

Subtype Intelligent Inverter Heat Pump R290- G60+G60S

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- G60+G60S
Registration number	041-K020-13
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	1.4 kg
Certification Date	15.03.2024
Testing basis	Heat Pump Keymark Scheme Rules Rev 13

Model G60

Model name	G60
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	16.98 kW	17.09 kW
El input	4.02 kW	5.90 kW
COP	4.22	2.90

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	62 dB(A)	61 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	183 %	141 %
Prated	16.66 kW	17.07 kW
SCOP	4.65	3.61
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	14.74 kW	15.10 kW
COP Tj = -7°C	2.76	2.15
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	8.98 kW	9.37 kW
COP Tj = +2°C	4.52	3.49
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.82 kW	6.02 kW

COP Tj = +7°C	6.43	4.98
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	6.06 kW	5.80 kW
COP Tj = 12°C	8.11	6.41
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	14.74 kW	15.10 kW
COP Tj = Tbiv	2.76	2.15
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.05 kW	15.04 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.48	1.93
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	11 W	11 W
PTO	12 W	12 W
PSB	11 W	11 W
PCK	86 W	86 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.60 kW	2.03 kW
Annual energy consumption Qhe	7404 kWh	9777 kWh

Model G60S

Model name	G60S
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	17.02 kW	16.92 kW
El input	4.03 kW	5.57 kW
COP	4.23	3.04

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	61 dB(A)	63 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	183 %	142 %
Prated	16.71 kW	16.62 kW
SCOP	4.64	3.62
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	14.78 kW	14.70 kW
COP Tj = -7°C	2.85	2.15
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	9.16 kW	9.09 kW
COP Tj = +2°C	4.49	3.54
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.80 kW	5.76 kW

COP Tj = +7°C	6.27	4.87
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	6.04 kW	5.86 kW
COP Tj = 12°C	8.36	6.91
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	14.78 kW	14.70 kW
COP Tj = Tbiv	2.85	2.15
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.57 kW	14.05 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.56	1.89
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	88 W	88 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.14 kW	2.57 kW
Annual energy consumption Qhe	7440 kWh	9486 kWh