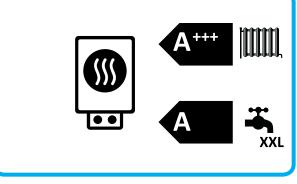


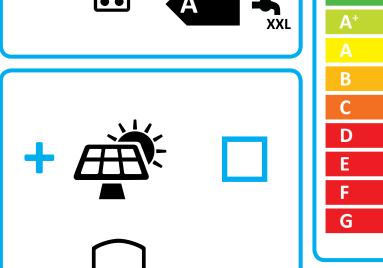


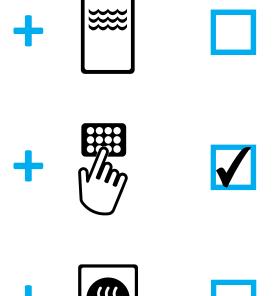
ENERG Y UA EHEPΓИЯ · ενεργεια II IA



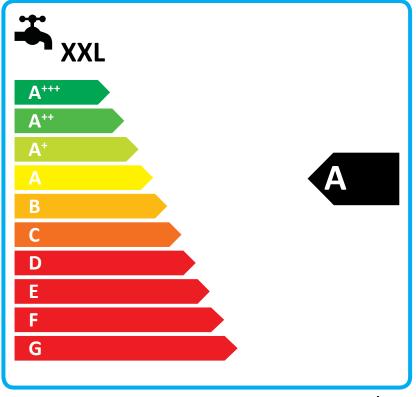
NIBE F2120-20 + VVM500











2015

| Supplier's name: | NIBE | | | |
|--|------------------------|------|-------|--|
| Model: | NIBE F2120-20 + VVM500 | | | |
| Temperature application | 35 | 55 | °C | |
| Declared load profile for water | XXL | | | |
| heating | | T | | |
| Seasonal space heating energy efficiency class, average climate: | A+++ | A+++ | | |
| Water heating energy efficiency | | | | |
| class, average climate: | | 1 | | |
| | 4.4 | 10.0 | 1.347 | |
| Rated heat output, average climate: | 11 | 12,3 | kW | |
| Annual energy consumption for | 4502 | 6524 | kWh | |
| space heating, average climate | 1002 | 0021 | | |
| Annual electricity consumption for | 2096 | | kWh | |
| water heating, average climate | 20 | 30 | KVVII | |
| Seasonal space heating energy | 199 | 153 | % | |
| efficiency, average climate: | 199 | 153 | 70 | |
| Water heating energy efficiency, | 10 | 13 | % | |
| average climate: | 103 | | | |
| Sound power level LWA indoors | | 5 | dB | |
| Rated heat output, cold climate: | 13,0 | 14,0 | kW | |
| Rated heat output, warm climate: | 13,0 | 13,0 | kW | |
| Annual energy consumption for | 7543 | 9765 | kWh | |
| space heating, cold climate | 7040 | 3700 | KVVII | |
| Annual electricity consumption for | 2284 | | kWh | |
| water heating, cold climate | 2204 | | KVVII | |
| Annual energy consumption for | 3153 | 3867 | kWh | |
| space heating, warm climate | 0.00 | 0001 | | |
| Annual electricity consumption for | 1873 | | kWh | |
| water heating, warm climate Seasonal space heating energy | | I | | |
| efficiency, cold climate: | 167 | 138 | % | |
| Water heating energy efficiency, | | | | |
| cold climate: | 94 | | % | |
| Seasonal space heating energy | | | 1 2/ | |
| efficiency, warm climate: | 217 | 177 | % | |
| Water heating energy efficiency, | | | 0/ | |
| warm climate: | 115 | | % | |
| Sound power level LWA outdoors | 55 | | dB | |

Data for package fiche

| Controller class | VI | | |
|--|------|------|---|
| Controler contribution to efficiency | 4,0 | | % |
| Seasonal space heating energy efficiency of package, average climate: | 203 | 157 | % |
| Seasonal space heating energy efficiency class for package, average climate: | A+++ | A+++ | % |
| Seasonal space heating energy efficiency of package, cold climate: | 171 | 142 | % |
| Seasonal space heating energy efficiency of package, warm climate: | 221 | 181 | % |

| Model(s): | NIBE F2120-20 + VVM500 | | |
|--|----------------------------|--|--|
| Type of heat source/sink: | Air-to-water | | |
| Low-temperature heat pump: | No | | |
| Equipped with supplementary heater: | Yes | | |
| Heat pump combination heater: | Yes | | |
| Climate condition: | Average | | |
| Temperature application: | Medium temperature (55 °C) | | |
| Applied standards: EN1/1925 and EN161/17 | | | |



| remperature application. | | 1110 | ararri cci | iperature (55°C) | | | |
|---|-------------------|-------|------------|--|-------------------|--------------|-------------|
| Applied standards: EN14825 and EN1614 | 7 | | | | | | |
| | | | | Seasonal space heating energy | | | |
| Rated heat output | Prated | 12,3 | kW | efficiency | η_{s} | 153 | % |
| Declared capacity for part load at outdoor tem | nerature Ti | | | Declared coefficient of performance for part | load at outde | oor temperat | ure Ti |
| Ti = -7 °C | Pdh | 10,9 | kW | Ti = -7 °C | COPd | 2,48 | ure 1j - |
| Tj = +2 °C | Pdh | 6,7 | kW | Tj = +2 °C | COPd | 3,96 | |
| Tj = +7 °C | Pdh | 5,9 | kW | Tj = +7 °C | COPd | 4,67 | _ |
| Tj = +12 °C | Pdh | 6,0 | kW | Tj = +12 °C | COPd | 5,67 | _ |
| Tj = biv | Pdh | 10,9 | kW | Tj = biv | COPd | 2,48 | - |
| Tj = TOL | Pdh | 11,6 | kW | Tj = TOL | COPd | 2,40 | - |
| Tj = -15 °C (if TOL < -20 °C) | Pdh | 11,0 | kW | Tj = -15 °C (if TOL < -20 °C) | COPd | 2,10 | - |
| | | | | | | | |
| Bivalent temperature | T _{biv} | -7 | °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 Off mode | | 0.025 | 1347 | Supplementary heater | I 6 | 0.7 | 1347 |
| | P _{OFF} | 0,025 | kW | Rated heat output | Psup | 0,7 | kW |
| Thermostat-off mode | P _{TO} | 0,007 | kW | | | | |
| Standby mode | P _{SB} | 0,025 | kW | Type of energy input | Electric | | |
| Crankcase heater mode | P _{CK} | 0,037 | kW | | | | |
| Other items | | | | | | | |
| Capacity control | variable | | | Rated air flow rate, outdoors | | 4150 | m³/h |
| | | | | Rated water flow rate, indoor heat | | | |
| Sound power level, indoors/outdoors | L _{WA} | 35/55 | dB | exchanger | | variable | m³/h |
| | | | | Rated brine or water flow rate, | | | |
| Annual energy consumption | Q _{HE} | 6524 | kWh | outdoor heat exchanger | | | m³/h |
| | | | | • | | | |
| For heat pump combination heater: | | | | | | | |
| Declared load profile | | XXL | | Water heating energy efficiency | η_{wh} | 103 | % |
| Daily electricity consumption | Q _{elec} | 9,54 | kWh | Daily fuel consumption | Q _{fuel} | | kWh |
| Annual electricity consumption | AEC | 2096 | kWh | Annual fuel consumption | AFC | | GJ |
| Approved by: | | | 1 | r and an are pro- | | | |
| | | | | | | | |