

# Technical Product Submittal – HTHP290-12

<b>Model Number:</b>	HTHP290-12
<b>HEATING</b>	
(1) Min. Input Power (kW)	2.61
(1) Min. Heating Capacity (kW)	5.99
(1) Nom. Heating Capacity (kW)	12.60
(1) Max. Heating Capacity (kW)	13.70
(2) Mid. Input Power (kW)	3.60
(2) Min. Heating Capacity (kW)	5.26
(2) Nom. Heating Capacity (kW)	11.61
(2) Max. Heating Capacity (kW)	12.77
(3) Max. Input Power (kW)	4.60
(3) Min. Heating Capacity (kW)	4.93
(3) Nom. Heating Capacity (kW)	12.04
(3) Max. Heating Capacity (kW)	13.08
(1) C.O.P. (W/W)	4.83
(2) C.O.P. (W/W)	3.22
(3) C.O.P. (W/W)	2.62
(1) Water Flow Rate (L/s)	0.58
(1) Nominal Useful Head (kPa)	79.5
ERP Efficiency Class (Water @ 35°C/55°C)	A+++/A++
<b>COMPRESSOR</b>	
Compressor Type	Twin Rotary DC Inverter
Number of Compressors	1
<b>REFRIGERANT</b>	
Refrigerant Type	R290
<b>FANS</b>	
Fan Type	Brushless DC Motor
Number of Fans	2
<b>INTERNAL HEAT EXCHANGER</b>	
Type of Heat Exchanger	Plates
Number of Heat Exchangers	1
Water Content (L)	1.69
<b>HYDRAULIC CIRCUIT</b>	
Water Content of Hydraulic Circuit (L)	3.7
Max. Water Side Pressure (bar)	3
Min. Water Volume (L)	185
Max. Circulator Output (kW)	0.14
<b>ELECTRICAL DATA</b>	
Power Supply (V)	230V/1/50Hz
Max. Input Power (kW)	5.1
Max. Input Power w/Antifreeze Kit (kW)	5.3
<b>NOISE LEVEL</b>	
Sound Power Level (dB)	59
Sound Pressure Level @ 10m (dB)	28
<b>WEIGHT</b>	
Operating Weight (kg)	156

**Performance referring to the following conditions, according to standard 14511:2018:**

- (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.

2. 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.

3. 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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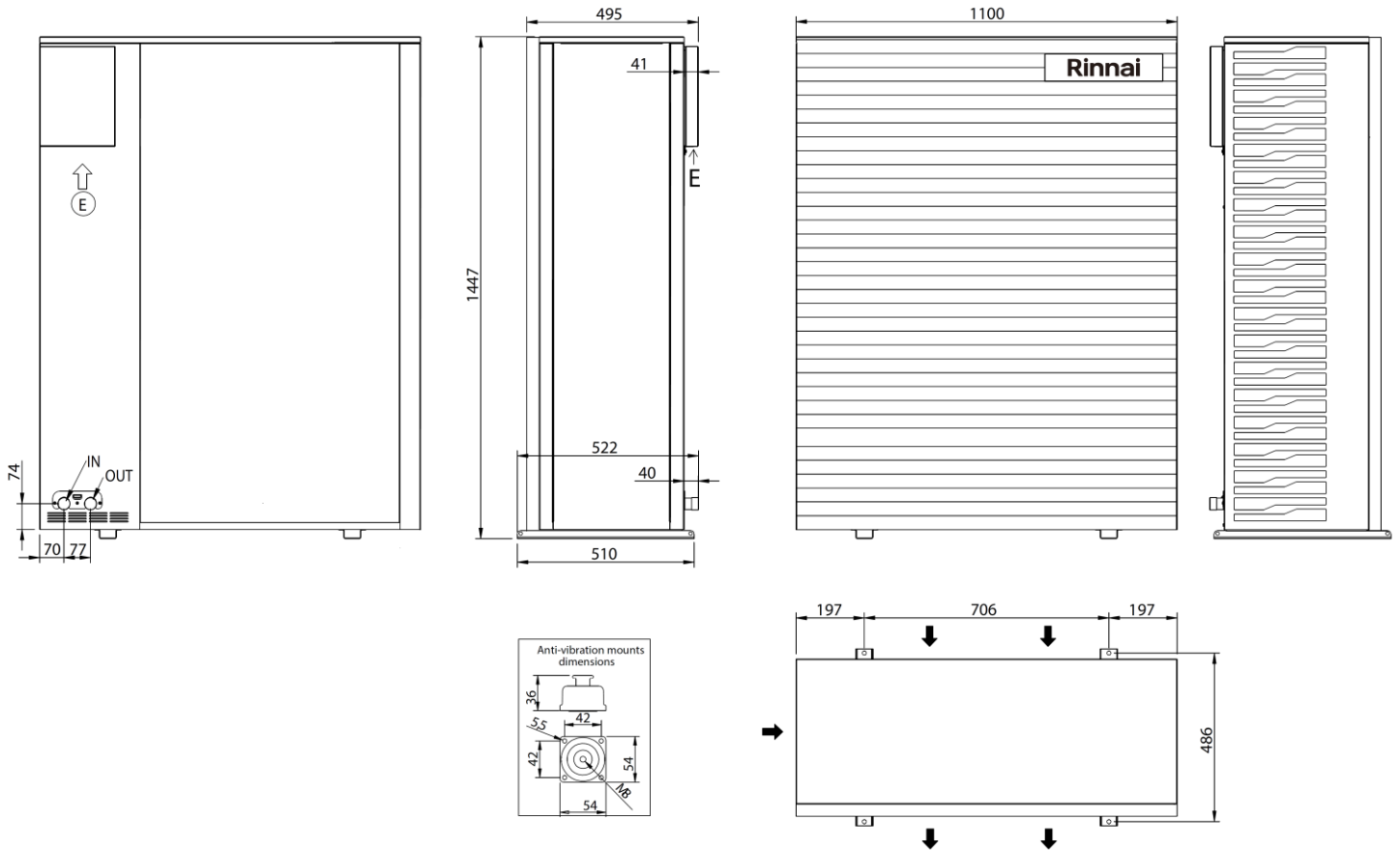
## Seasonal Performance at Different Temperature Levels

Model	SCOP (LT)	SCOP (MT)	SCOP (HT)
HTHP290-12	4.88	3.59	3.23

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

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

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



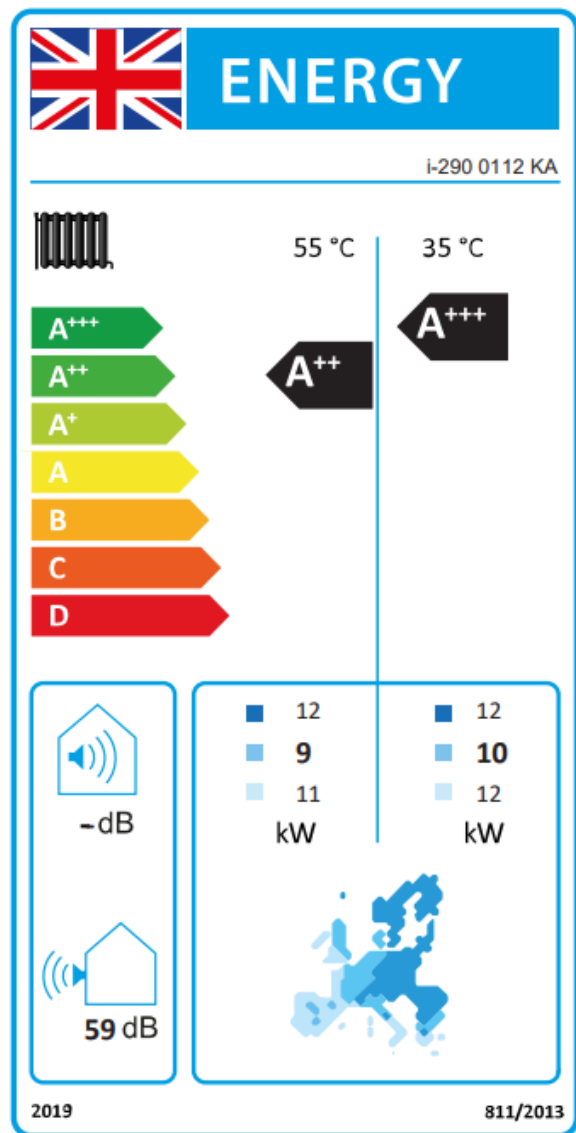
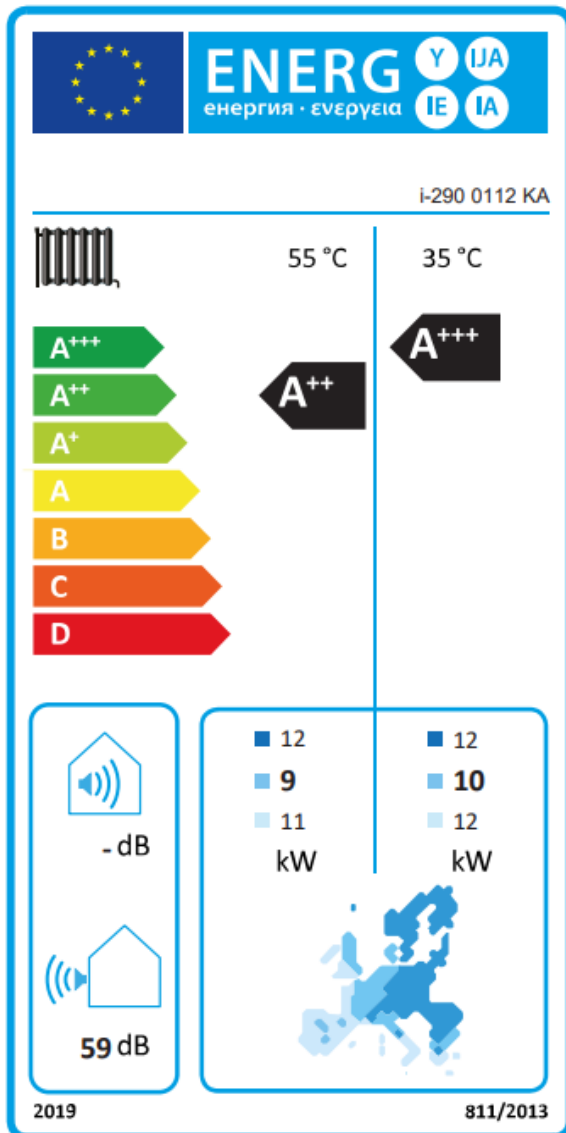
Model i-290	Length [mm]	Width [mm]	Height [mm]	Plumbing connections IN/OUT	Dimensions with packaging (length x width x height) [mm]
0106 / 0109	1100	510	875	1" G	1195 x 580 x 920
0112 / 0115 / 0118	1100	510	1447	1" G	1195 x 580 x 1485



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# Data label and Product Fiche – HTHP290-12



Product Fiche		Unit
Supplier's Name	Rinnai UK	
Supplier's Model	HTHP290-12	
ERP Efficiency Class	A+++/A++	
COP <sub>1</sub>	4.83	W/W
COP <sub>2</sub>	3.22	W/W
COP <sub>3</sub>	2.62	W/W
SCOP <sub>1</sub>	4.88	W/W
Heating Input <sub>1</sub>	2.61	kW
Heating Input <sub>2</sub>	3.60	kW
Heating Input <sub>3</sub>	4.60	kW
Temperature Setting*	75	°C
Refrigerant Type	R290	
Indoor Sound Power Level (LWA)	59	dB
Sound Pressure Level @ 10m (dB)	28	dB



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