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**NIBE**

NIBE F1345-40



55 °C

35 °C



**A++**

**A++**



**47** dB



dB

■ 46  
■ 46  
■ 46  
kW

■ 46  
■ 46  
■ 46  
kW



2015

811/2013



# ENERG

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**NIBE**

## NIBE F1345-40



**A<sup>++</sup>**

**A<sup>+++</sup>**

**A<sup>++</sup>**

**A<sup>++</sup>**

**A<sup>+</sup>**

**A**

**B**

**C**

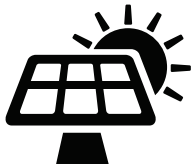
**D**

**E**

**F**

**G**

+



+



+




+



|   |               |            |     |
|---|---------------|------------|-----|
| Supplier's name:  | NIBE          |            |     |
| Model:  | NIBE F1345-40 |            |     |
| Temperature application   | 35            | 55         | °C  |
| Declared load profile for water heating                           |               |            |     |
| Seasonal space heating energy efficiency class, average climate:  | <b>A++</b>    | <b>A++</b> |     |
| Water heating energy efficiency class, average climate:           |               |            |     |
| Rated heat output, average climate:                               | 46            | 46         | kW  |
| Annual energy consumption for space heating, average climate      | 19996         | 25093      | kWh |
| Annual electricity consumption for water heating, average climate |               |            | kWh |
| Seasonal space heating energy efficiency, average climate:        | 182           | 143        | %   |
| Water heating energy efficiency, average climate:                 |               |            | %   |
| Sound power level LWA indoors                                     | 47            |            | dB  |
| Rated heat output, cold climate:                                  | 46            | 46         | kW  |
| Rated heat output, warm climate:                                  | 46            | 46         | kW  |
| Annual energy consumption for space heating, cold climate         | 22939         | 28857      | kWh |
| Annual electricity consumption for water heating, cold climate    |               |            | kWh |
| Annual energy consumption for space heating, warm climate         | 12931         | 16202      | kWh |
| Annual electricity consumption for water heating, warm climate    |               |            | kWh |
| Seasonal space heating energy efficiency, cold climate:           | 190           | 149        | %   |
| Water heating energy efficiency, cold climate:                    |               |            | %   |
| Seasonal space heating energy efficiency, warm climate:           | 182           | 144        | %   |
| Water heating energy efficiency, warm climate:                    |               |            | %   |
| Sound power level LWA outdoors                                    | -             |            | dB  |

#### Data for package fiche

|  |             |            |   |
|--|-------------|------------|---|
| Controller class   | II          |            |   |
| Controller contribution to efficiency  | 2           |            | % |
| Seasonal space heating energy efficiency of package, average climate:        | 184         | 145        | % |
| Seasonal space heating energy efficiency class for package, average climate: | <b>A+++</b> | <b>A++</b> | % |
| Seasonal space heating energy efficiency of package, cold climate:           | 192         | 151        | % |
| Seasonal space heating energy efficiency of package, warm climate:           | 184         | 146        | % |

|  |                  |   |       |   |  |                  |                               |      |                    |    |
|--|------------------|---|-------|---|--|------------------|-------------------------------|------|--------------------|----|
| <b>Model(s):</b>   |                  | <b>NIBE F1345-40</b>  |       |  |  |                  |                               |      |                    |    |
| Type of heat source/sink:  |                  | Brine-to-water  |       |   |  |                  |                               |      |                    |    |
| Low-temperature heat pump:                                       |                  | No  |       |   |  |                  |                               |      |                    |    |
| Equipped with supplementary heater:                              |                  | No  |       |   |  |                  |                               |      |                    |    |
| Heat pump combination heater:                                    |                  | No  |       |   |  |                  |                               |      |                    |    |
| Climate condition:   |                  | Average   |       |   |  |                  |                               |      |                    |    |
| Temperature application:   |                  | Medium temperature (55 °C)  |       |   |  |                  |                               |      |                    |    |
| Applied standards: EN14825                                       |                  |   |       |   |  |                  |                               |      |                    |    |
| <b>Rated heat output</b>   |                  | Prated  | 46,0  | kW  | <b>Seasonal space heating energy efficiency</b>        |                  | $\eta_s$                      | 143  | %                  |    |
| <i>Declared capacity for part load at outdoor temperature Tj</i> |                  |   |       | <i>Declared coefficient of performance for part load at outdoor temperature Tj</i>  |  |                  |                               |      |                    |    |
| Tj = -7 °C   | Pdh              | 38,2  | kW    | Tj = -7 °C  | COPd   | 3,33             | -                             |      |                    |    |
| Tj = +2 °C   | Pdh              | 39,1  | kW    | Tj = +2 °C  | COPd   | 3,79             | -                             |      |                    |    |
| Tj = +7 °C   | Pdh              | 19,9  | kW    | Tj = +7 °C  | COPd   | 4,21             | -                             |      |                    |    |
| Tj = +12 °C  | Pdh              | 20,1  | kW    | Tj = +12 °C   | COPd   | 4,51             | -                             |      |                    |    |
| Tj = biv   | Pdh              | 38,4  | kW    | Tj = biv  | COPd   | 3,41             | -                             |      |                    |    |
| Tj = TOL   | Pdh              | 37,8  | kW    | Tj = TOL  | COPd   | 3,19             | -                             |      |                    |    |
| Tj = -15 °C (if TOL < -20 °C)                                    | Pdh              |   | kW    | Tj = -15 °C (if TOL < -20 °C)   | COPd   |                  | -                             |      |                    |    |
| Bivalent temperature   |                  |   |       | T <sub>biv</sub>  | -5,7   | °C               | Operation limit temperature   |      |                    |    |
| Cycling interval capacity for heating                            |                  |   |       | P <sub>cyh</sub>  |  | kW               | Cycling interval efficiency   |      | COP <sub>cyh</sub> |    |
| Degradation co-efficient   |                  |   |       | Cdh   | 0,99   | -                | Heating water operating limit |      | WTOL               | 65 |
| <i>Power consumption in modes other than active mode</i>         |                  |   |       | <i>Supplementary heater</i>   |  |                  |                               |      |                    |    |
| Off mode   | P <sub>OFF</sub> | 0,002   | kW    | Rated heat output   |  | P <sub>sup</sub> | 8,2                           | kW   |                    |    |
| Thermostat-off mode  | P <sub>TO</sub>  | 0,05  | kW    |   |  |                  |                               |      |                    |    |
| Standby mode   | P <sub>SB</sub>  | 0,007   | kW    | Type of energy input  |  | Electric         |                               |      |                    |    |
| Crankcase heater mode  | P <sub>CK</sub>  | 0,08  | kW    |   |  |                  |                               |      |                    |    |
| <i>Other items</i>   |                  |   |       |   |  |                  |                               |      |                    |    |
| Capacity control   |                  | variable  |       | Rated air flow rate, outdoors   |  |                  |                               |      | m <sup>3</sup> /h  |    |
| Sound power level, indoors/outdoors                              |                  | L <sub>WA</sub>   | 47/-  | dB  | Rated water flow rate, indoor heat exchanger           |                  |                               | 4,07 | m <sup>3</sup> /h  |    |
| Annual energy consumption  |                  | Q <sub>HE</sub>   | 25093 | kWh   | Rated brine or water flow rate, outdoor heat exchanger |                  |                               | 7,77 | m <sup>3</sup> /h  |    |
| <i>For heat pump combination heater:</i>                         |                  |   |       |   |  |                  |                               |      |                    |    |
| <b>Declared load profile</b>                                     |                  |   |       | <b>Water heating energy efficiency</b>  |  | $\eta_{wh}$      |                               |      | %                  |    |
| Daily electricity consumption                                    |                  |   |       | Q <sub>elec</sub>   |  | kWh              | Daily fuel consumption        |      | Q <sub>fuel</sub>  |    |
| Annual electricity consumption                                   |                  |   |       | AEC   |  | kWh              | Annual fuel consumption       |      | AFC                |    |
| <b>Approved by:</b>  |                  |   |       |   |  |                  |                               |      |                    |    |
| <b>Contact details</b>   |                  | © NIBE Energy Systems - Box 14 - Hannabadsvägen 5 - 28521 Markaryd - Sweden |       |   |  |                  |                               |      |                    |    |