

Subtype CHA-07/400V

Certificate Holder	WOLF GmbH
Address	Industriestr. 1
ZIP	84048
City	Mainburg
Country	DE
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	CHA-07/400V
Registration number	011-1W380
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	3.1 kg
Certification Date	30.06.2020

Model CHA-07/400V

Model name	CHA-07/400V
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
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	4.50 kW	4.45 kW
El input	0.82 kW	1.39 kW
COP	5.47	3.10

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	194 %	148 %
Prated	5.59 kW	5.93 kW
SCOP	4.92	3.77
Tbiv	-10 °C	-10 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.29 kW	5.62 kW
COP Tj = -7°C	2.95	2.22
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	3.20 kW	3.46 kW
COP Tj = +2°C	5.08	3.68
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	2.29 kW	2.25 kW

COP Tj = +7°C	6.27	5.11
Cdh Tj = +7 °C	0.96	0.90
Pdh Tj = 12°C	2.33 kW	2.60 kW
COP Tj = 12°C	6.85	6.43
Cdh Tj = +12 °C	0.96	0.96
Pdh Tj = Tbiv	5.59 kW	5.93 kW
COP Tj = Tbiv	2.55	1.86
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.59 kW	5.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.55	1.86
WTOL	35 °C	55 °C
Poff	13 W	13 W
PTO	15 W	15 W
PSB	15 W	15 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	2346 kWh	3249 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	174 %	127 %
Prated	6.16 kW	5.57 kW
SCOP	4.43	3.26
Tbiv	-17 °C	-17 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	3.71 kW	3.70 kW
COP Tj = -7°C	3.85	2.69
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	2.25 kW	2.25 kW
COP Tj = +2°C	5.28	3.95
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	2.33 kW	2.29 kW
COP Tj = +7°C	6.52	5.27
Cdh Tj = +7 °C	0.96	0.97
Pdh Tj = 12°C	2.27 kW	2.41 kW
COP Tj = 12°C	6.83	6.27
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	5.35 kW	4.84 kW
COP Tj = Tbiv	2.45	1.63

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.55 kW	4.09 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.09	1.28
WTOL	35 °C	55 °C
Poff	13 W	13 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.61 kW	1.48 kW
Annual energy consumption Qhe	3428 kWh	4215 kWh
Pdh Tj = -15°C (if TOL	4.78	4.99
COP Tj = -15°C (if TOL	2.74	1.99
Cdh Tj = -15 °C	0.90	0.90

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	249 %	179 %
Prated	5.70 kW	5.89 kW
SCOP	6.30	4.54
Tbiv	2 °C	2 °C
TOL	-22 °C	-22 °C
Pdh Tj = +2°C	5.70 kW	5.89 kW
COP Tj = +2°C	3.85	2.43
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	3.84 kW	4.02 kW
COP Tj = +7°C	6.16	3.98
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	2.32 kW	2.29 kW
COP Tj = 12°C	7.17	5.77
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	5.70 kW	5.89 kW
COP Tj = Tbiv	3.85	2.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.70 kW	5.89 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.85	2.43
WTOL	35 °C	55 °C
Poff	13 W	13 W
PTO	15 W	15 W
PSB	15 W	15 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 Q _{he}	1208 kWh	4215 kWh

Model CHA-07/400V + CEW-2-200 (CHC-Monoblock 07/200 ; CHC-Monoblock 07/200-35)

Model name	CHA-07/400V + CEW-2-200 (CHC-Monoblock 07/200 ; CHC-Monoblock 07/200-35)
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
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 16147 | Average Climate

Declared load profile	XL
Efficiency η_{DHW}	129 %
COP	3.10
Heating up time	2:04 h:min
Standby power input	40.0 W
Reference hot water temperature	50.5 °C
Mixed water at 40°C	229 l

EN 16147 | Colder Climate

Declared load profile	XL
Efficiency η_{DHW}	108 %
COP	2.60
Heating up time	2:03 h:min
Standby power input	47.0 W
Reference hot water temperature	50.5 °C
Mixed water at 40°C	228 l

EN 16147 | Warmer Climate

Declared load profile	XL
Efficiency η_{DHW}	151 %
COP	3.64
Heating up time	2:01 h:min
Standby power input	36.0 W
Reference hot water temperature	50.3 °C
Mixed water at 40°C	227 l

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	4.50 kW	4.45 kW
El input	0.82 kW	1.39 kW
COP	5.47	3.10
EN 12102-1 Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	52 dB(A)	52 dB(A)
EN 14825 Average Climate		
	Low temperature	Medium temperature
η_s	194 %	148 %
Prated	5.59 kW	5.93 kW
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Tbiv	-10 °C	-10 °C
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Pdh Tj = -7°C	5.29 kW	5.62 kW
COP Tj = -7°C	2.95	2.22
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	3.20 kW	3.46 kW
COP Tj = +2°C	5.08	3.68
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	2.29 kW	2.25 kW
COP Tj = +7°C	6.27	5.11
Cdh Tj = +7 °C	0.96	0.90
Pdh Tj = 12°C	2.33 kW	2.60 kW
COP Tj = 12°C	6.85	6.43
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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 Q _{he}	2346 kWh	3249 kWh
EN 12102-1 Colder Climate		
	Low temperature	Medium temperature
Sound power level outdoor	52 dB(A)	52 dB(A)
EN 14825 Colder Climate		
	Low temperature	Medium temperature
η _s	174 %	127 %
Prated	6.16 kW	5.57 kW
SCOP	4.43	3.26
T _{biv}	-17 °C	-17 °C
TOL	-22 °C	-22 °C
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COP T _j = -7°C	3.85	2.69
C _{dh} T _j = -7 °C	0.90	0.90
P _{dh} T _j = +2°C	2.25 kW	2.25 kW
COP T _j = +2°C	5.28	3.95
C _{dh} T _j = +2 °C	0.90	0.90
P _{dh} T _j = +7°C	2.33 kW	2.29 kW
COP T _j = +7°C	6.52	5.27
C _{dh} T _j = +7 °C	0.96	0.97
P _{dh} T _j = 12°C	2.27 kW	2.41 kW
COP T _j = 12°C	6.83	6.27
C _{dh} T _j = +12 °C	0.95	0.96
P _{dh} T _j = T _{biv}	5.35 kW	4.84 kW
COP T _j = T _{biv}	2.45	1.63
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	4.55 kW	4.09 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	2.09	1.28
WTOL	35 °C	55 °C
P _{off}	13 W	13 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.61 kW	1.48 kW
Annual energy consumption Q _{he}	3428 kWh	4215 kWh
P _{dh} T _j = -15°C (if TOL	4.78	4.99
COP T _j = -15°C (if TOL	2.74	1.99
C _{dh} T _j = -15 °C	0.90	0.90
EN 12102-1 Warmer Climate		
	Low temperature	Medium temperature

Sound power level outdoor 52 dB(A) 52 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_s	249 %	179 %
Prated	5.70 kW	5.89 kW
SCOP	6.30	4.54
Tbiv	2 °C	2 °C
TOL	-22 °C	-22 °C
Pdh Tj = +2°C	5.70 kW	5.89 kW
COP Tj = +2°C	3.85	2.43
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	3.84 kW	4.02 kW
COP Tj = +7°C	6.16	3.98
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	2.32 kW	2.29 kW
COP Tj = 12°C	7.17	5.77
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	5.70 kW	5.89 kW
COP Tj = Tbiv	3.85	2.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.70 kW	5.89 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.85	2.43
WTOL	35 °C	55 °C
Poff	13 W	13 W
PTO	15 W	15 W
PSB	15 W	15 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	1208 kWh	4215 kWh