

| Summary of | F1x45-8 1x230 | Reg. No. | 012-040 |
|----------------------------|---------------|-------------|---------|
| Certificate Holder | | | |
| Name | Nibe AB | | |
| Address | Box 14 | Zip | S-28521 |
| City | Markaryd | Country | Sweden |
| Certification Body | RISE CERT | RISE CERT | |
| Name of testing laboratory | AIT | | |
| Subtype title | F1x45-8 1x230 | | |
| Heat Pump Type | Brine/Water | Brine/Water | |
| Refrigerant | R407c | R407c | |
| Mass Of Refrigerant | 1.7 kg | | |



Model: F1145-8 1x230

| General Data | |
|--------------|-------------|
| Power supply | 1x230V 50Hz |

Heating

| EN 14511-4 | | |
|----------------------------------------------------------------------------|--------|--|
| | | |
| Operating range outdoor exchanger/indoor exchanger lower limit/lower limit | passed | |
| Operating range outdoor exchanger/indoor exchanger upper limit/upper limit | passed | |
| Shutting off the heat transfer medium flow | passed | |
| Complete power supply failure | passed | |

| EN 14511-2 | | | |
|------------------------|-----------------|--------------------|--|
| | Low temperature | Medium temperature | |
| Heat output | 8.32 kW | 7.66 kW | |
| El input | 1.83 kW | 2.57 kW | |
| СОР | 4.55 | 2.98 | |
| Indoor water flow rate | 1.72 m³/h | 0.97 m³/h | |

Average Climate



| EN 12102-1 | | |
|--------------------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | 45 dB(A) | 45 dB(A) |

| EN 14825 | | |
|---------------|-----------------|--------------------|
| | 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 |

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| | <u> </u> | |
|--------------------------------------------|-------------|-------------|
| Pdh Tj = TOL | 8.10 kW | 7.40 kW |
| COP Tj = TOL | 4.57 | 3.07 |
| Cdh | 0.99 | 0.99 |
| WTOL | 65 °C | 65 °C |
| Poff | 2 W | 2 W |
| РТО | 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 |

Colder Climate

| EN 12102-1 | | |
|--------------------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | 45 dB(A) | 45 dB(A) |

| EN 14825 | | |
|-----------------|--------------------|--|
| Low temperature | Medium temperature | |
| 190 % | 146 % | |
| 10.00 kW | 9.00 kW | |
| | Low temperature | |





| 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 = $+2^{\circ}$ 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 |
| $COP Tj = +7^{\circ}C$ | 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 | 8.10 kW | 7.40 kW |
| COP Tj = TOL | 4.57 | 3.07 |
| Cdh | 0.99 | 0.99 |
| WTOL | 65 °C | 65 °C |
| Poff | 2 W | 2 W |
| РТО | 15 W | 15 W |
| PSB | 7 W | 7 W |
| PCK | 14 W | 14 W |



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| Supplementary Heater: Type of energy input | electricity | electricity |
|--------------------------------------------|-------------|-------------|
| Supplementary Heater: PSUP | 1.90 kW | 1.60 kW |
| Annual energy consumption Qhe | 4981 kWh | 5777 kWh |



Model: F1245-8 1x230

| General Data | |
|------------------|-------------|
| Power supply | 1x230V 50Hz |
| Off-peak product | No |

Heating

| EN 14511-4 | | |
|----------------------------------------------------------------------------|--------|--|
| | | |
| Operating range outdoor exchanger/indoor exchanger lower limit/lower limit | passed | |
| Operating range outdoor exchanger/indoor exchanger upper limit/upper limit | passed | |
| Shutting off the heat transfer medium flow | passed | |
| Complete power supply failure | passed | |

| EN 14511-2 | | |
|------------------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| Heat output | 8.32 kW | 7.66 kW |
| El input | 1.83 kW | 2.57 kW |
| СОР | 4.55 | 2.98 |
| Indoor water flow rate | 1.72 m³/h | 0.97 m³/h |

Average Climate



| EN 12102-1 | | |
|--------------------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | 45 dB(A) | 45 dB(A) |

| EN 14825 | | |
|------------------------|-----------------|--------------------|
| | 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 |
| $COP Tj = +7^{\circ}C$ | 5.10 | 4.09 |
| Pdh Tj = 12°C | 8.40 kW | 8.10 kW |
| COP Tj = 12°C | 5.18 | 4.39 |
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|--------------------------------------------|-------------|-------------|
| COP Tj = TOL | 4.57 | 3.07 |
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| WTOL | 65 °C | 65 °C |
| Poff | 2 W | 2 W |
| РТО | 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 |

Colder Climate

| EN 12102-1 | | |
|--------------------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | 45 dB(A) | 45 dB(A) |

| Low temperature | Medium temperature |
|-----------------|--------------------|
| | |
| 190 % | 146 % |
| 10.00 kW | 9.00 kW |
| | |





| This information was generated by the HP KEYMARK database on 17 Dec 2020 | | | |
|--------------------------------------------------------------------------|---------|---------|--|
| 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 | |
| $COP Tj = +2^{\circ}C$ | 5.12 | 4.04 | |
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| COP Tj = 12°C | 5.03 | 4.47 | |
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| WTOL | 65 °C | 65 °C | |
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| РТО | 15 W | 15 W | |
| PSB | 7 W | 7 W | |
| РСК | 14 W | 14 W | |
| | 1 | | |



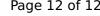
| Supplementary Heater: Type of energy input | electricity | electricity |
|--------------------------------------------|-------------|-------------|
| Supplementary Heater: PSUP | 1.90 kW | 1.60 kW |
| Annual energy consumption Qhe | 4981 kWh | 5777 kWh |

Domestic Hot Water (DHW)

Average Climate

| EN 16147 | | |
|---------------------------------|------------|--|
| Declared load profile | XL | |
| Efficiency ηDHW | 100 % | |
| 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 I | |
| СОР | 2.51 | |

Colder Climate





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| EN 16147 | | |
|---------------------------------|------------|--|
| Declared load profile | XL | |
| Efficiency ηDHW | 100 % | |
| 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 I | |
| СОР | 2.51 | |