

Subtype CHA-10/400V

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|---------------------|---|
| Certificate Holder | WOLF GmbH |
| Address | Industriestr. 1 |
| ZIP | 84048 |
| City | Mainburg |
| Country | DE |
| Certification Body | DIN CERTCO Gesellschaft für Konformitätsbewertung mbH |
| Subtype title | CHA-10/400V |
| Registration number | 011-1W0381 |
| Heat Pump Type | Outdoor Air/Water |
| Refrigerant | R290 |
| Mass of Refrigerant | 3.4 kg |
| Certification Date | 30.06.2020 |

Model CHA-10/400V

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|-------------------------------------|--|
| Model name | CHA-10/400V |
| 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

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|------------------|-------------|
| Power supply | 3x400V 50Hz |
| Off-peak product | n/a |

Outdoor Air/Water

EN 14511-4 | Heating

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

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|-----------------|-----------------|--------------------|
| η_s | 191 % | 141 % |
| Prated | 7.58 kW | 7.40 kW |
| SCOP | 4.86 | 3.60 |
| Tbiv | -10 °C | -10 °C |
| TOL | -22 °C | -22 °C |
| Pdh Tj = -7°C | 7.25 kW | 7.03 kW |
| COP Tj = -7°C | 2.92 | 2.09 |
| Cdh Tj = -7 °C | 0.90 | 0.90 |
| Pdh Tj = +2°C | 4.33 kW | 4.28 kW |
| COP Tj = +2°C | 4.69 | 3.45 |
| Cdh Tj = +2 °C | 0.90 | 0.90 |
| Pdh Tj = +7°C | 3.72 kW | 3.54 kW |
| COP Tj = +7°C | 6.89 | 5.07 |
| Cdh Tj = +7 °C | 0.97 | 0.98 |
| Pdh Tj = 12°C | 3.75 kW | 4.09 kW |
| COP Tj = 12°C | 7.43 | 6.60 |
| Cdh Tj = +12 °C | 0.97 | 0.98 |
| Pdh Tj = Tbiv | 7.58 kW | 7.40 kW |
| COP Tj = Tbiv | 2.52 | 1.75 |

| | | |
|---|-------------|-------------|
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 7.58 kW | 7.40 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.52 | 1.75 |
| 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 | 3225 kWh | 4255 kWh |

EN 12102-1 | Colder Climate

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

EN 14825 | Colder Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η_s | 177 % | 135 % |
| Prated | 8.78 kW | 8.17 kW |
| SCOP | 4.50 | 3.44 |
| Tbiv | -17 °C | -17 °C |
| TOL | -22 °C | -22 °C |
| Pdh Tj = -7°C | 5.32 kW | 5.44 kW |
| COP Tj = -7°C | 4.00 | 2.84 |
| Cdh Tj = -7 °C | 0.90 | 0.90 |
| Pdh Tj = +2°C | 3.36 kW | 3.30 kW |
| COP Tj = +2°C | 5.10 | 4.25 |
| Cdh Tj = +2 °C | 0.90 | 0.90 |
| Pdh Tj = +7°C | 3.73 kW | 3.61 kW |
| COP Tj = +7°C | 7.24 | 5.52 |
| Cdh Tj = +7 °C | 0.97 | 0.98 |
| Pdh Tj = 12°C | 4.03 kW | 3.90 kW |
| COP Tj = 12°C | 7.70 | 6.57 |
| Cdh Tj = +12 °C | 0.97 | 0.97 |
| Pdh Tj = Tbiv | 7.62 kW | 7.09 kW |
| COP Tj = Tbiv | 2.47 | 1.70 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 6.70 kW | 5.95 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.19 | 1.35 |
| 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} | 4812 kWh | 5852 kWh |
| P _{dh} T _j = -15°C (if TOL | 7.10 | 7.28 |
| COP T _j = -15°C (if TOL | 2.77 | 1.99 |
| C _{dh} T _j = -15 °C | 0.90 | 0.90 |

EN 12102-1 | Warmer Climate

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

EN 14825 | Warmer Climate

| | | |
|---|-----------------|--------------------|
| | Low temperature | Medium temperature |
| η _s | 272 % | 185 % |
| Prated | 8.57 kW | 8.64 kW |
| SCOP | 6.88 | 4.71 |
| T _{biv} | 2 °C | 2 °C |
| TOL | -22 °C | -22 °C |
| P _{dh} T _j = +2°C | 8.57 kW | 8.64 kW |
| COP T _j = +2°C | 3.51 | 2.40 |
| C _{dh} T _j = +2 °C | 0.90 | 0.90 |
| P _{dh} T _j = +7°C | 5.99 kW | 5.93 kW |
| COP T _j = +7°C | 6.41 | 4.14 |
| C _{dh} T _j = +7 °C | 0.90 | 0.90 |
| P _{dh} T _j = 12°C | 4.14 kW | 3.82 kW |
| COP T _j = 12°C | 8.36 | 5.99 |
| C _{dh} T _j = +12 °C | 0.97 | 0.98 |
| P _{dh} T _j = T _{biv} | 8.57 kW | 8.64 kW |
| COP T _j = T _{biv} | 3.51 | 2.40 |
| P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh} | 8.57 kW | 8.64 kW |
| COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh} | 3.51 | 2.40 |
| 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 | 0.00 kW | 0.00 kW |
| Annual energy consumption Q _{he} | 1665 kWh | 2451 kWh |

Model CHA-10/400V + CEW-2-200 (CHC-Monoblock 10/200 ; CHC-Monoblock 10/200-35)

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|-------------------------------------|--|
| Model name | CHA-10/400V + CEW-2-200 (CHC-Monoblock 10/200 ; CHC-Monoblock 10/200-35) |
| 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

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|---------------------------------|-------------|
| Declared load profile | XL |
| Efficiency η_{DHW} | 126 % |
| COP | 3.05 |
| Heating up time | 01:57 h:min |
| Standby power input | 38.7 W |
| Reference hot water temperature | 50.1 °C |
| Mixed water at 40°C | 229 l |

EN 16147 | Colder Climate

| | |
|---------------------------------|------------|
| Declared load profile | XL |
| Efficiency η_{DHW} | 112 % |
| COP | 2.69 |
| Heating up time | 2:02 h:min |
| Standby power input | 48.7 W |
| Reference hot water temperature | 50.3 °C |
| Mixed water at 40°C | 228 l |

EN 16147 | Warmer Climate

| | |
|---------------------------------|-------------|
| Declared load profile | XL |
| Efficiency η_{DHW} | 150 % |
| COP | 3.60 |
| Heating up time | 02:00 h:min |
| Standby power input | 38.5 W |
| Reference hot water temperature | 50.1 °C |
| Mixed water at 40°C | 231 l |