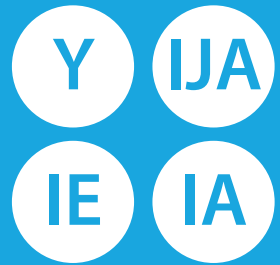




ENERG

енергия · ενέργεια



METROSAVER UB 17

 35 °C



A⁺⁺

A⁺⁺⁺

A⁺⁺

A⁺⁺

A⁺

A

B

C

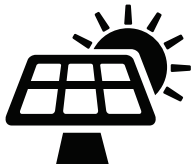
D

E

F

G

+



+



+



+





ENERG

енергия · ενέργεια

Y

IJA

IE

IA



METROSAVER UB 17

 55 °C



A⁺⁺

A⁺⁺⁺

A⁺⁺

A⁺⁺

A⁺

A

B

C

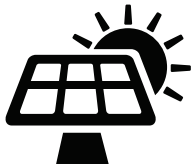
D

E

F

G

+



+



+



+

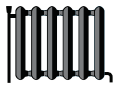




ENERG Y IJA
 енергия · ενεργεια IE IA



METROSAVER UB 17



55 °C

35 °C



A++

A++



43 dB



dB

■ 20
 ■ **20**
 ■ 20
 kW

■ 20
 ■ **20**
 ■ 20
 kW




2015

811/2013

Supplier's name:	METRO THERM A/S		
Model:	Metrosaver UB 17		
Temperature application	35	55	°C
Declared load profile for water heating			
Seasonal space heating energy efficiency class, average climate:	A++	A++	
Water heating energy efficiency class, average climate:			
Rated heat output, average climate:	20	20	kW
Annual energy consumption for space heating, average climate	9474	11407	kWh
Annual electricity consumption for water heating, average climate			kWh
Seasonal space heating energy efficiency, average climate:	166	137	%
Water heating energy efficiency, average climate:			%
Sound power level LWA indoors	43		dB
Rated heat output, cold climate:	20	20	kW
Rated heat output, warm climate:	20	20	kW
Annual energy consumption for space heating, cold climate	11047	13300	kWh
Annual electricity consumption for water heating, cold climate			kWh
Annual energy consumption for space heating, warm climate	6224	7404	kWh
Annual electricity consumption for water heating, warm climate			kWh
Seasonal space heating energy efficiency, cold climate:	171	140	%
Water heating energy efficiency, cold climate:			%
Seasonal space heating energy efficiency, warm climate:	164	136	%
Water heating energy efficiency, warm climate:			%
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:	170	140	%
Seasonal space heating energy efficiency class for package, average climate:	A++	A++	%
Seasonal space heating energy efficiency of package, cold climate:	174	144	%
Seasonal space heating energy efficiency of package, warm climate:	167	140	%

Model(s):		Metrosaver UB 17							
Type of heat source/sink:		Brine-to-water							
Low-temperature heat pump:		No							
Equipped with supplementary heater:		Yes							
Heat pump combination heater:		No							
Climate condition:		Average							
Temperature application:		Medium temperature (55 °C)							
Applied standards: EN14825 and EN16147									
Rated heat output		Prated	20,0	kW	Seasonal space heating energy efficiency		η_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	16,0	kW	Tj = -7 °C	COPd	3,25	kW		
Tj = +2 °C	Pdh	16,2	kW	Tj = +2 °C	COPd	3,70	kW		
Tj = +7 °C	Pdh	16,6	kW	Tj = +7 °C	COPd	3,95	kW		
Tj = +12 °C	Pdh	16,9	kW	Tj = +12 °C	COPd	4,16	kW		
Tj = biv	Pdh	16,1	kW	Tj = biv	COPd	3,35	kW		
Tj = TOL	Pdh	16,0	kW	Tj = TOL	COPd	3,08	kW		
Tj = -15 °C (if TOL < -20 °C)	Pdh		kW	Tj = -15 °C (if TOL < -20 °C)	COPd		kW		
Bivalent temperature		T _{biv}	-4,8	°C	Operation limit temperature		TOL	-10	°C
Cycling interval capacity for heating		P _{cyh}		kW	Cycling interval efficiency		COP _{cyh}		-
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}	4,0	kW	
Thermostat-off mode	P _{TO}	0,025	kW	Type of energy input		Electric			
Standby mode	P _{SB}	0,007	kW						
Crankcase heater mode	P _{CK}	0,035	kW						
<i>Other items</i>									
Capacity control	fixed			Rated air flow rate, outdoors				m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	43/-	dB	Rated water flow rate, indoor heat exchanger			1,72	m ³ /h	
Annual energy consumption	Q _{HE}	11407	kWh	Rated brine or water flow rate, outdoor heat exchanger			3,23	m ³ /h	
<i>For heat pump combination heater:</i>									
Declared load profile				Water heating energy efficiency		η_{wh}		%	
Daily electricity consumption		Q _{elec}		kWh	Daily fuel consumption		Q _{fuel}		kWh
Annual electricity consumption		AEC		kWh	Annual fuel consumption		AFC		GJ
Approved by:									
Contact details		METRO THERM A/S Rundinsvej 55 DK-3200 Helsingør www.metrotherm.dk							