

## Subtype Air to Water Inverter Heat Pump R290 Series 12 kW

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	Air to Water Inverter Heat Pump R290 Series 12 kW
Registration number	011-1W0909
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	0.9 kg
Certification Date	09.10.2024
Testing basis	HP KEYMARK certification scheme rules V14

## Model HL12HG

Model name	HL12HG
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	12.00 kW	11.60 kW
El input	2.55 kW	3.72 kW
COP	4.71	3.12

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	58 dB(A)	58 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	198 %	152 %
Prated	10.00 kW	10.00 kW
SCOP	5.02	3.87
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.20 kW	8.70 kW
COP Tj = -7°C	3.12	2.40
Cdh Tj = -7 °C	0.980	0.980
Pdh Tj = +2°C	5.50 kW	5.30 kW
COP Tj = +2°C	4.92	3.78
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COP Tj = +7°C	6.54	4.93
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	4.70 kW	4.50 kW
COP Tj = 12°C	8.48	6.86
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	9.20 kW	8.70 kW
COP Tj = Tbiv	3.12	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.20 kW	9.60 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.72	2.08
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.980	0.980
WTOL	75 °C	75 °C
Poff	12 W	12 W
PTO	13 W	13 W
PSB	12 W	12 W
PCK	49 W	49 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.40 kW
Annual energy consumption Qhe	4262 kWh	5253 kWh

## Model HL12HGS

Model name	HL12HGS
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	12.00 kW	11.60 kW
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