

Subtype HPR29025/27

Certificate Holder	Rinnai UK Ltd
Address	9 Christleton Ct
ZIP	WA7 1ST
City	Runcorn
Country	GB
Certification Body	ICIM S.p.A.
Subtype title	HPR29025/27
Registration number	ICIM-PDC-000306
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	2.1 kg
Certification Date	23.10.2024
Testing basis	V12

Model HPR29025

Model name	HPR29025
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	3x400V 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	24.80 kW	23.20 kW
El input	5.37 kW	7.66 kW
COP	4.62	3.03

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	6.19 kW	
Cooling capacity	19.80	
EER	3.20	

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	177 %	143 %
Prated	22.00 kW	22.00 kW
SCOP	4.49	3.66
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C

Pdh Tj = -7°C	19.60 kW	19.90 kW
COP Tj = -7°C	2.71	2.01
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	11.90 kW	12.10 kW
COP Tj = +2°C	4.22	3.64
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	10.50 kW	10.20 kW
COP Tj = +7°C	6.44	4.96
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	12.30 kW	11.90 kW
COP Tj = 12°C	8.03	6.49
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	19.60 kW	19.90 kW
COP Tj = Tbiv	2.71	2.01
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	17.70 kW	17.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.43	1.78
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	69 °C	69 °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	4.30 kW	4.30 kW
Annual energy consumption Qhe	10195 kWh	12702 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	19.80 kW	
SEER	4.92	
Pdc Tj = 35°C	19.80 kW	
EER Tj = 35°C	3.20	
Cdc Tj = 35 °C	1.000	
Pdc Tj = 30°C	14.60 kW	
EER Tj = 30°C	4.35	
Cdc Tj = 30 °C	1.000	
Pdc Tj = 25°C	9.70 kW	
EER Tj = 25°C	5.48	
Cdc Tj = 25 °C	1.000	
Pdc Tj = 20°C	9.76 kW	
EER Tj = 20°C	6.06	
Cdc Tj = 20 °C	0.986	
Poff	22 W	

PTO	0 W
PSB	28 W
PCK	0 W
Annual energy consumption Qce	2406 kWh

Model HPR29027		
Model name	HPR29027	
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	3x400V 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	27.00 kW	26.30 kW
El input	6.21 kW	8.74 kW
COP	4.35	3.01
EN 14511-2 Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	7.19 kW	
Cooling capacity	22.30	
EER	3.11	
EN 12102-1 Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	64 dB(A)	64 dB(A)
EN 14825 Average Climate		
	Low temperature	Medium temperature
ηs	175 %	140 %
Prated	24.00 kW	23.00 kW
SCOP	4.46	3.56
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C

Pdh Tj = -7°C	21.00 kW	20.70 kW
COP Tj = -7°C	2.77	1.97
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	12.80 kW	12.60 kW
COP Tj = +2°C	4.17	3.50
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	10.40 kW	10.10 kW
COP Tj = +7°C	6.31	4.92
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	12.30 kW	11.90 kW
COP Tj = 12°C	7.95	6.53
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	21.00 kW	20.70 kW
COP Tj = Tbiv	2.77	1.97
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	18.80 kW	18.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.46	1.70
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	69 °C	69 °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	5.20 kW	4.50 kW
Annual energy consumption Qhe	10997 kWh	136567 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	22.30 kW	
SEER	4.84	
Pdc Tj = 35°C	22.30 kW	
EER Tj = 35°C	3.11	
Cdc Tj = 35 °C	1.000	
Pdc Tj = 30°C	16.40 kW	
EER Tj = 30°C	4.17	
Cdc Tj = 30 °C	1.000	
Pdc Tj = 25°C	10.60 kW	
EER Tj = 25°C	5.33	
Cdc Tj = 25 °C	1.000	
Pdc Tj = 20°C	9.94 kW	
EER Tj = 20°C	6.14	
Cdc Tj = 20 °C	0.986	
Poff	22 W	

PTO	0 W
PSB	28 W
PCK	0 W
Annual energy consumption Qce	2764 kWh