

**SUMINISTRO Y PUESTA EN MARCHA DE UNA ENFRIADORA ECOLÓGICA EN EL CENTRO DE  
TRANSFUSION DE LA COMUNIDAD DE MADRID  
(PA SUM 010/2022) (A/SUM-037367/2022)**

**INFORME TECNICO**

Una vez analizada la Memoria y la documentación Técnica presentada en el Acto de Apertura por el licitador ELDU ELECTROAPLICACIONES, S.A., se determina que la oferta cumple la totalidad de las prescripciones técnicas y características mínimas descritas en el Pliego de Prescripciones Técnicas.

Madrid,

**LUIS  
TORRES  
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ou=CERTIFICADO ELECTRONICO DE  
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Responsable de Mantenimiento

**Unit Overview**

|                                                   |                      |      |           |
|---------------------------------------------------|----------------------|------|-----------|
| Chiller model                                     | Sintesis Prime       |      |           |
| Model                                             | RTAF G 090 HSS SN EC |      |           |
| Unit application                                  | Air cooled chiller   |      |           |
| Compressor type                                   | Screw                |      |           |
| Refrigerant Type                                  | Full charge R1234ze  |      |           |
| Seasonal space energy efficiency (s,c) / SEER (1) | 175 %                | 4.44 | Compliant |
| SEPRHT                                            | 5.47                 |      | Compliant |
| SEPRMT                                            | 3.24                 |      | Compliant |
| Free cooling                                      | No Free Cooling      |      |           |
| Hydraulic module                                  | Pump signal On/Off   |      |           |
| Electrical supply                                 | 400V/50Hz/3Ph        |      |           |

**SINTECIS™**  
**PRIME****Project conditions**

|                                  | Cooling              |
|----------------------------------|----------------------|
| Outdoor air dry bulb temperature | 35.0 C               |
| Fluid entering temperature       | 12.0 C               |
| Fluid leaving temperature        | 7.0 C                |
| Evap fluid type                  | Water                |
| Fluid Freezing Point             | 0.0 C                |
| Fouling Factor                   | 0.000000 m2-deg C/kW |
| Elevation                        | 0.0 m                |

**Unit performance data**

|                                   | Cooling          | (1) |
|-----------------------------------|------------------|-----|
| Gross capacity                    | 321.60 kW        |     |
| Net capacity                      | 321.30 kW        |     |
| Total absorbed power              | 99.02 kW         |     |
| Gross EER                         | 3.25 EER (kW/kW) |     |
| Net EER                           | 3.21 EER (kW/kW) |     |
| Design flow rate                  | 15.32 L/s        |     |
| Evaporator Pressure drop (Design) | 34.8 kPa         |     |
| Evaporator Min Flow               | 7.97 L/s         |     |
| Evaporator Max Flow               | 29.58 L/s        |     |

**Acoustic data**

|                              |        |        |        |        |       |       |       |     |
|------------------------------|--------|--------|--------|--------|-------|-------|-------|-----|
| Outdoor sound power level    |        |        |        | 97 dBA |       |       |       | (4) |
| Outdoor sound pressure level |        |        |        | 64 dBA |       |       |       | (3) |
|                              | 125 Hz | 250 Hz | 500 Hz | 1 kHz  | 2 kHz | 4 kHz | 8 kHz |     |
| Outdoor sound spectrum (Lw)  | 88 dB  | 89 dB  | 95 dB  | 93 dB  | 86 dB | 78 dB | 76 dB |     |

**General data - refrigerant circuit**

|                                                   |                     |       |
|---------------------------------------------------|---------------------|-------|
| <b>Refrigerant Type</b>                           | Full charge R1234ze |       |
| <b>Refrigerant GWP (AR5)</b>                      | 7                   |       |
| <b>Number of circuits</b>                         | 2                   |       |
| <b>Number of compressors (circuit 1 / 2... n)</b> | 2                   |       |
| <b>Compressor type</b>                            | Screw               |       |
| <b>Compressor regulation type</b>                 | Variable Speed      |       |
| <b>Unit minimum load</b>                          | 30.00 %             |       |
| <b>Refrigerant charge per circuit</b>             | 41 kg               | 39 kg |
| <b>Oil charge per circuit</b>                     | 6 kg                | 6 kg  |

**General data - fan section**

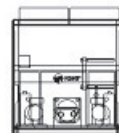
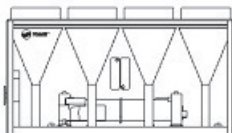
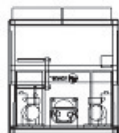
|                                 |            |
|---------------------------------|------------|
| <b>Number of outdoor fans</b>   | 8          |
| <b>Fan type</b>                 | EC Fan     |
| <b>Total condenser air flow</b> | 34.15 m3/s |

**Electrical data**

|                                            |               |
|--------------------------------------------|---------------|
| <b>Electrical supply</b>                   | 400V/50Hz/3Ph |
| <b>Compressor soft starter</b>             | Included      |
| <b>Start-up current</b>                    | 266.00 A      |
| <b>Maximum running current</b>             | 266.00 A      |
| <b>Displacement power factor (cos-phi)</b> | 0.93          |

**Shipping dimensions and weight**

|                                            |         |
|--------------------------------------------|---------|
| <b>Length</b>                              | 4520 mm |
| <b>Width</b>                               | 2200 mm |
| <b>Height</b>                              | 2554 mm |
| <b>Shipping weight including packaging</b> | 3770 kg |
| <b>Operating weight</b>                    | 3830 kg |



Note: Dimensions and weight include sound attenuation, hydraulic module, heat recovery and/or free cooling - if selected. Image is for illustration purposes only, options may not be shown.

**Applicable standards**

- (1) According to EN14825:2018, considering average climate
- (2) According to EN14511:2018
- (3) Average sound pressure at 10 meter distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level
- (4) Sound power measurements in accordance with ISO 9614:2009 (part 1)

**More information**

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Ecodesign datasheet</b> | <a href="https://www.trane.com/litweb/Litweb.aspx?#/category/bd13efa5-a5bf-4f0a-afb4-9eab178d9081/range/a1a2a06b-b5ae-492a-bc17-b8ada8833fac/model/8234b149-20ff-41a9-9c2b-e189f8956901/section/a41a3b61-a631-48b1-a8d8-3f25d0783c05">https://www.trane.com/litweb/Litweb.aspx?#/category/bd13efa5-a5bf-4f0a-afb4-9eab178d9081/range/a1a2a06b-b5ae-492a-bc17-b8ada8833fac/model/8234b149-20ff-41a9-9c2b-e189f8956901/section/a41a3b61-a631-48b1-a8d8-3f25d0783c05</a> |
| <b>Model Number</b>        | RTAF090D***UC2XXLXN2NNXXXBXCMA1XLX*XXXXX1CXZXXX                                                                                                                                                                                                                                                                                                                                                                                                                       |