

## **HYDRO UNIT P**

### **Air-to-Water rotary heat pump**



# TECHNICAL DATASHEET FOR MEDIUM TEMPERATURE SPACE HEATER

Information requirements pursuant to regulation (EU) N°813/2013

## Description

|                                         |                         |
|-----------------------------------------|-------------------------|
| Model                                   | <b>HYDRO UNIT P 008</b> |
| Air-to-Water Heat pump                  | Yes                     |
| Water-to-Water Heat pump                | No                      |
| Brine-to-Water Heat pump                | No                      |
| Low-temperature Heat pump (30°C / 35°C) | No                      |
| Equipped with supplementary heater      | No                      |
| Heat pump combination heater            | No                      |
| Climate                                 | Average                 |

## Performances established in accordance with EN14511:2018 and EN14825:2018

|                                                 | Symbol                         | Unit       |             |
|-------------------------------------------------|--------------------------------|------------|-------------|
| <b>Rated heat output(*)</b>                     | <b>Prated</b>                  | <b>kW</b>  | <b>6</b>    |
| <b>Seasonal Space Heating Energy Efficiency</b> | <b><math>\eta_{s,h}</math></b> | <b>%</b>   | <b>131</b>  |
| Annual energy consumption                       | <b>QHE</b>                     | <b>kWh</b> | <b>3989</b> |

## Declared capacity (Pdh), declared coefficient of performance (COPd) and declared degradation coefficient (Cdh(\*\*)) for heating for part load at indoor temperature 20 °C and outdoor temperature Tj

|                                     |         |    |      |
|-------------------------------------|---------|----|------|
| Tj = -7 °C                          | Pdh     | kW | 5.71 |
|                                     | COPd    |    | 1.9  |
|                                     | Cdh(**) |    | -    |
| Tj = 2 °C                           | Pdh     | kW | 3.33 |
|                                     | COPd    |    | 3.12 |
|                                     | Cdh(**) |    | -    |
| Tj = 7 °C                           | Pdh     | kW | 2.68 |
|                                     | COPd    |    | 4.97 |
|                                     | Cdh(**) |    | 0.97 |
| Tj = 12 °C                          | Pdh     | kW | 3.16 |
|                                     | COPd    |    | 7.09 |
|                                     | Cdh(**) |    | 0.97 |
| Tj = operation limit temperature °C | Pdh     | kW | 5.29 |
|                                     | COPd    |    | 1.71 |
|                                     | Cdh(**) |    | -    |
| Tj = bivalent temperature °C        | Pdh     | kW | 5.71 |
|                                     | COPd    |    | 1.9  |
|                                     | Cdh(**) |    | -    |
| Bivalent temperature                | Tbiv    | °C | -7   |
| Operation limit temperature         | TOL     | °C | -10  |
| Heating water operating limit       | WTOL    | °C | 75   |

## Power consumption in modes other than active mode

|                       |      |   |    |
|-----------------------|------|---|----|
| Off mode              | POFF | W | 10 |
| Thermostat off-mode   | PTO  | W | 15 |
| Standby mode          | PSB  | W | 10 |
| Crankcase heater mode | PCK  | W | 0  |

## Supplementary heater

|                      |            |    |   |
|----------------------|------------|----|---|
| Rated heat output(*) | Psup       | kW | 0 |
| Type of energy input | Electrical |    |   |

## Other items

|                                            |          |                   |     |
|--------------------------------------------|----------|-------------------|-----|
| Capacity control                           | VARIABLE |                   |     |
| Outlet temperature control                 | VARIABLE |                   |     |
| Water flow rate control                    | FIXED    |                   |     |
| Rated water flow rate outdoor exchanger(1) |          | m <sup>3</sup> /h | 800 |
| Sound power level                          | LwA      | dBA               | 51  |

|                 |                                                       |
|-----------------|-------------------------------------------------------|
| Contact details | CARRIER SCS - Route de Thil - 01120 Montluel - FRANCE |
|-----------------|-------------------------------------------------------|

(1)Not applicable for water-to-water and brine-to-water heat pumps

(\*)For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater sup is equal to the supplementary capacity for heating sup(Tj).

(\*\*)If Cdh is not determined by measurement then the default degradation coefficient of chillers shall be 0.9.