

Certificate Holder	Guangdong PHNIX Eco-Energy Solutions Ltd.
Address	No. 3 Tianyuan Road Dagang Town
ZIP	511470
City	Guangdong
Country	CN
ertification Body	BRE Global Limited
ubtype title	Intelligent Inverter Heat Pump R32- P10A, P10T
egistration number	041-K020-08
eat Pump Type	Outdoor Air/Water
efrigerant	R32
ass of Refrigerant	1.7 kg
ertification Date	05.09.2023
esting basis	Heat Pump Keymark Scheme Rules Rev 12



Model P10A		
Model name	P10A	
Application	Heating (medium temp)	
Units	Outdoor	
Climate zone (for heating)	n/a	
Reversibility	Yes	
Cooling mode application (optional)  Any additional heat sources	n/a	
Arry additional fleat 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		
	Law tamparatura	Modium tomporature
Sound power level outdoor	Low temperature 64 dB(A)	Medium temperature 65 dB(A)
EN 14825   Average Climate		
LN 14025   Average climate	Low temperature	Medium temperature
ης	165 %	125 %
113	105 /0	123 /0
Prated	7 75 kW	
Prated SCOP	7.75 kW 4.19	8.02 kW
SCOP	4.19	8.02 kW 3.20
		8.02 kW
SCOP Tbiv	4.19 -7 °C	8.02 kW 3.20 -7 °C
SCOP Tbiv TOL	4.19 -7 °C -10 °C	8.02 kW 3.20 -7 °C -10 °C
SCOP Tbiv TOL Pdh Tj = -7°C	4.19 -7 °C -10 °C 6.86 kW	8.02 kW 3.20 -7 °C -10 °C 7.09 kW
SCOP Tbiv TOL Pdh Tj = -7°C COP Tj = -7°C	4.19 -7 °C -10 °C 6.86 kW 2.98	8.02 kW 3.20 -7 °C -10 °C 7.09 kW 2.18
SCOP Tbiv TOL Pdh Tj = -7°C COP Tj = -7°C Cdh Tj = -7 °C	4.19 -7 °C -10 °C 6.86 kW 2.98 0.990	8.02 kW 3.20 -7 °C -10 °C 7.09 kW 2.18 0.990
SCOP Tbiv  TOL Pdh Tj = $-7^{\circ}$ C  COP Tj = $-7^{\circ}$ C  Cdh Tj = $-7^{\circ}$ C  Pdh Tj = $+2^{\circ}$ C	4.19 -7 °C -10 °C 6.86 kW 2.98 0.990 4.20 kW	8.02 kW 3.20 -7 °C -10 °C 7.09 kW 2.18 0.990 4.41 kW
SCOP Tbiv  TOL Pdh Tj = $-7^{\circ}$ C  COP Tj = $-7^{\circ}$ C  Cdh Tj = $-7^{\circ}$ C  Pdh Tj = $+2^{\circ}$ C  COP Tj = $+2^{\circ}$ C	4.19 -7 °C -10 °C 6.86 kW 2.98 0.990 4.20 kW 3.87	8.02 kW 3.20 -7 °C -10 °C 7.09 kW 2.18 0.990 4.41 kW 3.05
SCOP Tbiv  TOL  Pdh Tj = $-7^{\circ}$ C  COP Tj = $-7^{\circ}$ C  Cdh Tj = $-7^{\circ}$ C  Pdh Tj = $+2^{\circ}$ C  COP Tj = $+2^{\circ}$ C  Cdh Tj = $+2^{\circ}$ C	4.19 -7 °C -10 °C 6.86 kW 2.98 0.990 4.20 kW 3.87 0.990 2.72 kW 5.33	8.02 kW 3.20 -7 °C -10 °C 7.09 kW 2.18 0.990 4.41 kW 3.05 0.990 4.54 kW 4.16
SCOP Tbiv  TOL  Pdh Tj = $-7^{\circ}$ C  COP Tj = $-7^{\circ}$ C  Cdh Tj = $-7^{\circ}$ C  Pdh Tj = $+2^{\circ}$ C  COP Tj = $+2^{\circ}$ C  Cdh Tj = $+2^{\circ}$ C  Cdh Tj = $+2^{\circ}$ C  Pdh Tj = $+7^{\circ}$ C  COP Tj = $+7^{\circ}$ C  COP Tj = $+7^{\circ}$ C  Cdh Tj = $+7^{\circ}$ C	4.19 -7 °C -10 °C 6.86 kW 2.98 0.990 4.20 kW 3.87 0.990 2.72 kW 5.33 0.990	8.02 kW 3.20 -7 °C -10 °C 7.09 kW 2.18 0.990 4.41 kW 3.05 0.990 4.54 kW 4.16 0.990
SCOP Tbiv  TOL  Pdh Tj = $-7^{\circ}$ C  COP Tj = $-7^{\circ}$ C  Cdh Tj = $-7^{\circ}$ C  Pdh Tj = $+2^{\circ}$ C  COP Tj = $+2^{\circ}$ C  Cdh Tj = $+2^{\circ}$ C  Cdh Tj = $+2^{\circ}$ C  Pdh Tj = $+7^{\circ}$ C  COP Tj = $+7^{\circ}$ C  COP Tj = $+7^{\circ}$ C  Pdh Tj = $+7^{\circ}$ C  Pdh Tj = $+7^{\circ}$ C	4.19 -7 °C -10 °C 6.86 kW 2.98 0.990 4.20 kW 3.87 0.990 2.72 kW 5.33 0.990 3.01 kW	8.02 kW 3.20 -7 °C -10 °C 7.09 kW 2.18 0.990 4.41 kW 3.05 0.990 4.54 kW 4.16 0.990 4.83 kW
SCOP Tbiv  TOL  Pdh Tj = $-7^{\circ}$ C  COP Tj = $-7^{\circ}$ C  Cdh Tj = $-7^{\circ}$ C  Pdh Tj = $+2^{\circ}$ C  COP Tj = $+2^{\circ}$ C  Cdh Tj = $+2^{\circ}$ C  Cdh Tj = $+2^{\circ}$ C  Pdh Tj = $+7^{\circ}$ C  COP Tj = $+7^{\circ}$ C  COP Tj = $+7^{\circ}$ C  Cdh Tj = $+7^{\circ}$ C  Cdh Tj = $+7^{\circ}$ C  COP Tj = $+7^{\circ}$ C	4.19 -7 °C -10 °C 6.86 kW 2.98 0.990 4.20 kW 3.87 0.990 2.72 kW 5.33 0.990 3.01 kW 7.38	8.02 kW 3.20 -7 °C -10 °C 7.09 kW 2.18 0.990 4.41 kW 3.05 0.990 4.54 kW 4.16 0.990 4.83 kW 5.38
SCOP Tbiv  TOL  Pdh Tj = $-7^{\circ}$ C  COP Tj = $-7^{\circ}$ C  Cdh Tj = $-7^{\circ}$ C  Pdh Tj = $+2^{\circ}$ C  COP Tj = $+2^{\circ}$ C  Cdh Tj = $+2^{\circ}$ C  Cdh Tj = $+2^{\circ}$ C  Pdh Tj = $+7^{\circ}$ C  COP Tj = $+7^{\circ}$ C  COP Tj = $+7^{\circ}$ C  Cdh Tj = $+7^{\circ}$ C  COP Tj = $+7^{\circ}$ C	4.19 -7 °C -10 °C 6.86 kW 2.98 0.990 4.20 kW 3.87 0.990 2.72 kW 5.33 0.990 3.01 kW 7.38 0.990	8.02 kW 3.20 -7 °C -10 °C 7.09 kW 2.18 0.990 4.41 kW 3.05 0.990 4.54 kW 4.16 0.990 4.83 kW 5.38 0.990
SCOP Tbiv  TOL  Pdh Tj = $-7^{\circ}$ C  COP Tj = $-7^{\circ}$ C  Cdh Tj = $-7^{\circ}$ C  Pdh Tj = $+2^{\circ}$ C  COP Tj = $+2^{\circ}$ C  Cdh Tj = $+2^{\circ}$ C  Cdh Tj = $+2^{\circ}$ C  Pdh Tj = $+7^{\circ}$ C  COP Tj = $+7^{\circ}$ C  COP Tj = $+7^{\circ}$ C  Cdh Tj = $+7^{\circ}$ C  Cdh Tj = $+7^{\circ}$ C  COP Tj = $+7^{\circ}$ C	4.19 -7 °C -10 °C 6.86 kW 2.98 0.990 4.20 kW 3.87 0.990 2.72 kW 5.33 0.990 3.01 kW 7.38	8.02 kW 3.20 -7 °C -10 °C 7.09 kW 2.18 0.990 4.41 kW 3.05 0.990 4.54 kW 4.16 0.990 4.83 kW 5.38



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 12102-1   Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	65 dB(A)	65 dB(A)
режения режения и политический и пол		
EN 14825   Average Climate		
	Low temperature	Medium temperature
ηs	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
$COP Tj = -7^{\circ}C$	2.98	2.22
Cdh Tj = $-7$ °C	0.990	0.990
$Pdh Tj = +2^{\circ}C$	4.24 kW	4.28 kW
$COP Tj = +2^{\circ}C$	3.72	2.94
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = $+7^{\circ}$ C	4.29 kW	4.08 kW
$COP Tj = +7^{\circ}C$	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