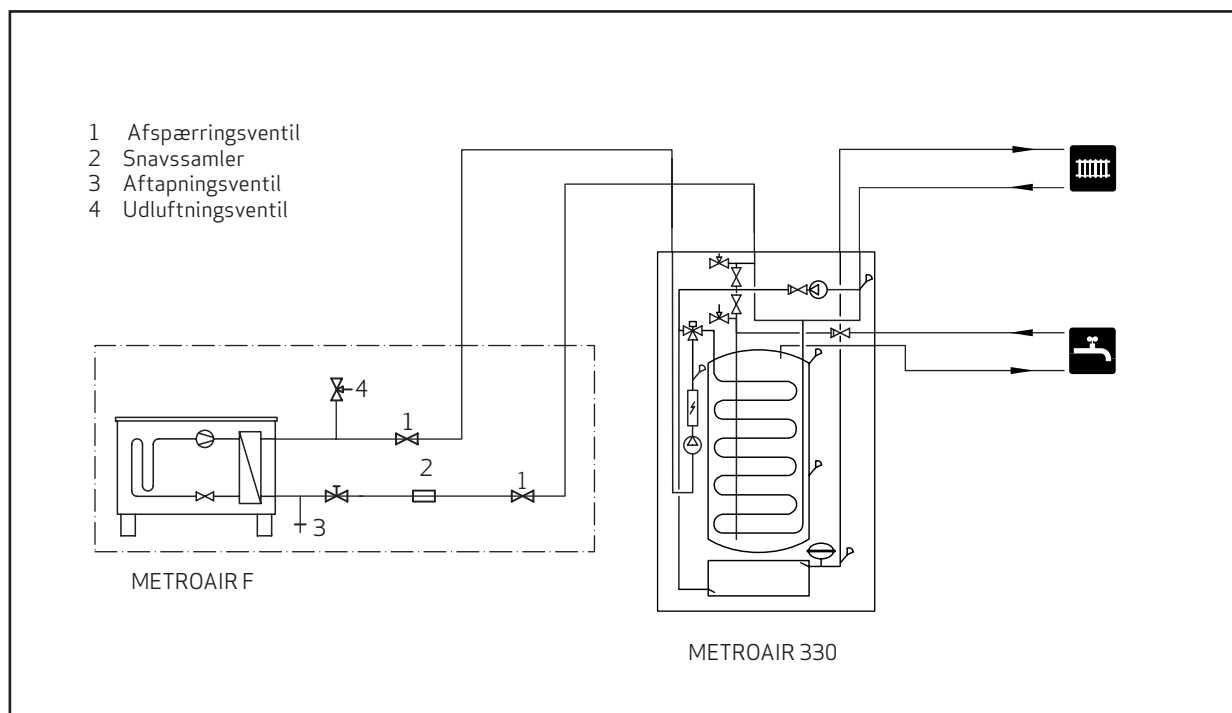


METROAIR F


Datablad



Supplier's name:	METRO THERM A/S		
Model:	METROAIR F6 + 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:	5,0	5,0	kW
Annual energy consumption for space heating, average climate	2089	3248	kWh
Annual electricity consumption for water heating, average climate	1833		kWh
Seasonal space heating energy efficiency, average climate:	188	131	%
Water heating energy efficiency, average climate:	91		%
Sound power level LWA indoors	35		dB
Rated heat output, cold climate:	4,0	6,0	kW
Rated heat output, warm climate:	4,0	5,0	kW
Annual energy consumption for space heating, cold climate	2694	4610	kWh
Annual electricity consumption for water heating, cold climate	2332		kWh
Annual energy consumption for space heating, warm climate	872	1398	kWh
Annual electricity consumption for water heating, warm climate	1485		kWh
Seasonal space heating energy efficiency, cold climate:	143	116	%
Water heating energy efficiency, cold climate:	72		%
Seasonal space heating energy efficiency, warm climate:	252	179	%
Water heating energy efficiency, warm climate:	113		%
Sound power level LWA outdoors	50		dB

Data for package fiche


Controller class	VI		
Controller contribution to efficiency	4,0		%
Seasonal space heating energy efficiency of package, average climate:	192	135	%
Seasonal space heating energy efficiency class for package, average climate:	A+++	A++	%
Seasonal space heating energy efficiency of package, cold climate:	147	120	%
Seasonal space heating energy efficiency of package, warm climate:	256	183	%

Model(s):		METROAIR F6 + METROAIR 330									
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	5,3	kW	Seasonal space heating energy efficiency		η_s	131	%		
<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	4,7	kW	Tj = -7 °C	COPd	1,88	-				
Tj = +2 °C	Pdh	2,8	kW	Tj = +2 °C	COPd	3,26	-				
Tj = +7 °C	Pdh	1,8	kW	Tj = +7 °C	COPd	4,72	-				
Tj = +12 °C	Pdh	2,7	kW	Tj = +12 °C	COPd	6,47	-				
Tj = biv	Pdh	4,7	kW	Tj = biv	COPd	1,88	-				
Tj = TOL	Pdh	4,1	kW	Tj = TOL	COPd	1,77	-				
Tj = -15 °C (if TOL < -20 °C)	Pdh	-	kW	Tj = -15 °C (if TOL < -20 °C)	COPd		-				
Bivalent temperature				T _{biv}	-7	°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	-	Heating water operating limit		WTOL	58	°C
<i>Power consumption in modes other than active mode</i>				<i>Supplementary heater</i>							
Off mode	P _{OFF}	0,007	kW	Rated heat output		P _{sup}	1,2	kW			
Thermostat-off mode	P _{TO}	0,012	kW	Type of energy input		Electric					
Standby mode	P _{SB}	0,012	kW								
Crankcase heater mode	P _{CK}	0	kW								
<i>Other items</i>											
Capacity control				variable		Rated air flow rate, outdoors			2526	m ³ /h	
Sound power level, indoors/outdoors				L _{WA}	35/50	dB	Rated water flow rate, indoor heat exchanger				m ³ /h
Annual energy consumption				Q _{HE}	3248	kWh	Rated brine or water flow rate, outdoor heat exchanger				m ³ /h
<i>For heat pump combination heater:</i>											
Declared load profile				XL		Water heating energy efficiency		η_{wh}	91	%	
Daily electricity consumption				Q _{elec}	8,59	kWh	Daily fuel consumption		Q _{fuel}		kWh
Annual electricity consumption				AEC	1833	kWh	Annual fuel consumption		AFC		GJ
Approved by:											
Contact details				METRO THERM A/S Rundinsvej 55 DK-3220 Helsingør www.metrotherm.dk							

Supplier's name:	METRO THERM A/S		
Model:	METROAIR F8 + 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:	8,2	7,0	kW
Annual energy consumption for space heating, average climate	3882	4447	kWh
Annual electricity consumption for water heating, average climate	1689		kWh
Seasonal space heating energy efficiency, average climate:	172	127	%
Water heating energy efficiency, average climate:	99		%
Sound power level LWA indoors	35		dB
Rated heat output, cold climate:	9,0	10,0	kW
Rated heat output, warm climate:	8,0	8,0	kW
Annual energy consumption for space heating, cold climate	6264	8844	kWh
Annual electricity consumption for water heating, cold climate	1886		kWh
Annual energy consumption for space heating, warm climate	1879	2333	kWh
Annual electricity consumption for water heating, warm climate	1540		kWh
Seasonal space heating energy efficiency, cold climate:	139	108	%
Water heating energy efficiency, cold climate:	89		%
Seasonal space heating energy efficiency, warm climate:	225	180	%
Water heating energy efficiency, warm climate:	109		%
Sound power level LWA outdoors	54		dB

Data for package fiche


Controller class	II		
Controller contribution to efficiency	4,0		%
Seasonal space heating energy efficiency of package, average climate:	176	131	%
Seasonal space heating energy efficiency class for package, average climate:	A+++	A++	%
Seasonal space heating energy efficiency of package, cold climate:	143	112	%
Seasonal space heating energy efficiency of package, warm climate:	229	184	%

Model(s):		METROAIR F8 + METROAIR 330									
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	7,0	kW	Seasonal space heating energy efficiency		η_s	127	%		
<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	6,3	kW	Tj = -7 °C	COPd	1,94	-				
Tj = +2 °C	Pdh	3,9	kW	Tj = +2 °C	COPd	3,11	-				
Tj = +7 °C	Pdh	2,6	kW	Tj = +7 °C	COPd	4,42	-				
Tj = +12 °C	Pdh	3,7	kW	Tj = +12 °C	COPd	5,93	-				
Tj = biv	Pdh	6,6	kW	Tj = biv	COPd	1,83	-				
Tj = TOL	Pdh	5,9	kW	Tj = TOL	COPd	1,86	-				
Tj = -15 °C (if TOL < -20 °C)	Pdh		kW	Tj = -15 °C (if TOL < -20 °C)	COPd		-				
Bivalent temperature				T _{biv}	-8,6	°C	Operation limit temperature		TOL	-10	°C
Cycling interval capacity for heating				P _{ych}		kW	Cycling interval efficiency		COP _{yc}		-
Degradation co-efficient				C _{dh}	0,97	-	Heating water operating limit		WTOL	58	°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}	1,1	kW			
Thermostat-off mode	P _{TO}	0,01	kW	Type of energy input		Electric					
Standby mode	P _{SB}	0,015	kW	Rated air flow rate, outdoors			3000	m ³ /h			
Crankcase heater mode	P _{CK}	0,03	kW	Rated water flow rate, indoor heat exchanger			0,60	m ³ /h			
<i>Other items</i>				Rated brine or water flow rate, outdoor heat exchanger				m ³ /h			
Capacity control		variable		Annual energy consumption		Q _{HE}	4447	kWh			
Sound power level, indoors/outdoors	L _{WA}	35/54	dB	<i>For heat pump combination heater:</i>							
Declared load profile				XL		Water heating energy efficiency		η_{wh}	99	%	
Daily electricity consumption	Q _{elec}	7,69	kWh	Daily fuel consumption		Q _{fuel}		kWh			
Annual electricity consumption	AEC	1689	kWh	Annual fuel consumption		AFC		GJ			
Approved by:											
Contact details		METRO THERM A/S Rundinsvej 55 DK-3220 Helsingør www.metrotherm.dk									

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										
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		η_s	132	%			
<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	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				T _{biv}	-7,9	°C	Operation limit temperature			TOL	-10	°C
Cycling interval capacity for heating				P _{cych}		kW	Cycling interval efficiency			COP _{cyc}		-
Degradation co-efficient				Cdh	0,98	-	Heating water operating limit			WTOL	58	°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}	1,9	kW				
Thermostat-off mode	P _{TO}	0,014	kW	Type of energy input		Electric						
Standby mode	P _{SB}	0,015	kW									
Crankcase heater mode	P _{CK}	0,035	kW									
<i>Other items</i>												
Capacity control		variable		Rated air flow rate, outdoors			4380	m ³ /h				
Sound power level, indoors/outdoors		L _{WA}	35/57	dB	Rated water flow rate, indoor heat exchanger			0,86	m ³ /h			
Annual energy consumption		Q _{HE}	6136	kWh	Rated brine or water flow rate, outdoor heat exchanger				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}	7,75	kWh	Daily fuel consumption		Q _{fuel}		kWh			
Annual electricity consumption		AEC	1702	kWh	Annual fuel consumption		AFC		GJ			
Approved by:												
Contact details		METRO THERM A/S Rundinsvej 55 DK-3220 Helsingø www.metrotherm.dk										