Information requirements
(heat pump space heaters and heat pump combination heaters)

Model(s): URBAN_AOWD_14

Air-to-water heat pump	Y			Low-temperature heat pump	N		
Water-to-water heat pump	N			Equipped with a supplementary heater	Y		
Brine-to-water heat pump	N			Heat pump combination heater	Y		
Parameters declared for	Medium-temperature application						
Parameters declared for	Average climate condition						
Item	symbol	value	unit	Item	symbol	value	unit
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	ηs	128	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = – 7 ℃	Pdh	4.0	kW	Tj = – 7 ℃	COPd	2.03	–
Degradation co-efficient (**)	Cdh	0.99	–				
Tj = 2 ℃	Pdh	2.6	kW	Tj = 2 ℃	COPd	3.27	–
Degradation co-efficient (**)	Cdh	0.97	–				
Tj = 7 ℃	Pdh	2.3	kW	Tj = 7 ℃	COPd	4.30	–
Degradation co-efficient (**)	Cdh	0.95	–				
Tj = 12℃	Pdh	2.8	kW	Tj = 12℃	COPd	6.00	–
Degradation co-efficient (**)	Cdh	0.95	–				
Tj = bivalent temperature	Pdh	4.0	kW	Tj = bivalent temperature	COPd	2.03	–
Tj = operation limit temperature	Pdh	3.8	kW	Tj = operation limit temperature	COPd	1.38	–
For air-to-water heat pumps: Tj = – 15℃ (if TOL < – 20℃)	Pdh	NA	kW	For air-to-water heat pumps: Tj = – 15℃ (if TOL < – 20℃)	COPd	NA	–
Bivalent temperature	Tbiv	-7	℃	For air-to-water heat pumps: Operation limit temperature	TOL	-10	℃
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	–
				Heating water operating limit temperature	WTOL	60	℃
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P_{OFF}	0.025	kW	Rated heat output (*)	Psup	1.2	kW
Thermostat-off mode	P_{TO}	0.025	kW	Type of energy input	Electric		
Standby mode	P_{SB}	0.025	kW				
Crankcase heater mode	P_{CK}	0.025	kW				
Other items							
Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	–	3200	m 3 /h
Sound power level, indoors/outdoors	L_{WA}	47/62	dB	For water- or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	–	NA	m 3 /h
Annual energy consumption	Q_{HE}	3152	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	116	%
Daily electricity consumption	Qelec	4.2215	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	885	kWh	Annual fuel consumption	AFC	NA	GJ
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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Information requirements (heat pump space heaters and heat pump combination heaters)							
Model(s): URBAN_AOWD_14							
Air-to-water heat pump	Y			Low-temperature heat pump	N		
Water-to-water heat pump	N			Equipped with a supplementary heater	Y		
Brine-to-water heat pump	N			Heat pump combination heater	Y		
Parameters declared for	Medium-temperature application						
Parameters declared for	Colder climate condition						
Item	symbol	value	unit	Item	symbol	value	unit
Rated heat output (*)	Prated	3	kW	Seasonal space heating energy efficiency	ηs	95	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = – 7 ℃	Pdh	1.9	kW	Tj = – 7 ℃	COPd	1.72	–
Degradation co-efficient (**)	Cdh	0.98	–				
Tj = 2 ℃	Pdh	1.9	kW	Tj = 2 ℃	COPd	3.41	–
Degradation co-efficient (**)	Cdh	0.96	–				
Tj = 7 ℃	Pdh	2.6	kW	Tj = 7 ℃	COPd	5.29	–
Degradation co-efficient (**)	Cdh	0.95	–				
Tj = 12℃	Pdh	2.9	kW	Tj = 12℃	COPd	6.71	–
Degradation co-efficient (**)	Cdh	0.94	–				
Tj = bivalent temperature	Pdh	2.7	kW	Tj = bivalent temperature	COPd	1.35	–
Tj = operation limit temperature	Pdh	2.3	kW	Tj = operation limit temperature	COPd	1.10	–
For air-to-water heat pumps: Tj = – 15℃ (if TOL < – 20℃)	Pdh	2.7	kW	For air-to-water heat pumps: Tj = – 15℃ (if TOL < – 20℃)	COPd	1.35	–
Bivalent temperature	Tbiv	-15	℃	For air-to-water heat pumps: Operation limit temperature	TOL	-22	℃
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	–
				Heating water operating limit temperature	WTOL	60	℃
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}	0.025	kW	Type of energy input	Electric		
Standby mode	P_{SB}	0.025	kW				
Crankcase heater mode	P_{CK}	0.025	kW				
Other items							
Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	–	3200	m 3 /h
Sound power level, indoors/outdoors	L_{WA}	47/62	dB	For water- or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	–	NA	m 3 /h
Annual energy consumption	Q_{HE}	3015	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	91	%
Daily electricity consumption	Qelec	5.399	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1125	kWh	Annual fuel consumption	AFC	NA	GJ
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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.							

Information requirements (heat pump space heaters and heat pump combination heaters)							
Model(s): URBAN_AOWD_14							
Air-to-water heat pump	Y			Low-temperature heat pump	N		
Water-to-water heat pump	N			Equipped with a supplementary heater	Y		
Brine-to-water heat pump	N			Heat pump combination heater	Y		
Parameters declared for	Medium-temperature application						
Parameters declared for	Warmer climate condition						
Item	symbol	value	unit	Item	symbol	value	unit
Rated heat output (*)	Prated	4	kW	Seasonal space heating energy efficiency	ηs	154	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = – 7 ℃	Pdh	NA	kW	Tj = – 7 ℃	COPd	NA	–
Degradation co-efficient (**)	Cdh	NA	–				
Tj = 2 ℃	Pdh	4.2	kW	Tj = 2 ℃	COPd	2.10	–
Degradation co-efficient (**)	Cdh	0.99	–				
Tj = 7 ℃	Pdh	2.6	kW	Tj = 7 ℃	COPd	3.40	–
Degradation co-efficient (**)	Cdh	0.97	–				
Tj = 12℃	Pdh	2.7	kW	Tj = 12℃	COPd	5.55	–
Degradation co-efficient (**)	Cdh	0.95	–				
Tj = bivalent temperature	Pdh	4.2	kW	Tj = bivalent temperature	COPd	2.10	–
Tj = operation limit temperature	Pdh	4.2	kW	Tj = operation limit temperature	COPd	2.10	–
For air-to-water heat pumps: Tj = – 15℃ (if TOL < – 20℃)	Pdh	NA	kW	For air-to-water heat pumps: Tj = – 15℃ (if TOL < – 20℃)	COPd	NA	–
Bivalent temperature	Tbiv	2	℃	For air-to-water heat pumps: Operation limit temperature	TOL	2	℃
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	–
				Heating water operating limit temperature	WTOL	60	℃
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P_{OFF}	0.025	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P_{TO}	0.025	kW	Type of energy input	Electric		
Standby mode	P_{SB}	0.025	kW				
Crankcase heater mode	P_{CK}	0.025	kW				
Other items							
Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	–	3200	m 3 /h
Sound power level, indoors/outdoors	L_{WA}	47/62	dB	For water- or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	–	NA	m 3 /h
Annual energy consumption	Q_{HE}	1365	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	122	%
Daily electricity consumption	Qelec	3.9914	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	838	kWh	Annual fuel consumption	AFC	NA	GJ
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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.							

Information requirements (heat pump space heaters and heat pump combination heaters)							
Model(s): URBAN_AOWD_14							
Air-to-water heat pump	Y			Low-temperature heat pump	N		
Water-to-water heat pump	N			Equipped with a supplementary heater	Y		
Brine-to-water heat pump	N			Heat pump combination heater	Y		
Parameters declared for	Low-temperature application						
Parameters declared for	Average climate condition						
Item	symbol	value	unit	Item	symbol	value	unit
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	ηs	184	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = – 7 ℃	Pdh	4.6	kW	Tj = – 7 ℃	COPd	3.23	–
Degradation co-efficient (**)	Cdh	0.98	–				
Tj = 2 ℃	Pdh	2.9	kW	Tj = 2 ℃	COPd	4.59	–
Degradation co-efficient (**)	Cdh	0.96	–				
Tj = 7 ℃	Pdh	2.6	kW	Tj = 7 ℃	COPd	6.39	–
Degradation co-efficient (**)	Cdh	0.94	–				
Tj = 12℃	Pdh	2.8	kW	Tj = 12℃	COPd	6.37	–
Degradation co-efficient (**)	Cdh	0.94	–				
Tj = bivalent temperature	Pdh	4.6	kW	Tj = bivalent temperature	COPd	3.23	–
Tj = operation limit temperature	Pdh	4.2	kW	Tj = operation limit temperature	COPd	2.56	–
For air-to-water heat pumps: Tj = – 15℃ (if TOL < – 20℃)	Pdh	NA	kW	For air-to-water heat pumps: Tj = – 15℃ (if TOL < – 20℃)	COPd	NA	–
Bivalent temperature	Tbiv	-7	℃	For air-to-water heat pumps: Operation limit temperature	TOL	-10	℃
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	–
				Heating water operating limit temperature	WTOL	60	℃
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P_{OFF}	0.025	kW	Rated heat output (*)	Psup	0.8	kW
Thermostat-off mode	P_{TO}	0.025	kW	Type of energy input	Electric		
Standby mode	P_{SB}	0.025	kW				
Crankcase heater mode	P_{CK}	0.025	kW				
Other items							
Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	–	3200	m 3 /h
Sound power level, indoors/outdoors	L_{WA}	47/62	dB	For water- or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	–	NA	m 3 /h
Annual energy consumption	Q_{HE}	2216	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	116	%
Daily electricity consumption	Qelec	4.2215	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	885	kWh	Annual fuel consumption	AFC	NA	GJ
Contact details: sat.eurofredgroup.com.				Name of the supplier: EUROFRED S.A.C/ Marqus de Sentmenat, 97 08029 Barcelon			
(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.							

Information requirements (heat pump space heaters and heat pump combination heaters)							
Model(s): URBAN_AOWD_14							
Air-to-water heat pump	Y			Low-temperature heat pump	N		
Water-to-water heat pump	N			Equipped with a supplementary heater	Y		
Brine-to-water heat pump	N			Heat pump combination heater	Y		
Parameters declared for	Low-temperature application						
Parameters declared for	Colder climate condition						
Item	symbol	value	unit	Item	symbol	value	unit
Rated heat output (*)	Prated	4	kW	Seasonal space heating energy efficiency	ηs	145	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = – 7 ℃	Pdh	2.4	kW	Tj = – 7 ℃	COPd	2.68	–
Degradation co-efficient (**)	Cdh	0.97	–				
Tj = 2 ℃	Pdh	2.3	kW	Tj = 2 ℃	COPd	5.34	–
Degradation co-efficient (**)	Cdh	0.94	–				
Tj = 7 ℃	Pdh	2.7	kW	Tj = 7 ℃	COPd	7.04	–
Degradation co-efficient (**)	Cdh	0.94	–				
Tj = 12℃	Pdh	2.6	kW	Tj = 12℃	COPd	6.90	–
Degradation co-efficient (**)	Cdh	0.93	–				
Tj = bivalent temperature	Pdh	3.1	kW	Tj = bivalent temperature	COPd	2.06	–
Tj = operation limit temperature	Pdh	2.8	kW	Tj = operation limit temperature	COPd	1.19	–
For air-to-water heat pumps: Tj = – 15℃ (if TOL < – 20℃)	Pdh	3.1	kW	For air-to-water heat pumps: Tj = – 15℃ (if TOL < – 20℃)	COPd	2.03	–
Bivalent temperature	Tbiv	-15	℃	For air-to-water heat pumps: Operation limit temperature	TOL	-22	℃
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	–
				Heating water operating limit temperature	WTOL	60	℃
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P_{OFF}	0.025	kW	Rated heat output (*)	Psup	1.3	kW
Thermostat-off mode	P_{TO}	0.025	kW	Type of energy input	Electric		
Standby mode	P_{SB}	0.025	kW				
Crankcase heater mode	P_{CK}	0.025	kW				
Other items							
Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	–	3200	m 3 /h
Sound power level, indoors/outdoors	L_{WA}	47/62	dB	For water- or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	–	NA	m 3 /h
Annual energy consumption	Q_{HE}	2662	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	91	%
Daily electricity consumption	Qelec	5.399	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1125	kWh	Annual fuel consumption	AFC	NA	GJ
Contact details: sat.eurofredgroup.com.				Name of the supplier: EUROFRED S.A.C/ Marqus de Sentmenat, 97 08029 Barcelon			
(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.							

Information requirements (heat pump space heaters and heat pump combination heaters)							
Model(s): URBAN_AOWD_14							
Air-to-water heat pump	Y			Low-temperature heat pump	N		
Water-to-water heat pump	N			Equipped with a supplementary heater	Y		
Brine-to-water heat pump	N			Heat pump combination heater	Y		
Parameters declared for	Low-temperature application						
Parameters declared for	Warmer climate condition						
Item	symbol	value	unit	Item	symbol	value	unit
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	ηs	232	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = – 7 ℃	Pdh	NA	kW	Tj = – 7 ℃	COPd	NA	–
Degradation co-efficient (**)	Cdh	NA	–				
Tj = 2 ℃	Pdh	4.8	kW	Tj = 2 ℃	COPd	3.46	–
Degradation co-efficient (**)	Cdh	0.98	–				
Tj = 7 ℃	Pdh	3.3	kW	Tj = 7 ℃	COPd	5.57	–
Degradation co-efficient (**)	Cdh	0.96	–				
Tj = 12℃	Pdh	2.9	kW	Tj = 12℃	COPd	7.60	–
Degradation co-efficient (**)	Cdh	0.93	–				
Tj = bivalent temperature	Pdh	4.8	kW	Tj = bivalent temperature	COPd	3.46	–
Tj = operation limit temperature	Pdh	4.8	kW	Tj = operation limit temperature	COPd	3.46	–
For air-to-water heat pumps: Tj = – 15℃ (if TOL < – 20℃)	Pdh	NA	kW	For air-to-water heat pumps: Tj = – 15℃ (if TOL < – 20℃)	COPd	NA	–
Bivalent temperature	Tbiv	2	℃	For air-to-water heat pumps: Operation limit temperature	TOL	2	℃
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	–
				Heating water operating limit temperature	WTOL	60	℃
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P_{OFF}	0.025	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P_{TO}	0.025	kW	Type of energy input	Electric		
Standby mode	P_{SB}	0.025	kW				
Crankcase heater mode	P_{CK}	0.025	kW				
Other items							
Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	–	3200	m 3 /h
Sound power level, indoors/outdoors	L_{WA}	47/62	dB	For water- or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	–	NA	m 3 /h
Annual energy consumption	Q_{HE}	1137	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	122	%
Daily electricity consumption	Qelec	3.9914	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	838	kWh	Annual fuel consumption	AFC	NA	GJ
Contact details: sat.eurofredgroup.com.				Name of the supplier: EUROFRED S.A.C/ Marqus de Sentmenat, 97 08029 Barcelon			
(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.							


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