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Summary of	CHA-Monoblock 16	Reg. No.	011-1W0514
Certificate Holder			
Name	WOLF GmbH		
Address	Industriestr. 1	Zip	84048
City	Mainburg	Country	Germany
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH		
Subtype title	CHA-Monoblock 16		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R290		
Mass of Refrigerant	3.8 kg		
Certification Date	30.11.2021		
Testing basis	European KEYMARK Scheme for Heat Pumps Rev. 9 (as of 2021-03)		

Model: CHA-16/20-400V-M2 CS-C2

Configure model	
Model name	CHA-16/20-400V-M2 CS-C2
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2		
	Low temperature	Medium temperature
Heat output	7.21 kW	7.26 kW
El input	1.27 kW	2.32 kW
COP	5.68	3.13

Average Climate

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EN 12102-1

	Low temperature	Medium temperature
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	209 %	154 %
Prated	15.00 kW	14.40 kW
SCOP	5.30	3.94
Tbiv	-10 °C	-10 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	13.27 kW	12.74 kW
COP Tj = -7°C	3.02	2.33
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	8.08 kW	7.75 kW
COP Tj = +2°C	5.32	3.91
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.19 kW	4.98 kW
COP Tj = +7°C	7.03	5.15
Cdh Tj = +7 °C	0.980	0.990
Pdh Tj = 12°C	2.31 kW	2.22 kW

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COP Tj = 12°C	8.43	6.47
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	15.00 kW	14.40 kW
COP Tj = Tbiv	2.78	1.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.00 kW	14.40 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.78	1.91
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	35 °C	55 °C
Poff	25 W	25 W
PTO	25 W	25 W
PSB	25 W	25 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5842 kWh	7553 kWh

Model: CHA-16/20-400V-M2 CS-e9-C2

Configure model	
Model name	CHA-16/20-400V-M2 CS-e9-C2
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2		
	Low temperature	Medium temperature
Heat output	7.21 kW	7.26 kW
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