

Subtype DC Inverter Air To Water Heat Pump Unit-R290-12

Certificate Holder	POLYTROPIC SAS
Address	4 chemin des Eclapons
ZIP	69390
City	Vouries
Country	FR
Certification Body	BRE Global Limited
Subtype title	DC Inverter Air To Water Heat Pump Unit-R290-12
Registration number	041-K093-08
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	0.9 kg
Certification Date	31.07.2024
Testing basis	HP KEYMARK certification scheme rules rev. no.14
Testing laboratory	TÜV SÜD Certification and Testing Co., Ltd. Guangzhou Branch, CN

Model Indoor unit: RLB100; Outdoor unit: WAO-12

Model name	Indoor unit: RLB100; Outdoor unit: WAO-12
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	8.90 kW	9.02 kW
El input	1.98 kW	3.60 kW
COP	4.50	2.51

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	56 dB(A)	61 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	188 %	139 %
Prated	8.97 kW	8.21 kW
SCOP	4.76	3.56
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.93 kW	7.26 kW
COP Tj = -7°C	2.87	2.25
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.06 kW	4.52 kW
COP Tj = +2°C	4.71	3.50
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.51 kW	4.01 kW

COP Tj = +7°C	6.83	4.92
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.23 kW	4.62 kW
COP Tj = 12°C	8.40	6.39
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.93 kW	7.26 kW
COP Tj = Tbiv	2.87	2.25
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.22 kW	6.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.99
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	67 °C	67 °C
Poff	20 W	20 W
PTO	23 W	23 W
PSB	20 W	20 W
PCK	30 W	30 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.75 kW	1.70 kW
Annual energy consumption Qhe	3889 kWh	4766 kWh