



ENERG
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Y IJA
IE IA



METROAIR F12



55 °C

35 °C



A++

A++



dB



57 dB

■ 13
■ **10**
■ 12
kW

■ 12
■ **12**
■ 12
kW



2015

811/2013



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METROAIR F12 + METROAIR 330



55 °C



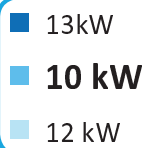
XL



35 dB



57 dB



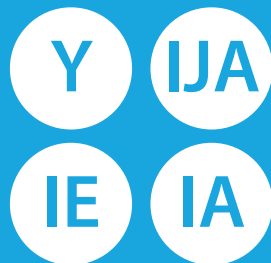
2015

811/2013



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METROAIR F12



A⁺⁺

A⁺⁺⁺

A⁺⁺⁺

A⁺⁺

A⁺

A

B

C

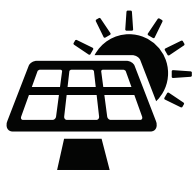
D

E

F

G

+



+



+



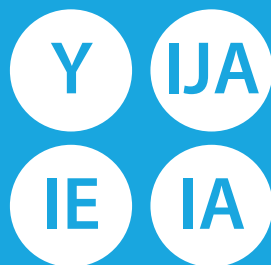
+





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METROAIR F12 + METROAIR 330



A⁺⁺



A



55 °C

A⁺⁺⁺

A⁺⁺

A⁺

A

B

C

D

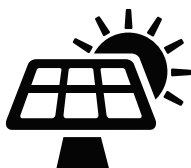
E

F

G

A⁺⁺

+



+



+



+



XL

A⁺⁺⁺

A⁺⁺

A⁺

A

B

C

D

E

F


G

A

Supplier's name:	METRO THERM A/S		
Model:	METROAIR F12 + 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:	11,5	10,0	kW
Annual energy consumption for space heating, average climate	5382	6136	kWh
Annual electricity consumption for water heating, average climate	1702		kWh
Seasonal space heating energy efficiency, average climate:	174	132	%
Water heating energy efficiency, average climate:	98		%
Sound power level LWA indoors	35		dB
Rated heat output, cold climate:	11,5	13,0	kW
Rated heat output, warm climate:	12,0	12,0	kW
Annual energy consumption for space heating, cold climate	7798	11197	kWh
Annual electricity consumption for water heating, cold climate	1904		kWh
Annual energy consumption for space heating, warm climate	2759	3419	kWh
Annual electricity consumption for water heating, warm climate	1551		kWh
Seasonal space heating energy efficiency, cold climate:	142	111	%
Water heating energy efficiency, cold climate:	88		%
Seasonal space heating energy efficiency, warm climate:	229	185	%
Water heating energy efficiency, warm climate:	108		%
Sound power level LWA outdoors	57		dB

Data for package fiche

Controller class	II		
Controller contribution to efficiency	4,0		%
Seasonal space heating energy efficiency of package, average climate:	178	136	%
Seasonal space heating energy efficiency class for package, average climate:	A+++	A++	%
Seasonal space heating energy efficiency of package, cold climate:	146	115	%
Seasonal space heating energy efficiency of package, warm climate:	233	189	%

Model(s):				METROAIR F12 + 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	10,0	kW	Seasonal space heating energy efficiency			ηs	132	%
Declared capacity for part load at outdoor temperature Tj						Declared coefficient of performance for part load at outdoor temperature Tj					
Tj = -7 °C			Pdh	8,9	kW	Tj = -7 °C			COPd	1,99	-
Tj = +2 °C			Pdh	5,5	kW	Tj = +2 °C			COPd	3,22	-
Tj = +7 °C			Pdh	3,5	kW	Tj = +7 °C			COPd	4,61	-
Tj = +12 °C			Pdh	5,0	kW	Tj = +12 °C			COPd	6,25	-
Tj = biv			Pdh	9,2	kW	Tj = biv			COPd	1,90	-
Tj = TOL			Pdh	8,1	kW	Tj = TOL			COPd	1,92	-
Tj = -15 °C (if TOL < -20 °C)			Pdh		kW	Tj = -15 °C (if TOL < -20 °C)			COPd		-
Bivalent temperature			Tbiv	-7,9	°C	Operation limit temperature			TOL	-10	°C
Cycling interval capacity for heating			Pcyh		kW	Cycling interval efficiency			COPcyh		-
Degradation co-efficient			Cdh	0,98	-	Heating water operating limit			WTOL	58	°C
Power consumption in modes other than active mode						Supplementary heater					
Off mode			POFF	0,002	kW	Rated heat output			Psup	1,9	kW
Thermostat-off mode			PTO	0,014	kW						
Standby mode			PSB	0,015	kW	Type of energy input			Electric		
Crankcase heater mode			PCK	0,035	kW						
Other items											
Capacity control			variable			Rated air flow rate, outdoors				4380	m³/h
Sound power level, indoors/outdoors			LWA	35/57	dB	Rated water flow rate, indoor heat exchanger				0,86	m³/h
Annual energy consumption			QHE	6136	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			ηwh	98	%
Daily electricity consumption			Qelec	7,75	kWh	Daily fuel consumption			Qfuel		kWh
Annual electricity consumption			AEC	1702	kWh	Annual fuel consumption			AFC		GJ
Approved by:											
Contact details			METRO THERM A/S Rundinsvej 55 DK-3220 Helsingør www.metrotherm.dk								