	(heat n			requirements eat pump combination heaters)				
Model(s): R-AQUA CGW-IU 14 M				eut pump combination neuters)				
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	ηs	131	%	
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	11.6	kW	Tj = −7 °C	COPd	1.96		
Degradation co-efficient (**)	Cdh	1.00	-		COru	1.96	_	
Tj = 2 ℃	Pdh	7.3	kW	- Tj = 2 ℃	COPd	3.33	-	
Degradation co-efficient (**)	Cdh	0.99	-		COru			
Tj = 7 ℃	Pdh	4.2	kW	- Tj = 7 ℃	COPd	4.48	_	
Degradation co-efficient (**)	Cdh	0.97	-					
Tj = 12℃	Pdh	3.1	kW	T; = 12°C	COD4	5.65	-	
Degradation co-efficient (**)	Cdh	0.95	-	Tj = 12℃	COPd	5.65		
Tj = bivalent temperature	Pdh	11.6	kW	Tj = bivalent temperature	COPd	1.96	-	
Tj = operation limit temperature	Pdh	11.0	kW	Tj = operation limit temperature	COPd	1.81	-	
For air-to-water heat pumps: $Tj = -15^{\circ} (\text{if TOL} < -20^{\circ} C)$	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	$^{\circ}$	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	60	$^{\circ}$	
Power consumption in modes other than active mode				Supplementary heater				
Off mode	P <sub>OFF</sub>	0.025	kW	Rated heat output (*)	Psup	2.0	kW	
Thermostat-off mode	P <sub>TO</sub>	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	_	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 l	heat pump co	mbination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	108	%	
Daily electricity consumption	Qelec	7.393	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1542	kWh	Annual fuel consumption	AFC	NA	GJ	
(*) For heat pump space heaters and h	eat pump co	mbination he	aters, the rate	ed heat output Prated is equal to the de	sign load for	heating Pdes	ignh.	

<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 n			requirements eat pump combination heaters)				
Model(s): R-AQUA CGW-IU 14 M				eut pump combination neuters)				
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	12	kW	Seasonal space heating energy efficiency	ηs	175	%	
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	10.5	kW	Tj = −7 °C	COD4	2.64	_	
Degradation co-efficient (**)	Cdh	0.99	-		COPd			
Tj = 2 ℃	Pdh	6.5	kW	T; − 2 °C	COPd	4.48	-	
Degradation co-efficient (**)	Cdh	0.98	-	Tj = 2 ℃				
Tj = 7 ℃	Pdh	4.2	kW	- Tj = 7 ℃	COPd	5.75	_	
Degradation co-efficient (**)	Cdh	0.97	-		COPa			
Tj = 12℃	Pdh	3.2	kW	Tj=12℃	COD4	7.24	-	
Degradation co-efficient (**)	Cdh	0.94	-		COPd	7.24		
Tj = bivalent temperature	Pdh	10.5	kW	Tj = bivalent temperature	COPd	2.64	-	
Tj = operation limit temperature	Pdh	10.7	kW	Tj = operation limit temperature	COPd	2.61	-	
For air-to-water heat pumps: $Tj = -15^{\circ} (\text{if TOL} < -20^{\circ} C)$	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	$^{\circ}$	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	60	$^{\circ}$	
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 <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	,						
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	$Q_{HE}$	5552	kWh					
		For l	heat pump co	mbination heater:				
Declared load profile		XL		Water heating energy efficiency	ηwh	108	%	
Daily electricity consumption	Qelec	7.393	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	1542	kWh	Annual fuel consumption	AFC	NA	GJ	
(A) F. L. (A) L. (A)				nd heat output Prated is equal to the de	. 1 10	1 D.	· 1	

<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.