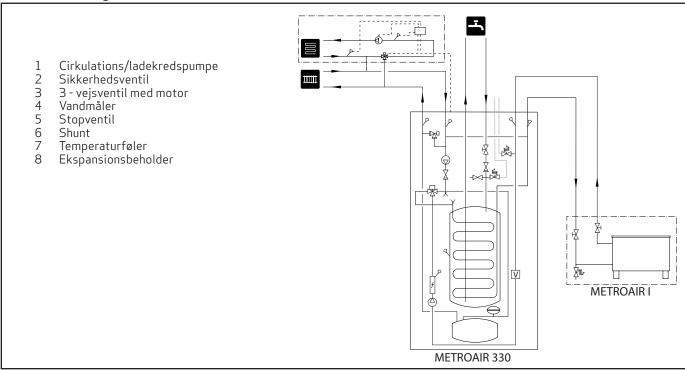
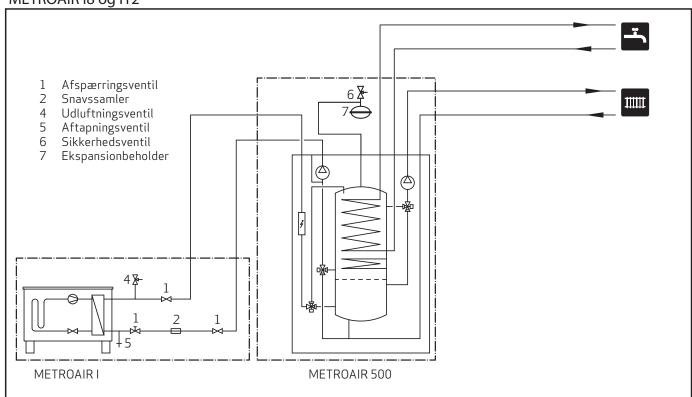
METROAIR I

Datablad

METROAIR 18 og 112



METROAIR 18 og 112





Supplier's name:	METRO 1	THERM A/S	
Model:	Metroair I 8	+ Metroair 330	
Temperature application	35	55	℃
Declared load profile for water	•	XL	
heating		<u>. </u>	
Seasonal space heating energy	A	A.,	
efficiency class, average climate:	A+++	A++	
Water heating energy efficiency		A	
class, average climate:		A	
Rated heat output, average climate:	5,9	6,3	kW
Annual energy consumption for	0544	0.470	LAMI
space heating, average climate	2544	3472	kWh
Annual electricity consumption for	4	004	1.34//
water heating, average climate	10	661	kWh
Seasonal space heating energy			
efficiency, average climate:	189	147	%
Water heating energy efficiency,		1	
average climate:	101		%
Sound power level LWA indoors	35		dB
Rated heat output, cold climate:	6,8	7,4	kW
Rated heat output, warm climate:	5,9	6,3	kW
Annual energy consumption for			
space heating, cold climate	4182	5524	kWh
Annual electricity consumption for	4	005	1.14//
water heating, cold climate	10	895	kWh
Annual energy consumption for	1452	1939	kWh
space heating, warm climate	1432	1939	KVVII
Annual electricity consumption for	1.	473	kWh
water heating, warm climate		- 170	KVVII
Seasonal space heating energy	158	130	%
efficiency, cold climate:	100	100	70
Water heating energy efficiency,	;	88	%
cold climate:		T	/-
Seasonal space heating energy	214	171	%
efficiency, warm climate:	-	1	
Water heating energy efficiency,	1	14	%
warm climate:			
Sound power level LWA outdoors	;	53	dB

Controller class	V	/	
Controler contribution to efficiency	4,	,0	%
Seasonal space heating energy efficiency of package, average climate:	193	151	%
Seasonal space heating energy efficiency class for package, average climate:	A+++	A+++	%
Seasonal space heating energy efficiency of package, cold climate:	162	134	%
Seasonal space heating energy efficiency of package, warm climate:	218	175	%

Model(s):	Metroair I 8 + 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	
	Socconal chaco h



Temperature application:		Med	dium tem	perature (55 °C)			
Applied standards: EN14825 and EN16147	1		1 I	Seasonal space heating energy	1	1	
Rated heat output	Prated	6,3	kW	efficiency	ης	147	%
Declared capacity for part load at outdoor temp	perature Tj			Declared coefficient of performance for par	t load at outdo	oor temperat	ure Tj
Tj = -7 ℃	Pdh	5,5	kW	Tj = -7 ℃	COPd	2,48	-
Tj = +2 ℃	Pdh	4,1	kW	Tj = +2 ℃	COPd	3,80	-
Tj = +7 ℃	Pdh	2,9	kW	Tj = +7 ℃	COPd	4,45	-
Tj = +12 ℃	Pdh	3,3	kW	Tj = +12 ℃	COPd	5,26	-
Tj = biv	Pdh	5,5	kW	Tj = biv	COPd	2,48	-
Tj = TOL	Pdh	5,7	kW	Tj = TOL	COPd	2,34	-
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	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	0,6	kW
Thermostat-off mode	P _{TO}	0,01	kW				
Standby mode	P_{SB}	0,025	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,037	kW		1		
Other items							
Capacity control		variable		Rated air flow rate, outdoors		2300	m³/h
				Rated water flow rate, indoor heat			2/1
Sound power level, indoors/outdoors	L _{WA}	35/53	dB	exchanger		variable	m³/h
				Rated brine or water flow rate,			
Annual energy consumption	Q_{HE}	3472	kWh	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:			<u> </u>	· ·			
Contact details	METRO T	HERM A/	S Runding	svej 55 DK-3200 Helsinge www.metroth	erm.dk		

Supplier's name:	METRO T	HERM A/S	
Model:	Metroair I 12 -	+ Metroair 330	
Temperature application	35	55	℃
Declared load profile for water	v	(L	
heating	^	\ L	
Seasonal space heating energy	A	A++	
efficiency class, average climate:	A+++	ATT	
Water heating energy efficiency		<u>. </u>	
class, average climate:	, , , , , , , , , , , , , , , , , , ,	4	
Rated heat output, average climate:	8	8,3	kW
Annual energy consumption for	0.400	4500	LAMI
space heating, average climate	3409	4529	kWh
Annual electricity consumption for	10	661	LAMI
water heating, average climate	10	1001	kWh
Seasonal space heating energy			
efficiency, average climate:	190	148	%
Water heating energy efficiency,	4,		0/
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			1-14/1-
space heating, cold climate	5666	7239	kWh
Annual electricity consumption for	10	395	kWh
water heating, cold climate	10	190	KVVII
Annual energy consumption for	2241	2741	kWh
space heating, warm climate	2241	2741	KVVII
Annual electricity consumption for	14	73	kWh
water heating, warm climate			100011
Seasonal space heating energy	159	130	%
efficiency, cold climate:			
Water heating energy efficiency,	8	88	%
cold climate:		1	
Seasonal space heating energy efficiency, warm climate:	216	176	%
Water heating energy efficiency,		<u> </u>	
warm climate:	1	14	%
	E	:0	۸D
Sound power level LWA outdoors	5	53	dB

Controller class	V	/	
Controler 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			
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				



7,3 4,7 2,9 3,3 7,3 7,8	kW kW kW kW	Seasonal space heating energy efficiency Declared coefficient of performance for part Tj = -7 °C Tj = +2 °C Tj = +7 °C Ti = +12 °C	COPd COPd	2,39	% ure Tj
4,7 2,9 3,3 7,3	kW kW kW	Tj = -7 °C Tj = +2 °C Tj = +7 °C	COPd COPd	2,39	ıre Tj
4,7 2,9 3,3 7,3	kW kW kW	Tj = -7 °C Tj = +2 °C Tj = +7 °C	COPd COPd	2,39	116 11
4,7 2,9 3,3 7,3	kW kW kW	Tj = +2 °C Tj = +7 °C	COPd		_
2,9 3,3 7,3	kW kW	Tj = +7 ℃		3,85	
3,3 7,3	_	Ti = 112 °C	COPd	4,48	
7,3	I/A/	- +12 C	COPd	5,30	-
7,8	kW	Tj = biv	COPd	2,39	-
	kW	Tj = TOL	COPd	2,28	-
	kW	Tj = -15 °C (if TOL < -20 °C)	COPd		-
-7	°C	Operation limit temperature	TOL	-10	°C
- ,	kW	Cycling interval efficiency	COPcyc	-10	
0,99	-	Heating water operating limit	WTOL	65	°C
,					
0.025	1347	Supplementary heater	T p	0.5	1347
0,025	kW	Rated heat output	Psup	0,5	kW
0,007	kW		1		
0,025	kW	Type of energy input	Electric		
0,037	kW				
variable		Rated air flow rate, outdoors		3400	m³/h
		Rated water flow rate, indoor heat			
35/53	dB	exchanger		variable	m³/h
		Rated brine or water flow rate,			i
4529	kWh	outdoor heat exchanger			m³/h
XL		Water heating energy efficiency	η_{wh}	101	%
7.50	134/6	Della facility and the	Ι .	<u> </u>	1144
					kWh
1661	kWh	Annual fuel consumption	AFC		GJ
	7,56 1661	7,56 kWh 1661 kWh	7,56 kWh Daily fuel consumption Annual fuel consumption	7,56 kWh Daily fuel consumption Q _{fuel}	7,56 kWh Daily fuel consumption Q _{fuel} Annual fuel consumption AFC

Supplier's name:	METRO T	HERM A/S		
Model:	Metroair I 16	Metroair I 16 + Metroair 330		
Temperature application	35	55	°C	
Declared load profile for water	Х	1		
heating	^			
Seasonal space heating energy	A+++	A+++		
efficiency class, average climate:	ATTT	ATTT		
Water heating energy efficiency	<u> </u>			
class, average climate:				
Rated heat output, average climate:	11	12,3	kW	
Annual energy consumption for	4502	6524	kWh	
space heating, average climate	4302	0024	KVVII	
Annual electricity consumption for	16	16	kWh	
water heating, average climate	10	10	KVVII	
Seasonal space heating energy	400	450	0/	
efficiency, average climate:	199	153	%	
Water heating energy efficiency,	10	M	%	
average climate:	104		%	
Sound power level LWA indoors	35		dB	
Rated heat output, cold climate:	13,0	14,0	kW	
Rated heat output, warm climate:	13,0	13,0	kW	
Annual energy consumption for	7543	9765	kWh	
space heating, cold climate	7 040	9705	KVVII	
Annual electricity consumption for	17	58	kWh	
water heating, cold climate	17		KVVII	
Annual energy consumption for	3153	3867	kWh	
space heating, warm climate	0100	0001	KVVII	
Annual electricity consumption for	14	48	kWh	
water heating, warm climate		ı		
Seasonal space heating energy efficiency, cold climate:	167	138	%	
Water heating energy efficiency,		<u> </u>	+	
cold climate:	9	5	%	
Seasonal space heating energy				
efficiency, warm climate:	217	177	%	
Water heating energy efficiency,	4.2	10	%	
warm climate:	11	116		
Sound power level LWA outdoors	5	5	dB	

Controller class	V	′ I	
Controler contribution to efficiency	4,	0	%
Seasonal space heating energy efficiency of package, average climate:	203	157	%
Seasonal space heating energy efficiency class for package, average climate:	A+++	A+++	%
Seasonal space heating energy efficiency of package, cold climate:	171	142	%
Seasonal space heating energy efficiency of package, warm climate:	221	181	%

Model(s):	Metroair I 16 + 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	•



Applied standards: EN14825 and EN16147	7						
				Seasonal space heating energy			
Rated heat output	Prated	12,3	kW	efficiency	η _s	153	%
Declared capacity for part load at outdoor tem	perature Tj			Declared coefficient of performance for part	load at outdo	oor temperat	ure Tj
Tj = -7 °C	Pdh	10,9	kW	Tj = -7 °C	COPd	2,48	-
Tj = +2 °C	Pdh	6,7	kW	Tj = +2 °C	COPd	3,96	-
Tj = +7 °C	Pdh	5,9	kW	Tj = +7 °C	COPd	4,67	-
Tj = +12 °C	Pdh	6,0	kW	Tj = +12 °C	COPd	5,67	-
Tj = biv	Pdh	10,9	kW	Tj = biv	COPd	2,48	-
Tj = TOL	Pdh	11,6	kW	Tj = TOL	COPd	2,40	-
Tj = -15 °C (if TOL < -20 °C)	Pdh		kW	Tj = -15 $^{\circ}$ C (if TOL < -20 $^{\circ}$ C)	COPd		-
Bivalent temperature	T _{biv}	-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		0,025	l kW	Supplementary heater Rated heat output	Down	0.7	kW
	P _{OFF}			Rated Heat Output	Psup	0,7	KVV
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		4150	m³/h
Sound power level, indoors/outdoors	L _{WA}	35/55	dB	Rated water flow rate, indoor heat exchanger		variable	m³/h
Annual energy consumption	Q _{HE}	6524	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}	104	%
Daily electricity consumption	Q _{elec}	7,36	kWh	Daily fuel consumption	Q _{fuel}		kWh
Annual electricity consumption	AEC	1616	kWh	Annual fuel consumption	AFC		GJ
Approved by:	AEC	1010	KVVII	Annual ruer consumption	AFC		GJ
Contact details	METRO	THE DNA A	/C Dund	nsvej 55 DK-3220 Helsinge www.metroth	orm dle		
Contact details	INIE I KO I	I I I I I I I I I I I I I I I I I I I	3 Kulla	iisvej 33 DK-3220 neisiiige www.metroth	eiiii.uk		

Supplier's name:	NII		
Model:	METROAIR I 20 + METROAIR 500		
Temperature application	35	55	°C
Declared load profile for water	Y	/I	
heating	XXL		
Seasonal space heating energy	A+++	A+++	
efficiency class, average climate:	Аттт	ATTT	
Water heating energy efficiency	A		
class, average climate:	<i>F</i>		
Rated heat output, average climate:	11	12,3	kW
Annual energy consumption for	4502	6524	kWh
space heating, average climate	4502	0324	KVVII
Annual electricity consumption for	20	06	kWh
water heating, average climate	2096		KVVII
Seasonal space heating energy	400	450	0,
efficiency, average climate:	199	153	%
Water heating energy efficiency,	102		%
average climate:	103		70
Sound power level LWA indoors	35		dB
Rated heat output, cold climate:	13,0	14,0	kW
Rated heat output, warm climate:	13,0	13,0	kW
Annual energy consumption for	7543	9765	kWh
space heating, cold climate	7545	9705	KVVII
Annual electricity consumption for	2284		kWh
water heating, cold climate			KVVII
Annual energy consumption for	3153	3867	kWh
space heating, warm climate	0100	0007	KWII
Annual electricity consumption for	1873		kWh
water heating, warm climate		Ι	
Seasonal space heating energy efficiency, cold climate:	167	138	%
Water heating energy efficiency,			
cold climate:	94		%
Seasonal space heating energy			
efficiency, warm climate:	217	177	%
Water heating energy efficiency,	L		0/
warm climate:	115		%
Sound power level LWA outdoors	55		dB

Controller class	V		
Controler contribution to efficiency	4,0		%
Seasonal space heating energy efficiency of package, average climate:	203	157	%
Seasonal space heating energy efficiency class for package, average climate:	A+++	A+++	%
Seasonal space heating energy efficiency of package, cold climate:	171	142	%
Seasonal space heating energy efficiency of package, warm climate:	221	181	%

Model(s):	METROAIR I 20 + METROAIR 500		
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			



Applied standards: EN14825 and EN16147			<u> </u>	Seasonal space heating energy			
Rated heat output	Prated	12,3	kW	efficiency	ης	153	%
Declared capacity for part load at outdoor tem	perature Tj			Declared coefficient of performance for part	load at outde	oor temperat	ure Tj
Tj = -7 °C	Pdh	10,9	kW	Tj = -7 °C	COPd	2,48	-
Tj = +2 °C	Pdh	6,7	kW	Tj = +2 °C	COPd	3,96	-
Tj = +7 °C	Pdh	5,9	kW	Tj = +7 °C	COPd	4,67	-
Tj = +12 °C	Pdh	6,0	kW	Tj = +12 °C	COPd	5,67	-
Tj = biv	Pdh	10,9	kW	Tj = biv	COPd	2,48	
Tj = TOL	Pdh	11,6	kW	Tj = TOL	COPd	2,40	-
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	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	0,7	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		1		
Other items							
Capacity control	variable			Rated air flow rate, outdoors		4150	m³/h
Sound power level, indoors/outdoors	L _{WA}	35/55	dB	Rated water flow rate, indoor heat exchanger		variable	m³/h
				Rated brine or water flow rate,			
Annual energy consumption	Q_{HE}	6524	kWh	outdoor heat exchanger			m³/h
For heat pump combination heater:							
Declared load profile		XXL		Water heating energy efficiency	η_{wh}	103	%
Daily electricity consumption	Q _{elec}	9,54	kWh	Daily fuel consumption	Q _{fuel}		kWh
Annual electricity consumption	AEC	2096	kWh	Annual fuel consumption	AFC		GJ
Approved by:				'	1		
Contact details	© NIBE E	nergy Sys	stems - B	ox 14 - Hannabadsvägen 5 - 28521 Mark	aryd - Swe	den	