

Subtype DC Inverter Air to Water Heat Pump R32 series 22KW

Certificate Holder	Guangdong Warmhouse Technology Co., Ltd.
Address	No. 1, Dejin Road, Xingtian Town, Shunde District
ZIP	528306
City	Xingtian
Country	CN
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	DC Inverter Air to Water Heat Pump R32 series 22KW
Registration number	011-1W0738
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	3.15 kg
Certification Date	13.11.2023
Testing basis	HP KEYMARK certification scheme rules V14

**Model HL22HB**

Model name	HL22HB
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	20.86 kW	20.56 kW
El input	4.78 kW	6.74 kW
COP	4.37	3.05

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level outdoor	59 dB(A)	59 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	178 %	144 %
Prated	16.91 kW	15.06 kW
SCOP	4.52	3.67
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	14.96 kW	13.33 kW
COP Tj = -7°C	3.27	2.30
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	8.79 kW	8.18 kW
COP Tj = +2°C	4.37	3.41
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	6.39 kW	6.59 kW

COP Tj = +7°C	5.91	4.95
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	7.98 kW	7.78 kW
COP Tj = 12°C	8.71	7.16
Cdh Tj = +12 °C	0.990	0.990
Pdh Tj = Tbiv	14.96 kW	13.33 kW
COP Tj = Tbiv	3.27	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.39 kW	15.06 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.95	2.27
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	14 W	14 W
PSB	13 W	13 W
PCK	40 W	40 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.52 kW	0.00 kW
Annual energy consumption Qhe	7735 kWh	8488 kWh