

## Subtype Air to Water Heat Pump - R290- 20

Certificate Holder	Dream Maker Technologie GmbH
Address	Zimmerbachstr.37
ZIP	74676
City	Niedernhall
Country	DE
Certification Body	BRE Global Limited
Subtype title	Air to Water Heat Pump - R290- 20
Registration number	041-K043-06
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	2.1 kg
Certification Date	09.09.2024
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: HPCB-W1-HT, Outdoor unit: HP-20KW-R290-T1

Model name	Indoor unit: HPCB-W1-HT, Outdoor unit: HP-20KW-R290-T1
Application	Heating (medium temp)
Units	Indoor, 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	12.92 kW	12.81 kW
El input	2.86 kW	4.15 kW
COP	4.53	3.09

##### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	35 dB(A)
Sound power level outdoor	56 dB(A)	57 dB(A)

##### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	181 %	136 %
Prated	16.76 kW	15.55 kW
SCOP	4.60	3.47
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	14.83 kW	13.76 kW
COP Tj = -7°C	2.89	2.23
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	9.03 kW	8.38 kW
COP Tj = +2°C	4.30	3.27
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	7.54 kW	7.22 kW
COP Tj = +7°C	6.86	4.99
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	8.93 kW	8.62 kW
COP Tj = 12°C	9.23	6.71
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	14.83 kW	13.76 kW
COP Tj = Tbiv	2.89	2.23
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.69 kW	12.99 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.68	2.08
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	23 W	23 W
PTO	33 W	33 W
PSB	23 W	23 W
PCK	25 W	25 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.08 kW	2.57 kW
Annual energy consumption Qhe	7523 kWh	9264 kWh