	(heat p	ump space h	eaters and h	neat pump combination heaters)				
Model(s): R-AQUA CGW-M 08 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	9	kW	Seasonal space heating energy efficiency	ηs	145	%	
Declared capacity for heating for part outdoor tem		or temperatu	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C a				
Tj = −7 °C	Pdh	8.3	kW	Tj = −7 °C	COD4	2.22		
Degradation co-efficient (**)	Cdh	0.99	-		COPd	2.33	_	
Tj = 2 ℃	Pdh	5.2	kW	T: - 2 °C	COD4	3.57	_	
Degradation co-efficient (**)	Cdh	0.98	_	Tj = 2 ℃	COPd			
Tj = 7 ℃	Pdh	3.3	kW	T: _ 7. °C	COPd	4.96	_	
Degradation co-efficient (**)	Cdh	0.97	_	Tj = 7 ℃				
Tj = 12℃	Pdh	3.0	kW	- Tj = 12℃	COPd	6.56	_	
Degradation co-efficient (**)	Cdh	0.96	_					
Tj = bivalent temperature	Pdh	8.3	kW	Tj = bivalent temperature	COPd	2.33	_	
Tj = operation limit temperature	Pdh	8.7	kW	Tj = operation limit temperature	COPd	1.81	_	
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if $TOL < -20^{\circ}C$ )	Pdh	NA	kW	For air-to-water heat pumps: $Tj = -15^{\circ}\mathbb{C}$ (if $TOL < -20^{\circ}\mathbb{C}$ )	COPd	NA	_	
Bivalent temperature	Tbiv	-7	$^{\circ}$ C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	$^{\circ}$	
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	-	
				Heating water operating limit temperature	WTOL	65	$^{\circ}$	
Power consumption in mod	des other tha	n active mod	Supplementary heater					
Off mode	$P_{OFF}$	0.025	kW	Rated heat output (*)	Psup	0.3	kW	
Thermostat-off mode	$P_{TO}$	0.025	kW		Electric			
Standby mode	$P_{SB}$	0.025	kW	Type of energy input				
Crankcase heater mode	$P_{CK}$	0.025	kW					
Other	items							
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	_	5800	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	$Q_{\text{HE}}$	5206	kWh		_	111 3 /11		
		For	heat pump co	mbination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	123	%	
Daily electricity consumption	Qelec	6.506	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1358	kWh	Annual fuel consumption	AFC	NA	GJ	

<sup>(\*)</sup> 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.

	(heat p			requirements neat pump combination heaters)				
Model(s): R-AQUA CGW-M 08 A1				The second secon	,			
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	8	kW	Seasonal space heating energy efficiency	ηs	177	%	
Declared capacity for heating for part outdoor tem		or temperatu	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C a				
Tj = −7 °C	Pdh	7.4	kW	-				
Degradation co-efficient (**)	Cdh	0.99	-	Tj = − 7 °C	COPd	3.12	_	
Tj = 2 ℃	Pdh	4.4	kW	- Tj = 2 ℃	COPd	4.44	-	
Degradation co-efficient (**)	Cdh	0.98	-					
Tj = 7 ℃	Pdh	3.0	kW	E: 1.00	COPd	5.31	_	
Degradation co-efficient (**)	Cdh	0.95	-	Tj = 7 ℃				
Tj = 12℃	Pdh	3.2	kW	- Tj = 12℃	COPd	7.69	_	
Degradation co-efficient (**)	Cdh	0.94	-					
Tj = bivalent temperature	Pdh	7.4	kW	Tj = bivalent temperature	COPd	3.12	_	
Tj = operation limit temperature	Pdh	7.8	kW	Tj = operation limit temperature	COPd	2.77	_	
For air-to-water heat pumps: $Tj = -15^{\circ} (\text{if TOL} < -20^{\circ} )$	Pdh	NA	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if $TOL < -20^{\circ}C$ )	COPd	NA	-	
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	$^{\circ}$	
Cycling interval capacity for heating	Pcych	NA	kW	Cycling interval efficiency	COPcyc	NA	_	
				Heating water operating limit temperature	WTOL	65	$^{\circ}$	
Power consumption in mo	des other tha	n active mod	Supplemen	ntary heater				
Off mode	$P_{OFF}$	0.025	kW	Rated heat output (*)	Psup	0.2	kW	
Thermostat-off mode	P <sub>TO</sub>	0.025	kW					
Standby mode	$P_{SB}$	0.025	kW	Type of energy input	Electric			
Crankcase heater mode	$P_{CK}$	0.025	kW					
Other	items		l .					
Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	5800	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	$Q_{HE}$	3827	kWh					
		For 1	heat pump co	ombination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	123	%	
Daily electricity consumption	Qelec	6.506	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1358	kWh	Annual fuel consumption	AFC	NA	GJ	
(*) For heat numn chace heaters and h	eat numn co	mhination ha	aters the rot.	ed heat output Prated is equal to the de	sian load for	heating Ddes	ianh	

<sup>(\*)</sup> 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.