Subtype Intelligent Inverter Heat Pump 40-R290

Certificate Holder	Guangdong PHNIX Eco-Energy Solution Ltd.
Address	No. 3 Tianyuan Road Dagang Town
ZIP	511470
City	Guangdong
Country	CN
Certification Body	BRE Global Limited
Subtype title	Intelligent Inverter Heat Pump 40-R290
Registration number	041-K020-05
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	0.85 kg
Certification Date	22.06.2022
Testing basis	Heat Pump Keymark Scheme Rules Rev 09
Testing laboratory	TÜV SÜD Certification and Testing Co., Ltd. Guangzhou Branch, CN

Model PASRW040S-BP-PS-D

Model name	PASRW040S-BP-PS-D
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
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	10.00 kW	10.32 kW
El input	2.01 kW	3.13 kW
COP	4.99	3.30

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	56 dB(A)	58 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	194 %	148 %
Prated	9.29 kW	9.24 kW
SCOP	4.92	3.78
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.22 kW	8.17 kW
COP Tj = -7°C	3.17	2.58
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	5.04 kW	4.98 kW
COP Tj = +2°C	4.85	3.62
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.72 kW	5.56 kW

COP Tj = +7°C	6.11	4.67
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	6.23 kW	6.08 kW
COP Tj = 12°C	7.59	6.16
Cdh Tj = +12 °C	0.990	0.990
Pdh Tj = Tbiv	8.22 kW	8.17 kW
COP Tj = Tbiv	3.17	2.58
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.39 kW	8.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.85	2.54
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	60 °C	60 °C
Poff	8 W	8 W
PTO	8 W	8 W
PSB	8 W	8 W
PCK	64 W	64 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.29 kW
Annual energy consumption Qhe	3903 kWh	5052 kWh

Model PASRW040-BP-PS-D	
Model name	PASRW040-BP-PS-D
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
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	10.92 kW	10.36 kW
El input	2.08 kW	3.38 kW
COP	5.26	3.07

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	56 dB(A)	57 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	193 %	147 %
Prated	9.46 kW	9.02 kW
SCOP	4.90	3.76
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.37 kW	7.98 kW
COP Tj = -7°C	3.20	2.38
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	5.23 kW	4.90 kW
COP Tj = +2°C	4.82	3.66
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.76 kW	5.73 kW

COP Tj = +7°C	6.09	4.84
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	6.25 kW	6.11 kW
COP Tj = 12°C	7.52	6.08
Cdh Tj = +12 °C	0.990	0.990
Pdh Tj = Tbiv	8.37 kW	7.98 kW
COP Tj = Tbiv	3.20	2.38
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.47 kW	9.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	1.99
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	60 °C	60 °C
Poff	9 W	9 W
PTO	9 W	9 W
PSB	9 W	9 W
PCK	42 W	42 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.02 kW
Annual energy consumption Qhe	3988 kWh	4959 kWh