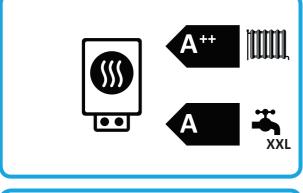


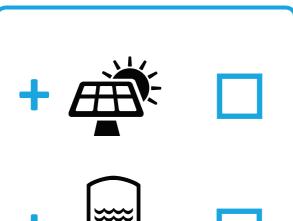


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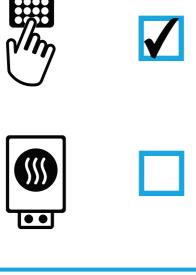


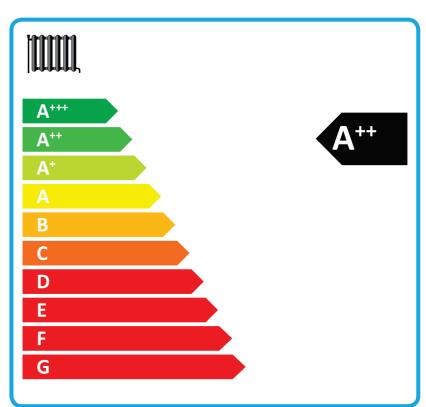
NIBE F1145-15 + VPB500

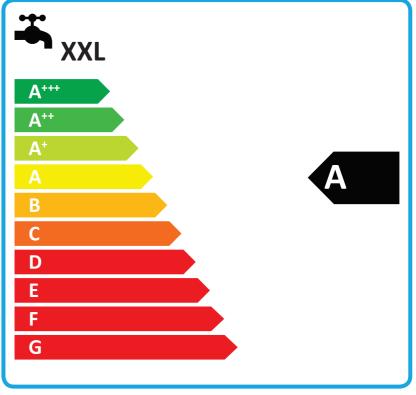












2015

| Supplier's name:  | NI                       | BE    |     |
|---|--------------------------|-------|-----|
| Model:  | NIBE F1145-15 (+VPB 500) |       |     |
| Temperature application   | 35                       | 55    | °C  |
| Declared load profile for water heating                           | XXL                      |       |     |
| Seasonal space heating energy efficiency class, average climate:  | A++                      | A++   |     |
| Water heating energy efficiency class, average climate:           |                          | A     |     |
| Rated heat output, average climate:                               | 18                       | 18    | kW  |
| Annual energy consumption for space heating, average climate      | 8134                     | 10194 | kWh |
| Annual electricity consumption for water heating, average climate | 2283                     |       | kWh |
| Seasonal space heating energy efficiency, average climate:        | 175                      | 138   | %   |
| Water heating energy efficiency, average climate:                 | 94                       |       | %   |
| Sound power level LWA indoors                                     | 4                        | 13    | dB  |
| Rated heat output, cold climate:                                  | 18                       | 18    | kW  |
| Rated heat output, warm climate:                                  | 18                       | 18    | kW  |
| Annual energy consumption for space heating, cold climate         | 9454                     | 11893 | kWh |
| Annual electricity consumption for water heating, cold climate    | 2283                     |       | kWh |
| Annual energy consumption for space heating, warm climate         | 5333                     | 6636  | kWh |
| Annual electricity consumption for water heating, warm climate    | 2283                     |       | kWh |
| Seasonal space heating energy efficiency, cold climate:           | 180                      | 141   | %   |
| Water heating energy efficiency, cold climate:                    | 94                       |       | %   |
| Seasonal space heating energy efficiency, warm climate:           | 172                      | 137   | %   |
| Water heating energy efficiency, warm climate:                    | 94                       |       | %   |
| Sound power level LWA outdoors                                    |                          | -     | dB  |

## Data for package fiche

| Controller class   | V    | <b>/</b> II |   |
|--|------|-------------|---|
| Controler contribution to efficiency   | 3,5  |             | % |
| Seasonal space heating energy efficiency of package, average climate:        | 178  | 141         | % |
| Seasonal space heating energy efficiency class for package, average climate: | A+++ | A++         | % |
| Seasonal space heating energy efficiency of package, cold climate:           | 183  | 145         | % |
| Seasonal space heating energy efficiency of package, warm climate:           | 176  | 140         | % |

| Model(s):                               |                  |      | NIBE F | 1145-15 (+ VPB 500)               |        |
|---|------------------|------|--------|-----------------------------------|--------|
| Type of heat source/sink:               | •                |      | E      | Brine-to-water                    |        |
| Low-temperature heat pump:              |                  |      |        | No                                |        |
| Equipped with supplementary h           | eater:           |      |        | Yes                               | <      |
| Heat pump combination heater:           |                  |      |        | Yes                               |        |
| Climate condition:                      |                  |      |        | Average                           | 1      |
| Temperature application:                |                  |      | Medium | n temperature (55 °C)             |        |
| Applied standards: EN14825 and E        | N16147           |      |        |                                   |        |
| Rated heat output                       | Prate            | 18,0 | kW     | Seasonal space heating efficiency | energ  |
| Declared capacity for part load at outo | loor temperature | ij   |        | Declared coefficient of perfo     | rmance |
| Tj = -7 °C                              | Pdh              | 14,6 | kW     | Tj = -7 °C                        |        |



| Applied standards: EN14825 and EN1614                                      |                          |              |         | Seasonal space heating energy  |          |  |
|--|--------------------------|--------------|---------|--|----------|--|
| Rated heat output  | Prated                   | 18,0         | kW      | efficiency η <sub>s</sub> 138  | %        |  |
|  |                          |              | ı       |  |          |  |
| <u>Declared capacity for part load at outdoor tem</u> $Ti = -7  ^{\circ}C$ |                          | 11.0         | kW      | Declared coefficient of performance for part load at outdoor temperature T  Ti = -7 °C COPd 3.16 |          |  |
|  | Pdh<br>Pdh               | 14,6         | kW      | ,  | -        |  |
| Tj = +2 °C   | Pan<br>Pdh               | 14,8         | kW      |  |          |  |
| Tj = +7 °C<br>Tj = +12 °C  | Pan                      | 15,1<br>15,4 | kW      | Tj = +7  °C  |          |  |
| Tj = ±12 C<br>Tj = biv   | Pdh                      |              | kW      | ,  |          |  |
| Ti = TOL   | Pdh                      | 14,6<br>14,6 | kW      | Tj = biv         COPd         3,27           Ti = TOL         COPd         2,96                  |          |  |
| Tj = -15 °C (if TOL < -20 °C)  | Pdh                      | 14,0         | kW      | Tj = -15 °C (if TOL < -20 °C) COPd   |          |  |
| 1]13 C (   10L < -20 C)  | Pull                     |              | KVV     | 1j13 C (ii 10LX -20 C) COPa  |          |  |
| Bivalent temperature   | T <sub>biv</sub>         | -5,1         | °C      | Operation limit temperature TOL -10  | °C       |  |
| Cycling interval capacity for heating                                      | Pcych                    |              | kW      | Cycling interval efficiency COPcyc   | -        |  |
| Degradation co-efficient   | Cdh                      | 0,99         | -       | Heating water operating limit WTOL 65  | °C       |  |
| Power consumption in modes other than active                               | o mode                   |              |         | Supplementary heater   |          |  |
| Off mode   | P <sub>OFF</sub>         | 0,002        | kW      | Rated heat output Psup 3,4   | kW       |  |
| Thermostat-off mode  | P <sub>TO</sub>          | 0,022        | kW      |  |          |  |
| Standby mode   | P <sub>SB</sub>          | 0,007        | kW      | Type of energy input Electric  | Electric |  |
| Crankcase heater mode  | P <sub>CK</sub>          | 0,035        | kW      | -  |          |  |
| Other items  |                          |              |         |  |          |  |
| Capacity control   |                          | fixed        |         | Rated air flow rate, outdoors  | m³/h     |  |
|  |                          |              |         | Rated water flow rate, indoor heat   |          |  |
| Sound power level, indoors/outdoors  | L <sub>WA</sub>          | 43/-         | dB      | exchanger 1,57   | m³/h     |  |
|  |                          |              |         | Rated brine or water flow rate,  |          |  |
| Annual energy consumption  | $Q_{HE}$                 | 10194        | kWh     | outdoor heat exchanger 2,89  | m³/h     |  |
| For heat pump combination heater:  |                          |              |         |  |          |  |
| Declared load profile  |                          | XXL          |         | Water heating energy efficiency $\eta_{wh}$ 94   | %        |  |
| Daily electricity consumption  | 0.                       | 10,39        | kWh     | Daily fuel consumption Q <sub>fuel</sub>   | kWh      |  |
| Annual electricity consumption   | Q <sub>elec</sub><br>AEC | 2283         | kWh     | Annual fuel consumption AFC  | GJ       |  |
| Annual electricity consumption   | ALC                      | 2203         | KVVII   | Ailliual fuel consumption Ai C   | O)       |  |
| Approved by:   |                          |              |         |  |          |  |
| Contact details  | © NIBE E                 | nergy Syste  | ms - Bo | 14 - Hannabadsvägen 5 - 28521 Markaryd - Sweden  |          |  |