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METROAIR I 12



55 °C

35 °C



A++

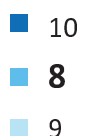
A++



dB



53 dB



kW



kW



2015

811/2013



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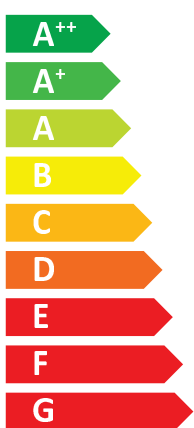
METROAIR I 12 + METROAIR 330



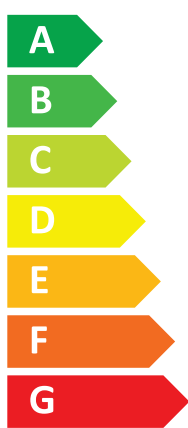
55 °C



XL



A++



A



35 dB



53 dB

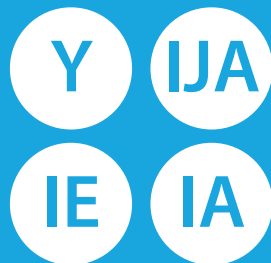


- 10 kW
- 8 kW
- 9 kW



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METROAIR I 12 + METROAIR 330



A⁺⁺

A⁺⁺⁺

A⁺⁺⁺

A⁺⁺

A⁺

A

B

C

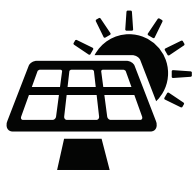
D

E

F

G

+



+



+



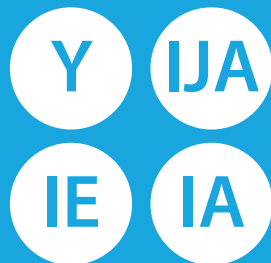
+





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METROAIR I 12 + METROAIR 330



A⁺⁺



A



55 °C

A⁺⁺⁺

A⁺⁺

A⁺

A

B

C

D

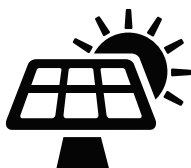
E

F

G

A⁺⁺⁺

+



+



+



+



XL

A⁺⁺⁺

A⁺⁺

A⁺

A

B

C

D

E

F


G

A

Supplier's name:	METRO THERM A/S		
Model:	Metroair I 12 + Metroair 330		
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:	8	8,3	kW
Annual energy consumption for space heating, average climate	3409	4529	kWh
Annual electricity consumption for water heating, average climate	1661		kWh
Seasonal space heating energy efficiency, average climate:	190	148	%
Water heating energy efficiency, average climate:	101		%
Sound power level LWA indoors	35		dB
Rated heat output, cold climate:	9,3	9,8	kW
Rated heat output, warm climate:	9,2	9,2	kW
Annual energy consumption for space heating, cold climate	5666	7239	kWh
Annual electricity consumption for water heating, cold climate	1895		kWh
Annual energy consumption for space heating, warm climate	2241	2741	kWh
Annual electricity consumption for water heating, warm climate	1473		kWh
Seasonal space heating energy efficiency, cold climate:	159	130	%
Water heating energy efficiency, cold climate:	88		%
Seasonal space heating energy efficiency, warm climate:	216	176	%
Water heating energy efficiency, warm climate:	114		%
Sound power level LWA outdoors	53		dB

Data for package fiche

Controller class	VI		
Controller contribution to efficiency	4,0		%
Seasonal space heating energy efficiency of package, average climate:	194	152	%
Seasonal space heating energy efficiency class for package, average climate:	A+++	A+++	%
Seasonal space heating energy efficiency of package, cold climate:	163	134	%
Seasonal space heating energy efficiency of package, warm climate:	220	180	%

Model(s):		Metroair I 12 + Metroair 330				<div></div>			
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: EN14825 and EN16147									
Rated heat output		Prated	8,3	kW	Seasonal space heating energy efficiency		ηs	148	%
Declared capacity for part load at outdoor temperature Tj				Declared coefficient of performance for part load at outdoor temperature Tj					
Tj = -7 °C	Pdh	7,3	kW	Tj = -7 °C	COPd	2,39	-		
Tj = +2 °C	Pdh	4,7	kW	Tj = +2 °C	COPd	3,85	-		
Tj = +7 °C	Pdh	2,9	kW	Tj = +7 °C	COPd	4,48	-		
Tj = +12 °C	Pdh	3,3	kW	Tj = +12 °C	COPd	5,30	-		
Tj = biv	Pdh	7,3	kW	Tj = biv	COPd	2,39	-		
Tj = TOL	Pdh	7,8	kW	Tj = TOL	COPd	2,28	-		
Tj = -15 °C (if TOL < -20 °C)	Pdh		kW	Tj = -15 °C (if TOL < -20 °C)	COPd		-		
Bivalent temperature	Tbiv	-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 mode				Supplementary heater					
Off mode	P _{OFF}	0,025	kW	Rated heat output		Psup	0,5	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			3400	m³/h	
Sound power level, indoors/outdoors	L _{WA}	35/53	dB	Rated water flow rate, indoor heat exchanger			variable	m³/h	
Annual energy consumption	Q _{HE}	4529	kWh	Rated brine or water flow rate, outdoor heat exchanger				m³/h	
For heat pump combination heater:									
Declared load profile		XL		Water heating energy efficiency		η _{wh}	101	%	
Daily electricity consumption	Q _{elec}	7,56	kWh	Daily fuel consumption		Q _{fuel}		kWh	
Annual electricity consumption	AEC	1661	kWh	Annual fuel consumption		AFC		GJ	
Approved by:									
Contact details		METRO THERM A/S Rundinsvej 55 DK-3200 Helsingør www.metrotherm.dk							