

Subtype HPVCH250

Certificate Holder	Rinnai UK Ltd
Address	9 Christleton Ct
ZIP	WA7 1ST
City	Runcorn
Country	GB
Certification Body	ICIM S.p.A.
Subtype title	HPVCH250
Registration number	ICIM-PDC-000298
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	8.5 kg
Certification Date	23.10.2024
Testing basis	Heat Pump KEYMARK V9

Model HPVCH250		
Model name	HPVCH250	
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	50.20 kW	48.30 kW
El input	12.20 kW	18.02 kW
COP	4.11	2.68
EN 14511-2 Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	11.69 kW	
Cooling capacity	36.30	
EER	3.11	
EN 12102-1 Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	75 dB(A)	75 dB(A)
EN 14825 Average Climate		
	Low temperature	Medium temperature
ηs	163 %	122 %
Prated	44.00 kW	44.00 kW
SCOP	4.16	3.11
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C

Pdh Tj = -7°C	39.30 kW	39.20 kW
COP Tj = -7°C	2.22	1.55
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	24.90 kW	23.80 kW
COP Tj = +2°C	4.25	3.06
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	24.70 kW	23.70 kW
COP Tj = +7°C	5.55	4.48
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	28.50 kW	27.70 kW
COP Tj = 12°C	7.22	7.10
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	39.30 kW	39.20 kW
COP Tj = Tbiv	2.22	1.55
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	34.00 kW	34.60 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.91	1.25
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	58 °C	58 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	76 W	76 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	10.00 kW	9.40 kW
Annual energy consumption Qhe	22063 kWh	29398 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	36.30 kW	
SEER	4.72	
Pdc Tj = 35°C	36.30 kW	
EER Tj = 35°C	3.11	
Cdc Tj = 35 °C	1.000	
Pdc Tj = 30°C	26.80 kW	
EER Tj = 30°C	3.93	
Cdc Tj = 30 °C	1.000	
Pdc Tj = 25°C	21.65 kW	
EER Tj = 25°C	5.00	
Cdc Tj = 25 °C	0.990	
Pdc Tj = 20°C	23.94 kW	
EER Tj = 20°C	6.45	
Cdc Tj = 20 °C	0.990	
Poff	22 W	

PTO	0 W
PSB	28 W
PCK	0 W
Annual energy consumption Qce	4614 kWh