

## Subtype DC Inverter Air to Water 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	DC Inverter Air to Water 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 V14

## 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

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	11.90 kW	11.63 kW
EI input	2.72 kW	3.89 kW
COP	4.37	2.99

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	56 dB(A)	56 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	178 %	133 %
Prated	9.39 kW	9.06 kW
SCOP	4.52	3.41
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.30 kW	8.01 kW
COP Tj = -7°C	3.20	2.21
Cdh Tj = -7 °C	0.990	1.000
Pdh Tj = +2°C	5.08 kW	5.14 kW
COP Tj = +2°C	4.37	3.35
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	3.58 kW	3.59 kW

COP Tj = +7°C	5.34	4.07
Cdh Tj = +7 °C	0.980	0.990
Pdh Tj = 12°C	4.20 kW	4.66 kW
COP Tj = 12°C	7.85	6.46
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	8.30 kW	8.01 kW
COP Tj = Tbiv	3.20	2.21
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