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

Model(s): R-AQUA CGW-M 16 A1

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	14	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	12.3	kW	Tj = − 7 ℃	COPd	2.18	–
Degradation co-efficient (**)	Cdh	1.00	–				
Tj = 2 ℃	Pdh	6.9	kW	Tj = 2 ℃	COPd	3.81	–
Degradation co-efficient (**)	Cdh	0.99	–				
Tj = 7 ℃	Pdh	4.5	kW	Tj = 7 ℃	COPd	4.56	–
Degradation co-efficient (**)	Cdh	0.97	–				
Tj = 12℃	Pdh	3.0	kW	Tj = 12℃	COPd	7.07	–
Degradation co-efficient (**)	Cdh	0.94	–				
Tj = bivalent temperature	Pdh	12.3	kW	Tj = bivalent temperature	COPd	2.18	–
Tj = operation limit temperature	Pdh	8.5	kW	Tj = operation limit temperature	COPd	1.41	–
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	65	℃
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P_OFF	0.025	kW	Rated heat output (*)	Psup	5.5	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, outdoors	L_WA	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	7768	kWh				
For heat pump combination heater:							
Declared load profile	XL			Water heating energy efficiency	ηwh	110	%
Daily electricity consumption	Qelec	7.243	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1518	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.

<table>
<tr><td colspan="6" align="center">Information requirements
(heat pump space heaters and heat pump combination heaters)</td></tr>
</table>

Model(s): R-AQUA CGW-M 16 A1					
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	14	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	12.2	kW	Tj = − 7 ℃	COPd	2.68	–
Degradation co-efficient (**)	Cdh	0.99	–				
Tj = 2 ℃	Pdh	7.1	kW	Tj = 2 ℃	COPd	4.39	–
Degradation co-efficient (**)	Cdh	0.98	–				
Tj = 7 ℃	Pdh	4.7	kW	Tj = 7 ℃	COPd	6.86	–
Degradation co-efficient (**)	Cdh	0.96	–				
Tj = 12℃	Pdh	3.5	kW	Tj = 12℃	COPd	10.30	–
Degradation co-efficient (**)	Cdh	0.93	–				
Tj = bivalent temperature	Pdh	12.2	kW	Tj = bivalent temperature	COPd	2.68	–
Tj = operation limit temperature	Pdh	11.2	kW	Tj = operation limit temperature	COPd	2.38	–
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	65	℃
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P_OFF	0.025	kW	Rated heat output (*)	Psup	2.8	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	–	5015	m 3 /h
Sound power level, outdoors	L_WA	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	6072	kWh				
For heat pump combination heater:							
Declared load profile	XL			Water heating energy efficiency	ηwh	110	%
Daily electricity consumption	Qelec	7.243	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1518	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.