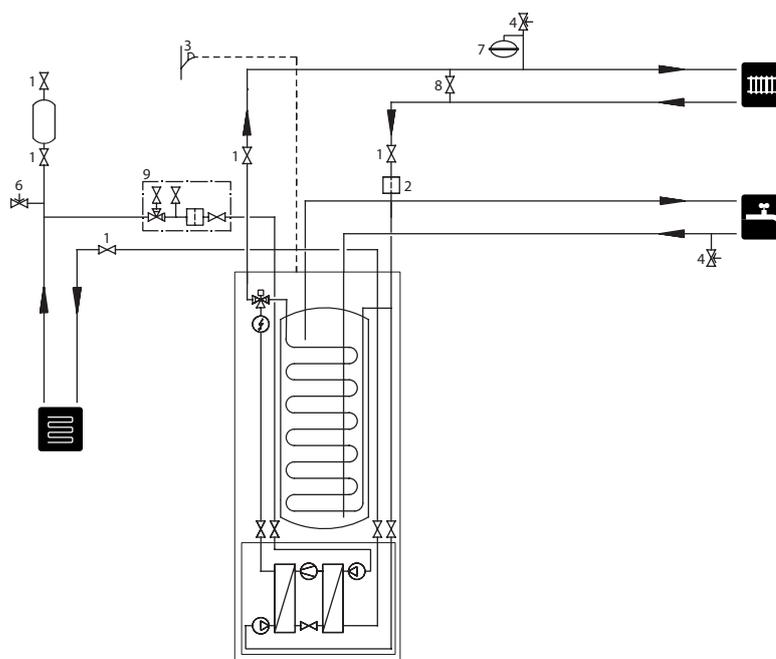


METROSAVER MB F

Datablad

- 1 Afspærringsventil
- 2 Snavsamler
- 3 Udeføler
- 4 Sikkerhedsventil
- 5 Aftapsventil
- 6 Sikkerhedsventil
- 7 Ekspansionsbeholder
- 8 Overtryksventil
- 9 Påfyldningsventil



METROSAVER MB F

Supplier's name:	METRO THERM A/S		
Model:	Metrosaver MB F6		
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:	5,5	5,5	kW
Annual energy consumption for space heating, average climate	2188	2875	kWh
Annual electricity consumption for water heating, average climate	1642		kWh
Seasonal space heating energy efficiency, average climate:	200	150	%
Water heating energy efficiency, average climate:	102		%
Sound power level LWA indoors	42		dB
Rated heat output, cold climate:	5,5	5,5	kW
Rated heat output, warm climate:	5,5	5,5	kW
Annual energy consumption for space heating, cold climate	2481	3287	kWh
Annual electricity consumption for water heating, cold climate	1642		kWh
Annual energy consumption for space heating, warm climate	1408	1852	kWh
Annual electricity consumption for water heating, warm climate	1642		kWh
Seasonal space heating energy efficiency, cold climate:	211	157	%
Water heating energy efficiency, cold climate:	102		%
Seasonal space heating energy efficiency, warm climate:	201	151	%
Water heating energy efficiency, warm climate:	102		%
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:	204	154	%
Seasonal space heating energy efficiency class for package, average climate:	A+++	A+++	%
Seasonal space heating energy efficiency of package, cold climate:	215	161	%
Seasonal space heating energy efficiency of package, warm climate:	205	155	%

Model(s):				Metrosaver MB F6								
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	5,5	kW		Seasonal space heating energy efficiency				
								η_s	150	%		
<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	5,0	kW		Tj = -7 °C	COPd	3,06			-		
Tj = +2 °C	Pdh	3,0	kW		Tj = +2 °C	COPd	3,97			-		
Tj = +7 °C	Pdh	2,0	kW		Tj = +7 °C	COPd	4,63			-		
Tj = +12 °C	Pdh	1,2	kW		Tj = +12 °C	COPd	4,86			-		
Tj = biv	Pdh	5,4	kW		Tj = biv	COPd	2,84			-		
Tj = TOL	Pdh	5,4	kW		Tj = TOL	COPd	2,84			-		
Tj = -15 °C (if TOL < -20 °C)	Pdh		kW		Tj = -15 °C (if TOL < -20 °C)	COPd				-		
Bivalent temperature				T _{biv}	-10	°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}	0,1	kW	
Thermostat-off mode	P _{TO}	0,007	kW									
Standby mode	P _{SB}	0,007	kW		Type of energy input				Electric			
Crankcase heater mode	P _{CK}	0,009	kW									
<i>Other items</i>												
Capacity control	fixed			Rated air flow rate, outdoors						m ³ /h		
Sound power level, indoors/outdoors	L _{WA}	42/-	dB		Rated brine or water flow rate, outdoor heat exchanger				0,68		m ³ /h	
Annual energy consumption	Q _{HE}	2875	kWh									
<i>For heat pump combination heater:</i>												
Declared load profile				XL				Water heating energy efficiency				
								η_{wh}				
								102				
								%				
Daily electricity consumption	Q _{elec}	7,48	kWh		Daily fuel consumption				Q _{fuel}		kWh	
Annual electricity consumption	AEC	1642	kWh		Annual fuel consumption				AFC		GJ	
Approved by:												
Contact details				METRO THERM A/S Rundinsvej 55 DK-3200 Helsingør www.metrotherm.dk								

Supplier's name:	METRO THERM A/S		
Model:	Metrosaver MB F6 PC		
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:	5,5	5,5	kW
Annual energy consumption for space heating, average climate	2188	2875	kWh
Annual electricity consumption for water heating, average climate	1642		kWh
Seasonal space heating energy efficiency, average climate:	200	150	%
Water heating energy efficiency, average climate:	102		%
Sound power level LWA indoors	42		dB
Rated heat output, cold climate:	5,5	5,5	kW
Rated heat output, warm climate:	5,5	5,5	kW
Annual energy consumption for space heating, cold climate	2481	3287	kWh
Annual electricity consumption for water heating, cold climate	1642		kWh
Annual energy consumption for space heating, warm climate	1408	1852	kWh
Annual electricity consumption for water heating, warm climate	1642		kWh
Seasonal space heating energy efficiency, cold climate:	211	157	%
Water heating energy efficiency, cold climate:	102		%
Seasonal space heating energy efficiency, warm climate:	201	151	%
Water heating energy efficiency, warm climate:	102		%
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:	204	154	%
Seasonal space heating energy efficiency class for package, average climate:	A+++	A+++	%
Seasonal space heating energy efficiency of package, cold climate:	215	161	%
Seasonal space heating energy efficiency of package, warm climate:	205	155	%

Model(s):		Metrosaver MB F6 PC					
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	5,5	kW	Seasonal space heating energy efficiency	η_s	150	%
<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	5,0	kW	Tj = -7 °C	COPd	3,06	-
Tj = +2 °C	Pdh	3,0	kW	Tj = +2 °C	COPd	3,97	-
Tj = +7 °C	Pdh	2,0	kW	Tj = +7 °C	COPd	4,63	-
Tj = +12 °C	Pdh	1,2	kW	Tj = +12 °C	COPd	4,86	-
Tj = biv	Pdh	5,4	kW	Tj = biv	COPd	2,84	-
Tj = TOL	Pdh	5,4	kW	Tj = TOL	COPd	2,84	-
Tj = -15 °C (if TOL < -20 °C)	Pdh		kW	Tj = -15 °C (if TOL < -20 °C)	COPd		-
Bivalent temperature				Operation limit temperature			
	T _{biv}	-10	°C		TOL	-10	°C
Cycling interval capacity for heating				Cycling interval efficiency			
	P _{cyh}		kW		COP _{cyh}		-
Degradation co-efficient				temperature			
	Cdh	0,99	-		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}	0,1	kW
Thermostat-off mode	P _{TO}	0,007	kW	Type of energy input			
Standby mode	P _{SB}	0,007	kW	Electric			
Crankcase heater mode	P _{CK}	0,009	kW				
<i>Other items</i>							
Capacity control	fixed			Rated air flow rate, outdoors			m ³ /h
Sound power level, indoors/outdoors	L _{WA}	42/-	dB	Rated brine or water flow rate, outdoor heat exchanger			
Annual energy consumption	Q _{HE}	2875	kWh			0,68	m ³ /h
<i>For heat pump combination heater:</i>				Water heating energy efficiency			
Declared load profile	XL				η_{wh}	102	%
Daily electricity consumption	Q _{elec}	7,48	kWh	Daily fuel consumption	Q _{fuel}		kWh
Annual electricity consumption	AEC	1642	kWh	Annual fuel consumption	AFC		GJ
Approved by:							
Contact details		METRO THERM A/S Rundinsvej 55 DK-3200 Helsingør www.metrotherm.dk					

Supplier's name:	METRO THERM A/S		
Model:	Metrosaver MB F12		
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:	12	12	kW
Annual energy consumption for space heating, average climate	4582	6213	kWh
Annual electricity consumption for water heating, average climate	1709		kWh
Seasonal space heating energy efficiency, average climate:	201	157	%
Water heating energy efficiency, average climate:	98		%
Sound power level LWA indoors	44		dB
Rated heat output, cold climate:	12	12	kW
Rated heat output, warm climate:	12	12	kW
Annual energy consumption for space heating, cold climate	5292	7173	kWh
Annual electricity consumption for water heating, cold climate	1709		kWh
Annual energy consumption for space heating, warm climate	2928	3999	kWh
Annual electricity consumption for water heating, warm climate	1709		kWh
Seasonal space heating energy efficiency, cold climate:	208	162	%
Water heating energy efficiency, cold climate:	98		%
Seasonal space heating energy efficiency, warm climate:	204	158	%
Water heating energy efficiency, warm climate:	98		%
Sound power level LWA outdoors	-		dB

Data for package fiche

Controller class	VII		
Controller contribution to efficiency	4		%
Seasonal space heating energy efficiency of package, average climate:	205	161	%
Seasonal space heating energy efficiency class for package, average climate:	A+++	A+++	%
Seasonal space heating energy efficiency of package, cold climate:	212	166	%
Seasonal space heating energy efficiency of package, warm climate:	208	162	%

Model(s):		Metrosaver MB F12					
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	12,4	kW	Seasonal space heating energy efficiency	η_s	157	%
<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	11,1	kW	Tj = -7 °C	COPd	3,18	-
Tj = +2 °C	Pdh	6,8	kW	Tj = +2 °C	COPd	4,12	-
Tj = +7 °C	Pdh	4,4	kW	Tj = +7 °C	COPd	4,67	-
Tj = +12 °C	Pdh	2,6	kW	Tj = +12 °C	COPd	5,06	-
Tj = biv	Pdh	12,3	kW	Tj = biv	COPd	2,91	-
Tj = TOL	Pdh	12,3	kW	Tj = TOL	COPd	2,91	-
Tj = -15 °C (if TOL < -20 °C)	Pdh		kW	Tj = -15 °C (if TOL < -20 °C)	COPd		-
Bivalent temperature				Operation limit temperature			
	T _{biv}	-10	°C		TOL	-10	°C
Cycling interval capacity for heating				Cycling interval efficiency			
	P _{cyh}		kW		COP _{cyh}		-
Degradation co-efficient				temperature			
	Cdh	0,99	-		WTOL	65	°C
<i>Power consumption in modes other than active mode</i>				<i>Supplementary heater</i>			
Off mode	P _{OFF}	0,005	kW	Rated heat output	P _{sup}	0,1	kW
Thermostat-off mode	P _{TO}	0,015	kW				
Standby mode	P _{SB}	0,007	kW	Type of energy input	Electric		
Crankcase heater mode	P _{CK}	0	kW				
<i>Other items</i>							
Capacity control	variable			Rated air flow rate, outdoors			m ³ /h
Sound power level, indoors/outdoors	L _{WA}	44/-	dB				
Annual energy consumption	Q _{HE}	6213	kWh	Rated brine or water flow rate, outdoor heat exchanger		1,46	m ³ /h
<i>For heat pump combination heater:</i>							
Declared load profile	XL			Water heating energy efficiency	η_{wh}	98	%
Daily electricity consumption	Q _{elec}	7,78	kWh	Daily fuel consumption	Q _{fuel}		kWh
Annual electricity consumption	AEC	1709	kWh	Annual fuel consumption	AFC		GJ
Approved by:							
Contact details	METRO THERM A/S Rudinsvej 55 DK-3220 Helsingør www.metrotherm.dk						