Subtype HPVCH140

Certificate Holder	Rinnai UK Ltd
Address	9 Christleton Ct
ZIP	WA7 1ST
City	Runcorn
Country	GB
Certification Body	ICIM S.p.A.
Subtype title	HPVCH140
Registration number	ICIM-PDC-000297
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	6.5 kg
Certification Date	23.10.2024
Testing basis	Heat Pump KEYMARK V9

Model HPVCH140	
Model name	HPVCH140
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	40.00 kW	38.40 kW
El input	9.84 kW	14.20 kW
COP	4.07	2.70

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	9.53 kW	
Cooling capacity	29.60	
EER	3.11	

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	74 dB(A)	74 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	167 %	126 %
Prated	31.00 kW	29.00 kW
SCOP	4.25	3.23
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-9 °C

Pdh Tj = -7°C	27.10 kW	25.80 kW
COP Tj = -7°C	2.49	1.72
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	17.60 kW	17.10 kW
COP Tj = +2°C	4.23	3.10
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	18.00 kW	20.20 kW
COP Tj = +7°C	5.54	4.59
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	20.20 kW	22.90 kW
COP Tj = 12°C	7.11	7.25
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	27.10 kW	25.80 kW
COP Tj = Tbiv	2.49	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	26.90 kW	25.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.51
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	38 W	38 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.10 kW	29.00 kW
Annual energy consumption Qhe	14894 kWh	18669 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	29.60 kW	
SEER	4.80	
Pdc Tj = 35°C	29.60 kW	
EER Tj = 35°C	3.11	
Cdc Tj = 35 °C	1.000	
Pdc Tj = 30°C	21.70 kW	
EER Tj = 30°C	4.14	
Cdc Tj = 30 °C	1.000	
Pdc Tj = 25°C	15.00 kW	
EER Tj = 25°C	5.00	
Cdc Tj = 25 °C	1.000	
Pdc Tj = 20°C	16.19 kW	
EER Tj = 20°C	6.57	
Cdc Tj = 20 °C	1.000	
Poff	22 W	

PTO	0 W
PSB	28 W
PCK	0 W
Annual energy consumption Qce	3700 kWh