

Subtype F1x45-17

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|---------------------|--|
| Certificate Holder | Nibe AB |
| Address | Box 14 |
| ZIP | S-28521 |
| City | Markaryd |
| Country | SE |
| Certification Body | RISE CERT |
| Subtype title | F1x45-17 |
| Registration number | 012-046 |
| Heat Pump Type | Brine/Water |
| Refrigerant | R407c |
| Mass of Refrigerant | 2 kg |
| Testing laboratory | Austrian Institute of Technology (AIT) |

Model F1145-17

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|-------------------------------------|-----------------------|
| Model name | F1145-17 |
| 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 14511-2 | Heating

| | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 16.89 kW | 16.10 kW |
| El input | 4.10 kW | 5.38 kW |
| COP | 4.12 | 2.99 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|--------------------------|-----------------|--------------------|
| Sound power level indoor | 43 dB(A) | 43 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|---------------|-----------------|--------------------|
| η_s | 166 % | 137 % |
| Prated | 20.00 kW | 20.00 kW |
| SCOP | 4.35 | 3.62 |
| Tbiv | -6 °C | -5 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 17.00 kW | 16.00 kW |
| COP Tj = -7°C | 4.39 | 3.25 |
| Pdh Tj = +2°C | 17.10 kW | 16.20 kW |
| COP Tj = +2°C | 4.50 | 3.70 |
| Pdh Tj = +7°C | 17.30 kW | 16.60 kW |
| COP Tj = +7°C | 4.55 | 3.95 |
| Pdh Tj = 12°C | 17.40 kW | 16.90 kW |
| COP Tj = 12°C | 4.34 | 4.16 |
| Pdh Tj = Tbiv | 17.00 kW | 16.10 kW |
| COP Tj = Tbiv | 4.41 | 3.35 |

| | | |
|---|-------------|-------------|
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 16.90 kW | 16.00 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.29 | 3.08 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.97 | 0.99 |
| WTOL | 65 °C | 65 °C |
| Poff | 2 W | 2 W |
| PTO | 100 W | 100 W |
| PSB | 7 W | 7 W |
| PCK | 35 W | 35 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 3.10 kW | 4.00 kW |
| Annual energy consumption Qhe | 9474 kWh | 11407 kWh |

EN 12102-1 | Colder Climate

| | Low temperature | Medium temperature |
|--------------------------|-----------------|--------------------|
| Sound power level indoor | 43 dB(A) | 43 dB(A) |

EN 14825 | Colder Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| ηs | 171 % | 140 % |
| Prated | 20.00 kW | 20.00 kW |
| SCOP | 4.47 | 3.70 |
| Tbiv | -16 °C | -15 °C |
| TOL | -22 °C | -22 °C |
| Pdh Tj = -7°C | 17.20 kW | 16.10 kW |
| COP Tj = -7°C | 4.56 | 3.62 |
| Pdh Tj = +2°C | 17.30 kW | 16.50 kW |
| COP Tj = +2°C | 4.58 | 3.89 |
| Pdh Tj = +7°C | 17.40 kW | 16.80 kW |
| COP Tj = +7°C | 4.52 | 4.12 |
| Pdh Tj = 12°C | 17.40 kW | 17.00 kW |
| COP Tj = 12°C | 4.06 | 4.22 |
| Pdh Tj = Tbiv | 17.00 kW | 16.10 kW |
| COP Tj = Tbiv | 4.45 | 3.37 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 16.90 kW | 16.00 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.29 | 3.08 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.97 | 0.99 |
| WTOL | 65 °C | 65 °C |
| Poff | 2 W | 2 W |
| PTO | 100 W | 100 W |
| PSB | 7 W | 7 W |

| | | |
|--|-------------|-------------|
| PCK | 35 W | 35 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 3.10 kW | 4.00 kW |
| Annual energy consumption Qhe | 11047 kWh | 13300 kWh |