

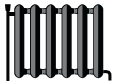


# ENERG

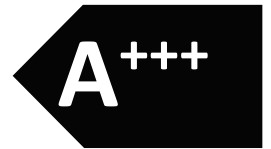
енергия · ενέργεια



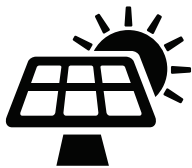
## METROSAVER MB 6



35 °C



+



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+



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# ENERG

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Y

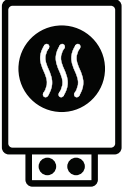




IJA

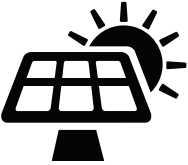
IE


IA





## METROSAVER MB 6

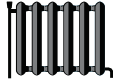






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+ 

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55 °C



**ENERG**  
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Y IJA  
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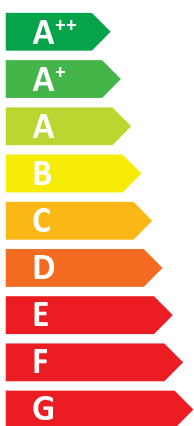
METROSAVER MB 6



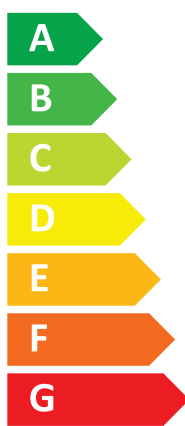
55 °C



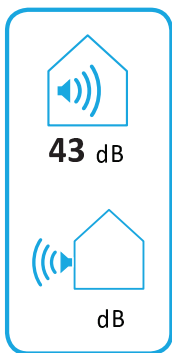
XL



A++



A



2015

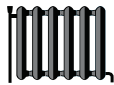
811/2013



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METROSAVER MB 6



55 °C

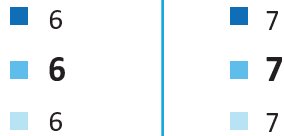
35 °C



**43** dB



dB



kW

kW




2015

811/2013

|   |                        |            |     |
|---|------------------------|------------|-----|
| Supplier's name:  | <b>METRO THERM A/S</b> |            |     |
| Model:  | <b>Metrosaver MB 6</b> |            |     |
| Temperature application   | 35                     | 55         | °C  |
| Declared load profile for water heating                           | <b>XL</b>              |            |     |
| Seasonal space heating energy efficiency class, average climate:  | <b>A++</b>             | <b>A++</b> |     |
| Water heating energy efficiency class, average climate:           | <b>A</b>               |            |     |
| Rated heat output, average climate:                               | 7                      | 6          | kW  |
| Annual energy consumption for space heating, average climate      | 3010                   | 3425       | kWh |
| Annual electricity consumption for water heating, average climate | 1709                   |            | kWh |
| Seasonal space heating energy efficiency, average climate:        | 184                    | 137        | %   |
| Water heating energy efficiency, average climate:                 | 98                     |            | %   |
| Sound power level LWA indoors                                     | 43                     |            | dB  |
| Rated heat output, cold climate:                                  | 7                      | 6          | kW  |
| Rated heat output, warm climate:                                  | 7                      | 6          | kW  |
| Annual energy consumption for space heating, cold climate         | 3487                   | 3969       | kWh |
| Annual electricity consumption for water heating, cold climate    | 1709                   |            | kWh |
| Annual energy consumption for space heating, warm climate         | 1964                   | 2233       | kWh |
| Annual electricity consumption for water heating, warm climate    | 1709                   |            | kWh |
| Seasonal space heating energy efficiency, cold climate:           | 190                    | 141        | %   |
| Water heating energy efficiency, cold climate:                    | 98                     |            | %   |
| Seasonal space heating energy efficiency, warm climate:           | 182                    | 136        | %   |
| Water heating energy efficiency, warm climate:                    | 98                     |            | %   |
| Sound power level LWA outdoors                                    | -                      |            | dB  |

#### Data for package fiche

|  |             |            |   |
|--|-------------|------------|---|
| Controller class   | VII         |            |   |
| Controller contribution to efficiency  | 3,5         |            | % |
| Seasonal space heating energy efficiency of package, average climate:        | 188         | 140        | % |
| 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:           | 193         | 145        | % |
| Seasonal space heating energy efficiency of package, warm climate:           | 186         | 139        | % |

|  |                  |  |      |   |   |                  |                             |                   |                    |     |    |
|--|------------------|--|------|---|---|------------------|-----------------------------|-------------------|--------------------|-----|----|
| <b>Model(s):</b>   |                  | <b>Metrosaver MB 6</b>   |      |  |   |                  |                             |                   |                    |     |    |
| Type of heat source/sink:  |                  | Brine-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: EN14825 and EN16147                           |                  |  |      |   |   |                  |                             |                   |                    |     |    |
| <b>Rated heat output</b>   |                  | Prated   | 6,0  | kW  | <b>Seasonal space heating energy efficiency</b> |                  | $\eta_s$                    | 137               | %                  |     |    |
| <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              | 4,8  | kW   | Tj = -7 °C  | COPd  | 3,18             | kW                          |                   |                    |     |    |
| Tj = +2 °C   | Pdh              | 5,3  | kW   | Tj = +2 °C  | COPd  | 3,69             | kW                          |                   |                    |     |    |
| Tj = +7 °C   | Pdh              | 5,6  | kW   | Tj = +7 °C  | COPd  | 4,02             | kW                          |                   |                    |     |    |
| Tj = +12 °C  | Pdh              | 6,0  | kW   | Tj = +12 °C   | COPd  | 4,29             | kW                          |                   |                    |     |    |
| Tj = biv   | Pdh              | 4,9  | kW   | Tj = biv  | COPd  | 3,30             | kW                          |                   |                    |     |    |
| Tj = TOL   | Pdh              | 4,5  | kW   | Tj = TOL  | COPd  | 2,96             | kW                          |                   |                    |     |    |
| Tj = -15 °C (if TOL < -20 °C)                                    | Pdh              |  | kW   | Tj = -15 °C (if TOL < -20 °C)   | COPd  |                  | kW                          |                   |                    |     |    |
| Bivalent temperature   |                  |  |      | T <sub>biv</sub>  | -5,3  | °C               | Operation limit temperature |                   | TOL                | -10 | °C |
| Cycling interval capacity for heating                            |                  |  |      | P <sub>cyh</sub>  |   | kW               | Cycling interval efficiency |                   | COP <sub>cyh</sub> |     | -  |
| Degradation co-efficient   |                  |  |      | Cdh   | 0,99  | -                | temperature                 |                   | WTOL               | 65  | °C |
| <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> | 1,5                         | kW                |                    |     |    |
| Thermostat-off mode  | P <sub>TO</sub>  | 0,01   | kW   | Type of energy input  |   | Electric         |                             |                   |                    |     |    |
| Standby mode   | P <sub>SB</sub>  | 0,007  | kW   |   |   |                  |                             |                   |                    |     |    |
| Crankcase heater mode  | P <sub>CK</sub>  | 0,014  | kW   |   |   |                  |                             |                   |                    |     |    |
| <i>Other items</i>   |                  |  |      |   |   |                  |                             |                   |                    |     |    |
| Capacity control   | fixed            |  |      | Rated air flow rate, outdoors   |   |                  |                             | m <sup>3</sup> /h |                    |     |    |
| Sound power level, indoors/outdoors                              | L <sub>WA</sub>  | 43/-   | dB   | Rated water flow rate, indoor heat exchanger  |   | 0,90             |                             | m <sup>3</sup> /h |                    |     |    |
| Annual energy consumption  | Q <sub>HE</sub>  | 3425   | kWh  | Rated brine or water flow rate, outdoor heat exchanger                              |   | 0,90             |                             | m <sup>3</sup> /h |                    |     |    |
| <i>For heat pump combination heater:</i>                         |                  |  |      |   |   |                  |                             |                   |                    |     |    |
| <b>Declared load profile</b>                                     |                  | <b>XL</b>  |      | <b>Water heating energy efficiency</b>  |   | $\eta_{wh}$      | 98                          | %                 |                    |     |    |
| Daily electricity consumption                                    |                  | Q <sub>elec</sub>  | 7,78 | kWh   | Daily fuel consumption                          |                  | Q <sub>fuel</sub>           | kWh               |                    |     |    |
| Annual electricity consumption                                   |                  | AEC  | 1709 | kWh   | Annual fuel consumption                         |                  | AFC                         | GJ                |                    |     |    |
| <b>Approved by:</b>  |                  |  |      |   |   |                  |                             |                   |                    |     |    |
| <b>Contact details</b>   |                  | <b>METRO THERM A/S Rundinsvej 55 DK-3200 Helsingør www.metrotherm.dk</b> |      |   |   |                  |                             |                   |                    |     |    |