

## Subtype Intelligent Inverter Heat Pump 40-R290

Certificate Holder	Guangdong PHNIX Eco-Energy Solutions 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

## 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 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
$\eta_s$	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 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
$\eta_s$	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