

## Subtype NIBE S2125-20

|                     |   |
|---------------------|---|
| Certificate Holder  | Nibe AB                                     |
| Address             | Box 14                                      |
| ZIP                 | S-28521                                     |
| City                | Markaryd                                    |
| Country             | SE  |
| Certification Body  | RISE CERT                                   |
| Subtype title       | NIBE S2125-20                               |
| Registration number | 012-C700273                                 |
| Heat Pump Type      | Outdoor Air/Water                           |
| Refrigerant         | R290  |
| Mass of Refrigerant | 1.15 kg                                     |
| Certification Date  | 26.06.2024                                  |
| Testing basis       | EN 14511:2022, EN 14825:2022, EN 12102:2022 |
| Testing laboratory  | RISE Research Institutes of Sweden          |

## Model NIBE S2125-20

|                                     |                       |
|-------------------------------------|-----------------------|
| Model name                          | NIBE S2125-20         |
| Application                         | Heating (medium temp) |
| Units                               | Outdoor               |
| Climate zone (for heating)          | Colder                |
| Reversibility                       | Yes                   |
| Cooling mode application (optional) | n/a                   |
| Any additional heat sources         | n/a                   |

## General data

|                  |             |
|------------------|-------------|
| Power supply     | 3x400V 50Hz |
| Off-peak product | n/a         |

## Outdoor Air/Water

### EN 14511-4 | Heating

|  |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

### EN 14511-2 | Heating

|             | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 5.10 kW         | 4.84 kW            |
| El input    | 0.92 kW         | 1.47 kW            |
| COP         | 5.55            | 3.29               |

### EN 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 55 dB(A)        | 55 dB(A)           |

### EN 14825 | Average Climate

|                | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| $\eta_s$       | 209 %           | 160 %              |
| Prated         | 11.00 kW        | 11.00 kW           |
| SCOP           | 5.30            | 4.08               |
| Tbiv           | -10 °C          | -10 °C             |
| TOL            | -10 °C          | -10 °C             |
| Pdh Tj = -7°C  | 9.76 kW         | 9.61 kW            |
| COP Tj = -7°C  | 3.24            | 2.49               |
| Cdh Tj = -7 °C | 0.990           | 1.000              |
| Pdh Tj = +2°C  | 5.76 kW         | 5.83 kW            |
| COP Tj = +2°C  | 5.41            | 4.07               |
| Cdh Tj = +2 °C | 0.980           | 0.990              |
| Pdh Tj = +7°C  | 5.23 kW         | 5.11 kW            |

|   |             |             |
|---|-------------|-------------|
| COP Tj = +7°C                                       | 6.71        | 5.25        |
| Cdh Tj = +7 °C                                      | 0.970       | 0.990       |
| Pdh Tj = 12°C                                       | 5.77 kW     | 5.71 kW     |
| COP Tj = 12°C                                       | 7.63        | 6.25        |
| Cdh Tj = +12 °C                                     | 0.970       | 0.980       |
| Pdh Tj = Tbiv                                       | 10.63 kW    | 10.49 kW    |
| COP Tj = Tbiv                                       | 2.81        | 2.16        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10.63 kW    | 10.49 kW    |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.81        | 2.16        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.000       | 1.000       |
| WTOL  | 65 °C       | 65 °C       |
| Poff  | 7 W         | 7 W         |
| PTO   | 20 W        | 14 W        |
| PSB   | 10 W        | 10 W        |
| PCK   | 11 W        | 11 W        |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 0.00 kW     | 0.00 kW     |
| Annual energy consumption Qhe                       | 4288 kWh    | 5571 kWh    |

#### EN 12102-1 | Colder Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 55 dB(A)        | 55 dB(A)           |

#### EN 14825 | Colder Climate

|                 | Low temperature | Medium temperature |
|-----------------|-----------------|--------------------|
| ηs              | 181 %           | 144 %              |
| Prated          | 13.00 kW        | 14.00 kW           |
| SCOP            | 4.60            | 3.69               |
| Tbiv            | -15 °C          | -15 °C             |
| TOL             | -22 °C          | -22 °C             |
| Pdh Tj = -7°C   | 7.87 kW         | 7.95 kW            |
| COP Tj = -7°C   | 3.82            | 3.00               |
| Cdh Tj = -7 °C  | 0.990           | 0.990              |
| Pdh Tj = +2°C   | 5.04 kW         | 5.29 kW            |
| COP Tj = +2°C   | 5.87            | 4.69               |
| Cdh Tj = +2 °C  | 0.980           | 0.990              |
| Pdh Tj = +7°C   | 5.24 kW         | 5.26 kW            |
| COP Tj = +7°C   | 6.91            | 5.75               |
| Cdh Tj = +7 °C  | 0.970           | 0.980              |
| Pdh Tj = 12°C   | 5.76 kW         | 5.74 kW            |
| COP Tj = 12°C   | 7.56            | 6.48               |
| Cdh Tj = +12 °C | 0.970           | 0.980              |
| Pdh Tj = Tbiv   | 10.63 kW        | 11.32 kW           |

|   |             |             |
|---|-------------|-------------|
| COP Tj = T <sub>biv</sub>   | 2.60        | 2.06        |
| P <sub>dh</sub> Tj = TOL or P <sub>dh</sub> Tj = T <sub>designh</sub> if TOL < T <sub>designh</sub> | 9.35 kW     | 9.40 kW     |
| COP Tj = TOL or COP Tj = T <sub>designh</sub> if TOL < T <sub>designh</sub>                         | 2.12        | 1.70        |
| C <sub>dh</sub> Tj = TOL or P <sub>dh</sub> Tj = T <sub>designh</sub> if TOL < T <sub>designh</sub> | 1.000       | 1.000       |
| WTOL  | 65 °C       | 65 °C       |
| P <sub>off</sub>  | 7 W         | 7 W         |
| PTO   | 20 W        | 14 W        |
| PSB   | 10 W        | 10 W        |
| PCK   | 11 W        | 11 W        |
| Supplementary Heater: Type of energy input  | Electricity | Electricity |
| Supplementary Heater: PSUP  | 3.60 kW     | 4.60 kW     |
| Annual energy consumption Q <sub>he</sub>   | 6960 kWh    | 9361 kWh    |
| P <sub>dh</sub> Tj = -15°C (if TOL  | 10.63       | 11.32       |
| COP Tj = -15°C (if TOL  | 2.60        | 2.06        |
| C <sub>dh</sub> Tj = -15 °C   | 1.000       | 1.000       |

## Model NIBE S2125-20 1X230V

|                                     |                       |
|-------------------------------------|-----------------------|
| Model name                          | NIBE S2125-20 1X230V  |
| Application                         | Heating (medium temp) |
| Units                               | Outdoor               |
| Climate zone (for heating)          | Colder                |
| Reversibility                       | Yes                   |
| Cooling mode application (optional) | n/a                   |
| Any additional heat sources         | n/a                   |

## General data

|                  |             |
|------------------|-------------|
| Power supply     | 1x230V 50Hz |
| Off-peak product | n/a         |

## Outdoor Air/Water

### EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

|                               |        |
|-------------------------------|--------|
| Complete power supply failure | passed |
| Defrost test                  | passed |
| Starting and operating test   | passed |

### EN 14511-2 | Heating

|             | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 5.10 kW         | 4.84 kW            |
| El input    | 0.92 kW         | 1.47 kW            |
| COP         | 5.55            | 3.29               |

### EN 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 55 dB(A)        | 55 dB(A)           |

### EN 14825 | Average Climate

|                | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| $\eta_s$       | 209 %           | 160 %              |
| Prated         | 11.00 kW        | 11.00 kW           |
| SCOP           | 5.30            | 4.08               |
| Tbiv           | -10 °C          | -10 °C             |
| TOL            | -10 °C          | -10 °C             |
| Pdh Tj = -7°C  | 9.76 kW         | 9.61 kW            |
| COP Tj = -7°C  | 3.24            | 2.49               |
| Cdh Tj = -7 °C | 0.990           | 1.000              |
| Pdh Tj = +2°C  | 5.76 kW         | 5.83 kW            |
| COP Tj = +2°C  | 5.41            | 4.07               |
| Cdh Tj = +2 °C | 0.980           | 0.990              |
| Pdh Tj = +7°C  | 5.23 kW         | 5.11 kW            |

|   |             |             |
|---|-------------|-------------|
| COP Tj = +7°C                                       | 6.71        | 5.25        |
| Cdh Tj = +7 °C                                      | 0.970       | 0.990       |
| Pdh Tj = 12°C                                       | 5.77 kW     | 5.71 kW     |
| COP Tj = 12°C                                       | 7.63        | 6.25        |
| Cdh Tj = +12 °C                                     | 0.970       | 0.980       |
| Pdh Tj = Tbiv                                       | 10.63 kW    | 10.49 kW    |
| COP Tj = Tbiv                                       | 2.81        | 2.16        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10.63 kW    | 10.49 kW    |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.81        | 2.16        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.000       | 1.000       |
| WTOL  | 65 °C       | 65 °C       |
| Poff  | 7 W         | 7 W         |
| PTO   | 20 W        | 14 W        |
| PSB   | 10 W        | 10 W        |
| PCK   | 11 W        | 11 W        |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 0.00 kW     | 0.00 kW     |
| Annual energy consumption Qhe                       | 4288 kWh    | 5571 kWh    |

#### EN 12102-1 | Colder Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 55 dB(A)        | 55 dB(A)           |

#### EN 14825 | Colder Climate

|                 | Low temperature | Medium temperature |
|-----------------|-----------------|--------------------|
| ηs              | 181 %           | 144 %              |
| Prated          | 13.00 kW        | 14.00 kW           |
| SCOP            | 4.60            | 3.69               |
| Tbiv            | -15 °C          | -15 °C             |
| TOL             | -22 °C          | -22 °C             |
| Pdh Tj = -7°C   | 7.87 kW         | 7.95 kW            |
| COP Tj = -7°C   | 3.82            | 3.00               |
| Cdh Tj = -7 °C  | 0.990           | 0.990              |
| Pdh Tj = +2°C   | 5.04 kW         | 5.29 kW            |
| COP Tj = +2°C   | 5.87            | 4.69               |
| Cdh Tj = +2 °C  | 0.980           | 0.990              |
| Pdh Tj = +7°C   | 5.24 kW         | 5.26 kW            |
| COP Tj = +7°C   | 6.91            | 5.75               |
| Cdh Tj = +7 °C  | 0.970           | 0.980              |
| Pdh Tj = 12°C   | 5.76 kW         | 5.74 kW            |
| COP Tj = 12°C   | 7.56            | 6.48               |
| Cdh Tj = +12 °C | 0.970           | 0.980              |
| Pdh Tj = Tbiv   | 10.63 kW        | 11.32 kW           |

|   |             |             |
|---|-------------|-------------|
| COP $T_j = T_{biv}$   | 2.60        | 2.06        |
| $P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$ | 9.35 kW     | 9.40 kW     |
| COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$       | 2.12        | 1.70        |
| $C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$ | 1.000       | 1.000       |
| WTOL  | 65 °C       | 65 °C       |
| P <sub>off</sub>  | 7 W         | 7 W         |
| PTO   | 20 W        | 14 W        |
| PSB   | 10 W        | 10 W        |
| PCK   | 11 W        | 11 W        |
| Supplementary Heater: Type of energy input                              | Electricity | Electricity |
| Supplementary Heater: PSUP  | 3.60 kW     | 4.60 kW     |
| Annual energy consumption Q <sub>he</sub>                               | 6960 kWh    | 9361 kWh    |
| $P_{dh} T_j = -15^{\circ}C$ (if TOL                                     | 10.63       | 11.32       |
| COP $T_j = -15^{\circ}C$ (if TOL  | 2.60        | 2.06        |
| $C_{dh} T_j = -15^{\circ}C$   | 1.000       | 1.000       |