

## Subtype HPVCH270

Certificate Holder	Rinnai UK Ltd
Address	9 Christleton Ct
ZIP	WA7 1ST
City	Runcorn
Country	GB
Certification Body	ICIM S.p.A.
Subtype title	HPVCH270
Registration number	ICIM-PDC-000300
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	12 kg
Certification Date	23.10.2024
Testing basis	Heat Pump KEYMARK V9

## Model HPVCH270

Model name	HPVCH270
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	66.80 kW	62.00 kW
El input	16.30 kW	23.80 kW
COP	4.10	2.61

### EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	17.67 kW	
Cooling capacity	53.20	
EER	3.01	

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	81 dB(A)	81 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	155 %	120 %
Prated	49.00 kW	51.00 kW
SCOP	3.94	3.08
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-9 °C

Pdh Tj = -7°C	43.60 kW	45.50 kW
COP Tj = -7°C	2.09	1.55
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	28.80 kW	28.50 kW
COP Tj = +2°C	3.89	3.02
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	33.10 kW	35.30 kW
COP Tj = +7°C	5.67	4.38
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	36.90 kW	39.70 kW
COP Tj = 12°C	7.01	6.82
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	43.60 kW	45.50 kW
COP Tj = Tbiv	2.09	1.55
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	41.70 kW	42.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.79	1.41
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	n/a	n/a
Supplementary Heater: PSUP	7.30 kW	51.00 kW
Annual energy consumption Qhe	25821 kWh	34544 kWh

#### EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	53.20 kW	
SEER	4.85	
Pdc Tj = 35°C	53.20 kW	
EER Tj = 35°C	3.01	
Pdc Tj = 30°C	39.20 kW	
EER Tj = 30°C	4.06	
Cdc Tj = 30 °C	1.000	
Pdc Tj = 25°C	29.04 kW	
EER Tj = 25°C	5.10	
Cdc Tj = 25 °C	1.000	
Pdc Tj = 20°C	31.50 kW	
EER Tj = 20°C	6.73	
Cdc Tj = 20 °C	1.000	
Poff	22 W	
PTO	0 W	

PSB	28 W
PCK	0 W
Annual energy consumption Qce	6581 kWh