

Subtype Monoblock heat pump R32 series 12KW			
Certificate Holder	Guangdong Warmhouse Technology Co., Ltd.		
Address	No. 1, Dejin Road, Xingtan Town, Shunde District		
ZIP	528306		
City	Xingtan		
Country	CN		
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH		
Subtype title	Monoblock heat pump R32 series 12KW		
Registration number	011-1W0736		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R32		
Mass of Refrigerant	1.5 kg		
Certification Date	13.11.2023		
Testing basis	HP KEYMARK certification scheme rules V12		



Model HL12HB		
Model name	HL12HB	
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	, -	
	2 40014 5014	
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	56 dB(A)	56 dB(A)
EN 1400E L Average Climate		
EN 14825 Average Climate		
EN 14825 Average Climate	Low temperature	Medium temperature
ης	178 %	131 %
ηs Prated	178 % 9.39 kW	131 % 9.06 kW
ηs Prated SCOP	178 %	131 %
ηs Prated SCOP Tbiv	178 % 9.39 kW 4.52 -7 °C	131 % 9.06 kW 3.41 -7 °C
ηs Prated SCOP Tbiv TOL	178 % 9.39 kW 4.52 -7 °C -10 °C	131 % 9.06 kW 3.41 -7 °C -10 °C
ηs Prated SCOP Tbiv TOL Pdh Tj = -7°C	178 % 9.39 kW 4.52 -7 °C -10 °C 8.30 kW	131 % 9.06 kW 3.41 -7 °C -10 °C 8.01 kW
ηs Prated SCOP Tbiv TOL Pdh Tj = -7°C COP Tj = -7°C	178 % 9.39 kW 4.52 -7 °C -10 °C	131 % 9.06 kW 3.41 -7 °C -10 °C
ηs Prated SCOP Tbiv TOL Pdh Tj = -7°C COP Tj = -7°C	178 % 9.39 kW 4.52 -7 °C -10 °C 8.30 kW	131 % 9.06 kW 3.41 -7 °C -10 °C 8.01 kW
ηs Prated SCOP Tbiv TOL Pdh Tj = -7°C COP Tj = -7°C	178 % 9.39 kW 4.52 -7 °C -10 °C 8.30 kW 3.20	131 % 9.06 kW 3.41 -7 °C -10 °C 8.01 kW 2.21
ηs Prated SCOP Tbiv TOL Pdh Tj = -7°C COP Tj = -7°C Cdh Tj = -7°C	178 % 9.39 kW 4.52 -7 °C -10 °C 8.30 kW 3.20 0.990	131 % 9.06 kW 3.41 -7 °C -10 °C 8.01 kW 2.21 1.000
ηs Prated SCOP Tbiv TOL Pdh Tj = -7°C COP Tj = -7°C Cdh Tj = -7°C Pdh Tj = +2°C COP Tj = +2°C	178 % 9.39 kW 4.52 -7 °C -10 °C 8.30 kW 3.20 0.990 5.08 kW	131 % 9.06 kW 3.41 -7 °C -10 °C 8.01 kW 2.21 1.000 5.14 kW
ηs Prated SCOP Tbiv TOL Pdh Tj = -7°C COP Tj = -7°C Cdh Tj = -7 °C Pdh Tj = +2°C COP Tj = +2°C COP Tj = +2°C	178 % 9.39 kW 4.52 -7 °C -10 °C 8.30 kW 3.20 0.990 5.08 kW 4.37	131 % 9.06 kW 3.41 -7 °C -10 °C 8.01 kW 2.21 1.000 5.14 kW 3.35
ης Prated SCOP Tbiv TOL Pdh Tj = -7°C COP Tj = -7°C Cdh Tj = -7°C Cdh Tj = +2°C COP Tj = +2°C Cdh Tj = +2°C Cdh Tj = +2°C	178 % 9.39 kW 4.52 -7 °C -10 °C 8.30 kW 3.20 0.990 5.08 kW 4.37 0.990	131 % 9.06 kW 3.41 -7 °C -10 °C 8.01 kW 2.21 1.000 5.14 kW 3.35 0.990
ηs Prated SCOP Tbiv TOL Pdh Tj = -7°C COP Tj = -7°C Cdh Tj = -7°C Pdh Tj = +2°C COP Tj = +7°C	178 % 9.39 kW 4.52 -7 °C -10 °C 8.30 kW 3.20 0.990 5.08 kW 4.37 0.990 3.58 kW	131 % 9.06 kW 3.41 -7 °C -10 °C 8.01 kW 2.21 1.000 5.14 kW 3.35 0.990 3.59 kW
ηs Prated SCOP Tbiv TOL Pdh Tj = -7°C COP Tj = -7°C Cdh Tj = -7°C Cdh Tj = +2°C Cdh Tj = +7°C Cdh Tj = +7°C COP Tj = +7°C	178 % 9.39 kW 4.52 -7 °C -10 °C 8.30 kW 3.20 0.990 5.08 kW 4.37 0.990 3.58 kW 5.34	131 % 9.06 kW 3.41 -7 °C -10 °C 8.01 kW 2.21 1.000 5.14 kW 3.35 0.990 3.59 kW 4.07
ηs Prated SCOP Tbiv TOL Pdh Tj = -7°C COP Tj = -7°C Cdh Tj = -7°C Pdh Tj = +2°C Cdh Tj = +2°C Cdh Tj = +2°C Cdh Tj = +2°C Cdh Tj = +7°C Cdh Tj = +7°C COP Tj = +7°C COP Tj = +7°C Cdh Tj = +7°C Pdh Tj = +7°C Cdh Tj = +7°C	178 % 9.39 kW 4.52 -7 °C -10 °C 8.30 kW 3.20 0.990 5.08 kW 4.37 0.990 3.58 kW 5.34 0.980	131 % 9.06 kW 3.41 -7 °C -10 °C 8.01 kW 2.21 1.000 5.14 kW 3.35 0.990 3.59 kW 4.07 0.990
ηs Prated SCOP	178 % 9.39 kW 4.52 -7 °C -10 °C 8.30 kW 3.20 0.990 5.08 kW 4.37 0.990 3.58 kW 5.34 0.980 4.20 kW	131 % 9.06 kW 3.41 -7 °C -10 °C 8.01 kW 2.21 1.000 5.14 kW 3.35 0.990 3.59 kW 4.07 0.990 4.66 kW
ηs Prated SCOP Tbiv TOL Pdh Tj = -7°C COP Tj = -7°C Cdh Tj = -7 °C Pdh Tj = +2°C Cdh Tj = +7°C COP Tj = 12°C	178 % 9.39 kW 4.52 -7 °C -10 °C 8.30 kW 3.20 0.990 5.08 kW 4.37 0.990 3.58 kW 5.34 0.980 4.20 kW 7.85	131 % 9.06 kW 3.41 -7 °C -10 °C 8.01 kW 2.21 1.000 5.14 kW 3.35 0.990 3.59 kW 4.07 0.990 4.66 kW 6.46



Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL $<$ Tdesignh	9.00 kW	8.53 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.87	2.05
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	40 W	40 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.39 kW	0.53 kW
Annual energy consumption Qhe	4295 kWh	5486 kWh