

Subtype F1x45-8 1x230

| | |
|---------------------|--|
| Certificate Holder | Nibe AB |
| Address | Box 14 |
| ZIP | S-28521 |
| City | Markaryd |
| Country | SE |
| Certification Body | RISE CERT |
| Subtype title | F1x45-8 1x230 |
| Registration number | 012-040 |
| Heat Pump Type | Brine/Water |
| Refrigerant | R407c |
| Mass of Refrigerant | 1.7 kg |
| Testing laboratory | Austrian Institute of Technology (AIT) |

Model F1145-8 1x230

| | |
|-------------------------------------|-----------------------|
| Model name | F1145-8 1x230 |
| 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 | 1x230V 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 14511-2 | Heating

| | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 8.32 kW | 7.66 kW |
| El input | 1.83 kW | 2.57 kW |
| COP | 4.55 | 2.98 |

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 | 185 % | 141 % |
| Prated | 10.00 kW | 9.00 kW |
| SCOP | 4.83 | 3.73 |
| Tbiv | -5 °C | -6 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 8.20 kW | 7.50 kW |
| COP Tj = -7°C | 4.70 | 3.27 |
| Pdh Tj = +2°C | 8.30 kW | 7.80 kW |
| COP Tj = +2°C | 4.94 | 3.77 |
| Pdh Tj = +7°C | 8.30 kW | 8.00 kW |
| COP Tj = +7°C | 5.10 | 4.09 |
| Pdh Tj = 12°C | 8.40 kW | 8.10 kW |
| COP Tj = 12°C | 5.18 | 4.39 |
| Pdh Tj = Tbiv | 8.20 kW | 7.60 kW |
| COP Tj = Tbiv | 4.75 | 3.33 |

| | | |
|---|-------------|-------------|
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8.10 kW | 7.40 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.57 | 3.07 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.99 | 0.99 |
| WTOL | 65 °C | 65 °C |
| Poff | 2 W | 2 W |
| PTO | 15 W | 15 W |
| PSB | 7 W | 7 W |
| PCK | 14 W | 14 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 1.90 kW | 1.60 kW |
| Annual energy consumption Qhe | 4290 kWh | 4993 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 |
|---|-----------------|--------------------|
| ηs | 190 % | 146 % |
| Prated | 10.00 kW | 9.00 kW |
| SCOP | 4.95 | 3.85 |
| Tbiv | -15 °C | -16 °C |
| TOL | -22 °C | -22 °C |
| Pdh Tj = -7°C | 8.30 kW | 7.80 kW |
| COP Tj = -7°C | 4.97 | 3.67 |
| Pdh Tj = +2°C | 8.40 kW | 7.90 kW |
| COP Tj = +2°C | 5.12 | 4.04 |
| Pdh Tj = +7°C | 8.40 kW | 8.10 kW |
| COP Tj = +7°C | 5.23 | 4.33 |
| Pdh Tj = 12°C | 8.40 kW | 8.20 kW |
| COP Tj = 12°C | 5.03 | 4.47 |
| Pdh Tj = Tbiv | 8.20 kW | 7.60 kW |
| COP Tj = Tbiv | 4.81 | 3.34 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8.10 kW | 7.40 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.57 | 3.07 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.99 | 0.99 |
| WTOL | 65 °C | 65 °C |
| Poff | 2 W | 2 W |
| PTO | 15 W | 15 W |
| PSB | 7 W | 7 W |

| | | |
|--|-------------|-------------|
| PCK | 14 W | 14 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 1.90 kW | 1.60 kW |
| Annual energy consumption Q _{he} | 4981 kWh | 5777 kWh |

Model F1245-8 1x230

| | |
|-------------------------------------|--------------------------|
| Model name | F1245-8 1x230 |
| 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 | 1x230V 50Hz |
| Off-peak product | No |

Brine/Water

EN 16147 | Average Climate

| | |
|---------------------------------|------------|
| Declared load profile | XL |
| Efficiency η_{DHW} | 100 % |
| COP | 2.51 |
| Heating up time | 1:28 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} | 100 % |
| COP | 2.51 |
| Heating up time | 1:28 h:min |
| Standby power input | 55.0 W |
| Reference hot water temperature | 50.0 °C |
| Mixed water at 40°C | 235 l |

EN 14511-4 | Heating

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