

# ecoAIR<sup>+</sup> 1-9 PRO



- Modulating thermal power control within a wide range (17-100%) and modulating flow rate control of the production circuit (20-100%).
- Natural refrigerant R290 : GWP 3.
- Inverter technology and scroll compressor.
- Compact design including the production circulation pump in the outdoor unit. Hydraulic connection within the outdoor unit and the indoor unit.
- Integrated management of up to 3 different emission temperatures, 2 buffer tanks (heating and cooling), 1 DHW tank, 1 pool and hourly control of DHW recirculation.
- Integrated management of simultaneous heating/cooling emission, according to scheme.
- Integrated management of external On/Off or modulating auxiliary systems, such as electrical heaters, On/Off boilers or modulating boilers.
- Integrated active cooling.
- Selection of the indoor unit depending on the installation needs.
- Single-phase version available.
- Integrated photovoltaic hybridisation.
- Integrated energy meters to measure the electrical consumption, the heating/cooling thermal power, the COP and the monthly and annual SPF.

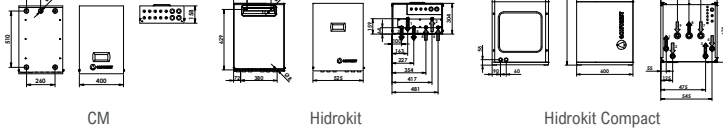
| SPECIFICATIONS ecoAIR <sup>+</sup> 1-9 PRO                       |  | UNITS             |                     |
|--|--|-------------------|---------------------|
| APPLICATION  | Place of installation  | -                 | Outdoors            |
|  | Type of brine system <sup>1</sup>                                | -                 | Air source          |
|  | DHW, Heating and Pool  | -                 | ✓                   |
|  | Integrated Active cooling  | -                 | ✓                   |
| PERFORMANCE  | Modulation range of the compressor                               | %                 | 17 to 100           |
|  | Heating power output <sup>2</sup> , A7W35                        | kW                | 1,7 to 8,7          |
|  | COP <sup>2</sup> , A7W35   | -                 | 5,0                 |
|  | Heating power output <sup>2</sup> , A7W55                        | kW                | 2,1 to 8,0          |
|  | COP <sup>2</sup> , A7W55   | -                 | 3,15                |
|  | Active cooling power output <sup>2</sup> , A35W7                 | kW                | 1,1 to 7,1          |
|  | EER <sup>2</sup> , A35W7   | -                 | 4,0                 |
|  | Max. DHW temperature without / with support <sup>5</sup>         | °C                | 70 / 80             |
|  | Noise power emission level <sup>6</sup>                          | db                | 60                  |
|  | Energy label / η <sub>s</sub> / SCOP W35 average climate control | -                 | A+++ / 183% / 4,57  |
| Energy label / η <sub>s</sub> / SCOP W55 average climate control | -  | A++ / 146% / 3,63 |                     |
| OPERATION LIMITS   | Distribution / Set heating outlet temperature range              | °C                | 10 to 70 / 20 to 70 |
|  | Distribution / Set cooling outlet temperature range              | °C                | 5 to 30 / 7 to 30   |
|  | Outdoor temperature range  | °C                | -22 to 50           |
|  | Minimum / Maximum refrigerant circuit pressure                   | bar               | 0,5 / 27,5          |
|  | Production circuit pressure                                      | bar               | 0,5 to 3,0          |
| WORKING FLUIDS   | R290 Refrigerant load  | kg                | 0,85                |
|  | Compressor oil type / load                                       | kg                | HXL4467 / 0,74      |
|  | Air flow (60% fan)   | m <sup>3</sup> /h | 3510                |
| CONTROL ELECTRICAL DATA  | 1/N/PE 230 V / 50-60 Hz <sup>8</sup>                             | -                 | ✓                   |
|  | Maximum recommended external protection <sup>9</sup>             | -                 | C5A                 |
|  | Transformer primary circuit fuse                                 | A                 | 0,5                 |
|  | Transformer secondary circuit fuse                               | A                 | 2,5                 |
| ELECTRICAL DATA: SINGLE-PHASE                                    | 1/N/PE 230 V / 50-60 Hz <sup>8</sup>                             | -                 | ✓                   |
|  | Maximum recommended external protection <sup>9</sup>             | -                 | C16A                |
|  | Maximum consumption <sup>2</sup> , A7W35                         | kW / A            | 1,9 / 9,5           |
|  | Maximum consumption <sup>2</sup> , A7W55                         | kW / A            | 2,59 / 12,95        |
|  | Minimum / Maximum starting current <sup>7</sup>                  | A                 | 3,27 / 4,43         |
| DIMENSIONS/WEIGHT  | Correction of cosine Ø   | -                 | 0,97 - 1            |
|  | Height x width x depth   | mm                | 973x1150x475        |
|  | Empty weight (without assembly)                                  | kg                | 134                 |

1. Outdoor air-to-water monobloc unit.
2. In compliance with EN 14511, this includes the consumption of the circulation pumps and the compressor driver.
3. Considering production flow rate in compliance with EN 14511.
4. Considering a heat slope from 20°C to 50°C in absence of consumption.
5. Considering support provided by the emergency electrical heater.
6. In compliance with EN 12102.
7. Starting current depends on the working conditions of the hydraulic circuits.
8. The admissible voltage range for proper operation of the heat pump is ±10%.
9. Maximum consumption can vary significantly according to working conditions, or if the compressor's operation range is restricted. Consult the technical service manual for more detailed information.
10. Certification in process.

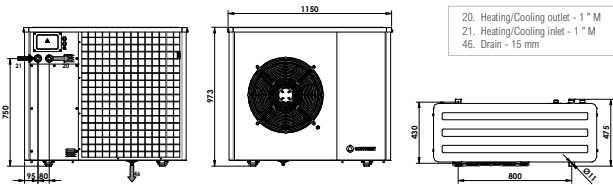
## Dimensions and hydraulic connections

### Indoor units

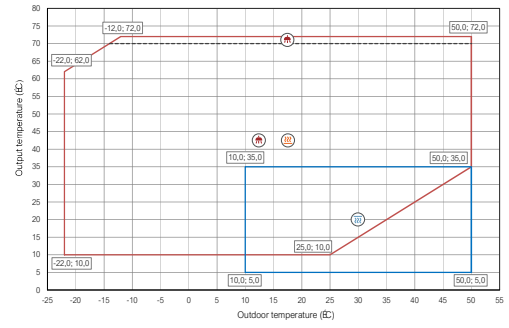
- 1. Outlet towards ecoAIR+ outdoor unit - 1" M
- 2. Inlet towards ecoAIR+ outdoor unit - 1" M
- 3. Heating/Cooling inlet - 1" M
- 4. Heating/Cooling inlet - 1" M
- 5. DHW System outlet - 1" M
- 6. DHW System inlet - 1" M
- 7. CW Inlet - 1" F
- 8. DHW outlet - 1" F
- 9. DHW Recirculation inlet - 3/4" F



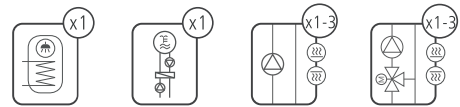
### Outdoor unit - ecoAIR+



## Operational chart

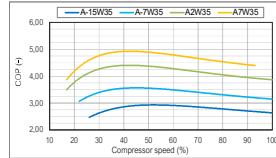
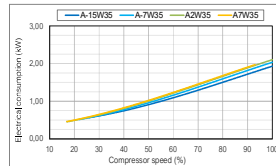
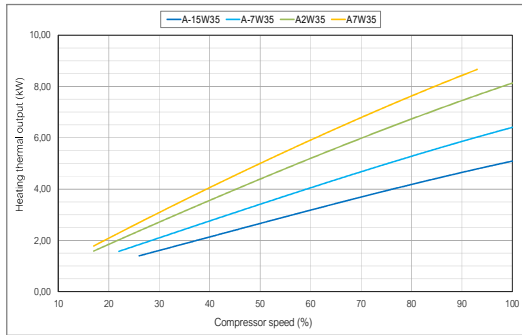


## Installation management



## Performance curves

### Thermal performance



### Hydraulic performance

