Subtype Monobloc Heat Pump R290 14 16 kW

Certificate Holder	Zhejiang Zhongguang Electrical Co., Ltd.
Address	No. 96 Yunjing Road Shuige Industry Area, Lishui
ZIP	323000
City	Zhejiang
Country	CN
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	Monobloc Heat Pump R290 14 16 kW
Registration number	011-1W0785
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	1.7 kg
Certification Date	29.04.2024
Testing basis	HP KEYMARK certification scheme rules V14

Model AHb14VR9XP	
Model name	AHb14VR9XP
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	14.00 kW	14.00 kW
El input	2.74 kW	4.40 kW
COP	5.11	3.18

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	66 dB(A)	66 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	197 %	145 %
Prated	13.83 kW	14.21 kW
SCOP	5.00	3.69
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.24 kW	12.57 kW
COP Tj = -7°C	2.89	2.24
Cdh Tj = -7 °C	0.990	1.000
Pdh Tj = +2°C	7.61 kW	7.87 kW
COP Tj = +2°C	4.60	3.44
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.14 kW	5.17 kW

COP Tj = +7°C	7.55	5.22
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	6.11 kW	5.79 kW
COP Tj = 12°C	11.14	7.76
Cdh Tj = +12 °C	0.960	0.970
Pdh Tj = Tbiv	12.24 kW	12.57 kW
COP Tj = Tbiv	2.89	2.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.98 kW	12.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.78	1.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	1.000
WTOL	75 °C	75 °C
Poff	20 W	20 W
PTO	23 W	23 W
PSB	20 W	20 W
PCK	87 W	87 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.85 kW	1.70 kW
Annual energy consumption Qhe	5716 kWh	7946 kWh

Model AHb16VR9XP	
Model name	AHb16VR9XP
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	16.00 kW	16.00 kW
El input	3.21 kW	5.11 kW
COP	4.98	3.13

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	67 dB(A)	67 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	189 %	145 %
Prated	15.57 kW	15.58 kW
SCOP	4.81	3.70
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	13.77 kW	13.78 kW
COP Tj = -7°C	2.74	2.21
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	8.51 kW	8.33 kW
COP Tj = +2°C	4.34	3.40
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	6.15 kW	5.98 kW

COP Tj = +7°C	7.66	5.47
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	5.97 kW	5.83 kW
COP Tj = 12°C	11.00	8.01
Cdh Tj = +12 °C	0.960	0.970
Pdh Tj = Tbiv	13.77 kW	13.78 kW
COP Tj = Tbiv	2.74	2.21
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.59 kW	12.46 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	75 °C	75 °C
Poff	20 W	20 W
PTO	23 W	23 W
PSB	20 W	20 W
PCK	87 W	87 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.98 kW	3.12 kW
Annual energy consumption Qhe	6690 kWh	8704 kWh