

# Technical Product Submittal - HTHP290-50

|  |                    |
|--|--------------------|
| <b>Model Number:</b>                                       | HTHP290-50         |
| <b>HEATING</b>   |                    |
| (1) Input Power (kW)                                       | 11.9               |
| (1) Heating Capacity (kW)                                  | 50.0               |
| (2) Input Power (kW)                                       | 16.5               |
| (2) Heating Capacity (kW)                                  | 47.9               |
| (3) Input Power (kW)                                       | 18.8               |
| (3) Heating Capacity (kW)                                  | 45.8               |
| (1) C.O.P. (W/W)   | 4.20               |
| (2) C.O.P. (W/W)   | 2.90               |
| (3) C.O.P. (W/W)   | 2.44               |
| (2) Water Flow Rate (L/s)                                  | 1.43               |
| (2) Nominal Useful Head (kPa)                              | 144                |
| ERP Efficiency Class (Water @ 35°C/55°C)                   | A++/A++            |
| <b>COMPRESSOR</b>  |                    |
| Compressor Type  | Scroll DC Inverter |
| Number of Compressors                                      | 2                  |
| <b>REFRIGERANT</b>   |                    |
| Refrigerant Type   | R290               |
| <b>FANS</b>  |                    |
| Fan Type   | EC                 |
| Number of Fans   | 1                  |
| <b>INTERNAL HEAT EXCHANGER</b>                             |                    |
| Type of Heat Exchanger                                     | Plate              |
| Number of Heat Exchangers                                  | 1                  |
| Water Content (L)  | 3.48               |
| <b>HYDRAULIC CIRCUIT</b>                                   |                    |
| Water Content of Hydraulic Circuit (L)                     | 5.2                |
| Maximum pressure hydronic kit - safety valve setting (bar) | 6                  |
| Min. Water Volume (L)                                      | 415                |
| Max Pump Power Input (kW)                                  | 1.04               |
| <b>ELECTRICAL DATA</b>                                     |                    |
| Power Supply (V)   | 400V/3P+N+T/50Hz   |
| Max. Input Power (kW)                                      | 27                 |
| Max. Input Power w/Antifreeze Kit (kW)                     | 27                 |
| <b>NOISE LEVEL</b>   |                    |
| Sound Power Level Lw (dB)                                  | 83                 |
| Sound Pressure Level @ 10m (dB)                            | 51                 |
| <b>WEIGHT</b>  |                    |
| Operating Weight (kg)                                      | 557                |

**Performance referring to the following conditions, according to standard 14511:2022:**

- (1) Heating: outdoor air temperature 7°C DB/6°C WB\*; in/out water temp 30/35°C.
  - (2) Heating: outdoor air temperature 7°C DB/6°C WB\*; in/out water temp 47/55°C.
  - (3) Heating: outdoor air temperature 7°C DB/6°C WB\*; in/out water temp 55/65°C.
- Sound power level: heating mode condition (1); value calculated based on measurements made in accordance with standard UNI EN ISO 9614- 2, compliant with the requirements of the Eurovent certification.
- Sound pressure level: value calculated from the sound power level using ISO 3744:2010.

\*DB & WB represent dry-bulb and wet-bulb air temperatures respectively



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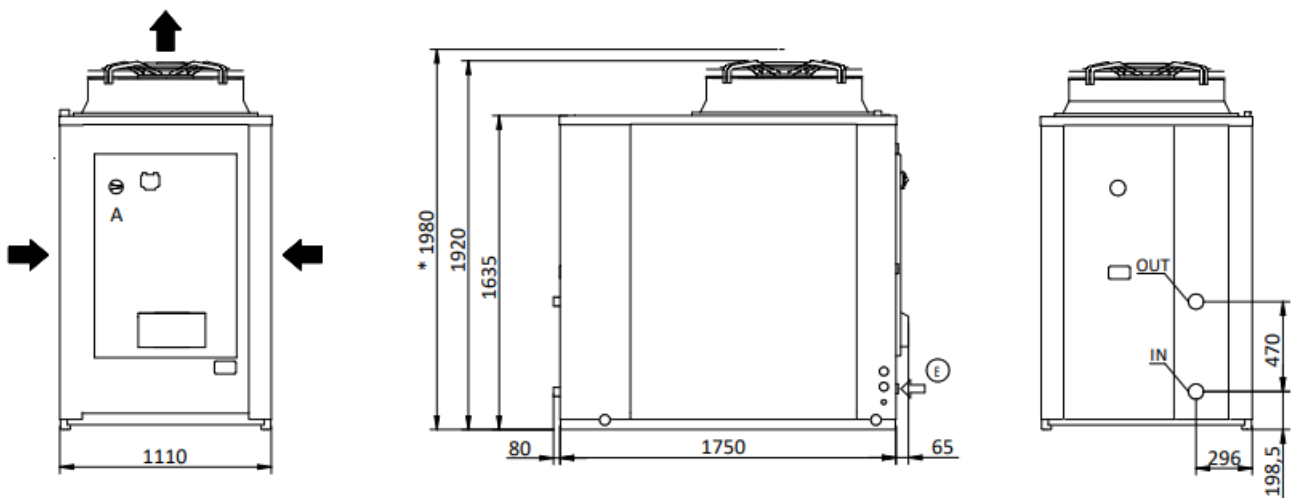
## Seasonal Performance at Different Temperature Levels

| Model      | SCOP (LT) | SCOP (MT) | SCOP (HT) |
|------------|-----------|-----------|-----------|
| HTHP290-50 | 4.20      | 3.34      | 2.87      |

LT: Heating in medium climate conditions,  $T_{biv} = -7\text{ }^{\circ}\text{C}$ , low temperature ( $35\text{ }^{\circ}\text{C}$ ), variable output, fixed flow rate.

MT: Heating in medium climate conditions,  $T_{biv} = -7\text{ }^{\circ}\text{C}$ , medium temperature ( $55\text{ }^{\circ}\text{C}$ ), variable output, fixed flow rate.

HT: Heating in medium climate conditions,  $T_{biv} = -7\text{ }^{\circ}\text{C}$ , high temperature ( $65\text{ }^{\circ}\text{C}$ ), variable output, fixed flow rate.



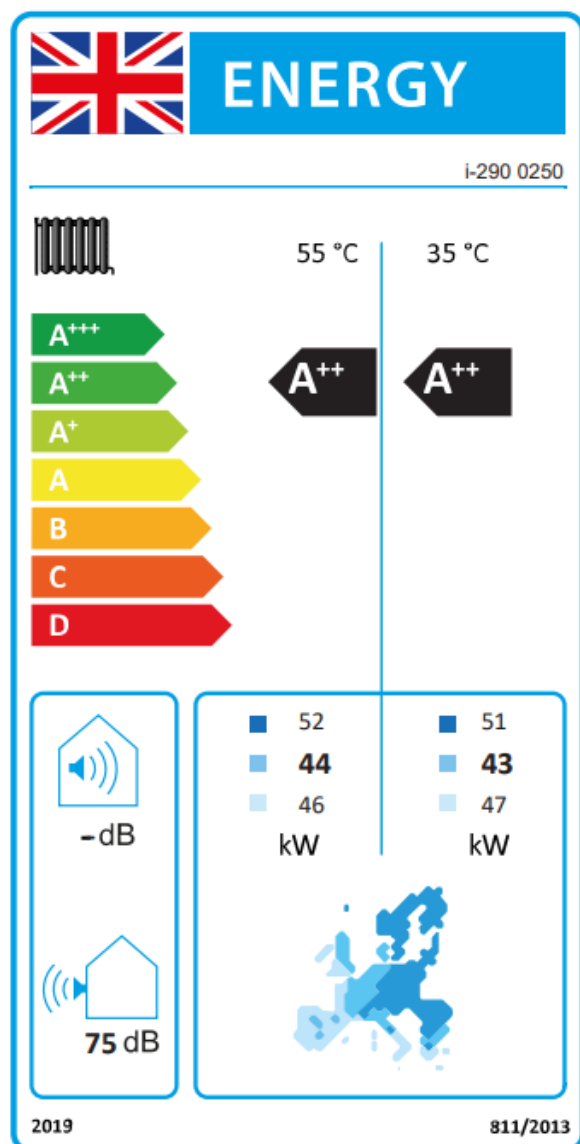
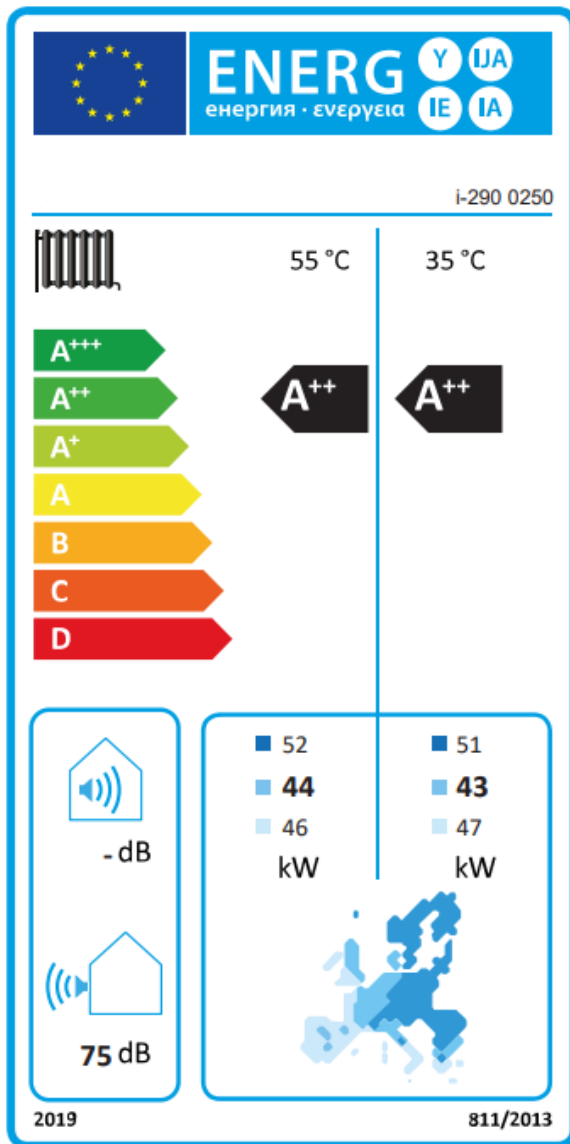
| Dimensions              |      |                    |
|-------------------------|------|--------------------|
| A - Length              | mm   | 1895               |
| B - Depth               | mm   | 1110               |
| C - Height              | mm   | 1920               |
| C - Height -SSL version | mm   | 1980               |
| IN / OUT                | inch | 1" 1/2 Grooved     |
| E                       | -    | Power supply input |



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# Data label and Product Fiche - HTHP290-50



| Product Fiche                   |            | Unit |
|---------------------------------|------------|------|
| Supplier's Name                 | Rinnai UK  |      |
| Supplier's Model                | HTHP290-50 |      |
| ERP Efficiency Class            | A++/A++    |      |
| COP <sub>1</sub>                | 4.20       | W/W  |
| COP <sub>2</sub>                | 2.90       | W/W  |
| COP <sub>3</sub>                | 2.44       | W/W  |
| SCOP <sub>1</sub>               | 4.20       | W/W  |
| Heating Input <sub>1</sub>      | 11.9       | kW   |
| Heating Input <sub>2</sub>      | 16.5       | kW   |
| Heating Input <sub>3</sub>      | 18.8       | kW   |
| Temperature Setting*            | 78         | °C   |
| Refrigerant Type                | R290       |      |
| Indoor Sound Power Level (LWA)  | 82         | dB   |
| Sound Pressure Level @ 10m (dB) | 51         | dB   |



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