

Subtype Intelligent Inverter Heat Pump R290- G15+G20

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 R290- G15+G20
Registration number	041-K020-11
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	0.65 kg
Certification Date	15.03.2024
Testing basis	Heat Pump Keymark Scheme Rules Rev 13

Model G15

Model name	G15
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	4.07 kW	4.14 kW
El input	0.85 kW	1.40 kW
COP	4.79	2.95

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	54 dB(A)	57 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	190 %	132 %
Prated	4.45 kW	4.47 kW
SCOP	4.83	3.36
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	3.94 kW	3.95 kW
COP Tj = -7°C	3.10	2.23
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	2.55 kW	2.57 kW
COP Tj = +2°C	4.87	3.34
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	2.01 kW	1.75 kW

COP Tj = +7°C	6.59	4.16
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.29 kW	2.19 kW
COP Tj = 12°C	7.21	6.13
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	3.94 kW	3.95 kW
COP Tj = Tbiv	3.10	2.23
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.08 kW	4.11 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.77	1.95
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	10 W	10 W
PTO	11 W	11 W
PSB	10 W	10 W
PCK	42 W	42 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.37 kW	0.36 kW
Annual energy consumption Qhe	1903 kWh	2744 kWh

Model G20

Model name	G20
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	7.00 kW	6.95 kW
El input	1.46 kW	2.31 kW
COP	4.78	3.01

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
η_s	188 %	138 %
Prated	7.01 kW	6.64 kW
SCOP	4.78	3.51
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	6.20 kW	5.87 kW
COP Tj = -7°C	2.93	2.29
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	3.78 kW	3.71 kW
COP Tj = +2°C	4.59	3.34
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	2.49 kW	2.42 kW

COP Tj = +7°C	6.75	4.69
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.49 kW	2.29 kW
COP Tj = 12°C	8.37	6.72
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	6.20 kW	5.87 kW
COP Tj = Tbiv	2.93	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.69 kW	5.04 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.72	1.94
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	10 W	10 W
PTO	11 W	11 W
PSB	10 W	10 W
PCK	42 W	42 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.33 kW	1.60 kW
Annual energy consumption Qhe	3033 kWh	3904 kWh