

# PROYECTO BÁSICO Y DE EJECUCIÓN DE LA REFORMA DE LA INSTALACIÓN DE CLIMATIZACIÓN DEL CENTRO DE PERSONAS CON DISCAPACIDAD INTELECTUAL EN GETAFE (MADRID)



Dirección: Calle Vereda del Camuerzo, 2, 28905 Getafe (Madrid)

PROPIEDAD:  
AGENCIA MADRILEÑA DE ATENCIÓN SOCIAL

TOMO II

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DEL COITI TOLEDO Nº 544

## ÍNDICE DEL PROYECTO

### TOMO II

#### IV. CÁLCULOS

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EL INGENIERO TÉCNICO INDUSTRIAL



Fdo. Jose Antonio López Benito

Colegiado nº 544

Colegio Oficial de Ingenieros Técnicos

Industriales de Toledo

# PROYECTO BÁSICO Y DE EJECUCIÓN DE LA REFORMA DE LA INSTALACIÓN DE CLIMATIZACIÓN DEL CENTRO DE PERSONAS CON DISCAPACIDAD INTELECTUAL EN GETAFE (MADRID)

## CÁLCULOS JUSTIFICATIVOS

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## 1. INSTALACIONES TÉRMICAS

### 1.1. PARÁMETRO GENERALES

Emplazamiento: Getafe

Latitud (grados): 40.31 grados

Altitud sobre el nivel del mar: 623 m

Percentil para verano: 1.0 %

Temperatura seca verano: 37.61 °C

Temperatura húmeda verano: 20.40 °C

Oscilación media diaria: 15.8 °C

Oscilación media anual: 39.7 °C

Percentil para invierno: 99.0 %

Temperatura seca en invierno: -3.70 °C

Humedad relativa en invierno: 90 %

Velocidad del viento: 4.4 m/s

Temperatura del terreno: 5.00 °C

Porcentaje de mayoración por la orientación N: 20 %

Porcentaje de mayoración por la orientación S: 0 %

Porcentaje de mayoración por la orientación E: 10 %

Porcentaje de mayoración por la orientación O: 10 %

Suplemento de intermitencia para calefacción: 5 %

Porcentaje de cargas debido a la propia instalación: 3 %

Porcentaje de mayoración de cargas (Invierno): 5 %

Porcentaje de mayoración de cargas (Verano): 10 %

### 1.2. CARGAS TÉRMICAS

#### REFRIGERACIÓN

| Conjunto: SISTEMA 01- SÓTANO |                  |                 |                    |                          |                 |                          |               |
|------------------------------|------------------|-----------------|--------------------|--------------------------|-----------------|--------------------------|---------------|
| Recinto                      | Ventilación      |                 |                    | Potencia térmica         |                 |                          |               |
|                              | Caudal<br>(m³/h) | Sensible<br>(W) | Carga total<br>(W) | Por superficie<br>(W/m²) | Sensible<br>(W) | Máxima simultánea<br>(W) | Máxima<br>(W) |
| DESP. MANT.                  | 90               | 102,27          | 5,86               | 73,89                    | 1111,23         | 1097,97                  | 1097,97       |
| DESPACHO COMITÉ              | 45               | 51,14           | 2,93               | 77,72                    | 1233,61         | 1256,4                   | 1256,4        |
| CUARTO MANT.                 | 90               | 102,27          | 5,86               | 66,42                    | 2104,73         | 2091,47                  | 2091,47       |
| LAVANDERÍA                   | 435,6            | 131,21          | -215,4             | 117,68                   | 9246,17         | 9329,77                  | 9609,57       |

|                                      |                  |                        |                       |                             |                 |                             |               |
|--------------------------------------|------------------|------------------------|-----------------------|-----------------------------|-----------------|-----------------------------|---------------|
| VEST.FEM                             | 99,89            | 378,37                 | 271,36                | 67,97                       | 2579,85         | 2514,42                     | 2514,42       |
| VEST.MASC                            | 115,87           | 438,91                 | 314,78                | 53,31                       | 2370,44         | 2287,89                     | 2287,89       |
| Total                                | 876,4            | Carga total simultánea |                       |                             |                 | 18577,9                     |               |
| Conjunto: SISTEMA 02- ACCESO         |                  |                        |                       |                             |                 |                             |               |
| Recinto                              | Ventilación      |                        |                       | Potencia térmica            |                 |                             |               |
|                                      | Caudal<br>(m³/h) | Sensible<br>(W)        | Carga<br>total<br>(W) | Por<br>superficie<br>(W/m²) | Sensible<br>(W) | Máxima<br>simultánea<br>(W) | Máxima<br>(W) |
| SALA JUEGOS                          | 270              | 326,68                 | 63,09                 | 132,28                      | 3280,3          | 3266,17                     | 3266,17       |
| SALA VISITAS                         | 270              | 326,68                 | 63,09                 | 129,15                      | 3197,55         | 3183,42                     | 3183,42       |
| DIST.PPAL.FT 01                      | 153,96           | 620,95                 | 470,64                | 102,97                      | 5434,67         | 5284,36                     | 5284,36       |
| Total                                | 694              | Carga total simultánea |                       |                             |                 | 11734                       |               |
| Conjunto: SISTEMA 03- ADMINISTRACIÓN |                  |                        |                       |                             |                 |                             |               |
| Recinto                              | Ventilación      |                        |                       | Potencia térmica            |                 |                             |               |
|                                      | Caudal<br>(m³/h) | Sensible<br>(W)        | Carga<br>total<br>(W) | Por<br>superficie<br>(W/m²) | Sensible<br>(W) | Máxima<br>simultánea<br>(W) | Máxima<br>(W) |
| DESP. DIRECCIÓN                      | 45               | 51,33                  | -20,75                | 101,15                      | 2671,63         | 2407,82                     | 2670,55       |
| DESP. SINDICAL                       | 45               | -1,37                  | -6,73                 | 113,05                      | 852,93          | 527,33                      | 918,57        |
| ADMINISTRACIÓN                       | 180              | 204,55                 | 11,72                 | 77,09                       | 4737,81         | 3325,49                     | 4828,98       |
| SALA DE JUNTAS                       | 540              | 358,07                 | -<br>345,05           | 144,57                      | 4813,84         | 4609,65                     | 4609,65       |
| RECEPCIÓN                            | 90               | 36,43                  | -<br>130,33           | 73,7                        | 5274,77         | 5188,96                     | 5218,03       |
| Total                                | 900              | Carga total simultánea |                       |                             |                 | 16059,3                     |               |
| Conjunto: SISTEMA 04- TEATRO         |                  |                        |                       |                             |                 |                             |               |
| Recinto                              | Ventilación      |                        |                       | Potencia térmica            |                 |                             |               |
|                                      | Caudal<br>(m³/h) | Sensible<br>(W)        | Carga<br>total<br>(W) | Por<br>superficie<br>(W/m²) | Sensible<br>(W) | Máxima<br>simultánea<br>(W) | Máxima<br>(W) |
| TEATRO                               | 1008             | 1219,6                 | 235,53                | 143,96                      | 4646,06         | 5117,19                     | 5117,19       |
| TEATRO ESCENARIO                     | 455,9            | 551,61                 | 106,53                | 151,97                      | 2639,93         | 3045,58                     | 3045,58       |
| TEATRO LATERAL IZQ.                  | 172,8            | 209,07                 | 40,38                 | 168,89                      | 1099,61         | 1180,37                     | 1180,37       |
| TEATRO ACCESO                        | 1276,53          | 1544,5                 | 298,27                | 163,25                      | 5292,16         | 6427,99                     | 6427,99       |
| TEATRO LATERAL DCHA.                 | 172,8            | 209,07                 | 40,38                 | 178,54                      | 1086,58         | 1167,35                     | 1167,35       |
| TEATRO PERÍMETRAL                    | 288              | 327,28                 | 18,75                 | 61,56                       | 1714,01         | 1376,11                     | 1405,48       |
| Total                                | 3374             | Carga total simultánea |                       |                             |                 | 18314,6                     |               |

| Conjunto: SISTEMA 05- COCINA  |                  |                        |                       |                             |                 |                             |               |
|-------------------------------|------------------|------------------------|-----------------------|-----------------------------|-----------------|-----------------------------|---------------|
| Recinto                       | Ventilación      |                        |                       | Potencia térmica            |                 |                             |               |
|                               | Caudal<br>(m³/h) | Sensible<br>(W)        | Carga<br>total<br>(W) | Por<br>superficie<br>(W/m²) | Sensible<br>(W) | Máxima<br>simultánea<br>(W) | Máxima<br>(W) |
| COCINA                        | 273,54           | 969,1                  | 651,1                 | 79,97                       | 13891,09        | 14633,5                     | 14633,5       |
| Total                         | 273,5            | Carga total simultánea |                       |                             |                 | 14633,5                     |               |
| Conjunto: SISTEMA 06- COMEDOR |                  |                        |                       |                             |                 |                             |               |
| Recinto                       | Ventilación      |                        |                       | Potencia térmica            |                 |                             |               |
|                               | Caudal           | Sensible               | Carga<br>total        | Por<br>superficie           | Sensible        | Máxima<br>simultánea        | Máxima        |

|  |                  |                        |                    |                          |                 |                          |               |
|--|------------------|------------------------|--------------------|--------------------------|-----------------|--------------------------|---------------|
|  | (m³/h)           | (W)                    | (W)                | (W/m²)                   | (W)             | (W)                      | (W)           |
| COMEDOR                                      | 2160             | 2613,43                | 504,7              | 130,66                   | 33723,84        | 38619,27                 | 38619,27      |
| COMEDOR PERSONAL                             | 720              | 871,14                 | 168,23             | 128,56                   | 6062,72         | 7694,53                  | 7694,53       |
| Total  | 2880             | Carga total simultánea |                    |                          |                 | 46313,8                  |               |
| Conjunto: SISTEMA 07- DISTRIBUIDOR PRINCIPAL |                  |                        |                    |                          |                 |                          |               |
| Recinto                                      | Ventilación      |                        |                    | Potencia térmica         |                 |                          |               |
|  | Caudal<br>(m³/h) | Sensible<br>(W)        | Carga total<br>(W) | Por superficie<br>(W/m²) | Sensible<br>(W) | Máxima simultánea<br>(W) | Máxima<br>(W) |
| DISTRIBUIDOR PPAL                            | 0                | 0                      | 0                  | 51,35                    | 18465,17        | 18465,17                 | 18465,17      |
|  | 0                | 0                      | 0                  | 90                       |                 | 32042,36                 |               |
| DIST.PPAL.FT 02                              | 39,73            | 150,49                 | 107,93             | 33,33                    | 483,91          | 435,53                   | 441,35        |
| DIST.PPAL.FT 03                              | 58,16            | 220,3                  | 158                | 51,31                    | 1056,96         | 969,48                   | 994,66        |
| DIST.PPAL.FT 04                              | 52,88            | 200,31                 | 143,66             | 52,78                    | 987,05          | 906,93                   | 930,39        |
| DIST.PPAL.FT 05                              | 51,41            | 194,74                 | 139,67             | 50,47                    | 920,08          | 839,09                   | 865           |
| DIST.PPAL.FT 06                              | 79,32            | 319,91                 | 242,47             | 26,96                    | 790,19          | 702,68                   | 712,75        |
| DIST.PPAL.FT 07                              | 18,33            | 64,94                  | 43,63              | 35,23                    | 236,58          | 207,3                    | 215,27        |
| DIST.PPAL.FT 08                              | 14,42            | 43,47                  | 27,29              | 42,44                    | 220,22          | 179,86                   | 204,05        |
| ACCESO COMEDOR                               | 20,41            | 77,3                   | 55,44              | 62,38                    | 446,17          | 412,26                   | 424,31        |
| ACCESO TEATRO                                | 70,15            | 265,73                 | 190,58             | 37,74                    | 957,73          | 868,76                   | 882,58        |
| Total  | 404,8            | Carga total simultánea |                    |                          |                 | 56029,42                 |               |
| Conjunto: SISTEMA 08- CONSULTAS              |                  |                        |                    |                          |                 |                          |               |
| Recinto                                      | Ventilación      |                        |                    | Potencia térmica         |                 |                          |               |
|  | Caudal<br>(m³/h) | Sensible<br>(W)        | Carga total<br>(W) | Por superficie<br>(W/m²) | Sensible<br>(W) | Máxima simultánea<br>(W) | Máxima<br>(W) |
| VEST,MASC                                    | 45,76            | 164,88                 | 123,73             | 204,37                   | 3463,02         | 3286,54                  | 3463,45       |
| PSICOLOGO                                    | 90               | -2,75                  | -13,45             | 114,71                   | 1185,41         | 1000,78                  | 1257,85       |
| T,ASISTENCIAL                                | 90               | 108,89                 | 21,03              | 87,76                    | 1231,86         | 1144,98                  | 1227,15       |
| TRAB,SOCIAL                                  | 90               | 108,89                 | 21,03              | 92,98                    | 1255,25         | 1151,2                   | 1250,54       |
| DESP, GOBERNANTE                             | 45               | 51,14                  | 2,93               | 92,9                     | 1029,22         | 927,73                   | 1052,02       |
| SALA RELAJACIÓN                              | 225              | 255,69                 | 14,64              | 72,45                    | 3385,03         | 3000,16                  | 3351,87       |
| PELUQUERÍA                                   | 115,2            | 139,38                 | 26,92              | 295,15                   | 3473,44         | 3470,99                  | 3470,99       |
| Total  | 701              | Carga total simultánea |                    |                          |                 | 13982,4                  |               |
| Conjunto: SISTEMA 09- SALAS                  |                  |                        |                    |                          |                 |                          |               |
| Recinto                                      | Ventilación      |                        |                    | Potencia térmica         |                 |                          |               |
|  | Caudal<br>(m³/h) | Sensible<br>(W)        | Carga total<br>(W) | Por superficie<br>(W/m²) | Sensible<br>(W) | Máxima simultánea<br>(W) | Máxima<br>(W) |
| SALA OCUPACIONAL 04                          | 225              | 255,69                 | 14,64              | 108                      | 2859,92         | 2826,77                  | 2826,77       |
| SALA OCUPACIONAL 05                          | 225              | 255,69                 | 14,64              | 103,21                   | 3013,5          | 2980,34                  | 2980,34       |
| SALA OCUPACIONAL 03                          | 225              | 272,23                 | 52,57              | 79,73                    | 2047,09         | 2020,62                  | 2035,32       |
| SALA OCUPACIONAL 02                          | 225              | 272,23                 | 52,57              | 91,58                    | 2359,25         | 2141,14                  | 2347,47       |
| T,CARPINTERÍA                                | 225              | 272,23                 | 52,57              | 83,95                    | 2148,61         | 2114,35                  | 2136,83       |
| TALLER TEXTIL                                | 225              | 272,23                 | 52,57              | 95,32                    | 2441,16         | 2206,81                  | 2429,39       |
| GIMNASIO                                     | 455,9            | 518,08                 | 29,67              | 169,22                   | 7809,98         | 8172,3                   | 8172,3        |
| Total  | 1805,9           | Carga total simultánea |                    |                          |                 | 22462,3                  |               |
| Conjunto: SISTEMA 10- ENFERMERÍA             |                  |                        |                    |                          |                 |                          |               |
| Recinto                                      | Ventilación      |                        |                    | Potencia térmica         |                 |                          |               |

|                                 | Caudal<br>(m³/h) | Sensible<br>(W)        | Carga<br>total<br>(W) | Por<br>superficie<br>(W/m²) | Sensible<br>(W) | Máxima<br>simultánea<br>(W) | Máxima<br>(W) |
|---------------------------------|------------------|------------------------|-----------------------|-----------------------------|-----------------|-----------------------------|---------------|
| HABITACIÓN A                    | 45               | 47,83                  | -4,49                 | 53,72                       | 745,72          | 539,56                      | 734,99        |
| HABITACIÓN B                    | 45               | 47,83                  | -4,49                 | 57,06                       | 716,43          | 545,95                      | 705,69        |
| HABITACIÓN C                    | 45               | 47,83                  | -4,49                 | 52,12                       | 740,48          | 536,9                       | 729,75        |
| HABITACIÓN D                    | 45               | 40,69                  | -9,78                 | 54,9                        | 657,72          | 471,12                      | 648,83        |
| HABITACIÓN E                    | 45               | 47,83                  | -4,49                 | 57,24                       | 1053,63         | 737,95                      | 1042,9        |
| ENFERMERÍA                      | 90               | 108,89                 | 21,03                 | 224,94                      | 3539,62         | 3534,91                     | 3534,91       |
| DESPACHO MÉDICO 01              | 90               | 108,89                 | 21,03                 | 159,9                       | 2734,13         | 2708,73                     | 2729,42       |
| DESPACHO MÉDICO 02              | 90               | 59,68                  | -57,51                | 105,7                       | 1805,27         | 1333,94                     | 1771,23       |
| DESPACHO 1                      | 45               | 51,14                  | 2,93                  | 103,07                      | 721,32          | 649,42                      | 744,11        |
| DESPACHO 2                      | 90               | 71,36                  | -9,68                 | 260,83                      | 3359,76         | 3344,3                      | 3361,88       |
| Total                           | 630              | Carga total simultánea |                       |                             |                 | 14402,8                     |               |
| Conjunto: SISTEMA 11- CONTROL A |                  |                        |                       |                             |                 |                             |               |
| Recinto                         | Ventilación      |                        |                       | Potencia térmica            |                 |                             |               |
|                                 | Caudal<br>(m³/h) | Sensible<br>(W)        | Carga<br>total<br>(W) | Por<br>superficie<br>(W/m²) | Sensible<br>(W) | Máxima<br>simultánea<br>(W) | Máxima<br>(W) |
| ASEO A                          | 198,76           | 752,89                 | 539,96                | 64,04                       | 4844,1          | 4714,32                     | 4714,32       |
| HABITACIÓN 03                   | 135              | 128,41                 | -50,84                | 44,41                       | 1329,76         | 1133,26                     | 1233,66       |
| HABITACIÓN 04                   | 135              | 128,41                 | -50,84                | 42,65                       | 1309,85         | 1079,37                     | 1213,75       |
| HABITACIÓN 05                   | 135              | 128,41                 | -50,84                | 46,66                       | 1276,46         | 992,89                      | 1180,36       |
| HABITACIÓN 06                   | 135              | 128,41                 | -50,84                | 46,52                       | 1277,96         | 995,44                      | 1181,86       |
| HABITACIÓN 07                   | 135              | 128,41                 | -50,84                | 45,5                        | 1260,41         | 971,48                      | 1164,31       |
| HABITACIÓN 08                   | 135              | 128,41                 | -50,84                | 49,54                       | 1322,3          | 1117,46                     | 1226,2        |
| HABITACIÓN 02                   | 45               | 47,83                  | -4,49                 | 57,72                       | 638,14          | 619,11                      | 627,4         |
| CONTROL A-B                     | 470              | 568,66                 | 109,82                | 80,34                       | 9081,98         | 7901,48                     | 8788,17       |
| Total                           | 1523,8           | Carga total simultánea |                       |                             |                 | 19524,8                     |               |
| Conjunto: SISTEMA 12- CONTROL B |                  |                        |                       |                             |                 |                             |               |
| Recinto                         | Ventilación      |                        |                       | Potencia térmica            |                 |                             |               |
|                                 | Caudal<br>(m³/h) | Sensible<br>(W)        | Carga<br>total<br>(W) | Por<br>superficie<br>(W/m²) | Sensible<br>(W) | Máxima<br>simultánea<br>(W) | Máxima<br>(W) |
| ASEO B                          | 198,29           | 751,11                 | 538,68                | 67,77                       | 5106,65         | 4977,38                     | 4977,38       |
| HABITACIÓN 09                   | 135              | 163,34                 | 31,54                 | 81,05                       | 2051,81         | 1991,45                     | 2003,16       |
| HABITACIÓN 10                   | 135              | 163,34                 | 31,54                 | 72,37                       | 1878,88         | 1805,9                      | 1830,24       |
| HABITACIÓN 11                   | 135              | 163,34                 | 31,54                 | 72,71                       | 1875,78         | 1798,36                     | 1827,14       |
| HABITACIÓN 12                   | 135              | 163,34                 | 31,54                 | 72,46                       | 1877,89         | 1801,03                     | 1829,24       |
| HABITACIÓN 13                   | 135              | 163,34                 | 31,54                 | 66,28                       | 1927,53         | 1871,51                     | 1878,89       |
| HABITACIÓN 14                   | 135              | 153,41                 | 8,79                  | 69,53                       | 1976,32         | 1913,29                     | 1914,85       |
| HABITACIÓN 15                   | 45               | -1,37                  | -6,73                 | 78,56                       | 808,73          | 624,11                      | 844,95        |
| HABITACIÓN 16                   | 45               | -1,37                  | -6,73                 | 81,04                       | 828,7           | 675,74                      | 864,92        |
| Total                           | 1098,3           | Carga total simultánea |                       |                             |                 | 17458,8                     |               |
| Conjunto: SISTEMA 13- CONTROL C |                  |                        |                       |                             |                 |                             |               |
| Recinto                         | Ventilación      |                        |                       | Potencia térmica            |                 |                             |               |
|                                 | Caudal<br>(m³/h) | Sensible<br>(W)        | Carga<br>total<br>(W) | Por<br>superficie<br>(W/m²) | Sensible<br>(W) | Máxima<br>simultánea<br>(W) | Máxima<br>(W) |
| ASEO C                          | 199,6            | 756,07                 | 542,24                | 65,03                       | 4938,27         | 4807,6                      | 4807,6        |

|                                 |             |                        |             |                  |          |                   |         |
|---------------------------------|-------------|------------------------|-------------|------------------|----------|-------------------|---------|
| HABITACIÓN 17                   | 135         | 153,41                 | 8,79        | 69,39            | 1978,63  | 1915,44           | 1917,16 |
| HABITACIÓN 18                   | 135         | 163,34                 | 31,54       | 66,38            | 1927,34  | 1868,3            | 1878,69 |
| HABITACIÓN 19                   | 135         | 163,34                 | 31,54       | 72,22            | 1877,31  | 1802,41           | 1828,67 |
| HABITACIÓN 20                   | 135         | 163,34                 | 31,54       | 71,4             | 1848,62  | 1771,42           | 1799,97 |
| HABITACIÓN 21                   | 135         | 163,34                 | 31,54       | 69,67            | 1808,07  | 1732,19           | 1759,43 |
| HABITACIÓN 22                   | 135         | 163,34                 | 31,54       | 77               | 1947,26  | 1886,32           | 1898,62 |
| HABITACIÓN 23                   | 45          | -1,37                  | -6,73       | 80,15            | 825,87   | 693,81            | 862,09  |
| HABITACIÓN 24                   | 45          | -1,37                  | -6,73       | 77,81            | 805,96   | 638,93            | 842,19  |
| CONTROL C-D                     | 470         | 568,66                 | 109,82      | 81,82            | 9251,41  | 8009,95           | 8957,59 |
| Total                           | 1569,6      | Carga total simultánea |             |                  |          | 25126,4           |         |
| Conjunto: SISTEMA 14- CONTROL D |             |                        |             |                  |          |                   |         |
| Recinto                         | Ventilación |                        |             | Potencia térmica |          |                   |         |
|                                 | Caudal      | Sensible               | Carga total | Por superficie   | Sensible | Máxima simultánea | Máxima  |
|                                 | (m³/h)      | (W)                    | (W)         | (W/m²)           | (W)      | (W)               | (W)     |
| ASEO D                          | 200,08      | 757,87                 | 543,53      | 72,31            | 5489,51  | 5138,17           | 5358,32 |
| HABITACIÓN 25                   | 135         | 143,48                 | -13,46      | 57,45            | 1495,43  | 1421,64           | 1421,64 |
| HABITACIÓN 26                   | 135         | 143,48                 | -13,46      | 47,95            | 1290,92  | 1217,13           | 1217,13 |
| HABITACIÓN 27                   | 135         | 143,48                 | -13,46      | 47,29            | 1270,02  | 1196,23           | 1196,23 |
| HABITACIÓN 28                   | 135         | 143,48                 | -13,46      | 47,14            | 1268,21  | 1194,42           | 1194,42 |
| HABITACIÓN 29                   | 135         | 143,48                 | -13,46      | 45,16            | 1354,92  | 1281,13           | 1281,13 |
| HABITACIÓN 30                   | 135         | 143,48                 | -13,46      | 42,28            | 1238,63  | 1164,84           | 1164,84 |
| HABITACIÓN 31                   | 45          | 25,38                  | -56,39      | 102,67           | 1164,68  | 671,55            | 1124,49 |
| HABITACIÓN 32                   | 45          | 25,38                  | -56,39      | 106,52           | 1203,62  | 741,81            | 1163,43 |
| Total                           | 1100,1      | Carga total simultánea |             |                  |          | 14026,9           |         |
| Conjunto: SISTEMA 15- CONTROL E |             |                        |             |                  |          |                   |         |
| Recinto                         | Ventilación |                        |             | Potencia térmica |          |                   |         |
|                                 | Caudal      | Sensible               | Carga total | Por superficie   | Sensible | Máxima simultánea | Máxima  |
|                                 | (m³/h)      | (W)                    | (W)         | (W/m²)           | (W)      | (W)               | (W)     |
| ASEO E                          | 200,39      | 759,06                 | 544,38      | 66,63            | 5076,56  | 4945,04           | 4945,04 |
| HABITACIÓN 35                   | 135         | 143,48                 | -13,46      | 48,83            | 1424,87  | 1281,55           | 1351,09 |
| HABITACIÓN 36                   | 135         | 143,48                 | -13,46      | 45,72            | 1362,54  | 1230,7            | 1288,76 |
| HABITACIÓN 37                   | 135         | 143,48                 | -13,46      | 48,13            | 1287,17  | 1165,75           | 1213,38 |
| HABITACIÓN 38                   | 135         | 143,48                 | -13,46      | 47,36            | 1280,36  | 1158,96           | 1206,57 |
| HABITACIÓN 39                   | 135         | 143,48                 | -13,46      | 46,69            | 1253,39  | 1128,51           | 1179,6  |
| HABITACIÓN 40                   | 135         | 143,48                 | -13,46      | 46,72            | 1226,52  | 1102,06           | 1152,74 |
| HABITACIÓN 33                   | 45          | 25,38                  | -56,39      | 105,39           | 1180,05  | 728,96            | 1139,86 |
| HABITACIÓN 34                   | 45          | 25,38                  | -56,39      | 103,3            | 1164,78  | 669,46            | 1124,59 |
| CONTROL E-F                     | 470         | 597,07                 | 50,07       | 70,82            | 7962,4   | 7195,3            | 7580,42 |
| Total                           | 1570,4      | Carga total simultánea |             |                  |          | 20606,3           |         |
| Conjunto: SISTEMA 16- CONTROL F |             |                        |             |                  |          |                   |         |
| Recinto                         | Ventilación |                        |             | Potencia térmica |          |                   |         |
|                                 | Caudal      | Sensible               | Carga total | Por superficie   | Sensible | Máxima simultánea | Máxima  |
|                                 | (m³/h)      | (W)                    | (W)         | (W/m²)           | (W)      | (W)               | (W)     |
| HABITACIÓN 46                   | 135         | 153,41                 | 8,79        | 52,46            | 1517,15  | 1455,68           | 1455,68 |

|   |                  |                        |                    |                          |                 |                          |               |
|---|------------------|------------------------|--------------------|--------------------------|-----------------|--------------------------|---------------|
| HABITACIÓN 45                           | 135              | -4,12                  | -20,18             | 46,77                    | 1296,79         | 1144,63                  | 1322,3        |
| HABITACIÓN 41                           | 135              | -4,12                  | -20,18             | 55,05                    | 1335,2          | 1276,18                  | 1360,71       |
| HABITACIÓN 42                           | 135              | -4,12                  | -20,18             | 51,11                    | 1271,21         | 1095,69                  | 1296,72       |
| HABITACIÓN 43                           | 135              | -4,12                  | -20,18             | 49,94                    | 1236,5          | 1087,07                  | 1262,02       |
| HABITACIÓN 44                           | 135              | -4,12                  | -20,18             | 49,98                    | 1237,52         | 1085,33                  | 1263,03       |
| ASEO F                                  | 199,44           | 755,46                 | 541,8              | 72,99                    | 5522,34         | 5391,83                  | 5391,83       |
| HABITACIÓN 47                           | 45               | 54,45                  | 10,51              | 106,39                   | 1133,22         | 1100,18                  | 1130,86       |
| HABITACIÓN 48                           | 45               | 54,45                  | 10,51              | 120,42                   | 1299,85         | 1272,85                  | 1297,49       |
| Total                                   | 1099,4           | Carga total simultánea |                    |                          |                 | 14909,4                  |               |
| Conjunto: SISTEMA 17- SALA DE ESTAR A/B |                  |                        |                    |                          |                 |                          |               |
| Recinto                                 | Ventilación      |                        |                    | Potencia térmica         |                 |                          |               |
|   | Caudal<br>(m³/h) | Sensible<br>(W)        | Carga total<br>(W) | Por superficie<br>(W/m²) | Sensible<br>(W) | Máxima simultánea<br>(W) | Máxima<br>(W) |
| SALA DE ESTAR A                         | 1080             | 1227,29                | 70,29              | 132,98                   | 5676,19         | 5517,04                  | 5517,04       |
| SALA DE ESTAR B                         | 1080             | 1227,29                | 70,29              | 154,19                   | 6675,97         | 6516,83                  | 6516,83       |
| Total                                   | 2160             | Carga total simultánea |                    |                          |                 | 12033,9                  |               |
| Conjunto: SISTEMA 18- SALA DE ESTAR C/D |                  |                        |                    |                          |                 |                          |               |
| Recinto                                 | Ventilación      |                        |                    | Potencia térmica         |                 |                          |               |
|   | Caudal<br>(m³/h) | Sensible<br>(W)        | Carga total<br>(W) | Por superficie<br>(W/m²) | Sensible<br>(W) | Máxima simultánea<br>(W) | Máxima<br>(W) |
| SALA DE ESTAR C                         | 1080             | 1227,29                | 70,29              | 165,82                   | 7164,37         | 6998,36                  | 7005,22       |
| SALA DE ESTAR D                         | 1080             | 1227,29                | 70,29              | 150,55                   | 6390,47         | 6231,33                  | 6231,33       |
| Total                                   | 2160.0           | Carga total simultánea |                    |                          |                 | 13229.7                  |               |
| Conjunto: SISTEMA 19- SALA DE ESTAR E/F |                  |                        |                    |                          |                 |                          |               |
| Recinto                                 | Ventilación      |                        |                    | Potencia térmica         |                 |                          |               |
|   | Caudal<br>(m³/h) | Sensible<br>(W)        | Carga total<br>(W) | Por superficie<br>(W/m²) | Sensible<br>(W) | Máxima simultánea<br>(W) | Máxima<br>(W) |
| SALA DE ESTAR F                         | 1080             | 1306,72                | 252,35             | 130,3                    | 5624,5          | 5567,99                  | 5567,99       |
| SALA DE ESTAR E                         | 1080             | 1306,72                | 252,35             | 128,55                   | 5328,32         | 5271,81                  | 5271,81       |
| Total                                   | 2160             | Carga total simultánea |                    |                          |                 | 10839,8                  |               |

## CALEFACCIÓN

| Conjunto: SISTEMA 01- SÓTANO |             |                        |                |                   |         |
|------------------------------|-------------|------------------------|----------------|-------------------|---------|
| Recinto                      | Ventilación |                        | Potencia       |                   |         |
|                              | Caudal      | Carga total            | Por superficie | Máxima simultánea | Máxima  |
|                              | (m³/h)      | (W)                    | (W/m²)         | (W)               | (W)     |
| DESP, MANT,                  | 90          | 213,77                 | 141,64         | 2104,79           | 2104,79 |
| DESPACHO COMITÉ              | 45          | 106,89                 | 120,29         | 1944,73           | 1944,73 |
| CUARTO MANT,                 | 90          | 213,77                 | 103,2          | 3249,63           | 3249,63 |
| LAVANDERÍA                   | 435,6       | 1034,66                | 92,21          | 7529,62           | 7529,62 |
| VEST,FEM                     | 99,89       | 790,85                 | 101,1          | 3740,23           | 3740,23 |
| VEST,MASC                    | 115,87      | 917,4                  | 74,06          | 3178,45           | 3178,45 |
| Total                        | 876,4       | Carga total simultánea |                | 21747,4           |         |
| Conjunto: SISTEMA 02- ACCESO |             |                        |                |                   |         |
| Recinto                      | Ventilación |                        | Potencia       |                   |         |
|                              | Caudal      | Carga                  | Por superficie | Máxima            | Máxima  |



|                 | (m³/h) | total<br>(W)           | (W/m²) | simultánea<br>(W) | (W)     |
|-----------------|--------|------------------------|--------|-------------------|---------|
| SALA JUEGOS     | 270    | 641,32                 | 114,21 | 2820              | 2820    |
| SALA VISITAS    | 270    | 641,32                 | 116,66 | 2875,75           | 2875,75 |
| DIST,PPAL,FT 01 | 153,96 | 1219,01                | 83,92  | 4306,79           | 4306,79 |
| Total           | 694    | Carga total simultánea |        | 10002,5           |         |

Conjunto: SISTEMA 03- ADMINISTRACIÓN

| Recinto         | Ventilación      |                        | Potencia                 |                          |               |
|-----------------|------------------|------------------------|--------------------------|--------------------------|---------------|
|                 | Caudal<br>(m³/h) | Carga total<br>(W)     | Por superficie<br>(W/m²) | Máxima simultánea<br>(W) | Máxima<br>(W) |
| DESP. DIRECCIÓN | 45               | 106,89                 | 86,22                    | 2276,29                  | 2276,29       |
| DESP. SINDICAL  | 45               | 106,89                 | 111,74                   | 907,91                   | 907,91        |
| ADMINISTRACIÓN  | 180              | 427,54                 | 78,72                    | 4930,89                  | 4930,89       |
| SALA DE JUNTAS  | 540              | 1282,63                | 108,5                    | 3459,33                  | 3459,33       |
| RECEPCIÓN       | 90               | 213,77                 | 53,04                    | 3755,39                  | 3755,39       |
| Total           | 900              | Carga total simultánea |                          | 15329,8                  |               |

Conjunto: SISTEMA 04- TEATRO

| Recinto              | Ventilación      |                        | Potencia                 |                          |               |
|----------------------|------------------|------------------------|--------------------------|--------------------------|---------------|
|                      | Caudal<br>(m³/h) | Carga total<br>(W)     | Por superficie<br>(W/m²) | Máxima simultánea<br>(W) | Máxima<br>(W) |
| TEATRO               | 1008             | 2394,25                | 80,95                    | 2877,46                  | 2877,46       |
| TEATRO ESCENARIO     | 455,9            | 1082,88                | 178,29                   | 3572,9                   | 3572,9        |
| TEATRO LATERAL IZO,  | 172,8            | 410,44                 | 153,78                   | 1074,72                  | 1074,72       |
| TEATRO ACCESO        | 1276,53          | 3032,07                | 130,7                    | 5146,38                  | 5146,38       |
| TEATRO LATERAL DCHA, | 172,8            | 410,44                 | 165,28                   | 1080,66                  | 1080,66       |
| TEATRO PERÍMETRAL    | 288              | 684,07                 | 154,58                   | 3529,18                  | 3529,18       |
| Total                | 3374             | Carga total simultánea |                          | 17281,3                  |               |

Conjunto: SISTEMA 05- COCINA

| Recinto | Ventilación      |                        | Potencia                 |                          |               |
|---------|------------------|------------------------|--------------------------|--------------------------|---------------|
|         | Caudal<br>(m³/h) | Carga total<br>(W)     | Por superficie<br>(W/m²) | Máxima simultánea<br>(W) | Máxima<br>(W) |
| COCINA  | 273,54           | 2165,77                | 96,97                    | 17746,14                 | 17746,14      |
| Total   | 273,5            | Carga total simultánea |                          | 17746,1                  |               |

Conjunto: SISTEMA 06- COMEDOR

| Recinto          | Ventilación      |                        | Potencia                 |                          |               |
|------------------|------------------|------------------------|--------------------------|--------------------------|---------------|
|                  | Caudal<br>(m³/h) | Carga total<br>(W)     | Por superficie<br>(W/m²) | Máxima simultánea<br>(W) | Máxima<br>(W) |
| COMEDOR          | 2160             | 5130,53                | 106,75                   | 31553,42                 | 31553,42      |
| COMEDOR PERSONAL | 720              | 1710,18                | 113,99                   | 6822,62                  | 6822,62       |
| Total            | 2880             | Carga total simultánea |                          | 38376                    |               |

Conjunto: SISTEMA 07- DISTRIBUIDOR PRINCIPAL

| Recinto                          | Ventilación      |                        | Potencia                 |                          |               |
|----------------------------------|------------------|------------------------|--------------------------|--------------------------|---------------|
|                                  | Caudal<br>(m³/h) | Carga total<br>(W)     | Por superficie<br>(W/m²) | Máxima simultánea<br>(W) | Máxima<br>(W) |
| DISTRIBUIDOR PPAL                | 0                | 0                      | 41,28                    | 14844,55                 | 14844,55      |
| DISTRIBUIDOR PPAL                | 0                | 0                      |                          | 28482,1                  |               |
| LUCERNARIO                       |                  |                        |                          |                          |               |
| DIST,PPAL,FT 02                  | 39,73            | 314,55                 | 82,71                    | 1095,35                  | 1095,35       |
| DIST,PPAL,FT 03                  | 58,16            | 460,47                 | 120,1                    | 2328,21                  | 2328,21       |
| DIST,PPAL,FT 04                  | 52,88            | 418,68                 | 122,54                   | 2160,03                  | 2160,03       |
| DIST,PPAL,FT 05                  | 51,41            | 407,05                 | 119,66                   | 2050,57                  | 2050,57       |
| DIST,PPAL,FT 06                  | 79,32            | 628,02                 | 68,22                    | 1803,75                  | 1803,75       |
| DIST,PPAL,FT 07                  | 18,33            | 145,13                 | 115,38                   | 704,97                   | 704,97        |
| DIST,PPAL,FT 08                  | 14,42            | 114,19                 | 123,38                   | 593,12                   | 593,12        |
| ACCESO COMEDOR                   | 20,41            | 161,57                 | 145,71                   | 991,15                   | 991,15        |
| ACCESO TEATRO                    | 70,15            | 555,42                 | 90,8                     | 2123,27                  | 2123,27       |
| Total                            | 404,8            | Carga total simultánea |                          | 57177,07                 |               |
| Conjunto: SISTEMA 08- CONSULTAS  |                  |                        |                          |                          |               |
| Recinto                          | Ventilación      |                        | Potencia                 |                          |               |
|                                  | Caudal<br>(m³/h) | Carga total<br>(W)     | Por superficie<br>(W/m²) | Máxima simultánea<br>(W) | Máxima<br>(W) |
| VEST.MASC                        | 45,76            | 362,29                 | 130,12                   | 2205,17                  | 2205,17       |
| PSICOLOGO                        | 90               | 213,77                 | 112,46                   | 1233,25                  | 1233,25       |
| T.ASISTENCIAL                    | 90               | 213,77                 | 100,45                   | 1404,61                  | 1404,61       |
| TRAB.SOCIAL                      | 90               | 213,77                 | 113,75                   | 1529,76                  | 1529,76       |
| DESP. GOBERNANTE                 | 45               | 106,89                 | 121,26                   | 1373,16                  | 1373,16       |
| SALA RELAJACIÓN                  | 225              | 534,43                 | 92,05                    | 4258,3                   | 4258,3        |
| PELUQUERÍA                       | 115,2            | 273,63                 | 162,04                   | 1905,63                  | 1905,63       |
| Total                            | 701              | Carga total simultánea |                          | 13909,9                  |               |
| Conjunto: SISTEMA 09- SALAS      |                  |                        |                          |                          |               |
| Recinto                          | Ventilación      |                        | Potencia                 |                          |               |
|                                  | Caudal<br>(m³/h) | Carga total<br>(W)     | Por superficie<br>(W/m²) | Máxima simultánea<br>(W) | Máxima<br>(W) |
| SALA OCUPACIONAL 04              | 225              | 534,43                 | 109,29                   | 2860,59                  | 2860,59       |
| SALA OCUPACIONAL 05              | 225              | 534,43                 | 101,81                   | 2939,95                  | 2939,95       |
| SALA OCUPACIONAL 03              | 225              | 534,43                 | 108,51                   | 2769,82                  | 2769,82       |
| SALA OCUPACIONAL 02              | 225              | 534,43                 | 101,75                   | 2608,24                  | 2608,24       |
| T.CARPINTERÍA                    | 225              | 534,43                 | 105,75                   | 2691,84                  | 2691,84       |
| TALLER TEXTIL                    | 225              | 534,43                 | 96,13                    | 2449,81                  | 2449,81       |
| GIMNASIO                         | 455,9            | 1082,88                | 114,45                   | 5527,14                  | 5527,14       |
| Total                            | 1805,9           | Carga total simultánea |                          | 21847,4                  |               |
| Conjunto: SISTEMA 10- ENFERMERÍA |                  |                        |                          |                          |               |
| Recinto                          | Ventilación      |                        | Potencia                 |                          |               |
|                                  | Caudal<br>(m³/h) | Carga total<br>(W)     | Por superficie<br>(W/m²) | Máxima simultánea<br>(W) | Máxima<br>(W) |
| HABITACIÓN A                     | 45               | 106,89                 | 97,19                    | 1329,77                  | 1329,77       |
| HABITACIÓN B                     | 45               | 106,89                 | 109,65                   | 1356,19                  | 1356,19       |
| HABITACIÓN C                     | 45               | 106,89                 | 92,84                    | 1300,03                  | 1300,03       |

|                                 |                  |                        |                          |                          |               |
|---------------------------------|------------------|------------------------|--------------------------|--------------------------|---------------|
| HABITACIÓN D                    | 45               | 106,89                 | 99,15                    | 1171,82                  | 1171,82       |
| HABITACIÓN E                    | 45               | 106,89                 | 108,19                   | 1971,14                  | 1971,14       |
| ENFERMERÍA                      | 90               | 213,77                 | 113,5                    | 1783,58                  | 1783,58       |
| DESPACHO MÉDICO 01              | 90               | 213,77                 | 126,72                   | 2163,04                  | 2163,04       |
| DESPACHO MÉDICO 02              | 90               | 213,77                 | 106,85                   | 1790,47                  | 1790,47       |
| DESPACHO 1                      | 45               | 106,89                 | 123,68                   | 892,87                   | 892,87        |
| DESPACHO 2                      | 90               | 213,77                 | 98,77                    | 1273,11                  | 1273,11       |
| Total                           | 630              | Carga total simultánea |                          | 15032                    |               |
| Conjunto: SISTEMA 11- CONTROL A |                  |                        |                          |                          |               |
| Recinto                         | Ventilación      |                        | Potencia                 |                          |               |
|                                 | Caudal<br>(m³/h) | Carga total<br>(W)     | Por superficie<br>(W/m²) | Máxima simultánea<br>(W) | Máxima<br>(W) |
| ASEO A                          | 198,76           | 1573,67                | 74,52                    | 5485,44                  | 5485,44       |
| HABITACIÓN 03                   | 135              | 320,66                 | 73,32                    | 2036,72                  | 2036,72       |
| HABITACIÓN 04                   | 135              | 320,66                 | 61,86                    | 1760,33                  | 1760,33       |
| HABITACIÓN 05                   | 135              | 320,66                 | 60,42                    | 1528,66                  | 1528,66       |
| HABITACIÓN 06                   | 135              | 320,66                 | 60,34                    | 1533,15                  | 1533,15       |
| HABITACIÓN 07                   | 135              | 320,66                 | 61,91                    | 1584,41                  | 1584,41       |
| HABITACIÓN 08                   | 135              | 320,66                 | 88,43                    | 2188,73                  | 2188,73       |
| HABITACIÓN 02                   | 45               | 106,89                 | 119,01                   | 1293,59                  | 1293,59       |
| CONTROL A-B                     | 470              | 1116,36                | 68,21                    | 7461,06                  | 7461,06       |
| Total                           | 1523,8           | Carga total simultánea |                          | 24872,1                  |               |
| Conjunto: SISTEMA 12- CONTROL B |                  |                        |                          |                          |               |
| Recinto                         | Ventilación      |                        | Potencia                 |                          |               |
|                                 | Caudal<br>(m³/h) | Carga total<br>(W)     | Por superficie<br>(W/m²) | Máxima simultánea<br>(W) | Máxima<br>(W) |
| ASEO B                          | 198,29           | 1569,95                | 83,91                    | 6162,51                  | 6162,51       |
| HABITACIÓN 09                   | 135              | 320,66                 | 96,24                    | 2378,63                  | 2378,63       |
| HABITACIÓN 10                   | 135              | 320,66                 | 68,19                    | 1724,48                  | 1724,48       |
| HABITACIÓN 11                   | 135              | 320,66                 | 64,77                    | 1627,79                  | 1627,79       |
| HABITACIÓN 12                   | 135              | 320,66                 | 64,65                    | 1632,08                  | 1632,08       |
| HABITACIÓN 13                   | 135              | 320,66                 | 65,98                    | 1870,31                  | 1870,31       |
| HABITACIÓN 14                   | 135              | 320,66                 | 75,8                     | 2087,35                  | 2087,35       |
| HABITACIÓN 15                   | 45               | 106,89                 | 95,47                    | 1026,85                  | 1026,85       |
| HABITACIÓN 16                   | 45               | 106,89                 | 112,47                   | 1200,32                  | 1200,32       |
| Total                           | 1098,3           | Carga total simultánea |                          | 19710,3                  |               |
| Conjunto: SISTEMA 13- CONTROL C |                  |                        |                          |                          |               |
| Recinto                         | Ventilación      |                        | Potencia                 |                          |               |
|                                 | Caudal<br>(m³/h) | Carga total<br>(W)     | Por superficie<br>(W/m²) | Máxima simultánea<br>(W) | Máxima<br>(W) |
| ASEO C                          | 199,6            | 1580,33                | 70,57                    | 5216,95                  | 5216,95       |
| HABITACIÓN 17                   | 135              | 320,66                 | 75,67                    | 2090,82                  | 2090,82       |
| HABITACIÓN 18                   | 135              | 320,66                 | 63,86                    | 1807,4                   | 1807,4        |
| HABITACIÓN 19                   | 135              | 320,66                 | 64,79                    | 1640,6                   | 1640,6        |
| HABITACIÓN 20                   | 135              | 320,66                 | 62,43                    | 1573,74                  | 1573,74       |
| HABITACIÓN 21                   | 135              | 320,66                 | 62,96                    | 1590                     | 1590          |
| HABITACIÓN 22                   | 135              | 320,66                 | 92,42                    | 2278,82                  | 2278,82       |

|                                 |             |                        |                |                   |         |
|---------------------------------|-------------|------------------------|----------------|-------------------|---------|
| HABITACIÓN 23                   | 45          | 106,89                 | 114,34         | 1229,82           | 1229,82 |
| HABITACIÓN 24                   | 45          | 106,89                 | 97,02          | 1050,04           | 1050,04 |
| CONTROL C-D                     | 470         | 1116,36                | 67,11          | 7346,93           | 7346,93 |
| Total                           | 1569,6      | Carga total simultánea |                | 25825,1           |         |
| Conjunto: SISTEMA 14- CONTROL D |             |                        |                |                   |         |
| Recinto                         | Ventilación |                        | Potencia       |                   |         |
|                                 | Caudal      | Carga total            | Por superficie | Máxima simultánea | Máxima  |
|                                 | (m³/h)      | (W)                    | (W/m²)         | (W)               | (W)     |
| ASEO D                          | 200,08      | 1584,1                 | 84,93          | 6293,34           | 6293,34 |
| HABITACIÓN 25                   | 135         | 320,66                 | 100,48         | 2486,5            | 2486,5  |
| HABITACIÓN 26                   | 135         | 320,66                 | 70,53          | 1790,28           | 1790,28 |
| HABITACIÓN 27                   | 135         | 320,66                 | 64,75          | 1637,88           | 1637,88 |
| HABITACIÓN 28                   | 135         | 320,66                 | 64,48          | 1633,72           | 1633,72 |
| HABITACIÓN 29                   | 135         | 320,66                 | 66,14          | 1876,34           | 1876,34 |
| HABITACIÓN 30                   | 135         | 320,66                 | 78,01          | 2149,16           | 2149,16 |
| HABITACIÓN 31                   | 45          | 106,89                 | 102,77         | 1125,5            | 1125,5  |
| HABITACIÓN 32                   | 45          | 106,89                 | 120,9          | 1320,43           | 1320,43 |
| Total                           | 1100,1      | Carga total simultánea |                | 20313,2           |         |
| Conjunto: SISTEMA 15- CONTROL E |             |                        |                |                   |         |
| Recinto                         | Ventilación |                        | Potencia       |                   |         |
|                                 | Caudal      | Carga total            | Por superficie | Máxima simultánea | Máxima  |
|                                 | (m³/h)      | (W)                    | (W/m²)         | (W)               | (W)     |
| ASEO E                          | 200,39      | 1586,57                | 71,11          | 5277,54           | 5277,54 |
| HABITACIÓN 35                   | 135         | 320,66                 | 77,85          | 2153,79           | 2153,79 |
| HABITACIÓN 36                   | 135         | 320,66                 | 66,73          | 1880,92           | 1880,92 |
| HABITACIÓN 37                   | 135         | 320,66                 | 65,3           | 1646,08           | 1646,08 |
| HABITACIÓN 38                   | 135         | 320,66                 | 63,91          | 1628,26           | 1628,26 |
| HABITACIÓN 39                   | 135         | 320,66                 | 66,6           | 1682,79           | 1682,79 |
| HABITACIÓN 40                   | 135         | 320,66                 | 92,73          | 2287,97           | 2287,97 |
| HABITACIÓN 33                   | 45          | 106,89                 | 121,06         | 1309,25           | 1309,25 |
| HABITACIÓN 34                   | 45          | 106,89                 | 102,81         | 1119,25           | 1119,25 |
| CONTROL E-F                     | 470         | 1116,36                | 67,87          | 7264,79           | 7264,79 |
| Total                           | 1570,4      | Carga total simultánea |                | 26250,6           |         |
| Conjunto: SISTEMA 16- CONTROL F |             |                        |                |                   |         |
| Recinto                         | Ventilación |                        | Potencia       |                   |         |
|                                 | Caudal      | Carga total            | Por superficie | Máxima simultánea | Máxima  |
|                                 | (m³/h)      | (W)                    | (W/m²)         | (W)               | (W)     |
| HABITACIÓN 46                   | 135         | 320,66                 | 86,23          | 2392,99           | 2392,99 |
| HABITACIÓN 45                   | 135         | 320,66                 | 61,84          | 1748,24           | 1748,24 |
| HABITACIÓN 41                   | 135         | 320,66                 | 100,3          | 2479,34           | 2479,34 |
| HABITACIÓN 42                   | 135         | 320,66                 | 67,39          | 1709,56           | 1709,56 |
| HABITACIÓN 43                   | 135         | 320,66                 | 63,08          | 1594,2            | 1594,2  |
| HABITACIÓN 44                   | 135         | 320,66                 | 63,04          | 1592,94           | 1592,94 |
| ASEO F                          | 199,44      | 1579,05                | 85,08          | 6284,74           | 6284,74 |

|   |                  |                        |                          |                          |               |
|---|------------------|------------------------|--------------------------|--------------------------|---------------|
| HABITACIÓN 47                           | 45               | 106,89                 | 98,77                    | 1049,88                  | 1049,88       |
| HABITACIÓN 48                           | 45               | 106,89                 | 128,24                   | 1381,8                   | 1381,8        |
| Total                                   | 1099,4           | Carga total simultánea |                          | 20233,7                  |               |
| Conjunto: SISTEMA 17- SALA DE ESTAR A/B |                  |                        |                          |                          |               |
| Recinto                                 | Ventilación      |                        | Potencia                 |                          |               |
|   | Caudal<br>(m³/h) | Carga total<br>(W)     | Por superficie<br>(W/m²) | Máxima simultánea<br>(W) | Máxima<br>(W) |
| SALA DE ESTAR A                         | 1080             | 2565,26                | 135,99                   | 5641,92                  | 5641,92       |
| SALA DE ESTAR B                         | 1080             | 2565,26                | 135,5                    | 5727,13                  | 5727,13       |
| Total                                   | 2160             | Carga total simultánea |                          | 11369,1                  |               |
| Conjunto: SISTEMA 18- SALA DE ESTAR C/D |                  |                        |                          |                          |               |
| Recinto                                 | Ventilación      |                        | Potencia                 |                          |               |
|   | Caudal<br>(m³/h) | Carga total<br>(W)     | Por superficie<br>(W/m²) | Máxima simultánea<br>(W) | Máxima<br>(W) |
| SALA DE ESTAR C                         | 1080             | 2565,26                | 137,69                   | 5816,92                  | 5816,92       |
| SALA DE ESTAR D                         | 1080             | 2565,26                | 141,11                   | 5840,73                  | 5840,73       |
| Total                                   | 2160             | Carga total simultánea |                          | 11657,6                  |               |
| Conjunto: SISTEMA 19- SALA DE ESTAR E/F |                  |                        |                          |                          |               |
| Recinto                                 | Ventilación      |                        | Potencia                 |                          |               |
|   | Caudal           | Carga total            | Por superficie           | Máxima simultánea        | Máxima        |
|   | (m³/h)           | (W)                    | (W/m²)                   | (W)                      | (W)           |
| SALA DE ESTAR F                         | 1080             | 2565,26                | 137,28                   | 5866,53                  | 5866,53       |
| SALA DE ESTAR E                         | 1080             | 2565,26                | 135,55                   | 5558,72                  | 5558,72       |
| Total                                   | 2160             | Carga total simultánea |                          | 11425,3                  |               |

## 2. SELECCIÓN DE EQUIPOS E INSTALACIÓN DE CLIMATIZACIÓN

### 2.1. SELECCIÓN EQUIPOS VRV

El cálculo y selección de los equipos e instalación de climatización se ha realizado con el programa informático de Mitsubishi, y se adjunta dicho estudio.

# MITSUBISHI HEAVY INDUSTRIES

## VRF

### Sistema KX multi - inverter



### Datos del proyecto

Project: CADP Getafe V2

Cliente: Ssinergia

Preparado por: A. Peláez (Lumelco Madrid)

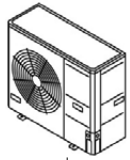
Situacion: En Estudio (Madrid)

Fecha del informe: 17/04/2024 16:40

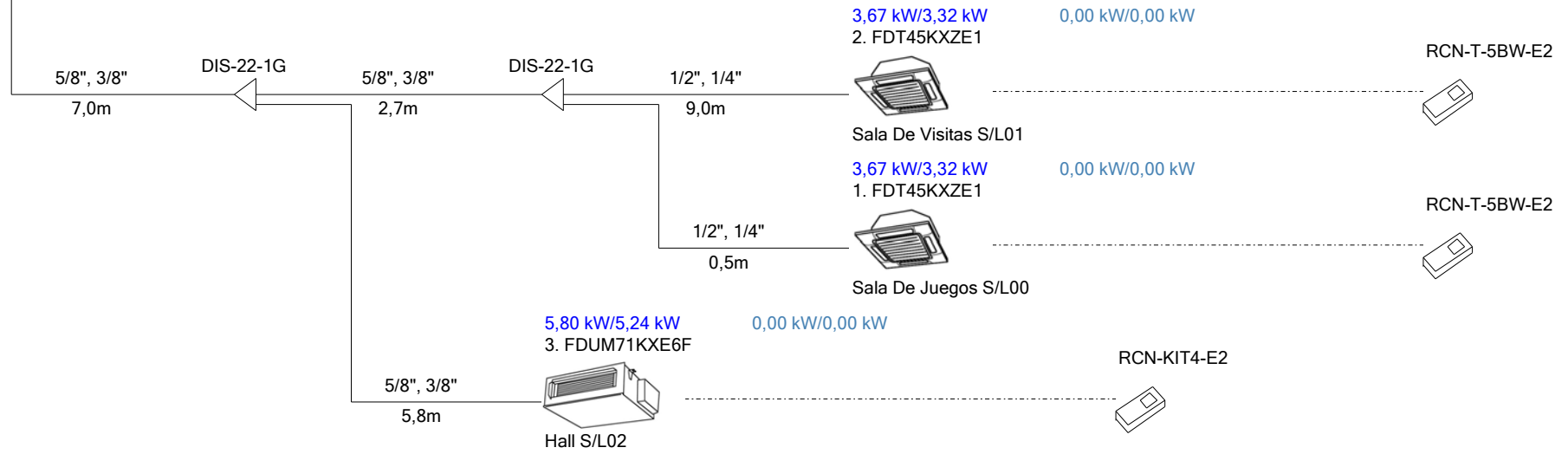
Debido a nuestra politica de mejora continua, nos reservamos el derecho de hacer cambios en todas las especificaciones sin previo aviso



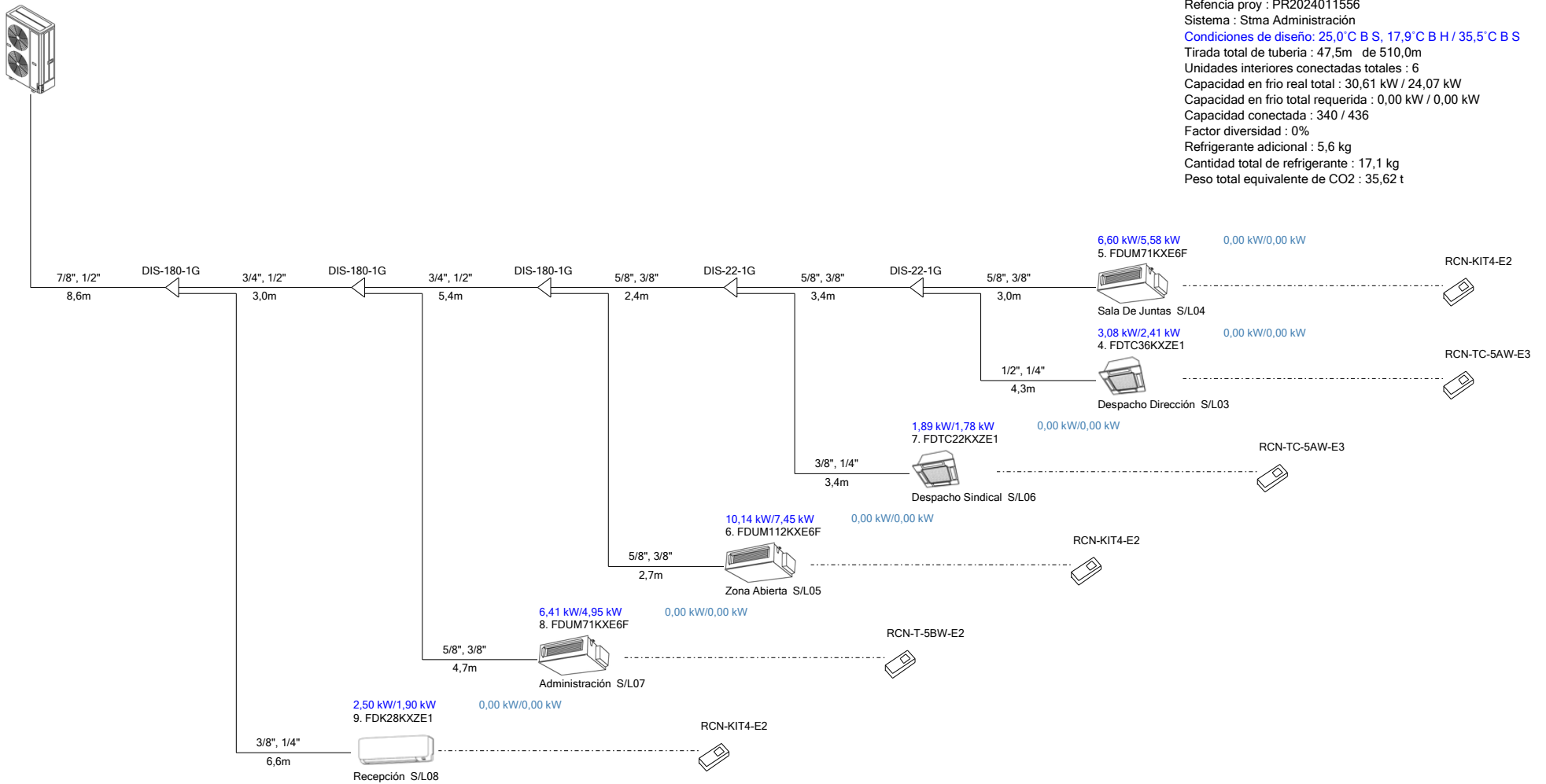
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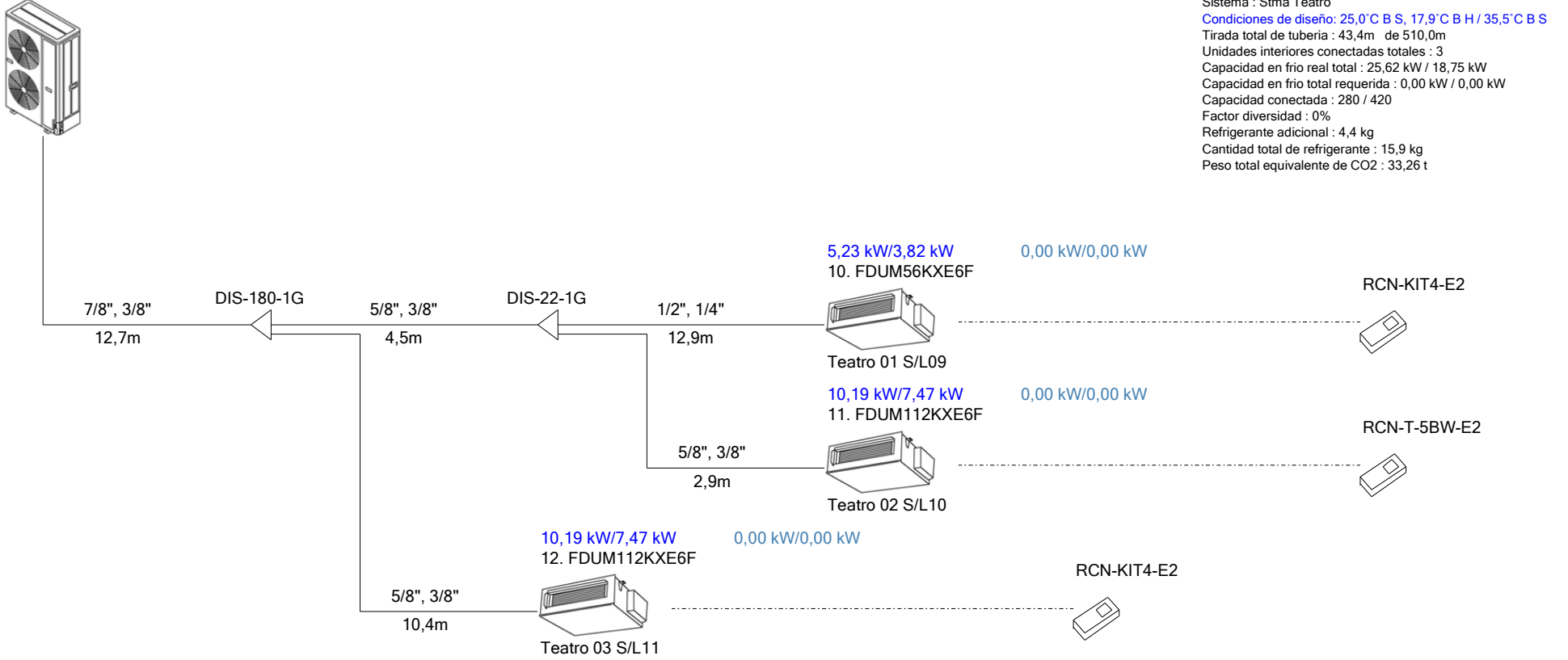
Proyecto : CADP Getafe V2  
Referencia proy : PR2024011556  
Sistema : Stma Acceso  
Condiciones de diseño: 25,0°C B S, 17,9°C B H / 35,5°C B S  
Tirada total de tubería : 25,0m de 100,0m  
Unidades interiores conectadas totales : 3  
Capacidad en frío real total : 13,15 kW / 11,88 kW  
Capacidad en frío total requerida : 0,00 kW / 0,00 kW  
Capacidad conectada : 161 / 210  
Factor diversidad : 0%  
Refrigerante adicional : 0,0 kg  
Cantidad total de refrigerante : 5,0 kg  
Peso total equivalente de CO2 : 10,44 t



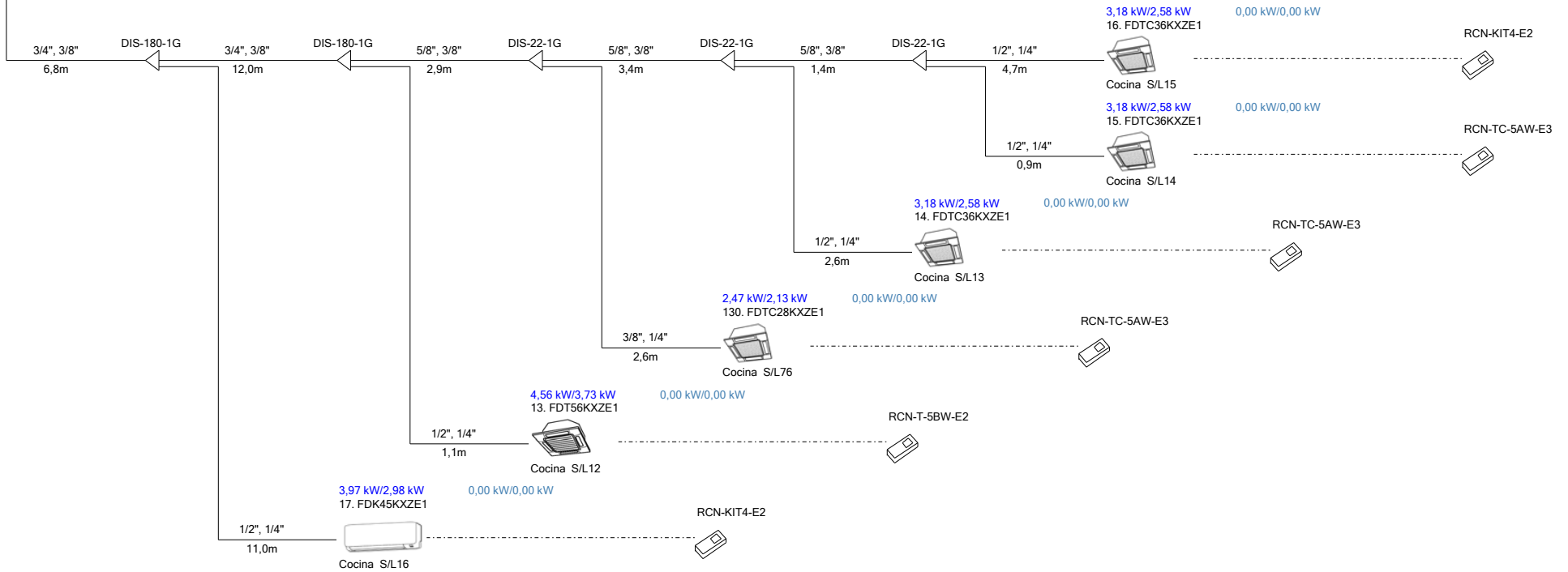
Proyecto : CADP Getafe V2  
Referencia proy : PR2024011556  
Sistema : Stma Administración  
Condiciones de diseño: 25,0°C B S, 17,9°C B H / 35,5°C B S  
Tirada total de tubería : 47,5m de 510,0m  
Unidades interiores conectadas totales : 6  
Capacidad en frío real total : 30,61 kW / 24,07 kW  
Capacidad en frío total requerida : 0,00 kW / 0,00 kW  
Capacidad conectada : 340 / 436  
Factor diversidad : 0%  
Refrigerante adicional : 5,6 kg  
Cantidad total de refrigerante : 17,1 kg  
Peso total equivalente de CO2 : 35,62 t



FDC280KXZME1



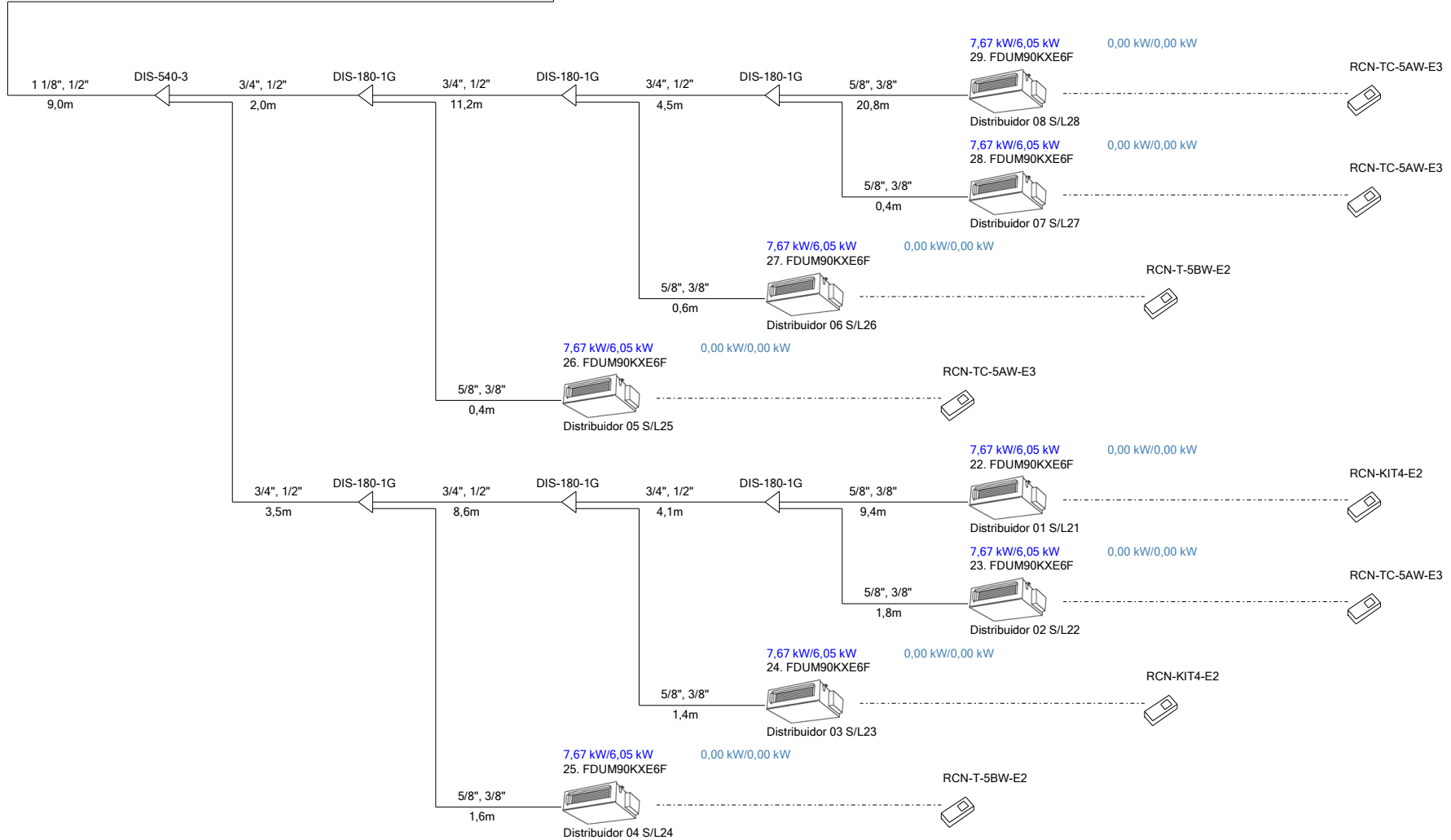
Proyecto : CADP Getafe V2  
Referencia proy : PR2024011556  
Sistema : Stma Cocina  
**Condiciones de diseño: 25,0°C B S, 17,9°C B H / 35,5°C B S**  
Tirada total de tubería : 49,4m de 150,0m  
Unidades interiores conectadas totales : 6  
Capacidad en frío real total : 20,53 kW / 16,57 kW  
Capacidad en frío total requerida : 0,00 kW / 0,00 kW  
Capacidad conectada : 237 / 268  
Factor diversidad : 0%  
Refrigerante adicional : 2,9 kg  
Cantidad total de refrigerante : 11,8 kg  
Peso total equivalente de CO2 : 24,71 t



FDC335KXZE2

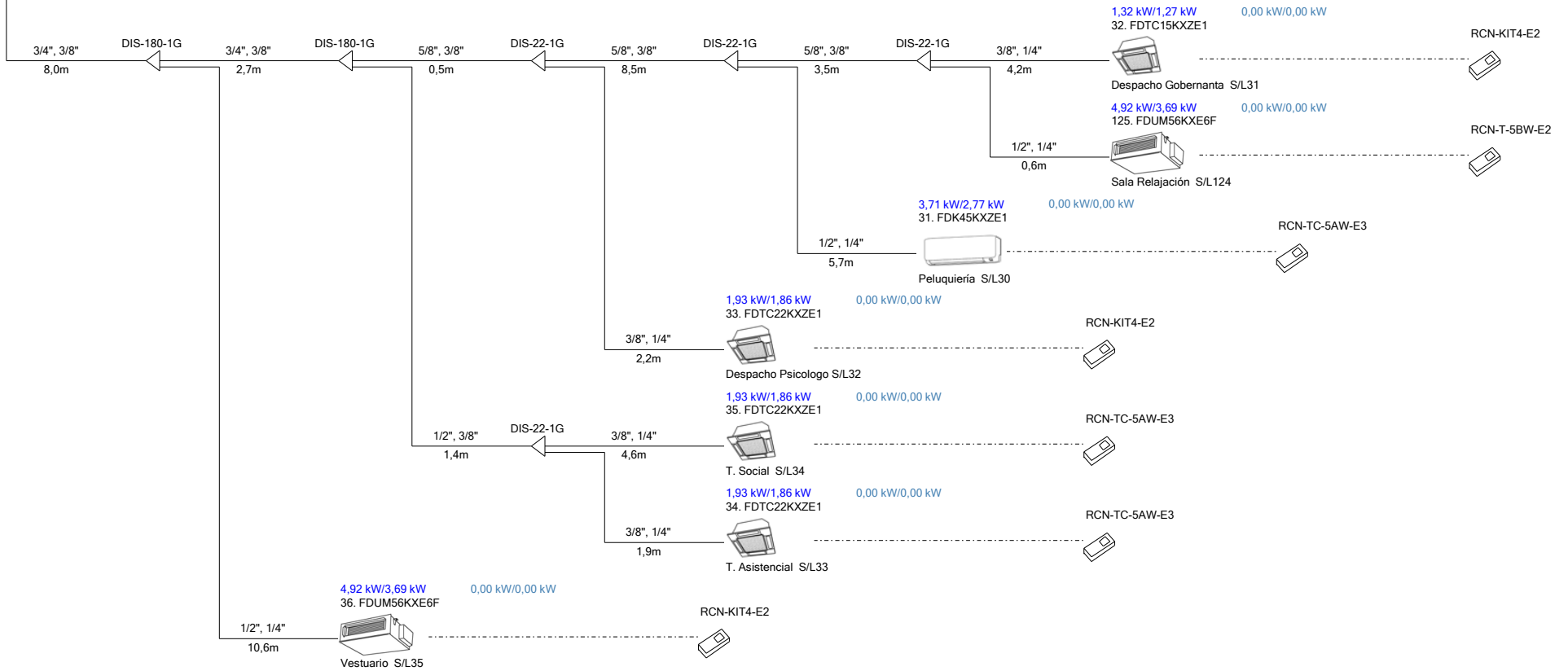
FDC670KXZE2

3/8"  
3,0m  
7/8", 1/2"  
2,5m  
7/8", 1/2"  
2,0m  
DOS-2A-3



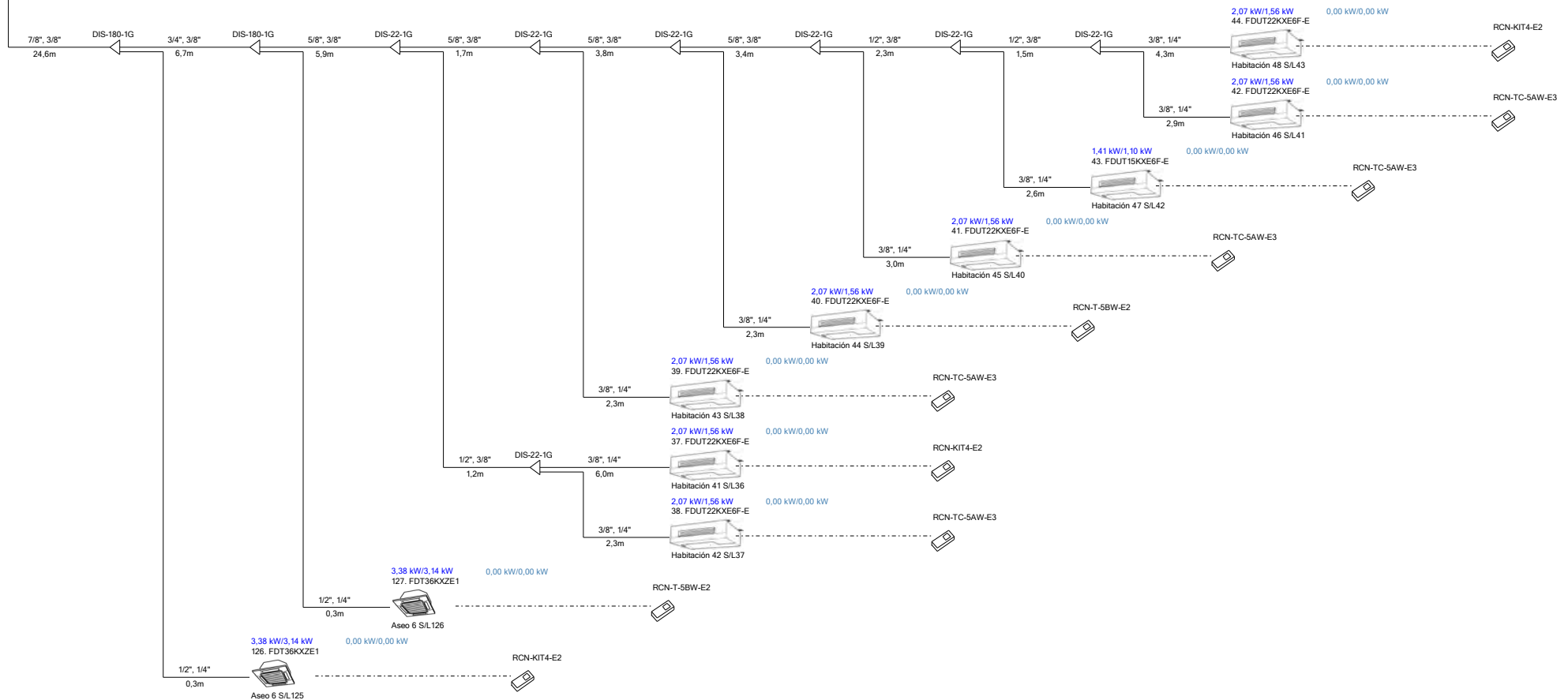
Proyecto : CADP Getafe V2  
Referencia proy : PR2024011556  
Sistema : Stma Distribuidores  
Condiciones de diseo: 25,0°C B S, 17,9°C B H / 35,5°C B S  
Tirada total de tubería : 83,8m de 1000,0m  
Unidades interiores conectadas totales : 8  
Capacidad en frío real total : 61,32 kW / 48,43 kW  
Capacidad en frío total requerida : 0,00 kW / 0,00 kW  
Capacidad conectada : 720 / 1072  
Factor diversidad : 0%  
Refrigerante adicional : 8,3 kg  
Cantidad total de refrigerante : 30,3 kg  
Peso total equivalente de CO2 : 63,34 t

Proyecto : CADP Getafe V2  
Referencia proy : PR2024011556  
Sistema : Stma Consultas  
Condiciones de diseño: 25,0°C B S, 17,9°C B H / 35,5°C B S  
Tirada total de tubería : 54,4m de 150,0m  
Unidades interiores conectadas totales : 7  
Capacidad en frío real total : 20,68 kW / 16,98 kW  
Capacidad en frío total requerida : 0,00 kW / 0,00 kW  
Capacidad conectada : 238 / 268  
Factor diversidad : 0%  
Refrigerante adicional : 3,0 kg  
Cantidad total de refrigerante : 11,9 kg  
Peso total equivalente de CO2 : 24,81 t



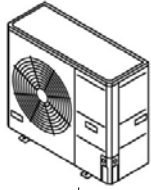


Proyecto : CADP Getafe V2  
Referencia proy : PR2024011556  
Sistema : Stma Control F  
Condiciones de diseño: 25,0°C B S, 17,9°C B H / 35,5°C B S  
Tirada total de tubería : 77,4m de 1000,0m  
Unidades interiores conectadas totales : 10  
Capacidad en frío real total : 22,64 kW / 18,28 kW  
Capacidad en frío total requerida : 0,00 kW / 0,00 kW  
Capacidad conectada : 241 / 560  
Factor diversidad : 0%  
Refrigerante adicional : 3,6 kg  
Cantidad total de refrigerante : 14,6 kg  
Peso total equivalente de CO2 : 30,47 t

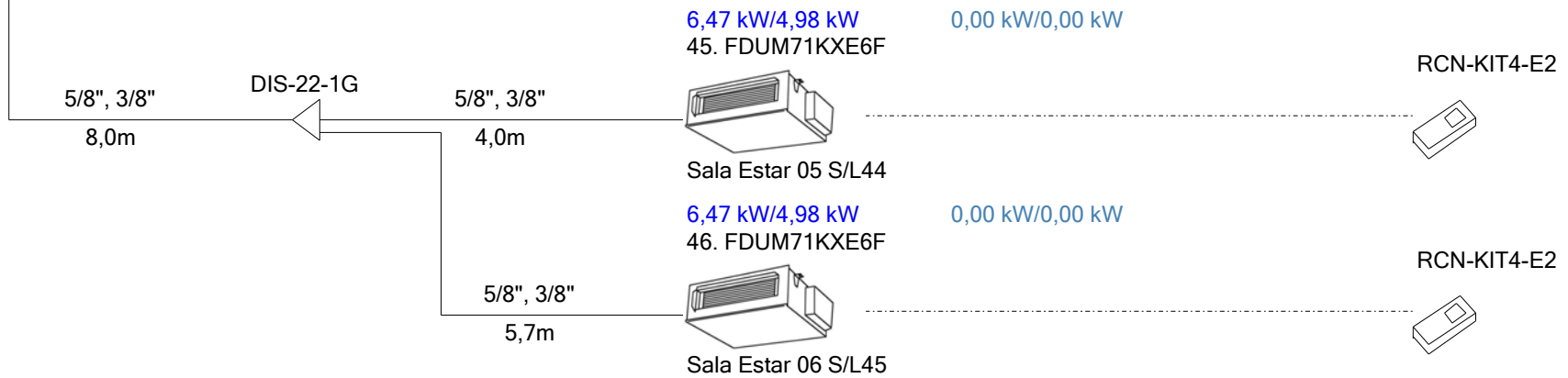




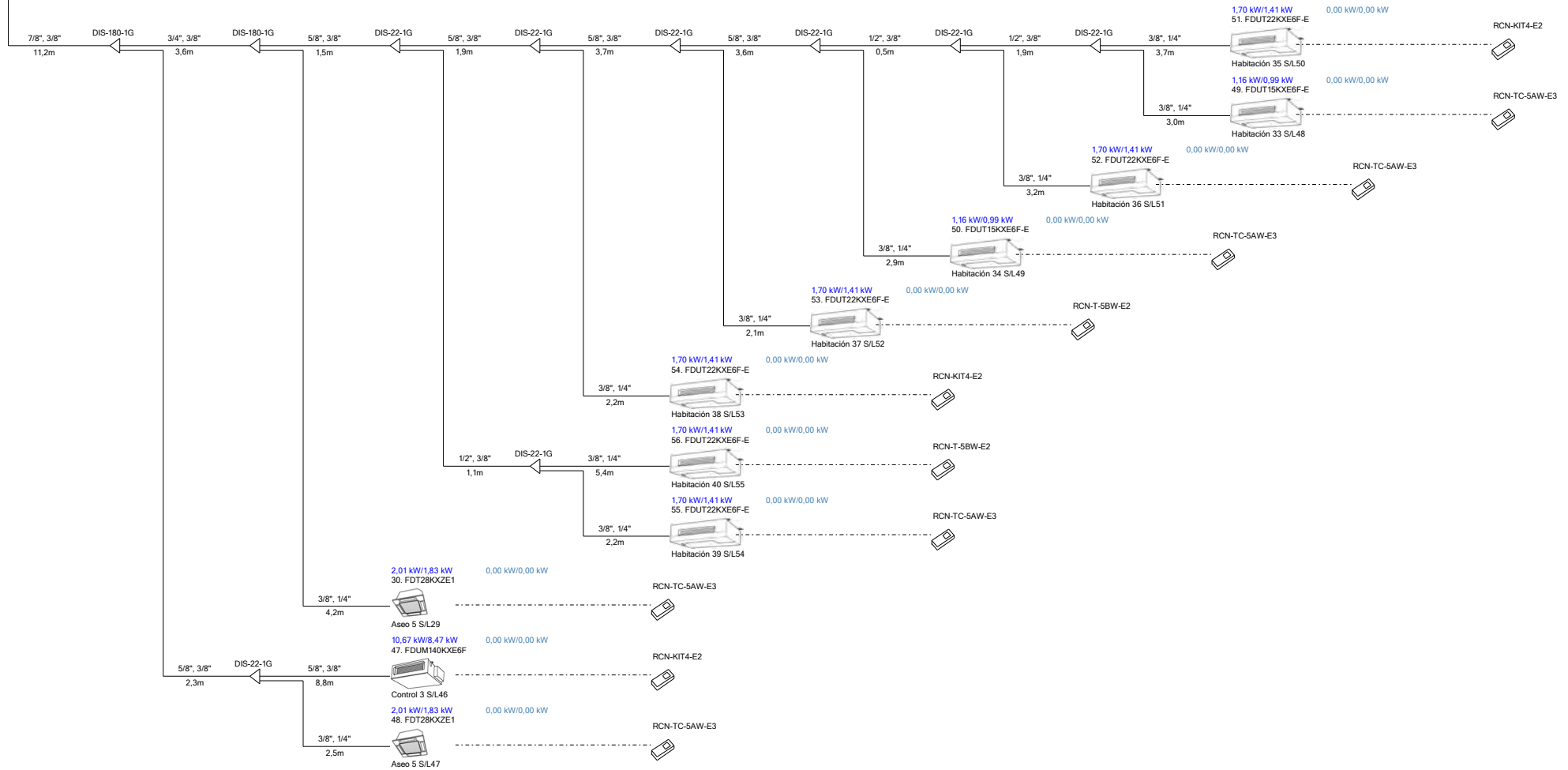
FDC140KXZES1



Proyecto : CADP Getafe V2  
 Referencia proy : PR2024011556  
 Sistema : Stma Salas E-F  
 Condiciones de diseño: 25,0°C B S, 17,9°C B H / 35,5°C B S  
 Tirada total de tubería : 17,7m de 100,0m  
 Unidades interiores conectadas totales : 2  
 Capacidad en frío real total : 12,95 kW / 9,96 kW  
 Capacidad en frío total requerida : 0,00 kW / 0,00 kW  
 Capacidad conectada : 142 / 210  
 Factor diversidad : 0%  
 Refrigerante adicional : 0,0 kg  
 Cantidad total de refrigerante : 5,0 kg  
 Peso total equivalente de CO2 : 10,44 t

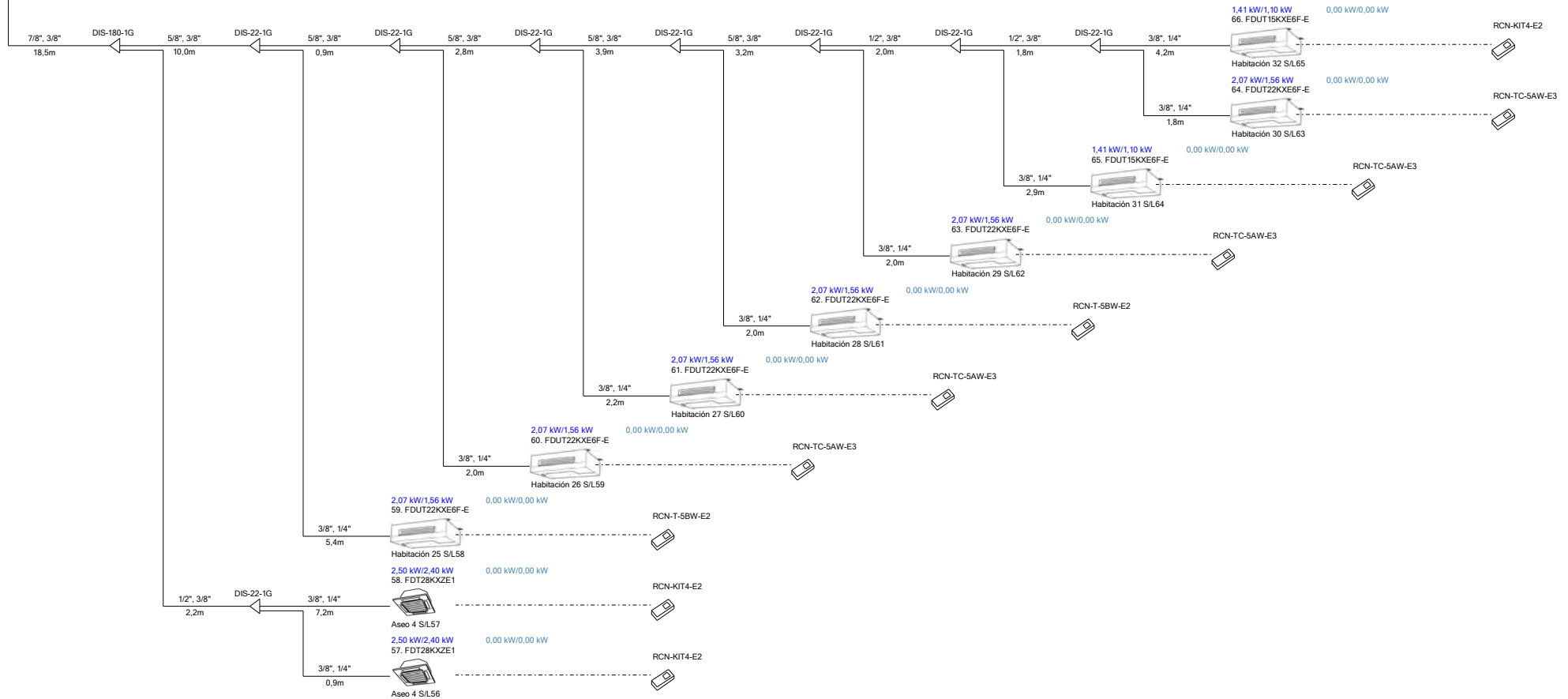


Proyecto : CADP Getafe V2  
Referencia proy : PR2024011556  
Sistema : Stma Control E  
Condiciones de diseño: 25,0°C B S, 17,9°C B H / 35,5°C B S  
Tirada total de tubería : 71,5m de 1000,0m  
Unidades interiores conectadas totales : 11  
Capacidad en frío real total : 27,23 kW / 22,58 kW  
Capacidad en frío total requerida : 0,00 kW / 0,00 kW  
Capacidad conectada : 358 / 560  
Factor diversidad : 0%  
Refrigerante adicional : 3,8 kg  
Cantidad total de refrigerante : 14,8 kg  
Peso total equivalente de CO2 : 30,98 t

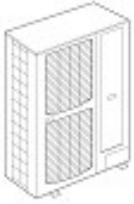




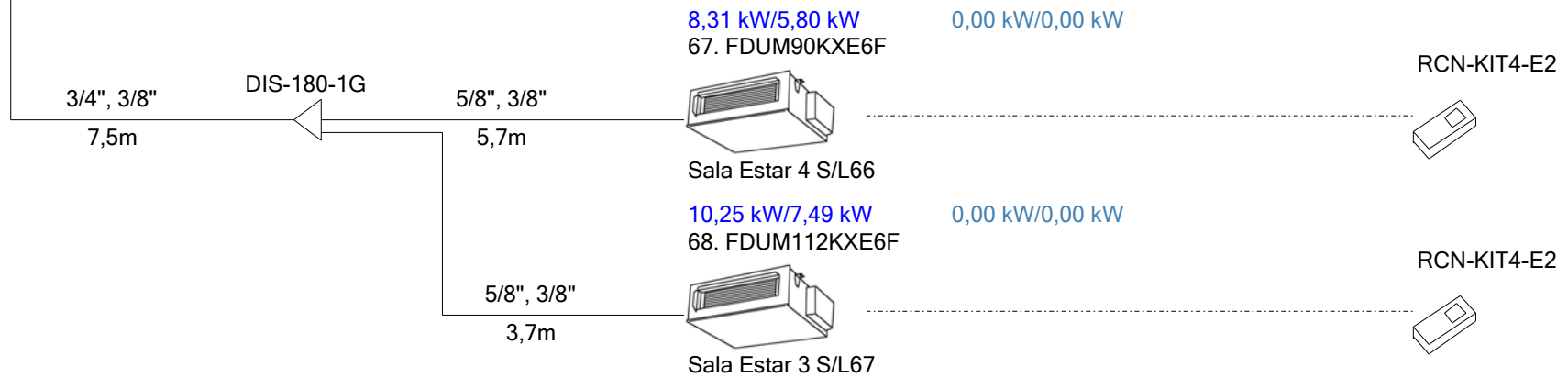
Proyecto : CADP Getafe V2  
Referencia proy : PR2024011556  
Sistema : Stma Control D  
Condiciones de diseño: 25,0°C B S, 17,9°C B H / 35,5°C B S  
Tirada total de tubería : 75,9m de 1000,0m  
Unidades interiores conectadas totales : 10  
Capacidad en frío real total : 20,22 kW / 16,34 kW  
Capacidad en frío total requerida : 0,00 kW / 0,00 kW  
Capacidad conectada : 218 / 560  
Factor diversidad : 0%  
Refrigerante adicional : 3,3 kg  
Cantidad total de refrigerante : 14,3 kg  
Peso total equivalente de CO2 : 29,95 t



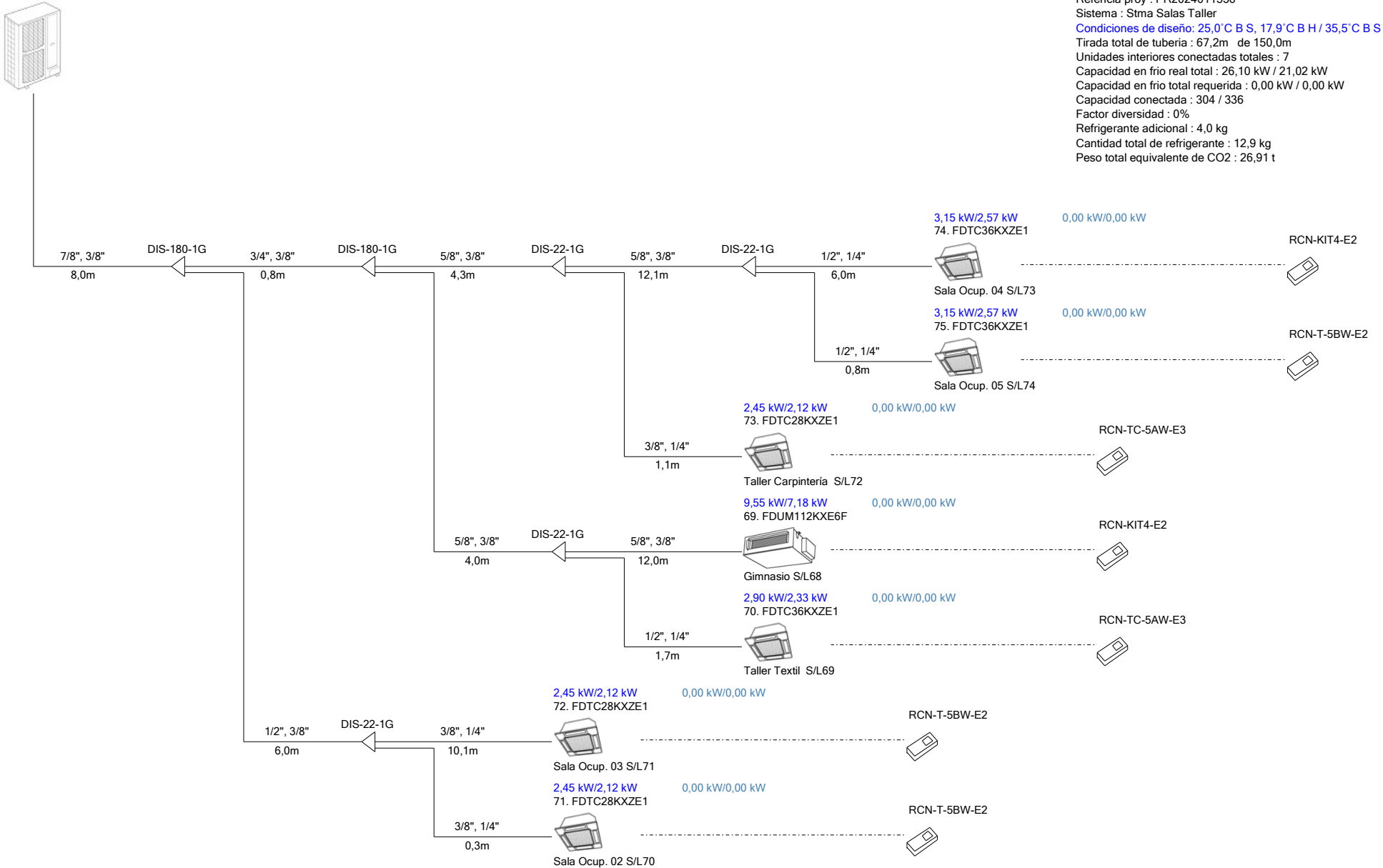
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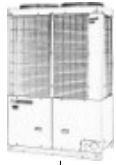


Proyecto : CADP Getafe V2  
Referencia proy : PR2024011556  
Sistema : Stma Salas C-D  
Condiciones de diseño: 25,0°C B S, 17,9°C B H / 35,5°C B S  
Tirada total de tubería : 16,9m de 150,0m  
Unidades interiores conectadas totales : 2  
Capacidad en frío real total : 18,56 kW / 13,29 kW  
Capacidad en frío total requerida : 0,00 kW / 0,00 kW  
Capacidad conectada : 202 / 268  
Factor diversidad : 0%  
Refrigerante adicional : 0,9 kg  
Cantidad total de refrigerante : 9,8 kg  
Peso total equivalente de CO2 : 20,49 t

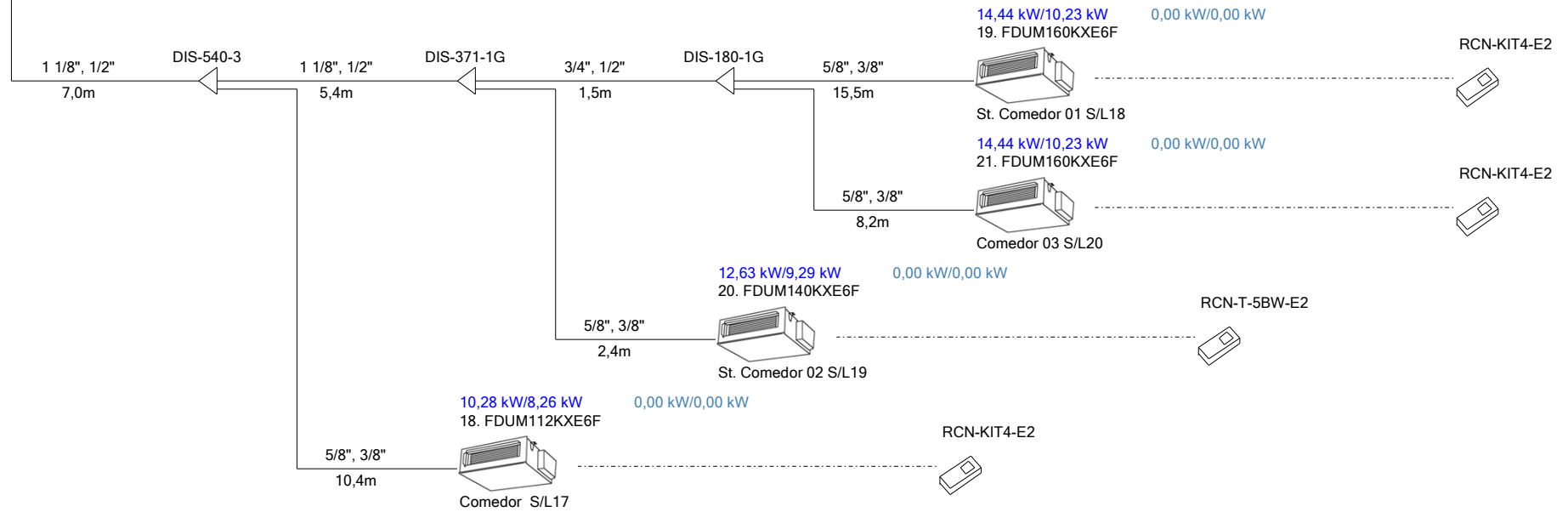


Proyecto : CADP Getafe V2  
Referencia proy : PR2024011556  
Sistema : Stma Salas Taller  
Condiciones de diseño: 25,0°C B S, 17,9°C B H / 35,5°C B S  
Tirada total de tubería : 67,2m de 150,0m  
Unidades interiores conectadas totales : 7  
Capacidad en frío real total : 26,10 kW / 21,02 kW  
Capacidad en frío total requerida : 0,00 kW / 0,00 kW  
Capacidad conectada : 304 / 336  
Factor diversidad : 0%  
Refrigerante adicional : 4,0 kg  
Cantidad total de refrigerante : 12,9 kg  
Peso total equivalente de CO2 : 26,91 t



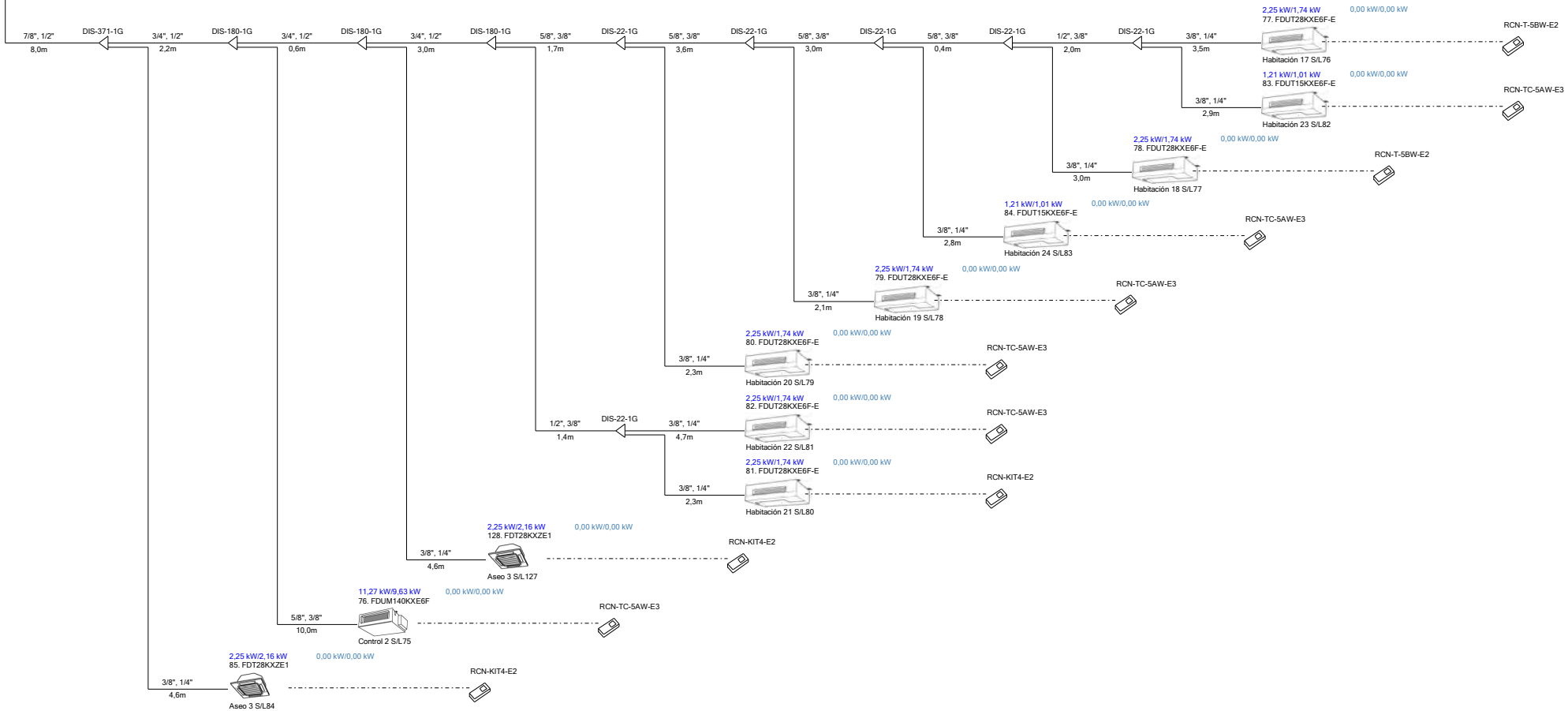


Proyecto : CADP Getafe V2  
Referencia proy : PR2024011556  
Sistema : Stma Comedor  
Condiciones de diseño: 25,0°C B S, 17,9°C B H / 35,5°C B S  
Tirada total de tubería : 50,4m de 1000,0m  
Unidades interiores conectadas totales : 4  
Capacidad en frío real total : 51,79 kW / 38,02 kW  
Capacidad en frío total requerida : 0,00 kW / 0,00 kW  
Capacidad conectada : 572 / 896  
Factor diversidad : 0%  
Refrigerante adicional : 10,1 kg  
Cantidad total de refrigerante : 21,6 kg  
Peso total equivalente de CO2 : 45,19 t



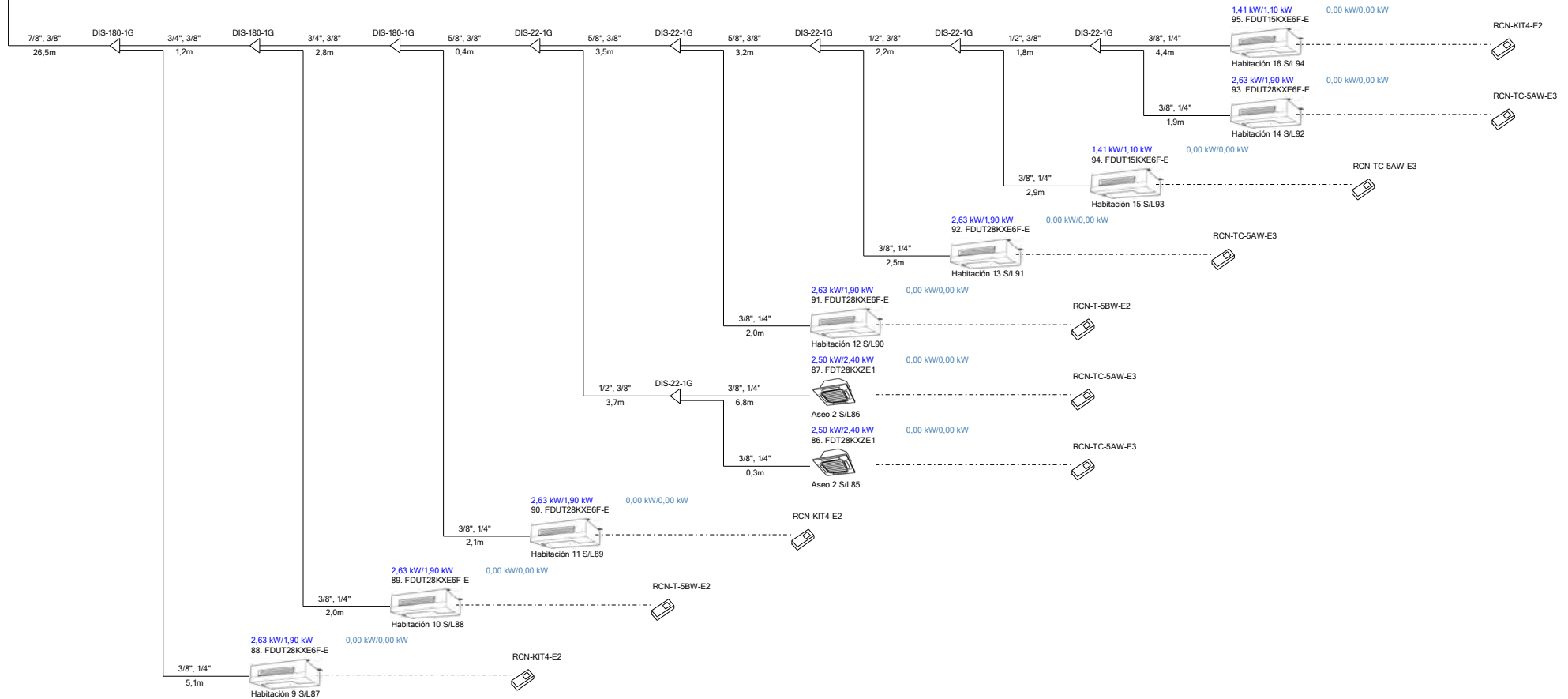


Proyecto : CADP Getafe V2  
Referencia proy : PR2024011556  
Sistema : Stma Control C  
**Condiciones de diseño: 25,0°C B S, 17,9°C B H / 35,5°C B S**  
Tirada total de tubería : 68,7m de 1000,0m  
Unidades interiores conectadas totales : 11  
Capacidad en frío real total : 31,71 kW / 26,39 kW  
Capacidad en frío total requerida : 0,00 kW / 0,00 kW  
Capacidad conectada : 394 / 670  
Factor diversidad : 0%  
Refrigerante adicional : 4,3 kg  
Cantidad total de refrigerante : 15,3 kg  
Peso total equivalente de CO2 : 31,89 t

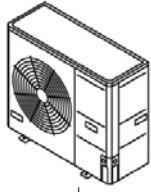




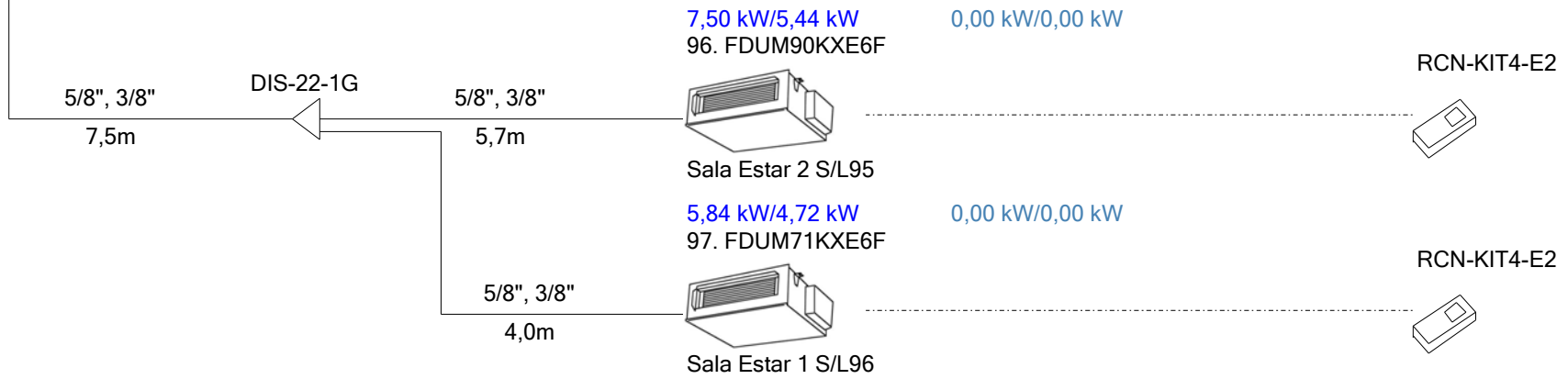
Proyecto : CADP Getafe V2  
Referencia proy : PR2024011556  
Sistema : Stma Control B  
Condiciones de diseño: 25,0°C B S, 17,9°C B H / 35,5°C B S  
Tirada total de tubería : 75,3m de 1000,0m  
Unidades interiores conectadas totales : 10  
Capacidad en frío real total : 23,60 kW / 18,37 kW  
Capacidad en frío total requerida : 0,00 kW / 0,00 kW  
Capacidad conectada : 254 / 560  
Factor diversidad : 0%  
Refrigerante adicional : 3,3 kg  
Cantidad total de refrigerante : 14,3 kg  
Peso total equivalente de CO2 : 29,93 t



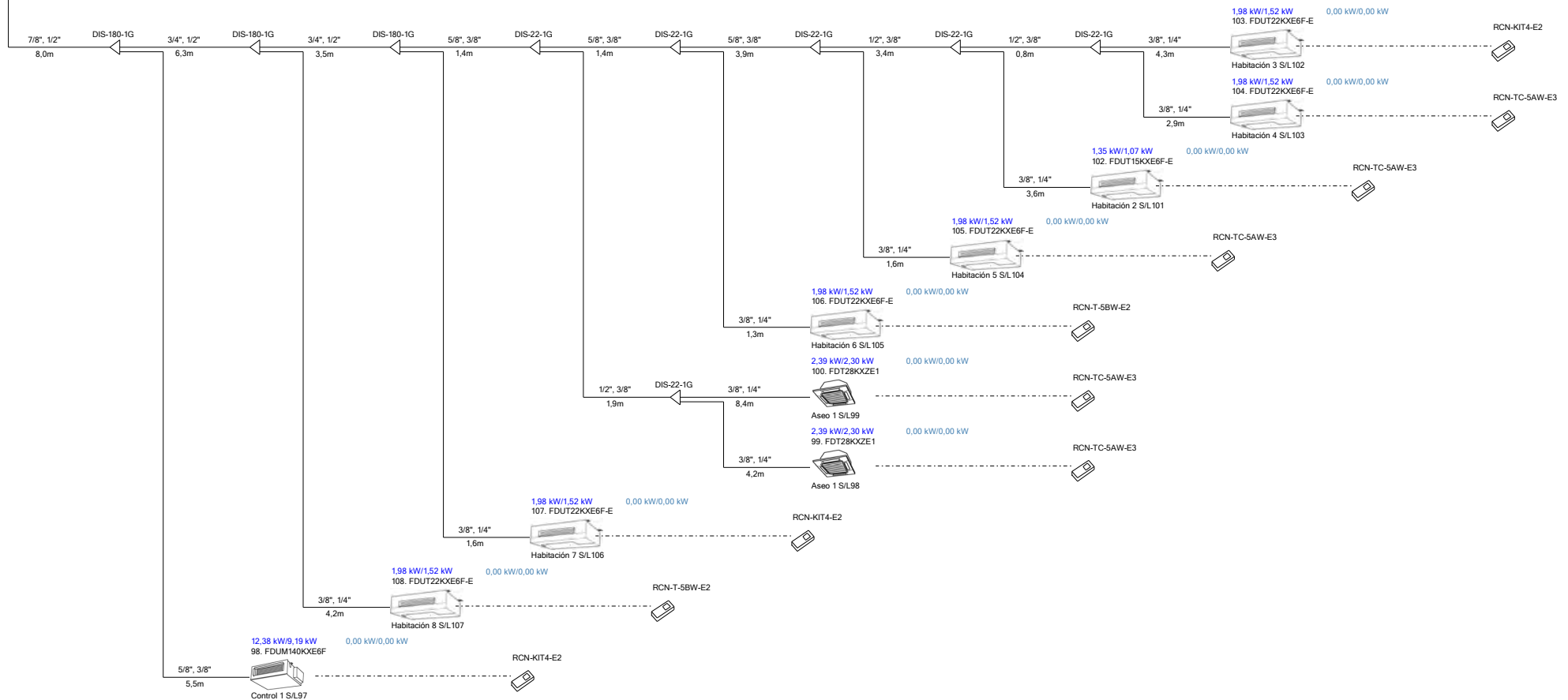
# FDC140KXZES1



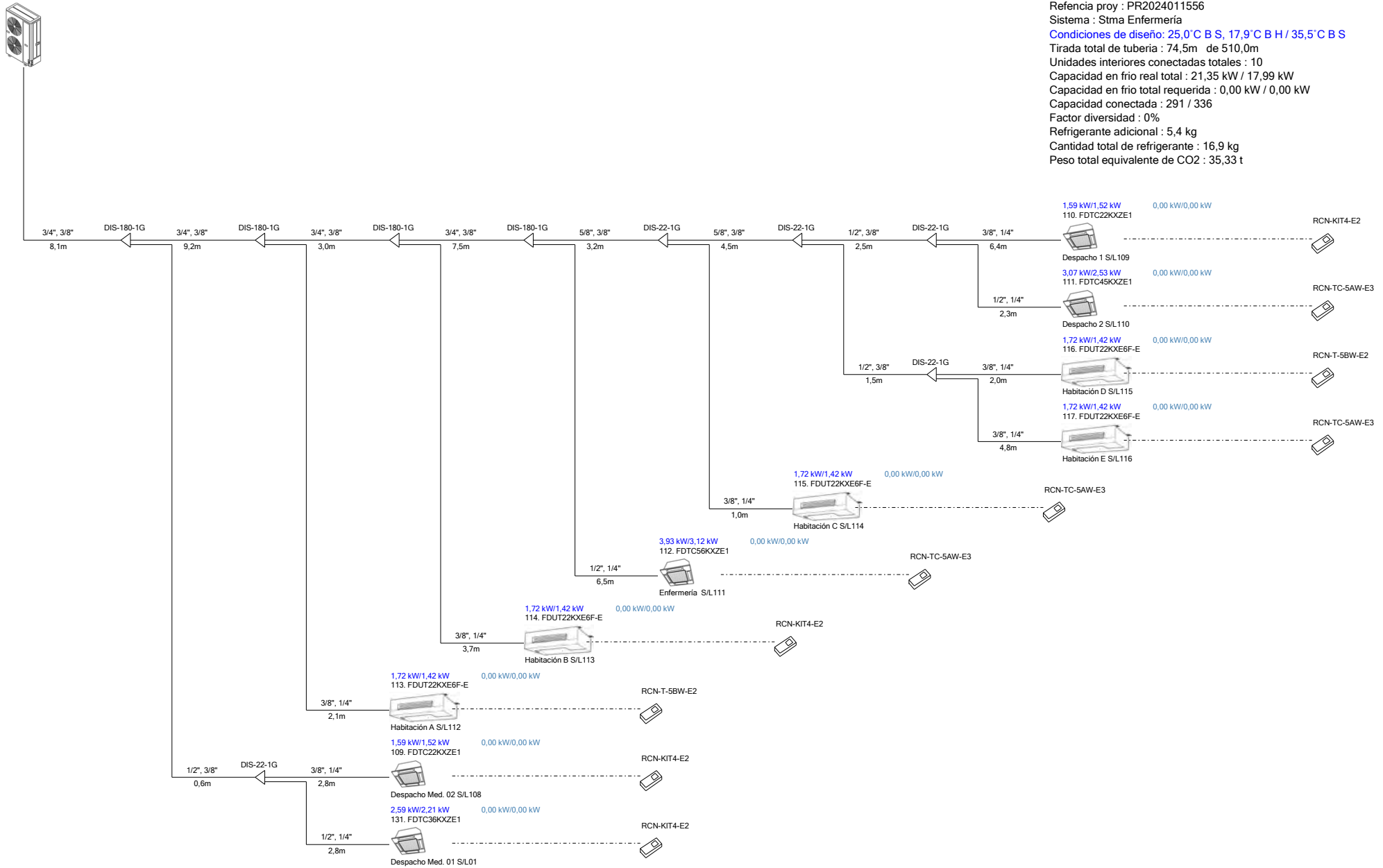
Proyecto : CADP Getafe V2  
 Referencia proy : PR2024011556  
 Sistema : Stma Salas A-B  
 Condiciones de diseño: 25,0°C B S, 17,9°C B H / 35,5°C B S  
 Tirada total de tubería : 17,2m de 100,0m  
 Unidades interiores conectadas totales : 2  
 Capacidad en frío real total : 13,33 kW / 10,17 kW  
 Capacidad en frío total requerida : 0,00 kW / 0,00 kW  
 Capacidad conectada : 161 / 210  
 Factor diversidad : 0%  
 Refrigerante adicional : 0,0 kg  
 Cantidad total de refrigerante : 5,0 kg  
 Peso total equivalente de CO2 : 10,44 t



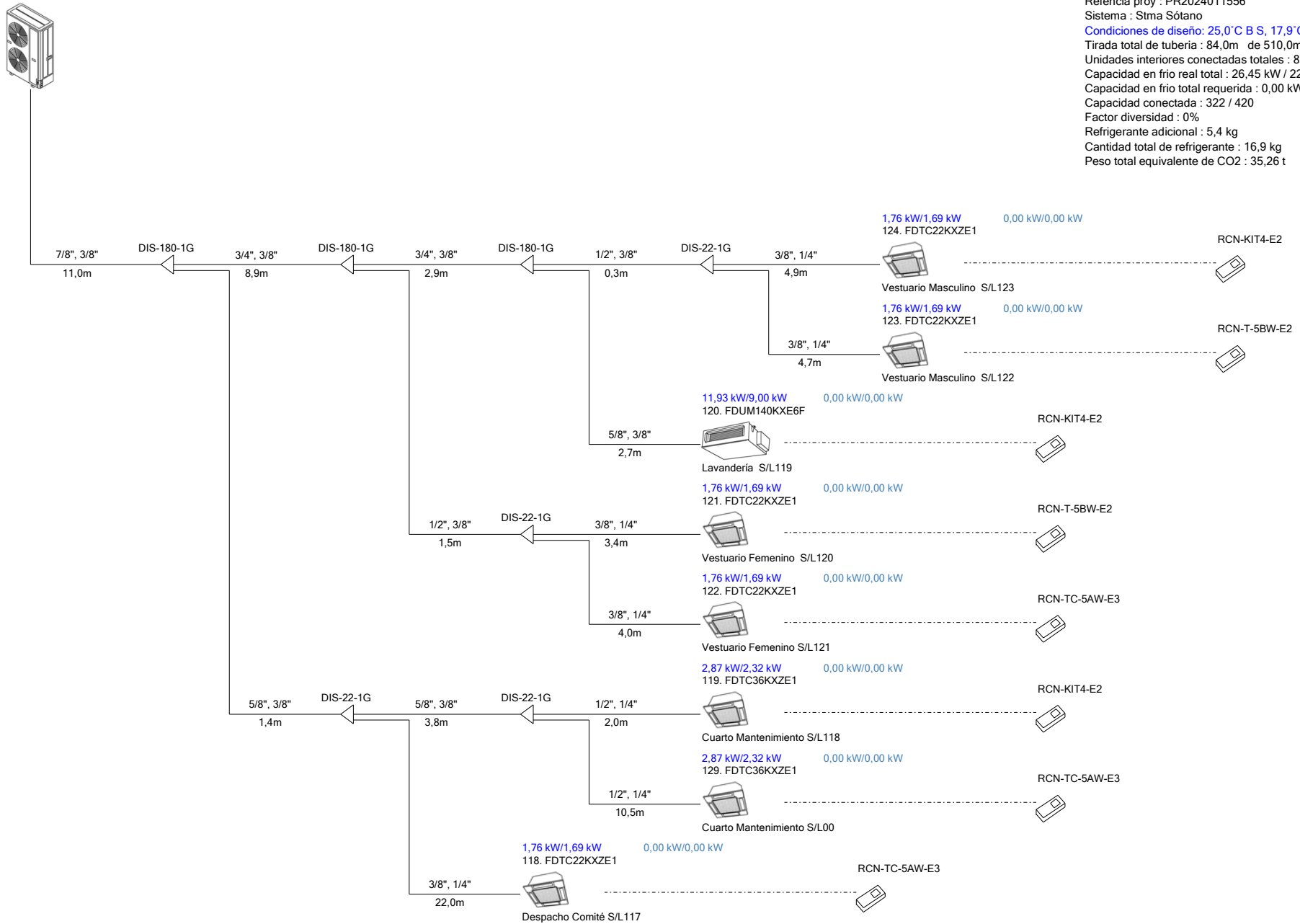
Proyecto : CADP Getafe V2  
Referencia proy : PR2024011556  
Sistema : Stma Control A  
Condiciones de diseño: 25,0°C B S, 17,9°C B H / 35,5°C B S  
Tirada total de tubería : 68,2m de 1000,0m  
Unidades interiores conectadas totales : 10  
Capacidad en frío real total : 30,39 kW / 23,97 kW  
Capacidad en frío total requerida : 0,00 kW / 0,00 kW  
Capacidad conectada : 343 / 670  
Factor diversidad : 0%  
Refrigerante adicional : 4,0 kg  
Cantidad total de refrigerante : 15,0 kg  
Peso total equivalente de CO2 : 31,32 t



Proyecto : CADP Getafe V2  
Referencia proy : PR2024011556  
Sistema : Stma Enfermería  
**Condiciones de diseño: 25,0°C B S, 17,9°C B H / 35,5°C B S**  
Tirada total de tubería : 74,5m de 510,0m  
Unidades interiores conectadas totales : 10  
Capacidad en frío real total : 21,35 kW / 17,99 kW  
Capacidad en frío total requerida : 0,00 kW / 0,00 kW  
Capacidad conectada : 291 / 336  
Factor diversidad : 0%  
Refrigerante adicional : 5,4 kg  
Cantidad total de refrigerante : 16,9 kg  
Peso total equivalente de CO2 : 35,33 t



Proyecto : CADP Getafe V2  
Referencia proy : PR2024011556  
Sistema : Stma Sótano  
Condiciones de diseño: 25,0°C B S, 17,9°C B H / 35,5°C B S  
Tirada total de tubería : 84,0m de 510,0m  
Unidades interiores conectadas totales : 8  
Capacidad en frío real total : 26,45 kW / 22,08 kW  
Capacidad en frío total requerida : 0,00 kW / 0,00 kW  
Capacidad conectada : 322 / 420  
Factor diversidad : 0%  
Refrigerante adicional : 5,4 kg  
Cantidad total de refrigerante : 16,9 kg  
Peso total equivalente de CO2 : 35,26 t



Proyecto : CADP Getafe V2  
Referencia proy : PR2024011556

Sistema : Stma Acceso

Condiciones de temperatura (frio)

Tª B S exterior  
35,5°C

Tª B H interior  
17,9°C

Condiciones de temperatura (calor)

Tª B H exterior  
-4,5°C

Tª B S interior  
21,0°C

| Und   | Habitacion      | Modelo       | Capacidad nominal (kW) |          |       | Capacidad real (kW) |          |       | Unidad interior<br>Posicion (m) |     | Real<br>Dista.<br>(m) | Tuberia<br>Dista.<br>(m) | Direccion |     |     |
|-------|-----------------|--------------|------------------------|----------|-------|---------------------|----------|-------|---------------------------------|-----|-----------------------|--------------------------|-----------|-----|-----|
|       |                 |              | Total                  | Sensible | Calor | Total               | Sensible | Calor |                                 |     |                       |                          | S/L       | O/U | I/U |
|       |                 | FDC140KXZES1 | 14,00                  | -        | 16,00 | 13,15               | -        | 12,73 |                                 |     |                       |                          | 1         | 01  | -   |
| 1     | Sala De Juegos  | FDT45KXZE1   | 4,50                   | 3,82     | 5,00  | 3,67                | 3,32     | 3,54  | Debajo                          | 0,0 | 10,2                  | 10,2                     | 1         | 01  | 00  |
| 2     | Sala De Visitas | FDT45KXZE1   | 4,50                   | 3,82     | 5,00  | 3,67                | 3,32     | 3,54  | Debajo                          | 0,0 | 18,7                  | 18,7                     | 1         | 01  | 01  |
| 3     | Hall            | FDUM71KXE6F  | 7,10                   | 6,05     | 8,00  | 5,80                | 5,24     | 5,66  | Debajo                          | 0,0 | 12,8                  | 12,8                     | 1         | 01  | 02  |
| Total |                 |              | 16,10                  | 13,68    | 18,00 | 13,15               | 11,88    | 12,73 |                                 |     |                       |                          |           |     |     |

Sistema : Stma Administración

Condiciones de temperatura (frio)

Tª B S exterior  
35,5°C

Tª B H interior  
17,9°C

Condiciones de temperatura (calor)

Tª B H exterior  
-4,5°C

Tª B S interior  
21,0°C

| Und   | Habitacion     | Modelo        | Capacidad nominal (kW) |          |       | Capacidad real (kW) |          |       | Unidad interior<br>Posicion (m) |     | Real<br>Dista.<br>(m) | Tuberia<br>Dista.<br>(m) | Direccion |     |     |
|-------|----------------|---------------|------------------------|----------|-------|---------------------|----------|-------|---------------------------------|-----|-----------------------|--------------------------|-----------|-----|-----|
|       |                |               | Total                  | Sensible | Calor | Total               | Sensible | Calor |                                 |     |                       |                          | S/L       | O/U | I/U |
|       |                | FDC335KXZME1A | 33,50                  | -        | 37,50 | 30,61               | -        | 29,56 |                                 |     |                       |                          | 1         | 02  | -   |
| 4     | Despacho Direc | FDTC36KXZE1   | 3,31                   | 2,61     | 3,64  | 3,08                | 2,41     | 2,92  | Debajo                          | 0,0 | 27,1                  | 27,1                     | 1         | 02  | 03  |
| 5     | Sala De Juntas | FDUM71KXE6F   | 7,10                   | 6,05     | 8,00  | 6,60                | 5,58     | 6,41  | Debajo                          | 0,0 | 25,8                  | 25,8                     | 1         | 02  | 04  |
| 6     | Zona Abierta   | FDUM112KXE6F  | 10,91                  | 8,02     | 12,16 | 10,14               | 7,45     | 9,74  | Debajo                          | 0,0 | 19,7                  | 19,7                     | 1         | 02  | 05  |
| 7     | Despacho Sindi | FDTC22KXZE1   | 2,03                   | 1,94     | 2,30  | 1,89                | 1,78     | 1,84  | Debajo                          | 0,0 | 22,8                  | 22,8                     | 1         | 02  | 06  |
| 8     | Administración | FDUM71KXE6F   | 6,89                   | 5,36     | 7,74  | 6,41                | 4,95     | 6,20  | Debajo                          | 0,0 | 16,3                  | 16,3                     | 1         | 02  | 07  |
| 9     | Recepción      | FDK28KXZE1    | 2,69                   | 2,05     | 3,05  | 2,50                | 1,90     | 2,44  | Debajo                          | 0,0 | 15,2                  | 15,2                     | 1         | 02  | 08  |
| Total |                |               | 32,93                  | 26,02    | 36,89 | 30,61               | 24,07    | 29,56 |                                 |     |                       |                          |           |     |     |

Sistema : Stma Teatro

Condiciones de temperatura (frio)

Tª B S exterior  
35,5°C

Tª B H interior  
17,9°C

Condiciones de temperatura (calor)

Tª B H exterior  
-4,5°C

Tª B S interior  
21,0°C

| Und | Habitacion | Modelo       | Capacidad nominal (kW) |          |       | Capacidad real (kW) |          |       | Unidad interior<br>Posicion (m) |     | Real<br>Dista.<br>(m) | Tuberia<br>Dista.<br>(m) | Direccion |     |     |
|-----|------------|--------------|------------------------|----------|-------|---------------------|----------|-------|---------------------------------|-----|-----------------------|--------------------------|-----------|-----|-----|
|     |            |              | Total                  | Sensible | Calor | Total               | Sensible | Calor |                                 |     |                       |                          | S/L       | O/U | I/U |
|     |            | FDC280KXZME1 | 28,00                  | -        | 31,50 | 25,62               | -        | 24,77 |                                 |     |                       |                          | 1         | 03  | -   |
| 10  | Teatro 01  | FDUM56KXE6F  | 5,60                   | 4,11     | 6,30  | 5,23                | 3,82     | 5,10  | Debajo                          | 0,0 | 30,1                  | 30,1                     | 1         | 03  | 09  |
| 11  | Teatro 02  | FDUM112KXE6F | 10,91                  | 8,02     | 12,16 | 10,19               | 7,47     | 9,84  | Debajo                          | 0,0 | 20,1                  | 20,1                     | 1         | 03  | 10  |

|       |           |              |       |       |       |       |       |       |        |     |      |      |   |    |    |
|-------|-----------|--------------|-------|-------|-------|-------|-------|-------|--------|-----|------|------|---|----|----|
| 12    | Teatro 03 | FDUM112KXE6F | 10,91 | 8,02  | 12,16 | 10,19 | 7,47  | 9,84  | Debajo | 0,0 | 23,1 | 23,1 | 1 | 03 | 11 |
| Total |           |              | 27,42 | 20,14 | 30,62 | 25,62 | 18,75 | 24,77 |        |     |      |      |   |    |    |

Sistema : Stma Cocina

Condiciones de temperatura (frio)

Tª B S exterior  
35,5°C

Tª B H interior  
17,9°C

Condiciones de temperatura (calor)

Tª B H exterior  
-4,5°C

Tª B S interior  
21,0°C

| Und   | Habitacion | Modelo      | Capacidad nominal (kW) |          |       | Capacidad real (kW) |          |       | Unidad interior<br>Posicion (m) |     | Real<br>Dista.<br>(m) | Tuberia<br>Dista.<br>(m) | Direccion |     |     |
|-------|------------|-------------|------------------------|----------|-------|---------------------|----------|-------|---------------------------------|-----|-----------------------|--------------------------|-----------|-----|-----|
|       |            |             | Total                  | Sensible | Calor | Total               | Sensible | Calor |                                 |     |                       |                          | S/L       | O/U | I/U |
|       |            | FDC224KXZE1 | 22,40                  | -        | 22,40 | 20,53               | -        | 17,94 |                                 |     |                       |                          | 1         | 04  | -   |
| 13    | Cocina     | FDT56KXZE1  | 5,17                   | 4,14     | 5,68  | 4,56                | 3,73     | 3,94  | Debajo                          | 0,0 | 19,9                  | 19,9                     | 1         | 04  | 12  |
| 14    | Cocina     | FDTC36KXZE1 | 3,60                   | 2,86     | 4,00  | 3,18                | 2,58     | 2,77  | Debajo                          | 0,0 | 27,7                  | 27,7                     | 1         | 04  | 13  |
| 15    | Cocina     | FDTC36KXZE1 | 3,60                   | 2,86     | 4,00  | 3,18                | 2,58     | 2,77  | Debajo                          | 0,0 | 27,4                  | 27,4                     | 1         | 04  | 14  |
| 16    | Cocina     | FDTC36KXZE1 | 3,60                   | 2,86     | 4,00  | 3,18                | 2,58     | 2,77  | Debajo                          | 0,0 | 31,2                  | 31,2                     | 1         | 04  | 15  |
| 17    | Cocina     | FDK45KXZE1  | 4,50                   | 3,30     | 5,00  | 3,97                | 2,98     | 3,47  | Debajo                          | 0,0 | 17,8                  | 17,8                     | 1         | 04  | 16  |
| 130   | Cocina     | FDTC28KXZE1 | 2,80                   | 2,36     | 3,20  | 2,47                | 2,13     | 2,22  | Debajo                          | 0,0 | 24,3                  | 24,3                     | 1         | 04  | 76  |
| Total |            |             | 23,27                  | 18,39    | 25,88 | 20,53               | 16,57    | 17,94 |                                 |     |                       |                          |           |     |     |

Sistema : Stma Distribuidores

Condiciones de temperatura (frio)

Tª B S exterior  
35,5°C

Tª B H interior  
17,9°C

Condiciones de temperatura (calor)

Tª B H exterior  
-4,5°C

Tª B S interior  
21,0°C

| Und   | Habitacion      | Modelo      | Capacidad nominal (kW) |          |       | Capacidad real (kW) |          |       | Unidad interior<br>Posicion (m) |     | Real<br>Dista.<br>(m) | Tuberia<br>Dista.<br>(m) | Direccion |     |     |
|-------|-----------------|-------------|------------------------|----------|-------|---------------------|----------|-------|---------------------------------|-----|-----------------------|--------------------------|-----------|-----|-----|
|       |                 |             | Total                  | Sensible | Calor | Total               | Sensible | Calor |                                 |     |                       |                          | S/L       | O/U | I/U |
|       |                 | FDC670KXZE2 | 67,00                  | -        | 75,00 | 61,32               | -        | 58,83 |                                 |     |                       |                          | 1         | 06  | -   |
| 22    | Distribuidor 01 | FDUM90KXE6F | 9,00                   | 6,85     | 10,00 | 7,67                | 6,05     | 7,35  | Debajo                          | 0,0 | 37,1                  | 37,1                     | 1         | 06  | 21  |
| 23    | Distribuidor 02 | FDUM90KXE6F | 9,00                   | 6,85     | 10,00 | 7,67                | 6,05     | 7,35  | Debajo                          | 0,0 | 29,5                  | 29,5                     | 1         | 06  | 22  |
| 24    | Distribuidor 03 | FDUM90KXE6F | 9,00                   | 6,85     | 10,00 | 7,67                | 6,05     | 7,35  | Debajo                          | 0,0 | 25,0                  | 25,0                     | 1         | 06  | 23  |
| 25    | Distribuidor 04 | FDUM90KXE6F | 9,00                   | 6,85     | 10,00 | 7,67                | 6,05     | 7,35  | Debajo                          | 0,0 | 16,6                  | 16,6                     | 1         | 06  | 24  |
| 26    | Distribuidor 05 | FDUM90KXE6F | 9,00                   | 6,85     | 10,00 | 7,67                | 6,05     | 7,35  | Debajo                          | 0,0 | 13,9                  | 13,9                     | 1         | 06  | 25  |
| 27    | Distribuidor 06 | FDUM90KXE6F | 9,00                   | 6,85     | 10,00 | 7,67                | 6,05     | 7,35  | Debajo                          | 0,0 | 25,3                  | 25,3                     | 1         | 06  | 26  |
| 28    | Distribuidor 07 | FDUM90KXE6F | 9,00                   | 6,85     | 10,00 | 7,67                | 6,05     | 7,35  | Debajo                          | 0,0 | 29,6                  | 29,6                     | 1         | 06  | 27  |
| 29    | Distribuidor 08 | FDUM90KXE6F | 9,00                   | 6,85     | 10,00 | 7,67                | 6,05     | 7,35  | Debajo                          | 0,0 | 50,0                  | 50,0                     | 1         | 06  | 28  |
| Total |                 |             | 72,00                  | 54,77    | 80,00 | 61,32               | 48,43    | 58,83 |                                 |     |                       |                          |           |     |     |

Sistema : Stma Consultas

Condiciones de temperatura (frio)

Tª B S exterior

35,5°C

Tª B H interior

17,9°C

Condiciones de temperatura (calor)

Tª B H exterior

-4,5°C

Tª B S interior

21,0°C

| Und   | Habitacion      | Modelo       | Capacidad nominal (kW) |          |       | Capacidad real (kW) |          |       | Unidad interior<br>Posicion (m) |     | Real<br>Dista.<br>(m) | Tuberia<br>Dista.<br>(m) | Direccion |     |     |
|-------|-----------------|--------------|------------------------|----------|-------|---------------------|----------|-------|---------------------------------|-----|-----------------------|--------------------------|-----------|-----|-----|
|       |                 |              | Total                  | Sensible | Calor | Total               | Sensible | Calor |                                 |     |                       |                          | S/L       | O/U | I/U |
|       |                 | FDC224KXZPE1 | 22,40                  | -        | 22,40 | 20,68               | -        | 17,97 |                                 |     |                       |                          | 1         | 08  | -   |
| 31    | Peluquería      | FDK45KXZE1   | 4,22                   | 3,09     | 4,66  | 3,71                | 2,77     | 3,17  | Debajo                          | 0,0 | 25,4                  | 25,4                     | 1         | 08  | 30  |
| 32    | Despacho Gobe   | FDTC15KXZE1  | 1,50                   | 1,44     | 1,70  | 1,32                | 1,27     | 1,15  | Debajo                          | 0,0 | 27,4                  | 27,4                     | 1         | 08  | 31  |
| 33    | Despacho Psico  | FDTC22KXZE1  | 2,20                   | 2,11     | 2,50  | 1,93                | 1,86     | 1,70  | Debajo                          | 0,0 | 13,4                  | 13,4                     | 1         | 08  | 32  |
| 34    | T. Asistencial  | FDTC22KXZE1  | 2,20                   | 2,11     | 2,50  | 1,93                | 1,86     | 1,70  | Debajo                          | 0,0 | 14,0                  | 14,0                     | 1         | 08  | 33  |
| 35    | T. Social       | FDTC22KXZE1  | 2,20                   | 2,11     | 2,50  | 1,93                | 1,86     | 1,70  | Debajo                          | 0,0 | 16,7                  | 16,7                     | 1         | 08  | 34  |
| 36    | Vestuario       | FDUM56KXE6F  | 5,60                   | 4,11     | 6,30  | 4,92                | 3,69     | 4,28  | Debajo                          | 0,0 | 18,6                  | 18,6                     | 1         | 08  | 35  |
| 125   | Sala Relajación | FDUM56KXE6F  | 5,60                   | 4,11     | 6,30  | 4,92                | 3,69     | 4,28  | Debajo                          | 0,0 | 23,8                  | 23,8                     | 1         | 08  | 124 |
| Total |                 |              | 23,52                  | 19,08    | 26,46 | 20,68               | 16,98    | 17,97 |                                 |     |                       |                          |           |     |     |

Sistema : Stma Control F

Condiciones de temperatura (frio)

Tª B S exterior

35,5°C

Tª B H interior

17,9°C

Condiciones de temperatura (calor)

Tª B H exterior

-4,5°C

Tª B S interior

21,0°C

| Und   | Habitacion    | Modelo        | Capacidad nominal (kW) |          |       | Capacidad real (kW) |          |       | Unidad interior<br>Posicion (m) |     | Real<br>Dista.<br>(m) | Tuberia<br>Dista.<br>(m) | Direccion |     |     |
|-------|---------------|---------------|------------------------|----------|-------|---------------------|----------|-------|---------------------------------|-----|-----------------------|--------------------------|-----------|-----|-----|
|       |               |               | Total                  | Sensible | Calor | Total               | Sensible | Calor |                                 |     |                       |                          | S/L       | O/U | I/U |
|       |               | FDC280KXZE2   | 28,00                  | -        | 31,50 | 24,96               | -        | 24,57 |                                 |     |                       |                          | 1         | 09  | -   |
| 37    | Habitación 41 | FDUT22KXE6F-E | 2,20                   | 1,67     | 2,50  | 2,07                | 1,56     | 2,20  | Debajo                          | 0,0 | 44,4                  | 44,4                     | 1         | 09  | 36  |
| 38    | Habitación 42 | FDUT22KXE6F-E | 2,20                   | 1,67     | 2,50  | 2,07                | 1,56     | 2,20  | Debajo                          | 0,0 | 40,7                  | 40,7                     | 1         | 09  | 37  |
| 39    | Habitación 43 | FDUT22KXE6F-E | 2,20                   | 1,67     | 2,50  | 2,07                | 1,56     | 2,20  | Debajo                          | 0,0 | 41,2                  | 41,2                     | 1         | 09  | 38  |
| 40    | Habitación 44 | FDUT22KXE6F-E | 2,20                   | 1,67     | 2,50  | 2,07                | 1,56     | 2,20  | Debajo                          | 0,0 | 45,0                  | 45,0                     | 1         | 09  | 39  |
| 41    | Habitación 45 | FDUT22KXE6F-E | 2,20                   | 1,67     | 2,50  | 2,07                | 1,56     | 2,20  | Debajo                          | 0,0 | 49,1                  | 49,1                     | 1         | 09  | 40  |
| 42    | Habitación 46 | FDUT22KXE6F-E | 2,20                   | 1,67     | 2,50  | 2,07                | 1,56     | 2,20  | Debajo                          | 0,0 | 52,8                  | 52,8                     | 1         | 09  | 41  |
| 43    | Habitación 47 | FDUT15KXE6F-E | 1,50                   | 1,18     | 1,70  | 1,41                | 1,10     | 1,49  | Debajo                          | 0,0 | 51,0                  | 51,0                     | 1         | 09  | 42  |
| 44    | Habitación 48 | FDUT22KXE6F-E | 2,20                   | 1,67     | 2,50  | 2,07                | 1,56     | 2,20  | Debajo                          | 0,0 | 54,2                  | 54,2                     | 1         | 09  | 43  |
| 126   | Aseo 6        | FDT36KXZE1    | 3,60                   | 3,40     | 4,00  | 3,38                | 3,14     | 3,52  | Debajo                          | 0,0 | 24,9                  | 24,9                     | 1         | 09  | 125 |
| 127   | Aseo 6        | FDT36KXZE1    | 3,60                   | 3,40     | 4,00  | 3,38                | 3,14     | 3,52  | Debajo                          | 0,0 | 31,6                  | 31,6                     | 1         | 09  | 126 |
| Total |               |               | 24,10                  | 19,69    | 27,20 | 22,64               | 18,28    | 23,90 |                                 |     |                       |                          |           |     |     |



Sistema : Stma Salas E-F

Condiciones de temperatura (frio)

Tª B S exterior  
35,5°C

Tª B H interior  
17,9°C

Condiciones de temperatura (calor)

Tª B H exterior  
-4,5°C

Tª B S interior  
21,0°C

| Und   | Habitacion    | Modelo       | Capacidad nominal (kW) |          |       | Capacidad real (kW) |          |       | Unidad interior<br>Posicion (m) |     | Real<br>Dista.<br>(m) | Tuberia<br>Dista.<br>(m) | Direccion |     |     |
|-------|---------------|--------------|------------------------|----------|-------|---------------------|----------|-------|---------------------------------|-----|-----------------------|--------------------------|-----------|-----|-----|
|       |               |              | Total                  | Sensible | Calor | Total               | Sensible | Calor |                                 |     |                       |                          | S/L       | O/U | I/U |
|       |               | FDC140KXZES1 | 14,00                  | -        | 16,00 | 12,99               | -        | 12,66 |                                 |     |                       |                          | 1         | 10  | -   |
| 45    | Sala Estar 05 | FDUM71KXE6F  | 6,89                   | 5,36     | 7,74  | 6,47                | 4,98     | 6,33  | Debajo                          | 0,0 | 12,0                  | 12,0                     | 1         | 10  | 44  |
| 46    | Sala Estar 06 | FDUM71KXE6F  | 6,89                   | 5,36     | 7,74  | 6,47                | 4,98     | 6,33  | Debajo                          | 0,0 | 13,7                  | 13,7                     | 1         | 10  | 45  |
| Total |               |              | 13,78                  | 10,72    | 15,48 | 12,95               | 9,96     | 12,66 |                                 |     |                       |                          |           |     |     |

Sistema : Stma Control E

Condiciones de temperatura (frio)

Tª B S exterior  
35,5°C

Tª B H interior  
17,9°C

Condiciones de temperatura (calor)

Tª B H exterior  
-4,5°C

Tª B S interior  
21,0°C

| Und   | Habitacion    | Modelo        | Capacidad nominal (kW) |          |       | Capacidad real (kW) |          |       | Unidad interior<br>Posicion (m) |     | Real<br>Dista.<br>(m) | Tuberia<br>Dista.<br>(m) | Direccion |     |     |
|-------|---------------|---------------|------------------------|----------|-------|---------------------|----------|-------|---------------------------------|-----|-----------------------|--------------------------|-----------|-----|-----|
|       |               |               | Total                  | Sensible | Calor | Total               | Sensible | Calor |                                 |     |                       |                          | S/L       | O/U | I/U |
|       |               | FDC280KXZE2   | 28,00                  | -        | 31,50 | 27,23               | -        | 25,10 |                                 |     |                       |                          | 1         | 11  | -   |
| 30    | Aseo 5        | FDTC28KXZE1   | 2,59                   | 2,15     | 2,95  | 2,01                | 1,83     | 1,85  | Debajo                          | 0,0 | 19,0                  | 19,0                     | 1         | 11  | 29  |
| 47    | Control 3     | FDUM140KXE6F  | 13,77                  | 10,10    | 15,68 | 10,67               | 8,47     | 9,84  | Debajo                          | 0,0 | 22,3                  | 22,3                     | 1         | 11  | 46  |
| 48    | Aseo 5        | FDTC28KXZE1   | 2,59                   | 2,15     | 2,95  | 2,01                | 1,83     | 1,85  | Debajo                          | 0,0 | 16,0                  | 16,0                     | 1         | 11  | 47  |
| 49    | Habitación 33 | FDUT15KXE6F-E | 1,50                   | 1,18     | 1,70  | 1,16                | 0,99     | 1,07  | Debajo                          | 0,0 | 30,9                  | 30,9                     | 1         | 11  | 48  |
| 50    | Habitación 34 | FDUT15KXE6F-E | 1,50                   | 1,18     | 1,70  | 1,16                | 0,99     | 1,07  | Debajo                          | 0,0 | 28,4                  | 28,4                     | 1         | 11  | 49  |
| 51    | Habitación 35 | FDUT22KXE6F-E | 2,20                   | 1,67     | 2,50  | 1,70                | 1,41     | 1,57  | Debajo                          | 0,0 | 31,6                  | 31,6                     | 1         | 11  | 50  |
| 52    | Habitación 36 | FDUT22KXE6F-E | 2,20                   | 1,67     | 2,50  | 1,70                | 1,41     | 1,57  | Debajo                          | 0,0 | 29,2                  | 29,2                     | 1         | 11  | 51  |
| 53    | Habitación 37 | FDUT22KXE6F-E | 2,20                   | 1,67     | 2,50  | 1,70                | 1,41     | 1,57  | Debajo                          | 0,0 | 24,0                  | 24,0                     | 1         | 11  | 52  |
| 54    | Habitación 38 | FDUT22KXE6F-E | 2,20                   | 1,67     | 2,50  | 1,70                | 1,41     | 1,57  | Debajo                          | 0,0 | 20,4                  | 20,4                     | 1         | 11  | 53  |
| 55    | Habitación 39 | FDUT22KXE6F-E | 2,20                   | 1,67     | 2,50  | 1,70                | 1,41     | 1,57  | Debajo                          | 0,0 | 19,6                  | 19,6                     | 1         | 11  | 54  |
| 56    | Habitación 40 | FDUT22KXE6F-E | 2,20                   | 1,67     | 2,50  | 1,70                | 1,41     | 1,57  | Debajo                          | 0,0 | 22,8                  | 22,8                     | 1         | 11  | 55  |
| Total |               |               | 35,15                  | 26,81    | 39,98 | 27,23               | 22,58    | 25,10 |                                 |     |                       |                          |           |     |     |

Sistema : Stma Control D

Condiciones de temperatura (frio)

Tª B S exterior  
35,5°C

Tª B H interior  
17,9°C

Condiciones de temperatura (calor)

Tª B H exterior  
-4,5°C

Tª B S interior  
21,0°C

| Und | Habitacion | Modelo      | Capacidad nominal (kW) |          |       | Capacidad real (kW) |          |       | Unidad interior<br>Posicion (m) |  | Real<br>Dista.<br>(m) | Tuberia<br>Dista.<br>(m) | Direccion |     |     |
|-----|------------|-------------|------------------------|----------|-------|---------------------|----------|-------|---------------------------------|--|-----------------------|--------------------------|-----------|-----|-----|
|     |            |             | Total                  | Sensible | Calor | Total               | Sensible | Calor |                                 |  |                       |                          | S/L       | O/U | I/U |
|     |            | FDC280KXZE2 | 28,00                  | -        | 31,50 | 25,14               | -        | 24,63 |                                 |  |                       |                          | 1         | 12  | -   |

|       |               |               |       |       |       |       |       |       |        |     |      |      |   |    |    |
|-------|---------------|---------------|-------|-------|-------|-------|-------|-------|--------|-----|------|------|---|----|----|
| 57    | Aseo 4        | FDT28KXZE1    | 2,66  | 2,55  | 3,03  | 2,50  | 2,40  | 2,66  | Debajo | 0,0 | 21,6 | 21,6 | 1 | 12 | 56 |
| 58    | Aseo 4        | FDT28KXZE1    | 2,66  | 2,55  | 3,03  | 2,50  | 2,40  | 2,66  | Debajo | 0,0 | 27,9 | 27,9 | 1 | 12 | 57 |
| 59    | Habitación 25 | FDUT22KXE6F-E | 2,20  | 1,67  | 2,50  | 2,07  | 1,56  | 2,20  | Debajo | 0,0 | 33,9 | 33,9 | 1 | 12 | 58 |
| 60    | Habitación 26 | FDUT22KXE6F-E | 2,20  | 1,67  | 2,50  | 2,07  | 1,56  | 2,20  | Debajo | 0,0 | 31,4 | 31,4 | 1 | 12 | 59 |
| 61    | Habitación 27 | FDUT22KXE6F-E | 2,20  | 1,67  | 2,50  | 2,07  | 1,56  | 2,20  | Debajo | 0,0 | 34,4 | 34,4 | 1 | 12 | 60 |
| 62    | Habitación 28 | FDUT22KXE6F-E | 2,20  | 1,67  | 2,50  | 2,07  | 1,56  | 2,20  | Debajo | 0,0 | 38,1 | 38,1 | 1 | 12 | 61 |
| 63    | Habitación 29 | FDUT22KXE6F-E | 2,20  | 1,67  | 2,50  | 2,07  | 1,56  | 2,20  | Debajo | 0,0 | 41,3 | 41,3 | 1 | 12 | 62 |
| 64    | Habitación 30 | FDUT22KXE6F-E | 2,20  | 1,67  | 2,50  | 2,07  | 1,56  | 2,20  | Debajo | 0,0 | 44,9 | 44,9 | 1 | 12 | 63 |
| 65    | Habitación 31 | FDUT15KXE6F-E | 1,50  | 1,18  | 1,70  | 1,41  | 1,10  | 1,49  | Debajo | 0,0 | 44,2 | 44,2 | 1 | 12 | 64 |
| 66    | Habitación 32 | FDUT15KXE6F-E | 1,50  | 1,18  | 1,70  | 1,41  | 1,10  | 1,49  | Debajo | 0,0 | 47,3 | 47,3 | 1 | 12 | 65 |
| Total |               |               | 21,52 | 17,51 | 24,46 | 20,22 | 16,34 | 21,49 |        |     |      |      |   |    |    |

Sistema : Stma Salas C-D

Condiciones de temperatura (frio)

Tª B S exterior

35,5°C

Tª B H interior

17,9°C

Condiciones de temperatura (calor)

Tª B H exterior

-4,5°C

Tª B S interior

21,0°C

| Und   | Habitacion   | Modelo       | Capacidad nominal (kW) |          |       | Capacidad real (kW) |          |       | Unidad interior<br>Posicion (m) |     | Real<br>Dista.<br>(m) | Tuberia<br>Dista.<br>(m) | Direccion |     |     |
|-------|--------------|--------------|------------------------|----------|-------|---------------------|----------|-------|---------------------------------|-----|-----------------------|--------------------------|-----------|-----|-----|
|       |              |              | Total                  | Sensible | Calor | Total               | Sensible | Calor |                                 |     |                       |                          | S/L       | O/U | I/U |
|       |              | FDC224KXZPE1 | 22,40                  | -        | 22,40 | 20,85               | -        | 18,00 |                                 |     |                       |                          | 1         | 13  | -   |
| 67    | Sala Estar 4 | FDUM90KXE6F  | 8,85                   | 6,21     | 9,75  | 8,31                | 5,80     | 8,01  | Debajo                          | 0,0 | 13,2                  | 13,2                     | 1         | 13  | 66  |
| 68    | Sala Estar 3 | FDUM112KXE6F | 10,91                  | 8,02     | 12,16 | 10,25               | 7,49     | 9,99  | Debajo                          | 0,0 | 11,2                  | 11,2                     | 1         | 13  | 67  |
| Total |              |              | 19,76                  | 14,23    | 21,91 | 18,56               | 13,29    | 18,00 |                                 |     |                       |                          |           |     |     |

Sistema : Stma Salas Taller

Condiciones de temperatura (frio)

Tª B S exterior

35,5°C

Tª B H interior

17,9°C

Condiciones de temperatura (calor)

Tª B H exterior

-4,5°C

Tª B S interior

21,0°C

| Und   | Habitacion        | Modelo       | Capacidad nominal (kW) |          |       | Capacidad real (kW) |          |       | Unidad interior<br>Posicion (m) |     | Real<br>Dista.<br>(m) | Tuberia<br>Dista.<br>(m) | Direccion |     |     |
|-------|-------------------|--------------|------------------------|----------|-------|---------------------|----------|-------|---------------------------------|-----|-----------------------|--------------------------|-----------|-----|-----|
|       |                   |              | Total                  | Sensible | Calor | Total               | Sensible | Calor |                                 |     |                       |                          | S/L       | O/U | I/U |
|       |                   | FDC280KXZPE1 | 28,00                  | -        | 28,00 | 26,10               | -        | 22,46 |                                 |     |                       |                          | 1         | 14  | -   |
| 69    | Gimnasio          | FDUM112KXE6F | 10,91                  | 8,02     | 12,16 | 9,55                | 7,18     | 8,18  | Debajo                          | 0,0 | 24,8                  | 24,8                     | 1         | 14  | 68  |
| 70    | Taller Textil     | FDTC36KXZE1  | 3,31                   | 2,61     | 3,64  | 2,90                | 2,33     | 2,45  | Debajo                          | 0,0 | 14,5                  | 14,5                     | 1         | 14  | 69  |
| 71    | Sala Ocup. 02     | FDTC28KXZE1  | 2,80                   | 2,36     | 3,20  | 2,45                | 2,12     | 2,15  | Debajo                          | 0,0 | 14,3                  | 14,3                     | 1         | 14  | 70  |
| 72    | Sala Ocup. 03     | FDTC28KXZE1  | 2,80                   | 2,36     | 3,20  | 2,45                | 2,12     | 2,15  | Debajo                          | 0,0 | 24,1                  | 24,1                     | 1         | 14  | 71  |
| 73    | Taller Carpinterí | FDTC28KXZE1  | 2,80                   | 2,36     | 3,20  | 2,45                | 2,12     | 2,15  | Debajo                          | 0,0 | 14,2                  | 14,2                     | 1         | 14  | 72  |
| 74    | Sala Ocup. 04     | FDTC36KXZE1  | 3,60                   | 2,86     | 4,00  | 3,15                | 2,57     | 2,69  | Debajo                          | 0,0 | 31,2                  | 31,2                     | 1         | 14  | 73  |
| 75    | Sala Ocup. 05     | FDTC36KXZE1  | 3,60                   | 2,86     | 4,00  | 3,15                | 2,57     | 2,69  | Debajo                          | 0,0 | 26,0                  | 26,0                     | 1         | 14  | 74  |
| Total |                   |              | 29,82                  | 23,42    | 33,40 | 26,10               | 21,02    | 22,46 |                                 |     |                       |                          |           |     |     |

Sistema : Stma Comedor

Condiciones de temperatura (frio)

Tª B S exterior

35,5°C

Tª B H interior

17,9°C

Condiciones de temperatura (calor)

Tª B H exterior

-4,5°C

Tª B S interior

21,0°C

| Und   | Habitacion     | Modelo       | Capacidad nominal (kW) |          |       | Capacidad real (kW) |          |       | Unidad interior<br>Posicion (m) |     | Real<br>Dista.<br>(m) | Tuberia<br>Dista.<br>(m) | Direccion |     |     |
|-------|----------------|--------------|------------------------|----------|-------|---------------------|----------|-------|---------------------------------|-----|-----------------------|--------------------------|-----------|-----|-----|
|       |                |              | Total                  | Sensible | Calor | Total               | Sensible | Calor |                                 |     |                       |                          | S/L       | O/U | I/U |
|       |                | FDC560KXZE2  | 56,00                  | -        | 63,00 | 51,79               | -        | 49,60 |                                 |     |                       |                          | 1         | 22  | -   |
| 18    | Comedor        | FDUM112KXE6F | 11,20                  | 8,98     | 12,50 | 10,28               | 8,26     | 9,77  | Debajo                          | 0,0 | 17,4                  | 17,4                     | 1         | 22  | 17  |
| 19    | St. Comedor 01 | FDUM160KXE6F | 15,74                  | 11,10    | 17,64 | 14,44               | 10,23    | 13,79 | Debajo                          | 0,0 | 29,4                  | 29,4                     | 1         | 22  | 18  |
| 20    | St. Comedor 02 | FDUM140KXE6F | 13,77                  | 10,10    | 15,68 | 12,63               | 9,29     | 12,26 | Debajo                          | 0,0 | 14,8                  | 14,8                     | 1         | 22  | 19  |
| 21    | Comedor 03     | FDUM160KXE6F | 15,74                  | 11,10    | 17,64 | 14,44               | 10,23    | 13,79 | Debajo                          | 0,0 | 22,1                  | 22,1                     | 1         | 22  | 20  |
| Total |                |              | 56,45                  | 41,29    | 63,46 | 51,79               | 38,02    | 49,60 |                                 |     |                       |                          |           |     |     |

Sistema : Stma Control C

Condiciones de temperatura (frio)

Tª B S exterior

35,5°C

Tª B H interior

17,9°C

Condiciones de temperatura (calor)

Tª B H exterior

-4,5°C

Tª B S interior

21,0°C

| Und   | Habitacion    | Modelo        | Capacidad nominal (kW) |          |       | Capacidad real (kW) |          |       | Unidad interior<br>Posicion (m) |     | Real<br>Dista.<br>(m) | Tuberia<br>Dista.<br>(m) | Direccion |     |     |
|-------|---------------|---------------|------------------------|----------|-------|---------------------|----------|-------|---------------------------------|-----|-----------------------|--------------------------|-----------|-----|-----|
|       |               |               | Total                  | Sensible | Calor | Total               | Sensible | Calor |                                 |     |                       |                          | S/L       | O/U | I/U |
|       |               | FDC335KXZE2   | 33,50                  | -        | 37,50 | 31,71               | -        | 29,81 |                                 |     |                       |                          | 2         | 15  | -   |
| 76    | Control 2     | FDUM140KXE6F  | 14,00                  | 11,18    | 16,00 | 11,27               | 9,63     | 10,60 | Debajo                          | 0,0 | 20,2                  | 20,2                     | 2         | 15  | 75  |
| 77    | Habitación 17 | FDUT28KXE6F-E | 2,80                   | 2,03     | 3,20  | 2,25                | 1,74     | 2,12  | Debajo                          | 0,0 | 28,0                  | 28,0                     | 2         | 15  | 76  |
| 78    | Habitación 18 | FDUT28KXE6F-E | 2,80                   | 2,03     | 3,20  | 2,25                | 1,74     | 2,12  | Debajo                          | 0,0 | 25,5                  | 25,5                     | 2         | 15  | 77  |
| 79    | Habitación 19 | FDUT28KXE6F-E | 2,80                   | 2,03     | 3,20  | 2,25                | 1,74     | 2,12  | Debajo                          | 0,0 | 21,2                  | 21,2                     | 2         | 15  | 78  |
| 80    | Habitación 20 | FDUT28KXE6F-E | 2,80                   | 2,03     | 3,20  | 2,25                | 1,74     | 2,12  | Debajo                          | 0,0 | 17,8                  | 17,8                     | 2         | 15  | 79  |
| 81    | Habitación 21 | FDUT28KXE6F-E | 2,80                   | 2,03     | 3,20  | 2,25                | 1,74     | 2,12  | Debajo                          | 0,0 | 17,5                  | 17,5                     | 2         | 15  | 80  |
| 82    | Habitación 22 | FDUT28KXE6F-E | 2,80                   | 2,03     | 3,20  | 2,25                | 1,74     | 2,12  | Debajo                          | 0,0 | 19,9                  | 19,9                     | 2         | 15  | 81  |
| 83    | Habitación 23 | FDUT15KXE6F-E | 1,50                   | 1,18     | 1,70  | 1,21                | 1,01     | 1,13  | Debajo                          | 0,0 | 27,4                  | 27,4                     | 2         | 15  | 82  |
| 84    | Habitación 24 | FDUT15KXE6F-E | 1,50                   | 1,18     | 1,70  | 1,21                | 1,01     | 1,13  | Debajo                          | 0,0 | 24,9                  | 24,9                     | 2         | 15  | 83  |
| 85    | Aseo 3        | FDT28KXZE1    | 2,80                   | 2,69     | 3,20  | 2,25                | 2,16     | 2,12  | Debajo                          | 0,0 | 12,6                  | 12,6                     | 2         | 15  | 84  |
| 128   | Aseo 3        | FDT28KXZE1    | 2,80                   | 2,69     | 3,20  | 2,25                | 2,16     | 2,12  | Debajo                          | 0,0 | 15,4                  | 15,4                     | 2         | 15  | 127 |
| Total |               |               | 39,40                  | 31,09    | 45,00 | 31,71               | 26,39    | 29,81 |                                 |     |                       |                          |           |     |     |

Sistema : Stma Control B

Condiciones de temperatura (frio)

Tª B S exterior

35,5°C

Tª B H interior

17,9°C

Condiciones de temperatura (calor)

Tª B H exterior

-4,5°C

Tª B S interior

21,0°C

| Und   | Habitacion    | Modelo        | Capacidad nominal (kW) |          |       | Capacidad real (kW) |          |       | Unidad interior<br>Posicion (m) |     | Real<br>Dista.<br>(m) | Tuberia<br>Dista.<br>(m) | Direccion |     |     |
|-------|---------------|---------------|------------------------|----------|-------|---------------------|----------|-------|---------------------------------|-----|-----------------------|--------------------------|-----------|-----|-----|
|       |               |               | Total                  | Sensible | Calor | Total               | Sensible | Calor |                                 |     |                       |                          | S/L       | O/U | I/U |
|       |               | FDC280KXZE2   | 28,00                  | -        | 31,50 | 25,18               | -        | 24,64 |                                 |     |                       |                          | 2         | 16  | -   |
| 86    | Aseo 2        | FDT28KXZE1    | 2,66                   | 2,55     | 3,03  | 2,50                | 2,40     | 2,60  | Debajo                          | 0,0 | 34,9                  | 34,9                     | 2         | 16  | 85  |
| 87    | Aseo 2        | FDT28KXZE1    | 2,66                   | 2,55     | 3,03  | 2,50                | 2,40     | 2,60  | Debajo                          | 0,0 | 41,4                  | 41,4                     | 2         | 16  | 86  |
| 88    | Habitación 9  | FDUT28KXE6F-E | 2,80                   | 2,03     | 3,20  | 2,63                | 1,90     | 2,75  | Debajo                          | 0,0 | 31,6                  | 31,6                     | 2         | 16  | 87  |
| 89    | Habitación 10 | FDUT28KXE6F-E | 2,80                   | 2,03     | 3,20  | 2,63                | 1,90     | 2,75  | Debajo                          | 0,0 | 29,7                  | 29,7                     | 2         | 16  | 88  |
| 90    | Habitación 11 | FDUT28KXE6F-E | 2,80                   | 2,03     | 3,20  | 2,63                | 1,90     | 2,75  | Debajo                          | 0,0 | 32,6                  | 32,6                     | 2         | 16  | 89  |
| 91    | Habitación 12 | FDUT28KXE6F-E | 2,80                   | 2,03     | 3,20  | 2,63                | 1,90     | 2,75  | Debajo                          | 0,0 | 36,4                  | 36,4                     | 2         | 16  | 90  |
| 92    | Habitación 13 | FDUT28KXE6F-E | 2,80                   | 2,03     | 3,20  | 2,63                | 1,90     | 2,75  | Debajo                          | 0,0 | 40,1                  | 40,1                     | 2         | 16  | 91  |
| 93    | Habitación 14 | FDUT28KXE6F-E | 2,80                   | 2,03     | 3,20  | 2,63                | 1,90     | 2,75  | Debajo                          | 0,0 | 43,5                  | 43,5                     | 2         | 16  | 92  |
| 94    | Habitación 15 | FDUT15KXE6F-E | 1,50                   | 1,18     | 1,70  | 1,41                | 1,10     | 1,46  | Debajo                          | 0,0 | 42,7                  | 42,7                     | 2         | 16  | 93  |
| 95    | Habitación 16 | FDUT15KXE6F-E | 1,50                   | 1,18     | 1,70  | 1,41                | 1,10     | 1,46  | Debajo                          | 0,0 | 46,0                  | 46,0                     | 2         | 16  | 94  |
| Total |               |               | 25,12                  | 19,64    | 28,66 | 23,60               | 18,37    | 24,64 |                                 |     |                       |                          |           |     |     |

Sistema : Stma Salas A-B

Condiciones de temperatura (frio)

Tª B S exterior

35,5°C

Tª B H interior

17,9°C

Condiciones de temperatura (calor)

Tª B H exterior

-4,5°C

Tª B S interior

21,0°C

| Und   | Habitacion   | Modelo       | Capacidad nominal (kW) |          |       | Capacidad real (kW) |          |       | Unidad interior<br>Posicion (m) |     | Real<br>Dista.<br>(m) | Tuberia<br>Dista.<br>(m) | Direccion |     |     |
|-------|--------------|--------------|------------------------|----------|-------|---------------------|----------|-------|---------------------------------|-----|-----------------------|--------------------------|-----------|-----|-----|
|       |              |              | Total                  | Sensible | Calor | Total               | Sensible | Calor |                                 |     |                       |                          | S/L       | O/U | I/U |
|       |              | FDC140KXZES1 | 14,00                  | -        | 16,00 | 13,33               | -        | 12,75 |                                 |     |                       |                          | 2         | 17  | -   |
| 96    | Sala Estar 2 | FDUM90KXE6F  | 8,85                   | 6,21     | 9,75  | 7,50                | 5,44     | 7,11  | Debajo                          | 0,0 | 13,2                  | 13,2                     | 2         | 17  | 95  |
| 97    | Sala Estar 1 | FDUM71KXE6F  | 6,89                   | 5,36     | 7,74  | 5,84                | 4,72     | 5,64  | Debajo                          | 0,0 | 11,5                  | 11,5                     | 2         | 17  | 96  |
| Total |              |              | 15,74                  | 11,57    | 17,49 | 13,33               | 10,17    | 12,75 |                                 |     |                       |                          |           |     |     |

Sistema : Stma Control A

Condiciones de temperatura (frio)

Tª B S exterior

35,5°C

Tª B H interior

17,9°C

Condiciones de temperatura (calor)

Tª B H exterior

-4,5°C

Tª B S interior

21,0°C

| Und | Habitacion | Modelo       | Capacidad nominal (kW) |          |       | Capacidad real (kW) |          |       | Unidad interior<br>Posicion (m) |     | Real<br>Dista.<br>(m) | Tuberia<br>Dista.<br>(m) | Direccion |     |     |
|-----|------------|--------------|------------------------|----------|-------|---------------------|----------|-------|---------------------------------|-----|-----------------------|--------------------------|-----------|-----|-----|
|     |            |              | Total                  | Sensible | Calor | Total               | Sensible | Calor |                                 |     |                       |                          | S/L       | O/U | I/U |
|     |            | FDC335KXZE2  | 33,50                  | -        | 37,50 | 30,39               | -        | 29,50 |                                 |     |                       |                          | 2         | 18  | -   |
| 98  | Control 1  | FDUM140KXE6F | 13,77                  | 10,10    | 15,68 | 12,38               | 9,19     | 12,03 | Debajo                          | 0,0 | 13,5                  | 13,5                     | 2         | 18  | 97  |

|       |              |               |       |       |       |       |       |       |        |     |      |      |   |    |     |
|-------|--------------|---------------|-------|-------|-------|-------|-------|-------|--------|-----|------|------|---|----|-----|
| 99    | Aseo 1       | FDT28KXZE1    | 2,66  | 2,55  | 3,03  | 2,39  | 2,30  | 2,33  | Debajo | 0,0 | 25,3 | 25,3 | 2 | 18 | 98  |
| 100   | Aseo 1       | FDT28KXZE1    | 2,66  | 2,55  | 3,03  | 2,39  | 2,30  | 2,33  | Debajo | 0,0 | 29,5 | 29,5 | 2 | 18 | 99  |
| 102   | Habitación 2 | FDUT15KXE6F-E | 1,50  | 1,18  | 1,70  | 1,35  | 1,07  | 1,30  | Debajo | 0,0 | 31,5 | 31,5 | 2 | 18 | 101 |
| 103   | Habitación 3 | FDUT22KXE6F-E | 2,20  | 1,67  | 2,50  | 1,98  | 1,52  | 1,92  | Debajo | 0,0 | 33,0 | 33,0 | 2 | 18 | 102 |
| 104   | Habitación 4 | FDUT22KXE6F-E | 2,20  | 1,67  | 2,50  | 1,98  | 1,52  | 1,92  | Debajo | 0,0 | 31,6 | 31,6 | 2 | 18 | 103 |
| 105   | Habitación 5 | FDUT22KXE6F-E | 2,20  | 1,67  | 2,50  | 1,98  | 1,52  | 1,92  | Debajo | 0,0 | 26,1 | 26,1 | 2 | 18 | 104 |
| 106   | Habitación 6 | FDUT22KXE6F-E | 2,20  | 1,67  | 2,50  | 1,98  | 1,52  | 1,92  | Debajo | 0,0 | 21,9 | 21,9 | 2 | 18 | 105 |
| 107   | Habitación 7 | FDUT22KXE6F-E | 2,20  | 1,67  | 2,50  | 1,98  | 1,52  | 1,92  | Debajo | 0,0 | 19,4 | 19,4 | 2 | 18 | 106 |
| 108   | Habitación 8 | FDUT22KXE6F-E | 2,20  | 1,67  | 2,50  | 1,98  | 1,52  | 1,92  | Debajo | 0,0 | 18,5 | 18,5 | 2 | 18 | 107 |
| Total |              |               | 33,79 | 26,43 | 38,44 | 30,39 | 23,97 | 29,50 |        |     |      |      |   |    |     |

Sistema : Stma Enfermería

Condiciones de temperatura (frio)

Tª B S exterior

35,5°C

Tª B H interior

17,9°C

Condiciones de temperatura (calor)

Tª B H exterior

-4,5°C

Tª B S interior

21,0°C

| Und   | Habitacion    | Modelo        | Capacidad nominal (kW) |          |       | Capacidad real (kW) |          |       | Unidad interior<br>Posicion (m) |     | Real<br>Dista.<br>(m) | Tuberia<br>Dista.<br>(m) | Direccion |     |     |
|-------|---------------|---------------|------------------------|----------|-------|---------------------|----------|-------|---------------------------------|-----|-----------------------|--------------------------|-----------|-----|-----|
|       |               |               | Total                  | Sensible | Calor | Total               | Sensible | Calor |                                 |     |                       |                          | S/L       | O/U | I/U |
|       |               | FDC224KXZME1  | 22,40                  | -        | 25,00 | 21,35               | -        | 20,05 |                                 |     |                       |                          | 2         | 19  | -   |
| 109   | Despacho Med. | FDTC22KXZE1   | 2,03                   | 1,94     | 2,30  | 1,59                | 1,52     | 1,51  | Debajo                          | 0,0 | 11,5                  | 11,5                     | 2         | 19  | 108 |
| 110   | Despacho 1    | FDTC22KXZE1   | 2,03                   | 1,94     | 2,30  | 1,59                | 1,52     | 1,51  | Debajo                          | 0,0 | 44,4                  | 44,4                     | 2         | 19  | 109 |
| 111   | Despacho 2    | FDTC45KXZE1   | 3,93                   | 3,00     | 4,28  | 3,07                | 2,53     | 2,81  | Debajo                          | 0,0 | 40,3                  | 40,3                     | 2         | 19  | 110 |
| 112   | Enfermería    | FDTC56KXZE1   | 5,03                   | 3,71     | 5,55  | 3,93                | 3,12     | 3,64  | Debajo                          | 0,0 | 34,3                  | 34,3                     | 2         | 19  | 111 |
| 113   | Habitación A  | FDUT22KXE6F-E | 2,20                   | 1,67     | 2,50  | 1,72                | 1,42     | 1,64  | Debajo                          | 0,0 | 19,4                  | 19,4                     | 2         | 19  | 112 |
| 114   | Habitación B  | FDUT22KXE6F-E | 2,20                   | 1,67     | 2,50  | 1,72                | 1,42     | 1,64  | Debajo                          | 0,0 | 24,0                  | 24,0                     | 2         | 19  | 113 |
| 115   | Habitación C  | FDUT22KXE6F-E | 2,20                   | 1,67     | 2,50  | 1,72                | 1,42     | 1,64  | Debajo                          | 0,0 | 32,0                  | 32,0                     | 2         | 19  | 114 |
| 116   | Habitación D  | FDUT22KXE6F-E | 2,20                   | 1,67     | 2,50  | 1,72                | 1,42     | 1,64  | Debajo                          | 0,0 | 39,0                  | 39,0                     | 2         | 19  | 115 |
| 117   | Habitación E  | FDUT22KXE6F-E | 2,20                   | 1,67     | 2,50  | 1,72                | 1,42     | 1,64  | Debajo                          | 0,0 | 41,8                  | 41,8                     | 2         | 19  | 116 |
| 131   | Despacho Med. | FDTC36KXZE1   | 3,31                   | 2,61     | 3,64  | 2,59                | 2,21     | 2,39  | Debajo                          | 0,0 | 11,5                  | 11,5                     | 2         | 19  | 01  |
| Total |               |               | 27,33                  | 21,56    | 30,57 | 21,35               | 17,99    | 20,05 |                                 |     |                       |                          |           |     |     |

Sistema : Stma Sótano

Condiciones de temperatura (frio)

Tª B S exterior

35,5°C

Tª B H interior

17,9°C

Condiciones de temperatura (calor)

Tª B H exterior

-4,5°C

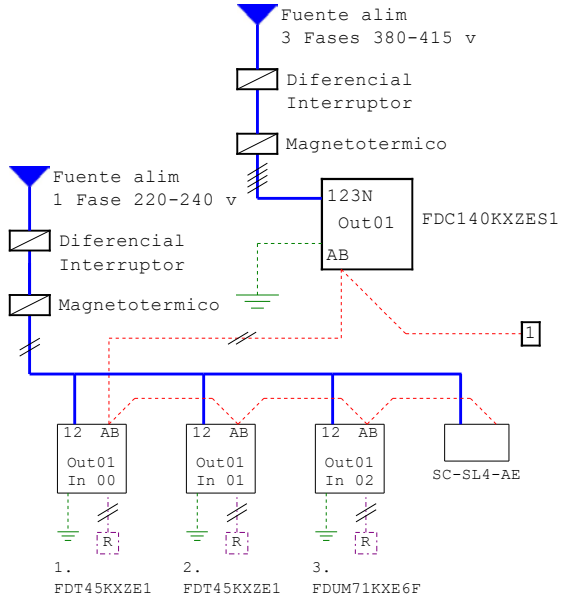
Tª B S interior

21,0°C

| Und | Habitacion     | Modelo       | Capacidad nominal (kW) |          |       | Capacidad real (kW) |          |       | Unidad interior<br>Posicion (m) |     | Real<br>Dista.<br>(m) | Tuberia<br>Dista.<br>(m) | Direccion |     |     |
|-----|----------------|--------------|------------------------|----------|-------|---------------------|----------|-------|---------------------------------|-----|-----------------------|--------------------------|-----------|-----|-----|
|     |                |              | Total                  | Sensible | Calor | Total               | Sensible | Calor |                                 |     |                       |                          | S/L       | O/U | I/U |
|     |                | FDC280KXZME1 | 28,00                  | -        | 31,50 | 26,45               | -        | 25,05 |                                 |     |                       |                          | 2         | 20  | -   |
| 118 | Despacho Comi  | FDTC22KXZE1  | 2,03                   | 1,94     | 2,30  | 1,76                | 1,69     | 1,67  | Debajo                          | 0,0 | 34,4                  | 34,4                     | 2         | 20  | 117 |
| 119 | Cuarto Manteni | FDTC36KXZE1  | 3,31                   | 2,61     | 3,64  | 2,87                | 2,32     | 2,65  | Debajo                          | 0,0 | 18,2                  | 18,2                     | 2         | 20  | 118 |
| 120 | Lavandería     | FDUM140KXE6F | 13,77                  | 10,10    | 15,68 | 11,93               | 9,00     | 11,40 | Debajo                          | 0,0 | 25,5                  | 25,5                     | 2         | 20  | 119 |

|       |                |             |       |       |       |       |       |       |        |     |      |      |   |    |     |
|-------|----------------|-------------|-------|-------|-------|-------|-------|-------|--------|-----|------|------|---|----|-----|
| 121   | Vestuario Feme | FDTC22KXZE1 | 2,03  | 1,94  | 2,30  | 1,76  | 1,69  | 1,67  | Debajo | 0,0 | 24,8 | 24,8 | 2 | 20 | 120 |
| 122   | Vestuario Feme | FDTC22KXZE1 | 2,03  | 1,94  | 2,30  | 1,76  | 1,69  | 1,67  | Debajo | 0,0 | 25,4 | 25,4 | 2 | 20 | 121 |
| 123   | Vestuario Masc | FDTC22KXZE1 | 2,03  | 1,94  | 2,30  | 1,76  | 1,69  | 1,67  | Debajo | 0,0 | 27,8 | 27,8 | 2 | 20 | 122 |
| 124   | Vestuario Masc | FDTC22KXZE1 | 2,03  | 1,94  | 2,30  | 1,76  | 1,69  | 1,67  | Debajo | 0,0 | 28,0 | 28,0 | 2 | 20 | 123 |
| 129   | Cuarto Manteni | FDTC36KXZE1 | 3,31  | 2,61  | 3,64  | 2,87  | 2,32  | 2,65  | Debajo | 0,0 | 26,7 | 26,7 | 2 | 20 | 00  |
| Total |                |             | 30,54 | 25,01 | 34,46 | 26,45 | 22,08 | 25,05 |        |     |      |      |   |    |     |

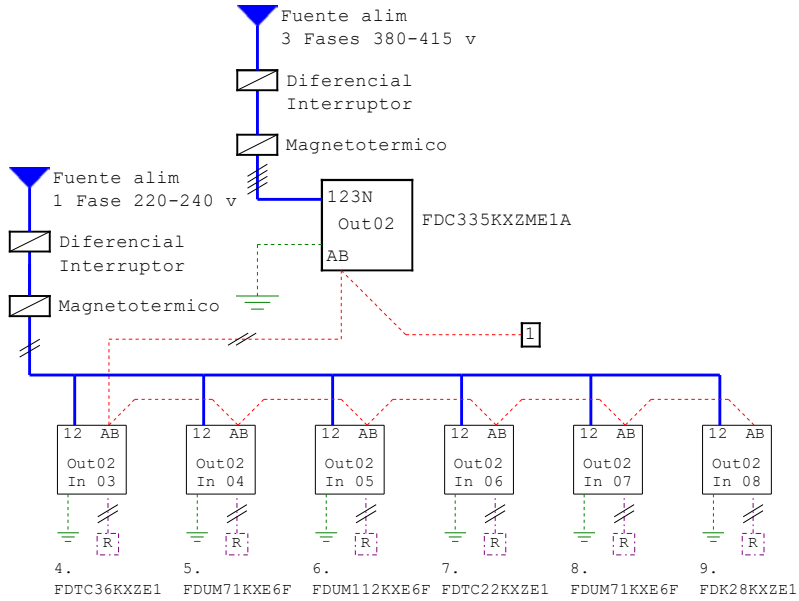
|                  |                |
|------------------|----------------|
| Proyecto:        | CADP Getafe V2 |
| Referencia proy: | PR2024011556   |
| Sistema:         | Stma Acceso    |



|                           |           |           |
|---------------------------|-----------|-----------|
| Unidad exterior           | 380v      | 415v      |
| Intensidad (A)            | 6,50/6,10 | 6,00/5,6  |
| Tension (%)               | 92/91     | 92/91     |
| Corriente de arranque (A) | 5,00      |           |
| Intensidad max. (A)       | 13.5      |           |
| Entrada (kW)              | 3,96/3,66 |           |
| UI ( frio/calor )         | 220v      | 240v      |
| Consumo total (Kw)        | 0,26/0,26 | 0,26/0,26 |
| Corriente total (A)       | 1,51/1,51 | 1,39/1,39 |

Los esquemas electricos se utilizaran solo como guia  
Las intalaciones electricas deben cumplir con la normativa vi

|                     |
|---------------------|
| Proyecto:           |
| CADP Getafe V2      |
| Referencia proy:    |
| PR2024011556        |
| Sistema:            |
| Stma Administración |

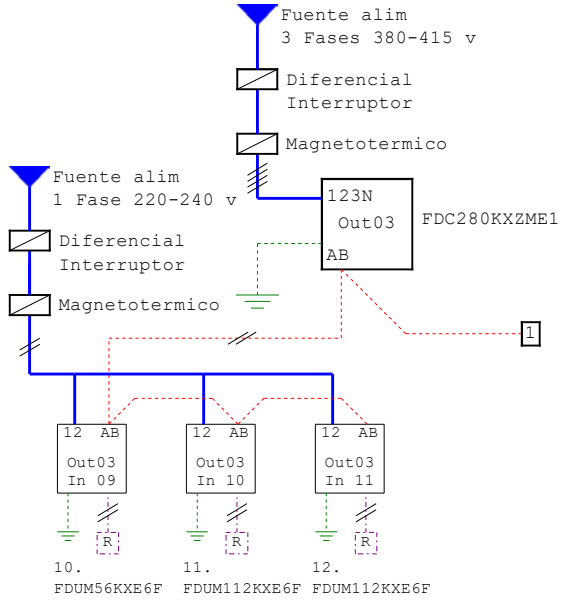


|                           |             |            |
|---------------------------|-------------|------------|
| Unidad exterior           | 380v        | 415v       |
| Intensidad (A)            | 17,80/14,40 | 16,30/13,7 |
| Tension (%)               | 91/91       | 91/91      |
| Corriente de arranque (A) | 5,00        |            |
| Intensidad max. (A)       | 23          |            |
| Entrada (kW)              | 10,68/8,44  |            |
| UI ( frio/calor )         | 220v        | 240v       |
| Consumo total (Kw)        | 0,78/0,78   | 0,78/0,78  |
| Corriente total (A)       | 3,95/3,95   | 3,60/3,60  |

Los esquemas electricos se utilizaran solo como guia  
Las intalaciones electricas deben cumplir con la normativa vi



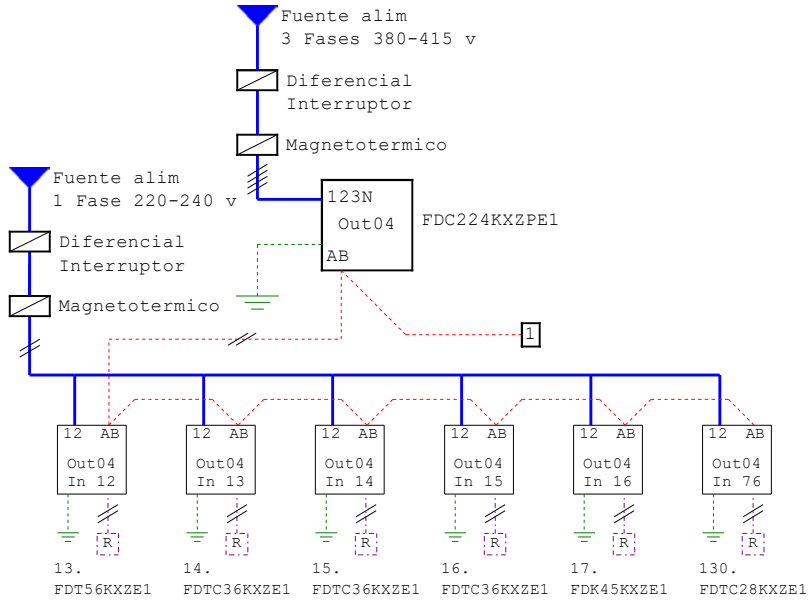
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|------------------|
| Proyecto:        |
| CADP Getafe V2   |
| Referencia proy: |
| PR2024011556     |
| Sistema:         |
| Stma Teatro      |



|                           |             |           |
|---------------------------|-------------|-----------|
| Unidad exterior           | 380v        | 415v      |
| Intensidad (A)            | 12,80/10,50 | 11,80/9,6 |
| Tension (%)               | 94/95       | 94/95     |
| Corriente de arranque (A) | 5,00        |           |
| Intensidad max. (A)       | 20          |           |
| Entrada (kW)              | 7,90/6,53   |           |
| UI ( frio/calor )         | 220v        | 240v      |
| Consumo total (Kw)        | 0,68/0,68   | 0,68/0,68 |
| Corriente total (A)       | 3,10/3,10   | 2,84/2,84 |

Los esquemas electricos se utilizaran solo como guia  
Las intalaciones electricas deben cumplir con la normativa vi

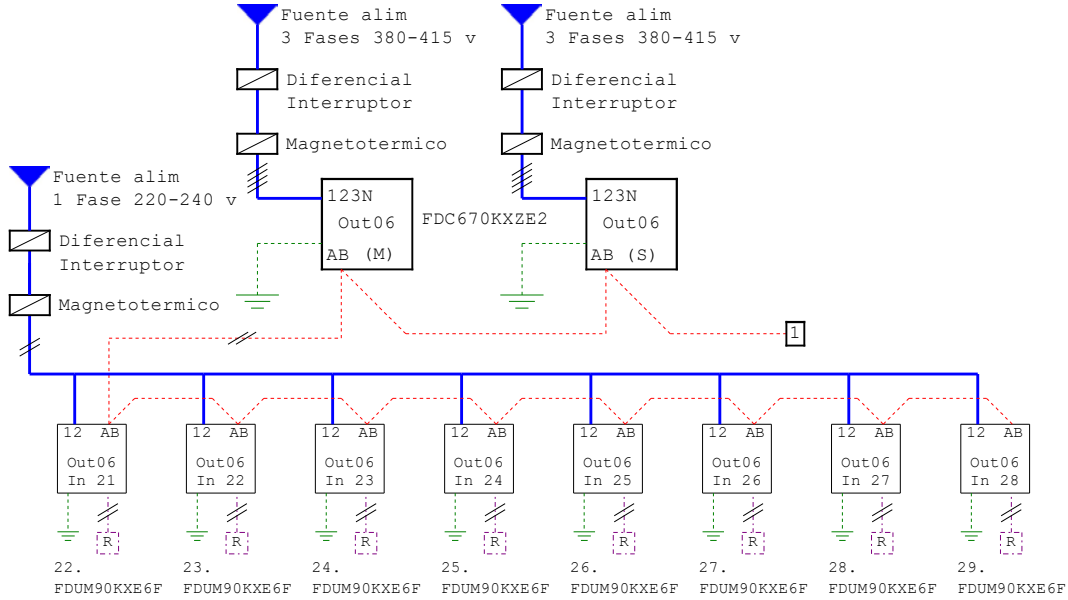
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| Proyecto:        |
| CADP Getafe V2   |
| Referencia proy: |
| PR2024011556     |
| Sistema:         |
| Stma Cocina      |



|                           |           |          |
|---------------------------|-----------|----------|
| Unidad exterior           | 380v      | 415v     |
| Intensidad (A)            | 9,20/7,90 | 8,50/7,3 |
| Tension (%)               | 92/92     | 92/92    |
| Corriente de arranque (A) | 5,00      |          |
| Intensidad max. (A)       | 21        |          |
| Entrada (kW)              | 5,60/4,80 |          |
| UI ( frio/calor )         | 220v      | 240v     |
| Consumo total (Kw)        | 0,22/0,22 | 0,22/0,2 |
| Corriente total (A)       | 2,02/2,02 | 1,85/1,8 |

Los esquemas electricos se utilizaran solo como guia  
Las intalaciones electricas deben cumplir con la normativa vi

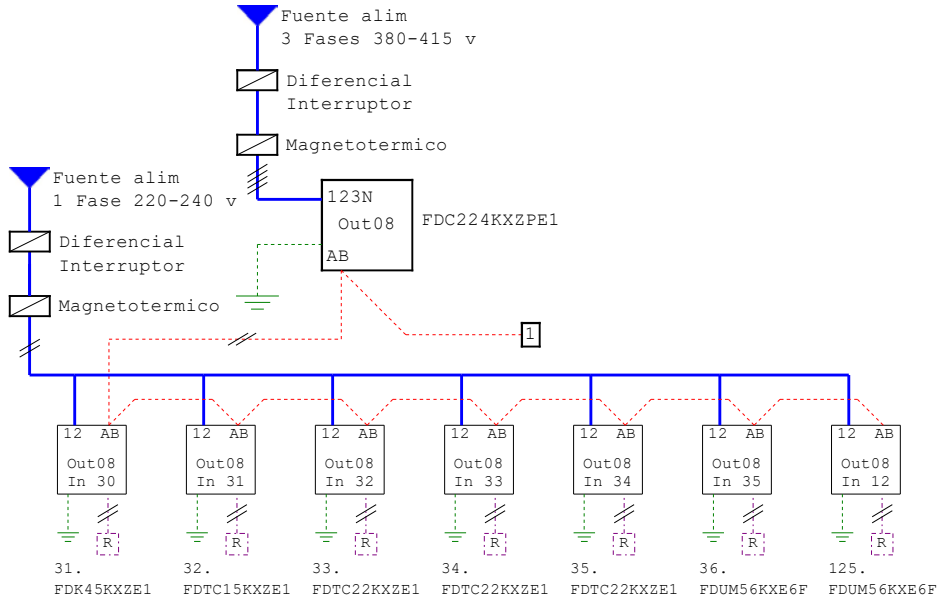
|                  |                     |
|------------------|---------------------|
| Proyecto:        | CADP Getafe V2      |
| Referencia proy: | PR2024011556        |
| Sistema:         | Stma Distribuidores |



|                           |             |             |
|---------------------------|-------------|-------------|
| Unidad exterior           | 380v        | 415v        |
| Intensidad (A)            | 29,40/29,60 | 26,80/27,60 |
| Tension (%)               | 93/93       | 93/93       |
| Corriente de arranque (A) | 10,00       |             |
| Intensidad max. (A)       | 20.1+20.1   |             |
| Entrada (kW)              | 17,96/18,06 |             |
| UI ( frio/calor )         | 220v        | 240v        |
| Consumo total (Kw)        | 1,60/1,60   | 1,60/1,60   |
| Corriente total (A)       | 7,28/7,28   | 6,64/6,64   |

Los esquemas electricos se utilizaran solo como guia  
Las intalaciones electricas deben cumplir con la normativa vi

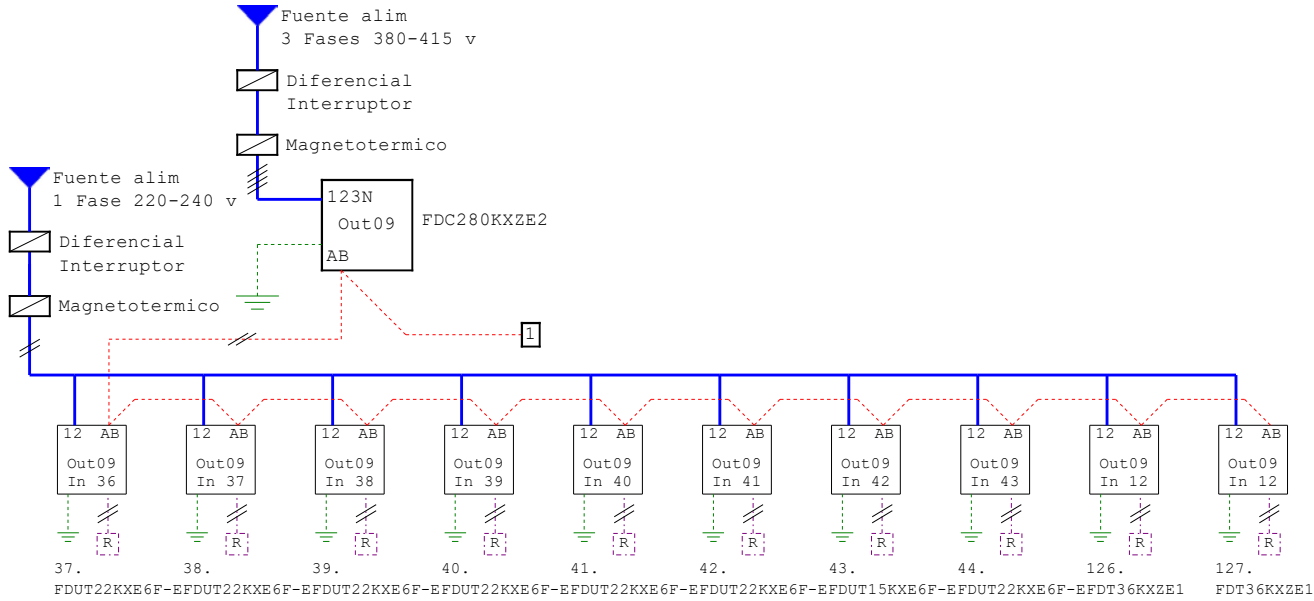
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|------------------|----------------|
| Proyecto:        | CADP Getafe V2 |
| Referencia proy: | PR2024011556   |
| Sistema:         | Stma Consultas |



|                           |           |          |
|---------------------------|-----------|----------|
| Unidad exterior           | 380v      | 415v     |
| Intensidad (A)            | 9,20/7,90 | 8,50/7,3 |
| Tension (%)               | 92/92     | 92/92    |
| Corriente de arranque (A) | 5,00      |          |
| Intensidad max. (A)       | 21        |          |
| Entrada (kW)              | 5,60/4,80 |          |
| UI ( frio/calor )         | 220v      | 240v     |
| Consumo total (Kw)        | 0,35/0,35 | 0,35/0,3 |
| Corriente total (A)       | 2,19/2,19 | 1,97/1,9 |

Los esquemas electricos se utilizaran solo como guia  
Las intalaciones electricas deben cumplir con la normativa vi

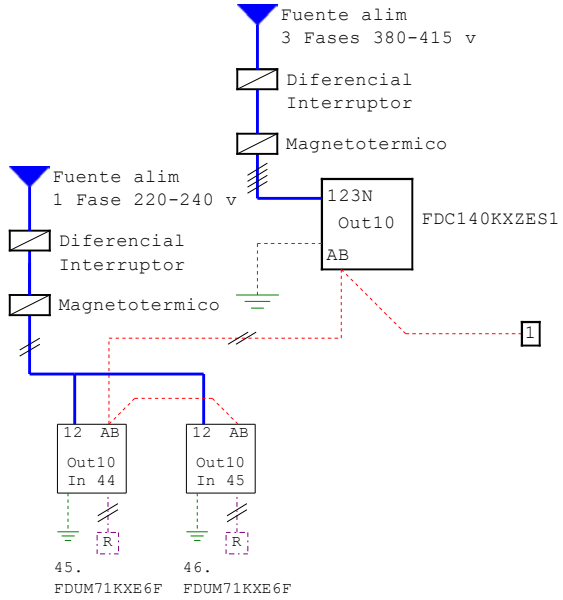
|                  |                |
|------------------|----------------|
| Proyecto:        | CADP Getafe V2 |
| Referencia proy: | PR2024011556   |
| Sistema:         | Stma Control F |



|                           |             |             |
|---------------------------|-------------|-------------|
| Unidad exterior           | 380v        | 415v        |
| Intensidad (A)            | 12,00/12,20 | 11,00/11,20 |
| Tension (%)               | 92/92       | 92/92       |
| Corriente de arranque (A) | 5,00        | 5,00        |
| Intensidad max. (A)       | 20.1        | 20.1        |
| Entrada (kW)              | 7,25/7,41   | 7,25/7,41   |
| UI ( frio/calor )         | 220v        | 240v        |
| Consumo total (Kw)        | 0,61/0,61   | 0,61/0,61   |
| Corriente total (A)       | 2,83/2,90   | 2,58/2,58   |

Los esquemas electricos se utilizaran solo como guia  
Las intalaciones electricas deben cumplir con la normativa vi

|                  |
|------------------|
| Proyecto:        |
| CADP Getafe V2   |
| Referencia proy: |
| PR2024011556     |
| Sistema:         |
| Stma Salas E-F   |



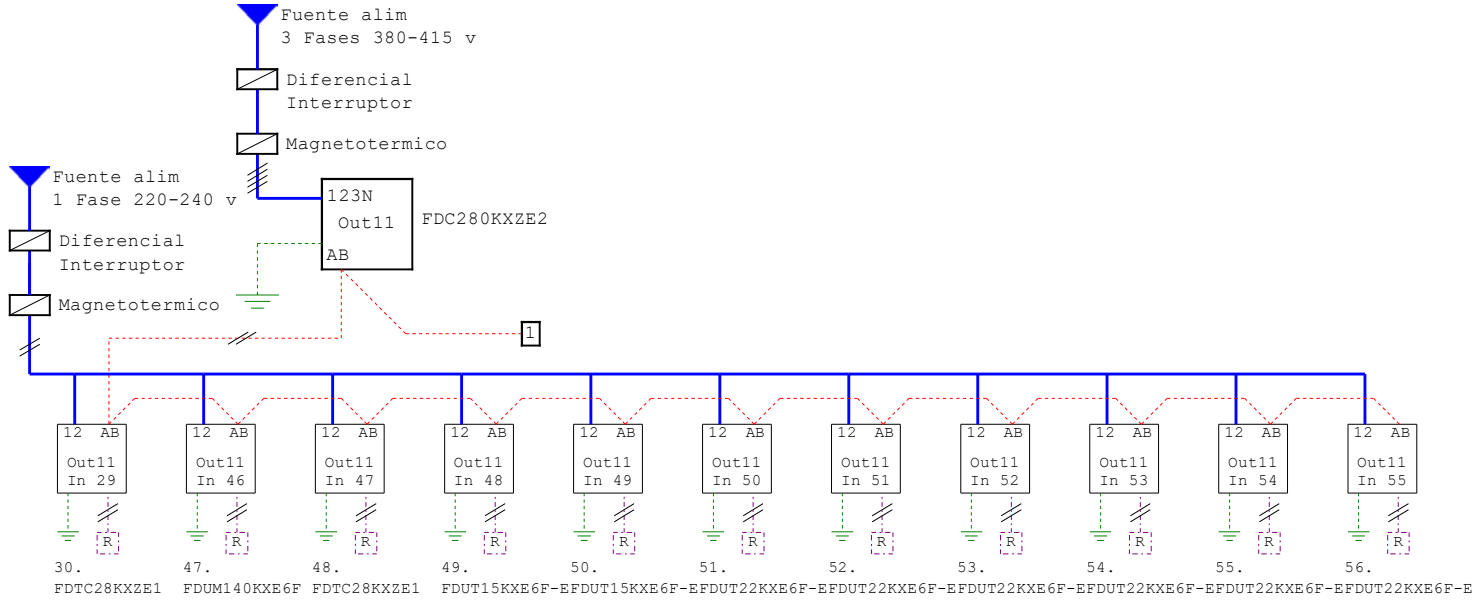
|                           |           |           |
|---------------------------|-----------|-----------|
| Unidad exterior           | 380v      | 415v      |
| Intensidad (A)            | 6,50/6,10 | 6,00/5,6  |
| Tension (%)               | 92/91     | 92/91     |
| Corriente de arranque (A) | 5,00      |           |
| Intensidad max. (A)       | 13.5      |           |
| Entrada (kW)              | 3,96/3,66 |           |
| UI ( frio/calor )         | 220v      | 240v      |
| Consumo total (Kw)        | 0,40/0,40 | 0,40/0,40 |
| Corriente total (A)       | 1,82/1,82 | 1,66/1,66 |

Los esquemas electricos se utilizaran solo como guia  
Las intalaciones electricas deben cumplir con la normativa vi

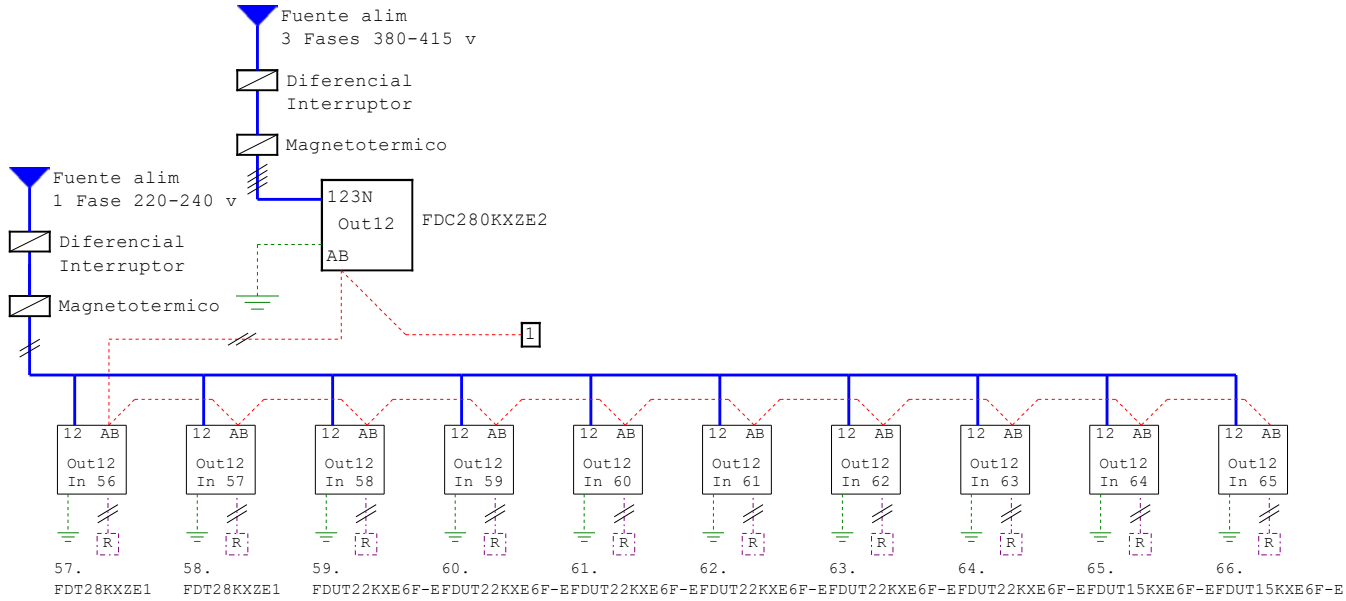
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|------------------|
| Proyecto:        |
| CADP Getafe V2   |
| Referencia proy: |
| PR2024011556     |
| Sistema:         |
| Stma Control E   |

|                           |             |            |
|---------------------------|-------------|------------|
| Unidad exterior           | 380v        | 415v       |
| Intensidad (A)            | 12,00/12,20 | 11,00/11,9 |
| Tension (%)               | 92/92       | 92/92      |
| Corriente de arranque (A) | 5,00        |            |
| Intensidad max. (A)       | 20.1        |            |
| Entrada (kW)              | 7,25/7,41   |            |
| UI ( frio/calor )         | 220v        | 240v       |
| Consumo total (Kw)        | 0,93/0,93   | 0,93/0,9   |
| Corriente total (A)       | 4,22/4,28   | 3,86/3,8   |

Los esquemas electricos se utilizaran solo como guia  
Las intalaciones electricas deben cumplir con la normativa vi



|                  |
|------------------|
| Proyecto:        |
| CADP Getafe V2   |
| Referencia proy: |
| PR2024011556     |
| Sistema:         |
| Stma Control D   |

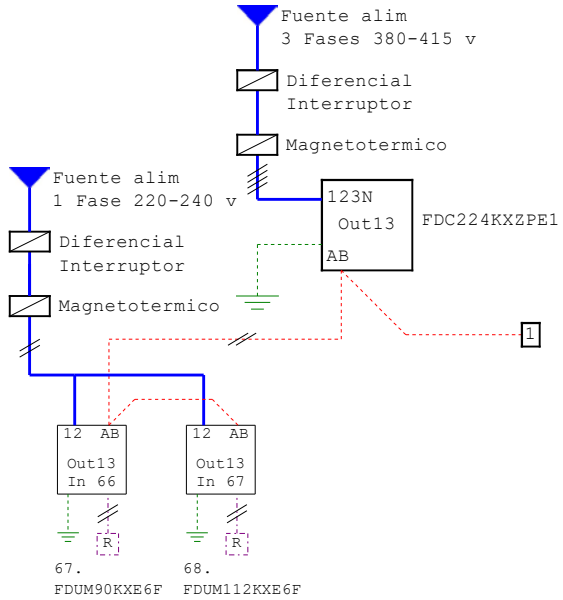


|                           |             |            |
|---------------------------|-------------|------------|
| Unidad exterior           | 380v        | 415v       |
| Intensidad (A)            | 12,00/12,20 | 11,00/11,5 |
| Tension (%)               | 92/92       | 92/92      |
| Corriente de arranque (A) | 5,00        |            |
| Intensidad max. (A)       | 20.1        |            |
| Entrada (kW)              | 7,25/7,41   |            |
| UI ( frio/calor )         | 220v        | 240v       |
| Consumo total (Kw)        | 0,58/0,58   | 0,58/0,58  |
| Corriente total (A)       | 2,62/2,68   | 2,42/2,42  |

Los esquemas electricos se utilizaran solo como guia  
Las intalaciones electricas deben cumplir con la normativa vi



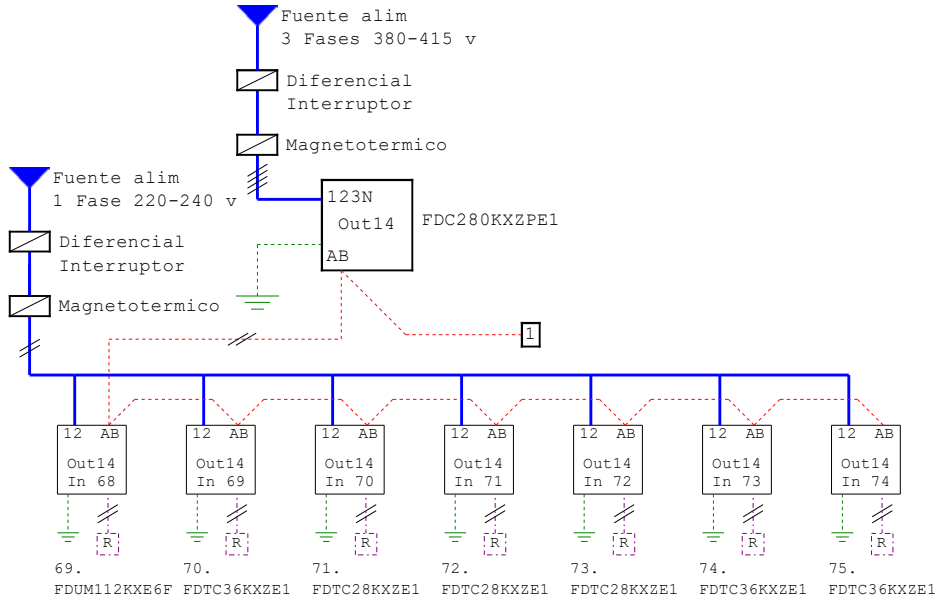
|                  |
|------------------|
| Proyecto:        |
| CADP Getafe V2   |
| Referencia proy: |
| PR2024011556     |
| Sistema:         |
| Stma Salas C-D   |



|                           |           |          |
|---------------------------|-----------|----------|
| Unidad exterior           | 380v      | 415v     |
| Intensidad (A)            | 9,20/7,90 | 8,50/7,3 |
| Tension (%)               | 92/92     | 92/92    |
| Corriente de arranque (A) | 5,00      |          |
| Intensidad max. (A)       | 21        |          |
| Entrada (kW)              | 5,60/4,80 |          |
| UI ( frio/calor )         | 220v      | 240v     |
| Consumo total (Kw)        | 0,49/0,49 | 0,49/0,4 |
| Corriente total (A)       | 2,23/2,23 | 2,04/2,0 |

Los esquemas electricos se utilizaran solo como guia  
Las intalaciones electricas deben cumplir con la normativa vi

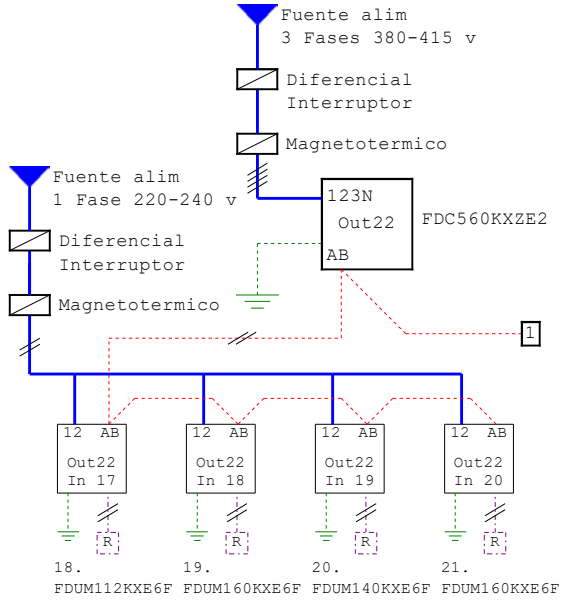
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|-------------------|
| Proyecto:         |
| CADP Getafe V2    |
| Referencia proy:  |
| PR2024011556      |
| Sistema:          |
| Stma Salas Taller |



|                           |             |           |
|---------------------------|-------------|-----------|
| Unidad exterior           | 380v        | 415v      |
| Intensidad (A)            | 12,90/10,60 | 11,80/9,5 |
| Tension (%)               | 94/93       | 94/93     |
| Corriente de arranque (A) | 5,00        |           |
| Intensidad max. (A)       | 22          |           |
| Entrada (kW)              | 7,87/6,47   |           |
| UI ( frio/calor )         | 220v        | 240v      |
| Consumo total (Kw)        | 0,50/0,50   | 0,50/0,50 |
| Corriente total (A)       | 3,21/3,21   | 2,92/2,92 |

Los esquemas electricos se utilizaran solo como guia  
Las intalaciones electricas deben cumplir con la normativa vi

|                  |
|------------------|
| Proyecto:        |
| CADP Getafe V2   |
| Referencia proy: |
| PR2024011556     |
| Sistema:         |
| Stma Comedor     |



|                           |             |            |
|---------------------------|-------------|------------|
| Unidad exterior           | 380v        | 415v       |
| Intensidad (A)            | 26,90/26,10 | 24,60/23,7 |
| Tension (%)               | 94/94       | 94/94      |
| Corriente de arranque (A) | 8,00        |            |
| Intensidad max. (A)       | 40.2        |            |
| Entrada (kW)              | 17,50/16,15 |            |
| UI ( frio/calor )         | 220v        | 240v       |
| Consumo total (Kw)        | 1,52/1,52   | 1,52/1,52  |
| Corriente total (A)       | 6,92/6,92   | 6,35/6,35  |

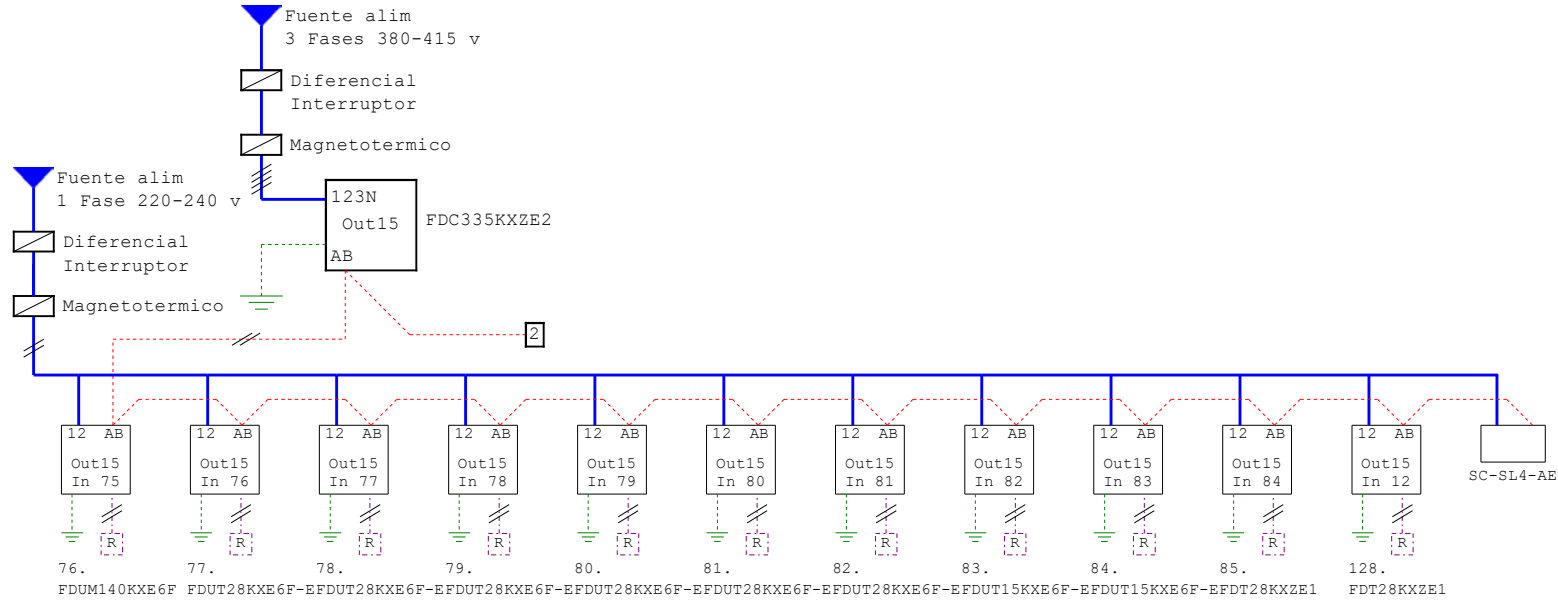
Los esquemas electricos se utilizaran solo como guia  
Las intalaciones electricas deben cumplir con la normativa vi

|                  |                |
|------------------|----------------|
| Proyecto:        | CADP Getafe V2 |
| Referencia proy: | PR2024011556   |
| Sistema:         | Stma Control C |

|                           |             |           |
|---------------------------|-------------|-----------|
| Unidad exterior           | 380v        | 415v      |
| Intensidad (A)            | 14,70/14,80 | 13,40/13, |
| Tension (%)               | 93/93       | 93/93     |
| Corriente de arranque (A) |             | 5,00      |
| Intensidad max. (A)       |             | 20.1      |
| Entrada (kW)              |             | 8,98/9,03 |

|                     |           |           |
|---------------------|-----------|-----------|
| UI ( frio/calor )   | 220v      | 240v      |
| Consumo total (Kw)  | 0,91/0,91 | 0,91/0,91 |
| Corriente total (A) | 4,12/4,18 | 3,80/3,84 |

Los esquemas electricos se utilizaran solo como guia  
Las intalaciones electricas deben cumplir con la normativa vi

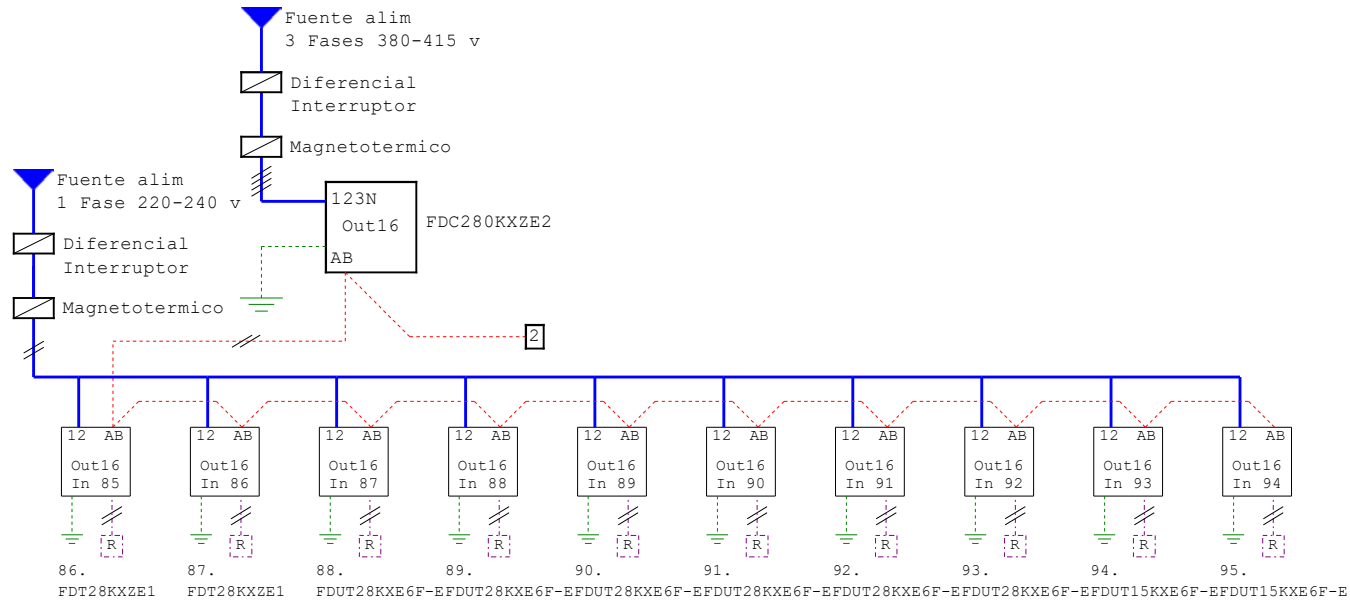


|                  |                |
|------------------|----------------|
| Proyecto:        | CADP Getafe V2 |
| Referencia proy: | PR2024011556   |
| Sistema:         | Stma Control B |

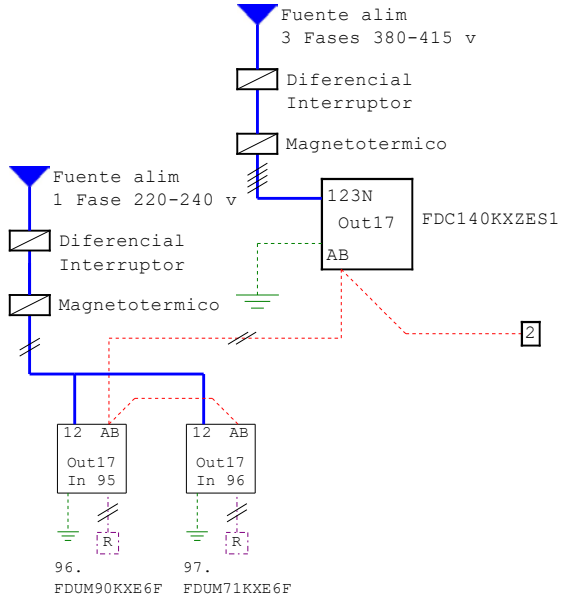
|                           |             |           |
|---------------------------|-------------|-----------|
| Unidad exterior           | 380v        | 415v      |
| Intensidad (A)            | 12,00/12,20 | 11,00/11, |
| Tension (%)               | 92/92       | 92/92     |
| Corriente de arranque (A) | 5,00        |           |
| Intensidad max. (A)       | 20.1        |           |
| Entrada (kW)              | 7,25/7,41   |           |

|                     |           |           |
|---------------------|-----------|-----------|
| UI ( frio/calor )   | 220v      | 240v      |
| Consumo total (Kw)  | 0,58/0,58 | 0,58/0,58 |
| Corriente total (A) | 2,62/2,68 | 2,42/2,44 |

Los esquemas electricos se utilizaran solo como guia  
Las intalaciones electricas deben cumplir con la normativa vi



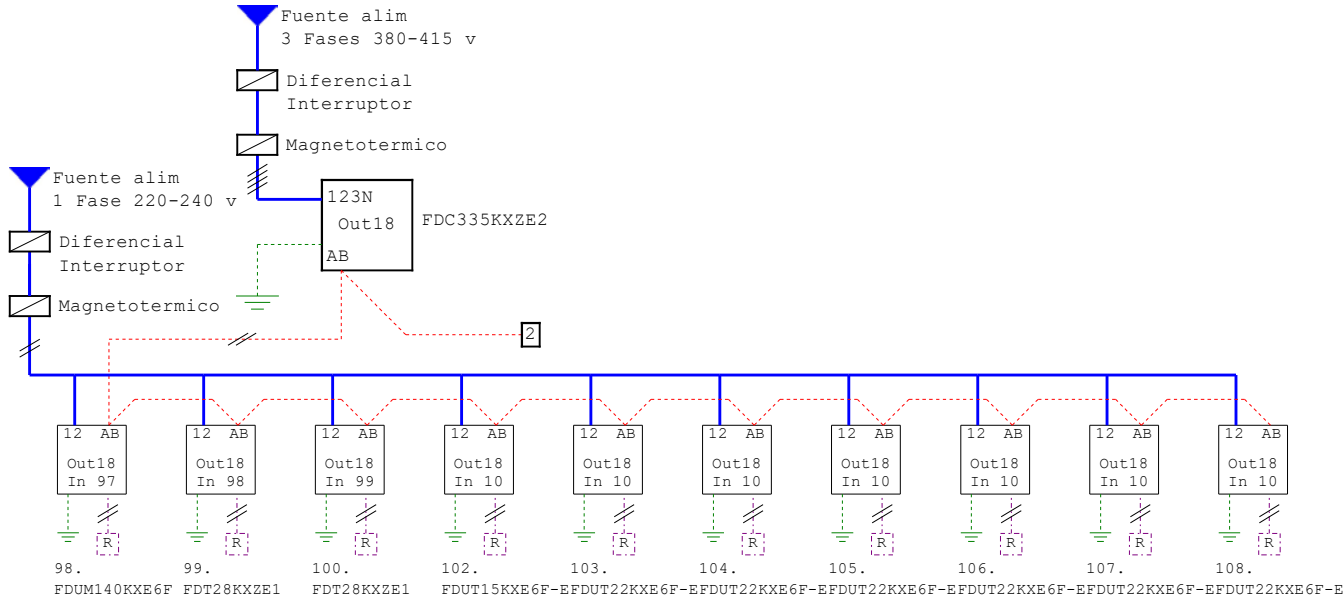
|                  |                |
|------------------|----------------|
| Proyecto:        | CADP Getafe V2 |
| Referencia proy: | PR2024011556   |
| Sistema:         | Stma Salas A-B |



|                           |           |           |
|---------------------------|-----------|-----------|
| Unidad exterior           | 380v      | 415v      |
| Intensidad (A)            | 6,50/6,10 | 6,00/5,6  |
| Tension (%)               | 92/91     | 92/91     |
| Corriente de arranque (A) | 5,00      |           |
| Intensidad max. (A)       | 13.5      |           |
| Entrada (kW)              | 3,96/3,66 |           |
| UI ( frio/calor )         | 220v      | 240v      |
| Consumo total (Kw)        | 0,40/0,40 | 0,40/0,40 |
| Corriente total (A)       | 1,82/1,82 | 1,66/1,66 |

Los esquemas electricos se utilizaran solo como guia  
Las intalaciones electricas deben cumplir con la normativa vi

|                  |
|------------------|
| Proyecto:        |
| CADP Getafe V2   |
| Referencia proy: |
| PR2024011556     |
| Sistema:         |
| Stma Control A   |



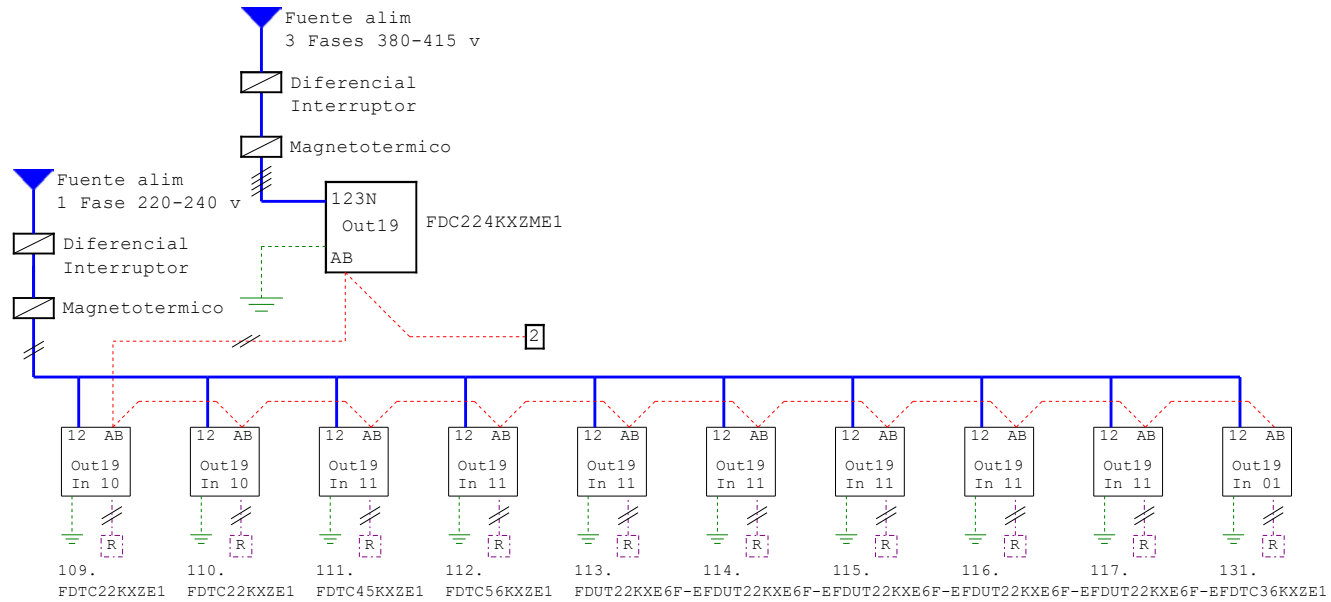
|                           |             |             |
|---------------------------|-------------|-------------|
| Unidad exterior           | 380v        | 415v        |
| Intensidad (A)            | 14,70/14,80 | 13,40/13,40 |
| Tension (%)               | 93/93       | 93/93       |
| Corriente de arranque (A) | 5,00        |             |
| Intensidad max. (A)       | 20.1        |             |
| Entrada (kW)              | 8,98/9,03   |             |
| UI ( frio/calor )         | 220v        | 240v        |
| Consumo total (Kw)        | 0,85/0,85   | 0,85/0,85   |
| Corriente total (A)       | 3,85/3,91   | 3,53/3,53   |

Los esquemas electricos se utilizaran solo como guia  
Las intalaciones electricas deben cumplir con la normativa vi

|                  |                 |
|------------------|-----------------|
| Proyecto:        | CADP Getafe V2  |
| Referencia proy: | PR2024011556    |
| Sistema:         | Stma Enfermería |

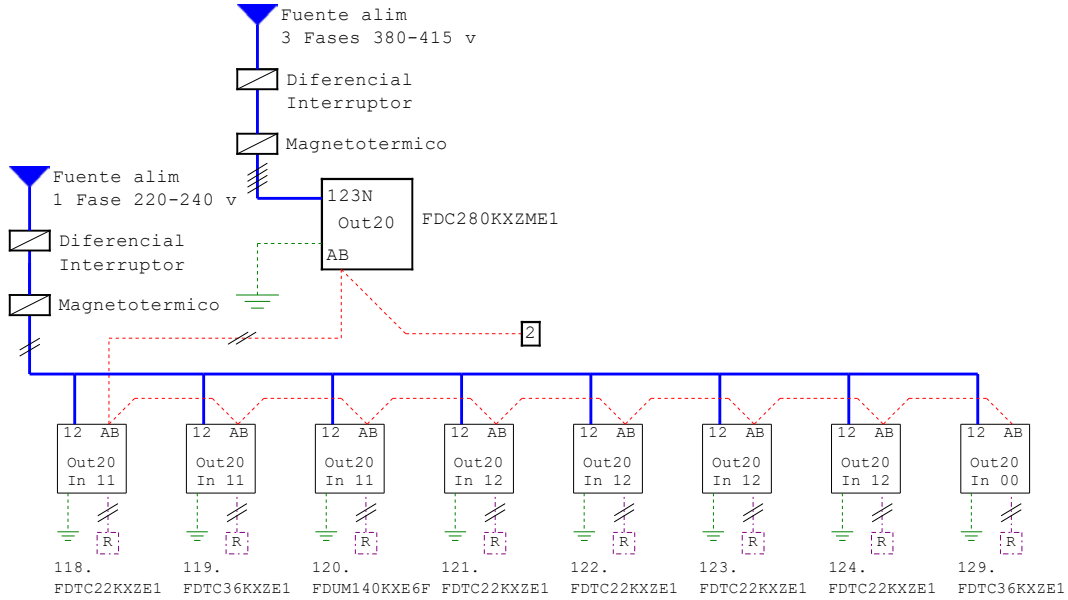
|                           |           |           |
|---------------------------|-----------|-----------|
| Unidad exterior           | 380v      | 415v      |
| Intensidad (A)            | 9,40/7,80 | 8,60/7,2  |
| Tension (%)               | 91/97     | 91/97     |
| Corriente de arranque (A) | 5,00      |           |
| Intensidad max. (A)       | 20        |           |
| Entrada (kW)              | 5,59/4,97 |           |
| UI ( frío/calor )         | 220v      | 240v      |
| Consumo total (Kw)        | 0,56/0,56 | 0,56/0,56 |
| Corriente total (A)       | 3,25/3,30 | 2,94/2,94 |

Los esquemas electricos se utilizaran solo como guia  
Las intalaciones electricas deben cumplir con la normativa vi





|                  |                |
|------------------|----------------|
| Proyecto:        | CADP Getafe V2 |
| Referencia proy: | PR2024011556   |
| Sistema:         | Stma Sótano    |



|                           |             |           |
|---------------------------|-------------|-----------|
| Unidad exterior           | 380v        | 415v      |
| Intensidad (A)            | 12,80/10,50 | 11,80/9,5 |
| Tension (%)               | 94/95       | 94/95     |
| Corriente de arranque (A) | 5,00        |           |
| Intensidad max. (A)       | 20          |           |
| Entrada (kW)              | 7,90/6,53   |           |
| UI ( frío/calor )         | 220v        | 240v      |
| Consumo total (Kw)        | 0,56/0,56   | 0,56/0,56 |
| Corriente total (A)       | 3,51/3,51   | 3,18/3,18 |

Los esquemas electricos se utilizaran solo como guia  
Las intalaciones electricas deben cumplir con la normativa vi



Creado por Mitsubishi Heavy Industries Air-Conditioning Europe, Ltd.

Lista de materiales del proyecto

Proyecto : CADP Getafe V2

Referencia proy : PR2024011556

| Control central | Cantidad |
|-----------------|----------|
| SC-SL4-AE       | 2        |

### Listado de materiales del sistema

Proyecto : CADP Getafe V2  
 Referencia proy : PR2024011556  
 Sistema : Stma Acceso

| Unidad exterior | Cantidad |
|-----------------|----------|
| FDC140KXZES1    | 1        |

| Unidad interior | Cantidad |
|-----------------|----------|
| FDUM71KXE6F     | 1        |
| FDT45KXZE1      | 2        |

| Panel       | Cantidad |
|-------------|----------|
| T-PSA-5BW-E | 2        |

| Ramal     | Cantidad |
|-----------|----------|
| DIS-22-1G | 2        |

| Control remoto | Cantidad |
|----------------|----------|
| RCN-KIT4-E2    | 1        |
| RCN-T-5BW-E2   | 2        |

|                        |        |
|------------------------|--------|
| Refrigerante adicional | 0,0 kg |
|------------------------|--------|

| Diametro de tuberia | Distancia total (m) |
|---------------------|---------------------|
| 1/4"                | 9,5                 |
| 3/8"                | 15,5                |
| 1/2"                | 9,5                 |
| 5/8"                | 15,5                |

# Listado de materiales del sistema

Proyecto : CADP Getafe V2  
 Referencia proy : PR2024011556  
 Sistema : Stma Administración

| Unidad exterior | Cantidad |
|-----------------|----------|
| FDC335KXZME1A   | 1        |

| Unidad interior | Cantidad |
|-----------------|----------|
| FDK28KXZE1      | 1        |
| FDUM71KXE6F     | 2        |
| FDUM112KXE6F    | 1        |
| FDTC22KXZE1     | 1        |
| FDTC36KXZE1     | 1        |

| Panel        | Cantidad |
|--------------|----------|
| TC-PSA-5AW-E | 2        |

| Ramal      | Cantidad |
|------------|----------|
| DIS-180-1G | 3        |
| DIS-22-1G  | 2        |

| Control remoto | Cantidad |
|----------------|----------|
| RCN-KIT4-E2    | 3        |
| RCN-T-5BW-E2   | 1        |
| RCN-TC-5AW-E3  | 2        |

|                        |        |
|------------------------|--------|
| Refrigerante adicional | 5,6 kg |
|------------------------|--------|

| Diametro de tuberia | Distancia total (m) |
|---------------------|---------------------|
| 1/4"                | 14,3                |
| 3/8"                | 26,2                |
| 1/2"                | 21,3                |
| 5/8"                | 16,2                |
| 3/4"                | 8,4                 |
| 7/8"                | 8,6                 |

#### Listado de materiales del sistema

Proyecto : CADP Getafe V2  
 Referencia proy : PR2024011556  
 Sistema : Stma Teatro

| Unidad exterior | Cantidad |
|-----------------|----------|
| FDC280KXZME1    | 1        |

| Unidad interior | Cantidad |
|-----------------|----------|
| FDUM112KXE6F    | 2        |
| FDUM56KXE6F     | 1        |

| Ramal      | Cantidad |
|------------|----------|
| DIS-180-1G | 1        |
| DIS-22-1G  | 1        |

| Control remoto | Cantidad |
|----------------|----------|
| RCN-KIT4-E2    | 2        |
| RCN-T-5BW-E2   | 1        |

|                        |        |
|------------------------|--------|
| Refrigerante adicional | 4,4 kg |
|------------------------|--------|

| Diametro de tuberia | Distancia total (m) |
|---------------------|---------------------|
| 1/4"                | 12,9                |
| 3/8"                | 30,5                |
| 1/2"                | 12,9                |
| 5/8"                | 17,8                |
| 7/8"                | 12,7                |

#### Listado de materiales del sistema

Proyecto : CADP Getafe V2  
 Referencia proy : PR2024011556  
 Sistema : Stma Cocina

| Unidad exterior | Cantidad |
|-----------------|----------|
| FDC224KXZPE1    | 1        |

| Unidad interior | Cantidad |
|-----------------|----------|
| FDT56KXZE1      | 1        |
| FDTC36KXZE1     | 3        |
| FDTC28KXZE1     | 1        |
| FDK45KXZE1      | 1        |

| Panel        | Cantidad |
|--------------|----------|
| T-PSA-5BW-E  | 1        |
| TC-PSA-5AW-E | 4        |

| Ramal      | Cantidad |
|------------|----------|
| DIS-180-1G | 2        |
| DIS-22-1G  | 3        |

| Control remoto | Cantidad |
|----------------|----------|
| RCN-T-5BW-E2   | 1        |
| RCN-TC-5AW-E3  | 3        |
| RCN-KIT4-E2    | 2        |

|                        |        |
|------------------------|--------|
| Refrigerante adicional | 2,9 kg |
|------------------------|--------|

| Diametro de tuberia | Distancia total (m) |
|---------------------|---------------------|
| 1/4"                | 22,9                |
| 3/8"                | 29,1                |
| 1/2"                | 20,3                |
| 5/8"                | 7,7                 |
| 3/4"                | 18,8                |

#### Listado de materiales del sistema

Proyecto : CADP Getafe V2  
 Referencia proy : PR2024011556  
 Sistema : Stma Distribuidores

| Unidad exterior | Cantidad |
|-----------------|----------|
| FDC335KXZE2     | 2        |

| Unidad interior | Cantidad |
|-----------------|----------|
| FDUM90KXE6F     | 8        |

| Ramal      | Cantidad |
|------------|----------|
| DIS-540-3  | 1        |
| DIS-180-1G | 6        |

| Distribuidor unidad exterior | Cantidad |
|------------------------------|----------|
| DOS-2A-3                     | 1        |

| Control remoto | Cantidad |
|----------------|----------|
| RCN-T-5BW-E2   | 2        |
| RCN-KIT4-E2    | 2        |
| RCN-TC-5AW-E3  | 4        |

|                        |        |
|------------------------|--------|
| Refrigerante adicional | 8,3 kg |
|------------------------|--------|

| Diametro de tuberia | Distancia total (m) |
|---------------------|---------------------|
| 3/8"                | 39,4                |
| 1/2"                | 47,4                |
| 5/8"                | 36,4                |
| 3/4"                | 33,9                |
| 7/8"                | 4,5                 |
| 1 1/8"              | 9,0                 |

# Listado de materiales del sistema

Proyecto : CADP Getafe V2  
 Referencia proy : PR2024011556  
 Sistema : Stma Consultas

| Unidad exterior | Cantidad |
|-----------------|----------|
| FDC224KXZPE1    | 1        |

| Unidad interior | Cantidad |
|-----------------|----------|
| FDUM56KXE6F     | 2        |
| FDTTC22KXZE1    | 3        |
| FDK45KXZE1      | 1        |
| FDTTC15KXZE1    | 1        |

| Panel        | Cantidad |
|--------------|----------|
| TC-PSA-5AW-E | 4        |

| Ramal      | Cantidad |
|------------|----------|
| DIS-180-1G | 2        |
| DIS-22-1G  | 4        |

| Control remoto | Cantidad |
|----------------|----------|
| RCN-KIT4-E2    | 3        |
| RCN-TC-5AW-E3  | 3        |
| RCN-T-5BW-E2   | 1        |

|                        |        |
|------------------------|--------|
| Refrigerante adicional | 3,0 kg |
|------------------------|--------|

| Diametro de tuberia | Distancia total (m) |
|---------------------|---------------------|
| 1/4"                | 29,8                |
| 3/8"                | 37,5                |
| 1/2"                | 18,3                |
| 5/8"                | 12,5                |
| 3/4"                | 10,7                |



# Listado de materiales del sistema

Proyecto : CADP Getafe V2  
 Referencia proy : PR2024011556  
 Sistema : Stma Control F

| Unidad exterior | Cantidad |
|-----------------|----------|
| FDC280KXZE2     | 1        |

| Unidad interior | Cantidad |
|-----------------|----------|
| FDT36KXZE1      | 2        |
| FDUT22KXE6F-E   | 7        |
| FDUT15KXE6F-E   | 1        |

| Panel       | Cantidad |
|-------------|----------|
| T-PSA-5BW-E | 2        |

| Ramal      | Cantidad |
|------------|----------|
| DIS-180-1G | 2        |
| DIS-22-1G  | 7        |

| Control remoto | Cantidad |
|----------------|----------|
| RCN-KIT4-E2    | 3        |
| RCN-T-5BW-E2   | 2        |
| RCN-TC-5AW-E3  | 5        |

|                        |        |
|------------------------|--------|
| Refrigerante adicional | 3,6 kg |
|------------------------|--------|

| Diametro de tuberia | Distancia total (m) |
|---------------------|---------------------|
| 1/4"                | 26,3                |
| 3/8"                | 76,8                |
| 1/2"                | 5,6                 |
| 5/8"                | 14,8                |
| 3/4"                | 6,7                 |
| 7/8"                | 24,6                |

Listado de materiales del sistema

Proyecto : CADP Getafe V2  
 Referencia proy : PR2024011556  
 Sistema : Stma Salas E-F

| Unidad exterior | Cantidad |
|-----------------|----------|
| FDC140KXZES1    | 1        |

| Unidad interior | Cantidad |
|-----------------|----------|
| FDUM71KXE6F     | 2        |

| Ramal     | Cantidad |
|-----------|----------|
| DIS-22-1G | 1        |

| Control remoto | Cantidad |
|----------------|----------|
| RCN-KIT4-E2    | 2        |

|                        |        |
|------------------------|--------|
| Refrigerante adicional | 0,0 kg |
|------------------------|--------|

| Diametro de tuberia | Distancia total (m) |
|---------------------|---------------------|
| 3/8"                | 17,7                |
| 5/8"                | 17,7                |

#### Listado de materiales del sistema

Proyecto : CADP Getafe V2  
 Referencia proy : PR2024011556  
 Sistema : Stma Control E

| Unidad exterior | Cantidad |
|-----------------|----------|
| FDC280KXZE2     | 1        |

| Unidad interior | Cantidad |
|-----------------|----------|
| FDUM140KXE6F    | 1        |
| FDT28KXZE1      | 2        |
| FDUT22KXE6F-E   | 6        |
| FDUT15KXE6F-E   | 2        |

| Panel        | Cantidad |
|--------------|----------|
| TC-PSA-5AW-E | 2        |

| Ramal      | Cantidad |
|------------|----------|
| DIS-180-1G | 2        |
| DIS-22-1G  | 8        |

| Control remoto | Cantidad |
|----------------|----------|
| RCN-KIT4-E2    | 3        |
| RCN-TC-5AW-E3  | 6        |
| RCN-T-5BW-E2   | 2        |

|                        |        |
|------------------------|--------|
| Refrigerante adicional | 3,8 kg |
|------------------------|--------|

| Diametro de tuberia | Distancia total (m) |
|---------------------|---------------------|
| 1/4"                | 31,4                |
| 3/8"                | 71,5                |
| 1/2"                | 3,5                 |
| 5/8"                | 21,8                |
| 3/4"                | 3,6                 |
| 7/8"                | 11,2                |

# Listado de materiales del sistema

Proyecto : CADP Getafe V2  
 Referencia proy : PR2024011556  
 Sistema : Stma Control D

| Unidad exterior | Cantidad |
|-----------------|----------|
| FDC280KXZE2     | 1        |

| Unidad interior | Cantidad |
|-----------------|----------|
| FDT28KXZE1      | 2        |
| FDUT22KXE6F-E   | 6        |
| FDUT15KXE6F-E   | 2        |

| Panel       | Cantidad |
|-------------|----------|
| T-PSA-5BW-E | 2        |

| Ramal      | Cantidad |
|------------|----------|
| DIS-180-1G | 1        |
| DIS-22-1G  | 8        |

| Control remoto | Cantidad |
|----------------|----------|
| RCN-KIT4-E2    | 3        |
| RCN-T-5BW-E2   | 2        |
| RCN-TC-5AW-E3  | 5        |

|                        |        |
|------------------------|--------|
| Refrigerante adicional | 3,3 kg |
|------------------------|--------|

| Diametro de tuberia | Distancia total (m) |
|---------------------|---------------------|
| 1/4"                | 30,6                |
| 3/8"                | 75,9                |
| 1/2"                | 6,0                 |
| 5/8"                | 20,8                |
| 7/8"                | 18,5                |

# Listado de materiales del sistema

Proyecto : CADP Getafe V2  
 Referencia proy : PR2024011556  
 Sistema : Stma Salas C-D

| Unidad exterior | Cantidad |
|-----------------|----------|
| FDC224KXZPE1    | 1        |

| Unidad interior | Cantidad |
|-----------------|----------|
| FDUM90KXE6F     | 1        |
| FDUM112KXE6F    | 1        |

| Ramal      | Cantidad |
|------------|----------|
| DIS-180-1G | 1        |

| Control remoto | Cantidad |
|----------------|----------|
| RCN-KIT4-E2    | 2        |

|                        |        |
|------------------------|--------|
| Refrigerante adicional | 0,9 kg |
|------------------------|--------|

| Diametro de tuberia | Distancia total (m) |
|---------------------|---------------------|
| 3/8"                | 16,9                |
| 5/8"                | 9,4                 |
| 3/4"                | 7,5                 |

# Listado de materiales del sistema

Proyecto : CADP Getafe V2  
 Referencia proy : PR2024011556  
 Sistema : Stma Salas Taller

| Unidad exterior | Cantidad |
|-----------------|----------|
| FDC280KXZPE1    | 1        |

| Unidad interior | Cantidad |
|-----------------|----------|
| FDTC28KXZE1     | 3        |
| FDTC36KXZE1     | 3        |
| FDUM112KXE6F    | 1        |

| Panel        | Cantidad |
|--------------|----------|
| TC-PSA-5AW-E | 6        |

| Ramal      | Cantidad |
|------------|----------|
| DIS-180-1G | 2        |
| DIS-22-1G  | 4        |

| Control remoto | Cantidad |
|----------------|----------|
| RCN-T-5BW-E2   | 3        |
| RCN-TC-5AW-E3  | 2        |
| RCN-KIT4-E2    | 2        |

|                        |        |
|------------------------|--------|
| Refrigerante adicional | 4,0 kg |
|------------------------|--------|

| Diametro de tuberia | Distancia total (m) |
|---------------------|---------------------|
| 1/4"                | 20,0                |
| 3/8"                | 58,7                |
| 1/2"                | 14,5                |
| 5/8"                | 32,4                |
| 3/4"                | 0,8                 |
| 7/8"                | 8,0                 |

### Listado de materiales del sistema

Proyecto : CADP Getafe V2  
 Referencia proy : PR2024011556  
 Sistema : Stma Comedor

| Unidad exterior | Cantidad |
|-----------------|----------|
| FDC560KXZE2     | 1        |

| Unidad interior | Cantidad |
|-----------------|----------|
| FDUM112KXE6F    | 1        |
| FDUM140KXE6F    | 1        |
| FDUM160KXE6F    | 2        |

| Ramal      | Cantidad |
|------------|----------|
| DIS-540-3  | 1        |
| DIS-371-1G | 1        |
| DIS-180-1G | 1        |

| Control remoto | Cantidad |
|----------------|----------|
| RCN-KIT4-E2    | 3        |
| RCN-T-5BW-E2   | 1        |

|                        |         |
|------------------------|---------|
| Refrigerante adicional | 10,1 kg |
|------------------------|---------|

| Diametro de tuberia | Distancia total (m) |
|---------------------|---------------------|
| 3/8"                | 36,5                |
| 1/2"                | 13,9                |
| 5/8"                | 36,5                |
| 3/4"                | 1,5                 |
| 1 1/8"              | 12,4                |

# Listado de materiales del sistema

Proyecto : CADP Getafe V2  
 Referencia proy : PR2024011556  
 Sistema : Stma Control C

| Unidad exterior | Cantidad |
|-----------------|----------|
| FDC335KXZE2     | 1        |

| Unidad interior | Cantidad |
|-----------------|----------|
| FDT28KXZE1      | 2        |
| FDUT28KXE6F-E   | 6        |
| FDUT15KXE6F-E   | 2        |
| FDUM140KXE6F    | 1        |

| Panel       | Cantidad |
|-------------|----------|
| T-PSA-5BW-E | 2        |

| Ramal      | Cantidad |
|------------|----------|
| DIS-371-1G | 1        |
| DIS-180-1G | 3        |
| DIS-22-1G  | 6        |

| Control remoto | Cantidad |
|----------------|----------|
| RCN-KIT4-E2    | 3        |
| RCN-TC-5AW-E3  | 6        |
| RCN-T-5BW-E2   | 2        |

|                        |        |
|------------------------|--------|
| Refrigerante adicional | 4,3 kg |
|------------------------|--------|

| Diametro de tuberia | Distancia total (m) |
|---------------------|---------------------|
| 1/4"                | 32,8                |
| 3/8"                | 54,9                |
| 1/2"                | 17,2                |
| 5/8"                | 18,7                |
| 3/4"                | 5,8                 |
| 7/8"                | 8,0                 |



#### Listado de materiales del sistema

Proyecto : CADP Getafe V2  
 Referencia proy : PR2024011556  
 Sistema : Stma Control B

| Unidad exterior | Cantidad |
|-----------------|----------|
| FDC280KXZE2     | 1        |

| Unidad interior | Cantidad |
|-----------------|----------|
| FDUT28KXE6F-E   | 6        |
| FDT28KXZE1      | 2        |
| FDUT15KXE6F-E   | 2        |

| Panel       | Cantidad |
|-------------|----------|
| T-PSA-5BW-E | 2        |

| Ramal      | Cantidad |
|------------|----------|
| DIS-180-1G | 3        |
| DIS-22-1G  | 6        |

| Control remoto | Cantidad |
|----------------|----------|
| RCN-KIT4-E2    | 3        |
| RCN-T-5BW-E2   | 2        |
| RCN-TC-5AW-E3  | 5        |

|                        |        |
|------------------------|--------|
| Refrigerante adicional | 3,3 kg |
|------------------------|--------|

| Diametro de tuberia | Distancia total (m) |
|---------------------|---------------------|
| 1/4"                | 30,0                |
| 3/8"                | 75,3                |
| 1/2"                | 7,7                 |
| 5/8"                | 7,1                 |
| 3/4"                | 4,0                 |
| 7/8"                | 26,5                |

# Listado de materiales del sistema

Proyecto : CADP Getafe V2  
 Referencia proy : PR2024011556  
 Sistema : Stma Salas A-B

| Unidad exterior | Cantidad |
|-----------------|----------|
| FDC140KXZES1    | 1        |

| Unidad interior | Cantidad |
|-----------------|----------|
| FDUM90KXE6F     | 1        |
| FDUM71KXE6F     | 1        |

| Ramal     | Cantidad |
|-----------|----------|
| DIS-22-1G | 1        |

| Control remoto | Cantidad |
|----------------|----------|
| RCN-KIT4-E2    | 2        |

|                        |        |
|------------------------|--------|
| Refrigerante adicional | 0,0 kg |
|------------------------|--------|

| Diametro de tuberia | Distancia total (m) |
|---------------------|---------------------|
| 3/8"                | 17,2                |
| 5/8"                | 17,2                |

# Listado de materiales del sistema

Proyecto : CADP Getafe V2  
 Referencia proy : PR2024011556  
 Sistema : Stma Control A

| Unidad exterior | Cantidad |
|-----------------|----------|
| FDC335KXZE2     | 1        |

| Unidad interior | Cantidad |
|-----------------|----------|
| FDUM140KXE6F    | 1        |
| FDUT22KXE6F-E   | 6        |
| FDT28KXZE1      | 2        |
| FDUT15KXE6F-E   | 1        |

| Panel       | Cantidad |
|-------------|----------|
| T-PSA-5BW-E | 2        |

| Ramal      | Cantidad |
|------------|----------|
| DIS-180-1G | 3        |
| DIS-22-1G  | 6        |

| Control remoto | Cantidad |
|----------------|----------|
| RCN-KIT4-E2    | 3        |
| RCN-T-5BW-E2   | 2        |
| RCN-TC-5AW-E3  | 5        |

|                        |        |
|------------------------|--------|
| Refrigerante adicional | 4,0 kg |
|------------------------|--------|

| Diametro de tuberia | Distancia total (m) |
|---------------------|---------------------|
| 1/4"                | 32,1                |
| 3/8"                | 50,4                |
| 1/2"                | 23,9                |
| 5/8"                | 12,2                |
| 3/4"                | 9,8                 |
| 7/8"                | 8,0                 |

#### Listado de materiales del sistema

Proyecto : CADP Getafe V2  
 Referencia proy : PR2024011556  
 Sistema : Stma Enfermería

| Unidad exterior | Cantidad |
|-----------------|----------|
| FDC224KXZME1    | 1        |

| Unidad interior | Cantidad |
|-----------------|----------|
| FDTC22KXZE1     | 2        |
| FDUT22KXE6F-E   | 5        |
| FDTC56KXZE1     | 1        |
| FDTC45KXZE1     | 1        |
| FDTC36KXZE1     | 1        |

| Panel        | Cantidad |
|--------------|----------|
| TC-PSA-5AW-E | 5        |

| Ramal      | Cantidad |
|------------|----------|
| DIS-180-1G | 4        |
| DIS-22-1G  | 5        |

| Control remoto | Cantidad |
|----------------|----------|
| RCN-KIT4-E2    | 4        |
| RCN-T-5BW-E2   | 2        |
| RCN-TC-5AW-E3  | 4        |

|                        |        |
|------------------------|--------|
| Refrigerante adicional | 5,4 kg |
|------------------------|--------|

| Diametro de tuberia | Distancia total (m) |
|---------------------|---------------------|
| 1/4"                | 34,4                |
| 3/8"                | 62,9                |
| 1/2"                | 16,2                |
| 5/8"                | 7,7                 |
| 3/4"                | 27,8                |

#### Listado de materiales del sistema

Proyecto : CADP Getafe V2  
 Referencia proy : PR2024011556  
 Sistema : Stma Sótano

| Unidad exterior | Cantidad |
|-----------------|----------|
| FDC280KXZME1    | 1        |

| Unidad interior | Cantidad |
|-----------------|----------|
| FDTC36KXZE1     | 2        |
| FDTC22KXZE1     | 5        |
| FDUM140KXE6F    | 1        |

| Panel        | Cantidad |
|--------------|----------|
| TC-PSA-5AW-E | 7        |

| Ramal      | Cantidad |
|------------|----------|
| DIS-180-1G | 3        |
| DIS-22-1G  | 4        |

| Control remoto | Cantidad |
|----------------|----------|
| RCN-KIT4-E2    | 3        |
| RCN-TC-5AW-E3  | 3        |
| RCN-T-5BW-E2   | 2        |

|                        |        |
|------------------------|--------|
| Refrigerante adicional | 5,4 kg |
|------------------------|--------|

| Diametro de tuberia | Distancia total (m) |
|---------------------|---------------------|
| 1/4"                | 51,5                |
| 3/8"                | 71,5                |
| 1/2"                | 14,3                |
| 5/8"                | 7,9                 |
| 3/4"                | 11,8                |
| 7/8"                | 11,0                |

# **FDC121KXZEN1, 140KXZEN1, 155KXZEN1**

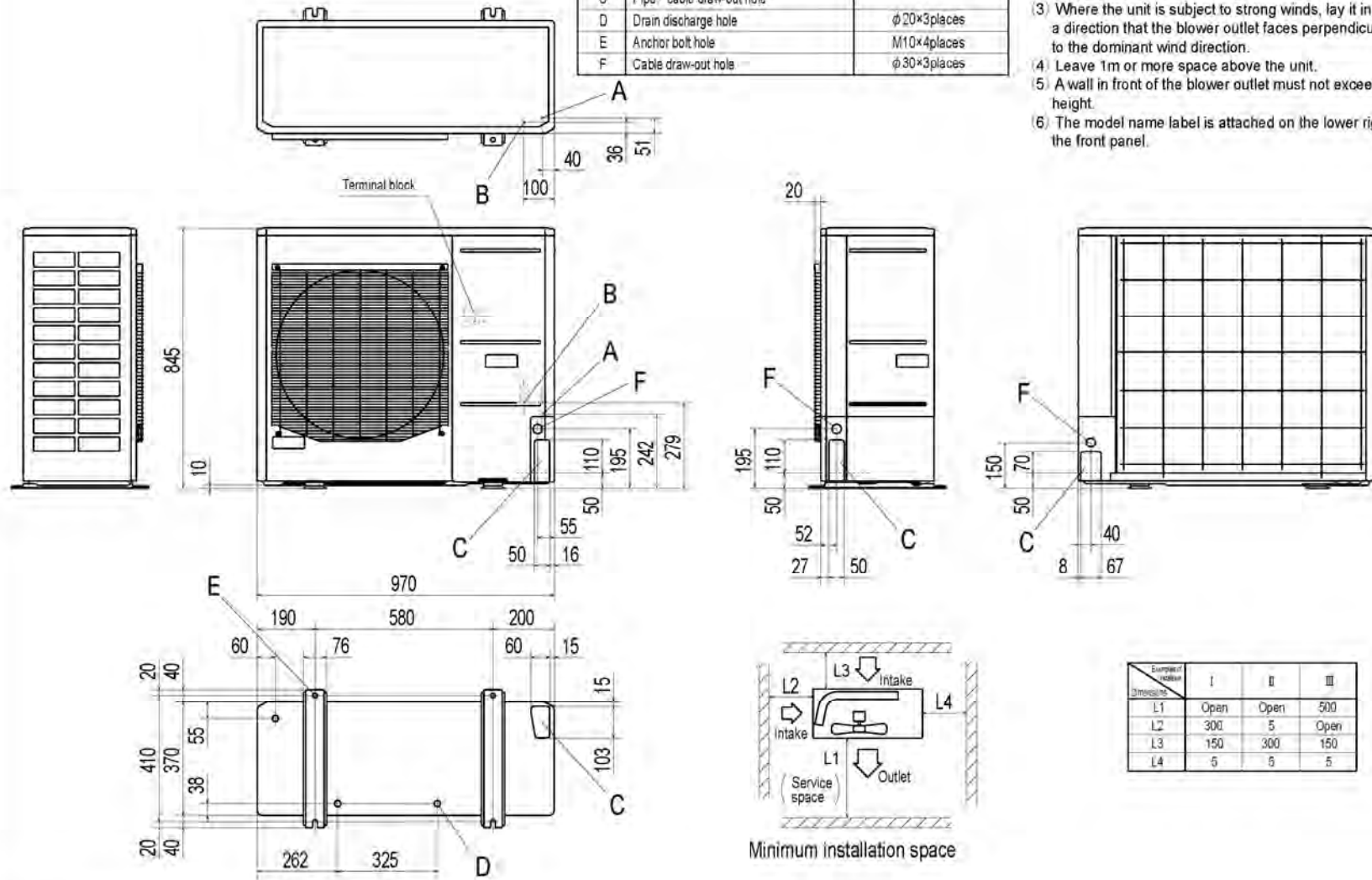
Unit:mm

## Meaning of marks

| Mark | Content   |
|------|---|
| A    | Service valve connection (gas side) $\phi 15.88$ (5/8") (Flare)   |
| B    | Service valve connection (liquid side) $\phi 9.52$ (3/8") (Flare) |
| C    | Pipe / cable draw-out hole  |
| D    | Drain discharge hole $\phi 20 \times 3$ places                    |
| E    | Anchor bolt hole M10 $\times 4$ places                            |
| F    | Cable draw-out hole $\phi 30 \times 3$ places                     |

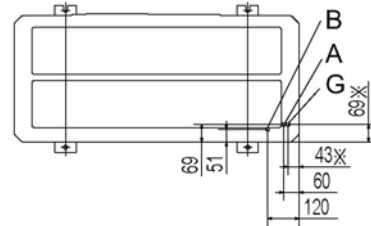
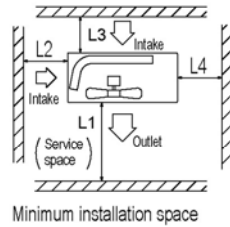
## Notes

- 1) It must not be surrounded by walls on the four sides.
- 2) The unit must be fixed with anchor bolts. An anchor bolt must not protrude more than 15mm.
- 3) Where the unit is subject to strong winds, lay it in such a direction that the blower outlet faces perpendicularly to the dominant wind direction.
- 4) Leave 1m or more space above the unit.
- 5) A wall in front of the blower outlet must not exceed the unit's height.
- 6) The model name label is attached on the lower right corner of the front panel.



**FDC224KXZME1**

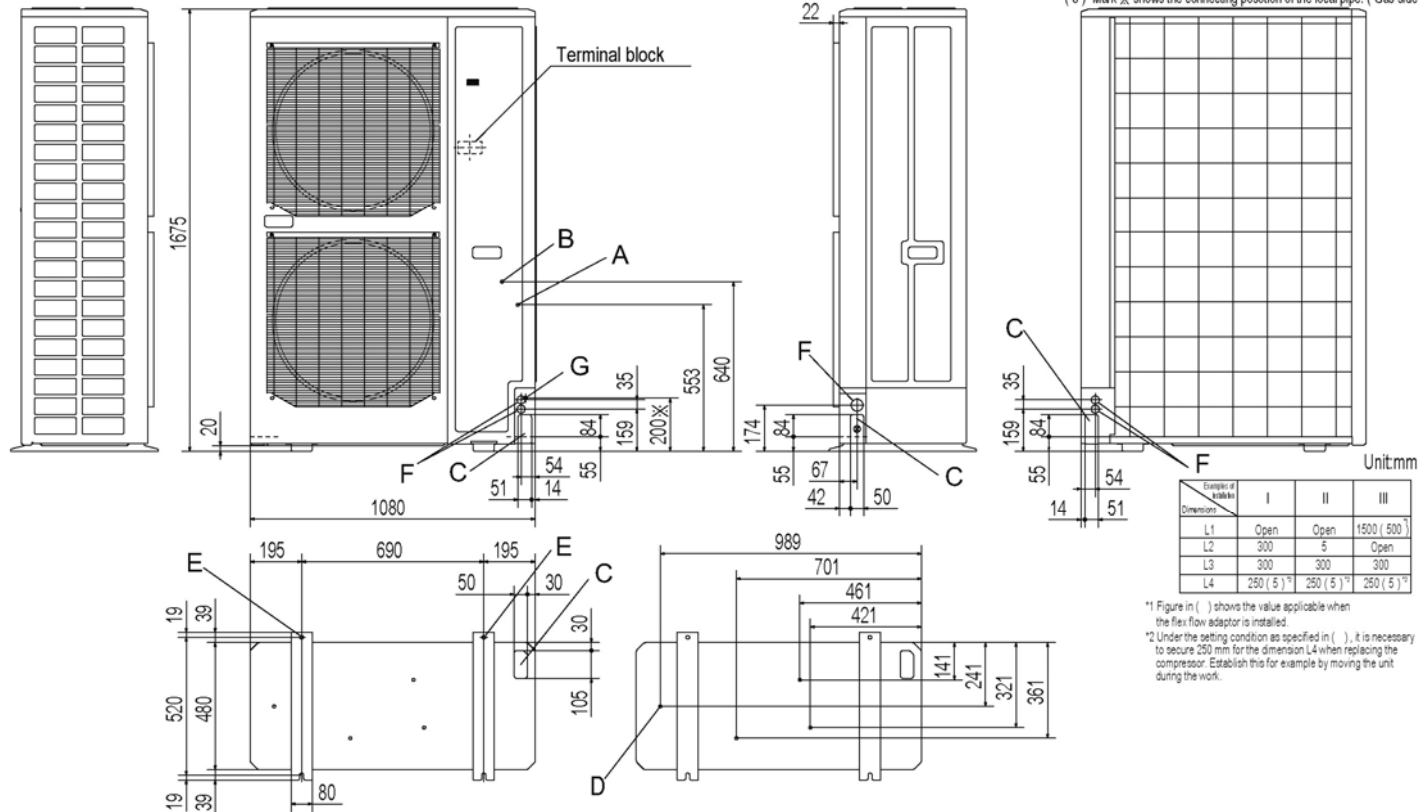
Unit:mm



| Symbol | Content   |
|--------|---|
| A      | Service valve connection of the attached connecting pipe (gas side) $\phi 19.05 (3/4")$ (Flare)               |
| B      | Service valve connection (liquid side) $\phi 9.52 (3/8")$ (Flare)   |
| C      | Pipe / cable draw-out hole 4 places   |
| D      | Drain discharge hole $\phi 20 \times 4$ places  |
| E      | Anchor bolt hole M10 $\times$ 4 places  |
| F      | Cable draw-out hole $\phi 30 \times 2$ places (front)<br>$\phi 45$ (side)<br>$\phi 30 \times 2$ places (back) |
| G      | Connecting position of the local pipe. (gas side) $\phi 19.05 (3/4")$ (Brazing)                               |

## Notes

- (1) It must not be surrounded by walls on the four sides.
- (2) The unit must be fixed with anchor bolts. An anchor bolt must not protrude more the 15mm.
- (3) Where the unit is subject to strong winds, lay it in such a direction that the blower outlet faces perpendicularly to the dominant wind direction.
- (4) Leave 1m or more space above the unit.
- (5) A wall in front of the blower outlet must not exceed the units height.
- (6) The model name label is attached on the lower right corner of the front.
- (7) Connect the Service valve with local pipe by using the pipe of the attachment.  
( Gas side only )
- (8) Mark ② shows the connecting position of the local pipe. ( Gas side only )

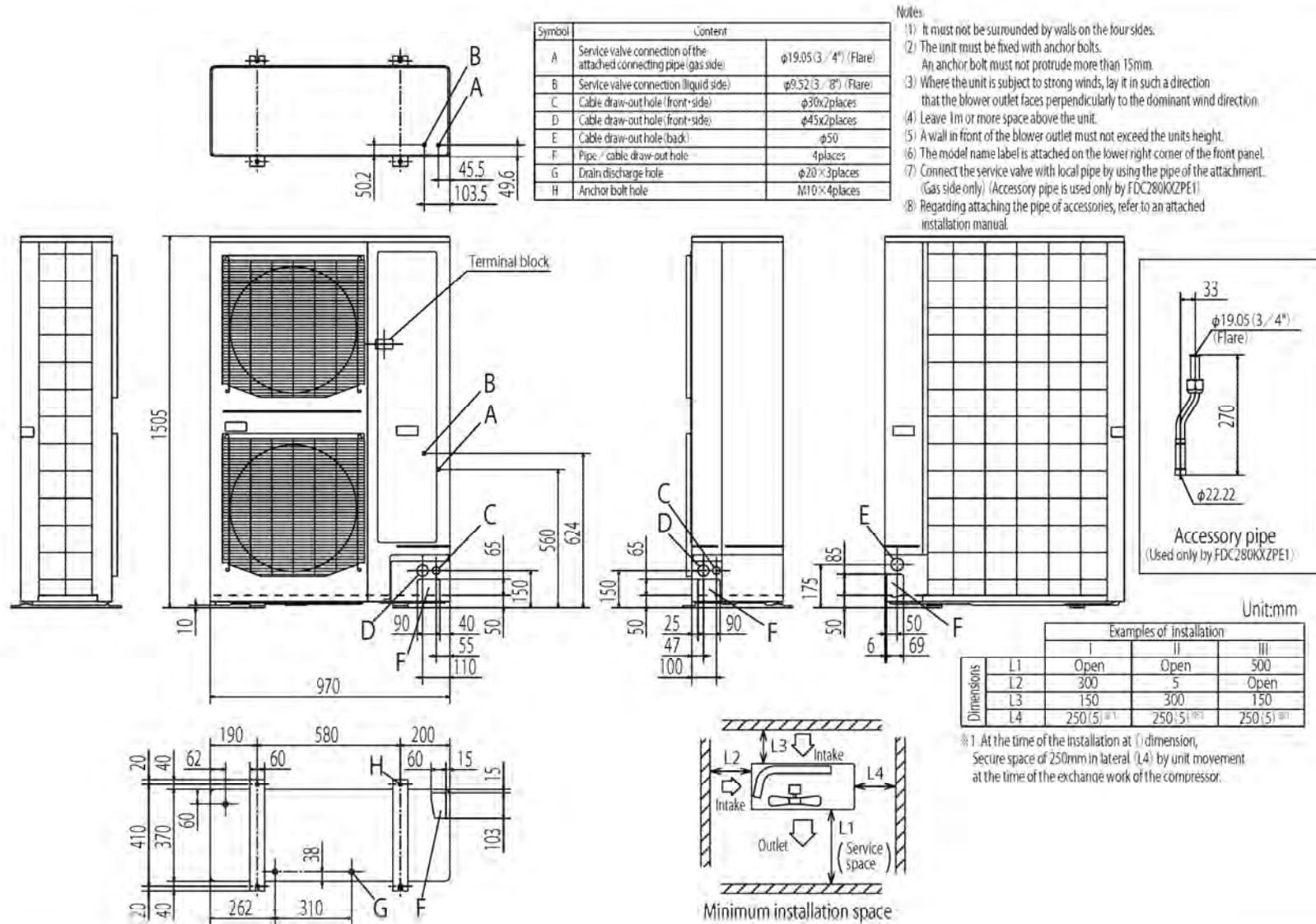


\*1 Figure in ( ) shows the value applicable when the flex flow adaptor is installed.

\*2 Under the setting condition as specified in ( ), it is necessary to secure 250 mm for the dimension L4 when replacing the compressor. Establish this for example by moving the unit during the work.

# FDC224KXZPE1, 280KXZPE1

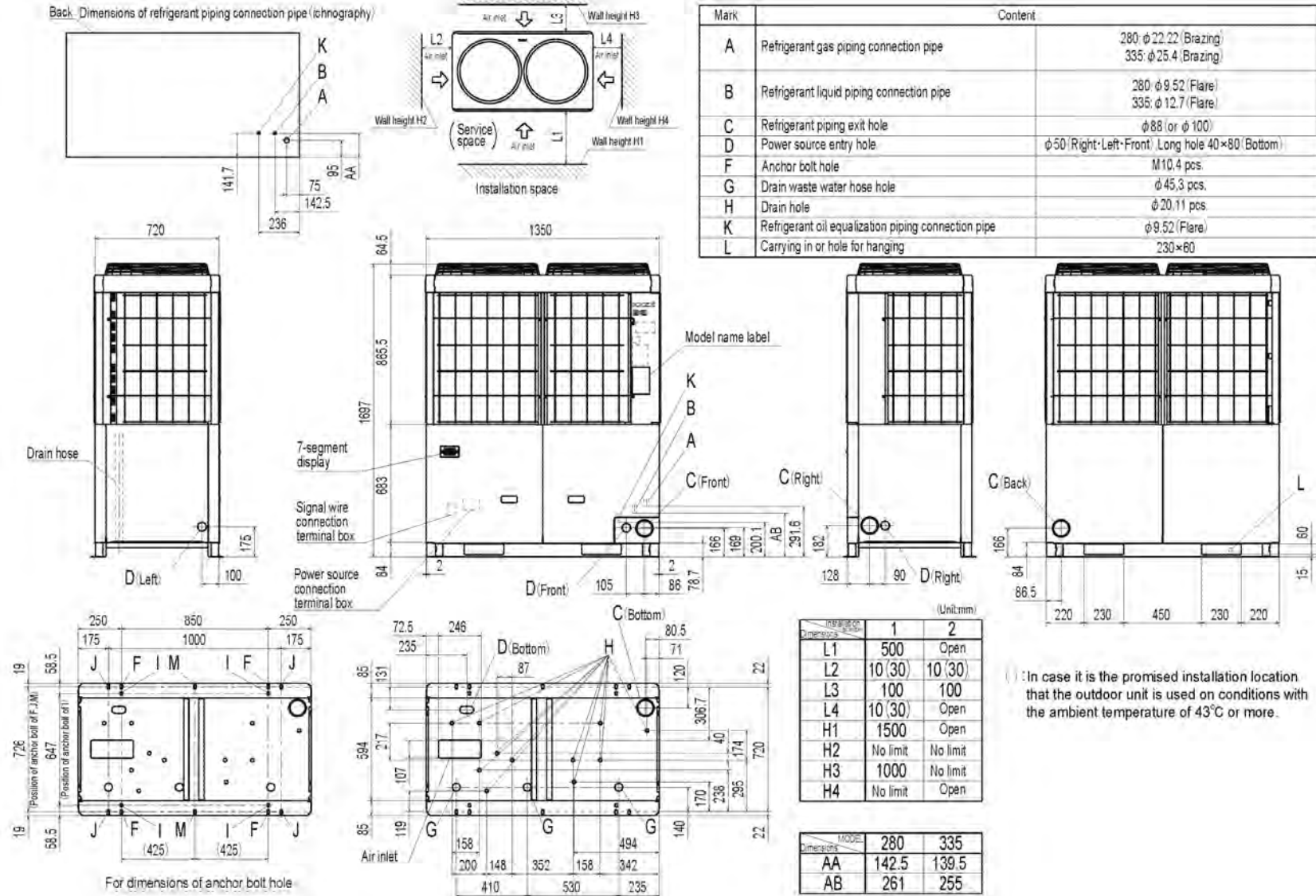
Unit:mm





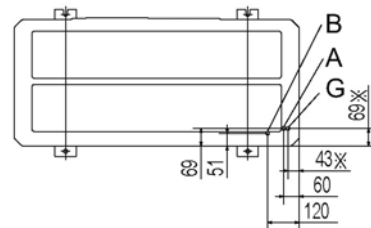
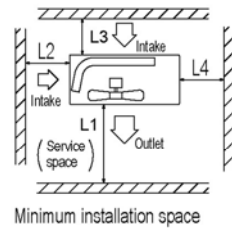
# **FDC280KXZE2, FDC335KXZE2**

Unit:mm




**FDC280KXZME1**

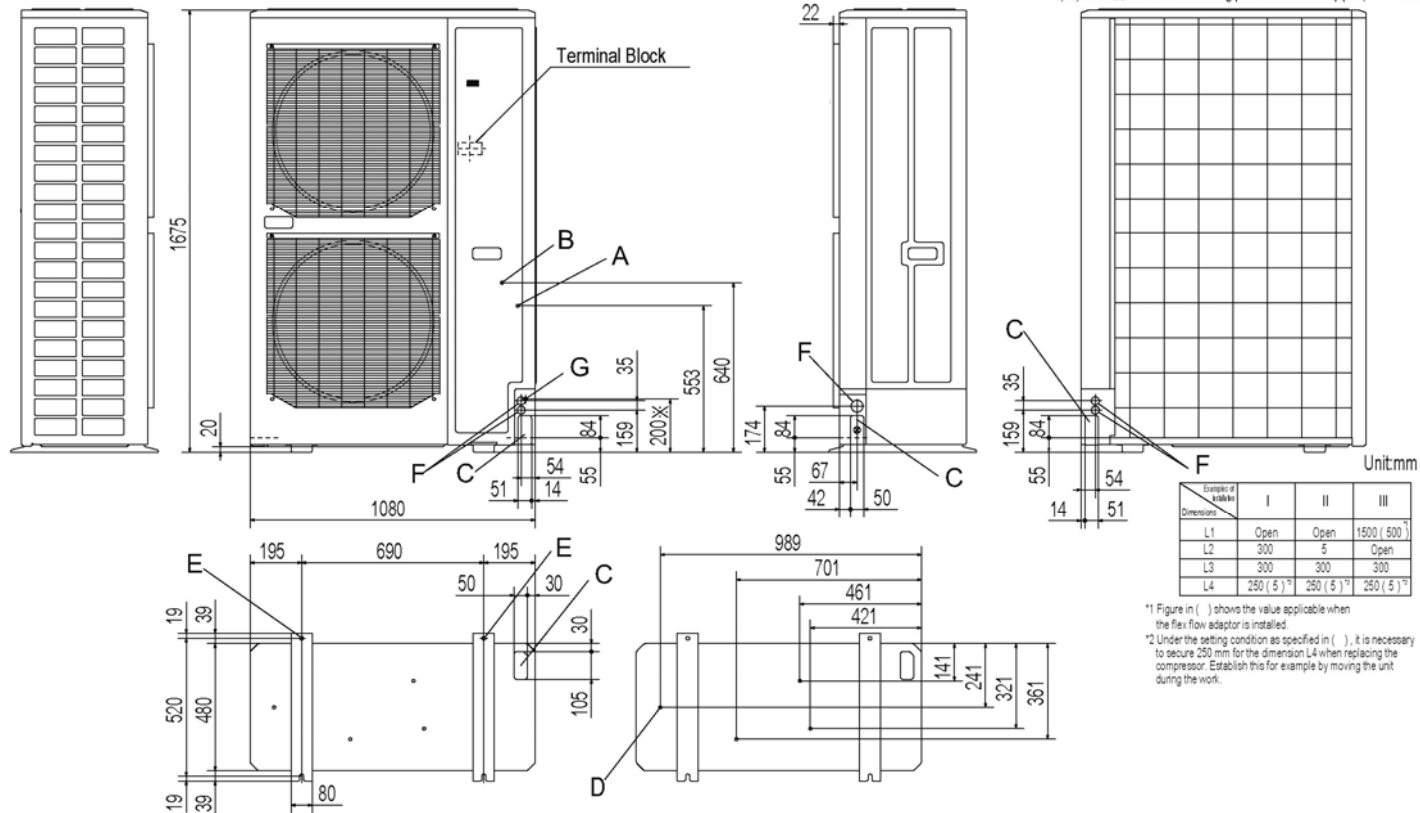
Unit:mm



| Symbol | Content   |   |
|--------|---|---|
| A      | Service valve connection of the attached connecting pipe (gas side) | $\phi 19.05$ (3 / 4" ) ( Flare )  |
| B      | Service valve connection ( liquid side )                            | $\phi 9.52$ ( 3 / 8" ) ( Flare )  |
| C      | Pipe / cable draw-out hole  | 4 places  |
| D      | Drain discharge hole  | $\phi 20 \times 4$ places   |
| E      | Anchor bolt hole  | M10 $\times 4$ places   |
| F      | Cable draw-out hole   | $\phi 30 \times 2$ places ( front )<br>$\phi 45$ ( side )<br>$\phi 30 \times 2$ places ( back ) |
| G      | Connecting position of the local pipe ( gas side )                  | $\phi 22.22$ ( 7 / 8" ) ( Brazing )   |

## Notes

- (1) It must not be surrounded by walls on the four sides.
- (2) The unit must be fixed with anchor bolts. An anchor bolt must not protrude more than 15mm.
- (3) Where the unit is subject to strong winds, lay it in such a direction that the blower outlet faces perpendicularly to the dominant wind direction.
- (4) Leave 1m or more space above the unit.
- (5) A wall in front of the blower outlet must not exceed the units height.
- (6) The model name label is attached on the lower right corner of the front.
- (7) Connect the Service valve with local pipe by using the pipe of the attachment.  
( Gas side only )
- (8) Mark  shows the connecting position of the local pipe. ( Gas side only )

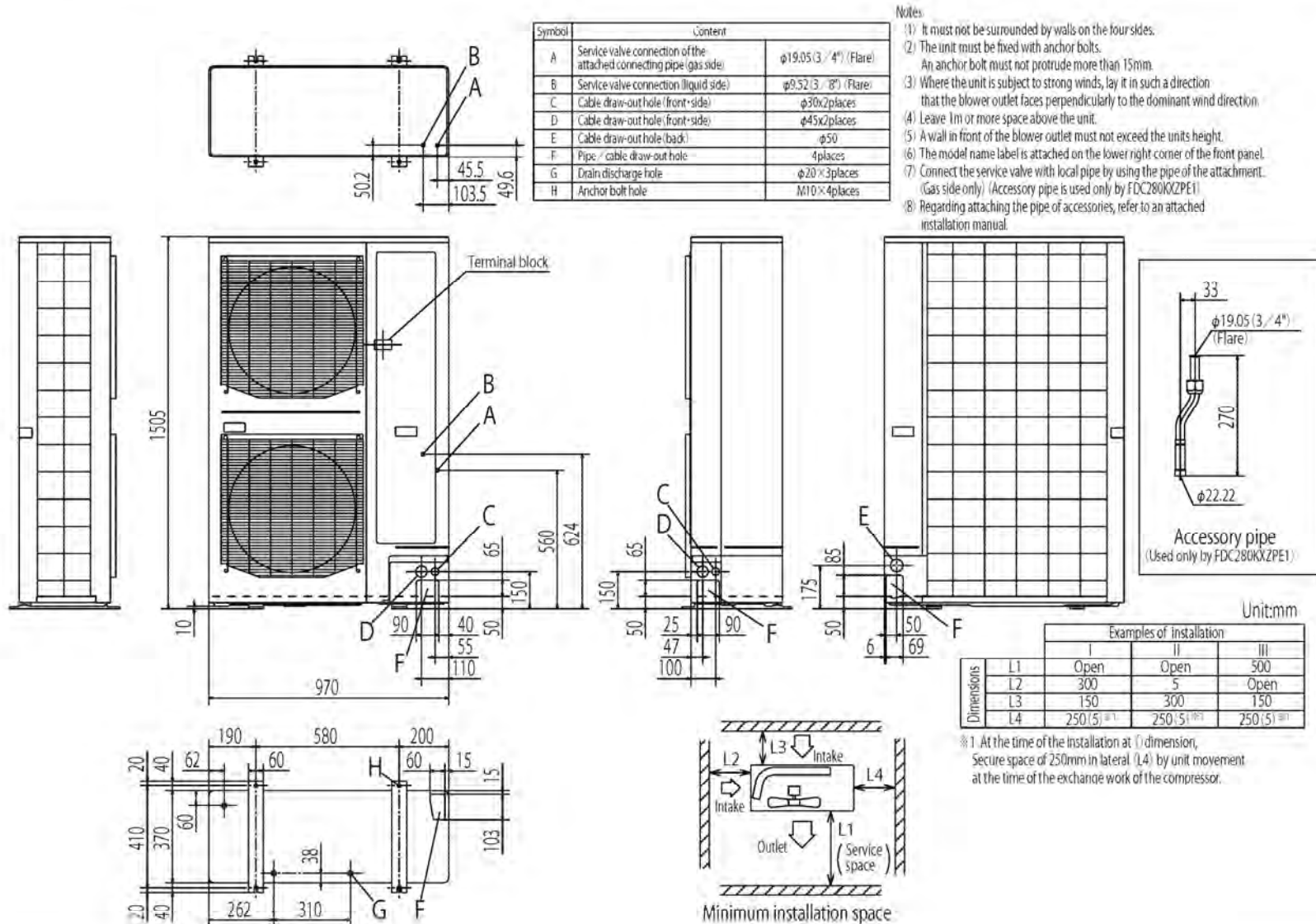


\*1 Figure in ( ) shows the value applicable when the flex flow adaptor is installed.

\*2 Under the setting condition as specified in ( ), it is necessary to secure 250 mm for the dimension L4 when replacing the compressor. Establish this for example by moving the unit during the work.

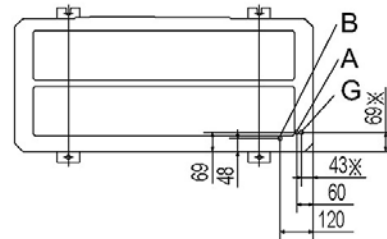
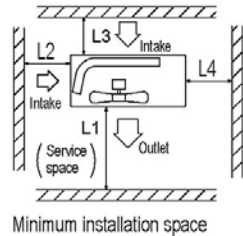
# FDC224KXZPE1, 280KXZPE1

Unit:mm



# FDC335KXZME1A

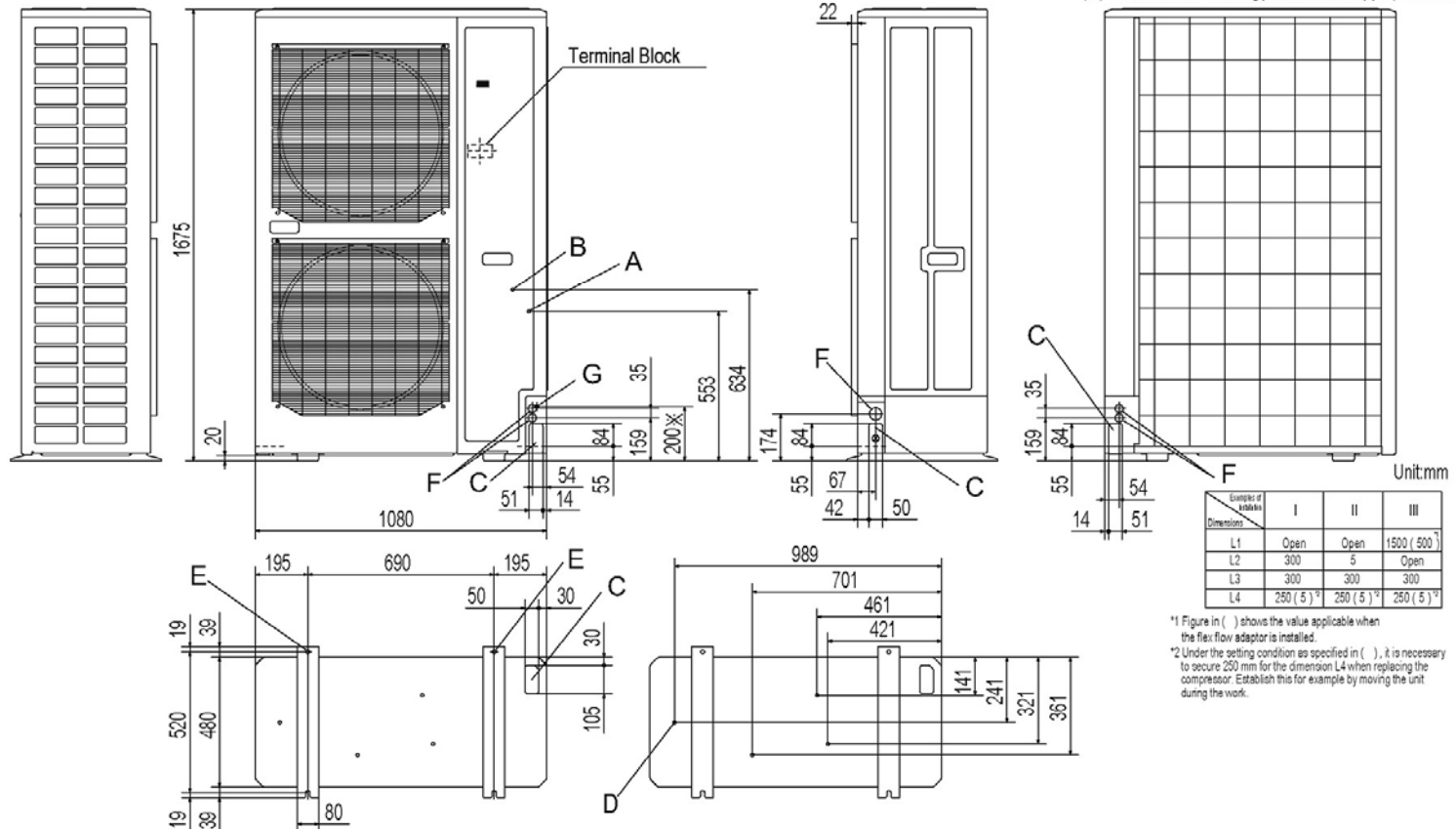
Unit:mm



| Symbol | Content   |  |
|--------|---|--|
| A      | Service valve connection of the attached connecting pipe ( gas side ) | φ 19.05 ( 3 / 4" ) ( Flare )                                       |
| B      | Service valve connection ( liquid side )                              | φ 12.7 ( 1 / 2" ) ( Flare )  |
| C      | Pipe / cable draw-out hole  | 4 places   |
| D      | Drain discharge hole  | φ 20×4 places  |
| E      | Anchor bolt hole  | M10×4 places   |
| F      | Cable draw-out hole   | φ 30×2 places ( front )<br>φ 45 ( side )<br>φ 30×2 places ( back ) |
| G      | Connecting position of the local pipe ( gas side )                    | φ 25.4 ( 1" ) ( Brazing )  |

## Notes

- ( 1 ) It must not be surrounded by walls on the four sides.
- ( 2 ) The unit must be fixed with anchor bolts. An anchor bolt must not protrude more the 15mm.
- ( 3 ) Where the unit is subject to strong winds, lay it in such a direction that the blower outlet faces perpendicularly to the dominant wind direction.
- ( 4 ) Leave 1m or more space above the unit.
- ( 5 ) A wall in front of the blower outlet must not exceed the units height.
- ( 6 ) The model name label is attached on the lower right corner of the front.
- ( 7 ) Connect the Service valve with local pipe by using the pipe of the attachment. ( Gas side only )
- ( 8 ) Mark ※ shows the connecting position of the local pipe. ( Gas side only )



| Dimensions | I                       | II                      | III                        |
|------------|-------------------------|-------------------------|----------------------------|
| L1         | Open                    | Open                    | 1500 ( 500 ) <sup>*1</sup> |
| L2         | 300                     | 5                       | Open                       |
| L3         | 300                     | 300                     | 300                        |
| L4         | 250 ( 5 ) <sup>*2</sup> | 250 ( 5 ) <sup>*2</sup> | 250 ( 5 ) <sup>*2</sup>    |

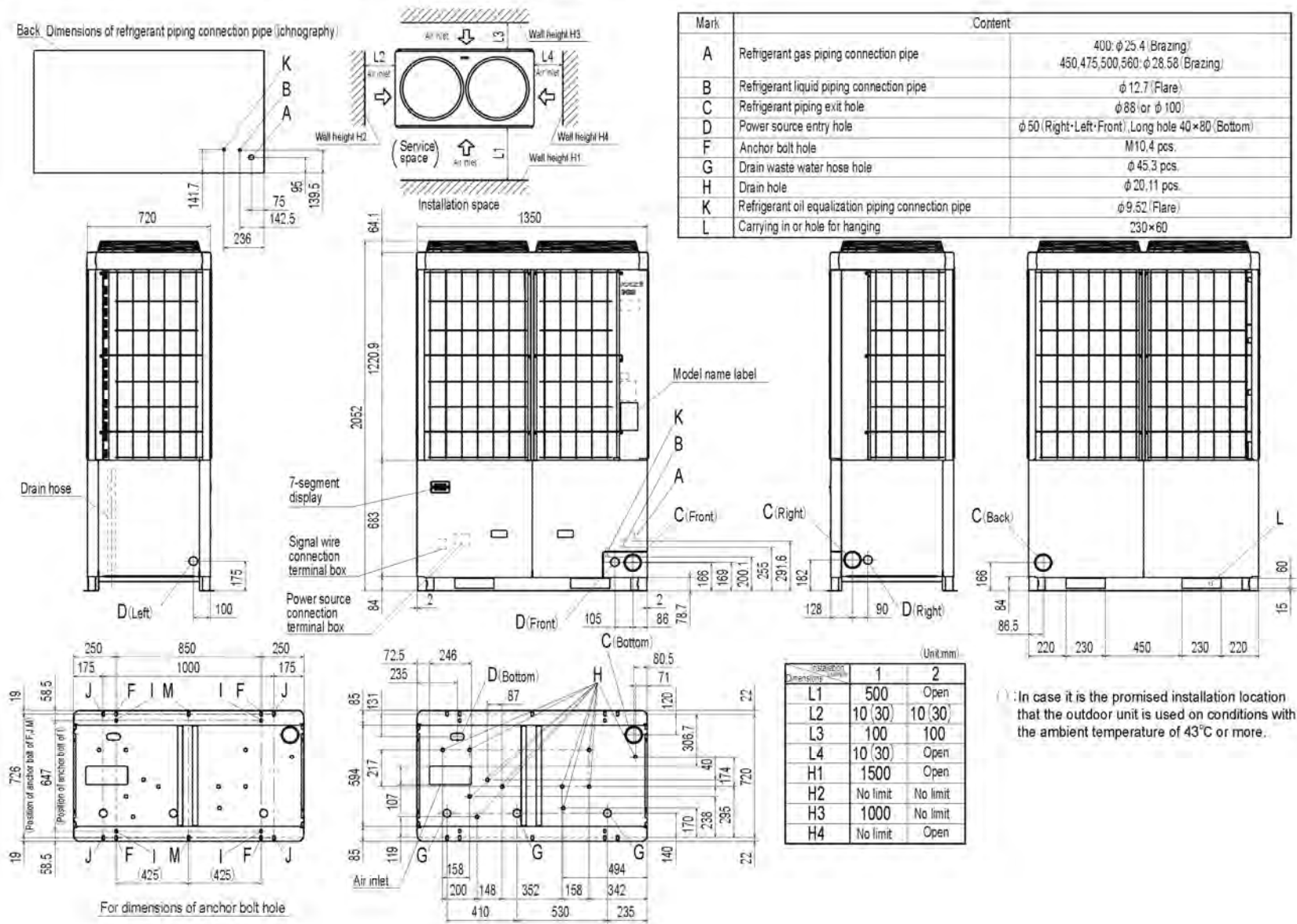
\*1 Figure in ( ) shows the value applicable when the flex flow adaptor is installed.

\*2 Under the setting condition as specified in ( ), it is necessary to secure 250 mm for the dimension L4 when replacing the compressor. Establish this for example by moving the unit during the work.



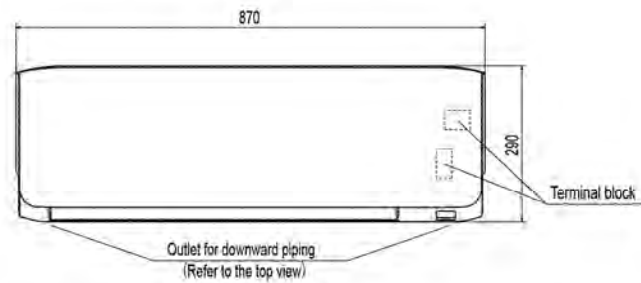
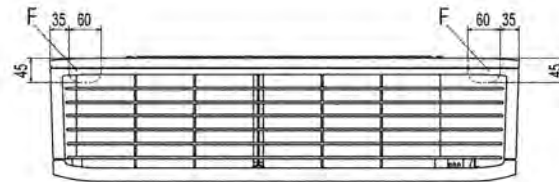
**FDC400KXZE2, FDC450KXZE2, FDC475KXZE2, FDC500KXZE2, FDC560KXZE2**

Unit: mm

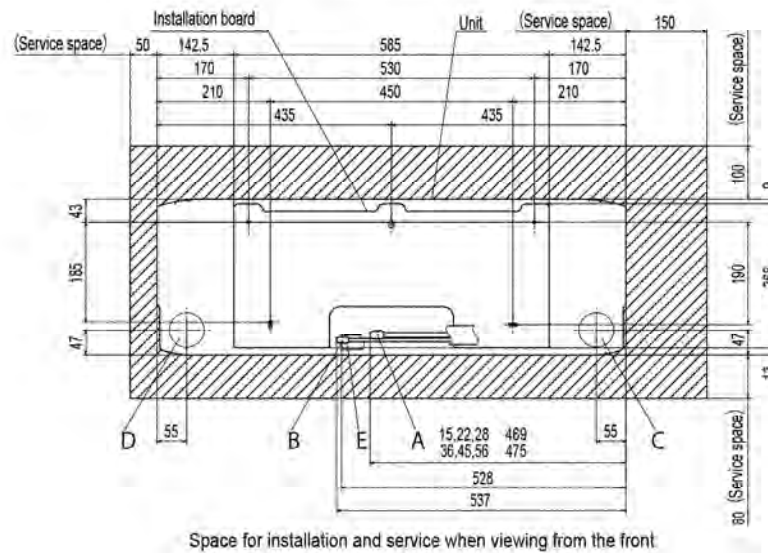
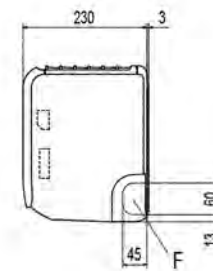


**FDK15KXE1, 22KXE1, 28KXE1, 36KXE1, 45KXE1, 56KXE1**

Unit:mm



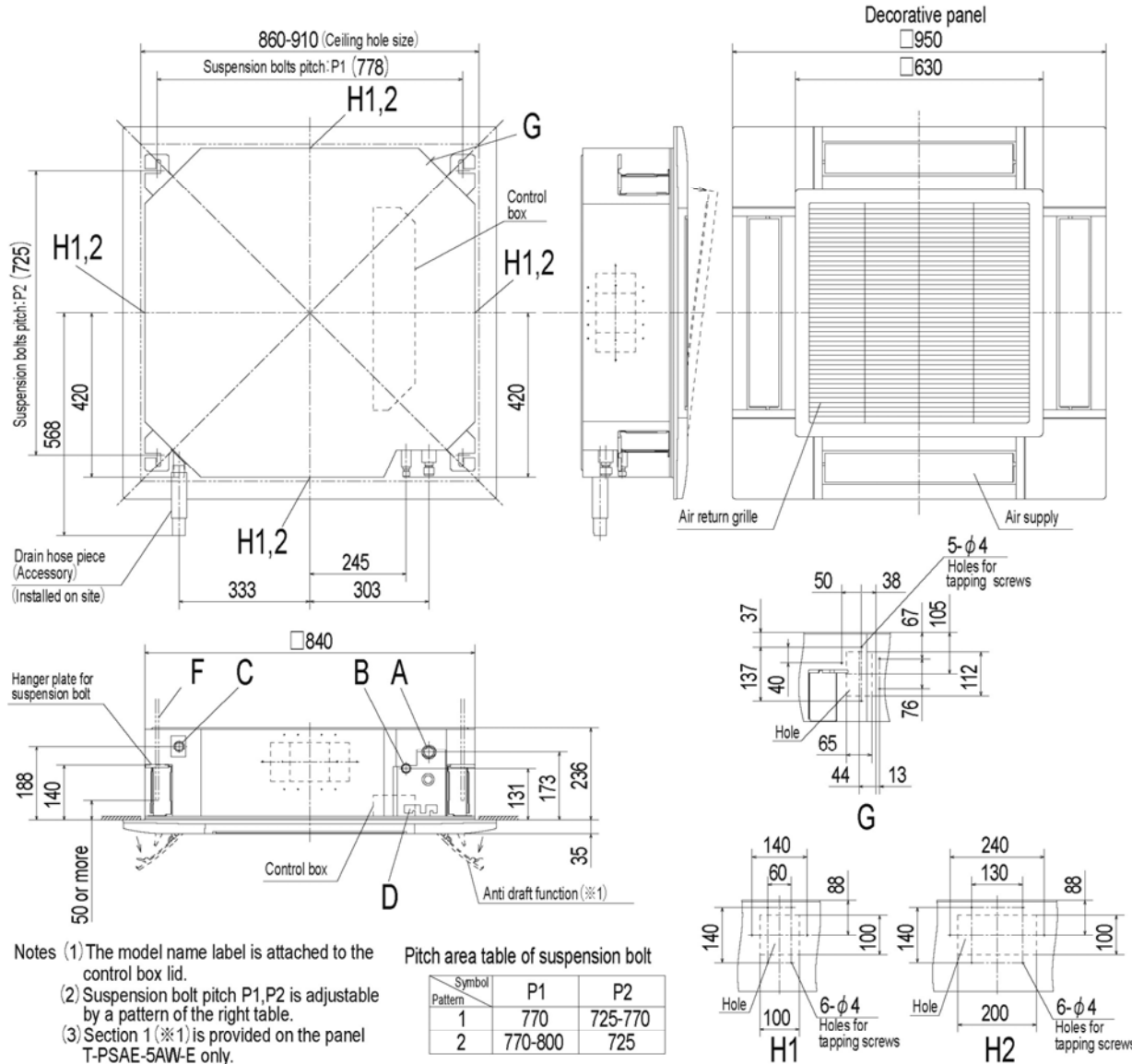
| Symbol | Model                              | Content  |
|--------|------------------------------------|--|
| A      | Gas piping                         | 15.22.28      36.45.56                           |
| B      | Liquid piping                      | φ 9.52 (3/8") (Flare)      φ 12.7 (1/2") (Flare) |
| C      | Hole on wall for right rear piping | φ 6.35 (1/4") (Flare)                            |
| D      | Hole on wall for left rear piping  | (φ 65)   |
| E      | Drain hose                         | (φ 65)   |
| F      | Outlet for wiring (on both side)   | VP16   |



Note (1) The model name label is attached on the right side of the unit.

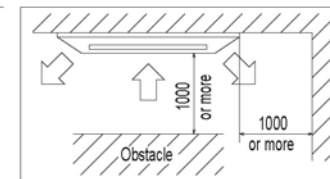
**FDT28KXZE1, 36KXZE1, 45KXZE1, 56KXZE1, 71KXZE1**

Unit:mm

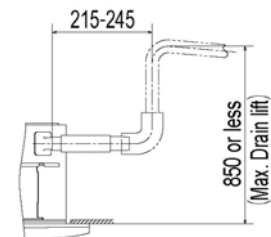


| Symbol | Model                           | 28                   | 36,45,56             | 71                     |
|--------|---------------------------------|----------------------|----------------------|------------------------|
| A      | Gas piping                      | φ9.53 (3/8") (Flare) | φ12.7 (1/2") (Flare) | φ15.885 (5/8") (Flare) |
| B      | Liquid piping                   | φ6.35 (1/4") (Flare) | φ9.53 (3/8") (Flare) | φ12.7 (1/2") (Flare)   |
| C      | Drain piping                    | VP25 (O.D.32)        |                      |                        |
| D      | Hole for wiring                 | (M10 or M8)          |                      |                        |
| F      | Suspension bolts                | (M10 or M8)          |                      |                        |
| G      | Outside air opening for ducting | (Knock out)          |                      |                        |
| H1     | Air outlet opening for ducting  | φ 125 (Knock out)    |                      |                        |
| H2     |                                 | φ 200 (Knock out)    |                      |                        |

Space for installation and service

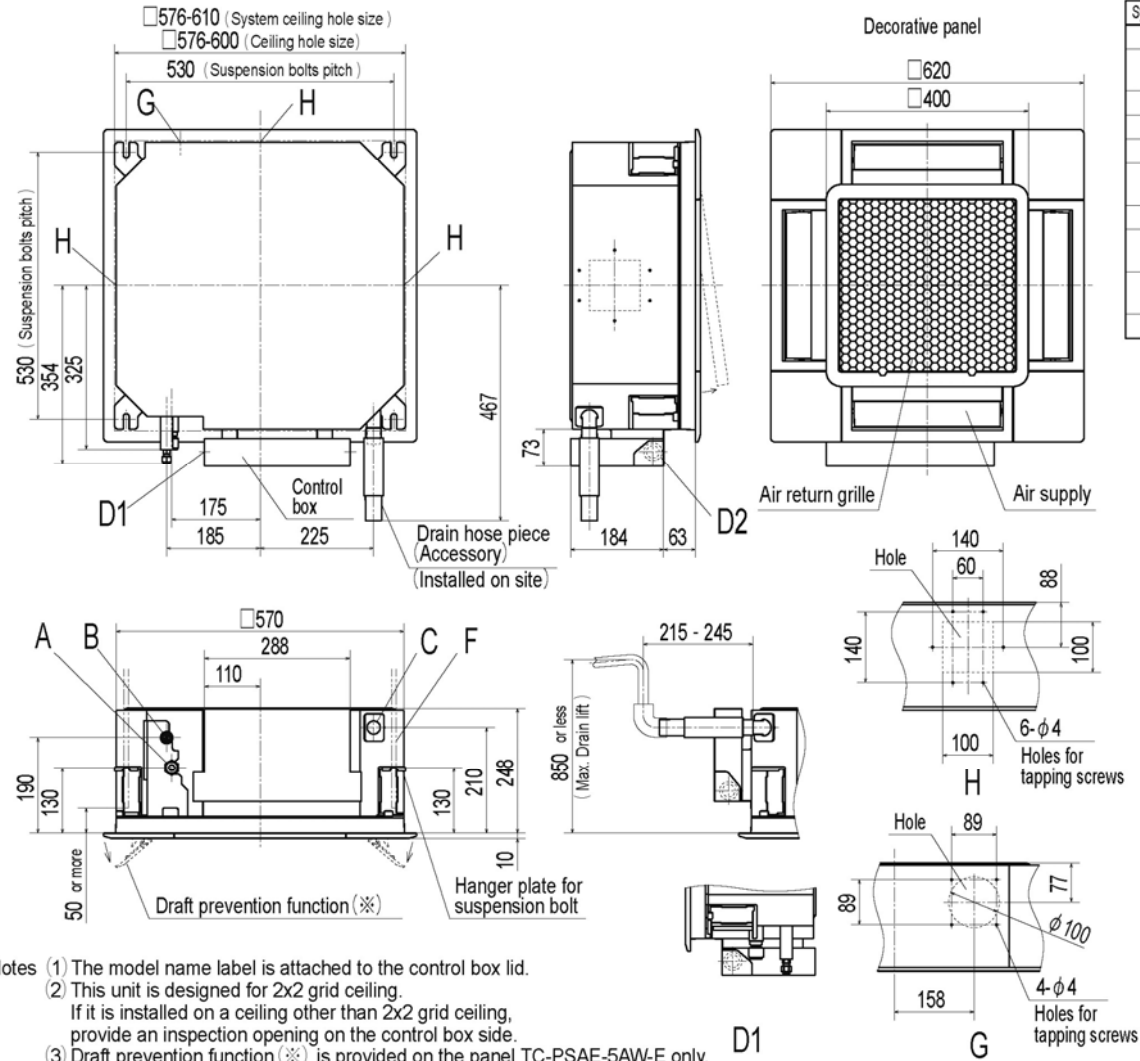


Make a space of 4000 or more between the units when installing more than one.



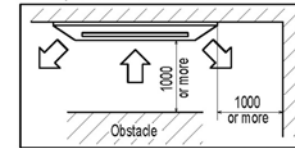
**FDTC15KXZE1, 22KXZE1, 28KXZE1, 36KXZE1, 45KXZE1, 56KXZE1**

Unit:mm



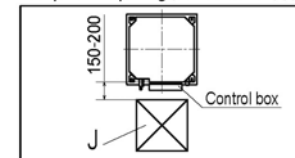
| Symbol | Model  | 15,22,28              | 36,45,56              |
|--------|--|-----------------------|-----------------------|
| A      | Gas piping                                       | φ 9.52 (3/8") (Flare) | φ 12.7 (1/2") (Flare) |
| B      | Liquid piping                                    | φ 6.35 (1/4") (Flare) |                       |
| C      | Drain piping                                     | VP25 (O.D.32)         |                       |
| D1     | Power source connection                          |                       |                       |
| D2     | Remote control code and signal wiring connection |                       |                       |
| F      | Suspension bolts                                 | (M10 or M8)           |                       |
| G      | Outside air opening for ducting                  | (Knock out)           |                       |
| H      | Air outlet opening for ducting                   | φ 125 (Knock out)     |                       |
| J      | Inspection opening                               | 450X450               |                       |

Space for installation and service



Make a space of 4000 or more between the units when installing more than one.

Inspection opening (Refer to note (2))

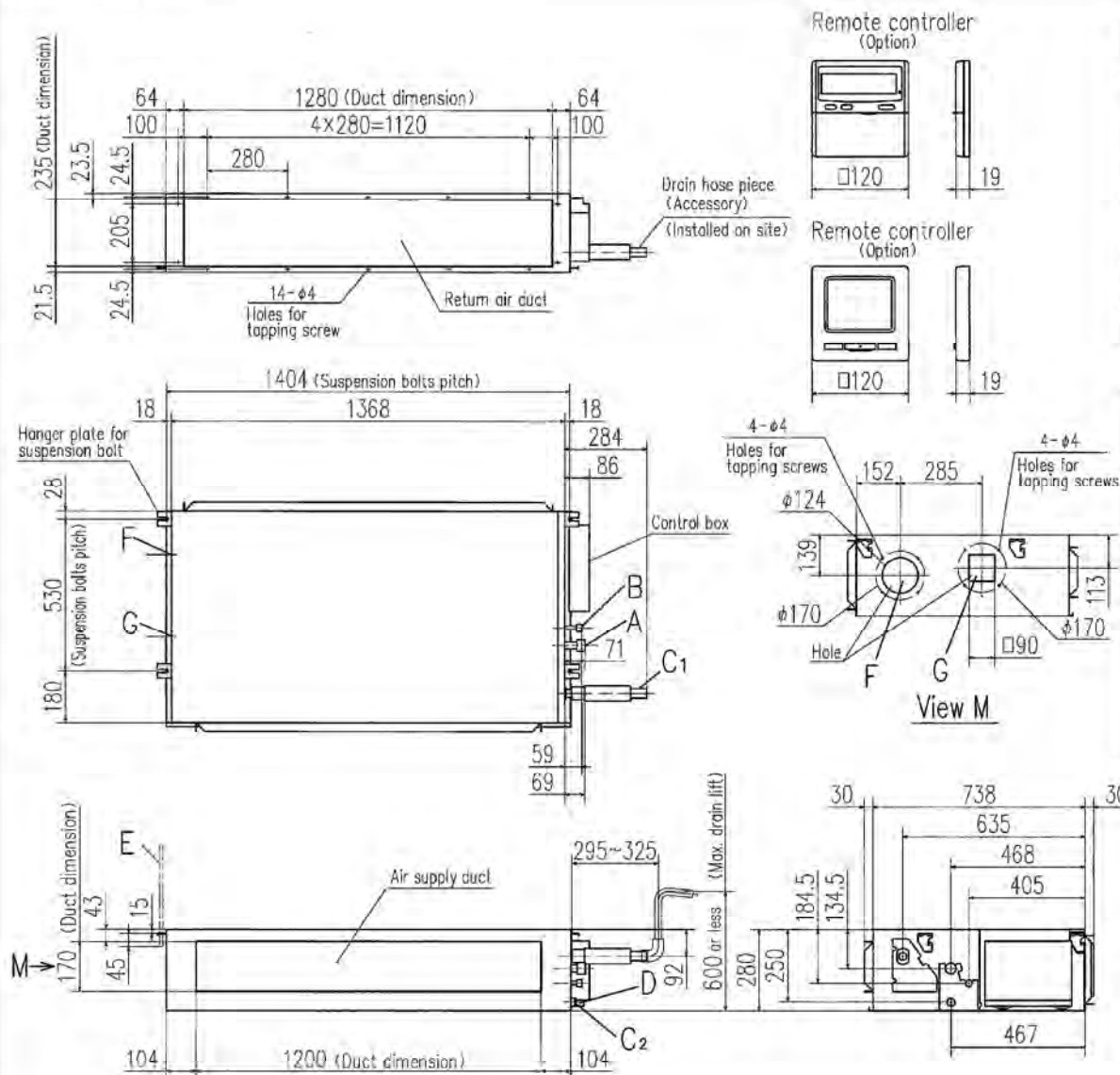


- Notes
- (1) The model name label is attached to the control box lid.
  - (2) This unit is designed for 2x2 grid ceiling.  
If it is installed on a ceiling other than 2x2 grid ceiling,  
provide an inspection opening on the control box side.
  - (3) Draft prevention function (※) is provided on the panel TC-PSAE-5AW-E only.



# FDUM112KXE6F

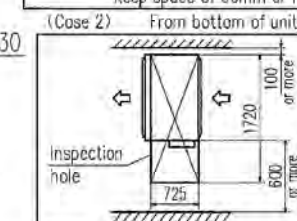
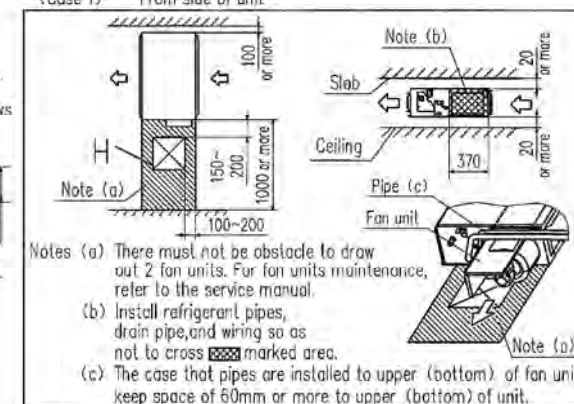
Unit:mm



| Symbol | Content  |
|--------|--|
| A      | Gas piping $\phi 15.88$ (5/8") (Flare)                     |
| B      | Liquid piping $\phi 9.52$ (3/8") (Flare)                   |
| C1     | Drain piping VP25 (O.D.32)                                 |
| C2     | Drain piping (Gravity drainage) VP20                       |
| D      | Hole for wiring  |
| E      | Suspension bolts (M10)                                     |
| F      | Outside air opening for ducting ( $\phi 150$ ) (Knock out) |
| G      | Air outlet opening for ducting ( $\phi 125$ ) (Knock out)  |
| H      | Inspection hole (450X450)                                  |

## Space for installation and service

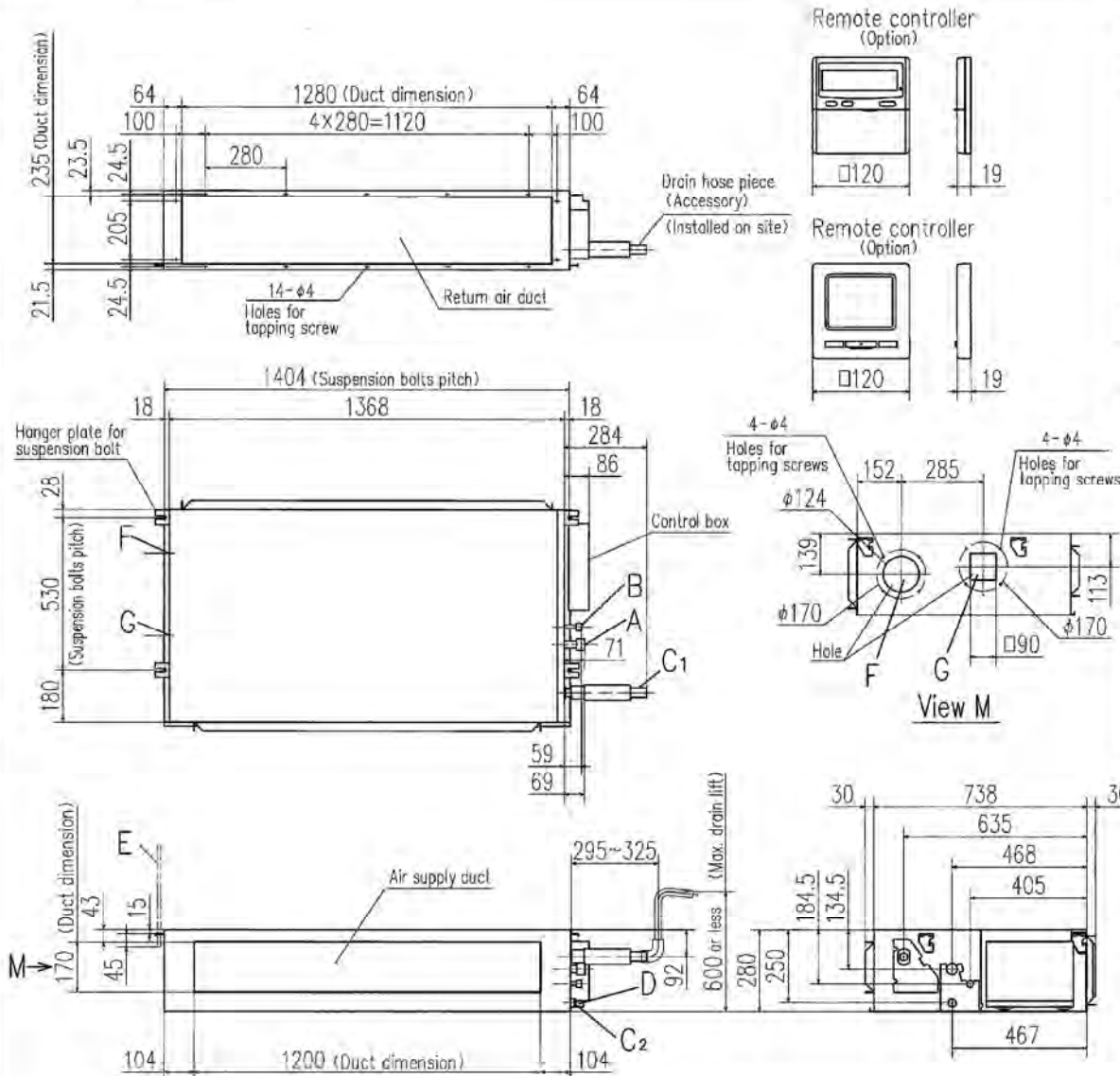
Select either of two cases to keep space for installation and services.  
(Case 1) From side of unit



Note  
(1) The model name label is attached on the lid of the control box.

# FDUM140KXE6F

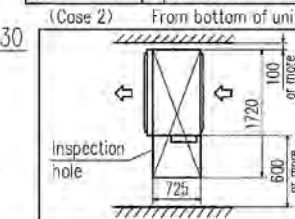
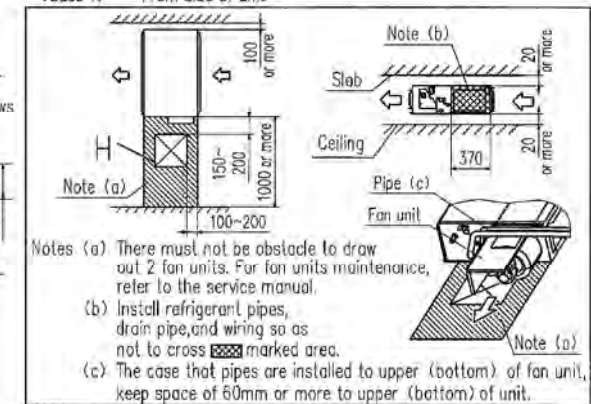
Unit:mm



| Symbol | Content   |
|--------|---|
| A      | Gas piping φ15.88 (5/8") (Flare)                  |
| B      | Liquid piping φ9.52 (3/8") (Flare)                |
| C1     | Drain piping VP25 (O.D.32)                        |
| C2     | Drain piping (Gravity drainage) VP20              |
| D      | Hole for wiring (M10)                             |
| E      | Suspension bolts (φ150) (Knock out)               |
| F      | Air outlet opening for ducting (φ125) (Knock out) |
| G      | Inspection hole (450X450)                         |

## Space for installation and service

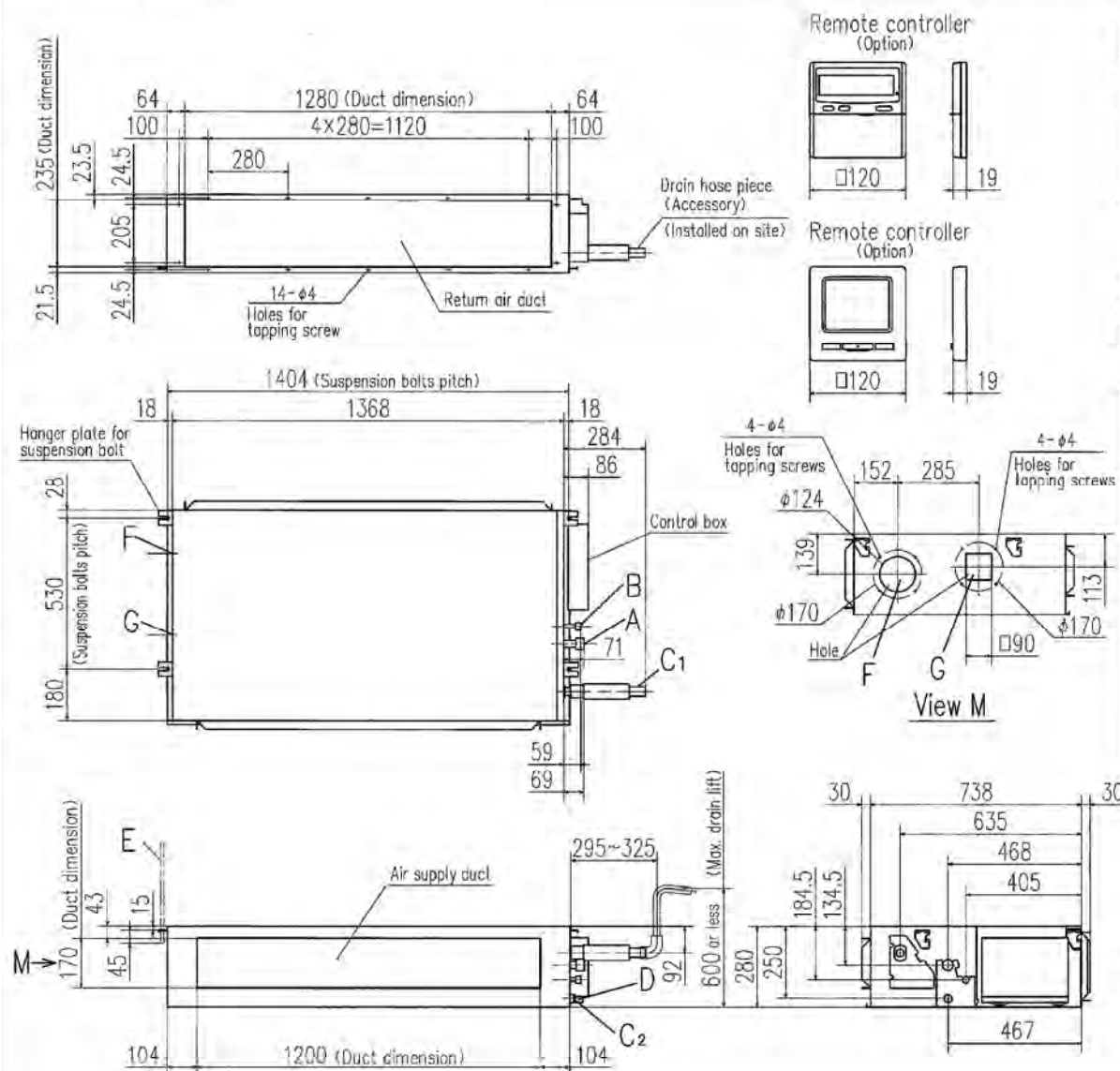
Select either of two cases to keep space for installation and services.  
(Case 1) From side of unit



**Note**  
(1) The model name label is attached on the lid of the control box.

**FDUM160KXE6F**

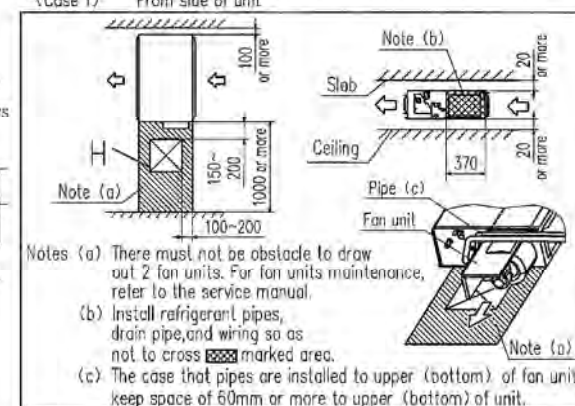
Unit:mm



| Symbol | Content  |
|--------|--|
| A      | Gas piping<br>ø15.88 (5/8") (Flare)                      |
| B      | Liquid piping<br>ø9.52 (3/8") (Flare)                    |
| C1     | Drain piping<br>VP25 (O.D.32)                            |
| C2     | Drain piping<br>(Gravity drainage)<br>VP20               |
| D      | Hole for wiring  |
| E      | Suspension bolts<br>(M10)                                |
| F      | Outside air opening<br>for ducting<br>(ø150) (Knock out) |
| G      | Air outlet opening<br>for ducting<br>(ø125) (Knock out)  |
| H      | Inspection hole<br>(450X450)                             |

## Space for installation and service

Select either of two cases to keep space for installation and services.  
(Case 1) From side of unit



(Case 2) From bottom of unit

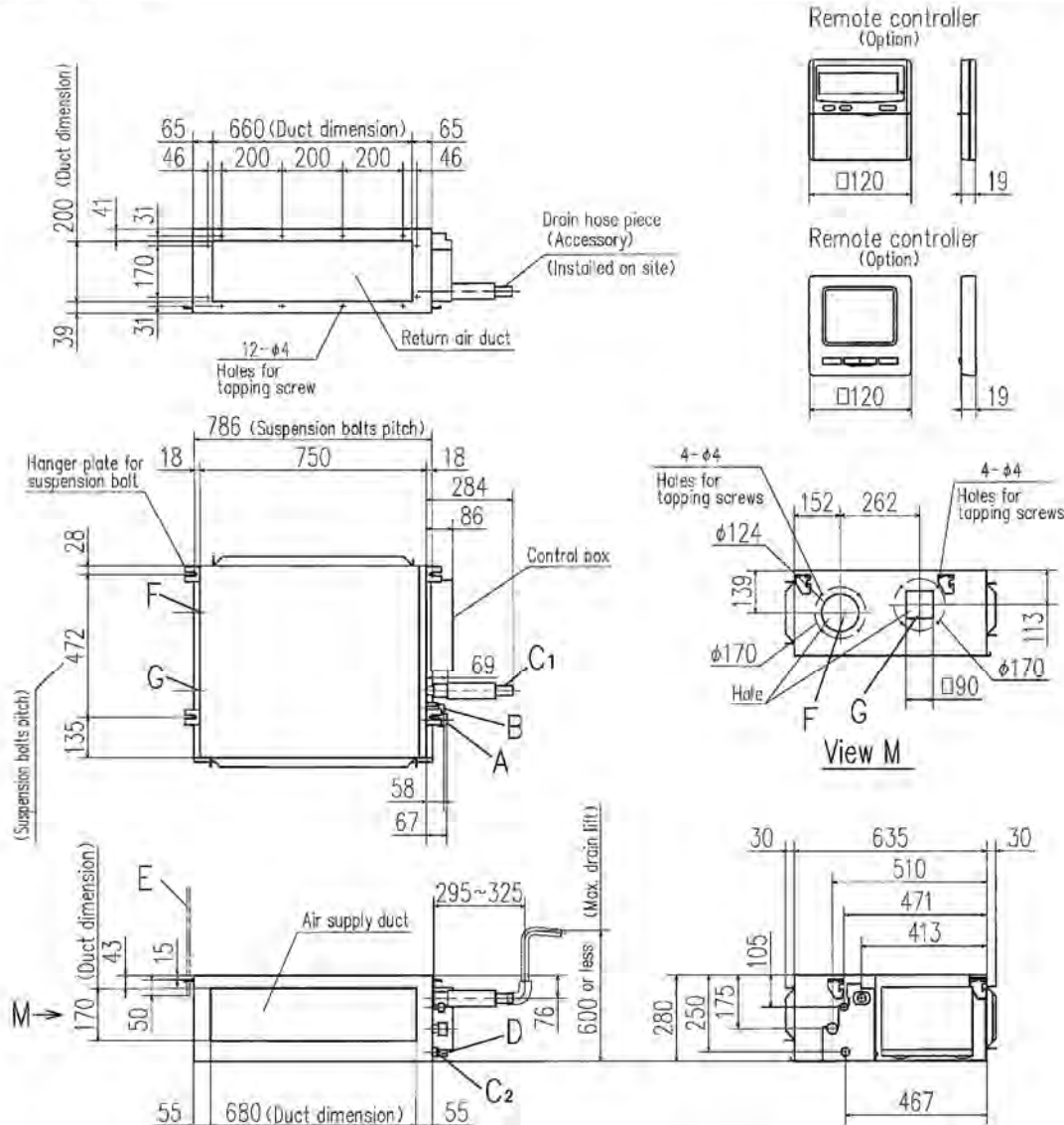
**Note**

(1) The model name label is attached on the lid of the control box.



# **FDUM56KXE6F**

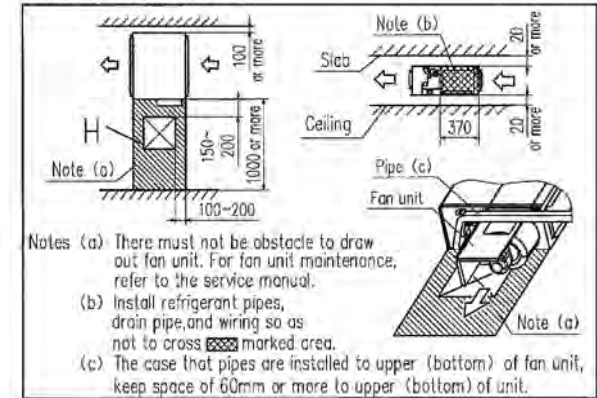
Unit:mm



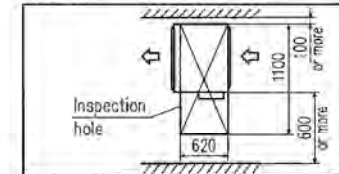
| Symbol | Content  |
|--------|--|
|        | Model 22,28 36,45,56                                 |
| A      | Gas piping φ9.52 (3/8") (Flare) φ12.7 (1/2") (Flare) |
| B      | Liquid piping φ6.35 (1/4") (Flare)                   |
| C1     | Drain piping VP25 (O.D.32)                           |
| C2     | Drain piping (Gravity drainage) VP20                 |
| D      | Hole for wiring                                      |
| E      | Suspension bolts (M10)                               |
| F      | Outside air opening for ducting (φ150) (Knock out)   |
| G      | Air outlet opening for ducting (φ125) (Knock out)    |
| H      | Inspection hole (450X450)                            |

## **Space for installation and service**

Select either of two cases to keep space for installation and services.  
(Case 1) From side of unit



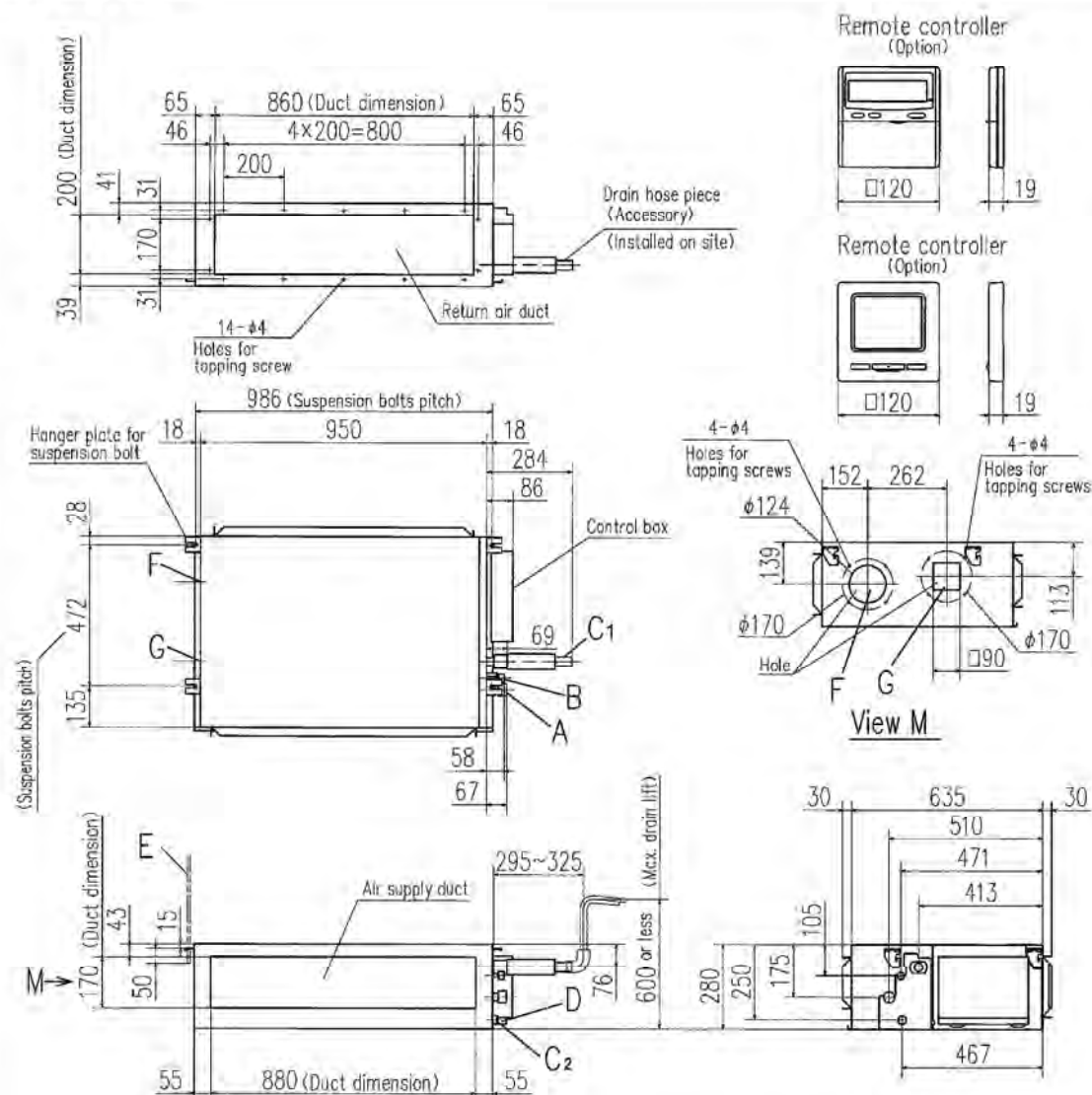
## **(Case 2) From bottom of unit**



**Note**  
(1) The model name label is attached on the lid of the control box.

**FDUM71KXE6F**

Unit:mm

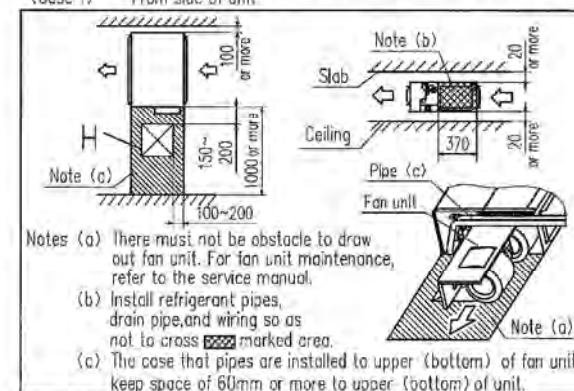


| Symbol | Content                            |                       |
|--------|------------------------------------|-----------------------|
| A      | Gas piping                         | ø15.88 (5/8") (Flare) |
| B      | Liquid piping                      | ø9.52 (3/8") (Flare)  |
| C1     | Drain piping                       | VP25 (O.D.32)         |
| C2     | Drain piping<br>(Gravity drainage) | VP20                  |
| D      | Hole for wiring                    |                       |
| E      | Suspension bolts                   | (M10)                 |
| F      | Outside air opening<br>for ducting | (ø150) (Knock out)    |
| G      | Air outlet opening<br>for ducting  | (ø125) (Knock out)    |
| H      | Inspection hole                    | (450X450)             |

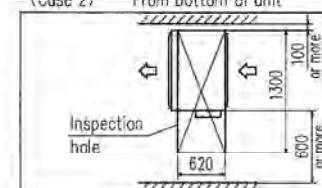
## Space for installation and service

Select either of two cases to keep space for installation and services.

(Case 1) From side of unit.



(Case 2) From bottom of unit

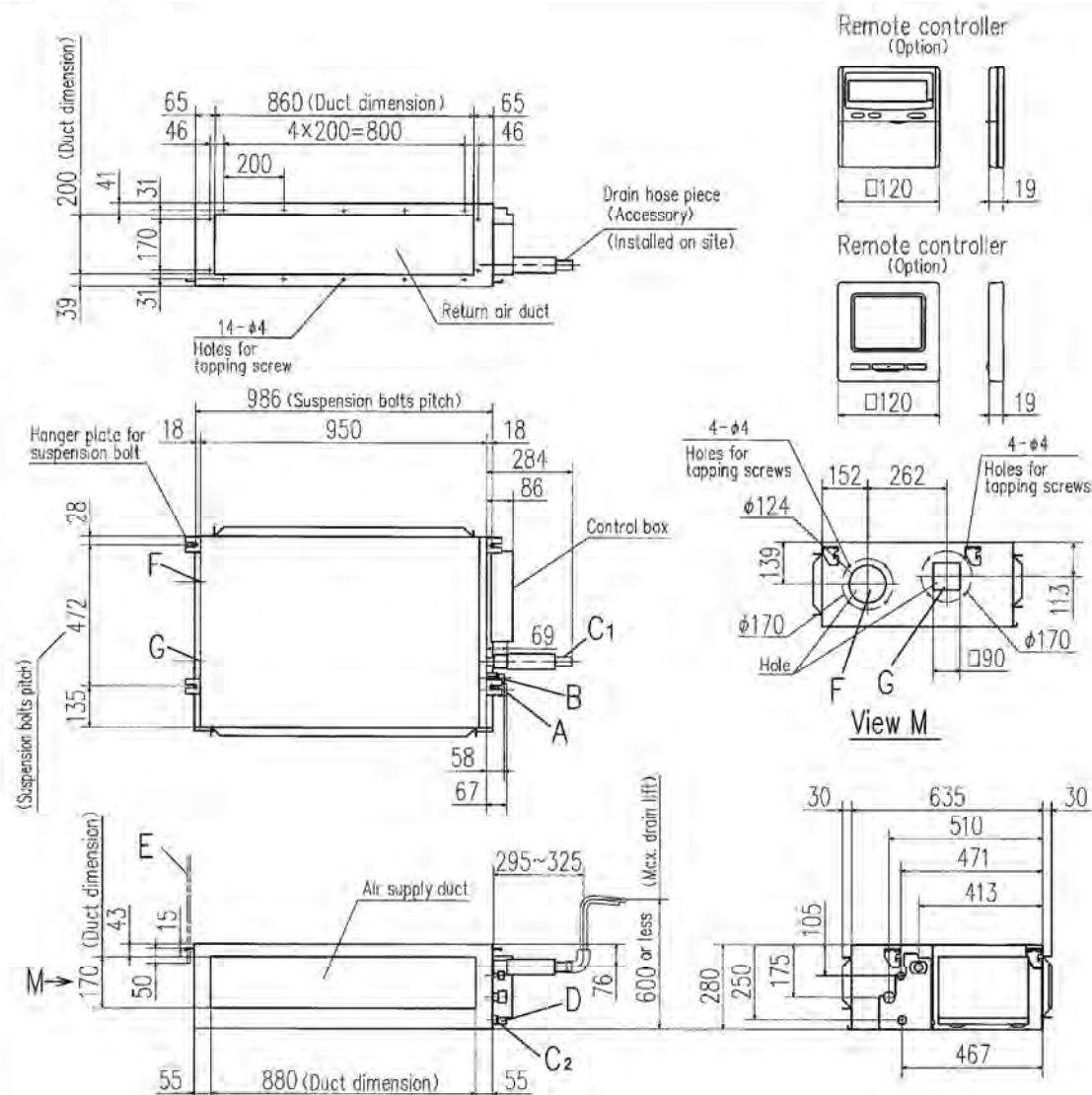


☐ **Note**

(1) The model name label is attached on the lid of the control box.

**FDUM90KXE6F**

Unit:mm

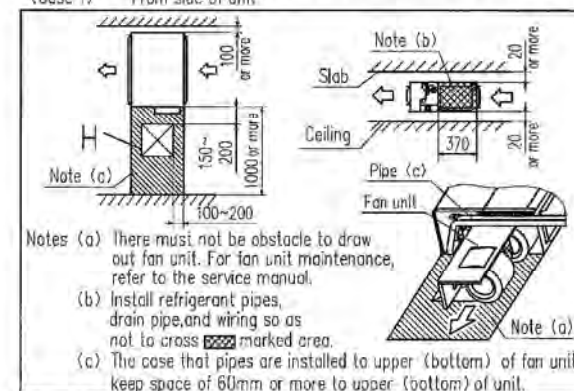


| Symbol | Content                            |                       |
|--------|------------------------------------|-----------------------|
| A      | Gas piping                         | ø15.88 (5/8") (Flare) |
| B      | Liquid piping                      | ø9.52 (3/8") (Flare)  |
| C1     | Drain piping                       | VP25 (O.D.32)         |
| C2     | Drain piping<br>(Gravity drainage) | VP20                  |
| D      | Hole for wiring                    |                       |
| E      | Suspension bolts                   | (M10)                 |
| F      | Outside air opening<br>for ducting | (ø150) (Knock out)    |
| G      | Air outlet opening<br>for ducting  | (ø125) (Knock out)    |
| H      | Inspection hole                    | (450X450)             |

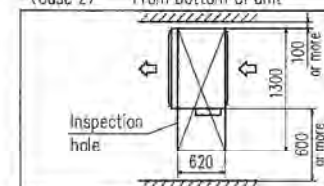
## Space for installation and service

Select either of two cases to keep space for installation and services.

(Case 1) From side of unit.



(Case 2) From bottom of unit



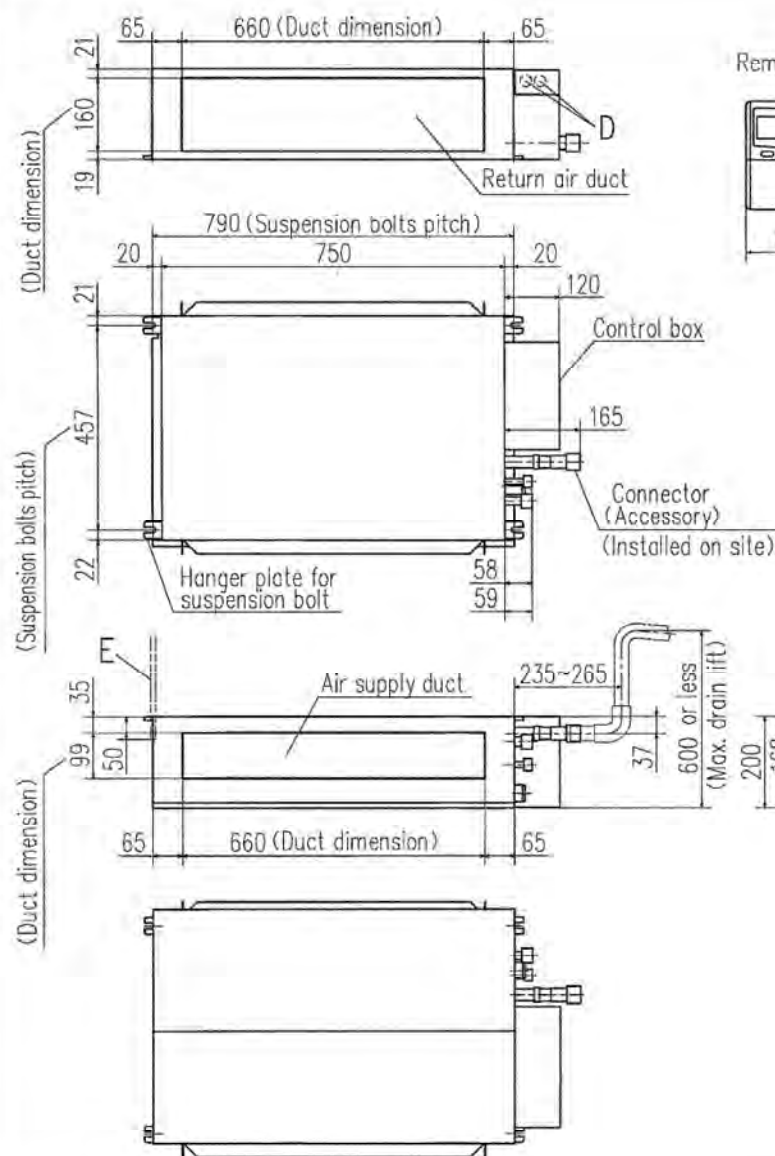
**Note**

(1) The model name label is attached on the lid of the control box.

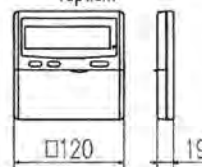


# FDUT15KXE6F-E

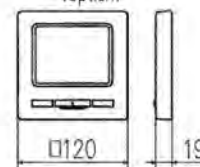
Unit:mm



Remote controller  
(Option)

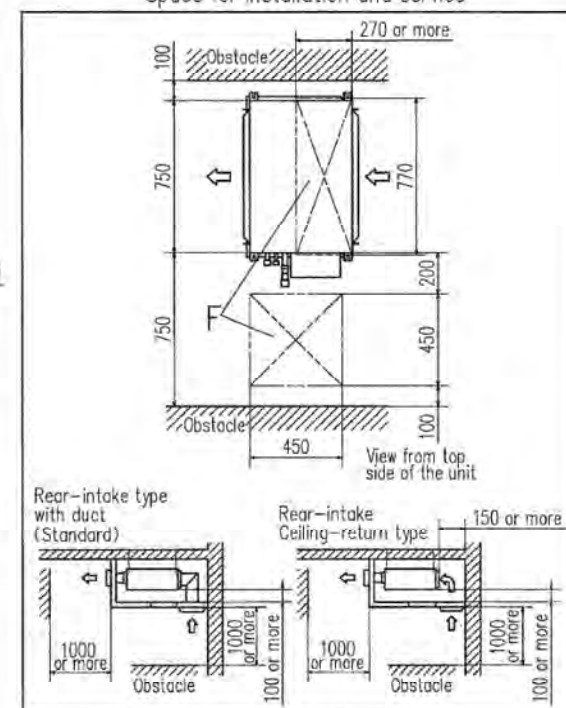


Remote controller  
(Option)



| Symbol | Model                              | Content   |
|--------|------------------------------------|---|
|        |                                    | 15,22,28 36   |
| A      | Gas piping                         | φ9.52 (3/8") (Flare) φ12.7 (1/2") (Flare)               |
| B      | Liquid piping                      | φ6.35 (1/4") (Flare)                                    |
| C1     | Drain piping                       | VP25 (I.D.25, O.D.32)<br>(Used with attached connector) |
| C2     | Drain piping<br>(Gravity drainage) | VP25 (I.D.25, O.D.32)<br>(Used with attached connector) |
| D      | Hole for wiring                    | φ25 x 2   |
| E      | Suspension bolts                   | (M10)   |
| F      | Inspection hole                    | (450X450), (270X770)                                    |

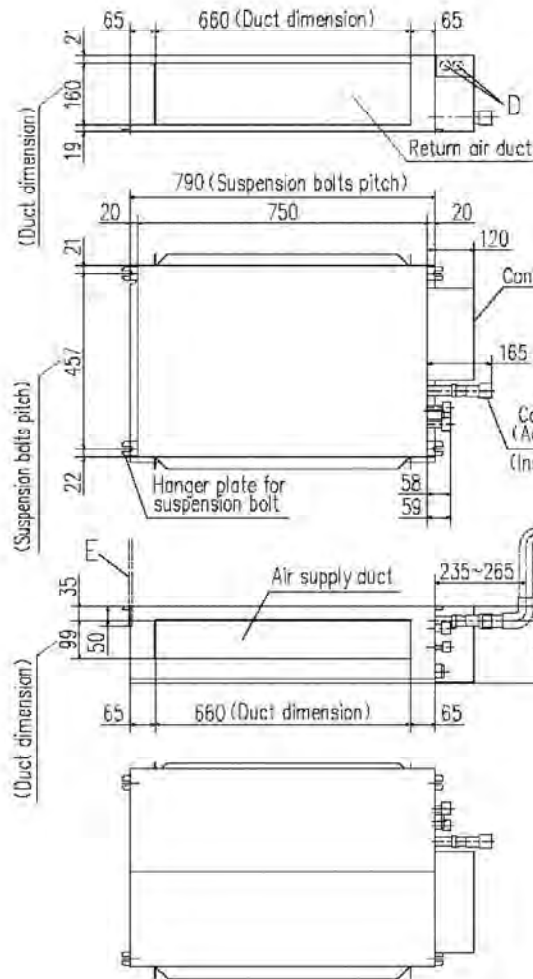
Space for installation and service



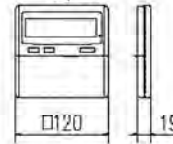
Notes (1) The model name label is attached on the lid of the control box.

# FDUT22KXE6F-E

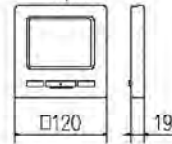
Unit:mm



Remote control  
(Option)

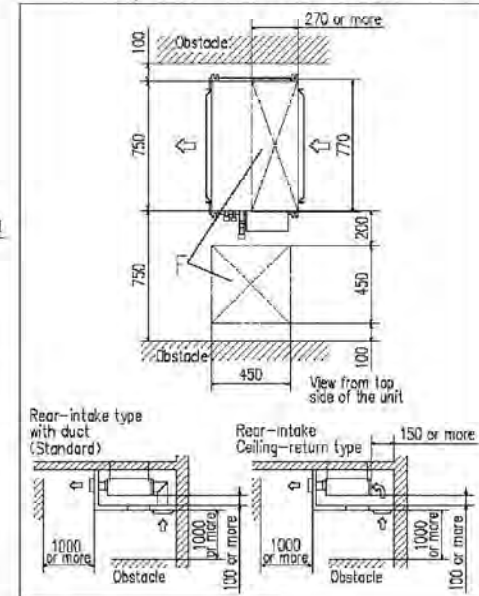


Remote control  
(Option)



| Symbol | Content   |
|--------|---|
|        | Model 22,2B 36  |
| A      | Gas piping $\phi 9.52$ (3/8") (Flare) $\phi 12.7$ (1/2") (Flare)                        |
| B      | Liquid piping $\phi 6.35$ (1/4") (Flare)  |
| C1     | Drain piping VP25 (I.D.25, O.D.32)<br>(Used with attached connector)                    |
| C2     | Drain piping (Gravity drainage) VP25 (I.D.25, O.D.32)<br>(Used with attached connector) |
| D      | Hole for wiring $\phi 25 \times 2$  |
| E      | Suspension bolts (M10)  |
| F      | Inspection hole (450X450), (270X770)  |

Space for installation and service

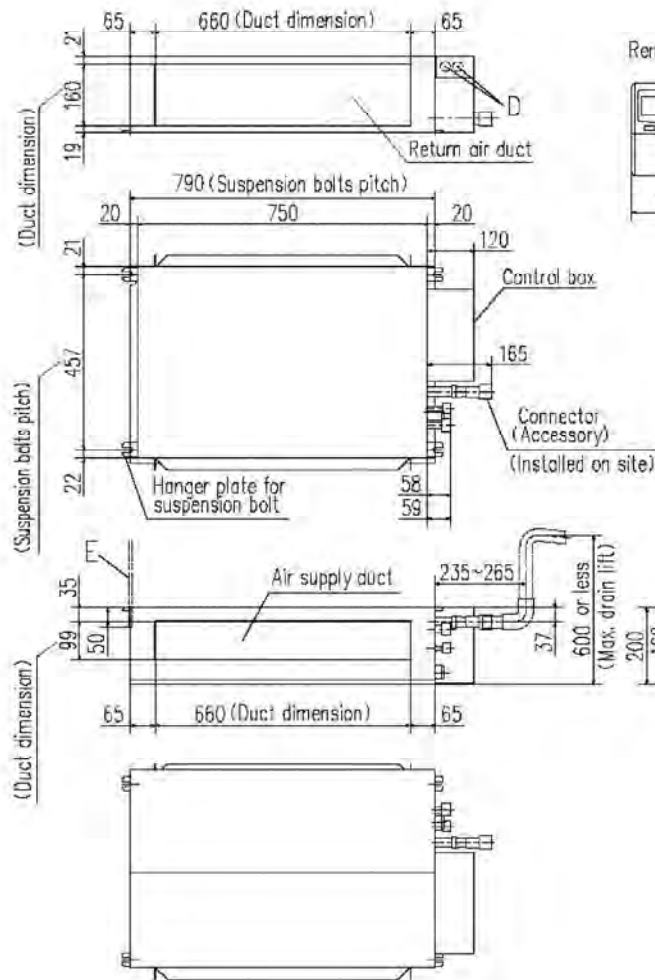


Notes (1) The model name label is attached on the lid of the control box

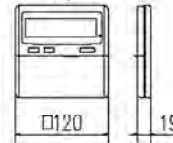


# FDUT28KXE6F-E

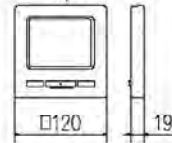
Unit:mm



Remote control (Option)

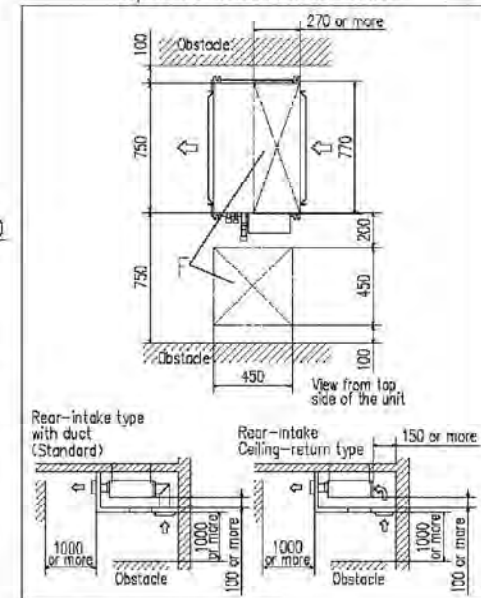


Remote control (Option)



| Symbol | Content  |
|--------|--|
|        | Model 22,2B 36   |
| A      | Gas piping $\phi 9.52 (3/8")$ (Flare) $\phi 12.7 (1/2")$ (Flare)                     |
| B      | Liquid piping $\phi 6.35 (1/4")$ (Flare)   |
| C1     | Drain piping VP25 (I.D.25, O.D.32) (Used with attached connector)                    |
| C2     | Drain piping (Gravity drainage) VP25 (I.D.25, O.D.32) (Used with attached connector) |
| D      | Hole for wiring $\phi 25 \times 2$   |
| E      | Suspension bolts (M10)   |
| F      | Inspection hole (450X450), (270X770)   |

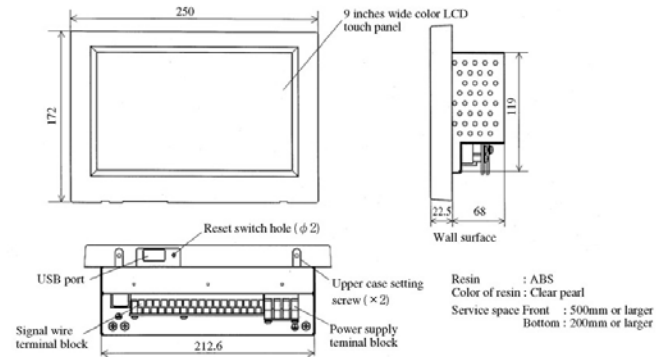
Space for installation and service



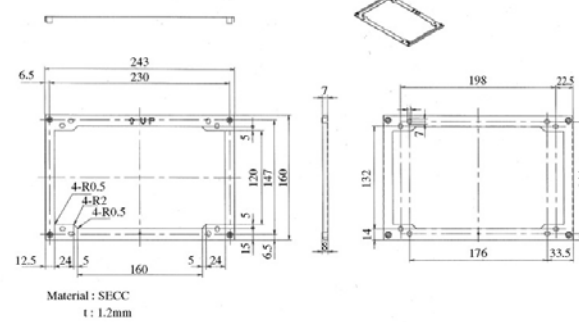
Notes (1) The model name label is attached on the lid of the control box

## SC-SL4-AE, SC-SL4-BE

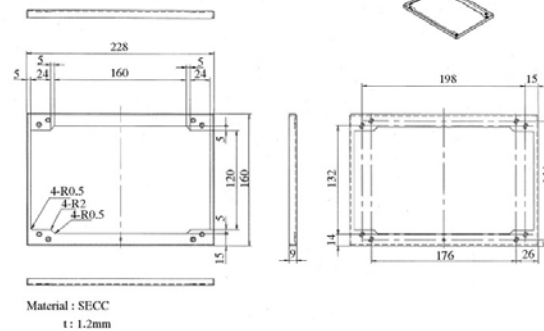
### (1) Central control



### (2) Installation bracket (front)



### (3) Installation bracket (rear)



## FDC121KXZEN1, 121KXZES1, 140KXZEN1, 140KXZES1, 155KXZEN1, 155KXZES1

| Models                                       |         | FDC121KXZEN1   | FDC140KXZEN1 | FDC155KXZEN1 | FDC121KXZES1                     | FDC140KXZES1 | FDC155KXZES1 |
|--|---------|--|--------------|--------------|----------------------------------|--------------|--------------|
| Nominal cooling capacity*1                   |         | 12.1   | 14.0         | 15.5         | 12.1                             | 14.0         | 15.5         |
| Nominal heating capacity*2                   | kW      | 12.1   | 14.0         | 15.5         | 12.1                             | 14.0         | 15.5         |
| Maximum heating capacity                     |         | 12.5   | 16.0         | 16.3         | 12.5                             | 16.0         | 16.3         |
| Power source                                 |         | 1 Phase 220-240V 50Hz, 220V 60Hz   |              |              | 3 Phase 380-415V 50Hz, 380V 60Hz |              |              |
| Power consumption                            | Cooling | 3.16   | 3.96         | 5.20         | 3.16                             | 3.96         | 5.20         |
|  | Heating | 3.09   | 3.66         | 4.28         | 3.09                             | 3.66         | 4.28         |
| Running current                              | Cooling | 15.3/14.0  | 19.6/17.9    | 25.7/23.6    | 5.2/4.7                          | 6.5/6.0      | 8.6/7.9      |
|  | Heating | 15.2/13.9  | 18.3/16.8    | 21.4/19.6    | 5.1/4.7                          | 6.1/5.6      | 7.1/6.5      |
| Power factor                                 | Cooling | 94/94  | 92/92        | 92/92        | 94/94                            | 92/92        | 92/92        |
|  | Heating | 93/93  | 91/91        | 91/91        | 93/93                            | 91/91        | 91/91        |
| EER  |         | 3.82   | 3.54         | 2.98         | 3.82                             | 3.54         | 2.98         |
| COP  |         | 3.91   | 3.83         | 3.62         | 3.91                             | 3.83         | 3.62         |
| Sound Pressure Level (Cooling/Heating)       | dB (A)  | 53/56  | 53/57        | 54/57        | 53/56                            | 53/57        | 54/57        |
| Sound Power Level (Cooling/Heating)          | dB (A)  | 70/72  | 71/72        | 71/74        | 70/72                            | 71/72        | 71/74        |
| Starting current                             |         | 5  |              |              |                                  |              |              |
| Maximum current                              | A       | 28   | 28           | 28           | 13.5                             | 13.5         | 13.5         |
| Exterior dimensions                          |         | 845x970x370  |              |              |                                  |              |              |
| Height x Width x Depth                       | mm      |  |              |              |                                  |              |              |
| Exterior appearance (Munsell color)          |         | Stucco white (4.2Y7.5/1.1) near equivalent   |              |              |                                  |              |              |
| Net weight                                   | kg      | 85   |              |              | 87                               |              |              |
| Refrigerant equipment compressor type & Q'ty |         | RMT5126MDE21 X 1   |              |              | RMT5126MDE31 X 1                 |              |              |
| Motor  | kW      | 2.3  | 2.9          | 3.2          | 2.3                              | 2.9          | 3.2          |
| Starting method                              |         | Direct line start  |              |              |                                  |              |              |
| Capacity control                             | %       | 26-100   | 21-100       | 21-100       | 26-100                           | 21-100       | 21-100       |
| Crankcase heater                             | W       | 20   |              |              |                                  |              |              |
| Refrigerant equipment                        |         | Straight fin & inner grooved tubing  |              |              |                                  |              |              |
| Heat exchanger                               |         | Electronic expansion valve   |              |              |                                  |              |              |
| Refrigerant control                          |         | R410A  |              |              |                                  |              |              |
| Refrigerant type                             |         | 5.0  |              |              |                                  |              |              |
| Refrigerant amount                           | kg      | 1.0 (M-MA68)   |              |              |                                  |              |              |
| Refrigerant oil                              | ℓ       | Microcomputer controlled De-Icer   |              |              |                                  |              |              |
| Defrost control                              |         | Propeller fan X 1  |              |              |                                  |              |              |
| Air handling equipment fan type & Q'ty       |         | 86   |              |              |                                  |              |              |
| Motor  | W       | Direct line start  |              |              |                                  |              |              |
| Starting method                              |         |  |              |              |                                  |              |              |
| Air flow (Standard)                          | m³/min  | 75/75  | 75/82        | 75/82        | 75/75                            | 75/82        | 75/82        |
| Shock & vibration absorber                   |         | Rubber mount (for compressor & fan motor)  |              |              |                                  |              |              |
| Safety equipment                             |         | Compressor over current protection / abnormal high pressure protection<br>abnormal low pressure protection / abnormal discharge temperature protection / over current protection |              |              |                                  |              |              |
| Installation data                            |         | Liquid line: #9.52 (3/8")  |              |              |                                  |              |              |
| Refrigerant piping size                      | mm (in) | Gas line: #15.88 (5/8")  |              |              |                                  |              |              |
| Connecting method                            |         | Flare (both Liquid & Gas lines)  |              |              |                                  |              |              |
| MAX. Pressure                                | MPa     | High 4.15 Low 2.21   |              |              |                                  |              |              |
| Drain  |         | Hole for drain (ø20 X 3pcs)  |              |              |                                  |              |              |
| Insulation for piping                        |         | Necessary (both Liquid & Gas line)   |              |              |                                  |              |              |
| IP number                                    |         | IP24   |              |              |                                  |              |              |
| Accessories                                  |         | -  | -            | -            | -                                | -            | -            |

Notes (1) The data are measured at the following conditions.

| Operation | Item | Indoor air temperature |       | Outdoor air temperature |       | Standards      |
|-----------|------|------------------------|-------|-------------------------|-------|----------------|
|           |      | DB                     | WB    | DB                      | WB    |                |
| Cooling*1 |      | 27 °C                  | 19 °C | 35 °C                   | 24 °C | ISO5151-T1, H1 |
| Heating*2 |      | 20 °C                  | -     | 7 °C                    | 6 °C  |                |

- (2) This air-conditioner is manufactured and tested in conformity with the ISO.  
 (3) Sound level indicates the value in an anechoic chamber.  
 During operation these value are somewhat higher due to ambient conditions.

- (4) Refrigerant piping size applicable to European installations are shown parentheses.  
 (5) This air-conditioner is adapted RoHS directive.

**FDC224KXZME1, 280KXZME1, 335KXZME1A**

(50/60 Hz)

| Models  |                     |         | FDC224KXZME1  | FDC280KXZME1   | FDC335KXZME1A                   |
|---|---------------------|---------|---|----------------|---------------------------------|
| Nominal cooling capacity*1                    | kW                  |         | 22.4  | 28.0           | 33.5                            |
| Nominal heating capacity*2                    |                     |         | 22.4  | 28.0           | 33.5                            |
| Maximum heating capacity                      |                     |         | 25.0  | 31.5           | 37.5                            |
| Power source                                  |                     |         | 3 Phase 380/415V 50Hz / 380V 60Hz   |                |                                 |
| Power consumption                             | Cooling             | kW      | 5.59  | 7.90           | 10.68                           |
|   | Heating             |         | 4.97  | 6.53           | 8.44                            |
| Running current                               | Cooling             | A       | 9.4/8.6   | 12.8/11.8      | 17.8/16.3                       |
|   | Heating             |         | 7.8/7.2   | 10.5/9.6       | 14.4/13.2                       |
| Power factor                                  | Cooling             | %       | 91/91   | 94/94          | 91/91                           |
|   | Heating             |         | 97/97   | 95/95          | 91/91                           |
| EER   |                     |         | 4.00  | 3.54           | 3.13                            |
| COP   |                     |         | 4.50  | 4.28           | 3.96                            |
| Sound pressure level (Cooling/Heating)        | dB (A)              |         | 58/59   | 60/60          | 60/62                           |
| Sound power level (Cooling/Heating)           | dB (A)              |         | 73/75   | 75/76          | 75/77                           |
| Starting current                              | A                   |         | 5   |                |                                 |
| Maximum current                               |                     |         | 20.0  | 20.0           | 23.0                            |
| Exterior dimensions<br>Height × Width × Depth | mm                  |         | 1675×1080×480   |                |                                 |
| Exterior appearance (Munsell color)           |                     |         | Stucco white (4.2Y7.5/1.1) near equivalent  |                |                                 |
| Net weight                                    | kg                  |         | 221   |                | 224                             |
| Compressor type & Q'ty                        |                     |         | GTC5150NH40K × 1  |                |                                 |
| Compressor motor                              | kW                  |         | 4.69  | 6.78           | 9.59                            |
| Starting method                               |                     |         | Direct line starting  |                |                                 |
| Capacity control                              | %                   |         | 24-100  | 18-100         | 18-100                          |
| Crankcase heater                              | W                   |         | 33  |                |                                 |
| Heat exchanger                                |                     |         | Straight fin & inner grooved tubing   |                |                                 |
| Refrigerant control                           |                     |         | Electronic expansion valve  |                |                                 |
| Refrigerant type                              |                     |         | R410A   |                |                                 |
| Refrigerant amount                            | kg                  |         | 11.5  |                |                                 |
| Refrigerant oil                               | l                   |         | 1.7 (M-MA32R)   |                |                                 |
| Defrost control                               |                     |         | Microcomputer controlled De-Icer  |                |                                 |
| Fan type & Q'ty                               |                     |         | Propeller fan × 2   |                |                                 |
| Fan motor                                     | W                   |         | 144 × 2   |                |                                 |
| Starting method                               |                     |         | Direct start  |                |                                 |
| Air flow (Standard)                           | m <sup>3</sup> /min |         | 200   |                |                                 |
| Available external static pressure            | Pa                  |         | Max. 35   |                |                                 |
| Shock & vibration absorber                    |                     |         | Rubber mount (for compressor)   |                |                                 |
| Safety equipment                              |                     |         | Compressor overheat protection, Overcurrent protection,<br>Power transistor overheating protection, Abnormal high pressure protection |                |                                 |
| Refrigerant piping size                       | Liquid line         | mm (in) | φ 9.52 (3/8")   |                | φ 12.7 (1/2")                   |
|   | Suction gas line    | mm (in) | φ 19.05 (3/4")  | φ 22.22 (7/8") | φ 25.4 (1")<br>(φ 22.22 (7/8")) |
| Connecting method                             |                     |         | Gas line: Brazing / Liquid line: Flare  |                |                                 |
| MAX. Pressure                                 | MPa                 |         | High 4.15, Low 2.21   |                |                                 |
| Drain   |                     |         | Hole for drain (φ 20 × 4pcs)  |                |                                 |
| Insulation for piping                         |                     |         | Necessary (both Liquid & Gas line)  |                |                                 |
| IP number                                     |                     |         | IP24  |                |                                 |
| Accessories                                   |                     |         | -   | -              | -                               |

Notes (1) The data are measured at the following conditions.

| Item    | Indoor air temperature |      | Outdoor air temperature |      | Standards     |
|---------|------------------------|------|-------------------------|------|---------------|
|         | DB                     | WB   | DB                      | WB   |               |
| Cooling | 27°C                   | 19°C | 35°C                    | 24°C | ISO5151-T1,H1 |
| Heating | 20°C                   |      | 7°C                     | 8°C  |               |

(2) This air-conditioner is manufactured and tested in conformity with the ISO.

(3) Sound level indicates the value in an anechoic chamber.

During operation these values are somewhat higher due to ambient conditions.

(4) Refrigerant piping size applicable to European installations are shown in parentheses.

(5) This air-conditioner is adapted RoHS directive.

### FDC224KXZPE1, 280KXZPE1

| Item  |   | Model              | FDC224KXZPE1   | FDC280KXZPE1            |
|---|---|--------------------|--|-------------------------|
| Power source                                  |   |                    | 3Phase 380-415V 50Hz / 380V 60Hz   |                         |
| Operation data                                | Nominal cooling capacity                    | kW                 | 22.4   | 28                      |
|   | Capacity control                            | %                  | -  | -                       |
|   | Nominal heating capacity                    | kW                 | 22.4   | 28                      |
|   | Capacity control                            | %                  | -  | -                       |
|   | Power consumption                           | Cooling<br>Heating | 5.6<br>4.8   | 7.67<br>6.47            |
|   | Max power consumption                       |                    | 13.2   | 13.7                    |
|   | Running current                             | Cooling<br>Heating | 9.2/8.5<br>7.9/7.3   | 12.9/11.8<br>10.6/9.7   |
|   | Inrush current, max current                 |                    | 5, 21  | 5, 22                   |
|   | Power factor                                | Cooling<br>Heating | 92<br>92   | 94<br>93                |
|   | EER   | Cooling            | 4.00   | 3.56                    |
|   | COP   | Heating            | 4.67   | 4.33                    |
|   | Sound pressure level                        | Cooling<br>Heating | 59<br>60   | 60<br>63                |
|   | Sound power level                           | Cooling<br>Heating | 72<br>73   | 74<br>76                |
|   | Silent mode sound pressure level            |                    | -  | -                       |
| Exterior dimensions (Height x Width x Depth)  |   | mm                 | 1505 x 970 x 370   |                         |
| Exterior appearance (Munsell color)           |   |                    | Stucco White (4.2Y7.5/1.1) near equivalent   |                         |
| Net weight                                    |   | kg                 | 165  | 165                     |
| Compressor type & Qty                         |   |                    | GTC5150NC40KF×1  |                         |
| Compressor motor (Starting method)            |   | kW                 | Direct line start  |                         |
| Refrigerant oil (Amount, type)                |   | l                  | 1.45 M-MA32R   |                         |
| Refrigerant (Type, amount, pre-charge length) |   | kg                 | R410A 8.9kg in outdoor unit (Standard charge)  |                         |
| Heat exchanger                                |   |                    | M shape fin & inner grooved tubing   |                         |
| Refrigerant control                           |   |                    | Electronic expansion valve   |                         |
| Fan type & Qty                                |   |                    | Propeller fan ×2   |                         |
| Fan motor (Starting method)                   |   | W                  | 86 ×2 < Direct line start >  |                         |
| Air flow (Standard)                           | Cooling                                     | m³/min             | 130  | 135                     |
|   | Heating                                     | m³/min             | 130  | 145                     |
| Available external static pressure            |   | Pa                 | 35   |                         |
| Shock & vibration absorber                    |   |                    | Rubber sleeve for Compressor )   |                         |
| Electric heater                               |   | W                  | 33 (Crank case heater)   |                         |
| Safety equipments                             |   |                    | Overcurrent protection, Frost protection control<br>Abnormal high pressure protection, Abnormal low pressure protection,<br>Abnormal discharge temperature protection<br>Overload protection for fan motor |                         |
| Installation (M5)                             | Refrigerant piping size (O.D.)              | mm                 | Liquid line: φ9.52 x 0.8 (3/8")<br>Gas line: φ19.05 (3/4")x1.0 or φ22.22 (7/8")x1.0  |                         |
|   | Connecting method                           |                    | Liquid : Flame / Gas : Brazing   |                         |
|   | Insulation for piping                       |                    | Necessary (both Liquid & Gas lines)  |                         |
|   | Refrigerant line (one way) length           | m                  | Max.120m   |                         |
|   | Vertical height diff. between O.U. and I.U. | m                  | Max.30m  |                         |
| Drain holes                                   |   |                    | Holes size: φ20 x 3pcs   |                         |
| Recommended breaker size                      |   | A                  | —  |                         |
| L.R.A. (Locked rotor ampere)                  |   | A                  | 5/5  |                         |
| IP number                                     |   |                    | IP24   |                         |
| Standard accessories                          |   |                    | Edging   | Connecting pipe, Edging |
| Option parts                                  |   |                    | —  |                         |

Note (1) The data are measured at the following conditions.

The pipe length is 7.5m.

| Operation | Indoor air temperature |      | Outdoor air temperature |      | Standards     |
|-----------|------------------------|------|-------------------------|------|---------------|
|           | DB                     | WB   | DB                      | WB   |               |
| Cooling   | 27°C                   | 19°C | 35°C                    | 24°C | ISO6151-T1,H1 |
| Heating   | 20°C                   | —    | 7°C                     | 6°C  |               |

(2) This air-conditioner is manufactured and tested in conformity with the ISO.

(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.

(4) Select the breaker size according to the own national standard.

(5) The operation data indicate when the air-conditioner is operated at 380V or 415V.

(6) Use 1/2H pipes having a 1.0mm or thicker wall for φ19.05 or larger pipes.

(7) This air-conditioner is adapted to RoHS directive.



## OUTDOOR UNIT(FDC)

| Models                                       |         |             |  | FDC280KXZE2   | FDC335KXZE2 | FDC400KXZE2                     | FDC450KXZE2 | FDC475KXZE2                       | FDC500KXZE2 | FDC560KXZE2   |             |                  |             |         |             |           |  |
|--|---------|-------------|--|---|-------------|---------------------------------|-------------|-----------------------------------|-------------|---------------|-------------|------------------|-------------|---------|-------------|-----------|--|
| Nominal cooling capacity*1                   |         |             | kW   | 28.0  |             | 33.5                            |             | 40.0                              |             | 45.0          |             | 47.5             |             | 50.0    |             | 56.0      |  |
| Nominal heating capacity*2                   |         |             |  | 31.5  |             | 37.5                            |             | 45.0                              |             | 50.0          |             | 53.0             |             | 56.0    |             | 63.0      |  |
| Maximum heating capacity                     |         |             |  | 31.5  |             | 37.5                            |             | 45.0                              |             | 50.0          |             | 53.0             |             | 56.0    |             | 63.0      |  |
| Power source                                 |         |             |  | 3 Phase 380 / 415V 50Hz / 380V 60Hz   |             |                                 |             |                                   |             |               |             |                  |             |         |             |           |  |
| Power consumption                            | Cooling | kW          | 7.25   |   | 8.98        |                                 | 10.98       |                                   | 13.98       |               | 13.97       |                  | 14.01       |         | 17.50       |           |  |
|  | Heating |             | 7.41   |   | 9.03        |                                 | 10.23       |                                   | 12.50       |               | 12.99       |                  | 13.56       |         | 16.15       |           |  |
| Running current                              | Cooling | A           | 12.0 / 11.0  |   | 14.7 / 13.4 |                                 | 17.6 / 16.3 |                                   | 22.4 / 20.5 |               | 22.6 / 20.7 |                  | 22.6 / 20.7 |         | 26.9 / 24.6 |           |  |
|  | Heating |             | 12.2 / 11.2  |   | 14.8 / 13.5 |                                 | 16.7 / 15.5 |                                   | 20.4 / 18.7 |               | 21.0 / 19.2 |                  | 21.9 / 20.1 |         | 26.1 / 23.9 |           |  |
| Power factor                                 | Cooling | %           | 92 / 92  |   | 93 / 93     |                                 | 95 / 94     |                                   | 95 / 95     |               | 94 / 94     |                  | 94 / 94     |         | 94 / 94     |           |  |
|  | Heating |             | 92 / 92  |   | 93 / 93     |                                 | 93 / 92     |                                   | 93 / 93     |               | 94 / 94     |                  | 94 / 94     |         | 94 / 94     |           |  |
| EER  |         |             | 3.86   |   | 3.73        |                                 | 3.64        |                                   | 3.22        |               | 3.40        |                  | 3.57        |         | 3.20        |           |  |
| COP  |         |             | 4.25   |   | 4.15        |                                 | 4.40        |                                   | 4.00        |               | 4.08        |                  | 4.13        |         | 3.90        |           |  |
| Sound Pressure Level                         | Cooling | Heating     | dB (A)   | 56 / 57   |             | 63 / 62                         |             | 60 / 62                           |             | 61 / 62       |             | 61 / 61          |             | 61 / 62 |             | 63 / 64   |  |
| Sound Power Level                            | Cooling | Heating     |  | 75 / 76   |             | 82 / 81                         |             | 80 / 82                           |             | 81 / 82       |             | 81 / 81          |             | 81 / 82 |             | 82 / 83   |  |
| Starting current                             |         |             | A  | 5   |             |                                 |             |                                   |             |               |             |                  |             |         |             |           |  |
| Maximum current                              |         |             |  | 20.1  |             | 20.1                            |             | 32.0                              |             | 32.0          |             | 40.2             |             | 40.2    |             | 40.2      |  |
| Exterior dimensions                          |         |             | mm   | 1697×1350×720   |             |                                 |             |                                   |             | 2052×1350×720 |             |                  |             |         |             |           |  |
| Height × Width × Depth                       |         |             |  |   |             |                                 |             |                                   |             |               |             |                  |             |         |             |           |  |
| Exterior appearance (Munsell color)          |         |             | Stucco White (4.2Y7.5 / 1.1) & Dark Silver (0.5Y4.3 / 0.1) near equivalent |   |             |                                 |             |                                   |             |               |             |                  |             |         |             |           |  |
| Net weight                                   |         |             | kg   | 288   |             |                                 |             | 332                               |             |               |             | 378              |             |         |             |           |  |
| Refrigerant equipment compressor type & Q'ty |         |             |  | GTC5150NC47BF×1   |             |                                 |             | GUC5185ND47B×1                    |             |               |             | GTC5150NC47BF×2  |             |         |             |           |  |
| Motor  |         |             | kW   | 4.76×1  |             | 5.94×1                          |             | 7.32×1                            |             | 9.32×1        |             | 4.64×2           |             | 4.91×2  |             | 5.36×2    |  |
| Starting method                              |         |             |  | Direct line starting  |             |                                 |             |                                   |             |               |             |                  |             |         |             |           |  |
| Crankcase heater                             |         |             | W  | 33×1  |             |                                 |             | 40×1                              |             |               |             | 33×2             |             |         |             |           |  |
| Refrigerant equipment                        |         |             |  | M fin & inner grooved tubing  |             |                                 |             |                                   |             |               |             |                  |             |         |             |           |  |
| Heat exchanger                               |         |             |  | Electronic expansion valve  |             |                                 |             |                                   |             |               |             |                  |             |         |             |           |  |
| Refrigerant control                          |         |             |  | R410A   |             |                                 |             |                                   |             |               |             |                  |             |         |             |           |  |
| Refrigerant type                             |         |             |  |   |             |                                 |             |                                   |             |               |             |                  |             |         |             |           |  |
| Refrigerant amount                           |         |             | kg   | 11.0  |             |                                 |             |                                   |             |               |             | 11.5             |             |         |             |           |  |
| Refrigerant oil                              |         |             | L  | 2.25 (M-MA32R)  |             |                                 |             | 2.9 (M-MA32R)                     |             |               |             | 4.2 (M-MA32R)    |             |         |             |           |  |
| Defrost control                              |         |             |  | Microcomputer controlled De-Icer  |             |                                 |             |                                   |             |               |             |                  |             |         |             |           |  |
| Air handling equipment fan type & Q'ty       |         |             |  | Propeller fan × 2   |             |                                 |             |                                   |             |               |             |                  |             |         |             |           |  |
| Motor  |         |             | W  | 560×2   |             |                                 |             |                                   |             |               |             |                  |             |         |             |           |  |
| Starting method                              |         |             |  | Direct start  |             |                                 |             |                                   |             |               |             |                  |             |         |             |           |  |
| Air flow (Standard)                          |         |             | m³/min   | 225 / 225   |             | 294 / 283                       |             | 304 / 304                         |             |               |             | 300 / 300        |             |         |             | 300 / 284 |  |
| Available external static pressure           |         |             | Pa   | Max.85  |             |                                 |             |                                   |             |               |             |                  |             |         |             |           |  |
| Shock & vibration absorber                   |         |             |  | Rubber mount for compressor   |             |                                 |             |                                   |             |               |             |                  |             |         |             |           |  |
| Safety equipment                             |         |             |  | Compressor overheat protection / overcurrent protection / power transistor overheating protection / abnormal high pressure protection |             |                                 |             |                                   |             |               |             |                  |             |         |             |           |  |
| Installation data                            |         | Liquid Line | mm (in)  | φ 9.52 (3/8")   |             |                                 |             |                                   |             |               |             | φ 12.7 (1/2")    |             |         |             |           |  |
| Refrigerant piping size                      |         | Gas line    | mm (in)  | φ 22.22 (7/8")  |             | φ 25.4 (1")<br>(φ 22.22 (7/8")) |             | φ 25.4 (1")<br>(φ 28.58 (1-1/8")) |             |               |             | φ 28.58 (1-1/8") |             |         |             |           |  |
| Connecting method                            |         |             |  | Gas line : Brazing / Liquid line : Flare  |             |                                 |             |                                   |             |               |             |                  |             |         |             |           |  |
| MAX. Pressure                                |         |             | MPa  | High 4.15 / Low 2.21  |             |                                 |             |                                   |             |               |             |                  |             |         |             |           |  |
| Drain  |         |             |  | Hole for drain φ 20 × 10 pcs. , φ 45 × 3 pcs.)  |             |                                 |             |                                   |             |               |             |                  |             |         |             |           |  |
| Insulation for piping                        |         |             |  | Necessary (both Liquid & Gas line)  |             |                                 |             |                                   |             |               |             |                  |             |         |             |           |  |
| IP number                                    |         |             |  | IP24  |             |                                 |             |                                   |             |               |             |                  |             |         |             |           |  |
| Accessories                                  |         |             |  | -   |             |                                 |             |                                   |             |               |             |                  |             |         |             |           |  |

Notes (1) The data are measured at the following conditions.

| Item      | Indoor air temperature |       | Outdoor air temperature |       | Standards     |
|-----------|------------------------|-------|-------------------------|-------|---------------|
| Operation | DB                     | WB    | DB                      | WB    |               |
| Cooling   | 27 °C                  | 19 °C | 35 °C                   | 24 °C | ISO5151-T1,H1 |
| Heating   | 20 °C                  | -     | 7 °C                    | 6 °C  |               |

(2) This air-conditioner is manufactured and tested in conformity with the ISO.

(3) Sound level indicates the value in an anechoic chamber.

During operation these value are somewhat higher due to ambient conditions.

(4) Refrigerant piping size applicable to European installations are shown in parentheses.

(5) This air-conditioner is adapted RoHS directive.

**FDC224KXZME1, 280KXZME1, 335KXZME1A**

(50/60 Hz)

| Models                                 |                     |         | FDC224KXZME1  | FDC280KXZME1   | FDC335KXZME1A |
|--|---------------------|---------|---|--|---------------|
| Nominal cooling capacity*1             | kW                  |         | 22.4  | 28.0   | 33.5          |
| Nominal heating capacity*2             |                     |         | 22.4  | 28.0   | 33.5          |
| Maximum heating capacity               |                     |         | 25.0  | 31.5   | 37.5          |
| Power source                           |                     |         | 3 Phase 380/415V 50Hz / 380V 60Hz   |  |               |
| Power consumption                      | Cooling             | kW      | 5.59  | 7.90   | 10.68         |
|  | Heating             |         | 4.97  | 6.53   | 8.44          |
| Running current                        | Cooling             | A       | 9.4/8.6   | 12.8/11.8  | 17.8/16.3     |
|  | Heating             |         | 7.8/7.2   | 10.5/9.6   | 14.4/13.2     |
| Power factor                           | Cooling             | %       | 91/91   | 94/94  | 91/91         |
|  | Heating             |         | 97/97   | 95/95  | 91/91         |
| EER                                    |                     |         | 4.00  | 3.54   | 3.13          |
| COP                                    |                     |         | 4.50  | 4.28   | 3.96          |
| Sound pressure level (Cooling/Heating) | dB (A)              |         | 58/59   | 60/60  | 60/62         |
| Sound power level (Cooling/Heating)    | dB (A)              |         | 73/75   | 75/76  | 75/77         |
| Starting current                       | A                   |         | 5   |  |               |
| Maximum current                        |                     |         | 20.0  | 20.0   | 23.0          |
| Exterior dimensions                    | mm                  |         | 1675×1080×480   |  |               |
| Height × Width × Depth                 |                     |         |   |  |               |
| Exterior appearance (Munsell color)    |                     |         | Stucco white (4.2Y7.5/1.1) near equivalent  |  |               |
| Net weight                             | kg                  |         | 221   |  | 224           |
| Compressor type & Q'ty                 |                     |         | GTC5150NH40K × 1  |  |               |
| Compressor motor                       | kW                  |         | 4.69  | 6.78   | 9.59          |
| Starting method                        |                     |         | Direct line starting  |  |               |
| Capacity control                       | %                   |         | 24-100  | 18-100   | 18-100        |
| Crankcase heater                       | W                   |         | 33  |  |               |
| Heat exchanger                         |                     |         | Straight fin & inner grooved tubing   |  |               |
| Refrigerant control                    |                     |         | Electronic expansion valve  |  |               |
| Refrigerant type                       |                     |         | R410A   |  |               |
| Refrigerant amount                     | kg                  |         | 11.5  |  |               |
| Refrigerant oil                        | l                   |         | 1.7 (M-MA32R)   |  |               |
| Defrost control                        |                     |         | Microcomputer controlled De-Icer  |  |               |
| Fan type & Q'ty                        |                     |         | Propeller fan × 2   |  |               |
| Fan motor                              | W                   |         | 144 × 2   |  |               |
| Starting method                        |                     |         | Direct start  |  |               |
| Air flow (Standard)                    | m <sup>3</sup> /min |         | 200   |  |               |
| Available external static pressure     | Pa                  |         | Max. 35   |  |               |
| Shock & vibration absorber             |                     |         | Rubber mount (for compressor)   |  |               |
| Safety equipment                       |                     |         | Compressor overheat protection, Overcurrent protection,<br>Power transistor overheating protection, Abnormal high pressure protection |  |               |
| Refrigerant piping size                | Liquid line         | mm (in) | φ 9.52 (3/8")   |  | φ 12.7 (1/2") |
|  | Suction gas line    | mm (in) | φ 19.05 (3/4")  | φ 22.22 (7/8")<br>( φ 25.4 (1")<br>( φ 22.22 (7/8")) ) |               |
| Connecting method                      |                     |         | Gas line : Brazing / Liquid line : Flare  |  |               |
| MAX. Pressure                          | MPa                 |         | High 4.15, Low 2.21   |  |               |
| Drain                                  |                     |         | Hole for drain ( φ 20 × 4pcs )  |  |               |
| Insulation for piping                  |                     |         | Necessary (both Liquid & Gas line)  |  |               |
| IP number                              |                     |         | IP24  |  |               |
| Accessories                            |                     |         | -   | -  | -             |

Notes (1) The data are measured at the following conditions.

| Item    | Indoor air temperature |      | Outdoor air temperature |      | Standards     |
|---------|------------------------|------|-------------------------|------|---------------|
|         | DB                     | WB   | DB                      | WB   |               |
| Cooling | 27°C                   | 19°C | 35°C                    | 24°C | ISO5151-T1,H1 |
| Heating | 20°C                   |      | 7°C                     | 8°C  |               |

(2) This air-conditioner is manufactured and tested in conformity with the ISO.

(3) Sound level indicates the value in an anechoic chamber.

During operation these values are somewhat higher due to ambient conditions.

(4) Refrigerant piping size applicable to European installations are shown in parentheses.

(5) This air-conditioner is adapted RoHS directive.

### FDC224KXZPE1, 280KXZPE1

| Item  |   | Model              | FDC224KXZPE1   | FDC280KXZPE1            |
|---|---|--------------------|--|-------------------------|
| Power source                                  |   |                    | 3Phase 380-415V 50Hz / 380V 60Hz   |                         |
| Operation data                                | Nominal cooling capacity                    | kW                 | 22.4   | 28                      |
|   | Capacity control                            | %                  | -  | -                       |
|   | Nominal heating capacity                    | kW                 | 22.4   | 28                      |
|   | Capacity control                            | %                  | -  | -                       |
|   | Power consumption                           | Cooling<br>Heating | 5.6<br>4.8   | 7.67<br>6.47            |
|   | Max power consumption                       |                    | 13.2   | 13.7                    |
|   | Running current                             | Cooling<br>Heating | 9.2/8.5<br>7.9/7.3   | 12.9/11.8<br>10.6/9.7   |
|   | Inrush current, max current                 |                    | 5, 21  | 5, 22                   |
|   | Power factor                                | Cooling<br>Heating | 92<br>92   | 94<br>93                |
|   | EER   | Cooling            | 4.00   | 3.56                    |
|   | COP   | Heating            | 4.67   | 4.33                    |
|   | Sound pressure level                        | Cooling<br>Heating | 59<br>60   | 60<br>63                |
|   | Sound power level                           | Cooling<br>Heating | 72<br>73   | 74<br>76                |
|   | Silent mode sound pressure level            |                    | -  | -                       |
| Exterior dimensions (Height x Width x Depth)  |   | mm                 | 1505 x 970 x 370   |                         |
| Exterior appearance (Munsell color)           |   |                    | Stucco White (4.2Y7.5/1.1) near equivalent   |                         |
| Net weight                                    |   | kg                 | 165  | 165                     |
| Compressor type & Qty                         |   |                    | GTC5150NC40KF×1  |                         |
| Compressor motor (Starting method)            |   | kW                 | Direct line start  |                         |
| Refrigerant oil (Amount, type)                |   | l                  | 1.45 M-MA32R   |                         |
| Refrigerant (Type, amount, pre-charge length) |   | kg                 | R410A 8.9kg in outdoor unit (Standard charge)  |                         |
| Heat exchanger                                |   |                    | M shape fin & inner grooved tubing   |                         |
| Refrigerant control                           |   |                    | Electronic expansion valve   |                         |
| Fan type & Qty                                |   |                    | Propeller fan ×2   |                         |
| Fan motor (Starting method)                   |   | W                  | 86 ×2 < Direct line start >  |                         |
| Air flow (Standard)                           | Cooling                                     | m³/min             | 130  | 135                     |
|   | Heating                                     | m³/min             | 130  | 145                     |
| Available external static pressure            |   | Pa                 | 35   |                         |
| Shock & vibration absorber                    |   |                    | Rubber sleeve (for Compressor)   |                         |
| Electric heater                               |   | W                  | 33 (Crank case heater)   |                         |
| Safety equipments                             |   |                    | Overcurrent protection, Frost protection control<br>Abnormal high pressure protection, Abnormal low pressure protection,<br>Abnormal discharge temperature protection<br>Overload protection for fan motor |                         |
| Installation (M5)                             | Refrigerant piping size (O.D.)              | mm                 | Liquid line: φ9.52 x 0.8 (3/8")<br>Gas line: φ19.05 (3/4")x1.0 or φ22.22 (7/8")x1.0 or φ25.4 (1")x1.0 or φ28.58 (1 1/8")x1.0   |                         |
|   | Connecting method                           |                    | Liquid : Flame / Gas : Brazing   |                         |
|   | Insulation for piping                       |                    | Necessary (both Liquid & Gas lines)  |                         |
|   | Refrigerant line (one way) length           | m                  | Max. 120m  |                         |
|   | Vertical height diff. between O.U. and I.U. | m                  | Max. 30m   |                         |
|   | Drain holes                                 |                    | Holes size: φ20 x 3pcs   |                         |
| Recommended breaker size                      |   | A                  | —  |                         |
| L.R.A. (Locked rotor ampere)                  |   | A                  | 5/5  |                         |
| IP number                                     |   |                    | IP24   |                         |
| Standard accessories                          |   |                    | Edging   | Connecting pipe, Edging |
| Option parts                                  |   |                    | —  |                         |

Note (1) The data are measured at the following conditions.

The pipe length is 7.5m.

| Operation | Indoor air temperature |      | Outdoor air temperature |      | Standards     |
|-----------|------------------------|------|-------------------------|------|---------------|
|           | DB                     | WB   | DB                      | WB   |               |
| Cooling   | 27°C                   | 19°C | 35°C                    | 24°C | ISO6151-T1,H1 |
| Heating   | 20°C                   | —    | 7°C                     | 6°C  |               |

(2) This air-conditioner is manufactured and tested in conformity with the ISO.

(3) Sound level indicates the value in an anechoic chamber. During operation these values are somewhat higher due to ambient conditions.

(4) Select the breaker size according to the own national standard.

(5) The operation data indicate when the air-conditioner is operated at 380V or 415V.

(6) Use 1/2H pipes having a 1.0mm or thicker wall for φ19.05 or larger pipes.

(7) This air-conditioner is adapted to RoHS directive.



**FDC224KXZME1, 280KXZME1, 335KXZME1A**

(50/60 Hz)

| Models                              |                  |         | FDC224KXZME1  | FDC280KXZME1   | FDC335KXZME1A                   |
|-------------------------------------|------------------|---------|---|----------------|---------------------------------|
| Nominal cooling capacity*1          |                  | kW      | 22.4  | 28.0           | 33.5                            |
| Nominal heating capacity*2          |                  |         | 22.4  | 28.0           | 33.5                            |
| Maximum heating capacity            |                  |         | 25.0  | 31.5           | 37.5                            |
| Power source                        |                  |         | 3 Phase 380/415V 50Hz / 380V 60Hz   |                |                                 |
| Power consumption                   | Cooling          | kW      | 5.59  | 7.90           | 10.68                           |
|                                     | Heating          |         | 4.97  | 6.53           | 8.44                            |
| Running current                     | Cooling          | A       | 9.4/8.6   | 12.8/11.8      | 17.8/16.3                       |
|                                     | Heating          |         | 7.8/7.2   | 10.5/9.6       | 14.4/13.2                       |
| Power factor                        | Cooling          | %       | 91/91   | 94/94          | 91/91                           |
|                                     | Heating          |         | 97/97   | 95/95          | 91/91                           |
| EER                                 |                  |         | 4.00  | 3.54           | 3.13                            |
| COP                                 |                  |         | 4.50  | 4.28           | 3.96                            |
| Sound pressure level                | Cooling/Heating  | dB (A)  | 58/59   | 60/60          | 60/62                           |
| Sound power level                   | Cooling/Heating  | dB (A)  | 73/75   | 75/76          | 75/77                           |
| Starting current                    |                  | A       | 5   |                |                                 |
| Maximum current                     |                  |         | 20.0  | 20.0           | 23.0                            |
| Exterior dimensions                 |                  | mm      | 1675×1080×480   |                |                                 |
| Height × Width × Depth              |                  |         |   |                |                                 |
| Exterior appearance (Munsell color) |                  |         | Stucco white (4.2Y7.5/1.1) near equivalent  |                |                                 |
| Net weight                          |                  | kg      | 221   |                | 224                             |
| Compressor type & Qty               |                  |         | GTC5150NH40K × 1  |                |                                 |
| Compressor motor                    |                  | kW      | 4.69  | 6.78           | 9.59                            |
| Starting method                     |                  |         | Direct line starting  |                |                                 |
| Capacity control                    |                  | %       | 24-100  | 18-100         | 18-100                          |
| Crankcase heater                    |                  | W       | 33  |                |                                 |
| Heat exchanger                      |                  |         | Straight fin & inner grooved tubing   |                |                                 |
| Refrigerant control                 |                  |         | Electronic expansion valve  |                |                                 |
| Refrigerant type                    |                  |         | R410A   |                |                                 |
| Refrigerant amount                  |                  | kg      | 11.5  |                |                                 |
| Refrigerant oil                     |                  | l       | 1.7 (M-MA32R)   |                |                                 |
| Defrost control                     |                  |         | Microcomputer controlled De-Icer  |                |                                 |
| Fan type & Qty                      |                  |         | Propeller fan × 2   |                |                                 |
| Fan motor                           |                  | W       | 144 × 2   |                |                                 |
| Starting method                     |                  |         | Direct start  |                |                                 |
| Air flow (Standard)                 |                  | m³/min  | 200   |                |                                 |
| Available external static pressure  |                  | Pa      | Max. 35   |                |                                 |
| Shock & vibration absorber          |                  |         | Rubber mount (for compressor)   |                |                                 |
| Safety equipment                    |                  |         | Compressor overheat protection, Overcurrent protection,<br>Power transistor overheating protection, Abnormal high pressure protection |                |                                 |
| Refrigerant piping size             | Liquid line      | mm (in) | φ 9.52 (3/8")   |                | φ 12.7 (1/2")                   |
|                                     | Suction gas line | mm (in) | φ 19.05 (3/4")  | φ 22.22 (7/8") | φ 25.4 (1")<br>(φ 22.22 (7/8")) |
| Connecting method                   |                  |         | Gas line: Brazing / Liquid line: Flare  |                |                                 |
| MAX. Pressure                       |                  | MPa     | High 4.15, Low 2.21   |                |                                 |
| Drain                               |                  |         | Hole for drain: φ 20 × 4pcs   |                |                                 |
| Insulation for piping               |                  |         | Necessary (both Liquid & Gas line)  |                |                                 |
| IP number                           |                  |         | IP24  |                |                                 |
| Accessories                         |                  |         | -   | -              | -                               |

Notes (1) The data are measured at the following conditions.

| Item    | Indoor air temperature |      | Outdoor air temperature |      | Standards     |
|---------|------------------------|------|-------------------------|------|---------------|
|         | DB                     | WB   | DB                      | WB   |               |
| Cooling | 27°C                   | 19°C | 35°C                    | 24°C | ISO5151-T1,H1 |
| Heating | 20°C                   |      | 7°C                     | 8°C  |               |

(2) This air-conditioner is manufactured and tested in conformity with the ISO.

(3) Sound level indicates the value in an anechoic chamber.

During operation these values are somewhat higher due to ambient conditions.

(4) Refrigerant piping size applicable to European installations are shown in parentheses.

(5) This air-conditioner is adapted RoHS directive.

### Wall Mounted type (FDK)

| Models                                   |      |        | FDK28KXZE1  |  |
|--|------|--------|---|--|
|  |      |        | -   |  |
| Nominal cooling capacity*1               | kW   | 2.8    |   |  |
| Nominal heating capacity*2               |      | 3.2    |   |  |
| Power source                             |      |        | 220-240V ~ 50Hz / 220V ~ 60Hz   |  |
| Power consumption                        | Cool | kW     | 0.02  |  |
|  | Heat |        | 0.02  |  |
| Running current                          | Cool | A      | 0.18 - 0.16 / 0.18  |  |
|  | Heat |        | 0.18 - 0.16 / 0.18  |  |
| Sound Pressure Level                     | Cool | dB(A)  | P-Hi : 38 Hi : 36 Me : 32 Lo : 28                                     |  |
|  | Heat |        | P-Hi : 38 Hi : 36 Me : 32 Lo : 28                                     |  |
| Sound Power Level                        | Cool | dB(A)  | 55  |  |
|  | Heat |        | 55  |  |
| Exterior dimensions                      |      | mm     | 290 × 870 × 230   |  |
| Height x Width x Depth                   |      |        |   |  |
| Exterior appearance<br>( Munsell color ) |      |        | Fine Snow<br>( 8.0Y9.3/0.1 ) near equivalent                          |  |
| Net weight                               |      | kg     | 11  |  |
| Refrigerant equipment                    |      |        |   |  |
| Heat exchanger                           |      |        | Louver fin & inner grooved tubing                                     |  |
| Refrigerant control                      |      |        | Electronic Expansion Valve  |  |
| Air handling equipment                   |      |        |   |  |
| Fan type & Q'ty                          |      |        | Tangential fan × 1  |  |
| Motor                                    |      | W      | 42  |  |
| Starting method                          |      |        | Direct line start   |  |
| Air flow(Standard)                       | Cool | m³/min | P-Hi : 8.5 Hi : 8 Me : 6 Lo : 5                                       |  |
|  | Heat |        | P-Hi : 8.5 Hi : 8 Me : 6 Lo : 5                                       |  |
| Available static pressure                |      | Pa     | 0   |  |
| Outside air intake                       |      |        | Not possible  |  |
| Air filter, Q'ty                         |      |        | Polypropylene net × 2 (Washable)                                      |  |
| Shock & vibration absorber               |      |        | Rubber sleeve(for fan motor)  |  |
| Insulation (noise & heat)                |      |        | Polyurethane form   |  |
| Operation control                        |      |        | Remote control switch<br>wired: RC-EX3,RC-E5,RCH-E3 wireless:RCN-K-E2 |  |
| Room temperature control                 |      |        | Thermostat by electronics   |  |
| Safety equipment                         |      |        | Overload protection for fan motor<br>Frost protection thermostat      |  |
| Installation data                        |      |        | Liquid line: φ6.35 (1/4")   |  |
| Refrigerant piping size                  |      |        | Gas line: φ9.52 (3/8")  |  |
| Connecting method                        |      |        | Flare piping  |  |
| Refrigerant                              |      |        | R410A   |  |
|  |      |        | -   |  |
| Drain hose                               |      |        | Connectable with V P 1 6  |  |
| Insulation for piping                    |      |        | Necessary(both Liquid & Gas line)                                     |  |
| Standard Accessories                     |      |        | Mounting kit  |  |

#### Notes

Adapted to **RoHS** directive

(1) The data are measured at the following conditions.

| Item      | Indoor air temperature |       | Outdoor air temperature |       | Standards |
|-----------|------------------------|-------|-------------------------|-------|-----------|
|           | DB                     | WB    | DB                      | WB    |           |
| Cooling*1 | 27 °C                  | 19 °C | 35 °C                   | 24 °C | ISO-T1    |
| Heating*2 | 20 °C                  |       | 7 °C                    | 6 °C  |           |

(2) This packaged air-conditioner is manufactured and tested in conformity with the following standard.  
ISO-T1 "UNITARY AIR-CONDITIONERS"

### Wall Mounted type (FDK)

| Models                                   |      |        | FDK45KXZE1  |  |
|--|------|--------|---|--|
| Nominal cooling capacity*1               |      | kW     | 4.5   |  |
| Nominal heating capacity*2               |      |        | 5.0   |  |
| Power source                             |      |        | 220-240V ~ 50Hz / 220V ~ 60Hz   |  |
| Power consumption                        | Cool | kW     | 0.03  |  |
|  | Heat |        | 0.03  |  |
| Running current                          | Cool | A      | 0.27 - 0.25 / 0.27  |  |
|  | Heat |        | 0.27 - 0.25 / 0.27  |  |
| Sound Pressure Level                     | Cool | dB(A)  | P-Hi : 43 Hi : 41 Me : 36 Lo : 33                                     |  |
|  | Heat |        | P-Hi : 43 Hi : 41 Me : 36 Lo : 33                                     |  |
| Sound Power Level                        | Cool | dB(A)  | 58  |  |
|  | Heat |        | 58  |  |
| Exterior dimensions                      |      | mm     | 290 × 870 × 230   |  |
| Height x Width x Depth                   |      |        |   |  |
| Exterior appearance<br>( Munsell color ) |      |        | Fine Snow<br>( 8.0Y9.3/0.1 ) near equivalent                          |  |
| Net weight                               |      | kg     | 11.5  |  |
| Refrigerant equipment                    |      |        |   |  |
| Heat exchanger                           |      |        | Louver fin & inner grooved tubing                                     |  |
| Refrigerant control                      |      |        | Electronic Expansion Valve  |  |
| Air handling equipment                   |      |        |   |  |
| Fan type & Q'ty                          |      |        | Tangential fan × 1  |  |
| Motor                                    |      | W      | 42  |  |
| Starting method                          |      |        | Direct line start   |  |
| Air flow(Standard)                       | Cool | m³/min | P-Hi : 12 Hi : 11 Me : 9 Lo : 8                                       |  |
|  | Heat |        | P-Hi : 12 Hi : 11 Me : 9 Lo : 8                                       |  |
| Available static pressure                |      | Pa     | 0   |  |
| Outside air intake                       |      |        | Not possible  |  |
| Air filter; Q'ty                         |      |        | Polypropylene net × 2 (Washable)                                      |  |
| Shock & vibration absorber               |      |        | Rubber sleeve(for fan motor)  |  |
| Insulation (noise & heat)                |      |        | Polyurethane form   |  |
| Operation control                        |      |        | Remote control switch<br>wired: RC-EX3,RC-E5,RCH-E3 wireless:RCN-K-E2 |  |
| Room temperature control                 |      |        | Thermostat by electronics   |  |
| Safety equipment                         |      |        | Overload protection for fan motor<br>Frost protection thermostat      |  |
| Installation data                        |      |        | Liquid line: φ6.35 (1/4")   |  |
| Refrigerant piping size                  |      |        | Gas line: φ12.7 (1/2")  |  |
| Connecting method                        |      |        | Flare piping  |  |
| Refrigerant                              |      |        | R410A   |  |
| Drain hose                               |      |        | Connectable with VP16   |  |
| Insulation for piping                    |      |        | Necessary(both Liquid & Gas line)                                     |  |
| Standard Accessories                     |      |        | Mounting kit  |  |

#### Notes

Adapted to **RoHS** directive

(1) The data are measured at the following conditions.

| Item      | Indoor air temperature |       | Outdoor air temperature |       | Standards |
|-----------|------------------------|-------|-------------------------|-------|-----------|
| Operation | DB                     | WB    | DB                      | WB    | ISO-T1    |
| Cooling*1 | 27 °C                  | 19 °C | 35 °C                   | 24 °C |           |
| Heating*2 | 20 °C                  |       | 7 °C                    | 6 °C  |           |

(2) This packaged air-conditioner is manufactured and tested in conformity with the following standard.

ISO-T1 "UNITARY AIR-CONDITIONERS"

### Ceiling Cassette -4way- type (FDT)

| Models                                   |      |  | FDT28KXZE1  |  |
|--|------|--|---|--|
| Panel model (Option)                     |      |  | Standard : T-PSA-5AW-E<br>Draft prevention : T-PSAE-5AW-E |  |
| Nominal cooling capacity*1               |      | kW   | 2.8   |  |
| Nominal heating capacity*2               |      |  | 3.2   |  |
| Power source                             |      |  | 220-240V ~ 50Hz / 220V ~ 60Hz                             |  |
| Power consumption                        | Cool | kW   | 0.02 - 0.02 / 0.02  |  |
|  | Heat |  | 0.02 - 0.02 / 0.02  |  |
| Running current                          | Cool | A  | 0.20 - 0.19 / 0.20  |  |
|  | Heat |  | 0.20 - 0.19 / 0.20  |  |
| Sound Pressure Level                     |      | dB(A)  | P-Hi : 37 Hi : 33 Me : 30 Lo : 28                         |  |
| Sound Power Level                        |      |  | 49  |  |
| Exterior dimensions                      |      | mm   | Unit : 236 × 840 × 840                                    |  |
| Height x Width x Depth                   |      |  | Panel : 35 × 950 × 950                                    |  |
| Exterior appearance<br>( Munsell color ) |      | Plaster White<br>( 6.8Y8.9/0.2 ) near equivalent                 |   |  |
| Net weight*3                             |      | kg   | Unit : 20 Standard panel : 5                              |  |
| Refrigerant equipment                    |      | Louver fin & inner grooved tubing                                |   |  |
| Heat exchanger                           |      | Electronic Expansion Valve                                       |   |  |
| Refrigerant control                      |      | Turbo fan × 1  |   |  |
| Air handling equipment                   |      | 58   |   |  |
| Fan type & Q'ty                          |      | Direct line start  |   |  |
| Motor                                    |      | W  | P-Hi : 15 Hi : 14 Me : 12 Lo : 10                         |  |
| Starting method                          |      | 0  |   |  |
| Air flow(Standard)                       |      | CMM  | Available static pressure                                 |  |
| Available static pressure                |      | Pa   | Outside air intake  |  |
| Outside air intake                       |      | Possible   |   |  |
| Air filter, Q'ty                         |      | Pocket plastic net × 1 (Washable)                                |   |  |
| Shock & vibration absorber               |      | Rubber sleeve(for fan motor)                                     |   |  |
| Insulation (noise & heat)                |      | Polyurethane form  |   |  |
| n control                                |      | Wired : RC-EX3, RC-E5, RCH-E3                                    |   |  |
| Remote control switch ( option )         |      | Wireless : RCN-T-5AW-E2  |   |  |
| Room temperature control                 |      | Thermostat by electronics  |   |  |
| Safety equipment                         |      | Overload protection for fan motor<br>Frost protection thermostat |   |  |
| Installation data                        |      | Liquid line: φ 6.35 (1/4")                                       |   |  |
| Refrigerant piping size                  |      | Gas line: φ 9.52 (3/8")  |   |  |
| Connecting method                        |      | Flare piping   |   |  |
| Refrigerant                              |      | R410A  |   |  |
| Drain pump                               |      | Built-in Drain pump  |   |  |
| Drain hose                               |      | Connectable with VP25  |   |  |
| Insulation for piping                    |      | Necessary(both Liquid & Gas line)                                |   |  |
| Accessories                              |      | Mounting kit, Drain hose   |   |  |

#### Notes

Adapted to **RoHS** directive

(1) The data are measured at the following conditions.

| Item      | Indoor air temperature |       | Outdoor air temperature |       | Standards |
|-----------|------------------------|-------|-------------------------|-------|-----------|
| Operation | DB                     | WB    | DB                      | WB    |           |
| Cooling*1 | 27 °C                  | 19 °C | 35 °C                   | 24 °C | ISO-T1    |
| Heating*2 | 20 °C                  |       | 7 °C                    | 6 °C  |           |

(2) This packaged air-conditioner is manufactured and tested in conformity with the following standard.  
ISO-T1 "UNITARY AIR-CONDITIONERS"

(3) Draft prevention panel weight\*3 : 6kg.

(4) Option : Motion sensor Kit (LB-T-5W-E)

### Ceiling Cassette -4way- type (FDT)

| Models                                   |      |       | FDT36KXZE1   |
|--|------|-------|--|
| Panel model (Option)                     |      |       | Standard : T-PSA-5AW-E<br>Draft prevention : T-PSAE-5AW-E        |
| Nominal cooling capacity*1               | kW   | 3.6   |  |
| Nominal heating capacity*2               |      | 4.0   |  |
| Power source                             |      |       | 220-240V ~ 50Hz / 220V ~ 60Hz                                    |
| Power consumption                        | Cool | kW    | 0.03 - 0.03 / 0.03   |
|  | Heat |       | 0.03 - 0.03 / 0.03   |
| Running current                          | Cool | A     | 0.30 - 0.28 / 0.30   |
|  | Heat |       | 0.30 - 0.28 / 0.30   |
| Sound Pressure Level                     |      | dB(A) | P-Hi : 37 Hi : 33 Me : 30 Lo : 28                                |
| Sound Power Level                        |      |       | 49   |
| Exterior dimensions                      |      | mm    | Unit : 236 × 840 × 840   |
| Height x Width x Depth                   |      |       | Panel : 35 × 950 × 950   |
| Exterior appearance<br>( Munsell color ) |      |       | Plaster White<br>( 6.8Y8.9/0.2 ) near equivalent                 |
| Net weight*3                             |      | kg    | Unit : 20 Standard panel : 5                                     |
| Refrigerant equipment                    |      |       | Louver fin & inner grooved tubing<br>Electronic Expansion Valve  |
| Heat exchanger                           |      |       |  |
| Refrigerant control                      |      |       |  |
| Air handling equipment                   |      |       |  |
| Fan type & Q'ty                          |      |       | Turbo fan × 1  |
| Motor                                    |      | W     | 55   |
| Starting method                          |      |       | Direct line start  |
| Air flow(Standard)                       |      | CMM   | P-Hi : 16 Hi : 14 Me : 12 Lo : 10                                |
| Available static pressure                |      | Pa    | 0  |
| Outside air intake                       |      |       | Possible   |
| Air filter, Q'ty                         |      |       | Pocket plastic net × 1 (Washable)                                |
| Shock & vibration absorber               |      |       | Rubber sleeve(for fan motor)                                     |
| Insulation (noise & heat)                |      |       | Polyurethane foam  |
| n control                                |      |       | Wired : RC-EX3, RC-E5, RCH-E3                                    |
| Remote control switch ( option )         |      |       | Wireless : RCN-T-5AW-E2  |
| Room temperature control                 |      |       | Thermostat by electronics  |
| Safety equipment                         |      |       | Overload protection for fan motor<br>Frost protection thermostat |
| Installation data                        |      |       | Liquid line: φ 6.35 (1/4")                                       |
| Refrigerant piping size                  |      |       | Gas line: φ 12.7 (1/2")  |
| Connecting method                        |      |       | Flare piping   |
| Refrigerant                              |      |       | R410A  |
| Drain pump                               |      |       | Built-in Drain pump  |
| Drain hose                               |      |       | Connectable with VP25  |
| Insulation for piping                    |      |       | Necessary(both Liquid & Gas line)                                |
| Accessories                              |      |       | Mounting kit, Drain hose   |

#### Notes

Adapted to **RoHS** directive

(1) The data are measured at the following conditions.

| Item      | Indoor air temperature |       | Outdoor air temperature |       | Standards |
|-----------|------------------------|-------|-------------------------|-------|-----------|
|           | DB                     | WB    | DB                      | WB    |           |
| Cooling*1 | 27 °C                  | 19 °C | 35 °C                   | 24 °C | ISO-T1    |
| Heating*2 | 20 °C                  |       | 7 °C                    | 6 °C  |           |

(2) This packaged air conditioner is manufactured and tested in conformity with the following standard.  
ISO-T1 "UNITARY AIR-CONDITIONERS"

(3) Draft prevention panel weight\*3 : 6kg

(4) Option / Motion sensor kit (LB-T-5W-E)

### Ceiling Cassette -4way- type (FDT)

| Models                                   |      |  | FDY45KXZE1  |  |
|--|------|--|---|--|
| Panel model (Option)                     |      |  | Standard : T-PSA-5AW-E<br>Draft prevention : T-PSAE-5AW-E |  |
| Nominal cooling capacity*1               |      | kW   | 4.5   |  |
| Nominal heating capacity*2               |      |  | 5.0   |  |
| Power source                             |      |  | 220-240V ~ 50Hz / 220V ~ 60Hz                             |  |
| Power consumption                        | Cool | kW   | 0.03 - 0.03 / 0.03  |  |
|  | Heat |  | 0.03 - 0.03 / 0.03  |  |
| Running current                          | Cool | A  | 0.30 - 0.28 / 0.30  |  |
|  | Heat |  | 0.30 - 0.28 / 0.30  |  |
| Sound Pressure Level                     |      | dB(A)  | P-Hi : 38 Hi : 33 Me : 31 Lo : 29                         |  |
| Sound Power Level                        |      |  | 50  |  |
| Exterior dimensions                      |      | mm   | Unit : 236 × 840 × 840                                    |  |
| Height x Width x Depth                   |      |  | Panel : 35 × 950 × 950                                    |  |
| Exterior appearance<br>( Munsell color ) |      | Plaster White<br>( 6.8Y8.9/0.2 ) near equivalent                 |   |  |
| Net weight*3                             |      | kg   | Unit : 20 Standard panel : 5                              |  |
| Refrigerant equipment                    |      | Louver fin & inner grooved tubing                                |   |  |
| Heat exchanger                           |      | Electronic Expansion Valve                                       |   |  |
| Refrigerant control                      |      | Turbo fan × 1  |   |  |
| Air handling equipment                   |      | 58   |   |  |
| Fan type & Q'ty                          |      | Direct line start  |   |  |
| Motor                                    |      | W  | P-Hi : 17 Hi : 15 Me : 13 Lo : 10                         |  |
| Starting method                          |      | CMM  |   |  |
| Air flow(Standard)                       |      | Pa   |   |  |
| Available static pressure                |      | 0  |   |  |
| Outside air intake                       |      | Possible   |   |  |
| Air filter, Q'ty                         |      | Pocket plastic net × 1 (Washable)                                |   |  |
| Shock & vibration absorber               |      | Rubber sleeve(for fan motor)                                     |   |  |
| Insulation (noise & heat)                |      | Polyurethane foam  |   |  |
| n control                                |      | Wired : RC-EX3, RC-E5, RCH-E3                                    |   |  |
| Remote control switch ( option )         |      | Wireless : RCN-T-5AW-E2  |   |  |
| Room temperature control                 |      | Thermostat by electronics  |   |  |
| Safety equipment                         |      | Overload protection for fan motor<br>Frost protection thermostat |   |  |
| Installation data                        |      | Liquid line : φ 6.35 (1/4")                                      |   |  |
| Refrigerant piping size                  |      | Gas line : φ 12.7 (1/2")   |   |  |
| Connecting method                        |      | Flare piping   |   |  |
| Refrigerant                              |      | R410A  |   |  |
| Drain pump                               |      | Built-in Drain pump  |   |  |
| Drain hose                               |      | Connectable with VP25  |   |  |
| Insulation for piping                    |      | Necessary(both Liquid & Gas line)                                |   |  |
| Accessories                              |      | Mounting kit, Drain hose   |   |  |

#### Notes

Adapted to **RoHS** directive

(1) The data are measured at the following conditions.

| Item      | Indoor air temperature |       | Outdoor air temperature |       | Standards |
|-----------|------------------------|-------|-------------------------|-------|-----------|
|           | DB                     | WB    | DB                      | WB    |           |
| Cooling*1 | 27 °C                  | 19 °C | 35 °C                   | 24 °C | ISO-T1    |
| Heating*2 | 20 °C                  |       | 7 °C                    | 6 °C  |           |

(2) This packaged air conditioner is manufactured and tested in conformity with the following standard.  
ISO-T1 "UNITARY AIR-CONDITIONERS"

(3) Draft prevention panel weight\*3 : 6kg

(4) Option / Motion sensor kit (LB-T-5W-E)



### Ceiling Cassette -4way- type (FDT)

| Models                                   |      |       | FDT56KXZE1   |
|--|------|-------|--|
| Panel model (Option)                     |      |       | Standard : T-PSA-5AW-E<br>Draft prevention : T-PSAE-5AW-E        |
| Nominal cooling capacity*1               |      | kW    | 5.6  |
| Nominal heating capacity*2               |      |       | 6.3  |
| Power source                             |      |       | 220-240V ~ 50Hz / 220V ~ 60Hz                                    |
| Power consumption                        | Cool | kW    | 0.04 - 0.04 / 0.04   |
|  | Heat |       | 0.04 - 0.04 / 0.04   |
| Running current                          | Cool | A     | 0.36 - 0.33 / 0.36   |
|  | Heat |       | 0.36 - 0.33 / 0.36   |
| Sound Pressure Level                     |      | dB(A) | P-Hi : 38 Hi : 33 Me : 31 Lo : 29                                |
| Sound Power Level                        |      |       | 55   |
| Exterior dimensions                      |      | mm    | Unit : 236 × 840 × 840   |
| Height x Width x Depth                   |      |       | Panel : 35 × 950 × 950   |
| Exterior appearance<br>( Munsell color ) |      |       | Plaster White<br>( 6.8Y8.9/0.2 ) near equivalent                 |
| Net weight*3                             |      | kg    | Unit : 21.5 Standard panel : 5                                   |
| Refrigerant equipment                    |      |       | Louver fin & inner grooved tubing                                |
| Heat exchanger                           |      |       |  |
| Refrigerant control                      |      |       | Electronic Expansion Valve                                       |
| Air handling equipment                   |      |       | Turbo fan × 1  |
| Fan type & Q'ty                          |      |       |  |
| Motor                                    |      | W     | 58   |
| Starting method                          |      |       | Direct line start  |
| Air flow(Standard)                       |      | CMM   | P-Hi : 20 Hi : 16 Me : 13 Lo : 11                                |
| Available static pressure                |      | Pa    | 0  |
| Outside air intake                       |      |       | Possible   |
| Air filter, Q'ty                         |      |       | Pocket plastic net × 1 (Washable)                                |
| Shock & vibration absorber               |      |       | Rubber sleeve(for fan motor)                                     |
| Insulation (noise & heat)                |      |       | Polyurethane foam  |
| n control                                |      |       | Wired : RC-EX3, RC-E5, RCH-E3                                    |
| Remote control switch ( option )         |      |       | Wireless : RCN-T-5AW-E2  |
| Room temperature control                 |      |       | Thermostat by electronics  |
| Safety equipment                         |      |       | Overload protection for fan motor<br>Frost protection thermostat |
| Installation data                        |      |       | Liquid line : φ 6.35 (1/4")                                      |
| Refrigerant piping size                  |      |       | Gas line : φ 12.7 (1/2")   |
| Connecting method                        |      |       | Flare piping   |
| Refrigerant                              |      |       | R410A  |
| Drain pump                               |      |       | Built-in Drain pump  |
| Drain hose                               |      |       | Connectable with VP25  |
| Insulation for piping                    |      |       | Necessary(both Liquid & Gas line)                                |
| Accessories                              |      |       | Mounting kit, Drain hose   |

#### Notes

Adapted to **RoHS** directive

(1) The data are measured at the following conditions.

| Item      | Indoor air temperature |       | Outdoor air temperature |       | Standards |
|-----------|------------------------|-------|-------------------------|-------|-----------|
|           | DB                     | WB    | DB                      | WB    |           |
| Cooling*1 | 27 °C                  | 19 °C | 35 °C                   | 24 °C | ISO-T1    |
| Heating*2 | 20 °C                  |       | 7 °C                    | 6 °C  |           |

(2) This packaged air conditioner is manufactured and tested in conformity with the following standard.  
ISO-T1 "UNITARY AIR-CONDITIONERS"

(3) Draft prevention panel weight\*3 : 6kg

(4) Option / Motion sensor kit (LB-T-5W-E)

### Ceiling Cassette -4way- Compact type (FDTC)

| Models  |      |       | FDTC15KXZE1  |  |
|---|------|-------|--|--|
| Panel model (Option)                                      |      |       | Standard :TC-PSA-5AW-E<br>Draft prevention :TC-PSAE-5AW-E                    |  |
| Nominal cooling capacity*1                                |      | kW    | 1.5  |  |
| Nominal heating capacity*2                                |      |       | 1.7  |  |
| Power source  |      |       | 220-240V ~ 50Hz / 220V ~ 60Hz  |  |
| Power consumption   | Cool | kW    | 0.03 - 0.03 / 0.03   |  |
|   | Heat |       | 0.03 - 0.03 / 0.03   |  |
| Running current   | Cool | A     | 0.25 - 0.22 / 0.25   |  |
|   | Heat |       | 0.25 - 0.22 / 0.25   |  |
| Sound Pressure Level                                      | Cool | dB(A) | P-Hi : 33 Hi : 30 Me : 28 Lo : 25  |  |
|   | Heat |       | P-Hi : 33 Hi : 30 Me : 26 Lo : 22  |  |
| Sound Power Level   | Cool |       | 47   |  |
|   | Heat |       | 46   |  |
| Exterior dimensions                                       |      | mm    | Unit : 248 × 570 × 570   |  |
| Height x Width x Depth                                    |      |       | Panel : 10 × 620 × 620   |  |
| Exterior appearance<br>( Munsell color )<br>( RAL color ) |      |       | Fine snow<br>( 8.0Y9.3/0.1 ) near equivalent<br>( RAL 9001 ) near equivalent |  |
| Net weight*3  |      | kg    | Unit : 12.5 Standard panel : 2.5   |  |
| Refrigerant equipment Heat exchanger                      |      |       | Louver fin & inner grooved tubing  |  |
| Refrigerant control                                       |      |       | Electronic Expansion Valve   |  |
| Air handling equipment Fan type & Q'ty                    |      |       | Turbo fan × 1  |  |
| Motor   |      | W     | 50   |  |
| Starting method   |      |       | Direct line start  |  |
| Air flow(Standard)  | Cool | CMM   | P-Hi : 8 Hi : 7 Me : 6 Lo : 5  |  |
|   | Heat |       | P-Hi : 8 Hi : 7 Me : 6 Lo : 5  |  |
| Available static pressure                                 |      | Pa    | 0  |  |
| Outdoor air intake  |      |       | Possible   |  |
| Air filter, Q'ty  |      |       | Pocket plastic net × 1 (Washable)  |  |
| Shock & vibration absorber                                |      |       | Rubber sleeve(for fan motor)   |  |
| Insulation (noise & heat)                                 |      |       | Polyurethane form  |  |
| Operation control   |      |       | Wired : RC-E5, RC-EX3A, RCH-E3   |  |
| Remote control switch ( option )                          |      |       | Wireless : RCN-TC-5AW-E2   |  |
| Room temperature control                                  |      |       | Thermostat by electronics  |  |
| Safety equipment  |      |       | Overload protection for fan motor<br>Frost protection thermostat             |  |
| Installation data   |      |       | Liquid line: φ6.35 (1/4")<br>Gas line: φ9.52 (3/8")                          |  |
| Refrigerant piping size                                   |      |       |  |  |
| Connecting method   |      |       | Flare piping   |  |
| Refrigerant   |      |       | R410A  |  |
| Drain pump  |      |       | Built-in Drain pump  |  |
| Drain hose  |      |       | Connectable with V P 2 5   |  |
| Insulation for piping                                     |      |       | Necessary(both Liquid & Gas line)  |  |
| Accessories   |      |       | Mounting kit, Drain hose   |  |

Notes Adapted to **RoHS** directive

(1) The data are measured at the following conditions.

| Item      | Indoor air temperature |       | Outdoor air temperature |       | Standards |
|-----------|------------------------|-------|-------------------------|-------|-----------|
|           | DB                     | WB    | DB                      | WB    |           |
| Cooling*1 | 27 °C                  | 19 °C | 35 °C                   | 24 °C | ISO-T1    |
| Heating*2 |                        | 20 °C | 7 °C                    | 6 °C  |           |

(2) This packaged air-conditioner is manufactured and tested in conformity with the following standard.

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(3) Draft prevention panel weight\*3 : 3.0kg (4) Option : Motion sensor kit (LB-TC-SW-E)



### Ceiling Cassette -4way- Compact type (FDTC)

| Models  |      |       | FDTC22KXZE1  |                        |  |  |
|---|------|-------|--|------------------------|--|--|
| Panel model (Option)                                      |      |       | Standard :TC-PSAE-5AW-E<br>Draft prevention :TC-PSAE-5AW-E                   |                        |  |  |
| Nominal cooling capacity*1                                |      | kW    | 2.2  |                        |  |  |
| Nominal heating capacity*2                                |      |       | 2.5  |                        |  |  |
| Power source  |      |       | 220-240V ~ 50Hz / 220V ~ 60Hz  |                        |  |  |
| Power consumption   | Cool | kW    | 0.03 - 0.03 / 0.03   |                        |  |  |
|   | Heat |       | 0.03 - 0.03 / 0.03   |                        |  |  |
| Running current   | Cool | A     | 0.25 - 0.22 / 0.25   |                        |  |  |
|   | Heat |       | 0.25 - 0.22 / 0.25   |                        |  |  |
| Sound Pressure Level                                      | Cool | dB(A) | P-Hi : 35 Hi : 32 Me : 29 Lo : 25  |                        |  |  |
|   | Heat |       | P-Hi : 35 Hi : 32 Me : 29 Lo : 25  |                        |  |  |
| Sound Power Level   | Cool |       | 49   |                        |  |  |
|   | Heat |       | 49   |                        |  |  |
| Exterior dimensions                                       |      |       | mm   | Unit : 248 × 570 × 570 |  |  |
| Height x Width x Depth                                    |      |       |  | Panel : 10 × 620 × 620 |  |  |
| Exterior appearance<br>( Munsell color )<br>( RAL color ) |      |       | Fine snow<br>( 8.0Y9.3/0.1 ) near equivalent<br>( RAL 9001 ) near equivalent |                        |  |  |
| Net weight*3  |      | kg    | Unit : 13 Standard panel : 2.5   |                        |  |  |
| Refrigerant equipment Heat exchanger                      |      |       | Louver fin & inner grooved tubing  |                        |  |  |
| Refrigerant control                                       |      |       | Electronic Expansion Valve   |                        |  |  |
| Air handling equipment Fan type & Q'ty                    |      |       | Turbo fan × 1  |                        |  |  |
| Motor   |      | W     | 50   |                        |  |  |
| Starting method   |      |       | Direct line start  |                        |  |  |
| Air flow(Standard)  | Cool | CMM   | P-Hi : 9 Hi : 8 Me : 7 Lo : 6  |                        |  |  |
|   | Heat |       | P-Hi : 9 Hi : 8 Me : 7 Lo : 6  |                        |  |  |
| Available static pressure                                 |      | Pa    | 0  |                        |  |  |
| Outdoor air intake  |      |       | Possible   |                        |  |  |
| Air filter, Q'ty  |      |       | Pocket plastic net × 1 (Washable)  |                        |  |  |
| Shock & vibration absorber                                |      |       | Rubber sleeve(for fan motor)   |                        |  |  |
| Insulation (noise & heat)                                 |      |       | Polyurethane form  |                        |  |  |
| Operation control   |      |       | Wired : RC-E5, RC-EX3A, RCH-E3   |                        |  |  |
| Remote control switch ( option )                          |      |       | Wireless : RCN-TC-5AW-E2   |                        |  |  |
| Room temperature control                                  |      |       | Thermostat by electronics  |                        |  |  |
| Safety equipment  |      |       | Overload protection for fan motor<br>Frost protection thermostat             |                        |  |  |
| Installation data   |      |       | Liquid line: φ6.35 (1/4")<br>Gas line: φ9.52 (3/8")                          |                        |  |  |
| Refrigerant piping size                                   |      |       |  |                        |  |  |
| Connecting method   |      |       | Flare piping   |                        |  |  |
| Refrigerant   |      |       | R410A  |                        |  |  |
| Drain pump  |      |       | Built-in Drain pump  |                        |  |  |
| Drain hose  |      |       | Connectable with V P 2.5   |                        |  |  |
| Insulation for piping                                     |      |       | Necessary(both Liquid & Gas line)  |                        |  |  |
| Accessories   |      |       | Mounting kit, Drain hose   |                        |  |  |

Notes Adapted to **RoHS** directive

(1) The data are measured at the following conditions.

| Item      | Indoor air temperature |       | Outdoor air temperature |       | Standards |
|-----------|------------------------|-------|-------------------------|-------|-----------|
|           | DB                     | WB    | DB                      | WB    |           |
| Cooling*1 | 27 °C                  | 19 °C | 35 °C                   | 24 °C | ISO-T1    |
| Heating*2 |                        | 20 °C | 7 °C                    | 6 °C  |           |

(2) This packaged air-conditioner is manufactured and tested in conformity with the following standard.

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(3) Draft prevention panel weight\*3 : 3.0kg (4) Option : Motion sensor kit (LB-TC-SW-E)

### Ceiling Cassette -4way- Compact type (FDTC)

| Models  |      |                                | FDTC28KXZE1  |
|---|------|--------------------------------|--|
| Panel model (Option)                                      |      |                                | Standard :TC-PSA-5AW-E<br>Draft prevention :TC-PSAE-5AW-E                    |
| Nominal cooling capacity*1                                | kW   | 2.8                            |  |
| Nominal heating capacity*2                                |      | 3.2                            |  |
| Power source  |      | 220-240V ~ 50Hz / 220V ~ 60Hz  |  |
| Power consumption   | Cool | kW                             | 0.03 - 0.03 / 0.03   |
|   | Heat |                                | 0.03 - 0.03 / 0.03   |
| Running current   | Cool | A                              | 0.25 - 0.22 / 0.25   |
|   | Heat |                                | 0.25 - 0.22 / 0.25   |
| Sound Pressure Level                                      | Cool | dB(A)                          | P-Hi : 35 Hi : 32 Me : 29 Lo : 25  |
|   | Heat |                                | P-Hi : 35 Hi : 32 Me : 29 Lo : 25  |
| Sound Power Level   | Cool |                                | 49   |
|   | Heat |                                | 49   |
| Exterior dimensions                                       |      | mm                             | Unit : 248 × 570 × 570   |
| Height x Width x Depth                                    |      |                                | Panel : 10 × 620 × 620   |
| Exterior appearance<br>( Munsell color )<br>( RAL color ) |      |                                | Fine snow<br>( 8.0Y9.3/0.1 ) near equivalent<br>( RAL 9001 ) near equivalent |
| Net weight*3  | kg   | Unit : 13 Standard panel : 2.5 |  |
| Refrigerant equipment Heat exchanger                      |      |                                | Louver fin & inner grooved tubing  |
| Refrigerant control                                       |      |                                | Electronic Expansion Valve   |
| Air handling equipment Fan type & Q'ty                    |      |                                | Turbo fan × 1  |
| Motor   |      | W                              | 50   |
| Starting method   |      |                                | Direct line start  |
| Air flow(Standard)  | Cool | CMM                            | P-Hi : 9 Hi : 8 Me : 7 Lo : 6  |
|   | Heat |                                | P-Hi : 9 Hi : 8 Me : 7 Lo : 6  |
| Available static pressure                                 |      | Pa                             | 0  |
| Outdoor air intake  |      |                                | Possible   |
| Air filter, Q'ty  |      |                                | Pocket plastic net × 1 (Washable)  |
| Shock & vibration absorber                                |      |                                | Rubber sleeve(for fan motor)   |
| Insulation (noise & heat)                                 |      |                                | Polyurethane form  |
| Operation control   |      |                                | Wired : RC-E5, RC-EX3A, RCH-E3   |
| Remote control switch ( option )                          |      |                                | Wireless : RCN-TC-5AW-E2   |
| Room temperature control                                  |      |                                | Thermostat by electronics  |
| Safety equipment  |      |                                | Overload protection for fan motor<br>Frost protection thermostat             |
| Installation data   |      |                                | Liquid line: φ6.35 (1/4")<br>Gas line: φ9.52 (3/8")                          |
| Refrigerant piping size                                   |      |                                |  |
| Connecting method   |      |                                | Flare piping   |
| Refrigerant   |      |                                | R410A  |
| Drain pump  |      |                                | Built-in Drain pump  |
| Drain hose  |      |                                | Connectable with V P 2 5   |
| Insulation for piping                                     |      |                                | Necessary(both Liquid & Gas line)  |
| Accessories   |      |                                | Mounting kit, Drain hose   |

Notes Adapted to **RoHS** directive

(1) The data are measured at the following conditions.

| Item      | Indoor air temperature |       | Outdoor air temperature |       | Standards |
|-----------|------------------------|-------|-------------------------|-------|-----------|
|           | DB                     | WB    | DB                      | WB    |           |
| Cooling*1 | 27 °C                  | 19 °C | 35 °C                   | 24 °C | ISO-T1    |
| Heating*2 | 20 °C                  |       | 7 °C                    | 6 °C  |           |

(2) This packaged air-conditioner is manufactured and tested in conformity with the following standard.

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(3) Draft prevention panel weight\*3 : 3.0kg (4) Option : Motion sensor kit (LB-TC-SW-E)

### Ceiling Cassette -4way- Compact type (FDTC)

| Models  |      |       | FDTC36KXZE1  |                        |  |
|---|------|-------|--|------------------------|--|
| Panel model (Option)                                      |      |       | Standard :TC-PSA-5AW-E<br>Draft prevention :TC-PSAE-5AW-E                    |                        |  |
| Nominal cooling capacity*1                                |      | kW    | 3.6  |                        |  |
| Nominal heating capacity*2                                |      |       | 4.0  |                        |  |
| Power source  |      |       | 220-240V ~ 50Hz / 220V ~ 60Hz  |                        |  |
| Power consumption   | Cool | kW    | 0.04 - 0.04 / 0.04   |                        |  |
|   | Heat |       | 0.04 - 0.04 / 0.04   |                        |  |
| Running current   | Cool | A     | 0.38 - 0.35 / 038  |                        |  |
|   | Heat |       | 0.38 - 0.35 / 038  |                        |  |
| Sound Pressure Level                                      | Cool | dB(A) | P-Hi : 39 Hi : 36 Me : 31 Lo : 26  |                        |  |
|   | Heat |       | P-Hi : 39 Hi : 36 Me : 31 Lo : 26  |                        |  |
| Sound Power Level   | Cool |       | 54   |                        |  |
|   | Heat |       | 53   |                        |  |
| Exterior dimensions                                       |      |       | mm   | Unit : 248 × 570 × 570 |  |
| Height x Width x Depth                                    |      |       |  | Panel : 10 × 620 × 620 |  |
| Exterior appearance<br>( Munsell color )<br>( RAL color ) |      |       | Fine snow<br>( 8.0Y9.3/0.1 ) near equivalent<br>( RAL 9001 ) near equivalent |                        |  |
| Net weight*3  |      | kg    | Unit : 14 Standard panel : 2.5   |                        |  |
| Refrigerant equipment Heat exchanger                      |      |       | Louver fin & inner grooved tubing  |                        |  |
| Refrigerant control                                       |      |       | Electronic Expansion Valve   |                        |  |
| Air handling equipment Fan type & Q'ty                    |      |       | Turbo fan × 1  |                        |  |
| Motor   |      | W     | 50   |                        |  |
| Starting method   |      |       | Direct line start  |                        |  |
| Air flow(Standard)  | Cool | CMM   | P-Hi : 10 Hi : 9 Me : 8 Lo : 6   |                        |  |
|   | Heat |       | P-Hi : 10 Hi : 9 Me : 8 Lo : 6   |                        |  |
| Available static pressure                                 |      | Pa    | 0  |                        |  |
| Outdoor air intake  |      |       | Possible   |                        |  |
| Air filter, Q'ty  |      |       | Pocket plastic net × 1 (Washable)  |                        |  |
| Shock & vibration absorber                                |      |       | Rubber sleeve(for fan motor)   |                        |  |
| Insulation (noise & heat)                                 |      |       | Polyurethane form  |                        |  |
| Operation control   |      |       | Wired : RC-E5, RC-EX3A, RCH-E3   |                        |  |
| Remote control switch ( option )                          |      |       | Wireless : RCN-TC-5AW-E2   |                        |  |
| Room temperature control                                  |      |       | Thermostat by electronics  |                        |  |
| Safety equipment  |      |       | Overload protection for fan motor<br>Frost protection thermostat             |                        |  |
| Installation data   |      |       | Liquid line: φ6.35 (1/4")  |                        |  |
| Refrigerant piping size                                   |      |       | Gas line: φ12.7 (1/2")   |                        |  |
| Connecting method   |      |       | Flare piping   |                        |  |
| Refrigerant   |      |       | R410A  |                        |  |
| Drain pump  |      |       | Built-in Drain pump  |                        |  |
| Drain hose  |      |       | Connectable with V P 2 5   |                        |  |
| Insulation for piping                                     |      |       | Necessary(both Liquid & Gas line)  |                        |  |
| Accessories   |      |       | Mounting kit, Drain hose   |                        |  |

Notes Adapted to **RoHS** directive

(1) The data are measured at the following conditions.

| Item      | Indoor air temperature |       | Outdoor air temperature |       | Standards |
|-----------|------------------------|-------|-------------------------|-------|-----------|
|           | DB                     | WB    | DB                      | WB    |           |
| Cooling*1 | 27 °C                  | 19 °C | 35 °C                   | 24 °C | ISO-T1    |
| Heating*2 | 20 °C                  |       | 7 °C                    | 6 °C  |           |

(2) This packaged air-conditioner is manufactured and tested in conformity with the following standard.

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(3) Draft prevention panel weight\*3 : 3.0kg (4) Option : Motion sensor kit (LB-TC-SW-E)

### Ceiling Cassette -4way- Compact type (FDTC)

| Models  |      |       | FDTC45KXZE1  |                        |  |  |
|---|------|-------|--|------------------------|--|--|
| Panel model (Option)                                      |      |       | Standard :TC-PSA-5AW-E<br>Draft prevention :TC-PSAE-5AW-E                    |                        |  |  |
| Nominal cooling capacity*1                                |      | kW    | 4.5  |                        |  |  |
| Nominal heating capacity*2                                |      |       | 5.0  |                        |  |  |
| Power source  |      |       | 220-240V ~ 50Hz / 220V ~ 60Hz  |                        |  |  |
| Power consumption   | Cool | kW    | 0.05 - 0.05 / 0.05   |                        |  |  |
|   | Heat |       | 0.05 - 0.05 / 0.05   |                        |  |  |
| Running current   | Cool | A     | 0.43 - 0.40 / 0.43   |                        |  |  |
|   | Heat |       | 0.43 - 0.40 / 0.43   |                        |  |  |
| Sound Pressure Level                                      | Cool | dB(A) | P-Hi : 43 Hi : 39 Me : 36 Lo : 28  |                        |  |  |
|   | Heat |       | P-Hi : 43 Hi : 39 Me : 36 Lo : 28  |                        |  |  |
| Sound Power Level   | Cool |       | 58   |                        |  |  |
|   | Heat |       | 57   |                        |  |  |
| Exterior dimensions                                       |      |       | mm   | Unit : 248 × 570 × 570 |  |  |
| Height x Width x Depth                                    |      |       |  | Panel : 10 × 620 × 620 |  |  |
| Exterior appearance<br>( Munsell color )<br>( RAL color ) |      |       | Fine snow<br>( 8.0Y9.3/0.1 ) near equivalent<br>( RAL 9001 ) near equivalent |                        |  |  |
| Net weight*3  |      | kg    | Unit : 14 Standard panel : 2.5   |                        |  |  |
| Refrigerant equipment Heat exchanger                      |      |       | Louver fin & inner grooved tubing  |                        |  |  |
| Refrigerant control                                       |      |       | Electronic Expansion Valve   |                        |  |  |
| Air handling equipment Fan type & Q'ty                    |      |       | Turbo fan × 1  |                        |  |  |
| Motor   |      | W     | 50   |                        |  |  |
| Starting method   |      |       | Direct line start  |                        |  |  |
| Air flow(Standard)  | Cool | CMM   | P-Hi : 12 Hi : 10 Me : 9 Lo : 7  |                        |  |  |
|   | Heat |       | P-Hi : 12 Hi : 10 Me : 9 Lo : 7  |                        |  |  |
| Available static pressure                                 |      | Pa    | 0  |                        |  |  |
| Outdoor air intake  |      |       | Possible   |                        |  |  |
| Air filter, Q'ty  |      |       | Pocket plastic net × 1 (Washable)  |                        |  |  |
| Shock & vibration absorber                                |      |       | Rubber sleeve(for fan motor)   |                        |  |  |
| Insulation (noise & heat)                                 |      |       | Polyurethane form  |                        |  |  |
| Operation control   |      |       | Wired : RC-E5, RC-EX3A, RCH-E3   |                        |  |  |
| Remote control switch ( option )                          |      |       | Wireless : RCN-TC-5AW-E2   |                        |  |  |
| Room temperature control                                  |      |       | Thermostat by electronics  |                        |  |  |
| Safety equipment  |      |       | Overload protection for fan motor<br>Frost protection thermostat             |                        |  |  |
| Installation data   |      |       | Liquid line: φ6.35 (1/4")  |                        |  |  |
| Refrigerant piping size                                   |      |       | Gas line: φ12.7 (1/2")   |                        |  |  |
| Connecting method   |      |       | Flare piping   |                        |  |  |
| Refrigerant   |      |       | R410A  |                        |  |  |
| Drain pump  |      |       | Built-in Drain pump  |                        |  |  |
| Drain hose  |      |       | Connectable with V P 2.5   |                        |  |  |
| Insulation for piping                                     |      |       | Necessary(both Liquid & Gas line)  |                        |  |  |
| Accessories   |      |       | Mounting kit, Drain hose   |                        |  |  |

Notes Adapted to **RoHS** directive

(1) The data are measured at the following conditions.

| Item      | Indoor air temperature |       | Outdoor air temperature |       | Standards |
|-----------|------------------------|-------|-------------------------|-------|-----------|
|           | DB                     | WB    | DB                      | WB    |           |
| Cooling*1 | 27 °C                  | 19 °C | 35 °C                   | 24 °C | ISO-T1    |
| Heating*2 | 20 °C                  |       | 7 °C                    | 6 °C  |           |

(2) This packaged air-conditioner is manufactured and tested in conformity with the following standard.

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(3) Draft prevention panel weight\*3 : 3.0kg (4) Option : Motion sensor kit (LB-TC-SW-E)

### Ceiling Cassette -4way- Compact type (FDTC)

| Models  |      |       | FDTC56KXZE1  |                        |  |
|---|------|-------|--|------------------------|--|
| Panel model (Option)                                      |      |       | Standard :TC-PSA-5AW-E<br>Draft prevention :TC-PSAE-5AW-E                    |                        |  |
| Nominal cooling capacity*1                                |      | kW    | 5.6  |                        |  |
| Nominal heating capacity*2                                |      |       | 6.3  |                        |  |
| Power source  |      |       | 220-240V ~ 50Hz / 220V ~ 60Hz  |                        |  |
| Power consumption   | Cool | kW    | 0.06 - 0.06 / 0.06   |                        |  |
|   | Heat |       | 0.06 - 0.06 / 0.06   |                        |  |
| Running current   | Cool | A     | 0.54 - 0.50 / 0.54   |                        |  |
|   | Heat |       | 0.54 - 0.50 / 0.54   |                        |  |
| Sound Pressure Level                                      | Cool | dB(A) | P-Hi : 47 Hi : 43 Me : 39 Lo : 31  |                        |  |
|   | Heat |       | P-Hi : 47 Hi : 43 Me : 39 Lo : 31  |                        |  |
| Sound Power Level   | Cool |       | 60   |                        |  |
|   | Heat |       | 60   |                        |  |
| Exterior dimensions                                       |      |       | mm   | Unit : 248 × 570 × 570 |  |
| Height x Width x Depth                                    |      |       |  | Panel : 10 × 620 × 620 |  |
| Exterior appearance<br>( Munsell color )<br>( RAL color ) |      |       | Fine snow<br>( 8.0Y9.3/0.1 ) near equivalent<br>( RAL 9001 ) near equivalent |                        |  |
| Net weight*3  |      | kg    | Unit : 14 Standard panel : 2.5   |                        |  |
| Refrigerant equipment Heat exchanger                      |      |       | Louver fin & inner grooved tubing  |                        |  |
| Refrigerant control                                       |      |       | Electronic Expansion Valve   |                        |  |
| Air handling equipment Fan type & Q'ty                    |      |       | Turbo fan × 1  |                        |  |
| Motor   |      | W     | 50   |                        |  |
| Starting method   |      |       | Direct line start  |                        |  |
| Air flow(Standard)  | Cool | CMM   | P-Hi : 14 Hi : 12 Me : 10 Lo : 8   |                        |  |
|   | Heat |       | P-Hi : 14 Hi : 12 Me : 10 Lo : 8   |                        |  |
| Available static pressure                                 |      | Pa    | 0  |                        |  |
| Outdoor air intake  |      |       | Possible   |                        |  |
| Air filter, Q'ty  |      |       | Pocket plastic net × 1 (Washable)  |                        |  |
| Shock & vibration absorber                                |      |       | Rubber sleeve(for fan motor)   |                        |  |
| Insulation (noise & heat)                                 |      |       | Polyurethane form  |                        |  |
| Operation control   |      |       | Wired : RC-E5, RC-EX3A, RCH-E3   |                        |  |
| Remote control switch ( option )                          |      |       | Wireless : RCN-TC-5AW-E2   |                        |  |
| Room temperature control                                  |      |       | Thermostat by electronics  |                        |  |
| Safety equipment  |      |       | Overload protection for fan motor<br>Frost protection thermostat             |                        |  |
| Installation data   |      |       | Liquid line: φ6.35 (1/4")  |                        |  |
| Refrigerant piping size                                   |      |       | Gas line: φ12.7 (1/2")   |                        |  |
| Connecting method   |      |       | Flare piping   |                        |  |
| Refrigerant   |      |       | R410A  |                        |  |
| Drain pump  |      |       | Built-in Drain pump  |                        |  |
| Drain hose  |      |       | Connectable with V P 2 5   |                        |  |
| Insulation for piping                                     |      |       | Necessary(both Liquid & Gas line)  |                        |  |
| Accessories   |      |       | Mounting kit, Drain hose   |                        |  |

Notes Adapted to **RoHS** directive

(1) The data are measured at the following conditions.

| Item      | Indoor air temperature |       | Outdoor air temperature |       | Standards |
|-----------|------------------------|-------|-------------------------|-------|-----------|
|           | DB                     | WB    | DB                      | WB    |           |
| Cooling*1 | 27 °C                  | 19 °C | 35 °C                   | 24 °C | ISO-T1    |
| Heating*2 | 20 °C                  |       | 7 °C                    | 6 °C  |           |

(2) This packaged air-conditioner is manufactured and tested in conformity with the following standard.

ISO-T1 "UNITARY AIR-CONDITIONERS"

(3) Draft prevention panel weight\*3 : 3.0kg (4) Option : Motion sensor kit (LB-TC-SW-E)

### Duct Connected -Middle static pressure- type (FDUM)

| Models                     |      |       | FDUM112KXE6F  |
|----------------------------|------|-------|---|
|                            |      |       | -   |
| Nominal cooling capacity   |      | kW    | 11.2  |
| Nominal heating capacity   |      |       | 12.5  |
| Power source               |      |       | 220-240V~ 50Hz / 220V~ 60Hz   |
| Power consumption          | Cool | kW    | 0.29 - 0.29 / 0.29  |
|                            | Heat |       | 0.29 - 0.29 / 0.29  |
| Running current            | Cool | A     | 1.32 - 1.21 / 1.32  |
|                            | Heat |       | 1.32 - 1.21 / 1.32  |
| Sound Pressure Level       |      | dB(A) | P-Hi : 44    Hi : 38    Me : 36    Lo : 30                                    |
| Exterior dimensions        |      | mm    | 280 × 1,370 × 740   |
| Height × Width × Depth     |      |       | -   |
|                            |      |       |   |
| Net weight                 |      | kg    | 54  |
| Refrigerant equipment      |      |       |   |
| Heat exchanger             |      |       | Louver fin & inner grooved tubing   |
| Refrigerant control        |      |       | Electronic Expansion Valve  |
| Air handling equipment     |      |       |   |
| Fan type & Q'ty            |      |       | Centrifugal fan ×3  |
| Motor                      |      | W     | 100 + 130   |
| Starting method            |      |       | Direct line start   |
| Air flow(Standard)         |      | CMM   | P-Hi : 36    Hi : 28    Me : 25    Lo : 19                                    |
| External static pressure   |      | Pa    | 100 (at 36 CMM)   |
| Outside air intake         |      |       | Possible  |
| Air filter, Q'ty           |      |       | Procure locally   |
| Shock & vibration absorber |      |       | Rubber sleeve(for fan motor)  |
| Insulation (noise & heat)  |      |       | Polyurethane form   |
| Operation control          |      |       | Remote control switch   |
| Operation switch           |      |       | Option: RC-EX1A, RC-E5  |
| Room temperature control   |      |       | Thermostat by electronics   |
| Safety equipment           |      |       | Overload protection for fan motor<br>Frost protection thermostat              |
| Installation data          |      |       | Liquid line: φ9.52 (3/8")<br>Gas line: φ15.88 (5/8")                          |
| Refrigerant piping size    |      |       |   |
| Connecting method          |      |       | Flare piping  |
| Refrigerant                |      |       | R410A   |
| Drain pump                 |      |       | Built-in Drain pump   |
| Drain hose                 |      |       | Connectable with V P 2 0 (Standard)<br>or V P 2 5 (used with attached socket) |
| Insulation for piping      |      |       | Necessary(both Liquid & Gas line)   |
| Accessories                |      |       | Drain hose  |

#### Notes

#### Adapted to RoHS directive

(1) The data are measured at the following conditions:

| Item    | Indoor air temperature |       | Outdoor air temperature |       | Standards | External static pressure of indoor unit<br>Pa |
|---------|------------------------|-------|-------------------------|-------|-----------|---|
|         | DB                     | WB    | DB                      | WB    |           |   |
| Cooling | 27 °C                  | 19 °C | 35 °C                   | 24 °C | ISO-T1    | 80  |
| Heating | 20 °C                  |       | 7 °C                    | 6 °C  |           |   |

(2) This packaged air-conditioner is manufactured and tested in conformity with the following standard:

ISO-T1 "UNITARY AIR-CONDITIONERS"

(3) Initial static pressure values of optional air filter "UM-FL2EF, 3EF" are 5Pa.

(4) When wireless remote controller is used, fan is 3 speed setting(Hi-Me-Lo) only.

### Duct Connected -Middle static pressure- type (FDUM)

| Models                     |      | FDUM140KXE6F  |                    |
|----------------------------|------|---|--------------------|
| Nominal cooling capacity   |      | 14.0  |                    |
| Nominal heating capacity   |      | 16.0  |                    |
| Power source               |      | 220-240V~ 50Hz / 220V~ 60Hz   |                    |
| Power consumption          | Cool | kW  | 0.33 - 0.33 / 0.33 |
|                            | Heat |   | 0.33 - 0.33 / 0.33 |
| Running current            | Cool | A   | 1.50 - 1.38 / 1.50 |
|                            | Heat |   | 1.50 - 1.38 / 1.50 |
| Sound Pressure Level       |      | dB(A) P-Hi : 45 Hi : 40 Me : 34 Lo : 29                                       |                    |
| Exterior dimensions        |      | mm 280 × 1,370 × 740  |                    |
| Height x Width x Depth     |      | -   |                    |
| Net weight                 |      | kg 54   |                    |
| Refrigerant equipment      |      | Louver fin & inner grooved tubing   |                    |
| Heat exchanger             |      | Electronic Expansion Valve  |                    |
| Refrigerant control        |      | -   |                    |
| Air handling equipment     |      | Centrifugal fan × 3   |                    |
| Fan type & Q'ty            |      | -   |                    |
| Motor                      |      | W 100 + 200   |                    |
| Starting method            |      | Direct line start   |                    |
| Air flow(Standard)         |      | CMM P-Hi : 39 Hi : 32 Me : 26 Lo : 20   |                    |
| External static pressure   |      | Pa 100 (at 39 CMM)  |                    |
| Outside air intake         |      | Possible  |                    |
| Air filter, Q'ty           |      | Procure locally   |                    |
| Shock & vibration absorber |      | Rubber sleeve(for fan motor)  |                    |
| Insulation (noise & heat)  |      | Polyurethane form   |                    |
| Operation control          |      | Remote control switch   |                    |
| Operation switch           |      | Option: RC-EX1A, RC-E5  |                    |
| Room temperature control   |      | Thermostat by electronics   |                    |
| Safety equipment           |      | Overload protection for fan motor<br>Frost protection thermostat              |                    |
| Installation data          |      | Liquid line: φ9.52 (3/8")<br>Gas line: φ15.88 (5/8")                          |                    |
| Refrigerant piping size    |      | Flare piping  |                    |
| Connecting method          |      | R410A   |                    |
| Refrigerant                |      | Built-in Drain pump   |                    |
| Drain pump                 |      | Connectable with V P 2 0 (Standard)<br>or V P 2 5 (used with attached socket) |                    |
| Drain hose                 |      | Necessary(both Liquid & Gas line)   |                    |
| Insulation for piping      |      | Drain hose  |                    |
| Accessories                |      | -   |                    |

#### \*Notes

#### Adapted to RoHS directive

| (1) The data are measured at the following conditions: |                        |       |                         |       |   |
|--|------------------------|-------|-------------------------|-------|---|
| Item   | Indoor air temperature |       | Outdoor air temperature |       | Standards                               |
| Operation  | DB                     | WB    | DB                      | WB    | External static pressure of indoor unit |
| Cooling  | 27 °C                  | 19 °C | 35 °C                   | 24 °C | Pa                                      |
| Heating  | 20 °C                  | 7 °C  | 7 °C                    | 6 °C  | ISO-T1                                  |

(2) This packaged air-conditioner is manufactured and tested in conformity with the following standard  
ISO-T1 "UNITARY AIR-CONDITIONERS"

(3) Initial static pressure values of optional air filter "UM-FL2EF, 3EF" are 5Pa

(4) When wireless remote controller is used, fan is 3 speed setting(Hi-Me-Lo) only.



### Duct Connected -Middle static pressure- type (FDUM)

| Models                     |      |       | FDUM160KXE6F  |
|----------------------------|------|-------|---|
|                            |      |       | -   |
| Nominal cooling capacity   |      | kW    | 16.0  |
| Nominal heating capacity   |      |       | 18.0  |
| Power source               |      |       | 220-240V~ 50Hz / 220V~ 60Hz   |
| Power consumption          | Cool | kW    | 0.45 - 0.45 / 0.45  |
|                            | Heat |       | 0.45 - 0.45 / 0.45  |
| Running current            | Cool | A     | 2.05 - 1.88 / 2.05  |
|                            | Heat |       | 2.05 - 1.88 / 2.05  |
| Sound Pressure Level       |      | dB(A) | P-Hi : 47    Hi : 40    Me : 35    Lo : 30                                    |
| Exterior dimensions        |      | mm    | 280 × 1,370 × 740   |
| Height x Width x Depth     |      |       |   |
|                            |      |       | -   |
| Net weight                 |      | kg    | 54  |
| Refrigerant equipment      |      |       | Louver fin & inner grooved tubing   |
| Heat exchanger             |      |       |   |
| Refrigerant control        |      |       | Electronic Expansion Valve  |
| Air handling equipment     |      |       | Centrifugal fan × 3   |
| Fan type & Q'ty            |      |       |   |
| Motor                      |      | W     | 100 + 200   |
| Starting method            |      |       | Direct line start   |
| Air flow(Standard)         |      | CMM   | P-Hi : 48    Hi : 35    Me : 28    Lo : 22                                    |
| External static pressure   |      | Pa    | 100 (at 48 CMM)   |
| Outside air intake         |      |       | Possible  |
| Air filter, Q'ty           |      |       | Procure locally   |
| Shock & vibration absorber |      |       | Rubber sleeve(for fan motor)  |
| Insulation (noise & heat)  |      |       | Polyurethane form   |
| Operation control          |      |       | Remote control switch   |
| Operation switch           |      |       | Option: RC-EX1A, RC-E5  |
| Room temperature control   |      |       | Thermostat by electronics   |
| Safety equipment           |      |       | Overload protection for fan motor<br>Frost protection thermostat              |
| Installation data          |      |       | Liquid line: φ 9.52 (3/8")<br>Gas line: φ 15.88 (5/8")                        |
| Refrigerant piping size    |      |       |   |
| Connecting method          |      |       | Flare piping  |
| Refrigerant                |      |       | R410A   |
| Drain pump                 |      |       | Built-in Drain pump   |
| Drain hose                 |      |       | Connectable with V P 2 0 (Standard)<br>or V P 2 5 (used with attached socket) |
| Insulation for piping      |      |       | Necessary(both Liquid & Gas line)   |
| Accessories                |      |       | Drain hose  |

#### Notes

#### Adapted to RoHS directive

(1) The data are measured at the following conditions:

| Item      | Indoor air temperature |       | Outdoor air temperature |       | Standards | External static pressure of indoor unit |
|-----------|------------------------|-------|-------------------------|-------|-----------|---|
| Operation | DB                     | WB    | DB                      | WB    |           | Pa                                      |
| Cooling   | 27 °C                  | 19 °C | 35 °C                   | 24 °C | ISO-T1    | 80                                      |
| Heating   | 20 °C                  |       | 7 °C                    | 6 °C  |           |   |

(2) This packaged air-conditioner is manufactured and tested in conformity with the following standard:

ISO-T1 "UNITARY AIR-CONDITIONERS"

(3) Initial static pressure values of optional air filter "UM-FL2EF,3EF" are 5Pa.

(4) When wireless remote controller is used, fan is 3 speed setting(Hi-Me-Lo) only.



### Duct Connected -Middle static pressure- type (FDUM)

| Models                     |       | FDUM56KXE6F   |                    |
|----------------------------|-------|---|--------------------|
|                            |       |   |                    |
| Nominal cooling capacity   | kW    | 5.6   |                    |
| Nominal heating capacity   |       | 6.3   |                    |
| Power source               |       | 220-240V~ 50Hz / 220V~ 60Hz   |                    |
| Power consumption          | Cool  | kW  | 0.10 - 0.10 / 0.10 |
|                            | Heat  |   | 0.10 - 0.10 / 0.10 |
| Running current            | Cool  | A   | 0.46 - 0.42 / 0.46 |
|                            | Heat  |   | 0.46 - 0.42 / 0.46 |
| Sound Pressure Level       | dB(A) | P-Hi : 37 Hi : 32 Me : 29 Lo : 26   |                    |
| Exterior dimensions        | mm    | 280 × 750 × 635   |                    |
| Height x Width x Depth     |       |   |                    |
|                            |       |   |                    |
| Net weight                 | kg    | 29  |                    |
| Refrigerant equipment      |       |   |                    |
| Heat exchanger             |       | Louver fin & inner grooved tubing   |                    |
| Refrigerant control        |       | Electronic Expansion Valve  |                    |
| Air handling equipment     |       |   |                    |
| Fan type & Q'ty            |       | Centrifugal fan × 1   |                    |
| Motor                      | W     | 100   |                    |
| Starting method            |       | Direct line start   |                    |
| Air flow(Standard)         | CMM   | P-Hi : 13 Hi : 10 Me : 9 Lo : 8   |                    |
| External static pressure   | Pa    | 100(at 13 CMM)  |                    |
| Outside air intake         |       | Possible  |                    |
| Air filter, Q'ty           |       | Procure locally   |                    |
| Shock & vibration absorber |       | Rubber sleeve(for fan motor)  |                    |
| Insulation (noise & heat)  |       | Polyurethane form   |                    |
| Operation control          |       | Remote control switch   |                    |
| Operation switch           |       | Option: RC-EX1A, RC-E5  |                    |
| Room temperature control   |       | Thermostat by electronics   |                    |
| Safety equipment           |       | Overload protection for fan motor<br>Frost protection thermostat              |                    |
| Installation data          |       | Liquid line: φ 6.35 (1/4")<br>Gas line: φ 12.7 (1/2")                         |                    |
| Refrigerant piping size    |       |   |                    |
| Connecting method          |       | Flare piping  |                    |
| Refrigerant                |       | R410A   |                    |
| Drain pump                 |       | Built-in Drain pump   |                    |
| Drain hose                 |       | Connectable with V P 2 0 (Standard)<br>or V P 2 5 (used with attached socket) |                    |
| Insulation for piping      |       | Necessary(both Liquid & Gas line)   |                    |
| Accessories                |       | Drain hose  |                    |

#### Notes

#### Adapted to RoHS directive

(1) The data are measured at the following conditions

| Item      | Indoor air temperature |       | Outdoor air temperature |       | Standards | External static pressure of indoor unit |
|-----------|------------------------|-------|-------------------------|-------|-----------|---|
|           | DB                     | WB    | DB                      | WB    |           | Pa                                      |
| Operation | 27 °C                  | 19 °C | 35 °C                   | 24 °C | ISO-T1    | 35                                      |
| Cooling   |                        |       |                         |       |           |   |
| Heating   | 20 °C                  |       | 7 °C                    | 6 °C  |           |   |

(2) This packaged air-conditioner is manufactured and tested in conformity with the following standard  
ISO-T1 "UNITARY AIR-CONDITIONERS"

(3) Initial static pressure values of optional air filter "UM-FL1EF" are 5Pa.

(4) When wireless remote controller is used, fan is 3 speed setting(Hi-Me-Lo) only

### Duct Connected -Middle static pressure- type (FDUM)

| Models                     |      |       | FDUM71KXE6F   |
|----------------------------|------|-------|---|
|                            |      |       | -   |
| Nominal cooling capacity   |      | kW    | 7.1   |
| Nominal heating capacity   |      |       | 8.0   |
| Power source               |      |       | 220-240V~ 50Hz / 220V~ 60Hz   |
| Power consumption          | Cool | kW    | 0.20 - 0.20 / 0.20  |
|                            | Heat |       | 0.20 - 0.20 / 0.20  |
| Running current            | Cool | A     | 0.91 - 0.83 / 0.91  |
|                            | Heat |       | 0.91 - 0.83 / 0.91  |
| Sound Pressure Level       |      | dB(A) | P-Hi : 38    Hi : 33    Me : 29    Lo : 25                                    |
| Exterior dimensions        |      | mm    | 280 × 950 × 635   |
| Height × Width × Depth     |      |       |   |
|                            |      |       | -   |
| Net weight                 |      | kg    | 34  |
| Refrigerant equipment      |      |       | Louver fin & inner grooved tubing   |
| Heat exchanger             |      |       |   |
| Refrigerant control        |      |       | Electronic Expansion Valve  |
| Air handling equipment     |      |       |   |
| Fan type & Q'ty            |      |       | Centrifugal fan × 2   |
| Motor                      |      | W     | 130   |
| Starting method            |      |       | Direct line start   |
| Air flow(Standard)         |      | CMM   | P-Hi : 24    Hi : 19    Me : 15    Lo : 10                                    |
| External static pressure   |      | Pa    | 100 (at 24 CMM)   |
| Outside air intake         |      |       | Possible  |
| Air filter, Q'ty           |      |       | Procure locally   |
| Shock & vibration absorber |      |       | Rubber sleeve(for fan motor)  |
| Insulation (noise & heat)  |      |       | Polyurethane form   |
| Operation control          |      |       | Remote control switch   |
| Operation switch           |      |       | Option: RC-EX1A, RC-E5  |
| Room temperature control   |      |       | Thermostat by electronics   |
| Safety equipment           |      |       | Overload protection for fan motor<br>Frost protection thermostat              |
| Installation data          |      |       | Liquid line: φ 9.52 (3/8")<br>Gas line: φ 15.88 (5/8")                        |
| Refrigerant piping size    |      |       |   |
| Connecting method          |      |       | Flare piping  |
| Refrigerant                |      |       | R410A   |
| Drain pump                 |      |       | Built-in Drain pump   |
| Drain hose                 |      |       | Connectable with V P 2 0 (Standard)<br>or V P 2 5 (used with attached socket) |
| Insulation for piping      |      |       | Necessary(both Liquid & Gas line)   |
| Accessories                |      |       | Drain hose  |

#### Notes

#### Adapted to RoHS directive

(1) The data are measured at the following conditions:

| Item    | Indoor air temperature |       | Outdoor air temperature |       | Standards | External static pressure of indoor unit<br>Pa |
|---------|------------------------|-------|-------------------------|-------|-----------|---|
|         | DB                     | WB    | DB                      | WB    |           |   |
| Cooling | 27 °C                  | 19 °C | 35 °C                   | 24 °C | ISO-T1    | 35  |
| Heating | 20 °C                  | -     | 7 °C                    | 6 °C  |           |   |

(2) This packaged air-conditioner is manufactured and tested in conformity with the following standard:

ISO-T1 "UNITARY AIR-CONDITIONERS"

(3) Initial static pressure values of optional air filter "UM-FL2EF,3EF" are 5Pa.

(4) When wireless remote controller is used, fan is 3 speed setting(Hi-Me-Lo) only.

### Duct Connected -Middle static pressure- type (FDUM)

| Models                     |      |       | FDUM90KXE6F   |
|----------------------------|------|-------|---|
|                            |      |       | -   |
| Nominal cooling capacity   |      | kW    | 9.0   |
| Nominal heating capacity   |      |       | 10.0  |
| Power source               |      |       | 220-240V~ 50Hz / 220V~ 60Hz   |
| Power consumption          | Cool | kW    | 0.20 - 0.20 / 0.20  |
|                            | Heat |       | 0.20 - 0.20 / 0.20  |
| Running current            | Cool | A     | 0.91 - 0.83 / 0.91  |
|                            | Heat |       | 0.91 - 0.83 / 0.91  |
| Sound Pressure Level       |      | dB(A) | P-Hi : 38    Hi : 33    Me : 29    Lo : 25                                    |
| Exterior dimensions        |      | mm    | 280 × 950 × 635   |
| Height x Width x Depth     |      |       | -   |
|                            |      |       | -   |
| Net weight                 |      | kg    | 34  |
| Refrigerant equipment      |      |       | Louver fin & inner grooved tubing   |
| Heat exchanger             |      |       |   |
| Refrigerant control        |      |       | Electronic Expansion Valve  |
| Air handling equipment     |      |       | Centrifugal fan × 2   |
| Fan type & Q'ty            |      |       |   |
| Motor                      |      | W     | 130   |
| Starting method            |      |       | Direct line start   |
| Air flow(Standard)         |      | CMM   | P-Hi : 24    Hi : 19    Me : 15    Lo : 10                                    |
| External static pressure   |      | Pa    | 100 (at 24 CMM)   |
| Outside air intake         |      |       | Possible  |
| Air filter, Q'ty           |      |       | Procure locally   |
| Shock & vibration absorber |      |       | Rubber sleeve(for fan motor)  |
| Insulation (noise & heat)  |      |       | Polyurethane form   |
| Operation control          |      |       | Remote control switch   |
| Operation switch           |      |       | Option: RC-EX1A, RC-E5  |
| Room temperature control   |      |       | Thermostat by electronics   |
| Safety equipment           |      |       | Overload protection for fan motor<br>Frost protection thermostat              |
| Installation data          |      |       | Liquid line: φ 9.52 (3/8")<br>Gas line: φ 15.88 (5/8")                        |
| Refrigerant piping size    |      |       |   |
| Connecting method          |      |       | Flare piping  |
| Refrigerant                |      |       | R410A   |
| Drain pump                 |      |       | Built-in Drain pump   |
| Drain hose                 |      |       | Connectable with V P 2 0 (Standard)<br>or V P 2 5 (used with attached socket) |
| Insulation for piping      |      |       | Necessary(both Liquid & Gas line)   |
| Accessories                |      |       | Drain hose  |

#### Notes

#### Adapted to RoHS directive

| (1) The data are measured at the following conditions: |                        |       |                         |       |   |
|--|------------------------|-------|-------------------------|-------|---|
| Item   | Indoor air temperature |       | Outdoor air temperature |       | Standards                               |
| Operation  | DB                     | WB    | DB                      | WB    | External static pressure of indoor unit |
| Cooling  | 27 °C                  | 19 °C | 35 °C                   | 24 °C | Pa                                      |
| Heating  | 20 °C                  | 7 °C  | 7 °C                    | 6 °C  | ISO-T1                                  |

(2) This packaged air-conditioner is manufactured and tested in conformity with the following standard

ISO-T1 "UNITARY AIR-CONDITIONERS"

(3) Initial static pressure values of optional air filter "UM-FL2EF,3EF" are 5Pa.

(4) When wireless remote controller is used, fan is 3 speed setting(Hi-Me-Lo) only.

### Duct Connected (Thin) -Low static pressure- type (FDUT)

| Models                         |      |       | FDUT15KXE6F-E                          |
|--------------------------------|------|-------|--|
|                                |      |       | Rear air return                        |
| Nominal cooling capacity       | kW   | 1.5   |  |
| Nominal heating capacity       |      | 1.7   |  |
| Power source                   |      |       | 220-240V~ 50Hz / 220~60Hz              |
| Power consumption              | Cool | kW    | 0.06-0.06/0.06                         |
|                                | Heat |       | 0.06-0.06/0.06                         |
| Running current                | Cool | A     | 0.27-0.27/0.27                         |
|                                | Heat |       | 0.27-0.27/0.27                         |
| Sound Pressure Level ①         |      | dB(A) | Hi : 28 Me : 26 Lo : 22                |
| Sound Pressure Level ②         |      | dB(A) | Hi : 32 Me : 29 Lo : 25                |
| Exterior dimensions            |      | mm    | 200x750x500                            |
| Height x Width x Depth         |      |       |  |
| Net weight                     |      | kg    | 21                                     |
| Refrigerant equipment          |      |       | Louver fin & inner grooved tubing      |
| Heat exchanger                 |      |       |  |
| Refrigerant control            |      |       | Electronic Expansion Valve             |
| Air handling equipment         |      |       | Centrifugal fan x2                     |
| Fan type & Qty                 |      |       |  |
| Motor                          |      | W     | 14                                     |
| Starting method                |      |       | Direct line start                      |
| Air flow                       |      | CMM   | Hi : 6 Me : 5 Lo : 4                   |
| External static pressure       |      | Pa    | Standard: 10, Max: 35                  |
| Outside air intake             |      |       | —                                      |
| Suction guard(Air filter), Qty |      |       | Procure locally                        |
| Shock & vibration absorber     |      |       | Rubber sleeve(for fan motor)           |
| Insulation (noise & heat)      |      |       | Polyurethane foam                      |
| Operation control              |      |       | Remote control switch                  |
| Operation switch               |      |       | Option: RC-E5, RC-EX1A                 |
| Room temperature control       |      |       | Thermostat by electronics              |
| Safety equipment               |      |       | Internal thermostat for fan motor      |
|                                |      |       | Frost protection thermostat            |
| Installation data              |      |       | Liquid line: φ6.35 (1/4")              |
| Refrigerant piping size        |      |       | Gas line: φ9.52 (3/8")                 |
| Connecting method              |      |       | Flare piping                           |
| Refrigerant                    |      |       | R410A                                  |
| Drain pump                     |      |       | Built-in Drain pump                    |
| Drain hose                     |      |       | Connectable with VP25 (I.D.25, O.D.32) |
| Insulation for piping          |      |       | Necessary(both Liquid & Gas line)      |
| Accessories                    |      |       | Mouting Kit, Joint for drain piping    |

Adapted to **RoHS** directive

#### Notes

(1) The data are measured as:

| Item      | Indoor air temperature |       | Outdoor air temperature |       | Standards | External static pressure of indoor unit |
|-----------|------------------------|-------|-------------------------|-------|-----------|---|
| Operation | DB                     | WB    | DB                      | WB    |           | Pa                                      |
| Cooling   | 27 °C                  | 19 °C | 35 °C                   | 24 °C | ISO-T1    | 10                                      |
| Heating   | 20 °C                  | 7 °C  | 7 °C                    | 6 °C  |           |   |

(2) Sound Pressure Level shows the value when the supply duct of 2m and the return duct of 1m are connected the unit.

(3) This packaged air-conditioner is manufactured and tested in conformity with the following standard.

ISO-T1 "UNITARY AIR-CONDITIONERS"

(4) Sound Pressure Level ① : Mike position is 1.5m below the unit, ② : Mike position is 1m in front and 1m below of the air supply duct.

(5) Initial static pressure value of optional suction guard(Air filter) "UT-FLS1EF-10" is 5Pa.

### Duct Connected (Thin) -Low static pressure- type (FDUT)

| Models                          |       | FDUT22KXE6F-E  |                         |
|---------------------------------|-------|--|-------------------------|
|                                 |       | Rear air return  |                         |
| Nominal cooling capacity        | kW    | 2.2  |                         |
| Nominal heating capacity        |       | 2.5  |                         |
| Power source                    |       | 220-240V ~ 50Hz / 220 ~ 60Hz                                     |                         |
| Power consumption               | Cool  | kW   | 0.07-0.07/0.07          |
|                                 | Heat  |  | 0.07-0.07/0.08          |
| Running current                 | Cool  | A  | 0.28-0.25/0.30          |
|                                 | Heat  |  | 0.29-0.25/0.31          |
| Sound Pressure Level ①          | dB(A) |  | Hi : 30 Me : 26 Lo : 21 |
| Sound Pressure Level ②          | dB(A) |  | Hi : 32 Me : 29 Lo : 25 |
| Exterior dimensions             | mm    |  | 200x750x500             |
| Height x Width x Depth          |       |  |                         |
| Net weight                      | kg    | 21   |                         |
| Refrigerant equipment           |       | Louver fin & inner grooved tubing                                |                         |
| Heat exchanger                  |       |  |                         |
| Refrigerant control             |       | Electronic Expansion Valve                                       |                         |
| Air handling equipment          |       | Centrifugal fan x2   |                         |
| Fan type & Q'ty                 |       |  |                         |
| Motor                           | W     | 14   |                         |
| Starting method                 |       | Direct line start  |                         |
| Air flow                        | CMM   | Hi : 7.5 Me : 6 Lo : 5   |                         |
| External static pressure        | Pa    | Standard: 10, Max: 35  |                         |
|                                 |       |  |                         |
| Outside air intake              |       | —  |                         |
| Suction guard(Air filter), Q'ty |       | Procure locally  |                         |
| Shock & vibration absorber      |       | Rubber sleeve(for fan motor)                                     |                         |
| Insulation (noise & heat)       |       | Polyurethane form  |                         |
| Operation control               |       | Remote control switch  |                         |
| Operation switch                |       | Option: RC-E4,RC-E5,RC-EX1A                                      |                         |
| Room temperature control        |       | Thermostat by electronics  |                         |
| Safety equipment                |       | Internal thermostat for fan motor<br>Frost protection thermostat |                         |
| Installation data               |       | Liquid line: φ6.35 (1/4")  |                         |
| Refrigerant piping size         |       | Gas line: φ9.52 (3/8")   |                         |
| Connecting method               |       | Flare piping   |                         |
| Refrigerant                     |       | R410A  |                         |
| Drain pump                      |       | Built-in Drain pump  |                         |
| Drain hose                      |       | Connectable with VP25 (I.D.25, O.D.32)                           |                         |
| Insulation for piping           |       | Necessary(both Liquid & Gas line)                                |                         |
| Accessories                     |       | Mounting Kit, Joint for drain piping                             |                         |

#### Notes

(1) The data are measured as:

| Item      | Indoor air temperature |       | Outdoor air temperature |       | Standards | External static pressure of indoor unit |
|-----------|------------------------|-------|-------------------------|-------|-----------|---|
| Operation | DB                     | WB    | DB                      | WB    |           | Pa                                      |
| Cooling   | 27 °C                  | 19 °C | 35 °C                   | 24 °C | ISO-T1    | 10                                      |
| Heating   | 20 °C                  |       | 7 °C                    | 6 °C  |           |   |

(2) Sound Pressure Level shows the value when the supply duct of 2m and the return duct of 1m are connected the unit.

(3) This packaged air-conditioner is manufactured and tested in conformity with the following standard.

ISO-T1 "UNITARY AIR-CONDITIONERS"

(4) Sound Pressure Level ① : Mike position is 1.5m below the unit. ② : Mike position is 1m in front and 1m below of the air supply duct.

(5) Initial static pressure value of optional suction guard(Air filter) "UT-FLS1EF-10" is 5Pa.

Adapted to **RoHS** directive



### Duct Connected (Thin) -Low static pressure- type (FDUT)

| Models                          |       |     | FDUT28KXE6F-E  |
|---------------------------------|-------|-----|--|
|                                 |       |     | Rear air return  |
| Nominal cooling capacity        | kW    | 2.8 |  |
| Nominal heating capacity        |       | 3.2 |  |
| Power source                    |       |     | 220-240V ~ 50Hz / 220~60Hz                                       |
| Power consumption               | Cool  | kW  | 0.07-0.07/0.07   |
|                                 | Heat  |     | 0.07-0.07/0.08   |
| Running current                 | Cool  | A   | 0.28-0.25/0.30   |
|                                 | Heat  |     | 0.29-0.25/0.31   |
| Sound Pressure Level ①          | dB(A) |     | Hi : 30 Me : 26 Lo : 21  |
| Sound Pressure Level ②          | dB(A) |     | Hi : 32 Me : 29 Lo : 25  |
| Exterior dimensions             |       |     |  |
| Height x Width x Depth          |       |     | 200x750x500  |
| Net weight                      |       |     | 21   |
| Refrigerant equipment           |       |     | Louver fin & inner grooved tubing                                |
| Heat exchanger                  |       |     |  |
| Refrigerant control             |       |     | Electronic Expansion Valve                                       |
| Air handling equipment          |       |     | Centrifugal fan x2   |
| Fan type & Q'ty                 |       |     |  |
| Motor                           |       | W   | 14   |
| Starting method                 |       |     | Direct line start  |
| Air flow                        | CMM   |     | Hi : 7.5 Me : 6 Lo : 5   |
| External static pressure        |       | Pa  | Standard: 10, Max: 35  |
| Outside air intake              |       |     | —  |
| Suction guard(Air filter), Q'ty |       |     | Procure locally  |
| Shock & vibration absorber      |       |     | Rubber sleeve(for fan motor)                                     |
| Insulation (noise & heat)       |       |     | Polyurethane form  |
| Operation control               |       |     | Remote control switch  |
| Operation switch                |       |     | Option: RC-E4,RC-E5,RC-EX1A                                      |
| Room temperature control        |       |     | Thermostat by electronics  |
| Safety equipment                |       |     | Internal thermostat for fan motor<br>Frost protection thermostat |
| Installation data               |       |     | Liquid line: φ6.35 (1/4")  |
| Refrigerant piping size         |       |     | Gas line: φ9.52 (3/8")   |
| Connecting method               |       |     | Flare piping   |
| Refrigerant                     |       |     | R410A  |
| Drain pump                      |       |     | Built-in Drain pump  |
| Drain hose                      |       |     | Connectable with VP25 (I.D.25, O.D.32)                           |
| Insulation for piping           |       |     | Necessary(both Liquid & Gas line)                                |
| Accessories                     |       |     | Mouting Kit, Joint for drain piping                              |

Adapted to **RoHS** directive

#### Notes

(1) The data are measured as

| Item    | Indoor air temperature |       | Outdoor air temperature |       | Standards | External static pressure of indoor unit<br>Pa |
|---------|------------------------|-------|-------------------------|-------|-----------|---|
|         | DB                     | WB    | DB                      | WB    |           |   |
| Cooling | 27 °C                  | 19 °C | 35 °C                   | 24 °C | ISO-T1    | 10  |
| Heating | 20 °C                  |       | 7 °C                    | 6 °C  |           |   |

(2) Sound Pressure Level shows the value when the supply duct of 2m and the return duct of 1m are connected the unit.

(3) This packaged air-conditioner is manufactured and tested in conformity with the following standard.

ISO-T1 "UNITARY AIR-CONDITIONERS"

(4) Sound Pressure Level ① : Mike position is 1.5m below the unit. ② : Mike position is 1m in front and 1m below of the air supply duct.

(5) Initial static pressure value of optional suction guard(Air filter) "UT-FLS1EF-10" is 5Pa.

## SC-SL4-AE, SC-SL4-BE

| Description                             |  | CENTRAL CONTROL, SC-SL4-AE  | CENTRAL CONTROL, SC-SL4-BE           |
|---|--|---|--------------------------------------|
| Model name                              |  | SC-SL4-AE   | SC-SL4-BE                            |
| Applicable model                        |  | Super Link compatible indoor unit <sup>(1)</sup>  |                                      |
| Ambient temperature at operation        |  | 0 ~ 40 °C   |                                      |
| Power supply                            |  | 1 phase 100 V, 200 ~ 240 V 50/60 Hz   |                                      |
| Power consumption                       |  | 9W  |                                      |
| External dimensions (H×W×D)             |  | 172mm×250mm×(23±70)mm <sup>(2)</sup>  |                                      |
| Net weight                              |  | 2kg   |                                      |
| LCD touch panel <sup>(3) (6)</sup>      |  | Color LCD, 9 inch wide  |                                      |
| Max. number of connectable indoor units |  | New SL: Max. 128 units×1 network,<br>Previous SL: Max. 48 units×3 networks = Max. 144 units   |                                      |
| Input                                   | Super Link input                           | New SL: 1 network, Previous SL: 3 networks  |                                      |
|   | Gas power pulse input <sup>(4)</sup>       | —   | 8 points, pulse width 100 ms or more |
|   | Emergency stop signal input <sup>(4)</sup> | 1 point, Non-voltage contact point "a" input, Continuous input<br>(Open/Close/Stop & Center)  |                                      |
|   | Demand signal input <sup>(5)</sup>         | 2 point, Non-voltage contact point "a" input, Continuous input<br>(Open → Close Demand control)   |                                      |
| Output                                  | Operation output                           | 1 point, Maximum rated current 40 mA, DC24V<br>All indoor units at stop: Open, If there is any unit operating: Close  |                                      |
|   | Error output                               | 1 point, Maximum rated current 40 mA, DC24V<br>All indoor units at normal: Close, If there is any error unit: open <sup>(7)</sup>   |                                      |
| Selection of language                   |  | English or Spanish can be selected as the default language.<br>If a language is optional/registered beforehand,<br>one of major European languages can be used on the display. <sup>(9)</sup> |                                      |

Notes (1) Some of the new functions cannot be used depending on the indoor unit model.

(2) 20 indicates embossed portion in the wall.

(3) The receiving side power supply is DC12V (10 mA).

(4) When the energy consumption calculation is required, use SC-SL4-BE.

(5) The life of LCD backlight is around 80,000 hours.

(6) Durability of touch panel is around 10 million times.

(7) On the "Function Setting" screen, it is possible to change the batch error output to normally Open and Close at error occurrence.

(8) The energy consumption calculated by this unit does not conform to GEM, and there are no guarantees concerning the results of the calculations.

This unit calculates only energy consumption distribution (electric power).

You need to calculate the air-conditioning rates.

(9) For the editing software and contents, refer to the Technical manual 110-SC-T-152 or -153.

## Range of usage & limitations

### FDC121KXZEN1, 121KXZES1, 140KXZEN1, 140KXZES1, 155KXZEN1, 155KXZES1

| System  |                           | FDC121KXZEN1<br>121KXZES1  | FDC140KXZEN1<br>140KXZES1 | FDC155KXZEN1<br>155KXZES1 |
|---|---------------------------|--|---------------------------|---------------------------|
| Item  |                           |  |                           |                           |
| Indoor intake air temperature<br>(Upper, lower limits)                        |                           | Please see the next page.  |                           |                           |
| Outdoor air temperature<br>(Upper, lower limits)                              |                           |  |                           |                           |
| Indoor units<br>that can be<br>used in<br>combination                         | Number of connected units | 1 to 8 units   | 1 to 10 units*            | 1 to 10 units*            |
|   | Total capacity            | 97 - 181   | 112 - 210                 | 124 - 233                 |
| Total Piping Length<br>(Total of the lengths of all piping)                   |                           | MAX. 100m  |                           |                           |
| Maximum Piping Distance<br>(From outdoor unit to farthest indoor unit)        |                           | Indoor unit MAX. 70m   |                           |                           |
| Total length of ø9.52 liquid pipe   |                           | Within 50 m  |                           |                           |
| Difference in<br>height between<br>indoor and outdoor<br>units                | Outdoor unit is higher    | MAX. 30m   |                           |                           |
|   | Outdoor unit is lower     | MAX. 15m   |                           |                           |
| Difference in height between indoor units                                     |                           | MAX. 15m   |                           |                           |
| Permissible height difference<br>between the first branch and the indoor unit |                           |  |                           |                           |
| Indoor unit atmosphere (behind ceiling)<br>temperature and humidity           |                           | Dew point temperature 28 ℃ or less, relative humidity 80% or less                            |                           |                           |
| Compressor<br>stop/start<br>frequency   | 1 cycle time              | 5 min or more (≥ minutes or more from start to stop or 3 minutes or more from stop to start) |                           |                           |
|   | Stop time                 | 3 min or more  |                           |                           |
| Power source<br>voltage   | Voltage fluctuation       | Within ±10% of rated voltage   |                           |                           |
|   | Voltage drop during start | Within ±15% of rated voltage   |                           |                           |
|   | Phase unbalance           | Within ±3% of rated voltage  |                           |                           |

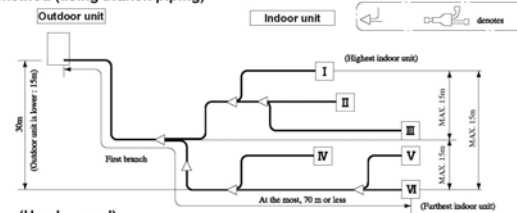
\*When connecting 9 units or more, set the connectable capacity as follows :

140 : 110% or less

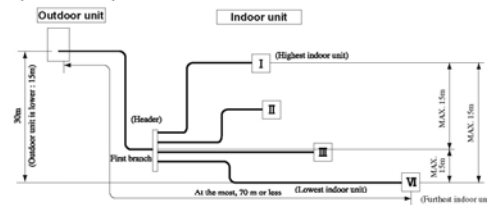
155 : 100% or less

Allowable length of refrigerant piping, height difference between indoor and outdoor unit

#### (1) Branch pipe method (using branch piping)



#### (2) Header System (Header used)



Notes (1) There is no limit to the permissible piping lengths for the main pipes or other piping, but keep furthest indoor unit piping to 50m with a diameter of ø9.52.

(2) A branch piping system cannot be connected after a header system.



### Range of usage & limitations

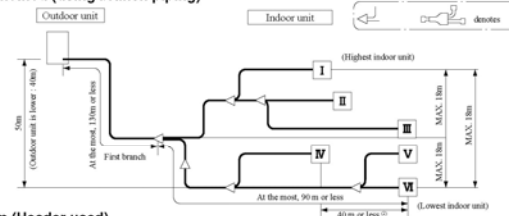
**FDC224KXZME1, 280KXZME1, 335KXZME1A**

| System   |                                     | FDC224KXZME1  | FDC280KXZME1  | FDC335KXZME1A |
|--|-------------------------------------|---|---|---------------|
| Indoor intake air temperature<br>(Upper, lower limits)   |                                     | Please see the next page.   |   |               |
| Outdoor air temperature<br>(Upper, lower limits)   |                                     |   |   |               |
| Indoor units<br>that can be<br>used in<br>combination  | Number of connected units           | 1 to 22 unit  | 1 to 24 unit  | 1 to 24 unit  |
|  | Connectable capacity <sup>(1)</sup> | 112 - 336   | 140 - 420   | 167 - 502     |
| Total piping length  |                                     |   | 510m or less  |               |
| Main pipe length   |                                     |   | 130m or less  |               |
| Single direction piping length   |                                     |   | Actual length : 160m or less, Equivalent length : 165m or less                          |               |
| Allowable pipe length from the first branching   |                                     |   | 90m or less (However, difference between the longest and shortest piping : 40m or less) |               |
| Elevation difference between the first branching point and the indoor unit   |                                     |   | 18m or less   |               |
| Difference in<br>height between<br>indoor and outdoor<br>units   | Outdoor unit is higher              | 50m or less   |   |               |
|  | Outdoor unit is lower               | 40m or less   |   |               |
| Difference in the elevation of Indoor units in a system  |                                     |   | 18m or less   |               |
| Indoor unit atmosphere (behind ceiling)<br>temperature and humidity<br>(Only models FDT, FDTG, FDTW, FDTS, FDTG,<br>FDU, FDUW, FDUH) |                                     | Dew point temperature 28 °C or less, relative humidity 80% or less<br>(FDE, FDK, FDFL, FDFU : Dew point temperature 23 °C or less, relative humidity 80% or less) |   |               |
| Compressor<br>stop/start<br>frequency  | 1 cycle time                        | 6 min or more (3 minutes or more from start to stop or 3 minutes or more from stop to start)  |   |               |
|  | Stop time                           | 3 min or more   |   |               |
| Power source<br>voltage  | Voltage fluctuation                 | Within ±10% of rated voltage  |   |               |
|  | Voltage drop during start           | Within ±15% of rated voltage  |   |               |
|  | Phase unbalance                     | Within ±3% of rated voltage   |   |               |

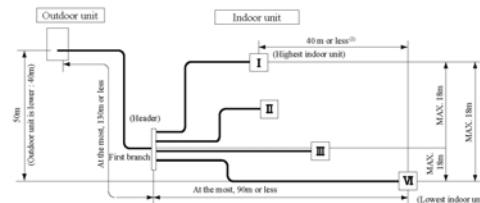
Note(1) If superlink I (previous superlink) is selected, all the range of usage and limitations, not only the limitations of connectable indoor capacity and connectable number of indoor unit but also of the piping length, operating temperature range and etc., become same as those of KX4 (See technical manual '07・KX・KXR-T-114). In addition to above limitations, all of new functions for KX6 such as automatic address setting function for multiple refrigerant systems and etc. will be cancelled.

| Allowable length of refrigerant piping, height difference between indoor and outdoor unit  |
|--|
| <p>① R410A system</p> <p>② R32 system</p> <p>③ R407C system</p> <p>④ R404A system</p> <p>⑤ R408A system</p> <p>⑥ R409A system</p> <p>⑦ R409B system</p> <p>⑧ R409C system</p> <p>⑨ R409D system</p> <p>⑩ R409E system</p> <p>⑪ R409F system</p> <p>⑫ R409G system</p> <p>⑬ R409H system</p> <p>⑭ R409I system</p> <p>⑮ R409J system</p> <p>⑯ R409K system</p> <p>⑰ R409L system</p> <p>⑱ R409M system</p> <p>⑲ R409N system</p> <p>⑳ R409O system</p> <p>㉑ R409P system</p> <p>㉒ R409Q system</p> <p>㉓ R409R system</p> <p>㉔ R409S system</p> <p>㉕ R409T system</p> <p>㉖ R409U system</p> <p>㉗ R409V system</p> <p>㉘ R409W system</p> <p>㉙ R409X system</p> <p>㉚ R409Y system</p> <p>㉛ R409Z system</p> <p>㉜ R409AA system</p> <p>㉝ R409AB system</p> <p>㉞ R409AC system</p> <p>㉟ R409AD system</p> <p>㊱ R409AE system</p> <p>㊲ R409AF system</p> <p>㊳ R409AG system</p> <p>㊴ R409AH system</p> <p>㊵ R409AI system</p> <p>㊶ R409AJ system</p> <p>㊷ R409AK system</p> <p>㊸ R409AL system</p> <p>㊹ R409AM system</p> <p>㊺ R409AN system</p> <p>㊻ R409AO system</p> <p>㊼ R409AP system</p> <p>㊽ R409AQ system</p> <p>㊾ R409AR system</p> <p>㊿ R409AS system</p> <p>㉑ R409AT system</p> <p>㉒ R409AU system</p> <p>㉓ R409AV system</p> <p>㉔ R409AW system</p> <p>㉕ R409AX system</p> <p>㉖ R409AY system</p> <p>㉗ R409AZ system</p> <p>㉘ R409BA system</p> <p>㉙ R409BB system</p> <p>㉚ R409BC system</p> <p>㉛ R409BD system</p> <p>㉜ R409BE system</p> <p>㉝ R409BF system</p> <p>㉞ R409BG system</p> <p>㉟ R409BH system</p> <p>㊱ R409BI system</p> <p>㊲ R409BJ system</p> <p>㊳ R409BK system</p> <p>㊴ R409BL system</p> <p>㊵ R409BM system</p> <p>㊶ R409BN system</p> <p>㊷ R409BO system</p> <p>㊸ R409BP system</p> <p>㊹ R409BQ system</p> <p>㊺ R409BR system</p> <p>㊻ R409BS system</p> <p>㊼ R409BT system</p> <p>㊽ R409BU system</p> <p>㊾ R409BV system</p> <p>㊿ R409BW system</p> <p>㉑ R409BX system</p> <p>㉒ R409BY system</p> <p>㉓ R409BZ system</p> <p>㉔ R409CA system</p> <p>㉕ R409CB system</p> <p>㉖ R409CC system</p> <p>㉗ R409CD system</p> <p>㉘ R409CE system</p> <p>㉙ R409CF system</p> <p>㉚ R409CG system</p> <p>㉛ R409CH system</p> <p>㉜ R409CI system</p> <p>㉝ R409CJ system</p> <p>㉞ R409CK system</p> <p>㉟ R409CL system</p> <p>㊱ R409CM system</p> <p>㊲ R409CN system</p> <p>㊳ R409CO system</p> <p>㊴ R409CP system</p> <p>㊵ R409CQ system</p> <p>㊶ R409CR system</p> <p>㊷ R409CS system</p> <p>㊸ R409CT system</p> <p>㊹ R409CU system</p> <p>㊺ R409CV system</p> <p>㊻ R409CW system</p> <p>㊼ R409CX system</p> <p>㊽ R409CY system</p> <p>㊾ R409CZ system</p> <p>㊿ R409DA system</p> <p>㉑ R409DB system</p> <p>㉒ R409DC system</p> <p>㉓ R409DD system</p> <p>㉔ R409DE system</p> <p>㉕ R409DF system</p> <p>㉖ R409DG system</p> <p>㉗ R409DH system</p> <p>㉘ R409DI system</p> <p>㉙ R409DJ system</p> <p>㉚ R409DK system</p> <p>㉛ R409DL system</p> <p>㉜ R409DM system</p> <p>㉝ R409DN system</p> <p>㉞ R409DO system</p> <p>㉟ R409DP system</p> <p>㊱ R409DQ system</p> <p>㊲ R409DR system</p> <p>㊳ R409DS system</p> <p>㊴ R409DT system</p> <p>㊵ R409DU system</p> <p>㊶ R409DV system</p> <p>㊷ R409DW system</p> <p>㊸ R409DX system</p> <p>㊹ R409DY system</p> <p>㊺ R409DZ system</p> <p>㊻ R409EA system</p> <p>㊼ R409EB system</p> <p>㊽ R409EC system</p> <p>㊾ R409ED system</p> <p>㊿ R409EE system</p> <p>㉑ R409EF system</p> <p>㉒ R409EG system</p> <p>㉓ R409EH system</p> <p>㉔ R409EI system</p> <p>㉕ R409EJ system</p> <p>㉖ R409EK system</p> <p>㉗ R409EL system</p> <p>㉘ R409EM system</p> <p>㉙ R409EN system</p> <p>㉚ R409EO system</p> <p>㉛ R409EP system</p> <p>㉜ R409EQ system</p> <p>㉝ R409ER system</p> <p>㉞ R409ES system</p> <p>㉟ R409ET system</p> <p>㊱ R409EU system</p> <p>㊲ R409EV system</p> <p>㊳ R409EW system</p> <p>㊴ R409EX system</p> <p>㊵ R409EY system</p> <p>㊶ R409EZ system</p> <p>㊷ R409FA system</p> <p>㊸ R409FB system</p> <p>㊹ R409FC system</p> <p>㊺ R409FD system</p> <p>㊻ R409FE system</p> <p>㊼ R409FF system</p> <p>㊽ R409FG system</p> <p>㊾ R409FH system</p> <p>㊿ R409FI system</p> <p>㉑ R409FJ system</p> <p>㉒ R409FK system</p> <p>㉓ R409FL system</p> <p>㉔ R409FM system</p> <p>㉕ R409FN system</p> <p>㉖ R409FO system</p> <p>㉗ R409FP system</p> <p>㉘ R409FQ system</p> <p>㉙ R409FR system</p> <p>㉚ R409FS system</p> <p>㉛ R409FT system</p> <p>㉜ R409FU system</p> <p>㉝ R409FV system</p> <p>㉞ R409FW system</p> <p>㉟ R409FX system</p> <p>㊱ R409FY system</p> <p>㊲ R409FZ system</p> <p>㊳ R409GA system</p> <p>㊴ R409GB system</p> <p>㊵ R409GC system</p> <p>㊶ R409GD system</p> <p>㊷ R409GE system</p> <p>㊸ R409GF system</p> <p>㊹ R409GG system</p> <p>㊺ R409GH system</p> <p>㊻ R409GI system</p> <p>㊼ R409GJ system</p> <p>㊽ R409GK system</p> <p>㊾ R409GL system</p> <p>㊿ R409GM system</p> <p>㉑ R409GN system</p> <p>㉒ R409GO system</p> <p>㉓ R409GP system</p> <p>㉔ R409GQ system</p> <p>㉕ R409GR system</p> <p>㉖ R409GS system</p> <p>㉗ R409GT system</p> <p>㉘ R409GU system</p> <p>㉙ R409GV system</p> <p>㉚ R409GW system</p> <p>㉛ R409GX system</p> <p>㉜ R409GY system</p> <p>㉝ R409GZ system</p> <p>㉞ R409HA system</p> <p>㉟ R409HB system</p> <p>㊱ R409HC system</p> <p>㊲ R409HD system</p> <p>㊳ R409HE system</p> <p>㊴ R409HF 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<p>㉓ R409IX system</p> <p>㉔ R409IY system</p> <p>㉕ R409IZ system</p> <p>㉖ R409JA system</p> <p>㉗ R409JB system</p> <p>㉘ R409JC system</p> <p>㉙ R409JD system</p> <p>㉚ R409JE system</p> |

(1) Branch pipe method (using branch piping)



(2) Header System (Header used)



Note (1) A branch piping system cannot be connected after a header system.

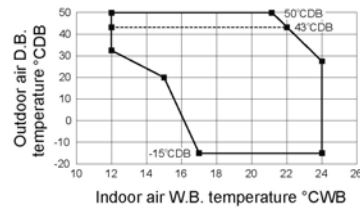
(2) 90m or less (However, difference between the longest and shortest piping : 40m or less)

## RANGE OF USAGE & LIMITATIONS

| System   |                           | FDC224KXZPE1  | FDC280KXZPE1 |
|--|---------------------------|---|--------------|
| Indoor units that can be used in combination   | Number of connected units | 1 to 8 units  | 1 to 8 units |
|  | Connectable capacity      | 112 ~ 268   | 140 ~ 336    |
| Total piping length  |                           | 150m or less  |              |
| Main pipe length   |                           | 90m or less   |              |
| Single direction piping length   |                           | Actual length : 120m or less  |              |
| Allowable pipe length from the first branching   |                           | 40m or less   |              |
| Elevation difference between the first branching point and the indoor unit   |                           | 18m or less   |              |
| Difference in height between indoor and outdoor units  | Outdoor unit is higher    | 30m or less   |              |
|  | Outdoor unit is lower     | 30m or less   |              |
| Difference in the elevation of indoor units in a system  |                           | 18m or less   |              |
| Indoor unit atmosphere (behind ceiling) temperature and humidity<br>(Only models FDT, FDTW, FDTQ, FDU, FDUH, FDUH, FDUH) |                           | Dew point temperature 28 °C or less, relative humidity 80% or less<br>(FDE, FDK, FDFL, FDFU, FDFW : Dew point temperature 23 °C or less, relative humidity 80% or less) |              |
| Compressor stop/start frequency  | 1 cycle time              | 5 min or more (from stop to stop or from start to start)  |              |
|  | Stop time                 | 3 min or more   |              |
| Power source voltage   | Voltage fluctuation       | Within ±10% of rated voltage  |              |
|  | Voltage drop during start | Within ~15% of rated voltage  |              |
|  | Phase unbalance           | Within 3%   |              |

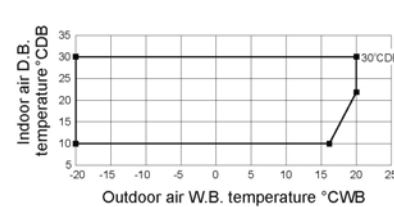
### Operating temperature range

Cooling operation



Broken line : In case of usage of existing pipe and limit the high pressure.

Heating operation



“CAUTION” Cooling operation under low outdoor air temperature conditions

KXZ models can be operated in cooling mode at low outdoor air temperature condition within above temperature range. However in case of severely low temperature conditions if the following precaution is not observed, it may not be operated in spite of operable temperature range mentioned above and cooling capacity may not be established under certain conditions.

[Precaution]

In case of severely low temperature condition

- 1) Install the outdoor unit at the place where strong wind cannot blow directly into the outdoor unit.
- 2) If there is no installation place where can prevent strong wind from directly blowing into the outdoor unit, prepare a windbreak fence or something like that locally in order to divert the strong wind from the outdoor unit.

[Reason]

Under the low outdoor air temperature conditions of -5°C or lower, if strong wind directly blow into the outdoor unit, the outdoor heat exchanger temperature will drop, even though the outdoor fan is stopped by outdoor fan control. This makes high and low pressures to drop as well. This low pressure drop makes the indoor heat exchanger temperature to drop and will activate anti-frost control at indoor heat exchanger at frequent intervals, that cooling operation may not be established for any given time.

### Range of usage & limitations

- Single use (also for combined use)

| Item  |                           | System | FDC280KXZE   | FDC338KXZE    | FDC400KXZE    |
|---|---------------------------|--------|--|---------------|---------------|
| Indoor air temperature<br>(Upper, lower limits)   |                           |        | Refer to the DATA BOOK   |               |               |
| Outdoor air temperature<br>(Upper, lower limits)  |                           |        | Refer to the DATA BOOK   |               |               |
| Indoor units<br>that can be<br>used in<br>combination   | Number of connected units |        | 1 to 37 units  | 1 to 44 units | 1 to 52 units |
|   | Connectable capacity (1)  |        | 140 ~ 560  | 168 ~ 670     | 200 ~ 800     |
| Total piping length (2)   |                           |        | 16000m or less   |               |               |
| Main pipe length  |                           |        | 130m or less   |               |               |
| Single direction piping length  |                           |        | Actual length: 160m or less, Equivalent length: 175m or less   |               |               |
| Allowable pipe length from the first branching  |                           |        | 50m or less (however, difference between the longest and shortest piping: 40m or less (3))   |               |               |
| Elevation difference between the first branching point and the indoor unit  |                           |        | 18m or less  |               |               |
| Difference in<br>height between<br>indoor and outdoor<br>units  | Outdoor unit is higher    |        | 50m or less (Max. 90m or less) (3)(4)  |               |               |
|   | Outdoor unit is lower     |        | 40m or less (3)  |               |               |
| Difference in the elevation of indoor units in a system   |                           |        | 18m or less (Max. 30m or less) (4)   |               |               |
| Indoor unit atmosphere (behind ceiling)<br>temperature and humidity<br>(Only models FDT, FDTG, FDW, FDTS, FDTQ,<br>FDU, FDUH, FDUF, FDUH, FDUF) |                           |        | Dew point temperature 28 °C or less, relative humidity 80% or less<br>(FDE, FDEI, FDEU, FDEW - Dew point temperature 25 °C or less, relative humidity 80% or less) |               |               |
| Compressor<br>stop/start<br>frequency   | 1 cycle time              |        | 5 min. or more (from stop to stop or from start to start)  |               |               |
|   | Stop time                 |        | 3 min. or more   |               |               |
| Power source<br>voltage   | Voltage fluctuation       |        | Within ±10% of rated voltage   |               |               |
|   | Voltage drop during start |        | Within -15% of rated voltage   |               |               |
|   | Phase unbalance           |        | Within 3%  |               |               |

| Item  |                           | System | FDC450KXZE2   | FDC475KXZE2   | FDC500KXZE2   | FDC560KXZE2   |
|---|---------------------------|--------|---|---------------|---------------|---------------|
| Indoor air temperature<br>(Upper, lower limits)   |                           |        | Refer to the DATA BOOK  |               |               |               |
| Outdoor air temperature<br>(Upper, lower limits)  |                           |        | Refer to the DATA BOOK  |               |               |               |
| Indoor units that can be used in combination  | Number of connected units |        | 1 to 60 units   | 1 to 40 units | 1 to 53 units | 1 to 59 units |
|   | Connectable capacity (kW) |        | 225 ~ 900   | 238 ~ 760     | 250 ~ 800     | 260 ~ 800     |
| Total piping length (m)   |                           |        | 1700m or less   |               |               |               |
| Main pipe length  |                           |        | 150m or less  |               |               |               |
| Single direction piping length  |                           |        | Actual length: 160m or less, Equivalent length: 150m or less  |               |               |               |
| Allowable pipe length from the first branching  |                           |        | 50m or less (However, difference between the longest and shortest piping: 40m or less <sup>(1)</sup> )  |               |               |               |
| Elevation difference between the first branching point and the indoor unit  |                           |        | 70m or less   |               |               |               |
| Difference in height between indoor and outdoor units   | Outdoor unit is higher    |        | 50m or less (MAX. 60m or less) <sup>(2)(3)</sup>  |               |               |               |
|   | Outdoor unit is lower     |        | 40m or less <sup>(3)</sup>  |               |               |               |
| Difference in the elevation of indoor units in a system   |                           |        | 10m or less (MAX. 30m or less) <sup>(4)</sup>   |               |               |               |
| Indoor unit atmosphere (behind ceiling) temperature and humidity<br>(Only models FDT, FDTG, FDTW, FDTs, FDTQ, FDU, FDUH, FDUt, FDUH, FDU-F) |                           |        | Dew point temperature 28 °C or less, relative humidity 80% or less<br>(FDE, FDC, FDEt, FDU, FDUW: Dew point temperature 21 °C or less, relative humidity 80% or less) |               |               |               |
| Compressor stop/start frequency   | 1 cycle time              |        | 5 min or more (from stop to stop or from start to start)  |               |               |               |
|   | Stop time                 |        | 5 min or more   |               |               |               |
| Power source voltage  | Voltage fluctuation       |        | Within ±10% of rated voltage  |               |               |               |
|   | Voltage drop during start |        | Within ±15% of rated voltage  |               |               |               |
|   | Phase unbalance           |        | Within 3%   |               |               |               |

Notes (1) When connecting the indoor unit type FDK, FDFL, FDFU or FDFW Series, limit the connectable capacity not higher than 130%a

(2) When the pipe extension length exceeds 510m, additional refrigerant oil must be charged (1,000 cc)

(3) It must be less than 30m when conducting the cooling operation with the outdoor air temperature lower than 10°C

(4) If superlink 1 (previous superlink) is selected, all the range of usage and limitations, not only the limitations of cable length and connectable number of node or unit but also of the wiring length, connection orientation range and etc. become

and connectable number of indoor unit but also of the piping length, operating temperature range and etc., become same as those of KX4 (See technical manual '07-KX-KXR-T-114). In addition to above limitations, all of new functions for KX6 and KNZ, such as automatic address setting function for multiple refrigerant systems and etc., will be cancelled.

(5) When it is required to install in a range of 50 to 90m, the limitation of use, etc. are different from those described here. For details, refer to the DATA BOOK.

(6) When it is required to install in the difference between the longest and shortest piping more than 40m, refer to the DATA BOOK.

(7) It must be 40m or less, when it is required to use at the outdoor air temperature higher than 43 °C

(8) If the difference in the elevation is 18 to 30m, the limitation of use, etc. are different from those described here. For details, refer to the DATA BOOK.

### Range of usage & limitations

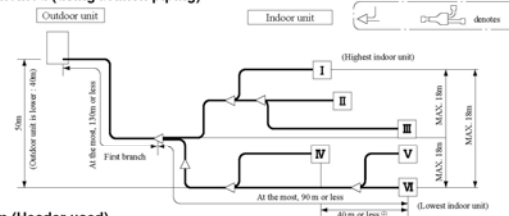
**FDC224KXZME1, 280KXZME1, 335KXZME1A**

| Item   | System                              | FDC224KXZE1  | FDC280KXZE1               | FDC335KXZE1A |
|--|-------------------------------------|--|---------------------------|--------------|
| Indoor intake air temperature<br>(Upper, lower limits)   |                                     |  |                           |              |
| Outdoor air temperature<br>(Upper, lower limits)   |                                     |  | Please see the next page. |              |
| Indoor units<br>that can be<br>used in<br>combination  | Number of connected units           | 1 to 22 unit   | 1 to 24 unit              | 1 to 24 unit |
|  | Connectable capacity <sup>(1)</sup> | 112 - 336  | 140 - 420                 | 167 - 502    |
| Total piping length  |                                     | 510m or less   |                           |              |
| Main pipe length   |                                     | 130m or less   |                           |              |
| Single direction piping length   |                                     | Actual length : 160m or less, Equivalent length : 185m or less   |                           |              |
| Allowable pipe length from the first branching   |                                     | 90m or less (However, difference between the longest and shortest piping : 40m or less)  |                           |              |
| Elevation difference between the first branching point and the indoor unit   |                                     | 18m or less  |                           |              |
| Difference in<br>height between<br>indoor and outdoor<br>units   | Outdoor unit is higher              | 50m or less  |                           |              |
|  | Outdoor unit is lower               | 40m or less  |                           |              |
| Difference in the elevation of indoor units in a system  |                                     | 18m or less  |                           |              |
| Indoor unit atmosphere (behind ceiling)<br>temperature and humidity<br>(Only models FDT, FDTG, FDTW, FDTS, FDTQ,<br>FDU, FDUH, FDTU, FDUH) |                                     | Dew point temperature 28 °C or less, relative humidity 80% or less<br>(FDE, FDK, FDFL, FDFU : Dew point temperature 23°C or less, relative humidity 80% or less) |                           |              |
| Compressor<br>stop/start<br>frequency  | 1 cycle time                        | 6 min or more (3 minutes or more from start to stop or 3 minutes or more from stop to start)   |                           |              |
|  | Stop time                           | 3 min or more  |                           |              |
| Power source<br>voltage  | Voltage fluctuation                 | Within ±10% of rated voltage   |                           |              |
|  | Voltage drop during start           | Within ±15% of rated voltage   |                           |              |
|  | Phase unbalance                     | Within ±3% of rated voltage  |                           |              |

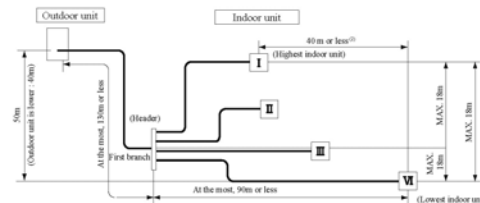
Note(1) If superlink I (previous superlink) is selected, all the range of usage and limitations, not only the limitations of connectable indoor capacity and connectable number of indoor unit but also of the piping length, operating temperature range and etc., become same as those of KX4 (See technical manual '07・KX・KXR-T-114). In addition to above limitations, all of new functions for KX6 such as automatic address setting function for multiple refrigerant systems and etc. will be cancelled.

| Allowable length of refrigerant piping, height difference between indoor and outdoor unit   |
|---|
| <p>① R410A</p> <p>② R32</p> <p>③ R407C</p> <p>④ R404A</p> <p>⑤ R408A</p> <p>⑥ R409A</p> <p>⑦ R409B</p> <p>⑧ R409C</p> <p>⑨ R409D</p> <p>⑩ R409E</p> <p>⑪ R409F</p> <p>⑫ R409G</p> <p>⑬ R409H</p> <p>⑭ R409I</p> <p>⑮ R409J</p> <p>⑯ R409K</p> <p>⑰ R409L</p> <p>⑱ R409M</p> <p>⑲ R409N</p> <p>⑳ R409O</p> <p>㉑ R409P</p> <p>㉒ R409Q</p> <p>㉓ R409R</p> <p>㉔ R409S</p> <p>㉕ R409T</p> <p>㉖ R409U</p> <p>㉗ R409V</p> <p>㉘ R409W</p> <p>㉙ R409X</p> <p>㉚ R409Y</p> <p>㉛ R409Z</p> <p>㉜ R409AA</p> <p>㉝ R409AB</p> <p>㉞ R409AC</p> <p>㉟ R409AD</p> <p>㊱ R409AE</p> <p>㊲ R409AF</p> <p>㊳ R409AG</p> <p>㊴ R409AH</p> <p>㊵ R409AI</p> <p>㊶ R409AJ</p> <p>㊷ R409AK</p> <p>㊸ R409AL</p> <p>㊹ R409AM</p> <p>㊺ R409AN</p> <p>㊻ R409AO</p> <p>㊼ R409AP</p> <p>㊽ R409AQ</p> <p>㊾ R409AR</p> <p>㊿ R409AS</p> <p>㉑ R409AT</p> <p>㉒ R409AU</p> <p>㉓ R409AV</p> <p>㉔ R409AW</p> <p>㉕ R409AX</p> <p>㉖ R409AY</p> <p>㉗ R409AZ</p> <p>㉘ R409BA</p> <p>㉙ R409BB</p> <p>㉚ R409BC</p> <p>㉛ R409BD</p> <p>㉜ R409BE</p> <p>㉝ R409BF</p> <p>㉞ R409BG</p> <p>㉟ R409BH</p> <p>㊱ R409BI</p> <p>㊲ R409BJ</p> <p>㊳ R409BK</p> <p>㊴ R409BL</p> <p>㊵ R409BM</p> <p>㊶ R409BN</p> <p>㊷ R409BO</p> <p>㊸ R409BP</p> <p>㊹ R409BQ</p> <p>㊺ R409BR</p> <p>㊻ R409BS</p> <p>㊼ R409BT</p> <p>㊽ R409BU</p> <p>㊾ R409BV</p> <p>㊿ R409BW</p> <p>㉑ R409BX</p> <p>㉒ R409BY</p> <p>㉓ R409BZ</p> <p>㉔ R409CA</p> <p>㉕ R409CB</p> <p>㉖ R409CC</p> <p>㉗ R409CD</p> <p>㉘ R409CE</p> <p>㉙ R409CF</p> <p>㉚ R409CG</p> <p>㉛ R409CH</p> <p>㉜ R409CI</p> <p>㉝ R409CJ</p> <p>㉞ R409CK</p> <p>㉟ R409CL</p> <p>㊱ R409CM</p> <p>㊲ R409CN</p> <p>㊳ R409CO</p> <p>㊴ R409CP</p> <p>㊵ R409CQ</p> <p>㊶ R409CR</p> <p>㊷ R409CS</p> <p>㊸ R409CT</p> <p>㊹ R409CU</p> <p>㊺ R409CV</p> <p>㊻ R409CW</p> <p>㊼ R409CX</p> <p>㊽ R409CY</p> <p>㊿ R409CZ</p> <p>㉑ R409DA</p> <p>㉒ R409DB</p> <p>㉓ R409DC</p> <p>㉔ R409DD</p> <p>㉕ R409DE</p> <p>㉖ R409DF</p> <p>㉗ R409DG</p> <p>㉘ R409DH</p> <p>㉙ R409DI</p> <p>㉚ R409DJ</p> <p>㉛ R409DK</p> <p>㉜ R409DL</p> <p>㉝ R409DM</p> <p>㉞ R409DN</p> <p>㉟ R409DO</p> <p>㊱ R409DP</p> <p>㊲ R409DQ</p> <p>㊳ R409DR</p> <p>㊴ R409DS</p> <p>㊵ R409DT</p> <p>㊶ R409DU</p> <p>㊷ R409DV</p> <p>㊸ R409DW</p> <p>㊹ R409DX</p> <p>㊺ R409DY</p> <p>㊻ R409DZ</p> <p>㊼ R409EA</p> <p>㊽ R409EB</p> <p>㊿ R409EC</p> <p>㉑ R409ED</p> <p>㉒ R409EE</p> <p>㉓ R409EF</p> <p>㉔ R409EG</p> <p>㉕ R409EH</p> <p>㉖ R409EI</p> <p>㉗ R409EJ</p> <p>㉘ R409EK</p> <p>㉙ R409EL</p> <p>㉚ R409EM</p> <p>㉛ R409EN</p> <p>㉜ R409EO</p> <p>㉝ R409EP</p> <p>㉞ R409EQ</p> <p>㉟ R409ER</p> <p>㊱ R409ES</p> <p>㊲ R409ET</p> <p>㊳ R409EU</p> <p>㊴ R409EV</p> <p>㊵ R409EW</p> <p>㊶ R409EX</p> <p>㊷ R409EY</p> <p>㊸ R409EZ</p> <p>㊹ R409FA</p> <p>㊺ R409FB</p> <p>㊻ R409FC</p> <p>㊼ R409FD</p> <p>㊽ R409FE</p> <p>㊿ R409FF</p> <p>㉑ R409FG</p> <p>㉒ R409FH</p> <p>㉓ R409FI</p> <p>㉔ R409FJ</p> <p>㉕ R409FK</p> <p>㉖ R409FL</p> <p>㉗ R409FM</p> <p>㉘ R409FN</p> <p>㉙ R409FO</p> <p>㉚ R409FP</p> <p>㉛ R409FQ</p> <p>㉜ R409FR</p> <p>㉝ R409FS</p> <p>㉞ R409FT</p> <p>㉟ R409FU</p> <p>㊱ R409FV</p> <p>㊲ R409FW</p> <p>㊳ R409FX</p> <p>㊴ R409FY</p> <p>㊵ R409FZ</p> <p>㊶ R409GA</p> <p>㊷ R409GB</p> <p>㊸ R409GC</p> <p>㊹ R409GD</p> <p>㊺ R409GE</p> <p>㊻ R409GF</p> <p>㊼ R409GG</p> <p>㊽ R409GH</p> <p>㊿ R409GI</p> <p>㉑ R409GJ</p> <p>㉒ R409GK</p> <p>㉓ R409GL</p> <p>㉔ R409GM</p> <p>㉕ R409GN</p> <p>㉖ R409GO</p> <p>㉗ R409GP</p> <p>㉘ R409GQ</p> <p>㉙ R409GR</p> <p>㉚ R409GS</p> <p>㉛ R409GT</p> <p>㉜ R409GU</p> <p>㉝ R409GV</p> <p>㉞ R409GW</p> <p>㉟ R409GX</p> <p>㊱ R409GY</p> <p>㊲ R409GZ</p> <p>㊳ R409HA</p> <p>㊴ R409HB</p> <p>㊵ R409HC</p> <p>㊶ R409HD</p> <p>㊷ R409HE</p> <p>㊸ R409HF</p> <p>㊹ R409HG</p> <p>㊺ R409HH</p> <p>㊻ R409HI</p> <p>㊼ R409HJ</p> <p>㊽ R409HK</p> <p>㊿ R409HL</p> <p>㉑ R409HM</p> <p>㉒ R409HN</p> <p>㉓ R409HO</p> <p>㉔ R409HP</p> <p>㉕ R409HQ</p> <p>㉖ R409HR</p> <p>㉗ R409HS</p> <p>㉘ R409HT</p> <p>㉙ R409HU</p> <p>㉚ R409HV</p> <p>㉛ R409HW</p> <p>㉜ R409HX</p> <p>㉝ R409HY</p> <p>㉞ R409HZ</p> <p>㉟ R409IA</p> <p>㊱ R409IB</p> <p>㊲ R409IC</p> <p>㊳ R409ID</p> <p>㊴ R409IE</p> <p>㊵ R409IF</p> <p>㊶ R409IG</p> <p>㊷ R409IH</p> <p>㊸ R409II</p> <p>㊹ R409IJ</p> <p>㊺ R409IK</p> <p>㊻ R409IL</p> <p>㊼ R409IM</p> <p>㊽ R409IN</p> <p>㊿ R409IO</p> <p>㉑ R409IP</p> <p>㉒ R409IQ</p> <p>㉓ R409IR</p> <p>㉔ R409IS</p> <p>㉕ R409IT</p> <p>㉖ R409IU</p> <p>㉗ R409IV</p> <p>㉘ R409IW</p> <p>㉙ R409IX</p> <p>㉚ R409IY</p> <p>㉛ R409IZ</p> <p>㉜ R409JA</p> <p>㉝ R409JB</p> <p>㉞ R409JC</p> <p>㉟ R409JD</p> <p>㊱ R409JE</p> <p>㊲ R409JF</p> <p>㊳ R409JG</p> <p>㊴ R409JH</p> <p>㊵ R409JI</p> <p>㊶ R409JJ</p> <p>㊷ R409JK</p> <p>㊸ R409JL</p> <p>㊹ R409JM</p> <p>㊺ R409JN</p> <p>㊻ R409JO</p> <p>㊼ R409JP</p> <p>㊽ R409JQ</p> <p>㊿ R409JR</p> <p>㉑ R409JS</p> <p>㉒ R409JT</p> <p>㉓ R409JU</p> <p>㉔ R409JV</p> <p>㉕ R409JW</p> <p>㉖ R409J</p> |

(1) Branch pipe method (using branch piping)



(2) Header System (Header used)



Note (1) A branch piping system cannot be connected after a header system.

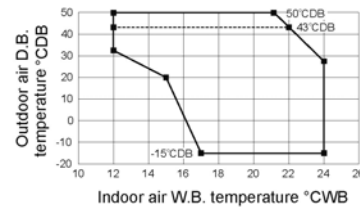
(2) 90m or less (However, difference between the longest and shortest piping : 40m or less)

## RANGE OF USAGE & LIMITATIONS

| System   |                           | FDC224KXZPE1   | FDC280KXZPE1 |
|--|---------------------------|--|--------------|
| Indoor units that can be used in combination   | Number of connected units | 1 to 8 units   | 1 to 8 units |
|  | Connectable capacity      | 112 ~ 268  | 140 ~ 336    |
| Total piping length  |                           | 150m or less   |              |
| Main pipe length   |                           | 90m or less  |              |
| Single direction piping length   |                           | Actual length : 120m or less   |              |
| Allowable pipe length from the first branching   |                           | 40m or less  |              |
| Elevation difference between the first branching point and the indoor unit   |                           | 18m or less  |              |
| Difference in height between indoor and outdoor units  | Outdoor unit is higher    | 30m or less  |              |
|  | Outdoor unit is lower     | 30m or less  |              |
| Difference in the elevation of indoor units in a system  |                           | 18m or less  |              |
| Indoor unit atmosphere (behind ceiling) temperature and humidity<br>(Only models FDT, FDTW, FDTQ, FDU, FDUH, FDUH, FDUH) |                           | Dew point temperature 28 °C or less, relative humidity 80% or less<br>(FDE, FDK, FDL, FDFU, FDFW : Dew point temperature 23 °C or less, relative humidity 80% or less) |              |
| Compressor stop/start frequency  | 1 cycle time              | 5 min or more (from stop to stop or from start to start)   |              |
|  | Stop time                 | 3 min or more  |              |
| Power source voltage   | Voltage fluctuation       | Within $\pm 10\%$ of rated voltage   |              |
|  | Voltage drop during start | Within $\sim 15\%$ of rated voltage  |              |
|  | Phase unbalance           | Within 3%  |              |

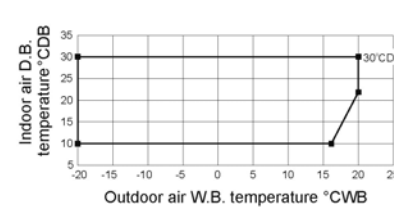
### Operating temperature range

#### Cooling operation



Broken line : In case of usage of existing pipe and limit the high pressure.

#### Heating operation



“CAUTION” Cooling operation under low outdoor air temperature conditions

KXZ models can be operated in cooling mode at low outdoor air temperature condition within above temperature range. However in case of severely low temperature conditions if the following precaution is not observed, it may not be operated in spite of operable temperature range mentioned above and cooling capacity may not be established under certain conditions.

[Precaution]

In case of severely low temperature condition

- 1) Install the outdoor unit at the place where strong wind cannot blow directly into the outdoor unit.
- 2) If there is no installation place where can prevent strong wind from directly blowing into the outdoor unit, prepare a windbreak fence or something like that locally in order to divert the strong wind from the outdoor unit.

[Reason]

Under the low outdoor air temperature conditions of -5°C or lower, if strong wind directly blow into the outdoor unit, the outdoor heat exchanger temperature will drop, even though the outdoor fan is stopped by outdoor fan control. This makes high and low pressures to drop as well. This low pressure drop makes the indoor heat exchanger temperature to drop and will activate anti-frost control at indoor heat exchanger at frequent intervals, that cooling operation may not be established for any given time.

## Range of usage & limitations

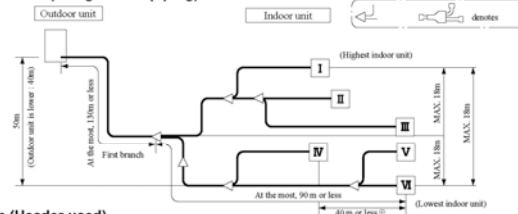
### FDC224KXZME1, 280KXZME1, 335KXZME1A

| System  |   | FDC224KXZME1   | FDC280KXZME1 | FDC335KXZME1A |
|---|---|--|--------------|---------------|
| Item  | Indoor intake air temperature (Upper, lower limits) | Please see the next page.  |              |               |
|   | Outdoor air temperature (Upper, lower limits)       |  |              |               |
| Indoor units that can be used in combination  | Number of connected units                           | 1 to 22 unit   | 1 to 24 unit | 1 to 24 unit  |
|   | Connectable capacity <sup>(1)</sup>                 | 112 - 336  | 140 - 420    | 167 - 502     |
| Total piping length   |   | 510m or less   |              |               |
| Main pipe length  |   | 130m or less   |              |               |
| Single direction piping length  |   | Actual length : 160m or less, Equivalent length : 185m or less   |              |               |
| Allowable pipe length from the first branching  |   | 90m or less (However, difference between the longest and shortest piping : 40m or less)  |              |               |
| Elevation difference between the first branching point and the indoor unit  |   | 18m or less  |              |               |
| Difference in height between indoor and outdoor units   | Outdoor unit is higher                              | 50m or less  |              |               |
|   | Outdoor unit is lower                               | 40m or less  |              |               |
| Difference in the elevation of indoor units in a system   |   | 18m or less  |              |               |
| Indoor unit atmosphere (behind ceiling) temperature and humidity (Only models FDT, FDTG, FDTW, FDTU, FDTV, FDTX, FDTY, FDU, FDUH, FDUK, FDUV, FDUX, FDUY) |   | Dew point temperature 28 °C or less, relative humidity 80% or less (FDE, FDK, FDFL, FDFU : Dew point temperature 23 °C or less, relative humidity 80% or less) |              |               |
| Compressor stop/start frequency   | 1 cycle time  | 6 min or more (3 minutes or more from start to stop or 3 minutes or more from stop to start)   |              |               |
|   | Stop time   | 3 min or more  |              |               |
| Power source voltage  | Voltage fluctuation                                 | Within $\pm 10\%$ of rated voltage   |              |               |
|   | Voltage drop during start                           | Within $\pm 5\%$ of rated voltage  |              |               |
|   | Phase unbalance                                     | Within $\pm 3\%$ of rated voltage  |              |               |

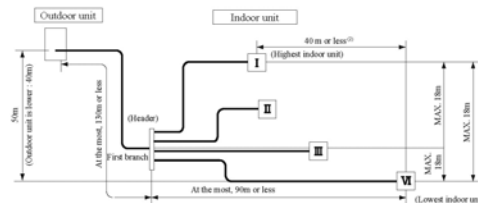
Note(1) If superlink I (previous superlink) is selected, all the range of usage and limitations, not only the limitations of connectable indoor capacity and connectable number of indoor unit but also of the piping length, operating temperature range and etc., become same as those of KX4 (See technical manual '07 • KX • KXR-T-114). In addition to above limitations, all of new functions for KX6 such as automatic address setting function for multiple refrigerant systems and etc. will be cancelled.

Allowable length of refrigerant piping, height difference between indoor and outdoor unit

#### (1) Branch pipe method (using branch piping)



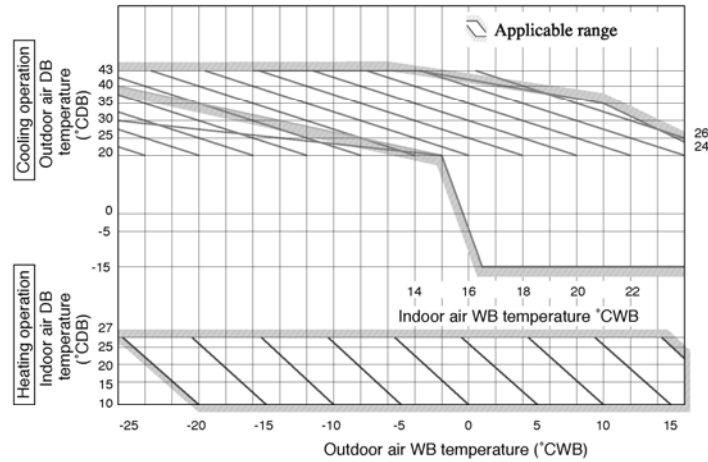
#### (2) Header System (Header used)



Note (1) A branch piping system cannot be connected after a header system.

(2) 90m or less (However, difference between the longest and shortest piping : 40m or less)

**Range of usage & limitations**



"CAUTION" Cooling operation under low ambient air temperature conditions

Micro KXZ models can be operated in cooling mode at low ambient air temperature condition within above temperature range. However in case of severely low temperature conditions if the following precaution is not observed, it may not be operated in spite of operable temperature range mentioned above and cooling capacity may not be established under certain conditions.

**[Precaution]**

In case of severely low temperature condition

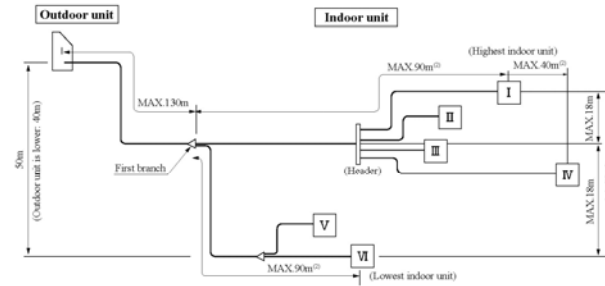
- 1) Install the outdoor unit at the place where strong wind cannot blow directly into the outdoor unit.
- 2) If there is no installation place where can prevent strong wind from directly blowing into the outdoor unit, mount the flex flow adaptor (prepared as option part) or like such devices onto the outdoor unit in order to divert the strong wind.

**[Reason]**

Under the low ambient air temperature conditions of -5°C or lower, if strong wind directly blow into the outdoor unit, the outdoor heat exchanger temperature will drop, even though the outdoor fan is stopped by outdoor fan control. This makes high and low pressures to drop as well. This low pressure drop makes the indoor heat exchanger temperature to drop and will activate anti-frost control at indoor heat exchanger at frequent intervals, that cooling operation may not be established for any given time.

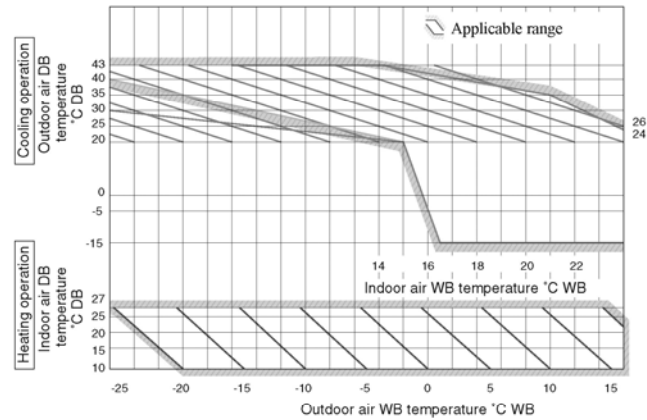


### (3) Mixed System (Branch piping and Header used)



- Notes (1) A branch piping system cannot be connected after a header system.  
(2) 90m or less (However, difference between the longest and shortest piping : 40m or less)

### Operating temperature range



#### "CAUTION" Cooling operation under low outdoor air temperature conditions

KXZME1 models can be operated in cooling mode at low outdoor air temperature condition within above temperature range. However in case of severely low temperature conditions if the following precaution is not observed, it may not be operated in spite of operable temperature range mentioned above and cooling capacity may not be established under certain conditions.

#### [Precaution]

In case of severely low temperature condition

- 1) Install the outdoor unit at the place where strong wind cannot blow directly into the outdoor unit.
- 2) If there is no installation place where can prevent strong wind from directly blowing into the outdoor unit, prepare a windbreak fence or something like that locally in order to divert the strong wind from the outdoor unit.

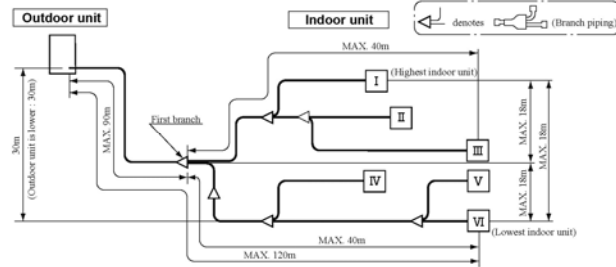
#### [Reason]

Under the low outdoor air temperature conditions of -5°C or lower, if strong wind directly blow into the outdoor unit, the outdoor heat exchanger temperature will drop, even though the outdoor fan is stopped by outdoor fan control. This makes high and low pressures to drop as well. This low pressure drop makes the indoor heat exchanger temperature to drop and will activate anti-frost control at indoor heat exchanger at frequent intervals, that cooling operation may not be established for any given time.

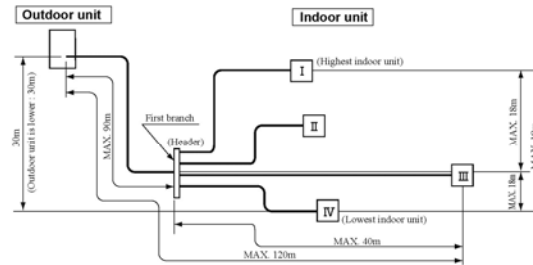


Allowable length of refrigerant piping, height difference between indoor and outdoor unit

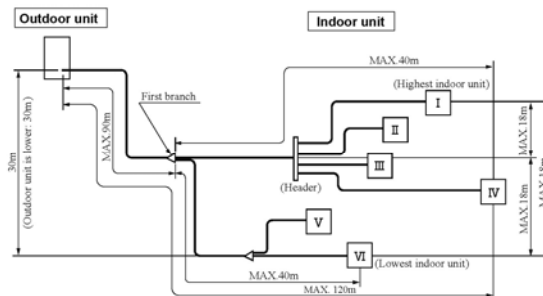
**(1) Branch pipe System (Branch piping used)**



**(2) Header System (Header used)**



**(3) Mixed System (Branch piping and header used)**



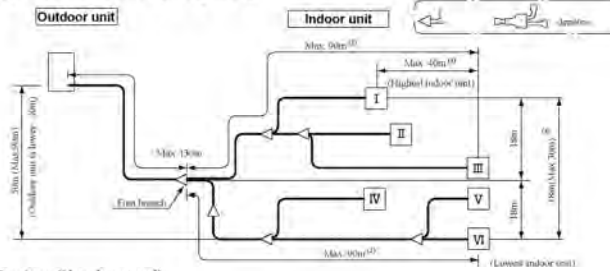
Note (1) A branch piping system cannot be connected after a header system.

**Important** When the additional refrigerant quantity is over 9.1kg, please separate the refrigerant line.

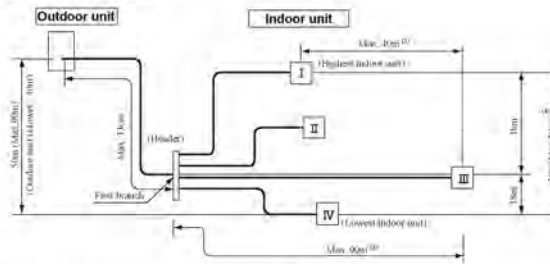
## Range of usage & limitations

Allowable length of refrigerant piping, height difference between indoor and outdoor unit

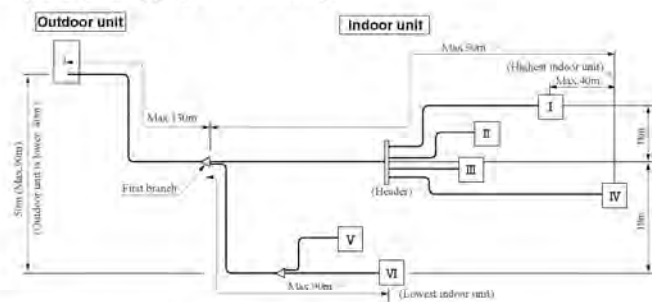
### (1) Branch pipe System (Branch piping used)



### (2) Header System (Header used)



### (3) Mixed System (Branch piping and Header used)



Note (1) A branch piping system cannot be connected after a header system.

(2) 90m or less (However, difference between the longest and shortest piping : 40m or less <sup>(1)</sup>)

(3) When it is required to install the difference between the longest and shortest piping more than 40m, refer to the DATA BOOK.

(4) When it is required to install the difference in the elevation 18 to 30m, refer to the DATA BOOK.

When the Additional refrigerant quantity (P+I) is over the following table, please separate the refrigerant line

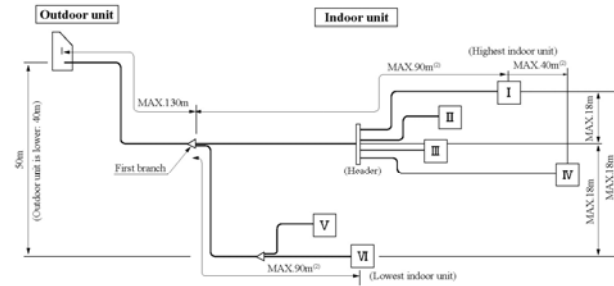
#### Important

| Outdoor unit | P + I (kg) |
|--------------|------------|
| 280-670      | 40         |
| 735-950      | 90         |
| 1000-1350    | 80         |
| 1425-1680    | 100        |

P: Additional refrigerant quantity for piping (kg)

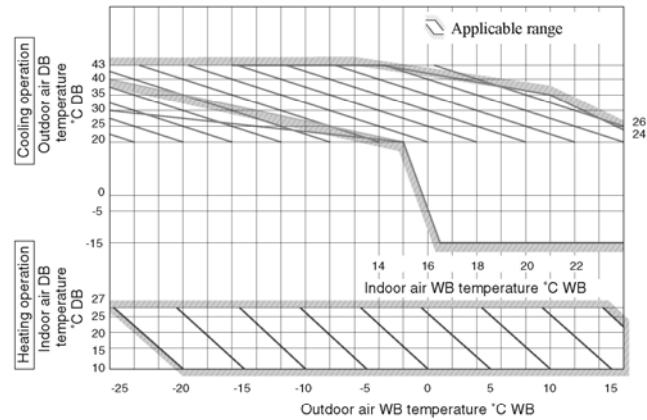
I: Additional refrigerant quantity for indoor units (kg)

### (3) Mixed System (Branch piping and Header used)



- Notes (1) A branch piping system cannot be connected after a header system.  
(2) 90m or less (However, difference between the longest and shortest piping : 40m or less)

#### Operating temperature range



#### “CAUTION” Cooling operation under low outdoor air temperature conditions

KXZME1 models can be operated in cooling mode at low outdoor air temperature condition within above temperature range. However in case of severely low temperature conditions if the following precaution is not observed, it may not be operated in spite of operable temperature range mentioned above and cooling capacity may not be established under certain conditions.

#### [Precaution]

In case of severely low temperature condition

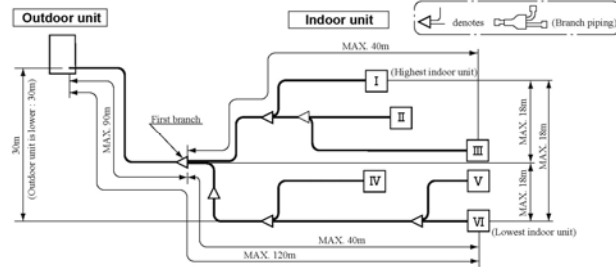
- 1) Install the outdoor unit at the place where strong wind cannot blow directly into the outdoor unit.
- 2) If there is no installation place where can prevent strong wind from directly blowing into the outdoor unit, prepare a windbreak fence or something like that locally in order to divert the strong wind from the outdoor unit.

#### [Reason]

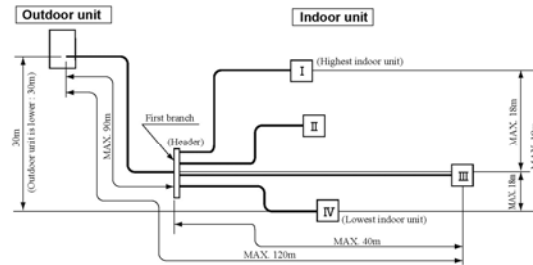
Under the low outdoor air temperature conditions of  $-5^{\circ}\text{C}$  or lower, if strong wind directly blow into the outdoor unit, the outdoor heat exchanger temperature will drop, even though the outdoor fan is stopped by outdoor fan control. This makes high and low pressures to drop as well. This low pressure drop makes the indoor heat exchanger temperature to drop and will activate anti-frost control at indoor heat exchanger at frequent intervals, that cooling operation may not be established for any given time.

Allowable length of refrigerant piping, height difference between indoor and outdoor unit

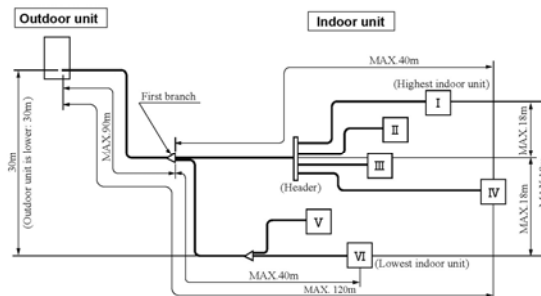
**(1) Branch pipe System (Branch piping used)**



**(2) Header System (Header used)**



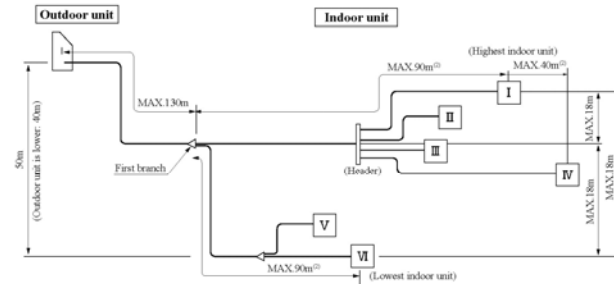
**(3) Mixed System (Branch piping and header used)**



Note (1) A branch piping system cannot be connected after a header system.

**Important** When the additional refrigerant quantity is over 9.1kg, please separate the refrigerant line.

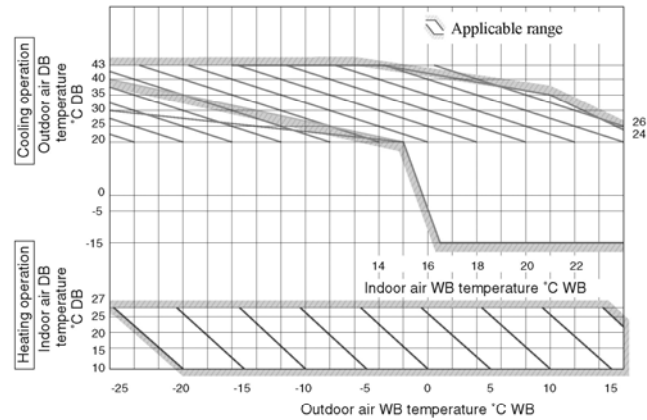
**(3) Mixed System (Branch piping and Header used)**



Notes (1) A branch piping system cannot be connected after a header system.

(2) 90m or less (However, difference between the longest and shortest piping : 40m or less)

**Operating temperature range**



“CAUTION” Cooling operation under low outdoor air temperature conditions

KXZME1 models can be operated in cooling mode at low outdoor air temperature condition within above temperature range. However in case of severely low temperature conditions if the following precaution is not observed, it may not be operated in spite of operable temperature range mentioned above and cooling capacity may not be established under certain conditions.

[Precaution]

In case of severely low temperature condition

- 1) Install the outdoor unit at the place where strong wind cannot blow directly into the outdoor unit.
- 2) If there is no installation place where can prevent strong wind from directly blowing into the outdoor unit, prepare a windbreak fence or something like that locally in order to divert the strong wind from the outdoor unit.

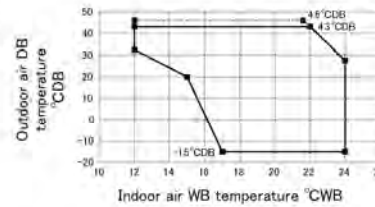
[Reason]

Under the low outdoor air temperature conditions of  $-5^{\circ}\text{C}$  or lower, if strong wind directly blow into the outdoor unit, the outdoor heat exchanger temperature will drop, even though the outdoor fan is stopped by outdoor fan control. This makes high and low pressures to drop as well. This low pressure drop makes the indoor heat exchanger temperature to drop and will activate anti-frost control at indoor heat exchanger at frequent intervals, that cooling operation may not be established for any given time.

## Range of usage & limitations

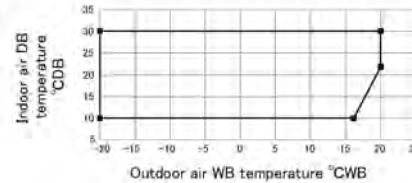
### Operating temperature range

#### Cooling operation



\*In case it is the promised installation location that the outdoor unit is used on conditions with the ambient temperature of 43°C or more, refer to (2.2 Exterior dimensions)

#### Heating operation



#### "CAUTION" Cooling operation under low outdoor air temperature conditions

KXX models can be operated in cooling mode at low outdoor air temperature condition within above temperature range. However in case of severely low temperature conditions if the following precaution is not observed, it may not be operated in spite of operable temperature range mentioned above and cooling capacity may not be established under certain conditions.

#### [Precaution]

In case of severely low temperature condition

- 1) Install the outdoor unit at the place where strong wind cannot blow directly into the outdoor unit.
- 2) If there is no installation place where can prevent strong wind from directly blowing into the outdoor unit, prepare a windbreak fence or something like that locally in order to divert the strong wind from the outdoor unit.

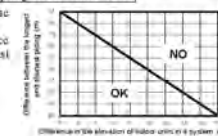
#### [Reason]

Under the low outdoor air temperature conditions of -5°C or lower, if strong wind directly blow into the outdoor unit, the outdoor heat exchanger temperature will drop, even though the outdoor fan is stopped by outdoor fan control. This makes high and low pressures to drop as well. This low pressure drop makes the indoor heat exchanger temperature to drop and will activate anti-frost control at indoor heat exchanger at frequent intervals, that cooling operation may not be established for any given time.

#### Specification for installation with the difference between the longest and shortest piping more than 40m

When the difference between the longest and shortest piping is longer than 40m, adjust the difference in the elevation of indoor units in a system such that it will fall in the OK range on the following graph.  
When the difference in the elevation between the indoor and the outdoor units is 50m - 90m or difference in the elevation of indoor units in a system is 18m - 30m, the difference between the longest and shortest piping cannot exceed 40m. Reduce it to less than 40m.

If the refrigerant quantity over occurs when the difference between the longest and shortest piping is longer than 40m, there is a risk that the heating capacity becomes insufficient. Take sufficient care to adjust the additional refrigerant quantity at correct value.



## Range of usage & limitations

Specification for installation with large head difference. (Applicable to: FDC280 - 1680KXZE2)

In case when the outdoor unit is installed at a higher place and the difference in the elevation between the indoor and the outdoor units is larger than 50m and smaller than 80m, the limitation on application differs partially from ordinary applications and, instead, the following specification applies. The pipe size, refrigerant amount and way of switch setting become also different.

In the range of use, the outdoor air temperature (lower limit), indoor units allowed to combine, total piping length and difference in the elevation between indoor units in the same system are different from ordinary applications.

| Table 1 Range of use  |  | FDC280-1680KXZE2  |
|---|--|---|
| Indoor air temperature (Upper, lower limits)                                  |  | Refer to Table 2  |
| Outdoor air temperature (Upper, lower limits)                                 |  |   |
| Indoor units that can be used in combination                                  | Number of connected units  | Refer to Table 3  |
|   | Connectable capacity   |   |
| Total piping length   |  | ≤ 10m or less   |
| Main pipe length  |  | ≤ 130m or less  |
| Single direction piping length  |  | Actual length : 10m or less, Equivalent length : 125m or less   |
| Allowable pipe length from the first branching                                |  | 90m or less<br>(However, difference between the longest and shortest piping : 40m or less)  |
| Allowable difference in the elevation   | Elevation difference between the first branching point and the indoor unit | 40m or less   |
|   | Outdoor unit is higher   | 50m or more, 80m or less  |
|   | Outdoor unit is lower  | 40m or less   |
|   | Difference in the elevation of indoor units in a system                    | 15m or less   |
| Limitation on piping from outdoor unit to branching pipe at outdoor unit side | Difference in the elevation  | 0.4m or less  |
|   | Elevation from outdoor unit to branching pipe at outdoor unit side         | 5m or less  |
|   | Oil equalizing pipe length   | 10m or less   |
|   | Length between outdoor branching pipes for a combination of 3 units        | 5m or less  |
| Indoor unit atmosphere (behind ceiling) temperature and humidity              |  | Dew point temperature 28°C or less, relative humidity 80% or less<br>(FDT, FDK, FDL, FDF, FDFW : Dew point temperature 28°C or less, relative humidity 80% or less) |
| Only models<br>FDT, FDTG, FDTW, FDTQ, FOTS, FDU, FDUH, FDUH, FDUH             |  |   |
| Compressor stop/start frequency   | 1 cycle time   | 5 min or less (from stop to stop or from start to start)  |
|   | Stop time  | 5 min or more   |
| Power source voltage  | Voltage fluctuation  | Within ± 10% of rated voltage   |
|   | Voltage drop during start  | Within ± 15% of rated voltage   |
|   | Phase unbalance  | Within 3%   |

Table 2 Indoor air temperature/Outdoor air temperature

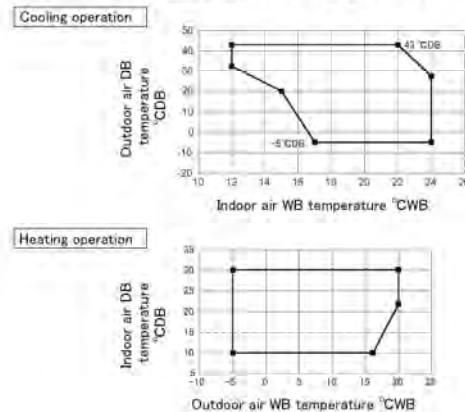


Table 3 Number of connectable indoor units and capacity range

| Model/Item   | Number of connectable units | Connectable capacity |
|--------------|-----------------------------|----------------------|
| FDC280KXZE2  | 1 to 1.8                    | 140 - 280            |
| FDC335KXZE2  | 1 to 2.2                    | 168 - 335            |
| FDC400KXZE2  | 1 to 2.6                    | 200 - 400            |
| FDC450KXZE2  | 1 to 3.0                    | 225 - 450            |
| FDC475KXZE2  | 1 to 3.1                    | 238 - 475            |
| FDC500KXZE2  | 1 to 3.3                    | 250 - 500            |
| FDC550KXZE2  | 1 to 3.7                    | 280 - 560            |
| FDC615KXZE2  | 2 to 4.1                    | 308 - 615            |
| FDC670KXZE2  | 2 to 4.4                    | 335 - 670            |
| FDC735KXZE2  | 2 to 4.9                    | 368 - 735            |
| FDC800KXZE2  | 2 to 5.3                    | 400 - 800            |
| FDC850KXZE2  | 2 to 5.6                    | 425 - 850            |
| FDC900KXZE2  | 2 to 6.0                    | 450 - 900            |
| FDC950KXZE2  | 2 to 6.3                    | 475 - 950            |
| FDC1000KXZE2 | 2 to 6.6                    | 500 - 1000           |
| FDC1060KXZE2 | 2 to 7.0                    | 530 - 1060           |
| FDC1120KXZE2 | 2 to 7.4                    | 560 - 1120           |
| FDC1200KXZE2 | 3 to 8.0                    | 600 - 1200           |
| FDC1250KXZE2 | 3 to 8.0                    | 625 - 1250           |
| FDC1300KXZE2 | 3 to 8.0                    | 650 - 1300           |
| FDC1350KXZE2 | 3 to 8.0                    | 675 - 1350           |
| FDC1425KXZE2 | 3 to 8.0                    | 713 - 1425           |
| FDC1450KXZE2 | 3 to 8.0                    | 725 - 1450           |
| FDC1500KXZE2 | 3 to 8.0                    | 750 - 1500           |
| FDC1560KXZE2 | 3 to 8.0                    | 780 - 1560           |
| FDC1620KXZE2 | 3 to 8.0                    | 810 - 1620           |
| FDC1680KXZE2 | 3 to 8.0                    | 840 - 1680           |



## Range of usage & limitations

### <Pipe size selection>

In the figure for pipe selection, sizes of main pipe and the pipe between the branch at the indoor side and the indoor unit are selected on the basis different from normal practice.

(1) Main pipe (branch of the outdoor unit – first branch at the indoor side)

Size of liquid pipe is different. Change the size of main pipe according to Table 4.

When the maximum length (from the outdoor unit to the furthest indoor unit) is larger than 90m (actual length), change the size of main pipe according to Table 4.

Table 4 Main pipe size

| Outdoor unit | Main pipe size (nominal) |               | Pipe size for an actual length of 90m or longer |               |
|--------------|--------------------------|---------------|---|---------------|
|              | Gas pipe                 | Liquid pipe   | Gas pipe  | Liquid pipe   |
| 280          | φ 22.22 ± 1.0            | φ 12.7 ± 1.0  | φ 25.4 (φ 22.22) ± 1.0                          | φ 15.88 ± 1.0 |
| 335          | φ 25.4 (φ 22.22) ± 1.0   |               | φ 28.58 ± 1.0                                   |               |
| 400          | φ 25.4 (φ 28.58) ± 1.0   |               |   |               |
| 450          |                          |               |   |               |
| 475          |                          |               |   |               |
| 500          | φ 28.58 ± 1.0            | φ 15.88 ± 1.0 | φ 31.8 ± 1.1                                    | φ 15.88 ± 1.0 |
| 560          |                          |               | φ 28.58 ± 1.0                                   |               |
| 635          |                          |               |   |               |
| 670          |                          |               |   |               |
| 785          |                          |               |   |               |
| 800          | φ 31.8 ± 1.1             |               |   |               |
| 850          | φ 34.92 ± 1.2            | φ 19.05 ± 1.0 |   | φ 19.05 ± 1.0 |
| 900          |                          |               |   |               |
| 950          |                          |               |   |               |
| 1000         |                          |               |   |               |
| 1060         |                          |               |   |               |
| 1120         |                          |               |   |               |
| 1200         |                          |               | φ 38.1 ± 1.35                                   |               |
| 1250         | φ 38.1 ± 1.35            | φ 22.22 ± 1.0 | φ 34.92 ± 1.2                                   |               |
| 1300         |                          |               |   |               |
| 1350         |                          |               |   |               |
| 1425         |                          |               |   |               |
| 1450         |                          |               |   |               |
| 1500         |                          |               |   |               |
| 1560         |                          |               |   |               |
| 1620         |                          |               |   |               |
| 1680         |                          |               |   |               |

(2) Between branch at the indoor side and indoor unit

Size of gas pipe for indoor unit with capacity larger than 112 is different. Change the size of pipe connected to indoor unit according to Table 5.

Table 5 Indoor unit connecting pipe size

| Indoor unit | Capacity       |            | Gas pipe             | Liquid pipe  |
|-------------|----------------|------------|----------------------|--------------|
|             | 15, 22, 28     | 36, 43, 50 | φ 9.52 ± 0.8         | φ 6.35 ± 0.8 |
|             | 71, 90         |            | φ 12.7 ± 0.8         |              |
|             | 112 (100, 160) |            | φ 15.88 ± 1.0        | φ 9.52 ± 0.8 |
|             | 224            |            | φ 19.05 ± 1.0        |              |
|             | 280            |            | φ 22.22 ± 1.0        |              |
|             |                |            | φ 25.4 ± 28.58 ± 1.0 |              |

(3) Refrigerant quantity

In addition to normal charge quantity for refrigerant pipes, charge quantity for the difference in capacity between the indoor and the outdoor units, and standard additional refrigerant quantity, measure and charge the additional refrigerant quantity for the installation with the difference in the elevation being over 50m and less than 90m.

Table 6 Additional refrigerant quantity for the installation with the difference in the elevation being over 50m and less than 90m

| Outdoor unit | (kg) | Outdoor unit | (kg) | Outdoor unit | (kg) | Outdoor unit | (kg) | High-COP combination |
|--------------|------|--------------|------|--------------|------|--------------|------|----------------------|
| 280          | 0.3  | 615          | 0.8  | 1000         | 1.6  | 1325         | 2.4  | Outdoor unit (kg)    |
| 335          | 0.5  | 670          | 1.0  | 1090         | 1.7  | 1450         | 2.4  | 560 0.6              |
| 400          | 0.6  | 735          | 0.9  | 1120         | 1.8  | 1500         | 2.4  | 850 0.9              |
| 450          | 0.7  | 800          | 1.2  | 1200         | 1.8  | 1560         | 2.5  | 990 1.1              |
| 475          | 0.8  | 850          | 1.3  | 1250         | 1.9  | 1600         | 2.6  | 950 1.3              |
| 500          | 0.8  | 900          | 1.4  | 1300         | 2.0  | 1650         | 2.7  | 1000 1.5             |
| 560          | 0.9  | 950          | 1.6  | 1350         | 2.1  |              |      | 1060 1.6             |
|              |      |              |      |              |      |              |      | 1120 1.7             |

(4) Microcomputer control

Setting of microcomputer control needs to be changed when the outdoor unit is installed upwards and the difference in elevation is larger than 50m and less than 90m. Make sure to set SW6-4 at ON position on both the master and slave units, before turning the power.

Table 7 Setting of microcomputer control

| Elevation difference | Setting             |
|----------------------|---------------------|
| 0m ~ 70m             | SW6-4 7-segment F32 |
| 70m ~ 90m            | ON                  |
| > 90m                | ON                  |



## Noise level

Measured based on JIS B 8616

Mike position as highest noise level in position as below

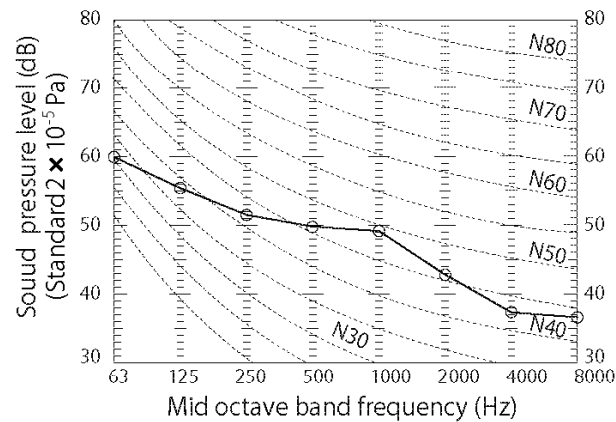
Distance from front side 1m

Height 1m

### FDC140KXZEN1, 140KXZES1

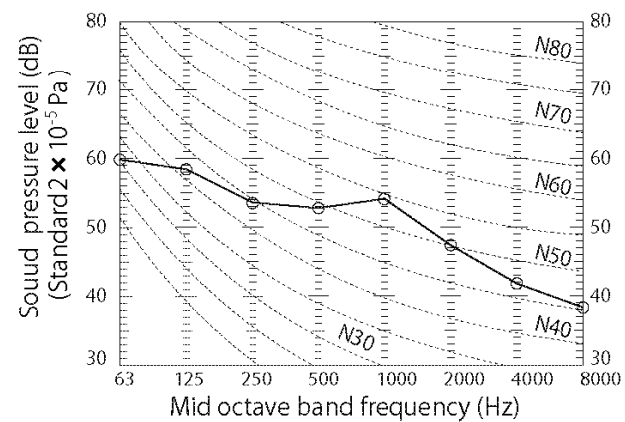
#### Cooling

Noise level 53 dB (A)



#### Heating

Noise level 57 dB (A)



## Noise level

Measured based on JIS B 8616

Mike position as highest noise level in position as below

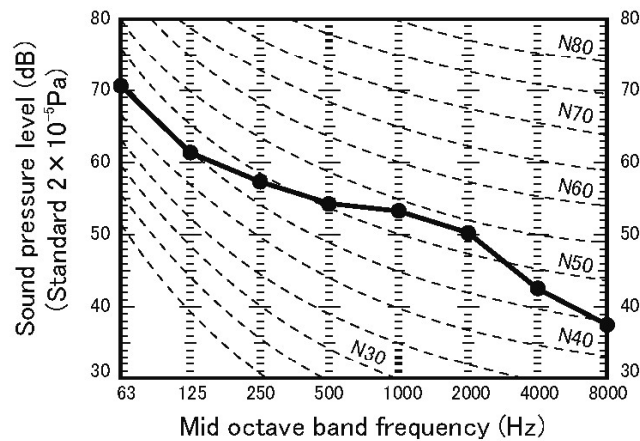
Distance from front side 1m

Height 1m

### FDC224KXZME1

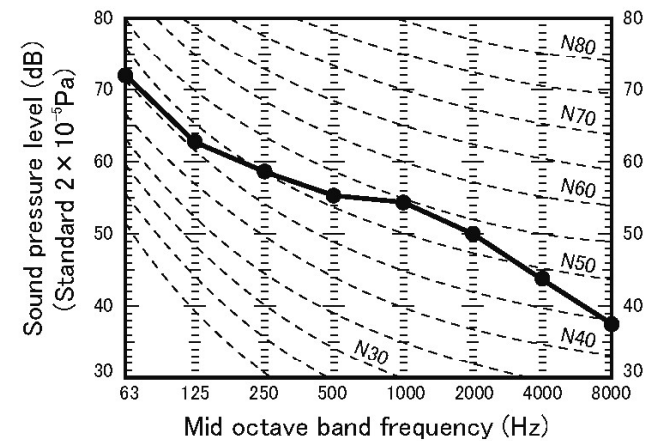
Noise level 58 dB (A)

Cooling



Noise level 59 dB (A)

Heating



## Noise level

Measured based on JIS B 8616

Mike position as highest noise level in position as below

Distance from front side 1m

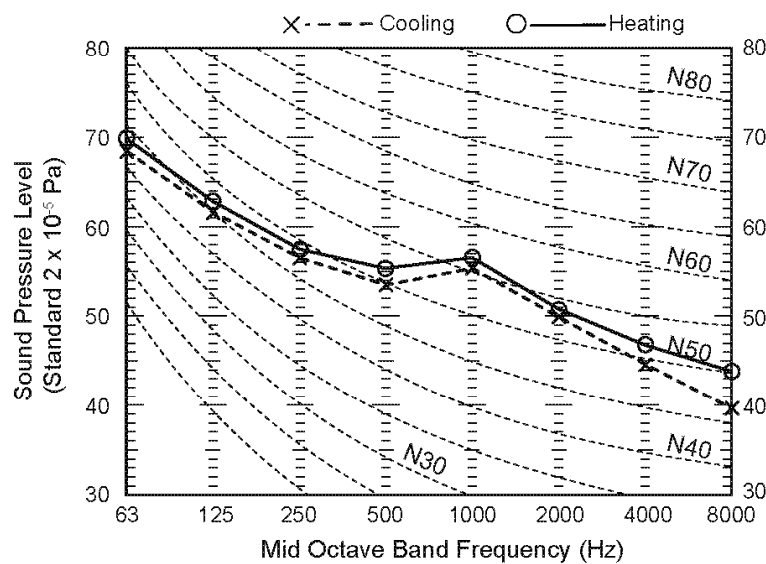
Height 1m

### FDC224KXZPE1

#### (1) Sound pressure level

Noise level 59 dB (A) at cooling

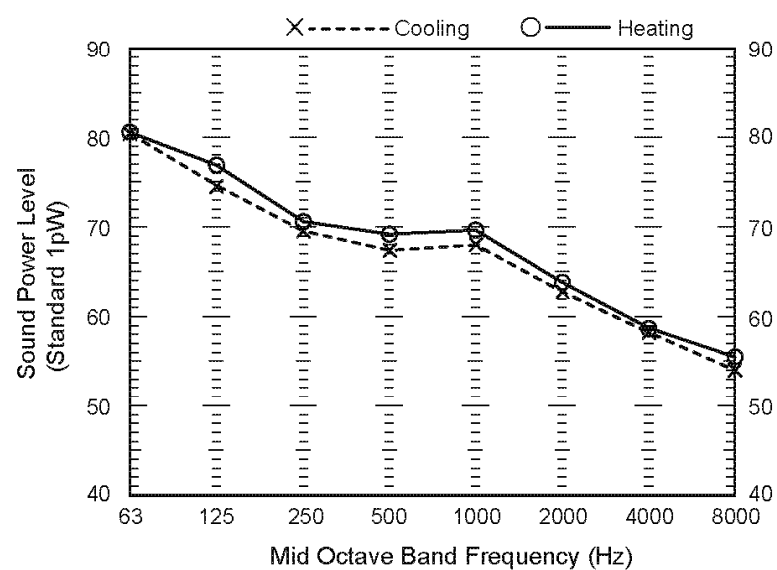
60 dB (A) at heating



#### (2) Sound power level

Noise level 72 dB (A) at cooling

73 dB (A) at heating



## Noise level

Measured based on JIS B 8616

Mike position as highest noise level in position as below

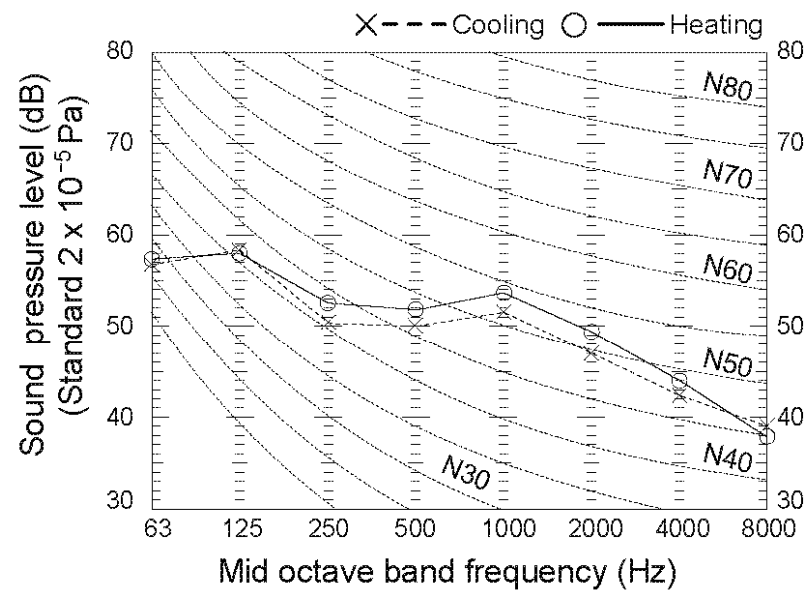
Distance from front side 1m

Height 1m

### FDC280KXZE2

Noise level 56 dB (A) at cooling

57 dB (A) at heating



## Noise level

Measured based on JIS B 8616

Mike position as highest noise level in position as below

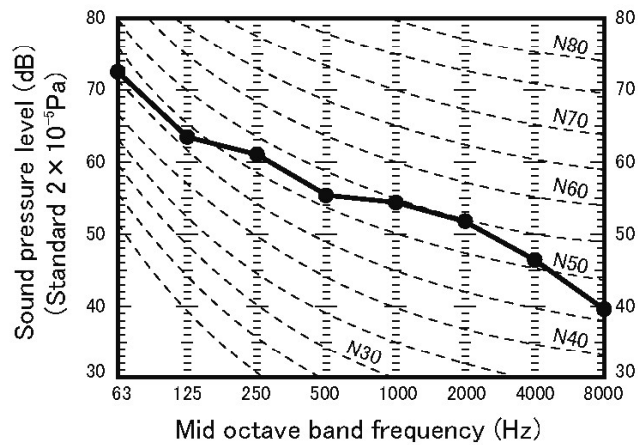
Distance from front side 1m

Height 1m

### FDC280KXZME1

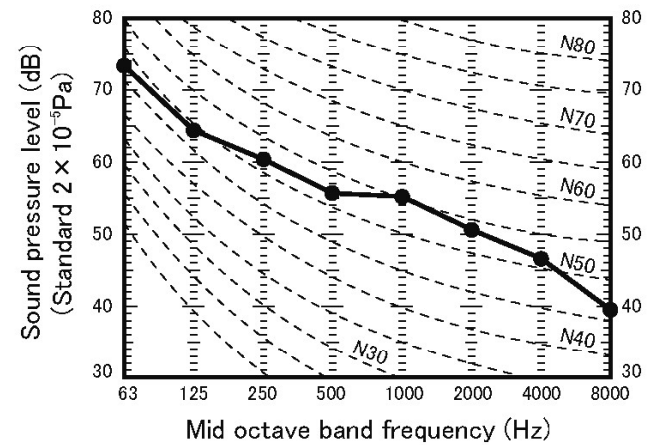
Noise level 60 dB (A)

Cooling



Noise level 60 dB (A)

Heating



## Noise level

Measured based on JIS B 8616

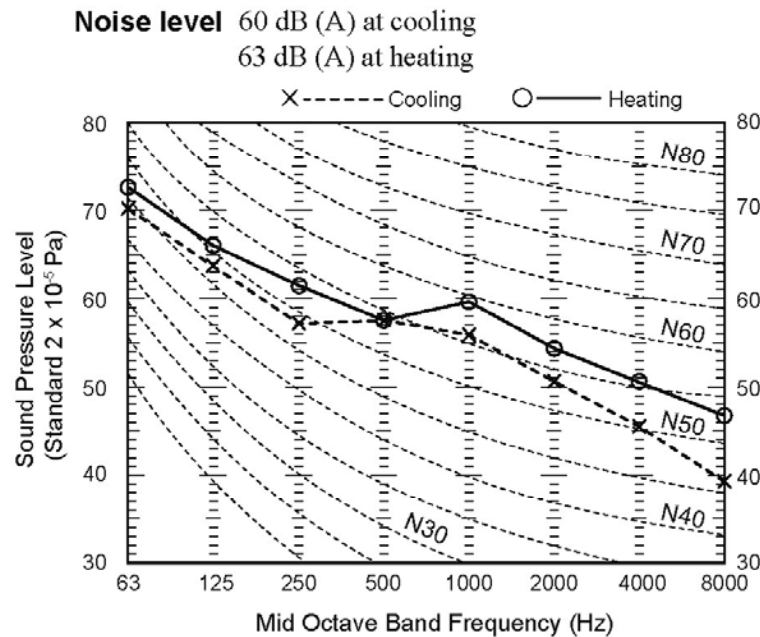
Mike position as highest noise level in position as below

Distance from front side 1m

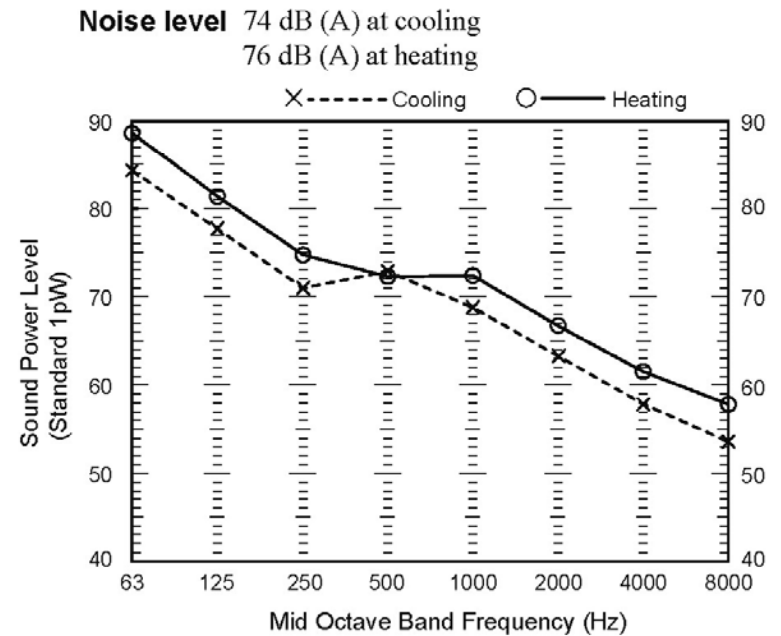
Height 1m

### FDC280KXZPE1

#### (1) Sound pressure level



#### (2) Sound power level



## Noise level

Measured based on JIS B 8616

Mike position as highest noise level in position as below

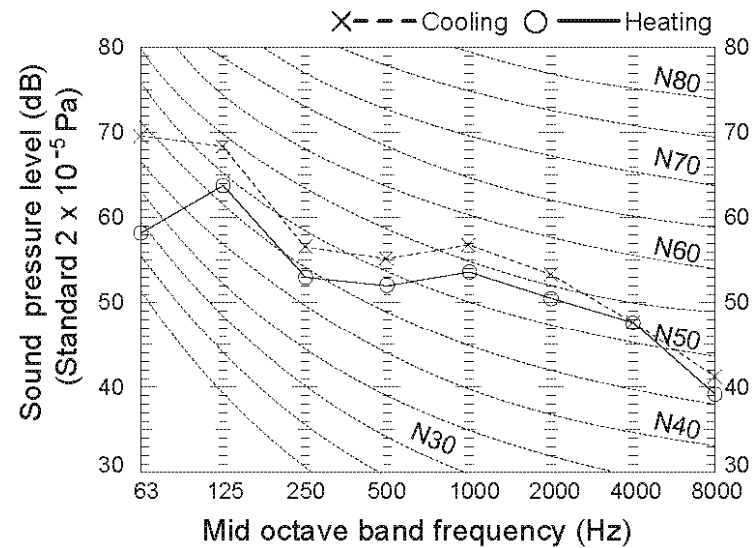
Distance from front side 1m

Height 1m

### FDC335KXZE2

Noise level 63 dB (A) at cooling

62 dB (A) at heating



## Noise level

Measured based on JIS B 8616

Mike position as highest noise level in position as below

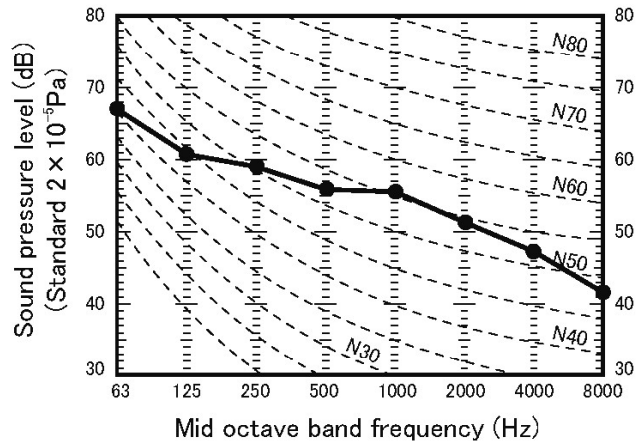
Distance from front side 1m

Height 1m

### FDC335KXZME1A

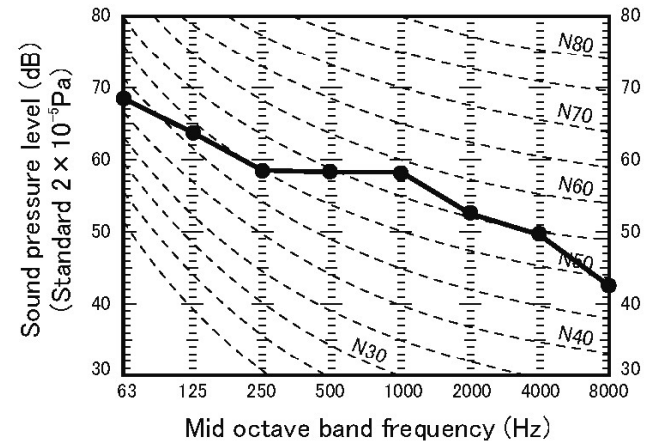
Noise level 60 dB (A)

Cooling



Noise level 62 dB (A)

Heating





## Noise level

Measured based on JIS B 8616

Mike position as highest noise level in position as below

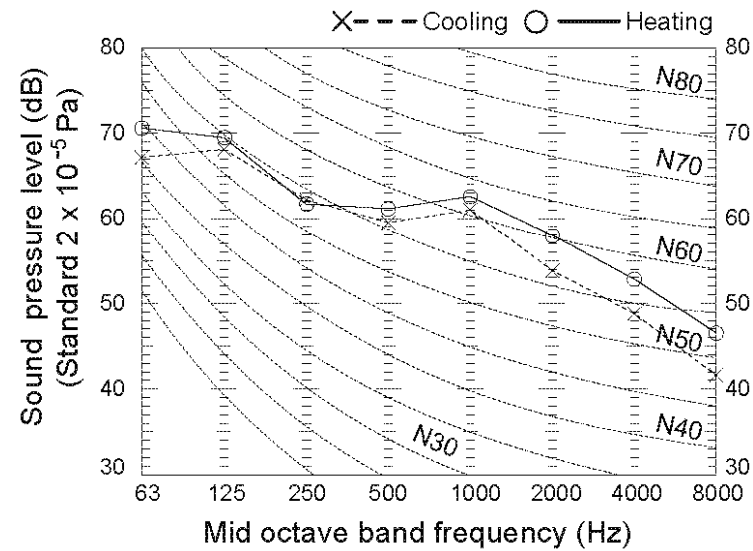
Distance from front side 1m

Height 1m

### FDC560KXZE2

Noise level 63 dB (A) at cooling

64 dB (A) at heating



## Noise level

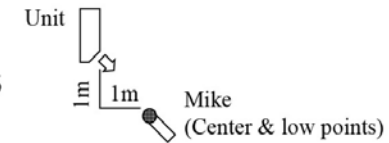
Notes(1) The data are based on the following conditions.

Ambient air temperature: Indoor unit 27°CWB. Outdoor unit 35°CDB.

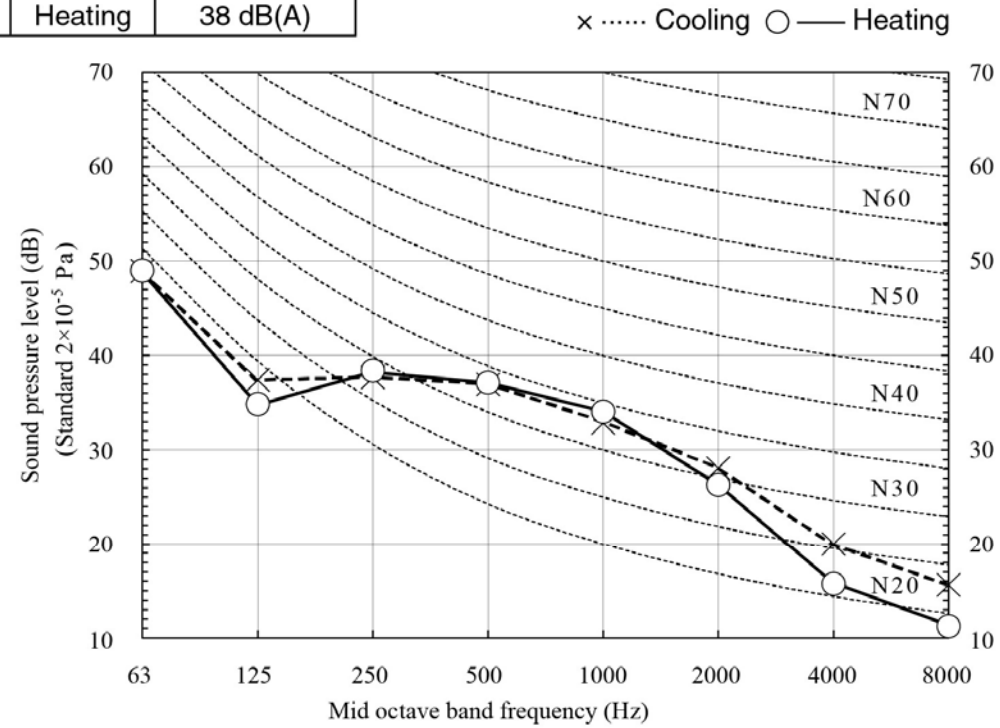
(2) The data in the chart are measured in an anechoic room.

(3) The noise levels measured in the field are usually higher than the data because of reflection.

Measured based on JIS B 8616  
Mike position



| Model               | <b>FDK28KXZE1</b> |          |
|---------------------|-------------------|----------|
| P-Hi<br>Noise Level | Cooling           | 38 dB(A) |
|                     | Heating           | 38 dB(A) |



## Noise level

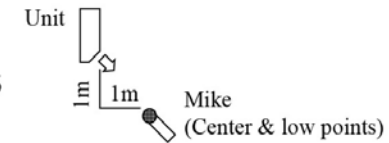
Notes(1) The data are based on the following conditions.

Ambient air temperature: Indoor unit 27°CWB. Outdoor unit 35°CDB.

(2) The data in the chart are measured in an anechoic room.

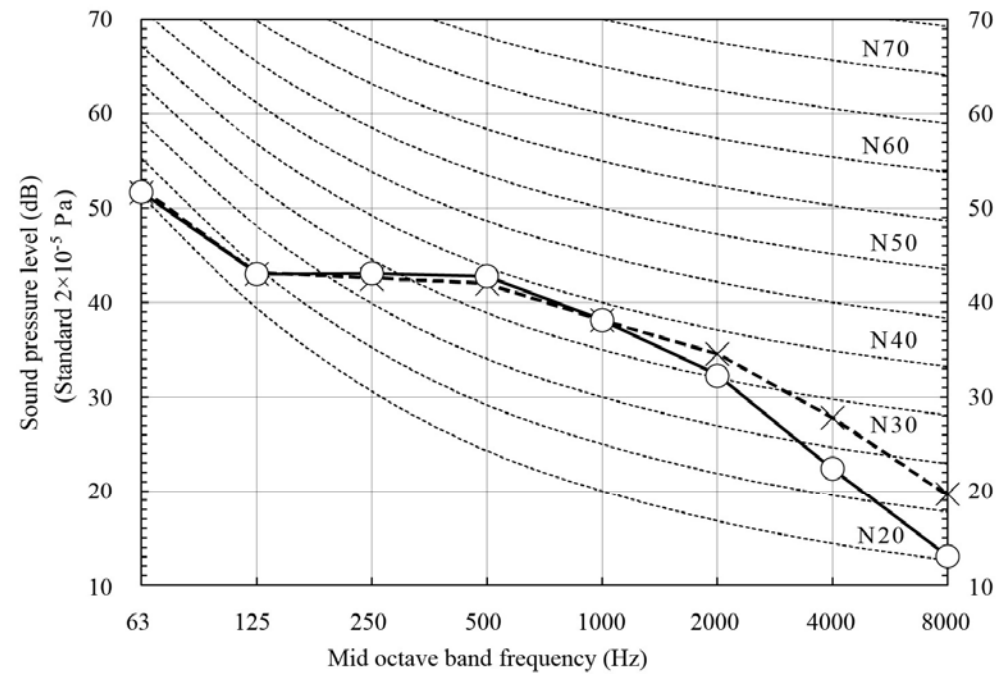
(3) The noise levels measured in the field are usually higher than the data because of reflection.

Measured based on JIS B 8616  
Mike position



| Model               | FDK45KXZE1 |          |
|---------------------|------------|----------|
| P-Hi<br>Noise Level | Cooling    | 43 dB(A) |
|                     | Heating    | 43 dB(A) |

× ..... Cooling ○ — Heating



## Noise level

Note (1) The data are based on the following conditions.

Ambient air temperature: Indoor unit 27°CDB, 19°CWB. Outdoor unit 35°CDB

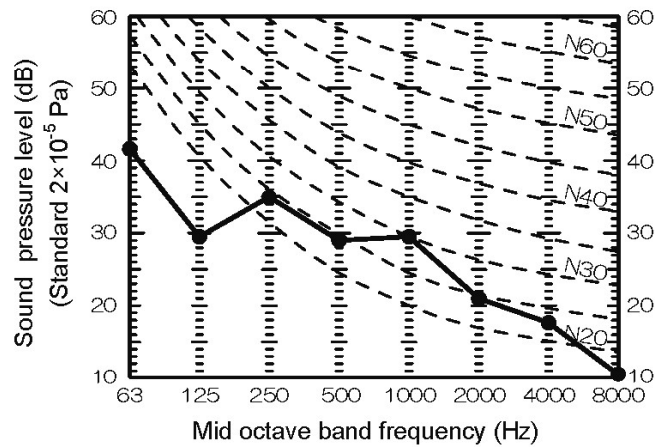
(2) The data in the chart are measured in an anechoic room.

(3) The noise levels measured in the field are usually higher than the data because of reflection.

### Ceiling cassette-4 way type (FDT)

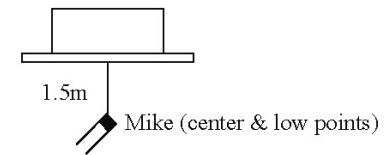
#### FDT28KXZE1

Noise level 33dB(A) at P-Hi



Measured based on JIS B 8616

Mike position as right



## Noise level

Note (1) The data are based on the following conditions.

Ambient air temperature: Indoor unit 27°CDB, 19°CWB. Outdoor unit 35°CDB

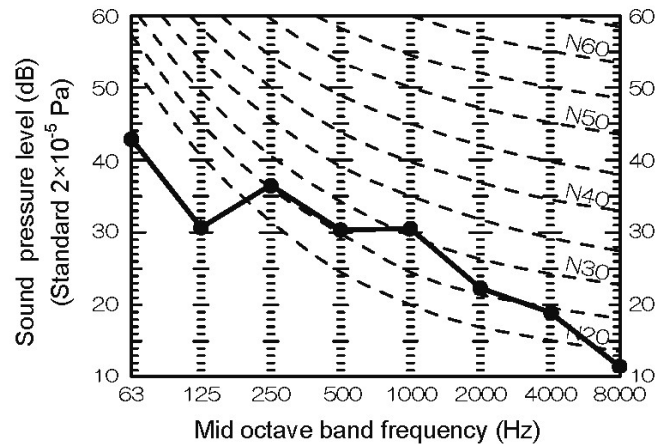
(2) The data in the chart are measured in an anechoic room.

(3) The noise levels measured in the field are usually higher than the data because of reflection.

### Ceiling cassette-4 way type (FDT)

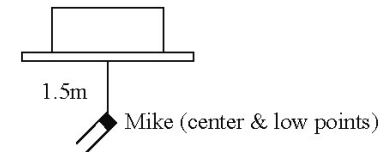
#### FDT36KXZE1

Noise level 34dB(A) at P-Hi



Measured based on JIS B 8616

Mike position as right



## Noise level

Note (1) The data are based on the following conditions.

Ambient air temperature: Indoor unit 27°CDB, 19°CWB. Outdoor unit 35°CDB

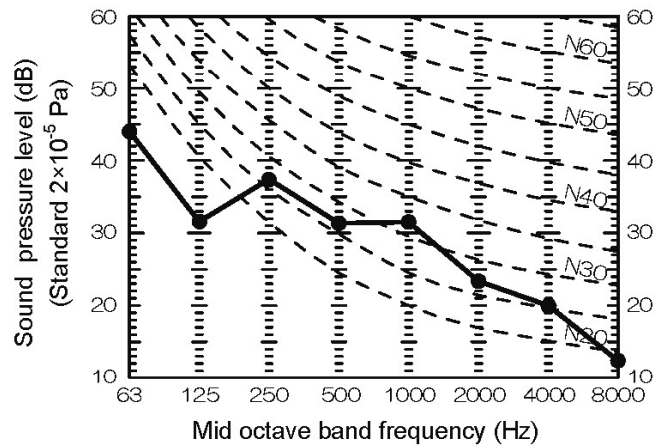
(2) The data in the chart are measured in an anechoic room.

(3) The noise levels measured in the field are usually higher than the data because of reflection.

### Ceiling cassette-4 way type (FDT)

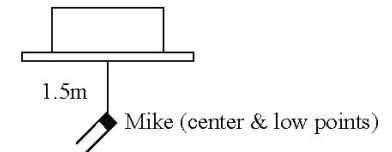
#### FDT45KXZE1

Noise level 35dB(A) at P-Hi



Measured based on JIS B 8616

Mike position as right



## Noise level

Note (1) The data are based on the following conditions.

Ambient air temperature: Indoor unit 27°CDB, 19°CWB. Outdoor unit 35°CDB

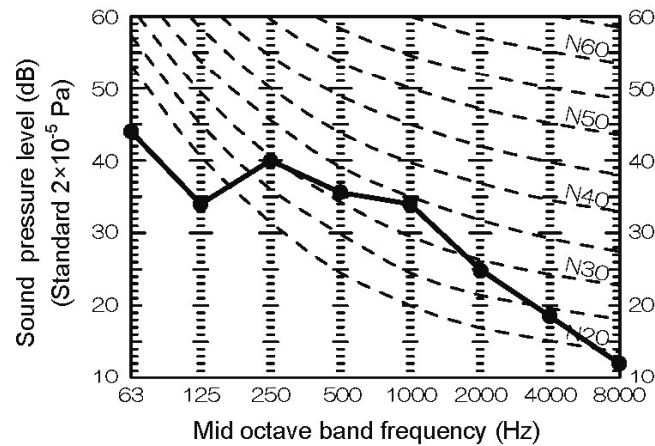
(2) The data in the chart are measured in an anechoic room.

(3) The noise levels measured in the field are usually higher than the data because of reflection.

### Ceiling cassette-4 way type (FDT)

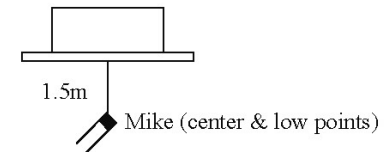
#### FDT56KXZE1

Noise level 38dB(A) at P-Hi



Measured based on JIS B 8616

Mike position as right



## Noise level

Note (1) The data are based on the following conditions.

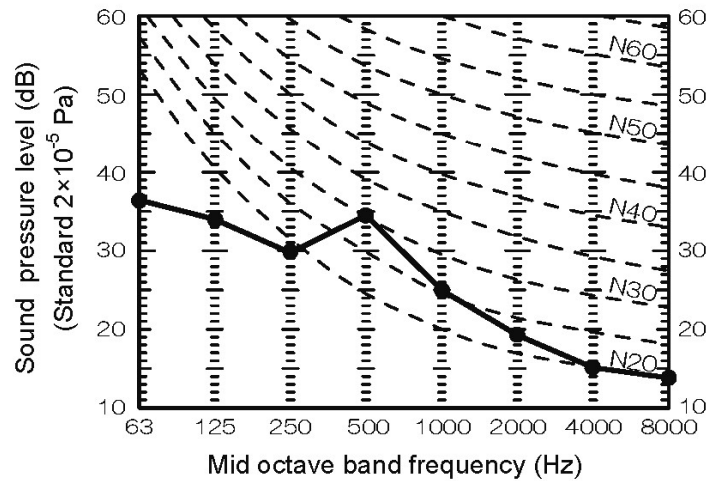
Ambient air temperature: Indoor unit 27°CDB, 19°CWB. Outdoor unit 35°CDB

(2) The data in the chart are measured in an anechoic room.

(3) The noise levels measured in the field are usually higher than the data because of reflection.

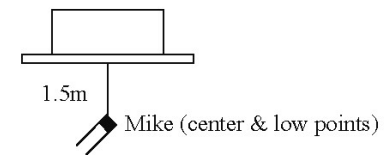
### FDTC15KXZE1

Noise level 33dB(A) at P-Hi



Measured based on JIS B 8616

Mike position as right





## Noise level

Note (1) The data are based on the following conditions.

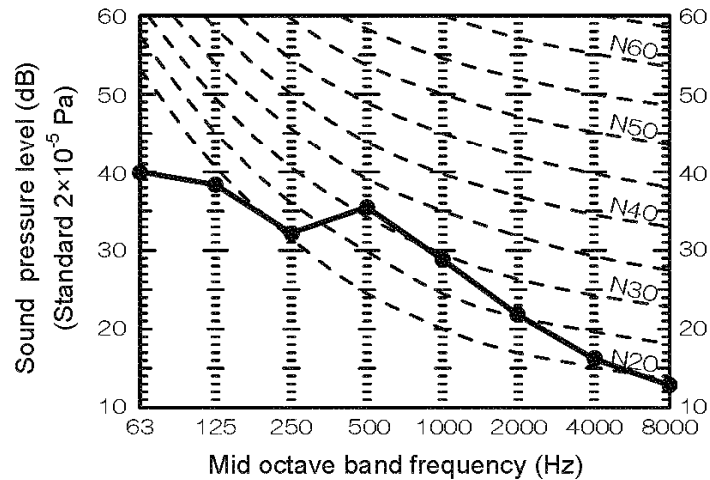
Ambient air temperature: Indoor unit 27°CDB, 19°CWB. Outdoor unit 35°CDB

(2) The data in the chart are measured in an anechoic room.

(3) The noise levels measured in the field are usually higher than the data because of reflection.

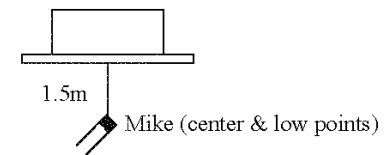
### FDTC22KXZE1

#### Noise level 35dB(A) at P-Hi



Measured based on JIS B 8616

Mike position as right



## Noise level

Note (1) The data are based on the following conditions.

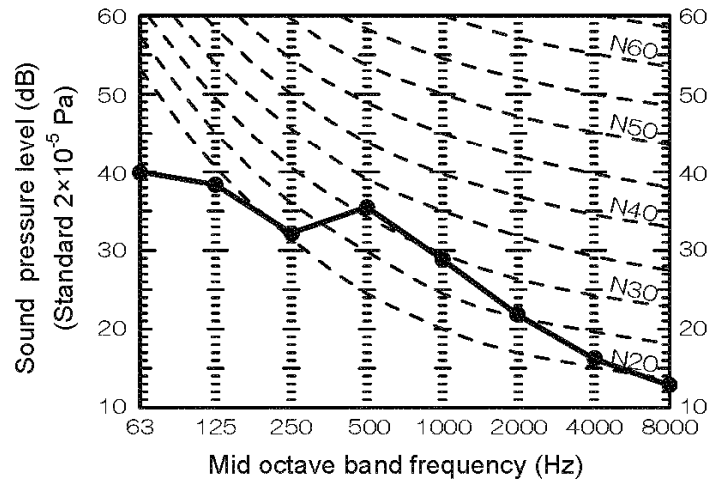
Ambient air temperature: Indoor unit 27°CDB, 19°CWB. Outdoor unit 35°CDB

(2) The data in the chart are measured in an anechoic room.

(3) The noise levels measured in the field are usually higher than the data because of reflection.

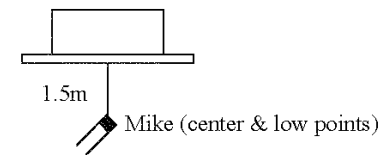
### FDTC28KXZE1

#### Noise level 35dB(A) at P-Hi



Measured based on JIS B 8616

Mike position as right



## Noise level

Note (1) The data are based on the following conditions.

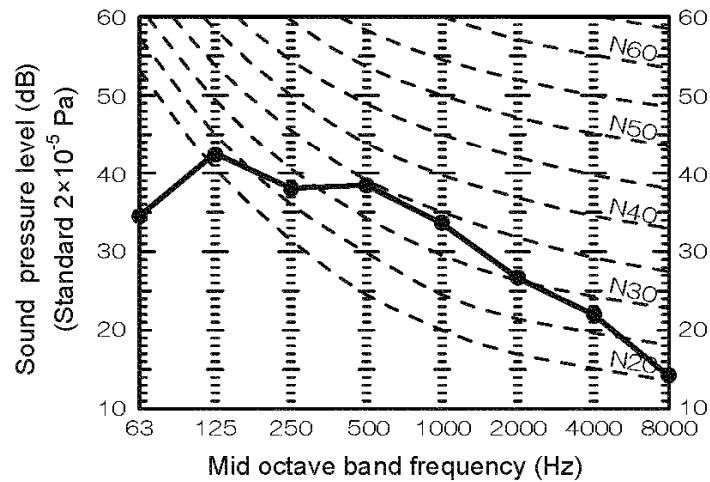
Ambient air temperature: Indoor unit 27°CDB, 19°CWB. Outdoor unit 35°CDB

(2) The data in the chart are measured in an anechoic room.

(3) The noise levels measured in the field are usually higher than the data because of reflection.

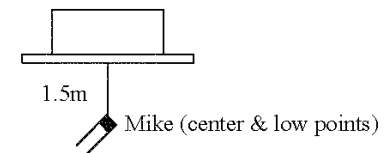
### FDTC36KXZE1

Noise level 39dB(A) at P-Hi



Measured based on JIS B 8616

Mike position as right



## Noise level

Note (1) The data are based on the following conditions.

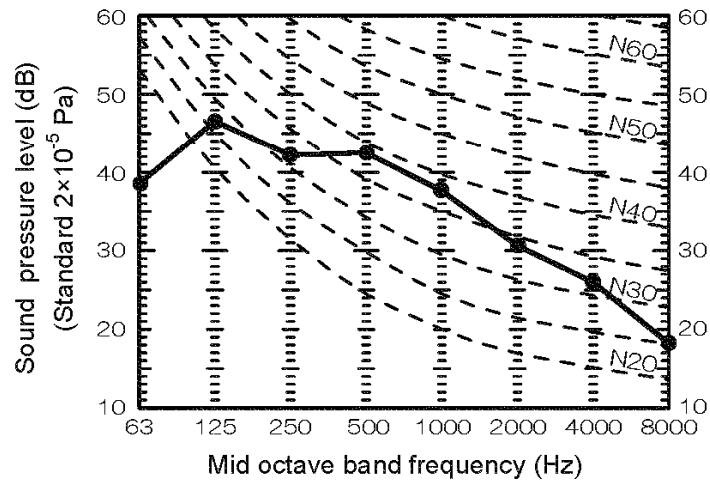
Ambient air temperature: Indoor unit 27°CDB, 19°CWB. Outdoor unit 35°CDB

(2) The data in the chart are measured in an anechoic room.

(3) The noise levels measured in the field are usually higher than the data because of reflection.

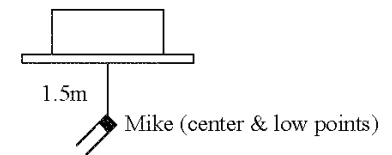
### FDTC45KXZE1

Noise level 43dB(A) at P-Hi



Measured based on JIS B 8616

Mike position as right



## Noise level

Note (1) The data are based on the following conditions.

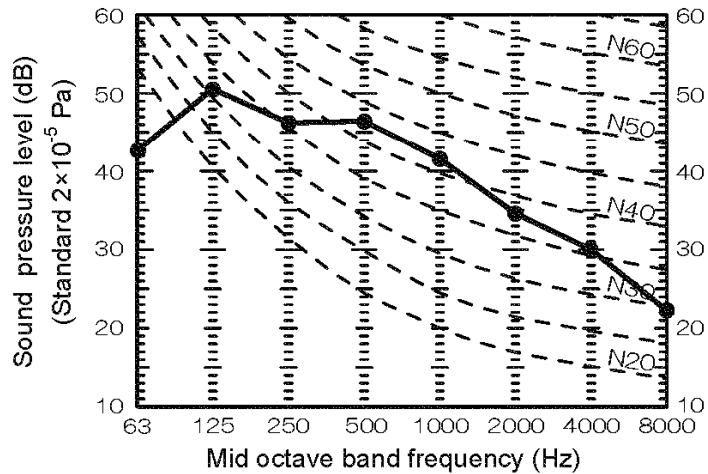
Ambient air temperature: Indoor unit 27°CDB, 19°CWB. Outdoor unit 35°CDB

(2) The data in the chart are measured in an anechoic room.

(3) The noise levels measured in the field are usually higher than the data because of reflection.

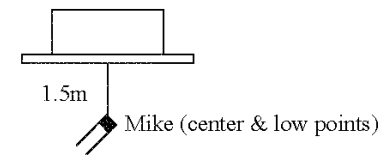
### FDTC56KXZE1

Noise level 47dB(A) at P-Hi



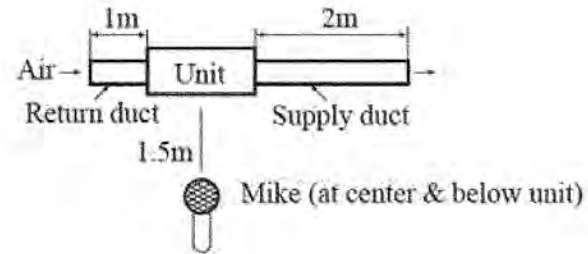
Measured based on JIS B 8616

Mike position as right



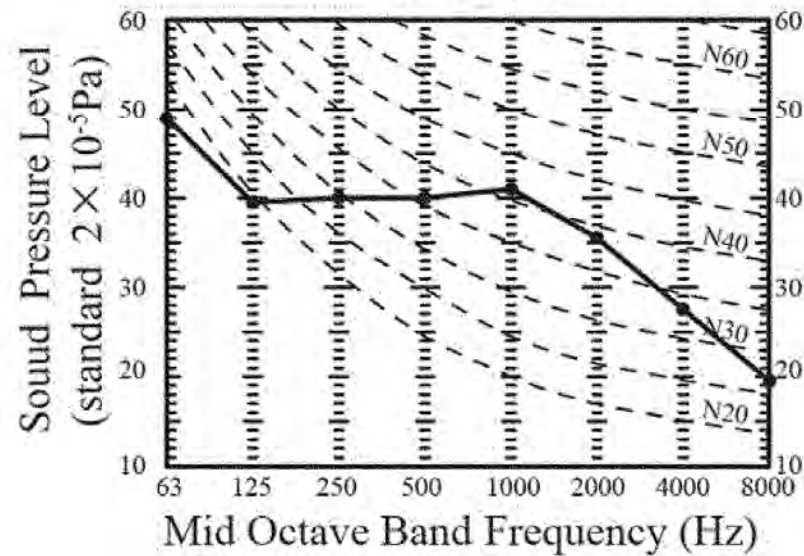
## Noise Level

Measured based on JIS B 8616  
Mike position as right



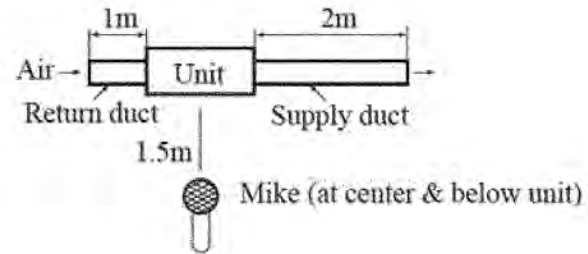
### FDUM112KXE6F

**Noise level** 44 dB (A) at P-HIGH  
38 dB (A) at HIGH  
36 dB (A) at MEDIUM  
30 dB (A) at LOW



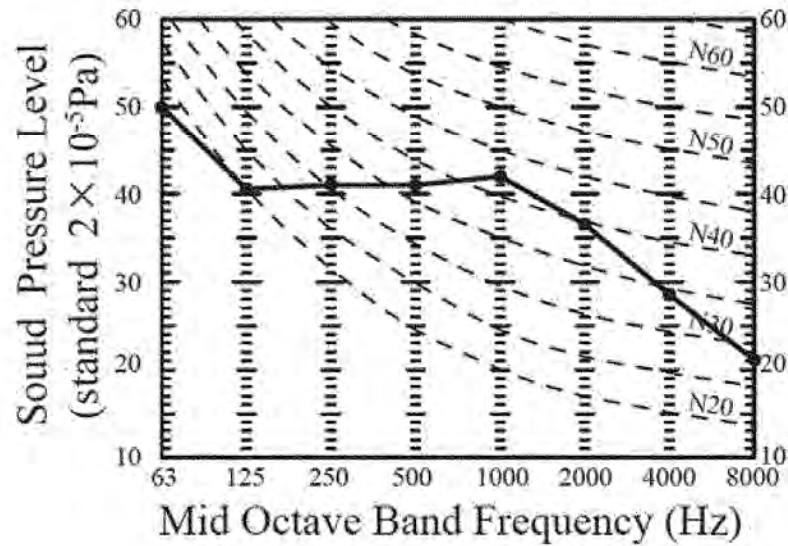
## Noise Level

Measured based on JIS B 8616  
Mike position as right



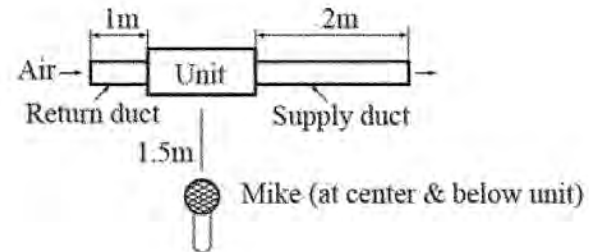
### FDUM140KXE6F

**Noise level** 45 dB (A) at P-HIGH  
40 dB (A) at HIGH  
34 dB (A) at MEDIUM  
29 dB (A) at LOW



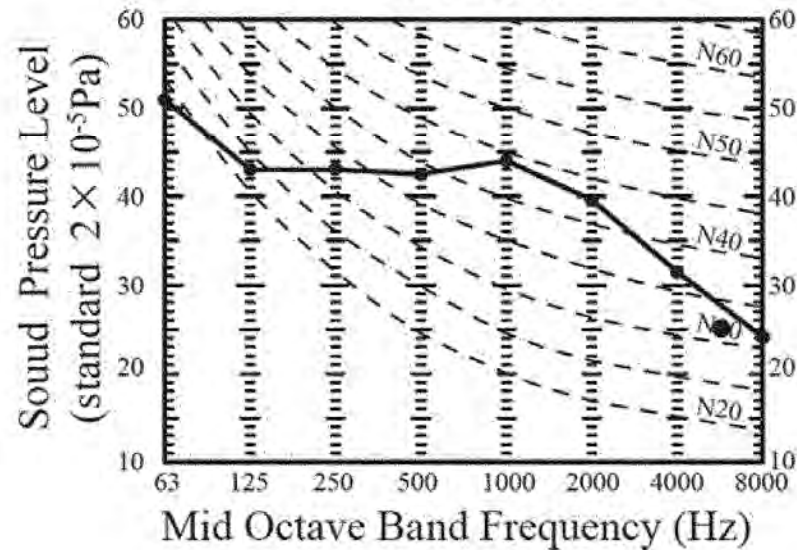
## Noise Level

Measured based on JIS B 8616  
Mike position as right



### FDUM160KXE6F

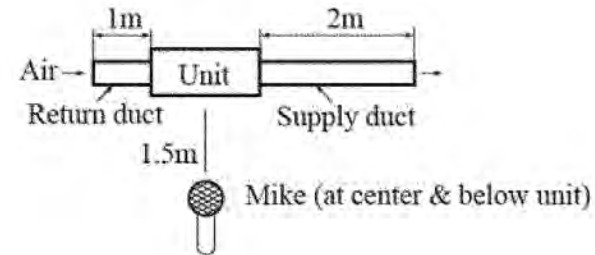
**Noise level** 47 dB (A) at P-HIGH  
40 dB (A) at HIGH  
35 dB (A) at MEDIUM  
30 dB (A) at LOW





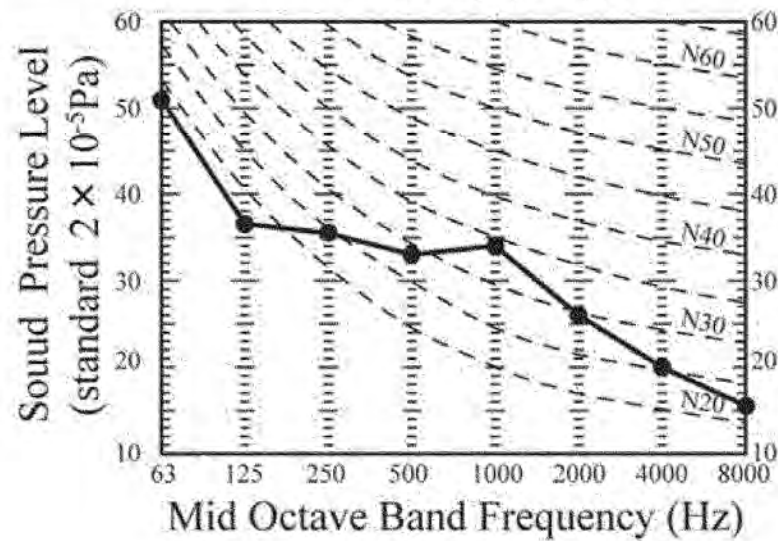
## Noise Level

Measured based on JIS B 8616  
Mike position as right



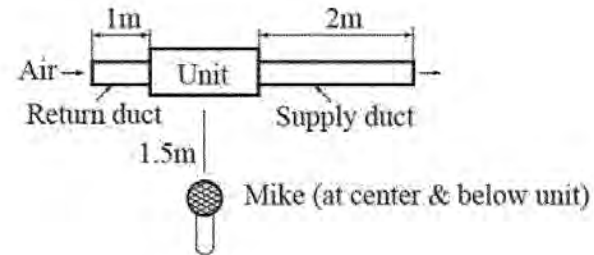
### FDUM56KXE6F

**Noise level** 37 dB (A) at P-HIGH  
32 dB (A) at HIGH  
29 dB (A) at MEDIUM  
26 dB (A) at LOW



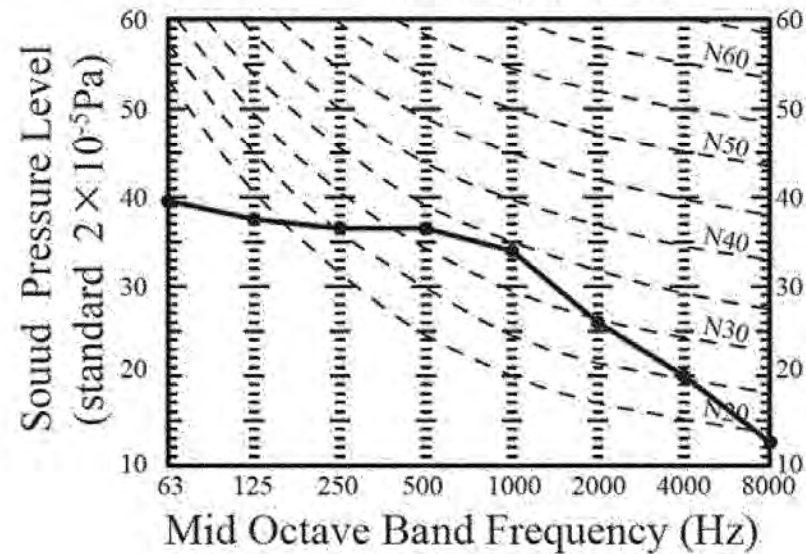
## Noise Level

Measured based on JIS B 8616  
Mike position as right



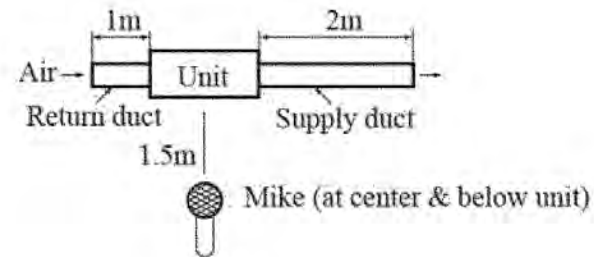
### FDUM71KXE6F

**Noise level** 38 dB (A) at P-HIGH  
33 dB (A) at HIGH  
29 dB (A) at MEDIUM  
25 dB (A) at LOW



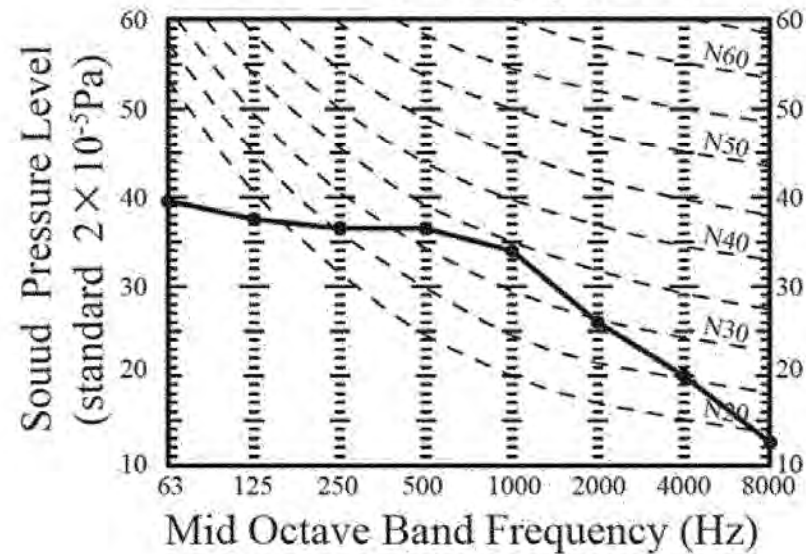
## Noise Level

Measured based on JIS B 8616  
Mike position as right



### FDUM90KXE6F

**Noise level** 38 dB (A) at P-HIGH  
33 dB (A) at HIGH  
29 dB (A) at MEDIUM  
25 dB (A) at LOW



## Noise Level

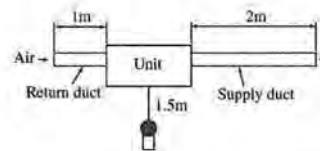
Duct connected (thin)-Low static pressure type (FDUT)

### FDUT15KXE6F-E

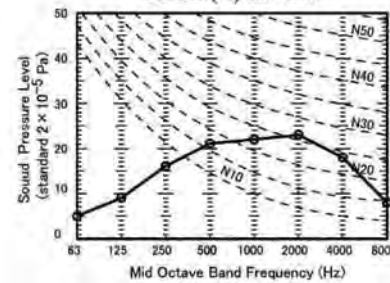
#### (I) Rear air return

- Mike position : 1.5m below the unit

Measured based on JIS B 8616 ANNEX3 (Duct setting)  
Mike position as right

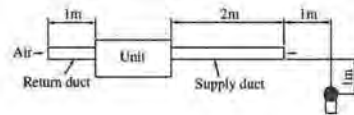


Noise level 28 dB (A) at HIGH  
26 dB (A) at MEDIUM  
22 dB (A) at LOW

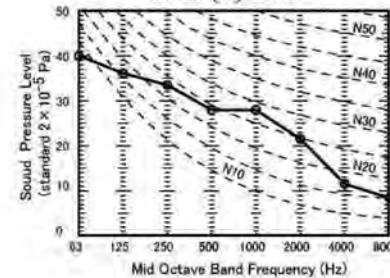


- Mike position : 1m in front and 1m below of the air supply duct

Measured based on JIS B 8616 ANNEX3 (Duct setting)  
Mike position as right



Noise level 32 dB (A) at HIGH  
29 dB (A) at MEDIUM  
25 dB (A) at LOW



## Noise Level

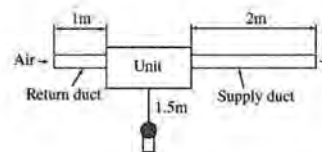
Duct connected (thin)-Low static pressure type (FDUT)

### FDUT22KXE6F-E

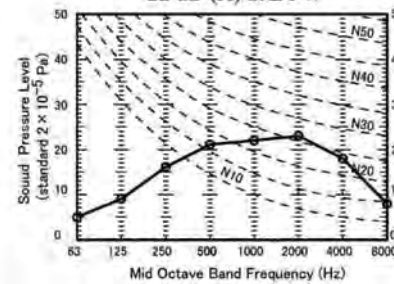
#### (1) Rear air return

- Mike position : 1.5m below the unit

Measured based on JIS B 8616 ANNEX3 (Duct setting)  
Mike position as right

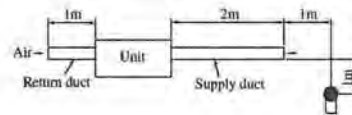


Noise level 28 dB (A) at HIGH  
26 dB (A) at MEDIUM  
22 dB (A) at LOW

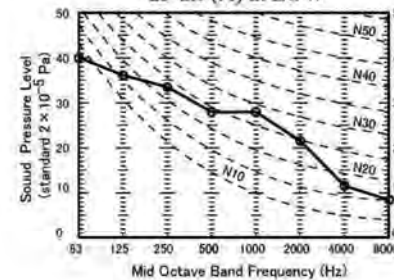


- Mike position : 1m in front and 1m below of the air supply duct

Measured based on JIS B 8616 ANNEX3 (Duct setting)  
Mike position as right



Noise level 32 dB (A) at HIGH  
29 dB (A) at MEDIUM  
25 dB (A) at LOW





## Noise Level

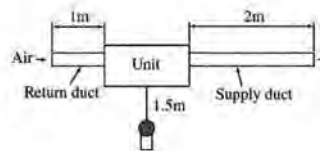
Duct connected (thin)-Low static pressure type (FDUT)

### FDUT28KXE6F-E

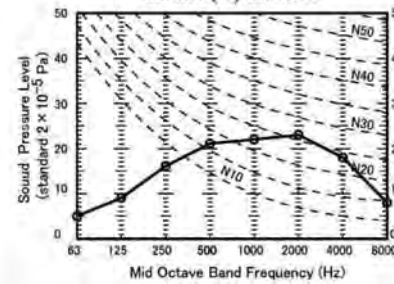
#### (1) Rear air return

- Mike position : 1.5m below the unit

Measured based on JIS B 8616 ANNEX3 (Duct setting)  
Mike position as right

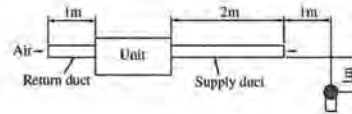


Noise level 28 dB (A) at HIGH  
26 dB (A) at MEDIUM  
22 dB (A) at LOW

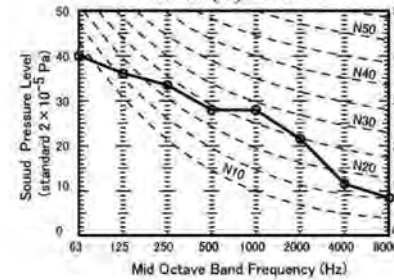


- Mike position : 1m in front and 1m below of the air supply duct

Measured based on JIS B 8616 ANNEX3 (Duct setting)  
Mike position as right



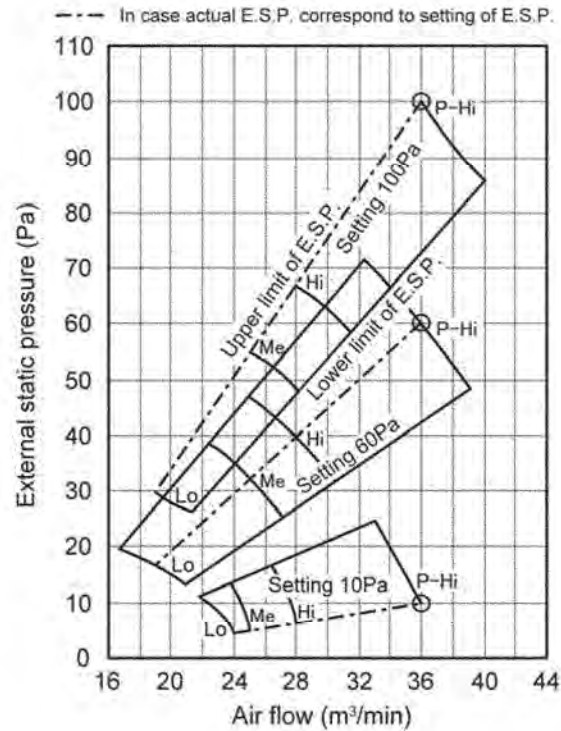
Noise level 32 dB (A) at HIGH  
29 dB (A) at MEDIUM  
25 dB (A) at LOW



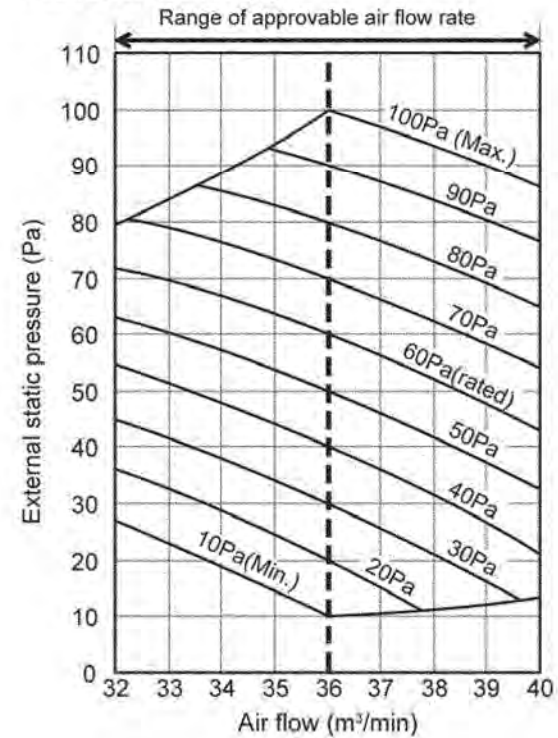
## Characteristics of fan

### FDUM112KXE6F

Characteristic FAN(1)



Characteristic FAN(2)

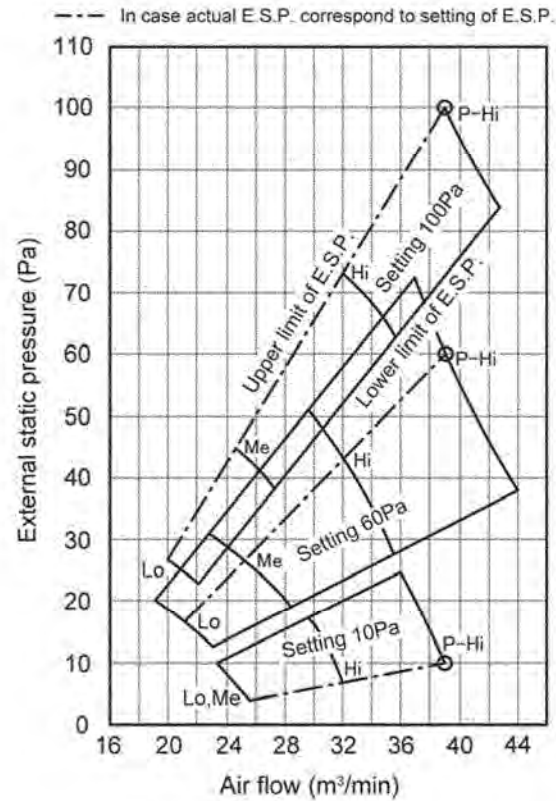


- Characteristic FAN (1) shows air flow vs. External Static Pressure (E.S.P.) range where settings of E.S.P. are maximum E.S.P. (100Pa) , rated E.S.P., and minimum E.S.P. (10Pa)
- Characteristic FAN (2) shows air flow vs. E.S.P curve when set fan tap is set P-Hi with each setting of E.S.P by remote controller.
- External Static Pressure (E.S.P.) can be set by wired remote controller.
- You can set required E.S.P. by wired remote controller which calculate it with the set air flow rate and pressure loss of the duct connected.

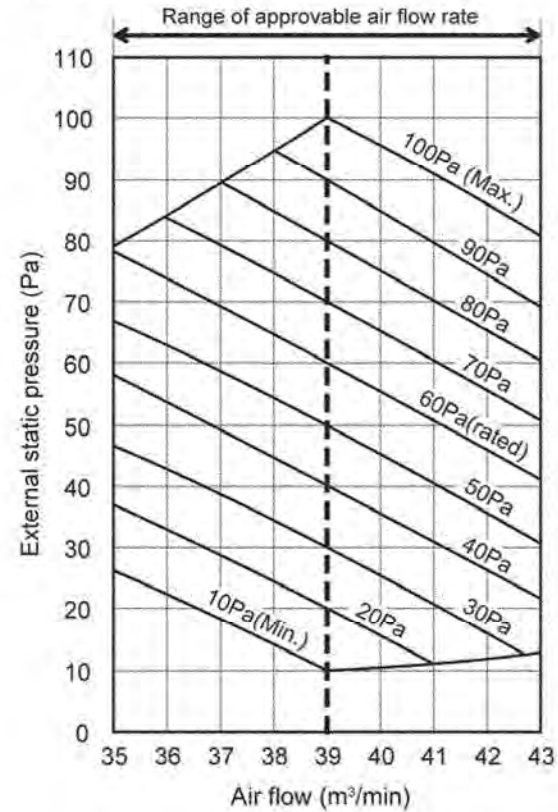
## Characteristics of fan

### FDUM140KXE6F

Characteristic FAN(1)



Characteristic FAN(2)



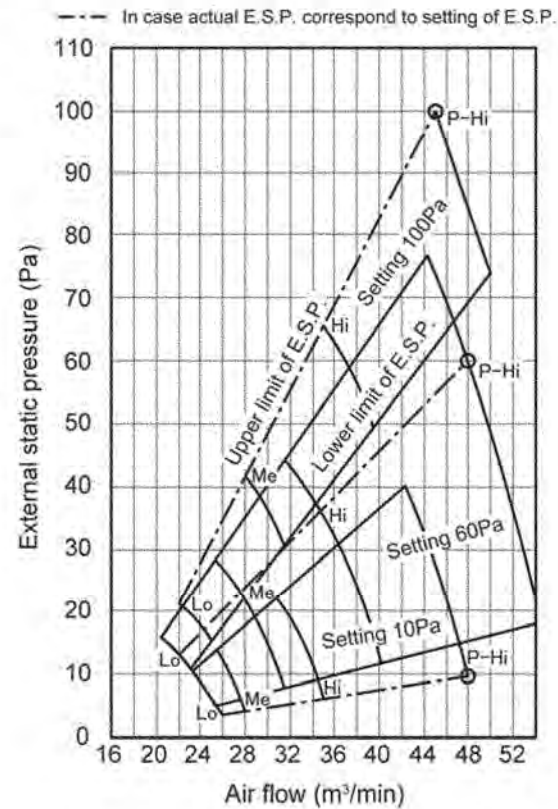
- Characteristic FAN (1) shows air flow vs. External Static Pressure (E.S.P.) range where settings of E.S.P. are maximum E.S.P. (100Pa), rated E.S.P., and minimum E.S.P. (10Pa)
- Characteristic FAN (2) shows air flow vs. E.S.P. curve when set fan tap is set P-Hi with each setting of E.S.P. by remote controller.
- External Static Pressure (E.S.P.) can be set by wired remote controller.
- You can set required E.S.P. by wired remote controller which calculate it with the set air flow rate and pressure loss of the duct connected.



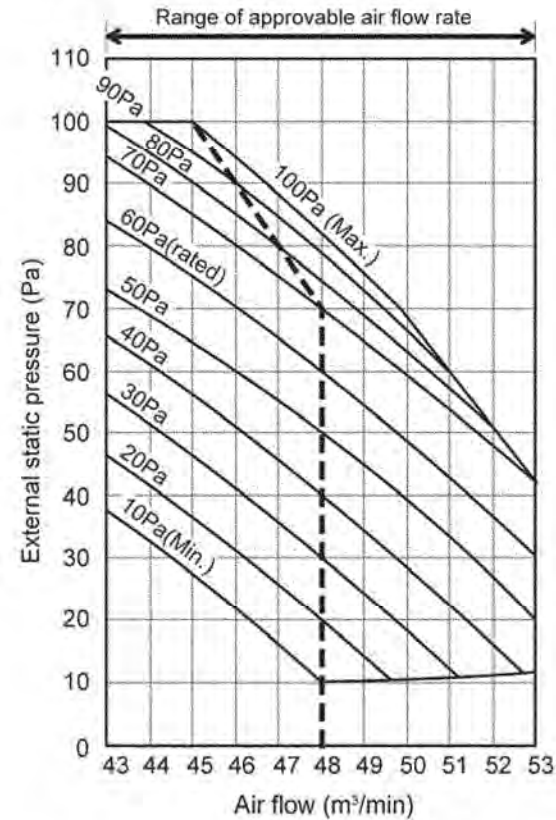
## Characteristics of fan

### FDUM160KXE6F

Characteristic FAN(1)



Characteristic FAN(2)

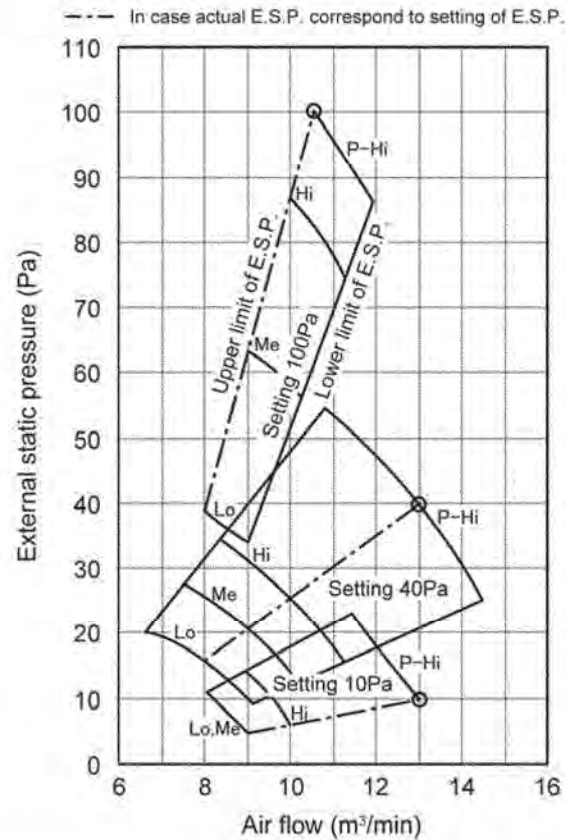


- Characteristic FAN (1) shows air flow vs. External Static Pressure (E.S.P.) range where settings of E.S.P. are maximum E.S.P. (100Pa) , rated E.S.P., and minimum E.S.P. (10Pa)
- Characteristic FAN (2) shows air flow vs. E.S.P curve when set fan tap is set P-Hi with each setting of E.S.P by remote controller.
- External Static Pressure (E.S.P.) can be set by wired remote controller.
- You can set required E.S.P. by wired remote controller which calculate it with the set air flow rate and pressure loss of the duct connected.

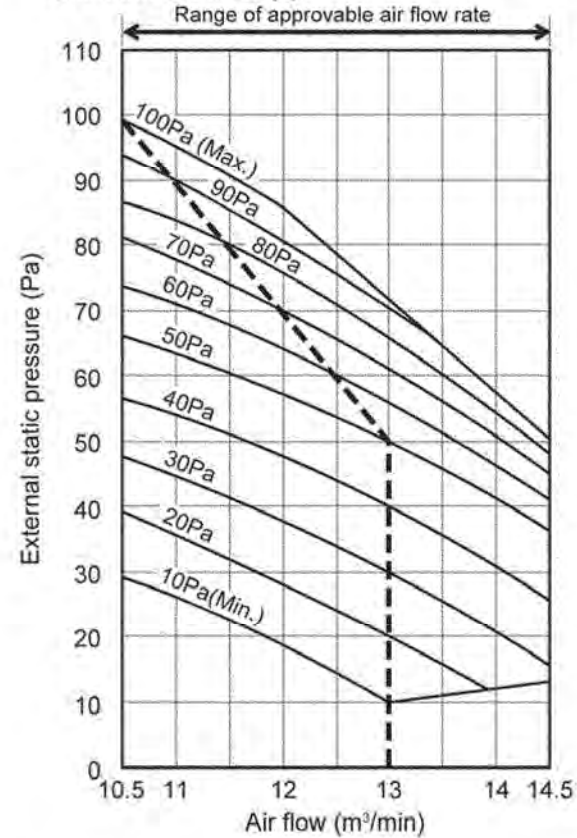
## Characteristics of fan

### FDUM56KXE6F

Characteristic FAN(1)



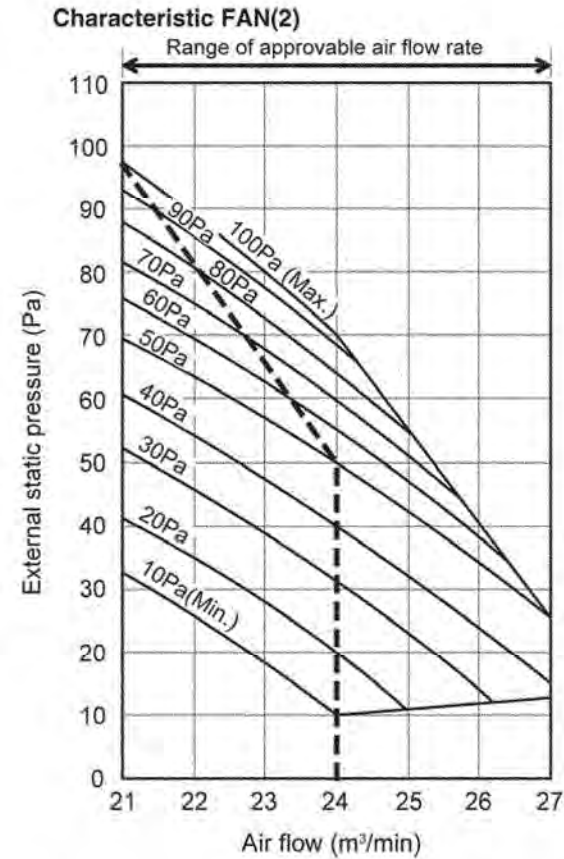
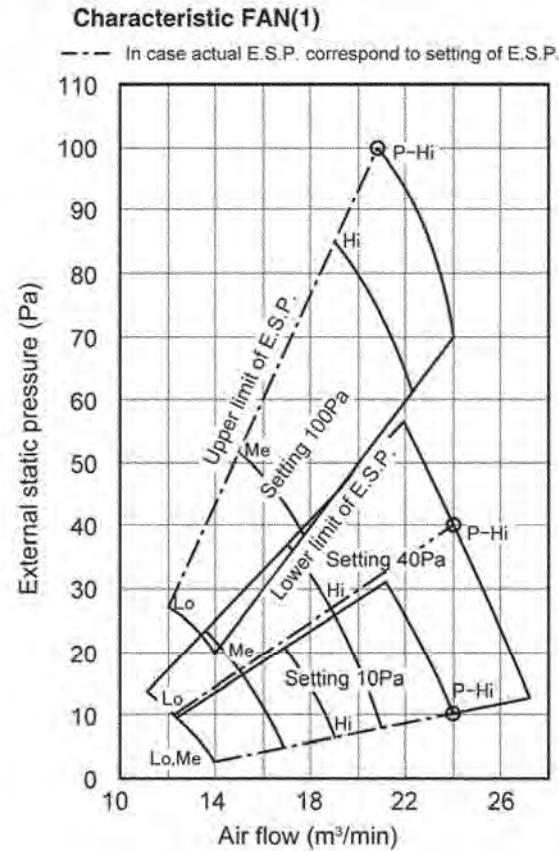
Characteristic FAN(2)



- Characteristic FAN (1) shows air flow vs. External Static Pressure (E.S.P.) range where settings of E.S.P. are maximum E.S.P. (100Pa), rated E.S.P., and minimum E.S.P. (10Pa)
- Characteristic FAN (2) shows air flow vs. E.S.P curve when set fan tap is set P-Hi with each setting of E.S.P by remote controller.
- External Static Pressure (E.S.P.) can be set by wired remote controller.
- You can set required E.S.P. by wired remote controller which calculate it with the set air flow rate and pressure loss of the duct connected.

## Characteristics of fan

### FDUM71KXE6F

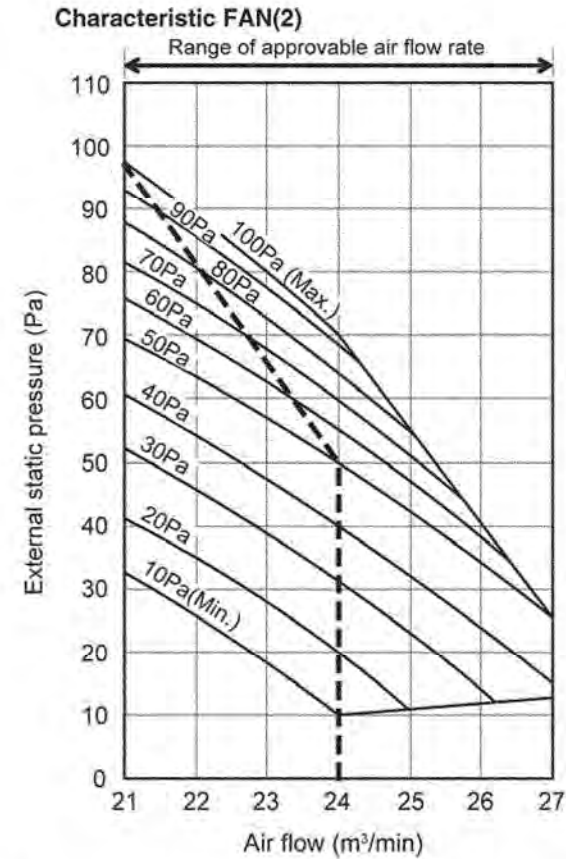
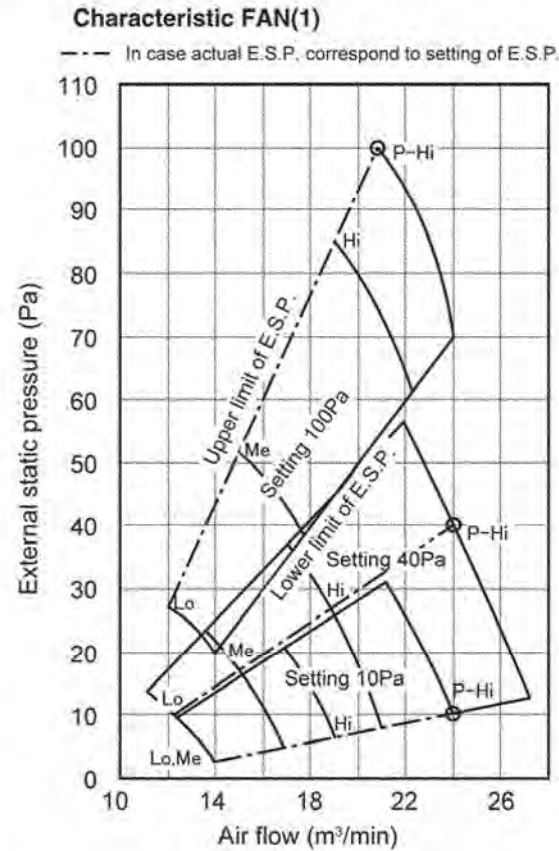


- Characteristic FAN (1) shows air flow vs. External Static Pressure (E.S.P.) range where settings of E.S.P. are maximum E.S.P. (100Pa), rated E.S.P., and minimum E.S.P. (10Pa)
- Characteristic FAN (2) shows air flow vs. E.S.P. curve when set fan tap is set P-Hi with each setting of E.S.P. by remote controller.
- External Static Pressure (E.S.P.) can be set by wired remote controller.
- You can set required E.S.P. by wired remote controller which calculate it with the set air flow rate and pressure loss of the duct connected.



## Characteristics of fan

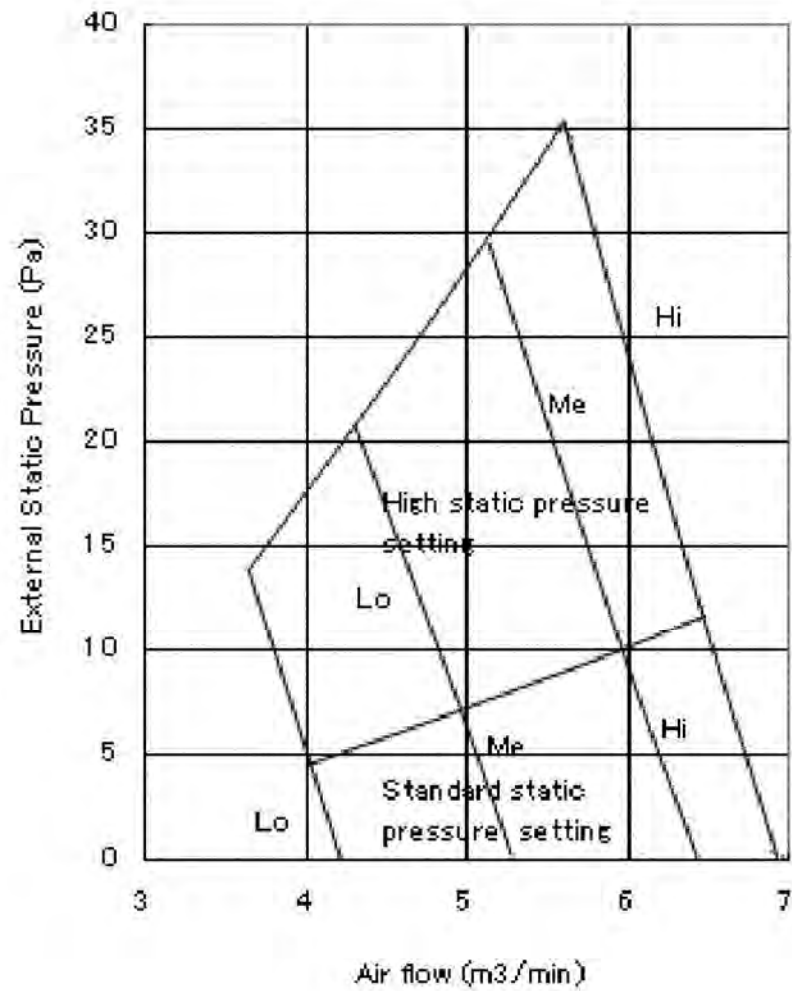
### FDUM90KXE6F



- Characteristic FAN (1) shows air flow vs. External Static Pressure (E.S.P.) range where settings of E.S.P. are maximum E.S.P. (100Pa) , rated E.S.P., and minimum E.S.P. (10Pa)
- Characteristic FAN (2) shows air flow vs. E.S.P. curve when set fan tap is set P-Hi with each setting of E.S.P. by remote controller.
- External Static Pressure (E.S.P.) can be set by wired remote controller.
- You can set required E.S.P. by wired remote controller which calculate it with the set air flow rate and pressure loss of the duct connected.

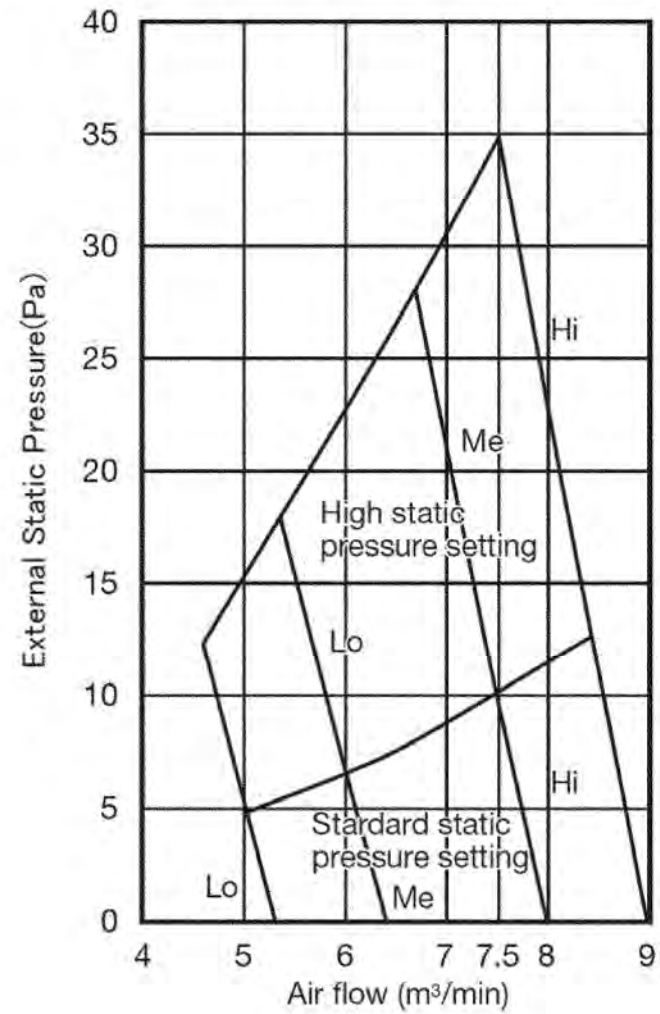
## Characteristics of fan

### FDUT15KXE6F-E



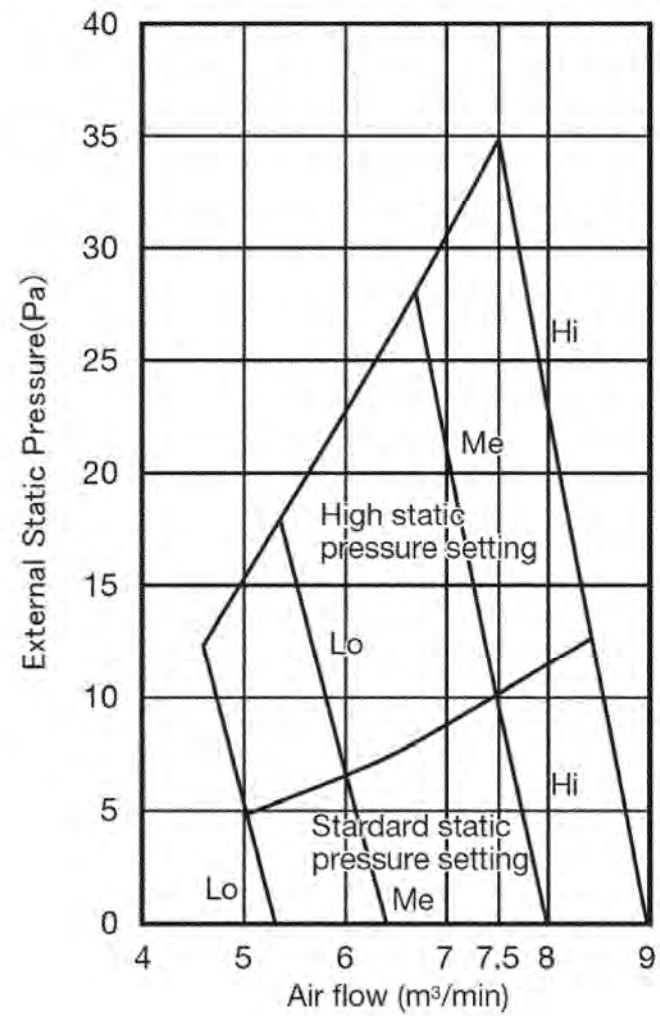
## Characteristics of fan

### FDUT22KXE6F-E



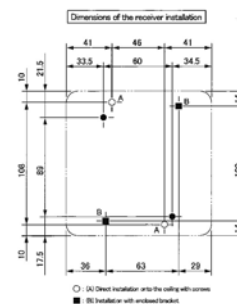
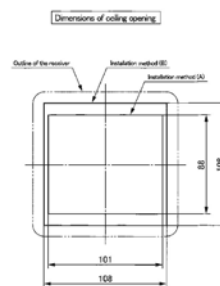
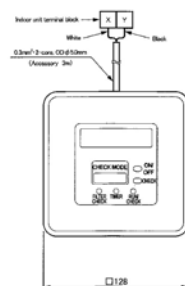
## Characteristics of fan

### FDUT28KXE6F-E



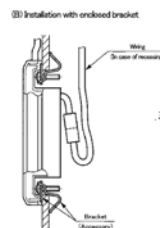
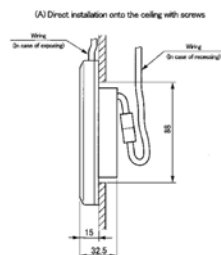
**RCN-KIT4-E2**

Unit:mm



### Installation of the receiver

The following two methods can be used to install the receiver onto a ceiling or a wall. Select a method according to the installation position.



## Installation of wireless kit

DO NOT install it on the following places in order to avoid malfunction.

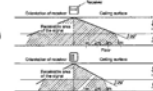
- DO NOT install it on the following places in order to avoid malfunction.
- (1) Places exposed to direct sunlight
  - (2) Places near heat devices
  - (3) High-humidity places
  - (4) Hot surface or cold surface enough to generate condensation
  - (5) Places exposed to oil mist or steam directly
  - (6) Livable surface
  - (7) Places affected by the direct airflow of the AC air
  - (8) Places where the motor is influenced by the fluorescent lamp (especially inverter type) or sunlight
  - (9) Places where the motor is affected by infrared rays of any other communication device
  - (10) Places where some object may obstruct the communication with the remote controller

Adapted to **RAMS** directive

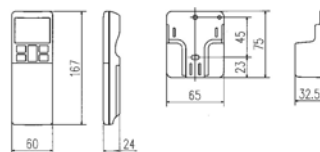
Wireless remote controller's operable area

When installed on ceiling

- ① Standard reachable area of the signal  
[condition] Illuminance at the receiver: 300/lux  
(When no lighting is installed within 1m  
of the receiver in an ordinary office.)



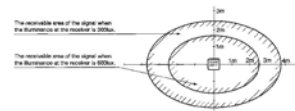
## Remote controller      Remote controller holder



Note

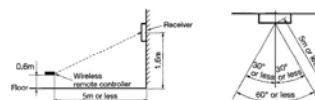
- (1) Two LR03 AAA dry cell batteries for remote controller are enclosed.

- ② Correlation between illuminance at the receiver and receivable area of the signal in a plain view.  
[condition] Correlation between the receivable area of the signal and illuminance at the receiver when the remote controller is operated at 1m high under the condition of ceiling height of 2.4m. When the illuminance becomes double, the area is narrowed down to two third.



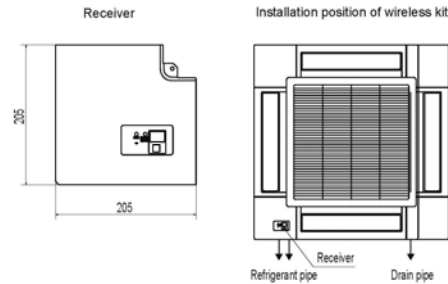
When installed on wall

- [condition] illuminance at the receiver: 800lux





## RCN-T-5BW-E2



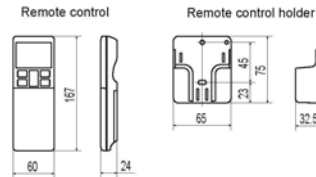
Setting switch on PCB of receiver

|     |  |                           |
|-----|--|---------------------------|
| SW1 | Prevent interference during plural setting | ON: Normal<br>OFF: Remote |
| SW2 | Receiver master/slave setting              | ON: Master<br>OFF: Slave  |
| SW3 | Buzzer                                     | ON: Valid<br>OFF: Invalid |
| SW4 | Auto restart                               | ON: Valid<br>OFF: Invalid |

Default setting: ☐ mark

### Notes

- (1) Receiver can install the position as shown.
- (2) Two LR03 AAA dry cell batteries for remote control are enclosed.
- (3) See spec sheet of "Wireless remote control" about remote control.



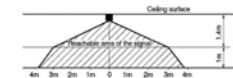
### Installation of wireless kit

Do not install the wireless kit at the following places in order to avoid malfunction.

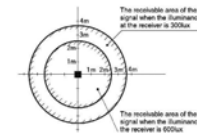
- (1) Places exposed to direct sunlight
- (2) Places near heat devices
- (3) High humidity places
- (4) Hot surface or cold surface enough to generate condensation
- (5) Places exposed to oil mist or steam directly
- (6) Uneven surface
- (7) Places affected by the direct airflow of the AC unit
- (8) Places where the receiver is influenced by the fluorescent lamp (especially inverter type) or sunlight
- (9) Places where the receiver is affected by infrared rays of any other communication devices
- (10) Places where some object may obstruct the communication with the remote control

### Wireless remote control's operable area

- (1) Standard reachable area of the signal  
[condition] Illuminance at the receiver: 300lux  
(When no lighting is installed within 1m of the receiver in an ordinary office.)



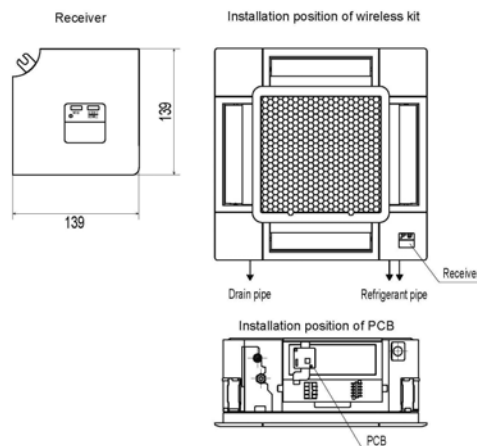
- (2) Correlation between illuminance at the receiver and reachable area of the signal in a plain view.  
The drawing in the right shows the correlation between the reachable area of the signal and illuminance at the receiver when the remote control is operated at 1m high under the condition of ceiling height of 2.4m.  
When the illuminance becomes double, the area is narrowed down to two thirds.



- (3) Installation tips when several receivers are installed close  
Minimum distance between the indoor units which can avoid cross communication is 5m under the condition of 300lux of illuminance at the receiver.  
(When no lighting is installed within 1m of the receiver in an ordinary office.)

Unit:mm

## RCN-TC-5AW-E3



Notes  
 (1) Receiver must be installed to the position as shown.  
 (2) Two LR03 AAA dry cell batteries for remote control are enclosed.  
 (3) See spec sheet of "Wireless remote control" about remote control.

### Installation of wireless kit

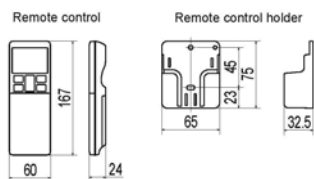
Do not install the wireless kit at the following places in order to avoid malfunction.

- (1) Places exposed to direct sunlight
- (2) Places near heat-generating devices
- (3) High humidity places
- (4) Hot surface or cold surface enough to generate condensation
- (5) Places exposed to oil mist or steam directly
- (6) Uneven surface
- (7) Places affected by the direct airflow of the AC unit
- (8) Places where the receiver is influenced by fluorescent lamp or sunlight
- (9) Places where the receiver is affected by infrared rays of any other communication devices
- (10) Places where some object may obstruct the communication with the remote control

### Setting switch on PCB

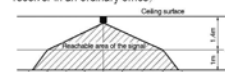
|     |   |                           |
|-----|---|---------------------------|
| SW1 | Prevents interference during multiple setting | ON: Normal<br>OFF: Remote |
| SW2 | Receiver master/slave setting                 | ON: Master<br>OFF: Slave  |
| SW3 | Buzzer  | ON: Valid<br>OFF: Invalid |
| SW4 | Auto restart                                  | ON: Valid<br>OFF: Invalid |

Default setting: ☐ mark

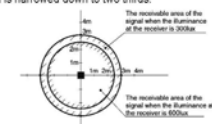


### Wireless remote control's operable area

- ① Standard reachable area of the signal  
 [condition] Illuminance at the receiver: 300lux  
 (When no lighting is installed within 1m of the receiver in an ordinary office)



- ② Correlation between illuminance at the receiver and reachable area of the signal in a plain view.  
 The drawing in the right shows the correlation between the reachable area of the signal and illuminance at the receiver when the remote control is operated at 1m high under the condition of ceiling height of 2.4m.  
 When the illuminance becomes double, the area is narrowed down to two thirds.



- ③ Installation tips when several receivers are installed close to one another. Minimum distance between the indoor units which can avoid cross communication is 5m under the condition of 300lux of illuminance at the receiver.  
 (When no lighting is installed within 1m of the receiver in an ordinary office)

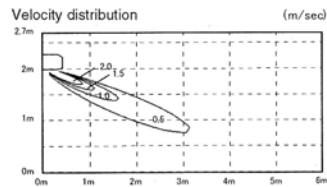
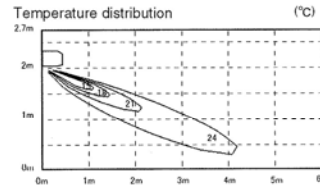
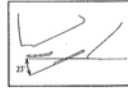
Unit:mm

## Temperature and velocity distribution

### FDK28KXZE1

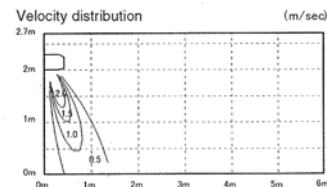
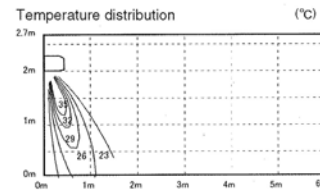
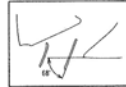
Cooling Air flow:P-Hi

Louver position



Heating Air flow:P-Hi

Louver position



#### Indoor temperature

Cooling 27°CDB/ 19°CWB

Heating 20°CDB

#### Note:

These figures represent the typical main range of temperature and velocity distribution at the center of air outlet within the published conditions.

In the actual installation, they may differ from the typical figures under the influence of air temperature conditions, ceiling height, operation conditions and obstacles.

## Temperature and velocity distribution

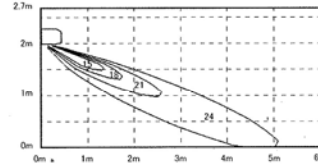
### FDK45KXZE1

Cooling Air flow:P-Hi

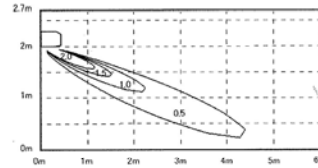
Louver position



Temperature distribution (°C)



Velocity distribution (m/sec)

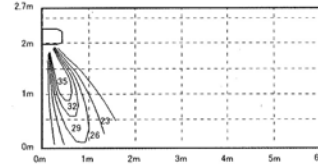


Heating Air flow:P-Hi

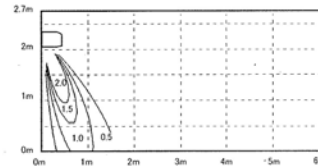
Louver position



Temperature distribution (°C)



Velocity distribution (m/sec)



### Indoor temperature

Cooling 27°CDB/ 19°CWB

Heating 20°CDB

#### Note:

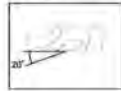
These figures represent the typical main range of temperature and velocity distribution at the center of air outlet within the published conditions.  
In the actual installation, they may differ from the typical figures under the influence of air temperature conditions, ceiling height, operation conditions and obstacles.

## Temperature and velocity distribution

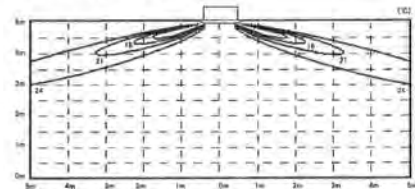
### FDT28KXZE1

Cooling Air flow:P-Hi

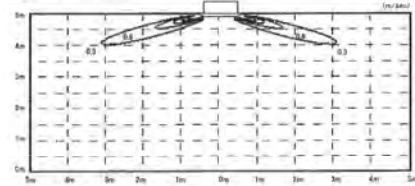
Louver position



Temperature distribution

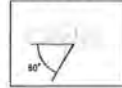


Velocity distribution

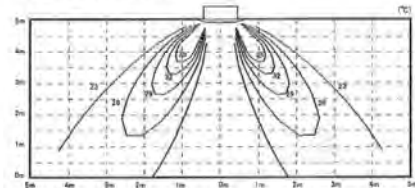


Heating Air flow:P-Hi

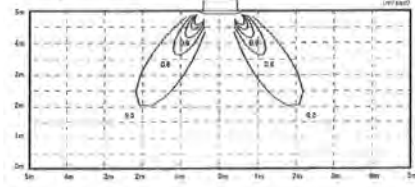
Louver position



Temperature distribution



Velocity distribution



#### Indoor temperature

Cooling 27°CDB/ 19°CWB

Heating 20°CDB

#### Note:

These figures represent the typical main range of temperature and velocity distribution at the center of air outlet within the published conditions.  
In the actual installation, they may differ from the typical figures under the influence of air temperature conditions, ceiling height, operation conditions and obstacles.

## Temperature and velocity distribution

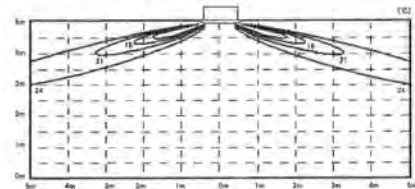
### FDT36KXZE1

Cooling Air flow:P-Hi

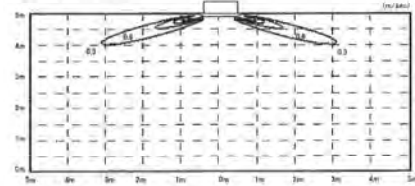
Louver position



Temperature distribution

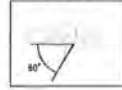


Velocity distribution

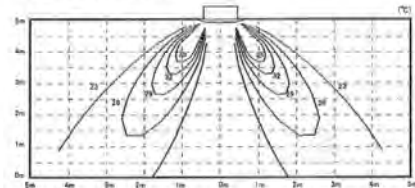


Heating Air flow:P-Hi

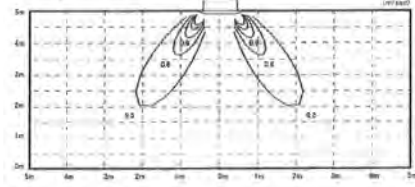
Louver position



Temperature distribution



Velocity distribution



#### Indoor temperature

Cooling 27°CDB/ 19°CWB

Heating 20°CDB

#### Note:

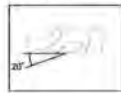
These figures represent the typical main range of temperature and velocity distribution at the center of air outlet within the published conditions.  
In the actual installation, they may differ from the typical figures under the influence of air temperature conditions, ceiling height, operation conditions and obstacles.

## Temperature and velocity distribution

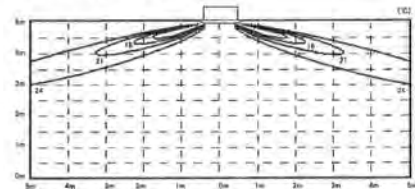
### FDT45KXZE1

Cooling Air flow:P-Hi

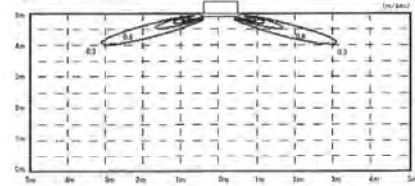
Louver position



Temperature distribution

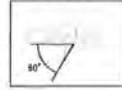


Velocity distribution

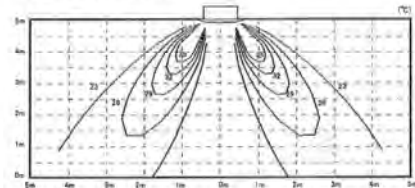


Heating Air flow:P-Hi

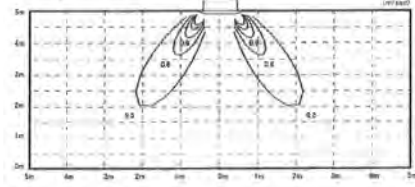
Louver position



Temperature distribution



Velocity distribution



#### Indoor temperature

Cooling 27°CDB/ 19°CWB

Heating 20°CDB

#### Note:

These figures represent the typical main range of temperature and velocity distribution at the center of air outlet within the published conditions.  
In the actual installation, they may differ from the typical figures under the influence of air temperature conditions, ceiling height, operation conditions and obstacles.

## Temperature and velocity distribution

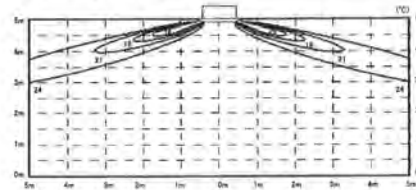
### FDT56KXZE1

Cooling Air flow:P-Hi

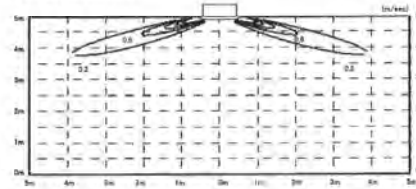
Louver position



Temperature distribution

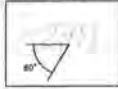


Velocity distribution

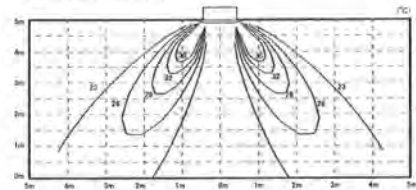


Heating Air flow:P-Hi

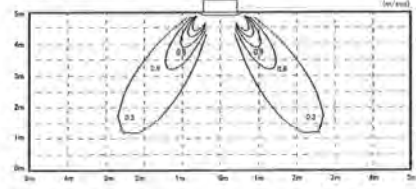
Louver position



Temperature distribution



Velocity distribution



#### Indoor temperature

Cooling 27°CDB/ 19°CWB

Heating 20°CDB

#### Note:

These figures represent the typical main range of temperature and velocity distribution at the center of air outlet within the published conditions.  
In the actual installation, they may differ from the typical figures under the influence of air temperature conditions, ceiling height, operation conditions and obstacles.

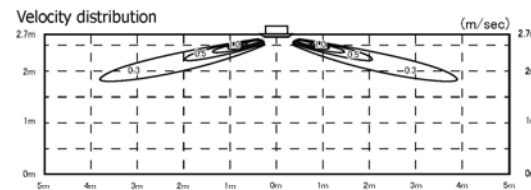
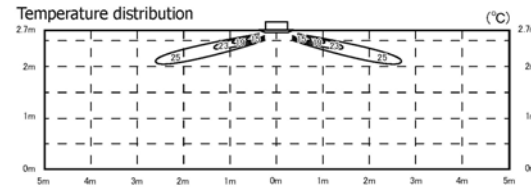
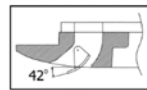


## Temperature and velocity distribution

Model FDTC15KXZE1

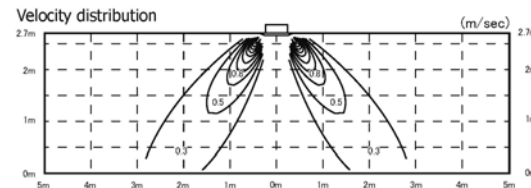
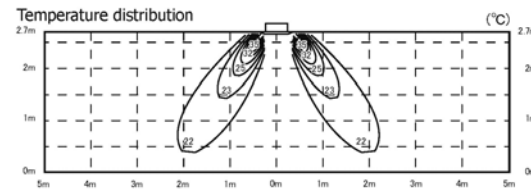
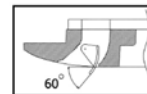
Cooling Air flow: P-Hi

Louver position



Heating Air flow: P-Hi

Louver position



### Indoor temperature

Cooling 27°CDB/ 19°CWB

Heating 20°CDB

### Note:

These figures represent the typical main range of temperature and velocity distribution at the center of air outlet within the published conditions.

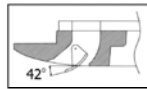
In the actual installation, they may differ from the typical figures under the influence of air temperature conditions, ceiling height, operation conditions and obstacles.

## Temperature and velocity distribution

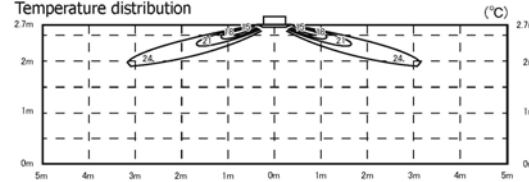
Model FDTC22KXZE1

Cooling Air flow: P-Hi

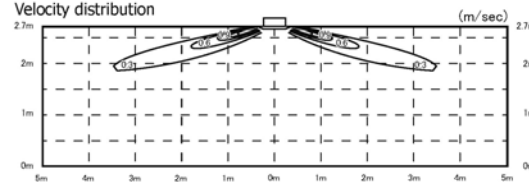
Louver position



Temperature distribution

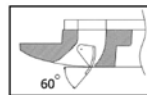


Velocity distribution

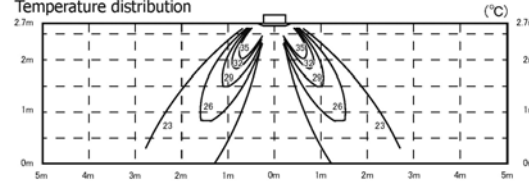


Heating Air flow: P-Hi

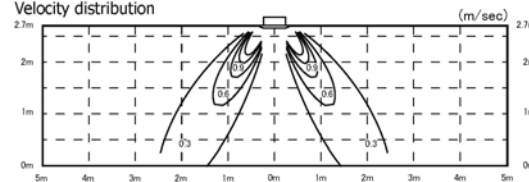
Louver position



Temperature distribution



Velocity distribution



### Indoor temperature

Cooling 27°CDB/ 19°CWB

Heating 20°CDB

#### Note:

These figures represent the typical main range of temperature and velocity distribution at the center of air outlet within the published conditions.

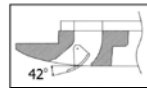
In the actual installation, they may differ from the typical figures under the influence of air temperature conditions, ceiling height, operation conditions and obstacles.

## Temperature and velocity distribution

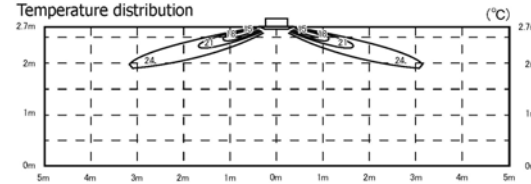
Model FDTC28KXZE1

Cooling Air flow: P-Hi

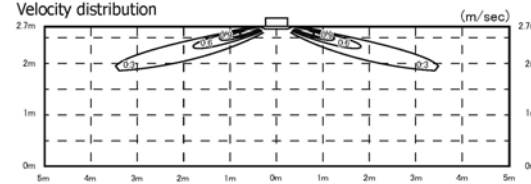
Louver position



Temperature distribution

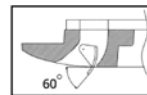


Velocity distribution

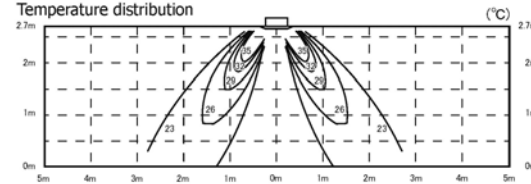


Heating Air flow: P-Hi

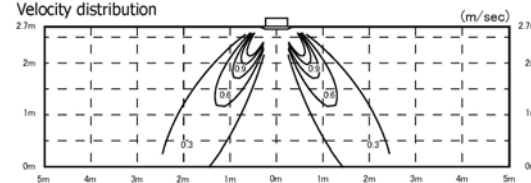
Louver position



Temperature distribution



Velocity distribution



### Indoor temperature

Cooling 27°CDB/ 19°CWB

Heating 20°CDB

### Note:

These figures represent the typical main range of temperature and velocity distribution at the center of air outlet within the published conditions.

In the actual installation, they may differ from the typical figures under the influence of air temperature conditions, ceiling height, operation conditions and obstacles.

## Temperature and velocity distribution

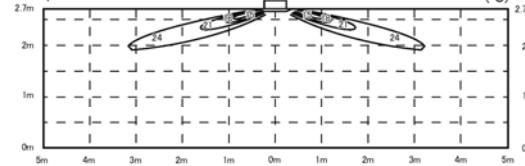
Model FDT36KXZE1

Cooling Air flow: P-Hi

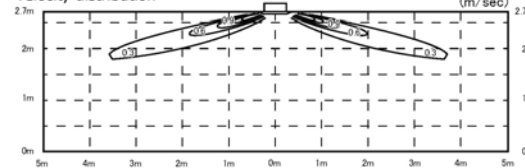
Louver position



Temperature distribution

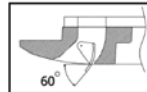


Velocity distribution

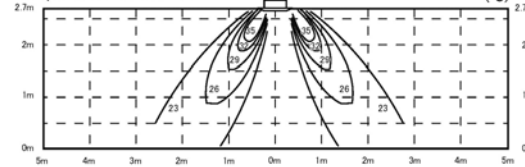


Heating Air flow: P-Hi

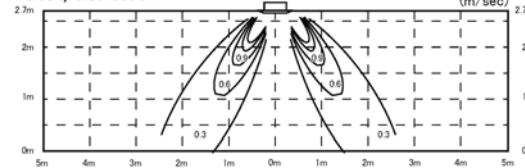
Louver position



Temperature distribution



Velocity distribution



### Indoor temperature

Cooling 27°CDB/ 19°CWB

Heating 20°CDB

### Note:

These figures represent the typical main range of temperature and velocity distribution at the center of air outlet within the published conditions.

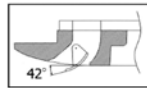
In the actual installation, they may differ from the typical figures under the influence of air temperature conditions, ceiling height, operation conditions and obstacles.

## Temperature and velocity distribution

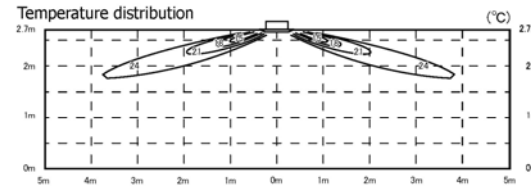
Model FDTC45KXZE1

Cooling Air flow: P-Hi

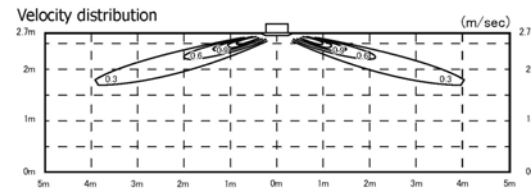
Louver position



Temperature distribution

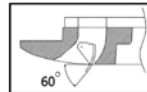


Velocity distribution

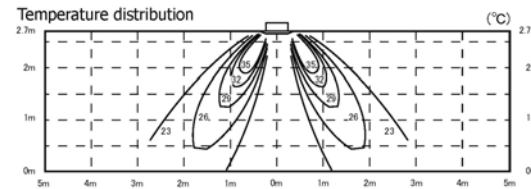


Heating Air flow: P-Hi

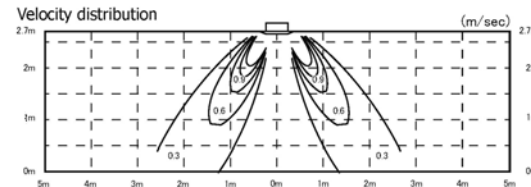
Louver position



Temperature distribution



Velocity distribution



### Indoor temperature

Cooling 27°CDB/ 19°CWB

Heating 20°CDB

#### Note:

These figures represent the typical main range of temperature and velocity distribution at the center of air outlet within the published conditions.

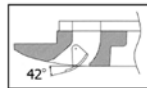
In the actual installation, they may differ from the typical figures under the influence of air temperature conditions, ceiling height, operation conditions and obstacles.

## Temperature and velocity distribution

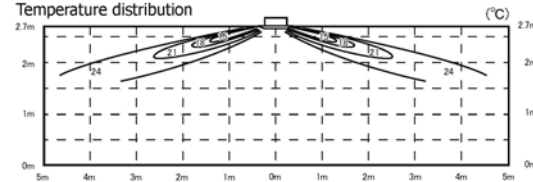
Model FDTCS56KXZE1

Cooling Air flow: P-Hi

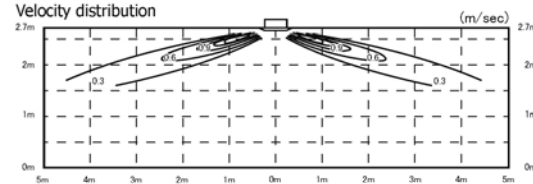
Louver position



Temperature distribution

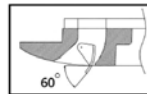


Velocity distribution

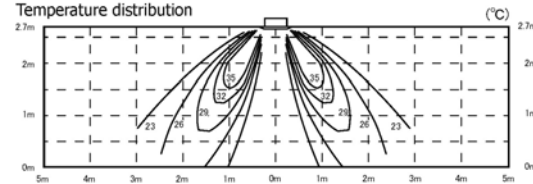


Heating Air flow: P-Hi

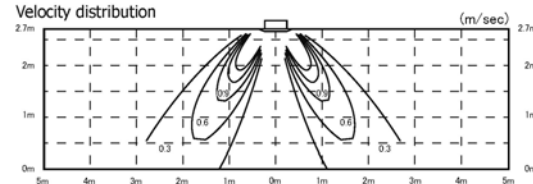
Louver position



Temperature distribution



Velocity distribution



### Indoor temperature

Cooling 27°CDB/ 19°CWB

Heating 20°CDB

### Note:

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