

## Subtype HPR29012

Certificate Holder	Rinnai UK Ltd
Address	9 Christleton Ct
ZIP	WA7 1ST
City	Runcorn
Country	GB
Certification Body	ICIM S.p.A.
Subtype title	HPR29012
Registration number	ICIM-PDC-000303
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	1 kg
Certification Date	23.10.2024
Testing basis	V12

## Model HPR29012

Model name	HPR29012
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C
Any additional heat sources	n/a

## General data

Power supply	1x230V 50Hz
Off-peak product	n/a

## Outdoor Air/Water

### EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

### EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	12.60 kW	11.61 kW
El input	2.61 kW	3.60 kW
COP	4.83	3.22

### EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	3.74 kW	
Cooling capacity	10.67	
EER	2.85	

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	59 dB(A)	59 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	192 %	140 %
Prated	9.60 kW	9.40 kW
SCOP	4.88	3.59
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C

Pdh Tj = -7°C	8.50 kW	8.30 kW
COP Tj = -7°C	2.93	2.17
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	5.50 kW	5.10 kW
COP Tj = +2°C	4.61	3.42
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	3.70 kW	3.40 kW
COP Tj = +7°C	7.01	5.10
Cdh Tj = +7 °C	0.958	0.967
Pdh Tj = 12°C	4.40 kW	4.30 kW
COP Tj = 12°C	9.33	5.93
Cdh Tj = +12 °C	0.953	0.970
Pdh Tj = Tbiv	8.50 kW	8.30 kW
COP Tj = Tbiv	2.93	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.10 kW	7.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	68 °C	68 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.50 kW	1.60 kW
Annual energy consumption Qhe	4069 kWh	5410 kWh

#### EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	10.67 kW	
SEER	4.72	
Pdc Tj = 35°C	10.67 kW	
EER Tj = 35°C	2.85	
Cdc Tj = 35 °C	1.000	
Pdc Tj = 30°C	8.17 kW	
EER Tj = 30°C	4.04	
Cdc Tj = 30 °C	1.000	
Pdc Tj = 25°C	5.10 kW	
EER Tj = 25°C	5.26	
Cdc Tj = 25 °C	1.000	
Pdc Tj = 20°C	4.31 kW	
EER Tj = 20°C	6.63	
Cdc Tj = 20 °C	0.966	
Poff	22 W	

PTO	0 W
PSB	28 W
PCK	0 W
Annual energy consumption Qce	1356 kWh