

Subtype F1x45-10 3x400

| | |
|---------------------|----------------|
| Certificate Holder | Nibe AB |
| Address | Box 14 |
| ZIP | S-28521 |
| City | Markaryd |
| Country | SE |
| Certification Body | RISE CERT |
| Subtype title | F1x45-10 3x400 |
| Registration number | 012-041 |
| Heat Pump Type | Brine/Water |
| Refrigerant | R407c |
| Mass of Refrigerant | 2.1 kg |

Model F1145-10 3x400

| | |
|-------------------------------------|-----------------------|
| Model name | F1145-10 3x400 |
| Application | Heating (medium temp) |
| Units | Indoor |
| Climate zone (for heating) | Colder Climate |
| Cooling mode application (optional) | n/a |
| Any additional heat sources | n/a |

General data

| | |
|------------------|-------------|
| Power supply | 3x400V 50Hz |
| Off-peak product | No |

Brine/Water

EN 14511-4 | Heating

| | |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|--------------------------|-----------------|--------------------|
| Sound power level indoor | 45 dB(A) | 45 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η_s | 194 % | 147 % |
| Prated | 12.00 kW | 10.00 kW |
| SCOP | 5.05 | 3.88 |
| Tbiv | -5 °C | -5 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 9.80 kW | 7.90 kW |
| COP Tj = -7°C | 4.93 | 3.40 |
| Pdh Tj = +2°C | 10.00 kW | 8.70 kW |
| COP Tj = +2°C | 5.18 | 3.91 |
| Pdh Tj = +7°C | 10.20 kW | 9.20 kW |
| COP Tj = +7°C | 5.35 | 4.25 |
| Pdh Tj = 12°C | 10.40 kW | 9.60 kW |
| COP Tj = 12°C | 5.39 | 4.58 |
| Pdh Tj = Tbiv | 9.50 kW | 8.20 kW |
| COP Tj = Tbiv | 4.99 | 3.52 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 9.70 kW | 7.60 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.80 | 3.19 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.99 | 1.00 |
| WTOL | 65 °C | 65 °C |

| | | |
|--|-------------|-------------|
| Poff | 2 W | 2 W |
| PTO | 20 W | 10 W |
| PSB | 7 W | 7 W |
| PCK | 14 W | 14 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 2.30 kW | 2.40 kW |
| Annual energy consumption Qhe | 4906 kWh | 5345 kWh |

EN 12102-1 | Colder Climate

| | Low temperature | Medium temperature |
|--------------------------|-----------------|--------------------|
| Sound power level indoor | 45 dB(A) | 45 dB(A) |

EN 14825 | Colder Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η_s | 200 % | 151 % |
| Prated | 12.00 kW | 10.00 kW |
| SCOP | 5.20 | 3.98 |
| Tbiv | -15 °C | -15 °C |
| TOL | -22 °C | -22 °C |
| Pdh Tj = -7°C | 10.10 kW | 8.60 kW |
| COP Tj = -7°C | 5.23 | 3.79 |
| Pdh Tj = +2°C | 10.20 kW | 9.10 kW |
| COP Tj = +2°C | 5.38 | 4.19 |
| Pdh Tj = +7°C | 10.40 kW | 9.40 kW |
| COP Tj = +7°C | 5.45 | 4.52 |
| Pdh Tj = 12°C | 10.40 kW | 9.70 kW |
| COP Tj = 12°C | 5.22 | 4.68 |
| Pdh Tj = Tbiv | 9.90 kW | 8.20 kW |
| COP Tj = Tbiv | 5.08 | 3.55 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 9.70 kW | 7.60 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.80 | 3.19 |
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| WTOL | 65 °C | 65 °C |
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| PTO | 20 W | 20 W |
| PSB | 7 W | 7 W |
| PCK | 14 W | 14 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 2.30 kW | 2.40 kW |
| Annual energy consumption Qhe | 5695 kWh | 6214 kWh |

Model F1145-10 PC 3x400

| | |
|-------------------------------------|-----------------------|
| Model name | F1145-10 PC 3x400 |
| Application | Heating (medium temp) |
| Units | Indoor |
| Climate zone (for heating) | Colder Climate |
| Cooling mode application (optional) | n/a |
| Any additional heat sources | n/a |

General data

| | |
|------------------|-------------|
| Power supply | 3x400V 50Hz |
| Off-peak product | No |

Brine/Water

EN 14511-4 | Heating

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|--|--------|
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| Complete power supply failure | passed |

EN 12102-1 | Average Climate

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EN 14825 | Average Climate

| | Low temperature | Medium temperature |
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| SCOP | 5.05 | 3.88 |
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| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 2.30 kW | 2.40 kW |
| Annual energy consumption Qhe | 4906 kWh | 5345 kWh |

EN 12102-1 | Colder Climate

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|--------------------------|-----------------|--------------------|
| Sound power level indoor | 45 dB(A) | 45 dB(A) |

EN 14825 | Colder Climate

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| Annual energy consumption Qhe | 5695 kWh | 6214 kWh |

Model F1245-10 3x400

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|-------------------------------------|--------------------------|
| Model name | F1245-10 3x400 |
| Application | Heating + DHW + low temp |
| Units | Indoor |
| Climate zone (for heating) | Colder Climate |
| Cooling mode application (optional) | n/a |
| Any additional heat sources | n/a |

General data

| | |
|------------------|-------------|
| Power supply | 3x400V 50Hz |
| Off-peak product | No |

Brine/Water

EN 16147 | Average Climate

| | |
|---------------------------------|------------|
| Declared load profile | XL |
| Efficiency η_{DHW} | 96 % |
| COP | 2.40 |
| Heating up time | 1:10 h:min |
| Standby power input | 55.0 W |
| Reference hot water temperature | 50.0 °C |
| Mixed water at 40°C | 235 l |

EN 16147 | Colder Climate

| | |
|---------------------------------|------------|
| Declared load profile | XL |
| Efficiency η_{DHW} | 96 % |
| COP | 2.40 |
| Heating up time | 1:10 h:min |
| Standby power input | 55.0 W |
| Reference hot water temperature | 50.0 °C |
| Mixed water at 40°C | 235 l |

Model F1245-10 PC 3x400

| | |
|-------------------------------------|--------------------------|
| Model name | F1245-10 PC 3x400 |
| Application | Heating + DHW + low temp |
| Units | Indoor |
| Climate zone (for heating) | Colder Climate |
| Cooling mode application (optional) | n/a |
| Any additional heat sources | n/a |

General data

| | |
|------------------|-------------|
| Power supply | 3x400V 50Hz |
| Off-peak product | No |

Brine/Water

EN 16147 | Average Climate

| | |
|---------------------------------|------------|
| Declared load profile | XL |
| Efficiency η_{DHW} | 96 % |
| COP | 2.40 |
| Heating up time | 1:10 h:min |
| Standby power input | 55.0 W |
| Reference hot water temperature | 50.0 °C |
| Mixed water at 40°C | 235 l |

EN 16147 | Colder Climate

| | |
|---------------------------------|------------|
| Declared load profile | XL |
| Efficiency η_{DHW} | 96 % |
| COP | 2.40 |
| Heating up time | 1:10 h:min |
| Standby power input | 55.0 W |
| Reference hot water temperature | 50.0 °C |
| Mixed water at 40°C | 235 l |