



ENERG

енергия · ενέργεια



METROSAVER MB 8

 35 °C



A⁺⁺

A⁺⁺⁺

A⁺⁺⁺

A⁺⁺

A⁺

A

B

C

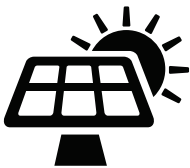
D

E

F

G

+



+



+



+





ENERG

енергия · ενέργεια

Y

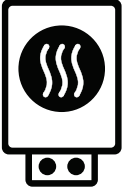




IJA

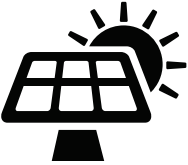
IE


IA





METROSAVER MB 8

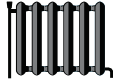






+ 






+ 

+ 

+ 



55 °C



ENERG
енергия · ενέργεια

Y IJA
IE IA



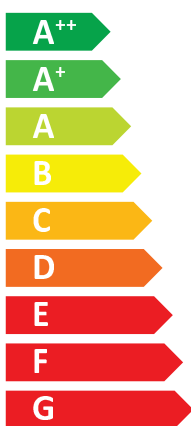
METROSAVER MB 8



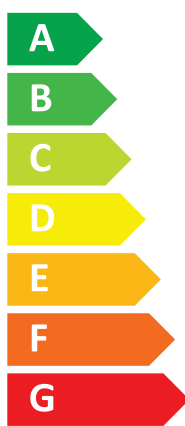
55 °C



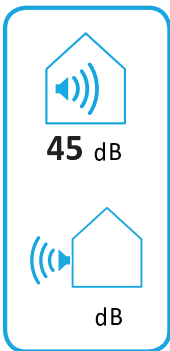
XL



A++



A



2015

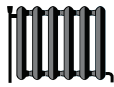
811/2013



ENERG
енергия · ενεργεια



METROSAVER MB 8



55 °C

35 °C



45 dB



dB



kW



kW




2015

811/2013

| | | | |
|---|------------------------|------------|-----|
| Supplier's name: | METRO THERM A/S | | |
| Model: | Metrosaver MB 8 | | |
| Temperature application | 35 | 55 | °C |
| Declared load profile for water heating | XL | | |
| Seasonal space heating energy efficiency class, average climate: | A++ | A++ | |
| Water heating energy efficiency class, average climate: | A | | |
| Rated heat output, average climate: | 9 | 8 | kW |
| Annual energy consumption for space heating, average climate | 3797 | 4433 | kWh |
| Annual electricity consumption for water heating, average climate | 1668 | | kWh |
| Seasonal space heating energy efficiency, average climate: | 188 | 141 | % |
| Water heating energy efficiency, average climate: | 100 | | % |
| Sound power level LWA indoors | 45 | | dB |
| Rated heat output, cold climate: | 9 | 8 | kW |
| Rated heat output, warm climate: | 9 | 8 | kW |
| Annual energy consumption for space heating, cold climate | 4393 | 5142 | kWh |
| Annual electricity consumption for water heating, cold climate | 1668 | | kWh |
| Annual energy consumption for space heating, warm climate | 2461 | 2860 | kWh |
| Annual electricity consumption for water heating, warm climate | 1668 | | kWh |
| Seasonal space heating energy efficiency, cold climate: | 194 | 145 | % |
| Water heating energy efficiency, cold climate: | 100 | | % |
| Seasonal space heating energy efficiency, warm climate: | 187 | 141 | % |
| Water heating energy efficiency, warm climate: | 100 | | % |
| 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: | 191 | 145 | % |
| Seasonal space heating energy efficiency class for package, average climate: | A+++ | A++ | % |
| Seasonal space heating energy efficiency of package, cold climate: | 198 | 149 | % |
| Seasonal space heating energy efficiency of package, warm climate: | 191 | 145 | % |

| | | | | | | | | | | | | |
|--|-------------------|-------|-----|--|------|--|---|---|------|-------------------|--|-------------------|
| Model(s): | | | | Metrosaver MB 8 | | | |  | | | | |
| 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 | | | | | | | | | | | | |
| Rated heat output | | | | Prated | 8,0 | kW | Seasonal space heating energy efficiency | | | | | |
| | | | | | | | η_s | 141 | % | | | |
| <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 | 6,2 | kW | Tj = -7 °C | COPd | 3,28 | kW | | | | | |
| Tj = +2 °C | Pdh | 6,9 | kW | Tj = +2 °C | COPd | 3,81 | kW | | | | | |
| Tj = +7 °C | Pdh | 7,2 | kW | Tj = +7 °C | COPd | 4,13 | kW | | | | | |
| Tj = +12 °C | Pdh | 7,6 | kW | Tj = +12 °C | COPd | 4,41 | kW | | | | | |
| Tj = biv | Pdh | 6,4 | kW | Tj = biv | COPd | 3,44 | kW | | | | | |
| Tj = TOL | Pdh | 5,9 | kW | Tj = TOL | COPd | 3,07 | kW | | | | | |
| Tj = -15 °C (if TOL < -20 °C) | Pdh | | kW | Tj = -15 °C (if TOL < -20 °C) | COPd | | kW | | | | | |
| Bivalent temperature | | | | T _{biv} | -4,9 | °C | Operation limit temperature | | | | | |
| Cycling interval capacity for heating | | | | P _{cyh} | | kW | Cycling interval efficiency | | | | | |
| 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 _{OFF} | 0,002 | kW | Rated heat output | | | | P _{sup} | 2,1 | kW | | |
| Thermostat-off mode | P _{TO} | 0,01 | kW | | | | | | | | | |
| Standby mode | P _{SB} | 0,007 | kW | Type of energy input | | | | Electric | | | | |
| Crankcase heater mode | P _{CK} | 0,014 | kW | | | | | | | | | |
| <i>Other items</i> | | | | | | | | | | | | |
| Capacity control | fixed | | | | | Rated air flow rate, outdoors | | | | | | m ³ /h |
| Sound power level, indoors/outdoors | L _{WA} | 45/- | dB | Rated water flow rate, indoor heat exchanger | | | | | 0,64 | m ³ /h | | |
| Annual energy consumption | Q _{HE} | 4433 | kWh | Rated brine or water flow rate, outdoor heat exchanger | | | | | 1,20 | m ³ /h | | |
| <i>For heat pump combination heater:</i> | | | | | | | | | | | | |
| Declared load profile | | | | XL | | | | Water heating energy efficiency | | | | |
| | | | | | | | | η_{wh} | 100 | % | | |
| Daily electricity consumption | Q _{elec} | 7,60 | kWh | Daily fuel consumption | | | | Q _{fuel} | | kWh | | |
| Annual electricity consumption | AEC | 1668 | kWh | Annual fuel consumption | | | | AFC | | GJ | | |
| Approved by: | | | | | | | | | | | | |
| Contact details | | | | METRO THERM A/S Rundinsvej 55 DK-3200 Helsingør www.metrotherm.dk | | | | | | | | |