

## Subtype CHA-07/400V + SEW-2-300

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 + SEW-2-300
Registration number	011-1W0576
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	3.1 kg
Certification Date	27.01.2023
Testing basis	European KEYMARK Scheme for Heat Pumps Rev. 10 (as of 2022-06)

Model CHA-07/400V + SEW-2-300 (CHC-Monoblock 07/300 ; CHC-Monoblock 07/300-50 ; CHC-Monoblock 07/300-50S)

Model name	CHA-07/400V + SEW-2-300 (CHC-Monoblock 07/300 ; CHC-Monoblock 07/300-50 ; CHC-Monoblock 07/300-50S)
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	XXL
Efficiency $\eta_{DHW}$	127 %
COP	3.16
Heating up time	2:36 h:min
Standby power input	60.2 W
Reference hot water temperature	49.5 °C
Mixed water at 40°C	311 l

##### EN 16147 | Colder Climate

Declared load profile	XXL
Efficiency $\eta_{DHW}$	101 %
COP	2.53
Heating up time	2:57 h:min
Standby power input	65.2 W
Reference hot water temperature	49.7 °C
Mixed water at 40°C	313 l

##### EN 16147 | Warmer Climate

Declared load profile	XXL
Efficiency $\eta_{DHW}$	146 %
COP	3.66
Heating up time	2:13 h:min
Standby power input	47.9 W
Reference hot water temperature	49.5 °C
Mixed water at 40°C	314 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
$\eta_s$	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 Q <sub>he</sub>	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
$\eta_s$	174 %	127 %
Prated	6.16 kW	5.57 kW
SCOP	4.43	3.26
T <sub>biv</sub>	-17 °C	-17 °C
TOL	-22 °C	-22 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	3.71 kW	3.70 kW
COP T <sub>j</sub> = -7°C	3.85	2.69
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.90	0.90
P <sub>dh</sub> T <sub>j</sub> = +2°C	2.25 kW	2.25 kW
COP T <sub>j</sub> = +2°C	5.28	3.95
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.90	0.90
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.33 kW	2.29 kW
COP T <sub>j</sub> = +7°C	6.52	5.27
C <sub>dh</sub> T <sub>j</sub> = +7 °C	0.96	0.97
P <sub>dh</sub> T <sub>j</sub> = 12°C	2.27 kW	2.41 kW
COP T <sub>j</sub> = 12°C	6.83	6.27
C <sub>dh</sub> T <sub>j</sub> = +12 °C	0.95	0.96
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	5.35 kW	4.84 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.45	1.63
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	4.55 kW	4.09 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.09	1.28
WTOL	35 °C	55 °C
P <sub>off</sub>	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 <sub>he</sub>	3428 kWh	4215 kWh
P <sub>dh</sub> T <sub>j</sub> = -15°C (if TOL	4.78	4.99
COP T <sub>j</sub> = -15°C (if TOL	2.74	1.99
C <sub>dh</sub> T <sub>j</sub> = -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
$\eta_s$	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