

Subtype Intelligent Inverter Heat Pump-R290-EST60S

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-R290-EST60S
Registration number	041-K020-22
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	1.7 kg
Certification Date	14.07.2025
Testing basis	HP KEYMARK certification scheme rules rev. no.15
Testing laboratory	TÜV SÜD Certification and Testing Co., Ltd. Guangzhou Branch, CN

**Model EST60S**

Model name	EST60S
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	16.89 kW	17.10 kW
El input	3.46 kW	5.06 kW
COP	4.88	3.38

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level outdoor	58 dB(A)	57 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	203 %	157 %
Prated	17.35 kW	17.22 kW
SCOP	5.15	4.01
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	15.34 kW	15.23 kW
COP Tj = -7°C	3.32	2.56
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	9.44 kW	9.29 kW
COP Tj = +2°C	5.02	3.88
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	6.17 kW	6.01 kW

COP Tj = +7°C	6.59	5.15
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	5.57 kW	5.24 kW
COP Tj = 12°C	9.07	7.21
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	15.34 kW	15.23 kW
COP Tj = Tbiv	3.32	2.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.02 kW	16.13 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.94	2.32
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	80 °C	80 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	45 W	45 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.32 kW	1.09 kW
Annual energy consumption Qhe	6957 kWh	8870 kWh