

## Subtype Intelligent Inverter Heat Pump R32- P10A, P10T

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 R32- P10A, P10T
Registration number	041-K020-08
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.7 kg
Certification Date	05.09.2023
Testing basis	Heat Pump Keymark Scheme Rules Rev 12
Testing laboratory	TÜV SÜD Certification and Testing Co., Ltd. Guangzhou Branch, CN

## Model P10A

Model name	P10A
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	9.88 kW	9.12 kW
El input	2.43 kW	3.02 kW
COP	4.06	3.02

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	64 dB(A)	65 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	165 %	125 %
Prated	7.75 kW	8.02 kW
SCOP	4.19	3.20
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.86 kW	7.09 kW
COP Tj = -7°C	2.98	2.18
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.20 kW	4.41 kW
COP Tj = +2°C	3.87	3.05
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	2.72 kW	4.54 kW

COP Tj = +7°C	5.33	4.16
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	3.01 kW	4.83 kW
COP Tj = 12°C	7.38	5.38
Cdh Tj = +12 °C	0.990	0.990
Pdh Tj = Tbiv	6.86 kW	7.09 kW
COP Tj = Tbiv	2.98	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.78 kW	6.27 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.53	1.67
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	50 °C	50 °C
Poff	13 W	60 W
PTO	13 W	60 W
PSB	13 W	60 W
PCK	53 W	69 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	1.75 kW
Annual energy consumption Qhe	3824 kWh	5172 kWh

## Model P10T

Model name	P10T
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	9.70 kW	9.12 kW
El input	2.18 kW	3.02 kW
COP	4.46	3.03

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	65 dB(A)	65 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	159 %	125 %
Prated	7.79 kW	7.91 kW
SCOP	4.04	3.20
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.89 kW	7.00 kW
COP Tj = -7°C	2.98	2.22
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.24 kW	4.28 kW
COP Tj = +2°C	3.72	2.94
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	4.29 kW	4.08 kW

COP Tj = +7°C	5.36	4.18
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	4.36 kW	4.73 kW
COP Tj = 12°C	5.82	5.84
Cdh Tj = +12 °C	0.990	0.990
Pdh Tj = Tbiv	6.89 kW	7.00 kW
COP Tj = Tbiv	2.98	2.22
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.73 kW	7.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.94
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	50 °C	50 °C
Poff	19 W	19 W
PTO	19 W	19 W
PSB	19 W	19 W
PCK	59 W	59 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.06 kW	0.00 kW
Annual energy consumption Qhe	3979 kWh	5106 kWh