

Information requirements (heat pump space heaters and heat pump combination heaters)							
Model(s): R-AQUA CGW-IU 16 M1 + R-AQUA CGW-OU 16 M1							
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	13	kW	Seasonal space heating energy efficiency	η_s	131	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T_j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T_j			
$T_j = -7\text{ °C}$	Pdh	11.6	kW	$T_j = -7\text{ °C}$	COPd	1.96	-
Degradation co-efficient (**)	Cdh	1.00	-				
$T_j = 2\text{ °C}$	Pdh	7.3	kW	$T_j = 2\text{ °C}$	COPd	3.33	-
Degradation co-efficient (**)	Cdh	0.99	-				
$T_j = 7\text{ °C}$	Pdh	4.2	kW	$T_j = 7\text{ °C}$	COPd	4.48	-
Degradation co-efficient (**)	Cdh	0.97	-				
$T_j = 12\text{ °C}$	Pdh	3.1	kW	$T_j = 12\text{ °C}$	COPd	5.65	-
Degradation co-efficient (**)	Cdh	0.95	-				
$T_j = \text{bivalent temperature}$	Pdh	11.6	kW	$T_j = \text{bivalent temperature}$	COPd	1.96	-
$T_j = \text{operation limit temperature}$	Pdh	11.0	kW	$T_j = \text{operation limit temperature}$	COPd	1.81	-
For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if $TOL < -20\text{ °C}$)	Pdh	NA	kW	For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if $TOL < -20\text{ °C}$)	COPd	NA	-
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	Ppsych	NA	kW	Cycling interval efficiency	COPcyc	NA	-
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P_{OFF}	0.025	kW	Rated heat output (*)	P_{sup}	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	-	5015	m ³ /h
Sound power level, indoors/outdoors	L_{WA}	42/68	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}	7958	kWh				
For heat pump combination heater:							
Declared load profile	XL			Water heating energy efficiency	η_{wh}	108	%
Daily electricity consumption	Q_{elec}	7.393	kWh	Daily fuel consumption	Q_{fuel}	NA	kWh
Annual electricity consumption	AEC	1542	kWh	Annual fuel consumption	AFC	NA	GJ
(*) 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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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	13	kW	Seasonal space heating energy efficiency	η_s	175	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T_j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T_j			
$T_j = -7\text{ °C}$	Pdh	11.1	kW	$T_j = -7\text{ °C}$	COPd	2.68	-
Degradation co-efficient (**)	Cdh	0.99	-				
$T_j = 2\text{ °C}$	Pdh	6.5	kW	$T_j = 2\text{ °C}$	COPd	4.35	-
Degradation co-efficient (**)	Cdh	0.98	-				
$T_j = 7\text{ °C}$	Pdh	4.2	kW	$T_j = 7\text{ °C}$	COPd	6.05	-
Degradation co-efficient (**)	Cdh	0.96	-				
$T_j = 12\text{ °C}$	Pdh	3.3	kW	$T_j = 12\text{ °C}$	COPd	7.34	-
Degradation co-efficient (**)	Cdh	0.94	-				
$T_j = \text{bivalent temperature}$	Pdh	11.1	kW	$T_j = \text{bivalent temperature}$	COPd	2.68	-
$T_j = \text{operation limit temperature}$	Pdh	10.7	kW	$T_j = \text{operation limit temperature}$	COPd	2.61	-
For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if $TOL < -20\text{ °C}$)	Pdh	NA	kW	For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if $TOL < -20\text{ °C}$)	COPd	NA	-
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	Ppsych	NA	kW	Cycling interval efficiency	COPcyc	NA	-
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P_{OFF}	0.025	kW	Rated heat output (*)	P_{sup}	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	-	5015	m ³ /h
Sound power level, indoors/outdoors	L_{WA}	42/68	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}	6027	kWh				
For heat pump combination heater:							
Declared load profile	XL			Water heating energy efficiency	η_{wh}	108	%
Daily electricity consumption	Q_{elec}	7.393	kWh	Daily fuel consumption	Q_{fuel}	NA	kWh
Annual electricity consumption	AEC	1542	kWh	Annual fuel consumption	AFC	NA	GJ
(*) 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.							