	(heat n			requirements neat pump combination heaters)			
Model(s): GRS-CQ10PdG/NhH3-M	(пеат р	ump space n	- arcis and i	teat pump combination neaters)			
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	1		
Parameters declared for				Average climate condition			
Item	symbol	value	unit	Item	symbol value unit		
Rated heat output (*)	Prated	9	kW	Seasonal space heating energy	,	129	%
				efficiency	ης		
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	7.65	kW	T:- 7 °C	COD4	2.20	
Degradation co-efficient (**)	Cdh	0.99	_	Tj = − 7 °C	COPd	2.29	_
Tj = 2 ℃	Pdh	4.66	kW	T: 2 %	CODI		
Degradation co-efficient (**)	Cdh	0.98	-	Tj = 2 ℃	COPd	3.24	_
Tj = 7 ℃	Pdh	3.08	kW			4.05	
Degradation co-efficient (**)	Cdh	0.97	-	Tj = 7 ℃	COPd	4.05	_
Tj = 12℃	Pdh	3.21	kW	E: 12°C	COPd	5.24	
Degradation co-efficient (**)	Cdh	0.96	-	Tj = 12℃			_
Tj = bivalent temperature	Pdh 7.65 kW		kW	Tj = bivalent temperature	COPd	2.29	-
Tj = operation limit temperature	Pdh	7.01 kW		Tj = operation limit temperature	COPd	2.07	-
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	$^{\circ}$
	D 1 N4	1-337	Cycling interval efficiency	COPcyc	NA	_	
Cycling interval capacity for heating	Pcych	NA	kW	Heating water operating limit temperature	WTOL	65	${\mathbb C}$
Power consumption in mod	des other tha	n active mod	le	Supplementary heater			
Off mode	$P_{OFF}$	0.025	kW	Rated heat output (*)	Psup	1.99	kW
Thermostat-off mode	$P_{TO}$	0.025	kW				
Standby mode	$P_{SB}$	0.025	kW	Type of energy input	Electric		
Crankcase heater mode	$P_{\rm CK}$	0	kW				
Other	items						
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4972	m 3 /h
Sound power level, outdoors	$L_{wa}$	64	dB	For water- or brine-to-water heat pumps: Rated brine or water flow		NA	m 3 /h
Annual energy consumption	$Q_{\text{HE}}$	5380	kWh			INA m 3 /	
		For l	heat pump co	ombination heater:			
Declared load profile		L		Water heating energy efficiency	ηwh	117	%
Daily electricity consumption	Qelec	4.256	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption Contact details:	AEC	878	kWh	Annual fuel consumption  Name of the supplier:	AFC	NA	GJ
West Jinji Rd, Qianshan, Zhuhai, Guar		na, 519070		GREE ELECTRIC APPLIANCES,IN			

<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 eat pump combination heaters)					
Model(s): GRS-CQ10PdG/NhH3-M	· · · · · · ·	F - F							
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	1				
Parameters declared for				Colder climate condition					
Item	symbol	symbol value unit		Item	symbol	value	unit		
Rated heat output (*)	Prated 8 kW		kW	Seasonal space heating energy efficiency	ηs	111	%		
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	5.25	kW	T: 7 %	COD4	2.39			
Degradation co-efficient (**)	Cdh	0.99	-	Tj = −7 °C	COPd	2.39	_		
Tj = 2 ℃	Pdh	3.19	kW	Tj = 2 ℃	COPd	2.20			
Degradation co-efficient (**)	Cdh	0.97	-	1j – 2 C	COPa	3.39	_		
Tj = 7 ℃	Pdh	2.43	kW	T: - 7 °C	COD4	4.93			
Degradation co-efficient (**)	Cdh	0.95	-	Tj = 7 ℃	COPd	4.93	_		
Tj = 12°C	Pdh	3.26	kW	T' 12°C	CODI	5.61			
Degradation co-efficient (**)	Cdh	0.96	_	$Tj = 12^{\circ}C$	COPd		_		
Tj = bivalent temperature	Pdh 6.44 kW		kW	Tj = bivalent temperature	COPd	1.65	-		
Tj = operation limit temperature	Pdh	Pdh 5.19 kW		Tj = operation limit temperature	COPd	1.23	_		
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if $TOL < -20^{\circ}C$ )	Pdh	6.44	kW	For air-to-water heat pumps: $Tj = -15^{\circ}\mathbb{C}$ (if $TOL < -20^{\circ}\mathbb{C}$ )	COPd	1.65	-		
Bivalent temperature	Tbiv	v -15 °C		For air-to-water heat pumps: Operation limit temperature	TOL	-22	$^{\circ}$		
		1 ***	Cycling interval efficiency	СОРсус	NA	_			
Cycling interval capacity for heating	Pcych	NA	kW	Heating water operating limit temperature	WTOL 65		$^{\circ}$		
Power consumption in mo	des other tha	n active mod	le	Supplemen	ntary heater				
Off mode	$P_{OFF}$	0.025	kW	Rated heat output (*)	Psup	2.81	kW		
Thermostat-off mode	$P_{TO}$	0.025	kW						
Standby mode	$P_{SB}$	0.025	kW	Type of energy input		Electric			
Crankcase heater mode	$P_{CK}$	0	kW						
Other	items								
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	_	4972	m 3 /h		
Sound power level, outdoors	$L_{wa}$	64	dB	For water- or brine-to-water heat pumps: Rated brine or water flow		NA	m 3 /h		
Annual energy consumption	$Q_{\rm HE}$	6820	kWh	rate, outdoor heat exchanger	_	NA .	111 3 711		
		For	heat pump co	mbination heater:					
Declared load profile		L		Water heating energy efficiency	ηwh	90	%		
Daily electricity consumption	Qelec	5.416	kWh	Daily fuel consumption	Qfuel	NA	kWh		
Annual electricity consumption	AEC	1133	kWh	Annual fuel consumption	AFC	NA	GJ		
Contact details: West Jinji Rd, Qianshan, Zhuhai, Gua	<u> </u>			Name of the supplier: GREE ELECTRIC APPLIANCES,IN and heat output Prated is equal to the de-					

<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 heat pump combination heaters)				
Model(s): GRS-CQ10PdG/NhH3-M	(neat p	ump space n		near pump combination nearers)				
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	symbol value unit		Item	symbol value un		unit	
Rated heat output (*)	Prated 10 kW		kW	Seasonal space heating energy efficiency	ηs	160	%	
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	NA	kW	TP: 7 00	COPd	NT A		
Degradation co-efficient (**)	Cdh	NA	_	- Tj = − 7 °C	COPa	NA	_	
Tj = 2 ℃	Pdh	9.51	kW	- Tj = 2 °C	COPd	2.47		
Degradation co-efficient (**)	Cdh	0.99	_	IJ = 2 C	COru	2.47	_	
Tj = 7 ℃	Pdh	5.84	kW	Tj = 7 ℃	COPd	3.56		
Degradation co-efficient (**)	Cdh	0.99	_	IJ = 7 C	COru	3.30	_	
Tj = 12℃	Pdh	2.78	kW		COPd	5.02		
Degradation co-efficient (**)	Cdh	0.96	_	11 - 12 C	COFu		_	
Tj = bivalent temperature	Pdh 9.51 kW		kW	Tj = bivalent temperature	COPd	2.47	_	
Tj = operation limit temperature	Pdh	dh 9.51 kW		Tj = operation limit temperature	COPd	2.47	_	
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	Tbiv 2 °C		For air-to-water heat pumps: Operation limit temperature	TOL	2	°C	
		1-337	Cycling interval efficiency	COPcyc	NA	_		
Cycling interval capacity for heating	Pcych	NA	kW	Heating water operating limit temperature	WTOL	65	${\mathbb C}$	
Power consumption in mod	des other tha	n active mod	le	Supplementary heater				
Off mode	$P_{\rm OFF}$	0.025	kW	Rated heat output (*)	Psup	0.49	kW	
Thermostat-off mode	$P_{TO}$	0.025	kW					
Standby mode	$P_{SB}$	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	$P_{\rm CK}$	0	kW					
Other	items							
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4972	m 3 /h	
Sound power level, outdoors	$L_{WA}$	64	dB	For water- or brine-to-water heat pumps: Rated brine or water flow		NA	m 3 /h	
Annual energy consumption	$Q_{\text{HE}}$	3109	kWh	rate, outdoor heat exchanger	– NA		111 3 /11	
		For 1	heat pump co	ombination heater:				
Declared load profile		L		Water heating energy efficiency	ηwh	118	%	
Daily electricity consumption	Qelec	4.236	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	867	kWh	Annual fuel consumption	AFC	NA	GJ	
Contact details: West Jinji Rd, Qianshan, Zhuhai, Gua	ngdong, Chir	na, 519070		Name of the supplier: GREE ELECTRIC APPLIANCES,IN	C. OF ZHUI	HAI		

<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.

	(hoat n			requirements eat pump combination heaters)			
Model(s): GRS-CQ10PdG/NhH3-M	(neat p	шир ѕрасе п	eaters and n	eat pump combination neaters)			
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 9 kW		kW	Seasonal space heating energy efficiency	ηs	179	%
Declared capacity for heating for part outdoor tem		or temperatur	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C a			
Tj = −7 °C	Pdh	7.76	kW	T: _ 7 %	COD4	2.15	
Degradation co-efficient (**)	Cdh	0.99	-	Tj = − 7 °C	COPd	3.15	_
Tj = 2 °C	Pdh	4.90	kW	T: 2 °C	CODI		
Degradation co-efficient (**)	Cdh	0.98	-	Tj = 2 ℃	COPd	4.59	_
Tj = 7 °C	Pdh	3.04	kW	T: 5 %	con.	5.40	
Degradation co-efficient (**)	Cdh	0.96	-	Tj = 7 ℃	COPd	5.49	_
Tj = 12℃	Pdh	3.28	kW		COPd	6.83	
Degradation co-efficient (**)	Cdh	0.95	-	$Tj = 12^{\circ}C$			_
Tj = bivalent temperature	Pdh	Pdh 7.76 kW		Tj = bivalent temperature	COPd	3.15	_
Tj = operation limit temperature	Pdh	Pdh 7.14 kW		Tj = operation limit temperature	COPd	2.76	_
For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if $TOL < -20^{\circ}C$ )	Pdh	NA	kW	For air-to-water heat pumps: $T_j = -15 \degree \text{ (if TOL} < -20 \degree \text{ )}$	COPd	NA	_
Bivalent temperature	Tbiv	Tbiv -7 °C		For air-to-water heat pumps: Operation limit temperature	TOL	-10	$^{\circ}$
		1 ***	Cycling interval efficiency	COPcyc	NA	_	
Cycling interval capacity for heating	Pcych	NA	kW	Heating water operating limit temperature	WTOL 65		$^{\circ}$
Power consumption in mo-	des other tha	n active mod	e	Supplementary heater			
Off mode	P <sub>OFF</sub>	0.025	kW	Rated heat output (*)	Psup	1.86	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	kW				
Other	items						
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	_	4972	m 3 /h
Sound power level, outdoors	$L_{WA}$	64	dB	For water- or brine-to-water heat pumps: Rated brine or water flow		NIA	2 /h
Annual energy consumption	$Q_{HE}$	3962	kWh	rate, outdoor heat exchanger	_	NA	m 3 /h
		For 1	heat pump co	mbination heater:			
Declared load profile		L		Water heating energy efficiency	ηwh	117	%
Daily electricity consumption	Qelec	4.256	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	878	kWh	Annual fuel consumption	AFC	NA	GJ
Contact details: West Jinji Rd, Qianshan, Zhuhai, Gua				Name of the supplier: GREE ELECTRIC APPLIANCES,IN			. 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.

	(heat n			requirements neat pump combination heaters)			
Model(s): GRS-CQ10PdG/NhH3-M	(пеат р	ump space n	- arcis and i	teat pump combination neaters)			
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	1		
Parameters declared for				Colder climate condition			
Item	symbol	value	unit	Item	symbol value unit		
Rated heat output (*)	Prated	8		Seasonal space heating energy	,	149	%
				efficiency	ηs		
Declared capacity for heating for part outdoor tem		or temperatu	re 20 °C and	Declared coefficient of performance of indoor temperature 20 °C a	or primary en and outdoor t	ergy ratio for emperature T	part load at
Tj = − 7 °C	Pdh	5.22	kW	T. 7 %	COPd	3.62	
Degradation co-efficient (**)	Cdh	0.98	-	Tj = −7 °C	COPa	3.62	_
Tj = 2 ℃	Pdh	3.27	kW	T: - 2 °C	COPd	4.20	
Degradation co-efficient (**)	Cdh	0.97	-	Tj = 2 ℃	COPa	4.29	_
Tj = 7 ℃	Pdh	2.53	kW			5.29	
Degradation co-efficient (**)	Cdh	0.95	_	Tj = 7 °C	COPd	3.29	_
Tj = 12°C	Pdh	3.33	kW	T: 12°C	CODI	6.84	
Degradation co-efficient (**)	Cdh	0.95	_	Tj = 12℃	COPd		_
Tj = bivalent temperature	Pdh 6.46 kW		kW	Tj = bivalent temperature	COPd	2.68	_
Tj = operation limit temperature	Pdh	3.15 kW		Tj = operation limit temperature	COPd	1.43	_
For air-to-water heat pumps: $Tj = -15^{\circ} (\text{if TOL} < -20^{\circ} )$	Pdh	6.46 kW		For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if $TOL < -20^{\circ}C$ )	COPd	2.68	_
Bivalent temperature	Tbiv	Tbiv -15 ℃		For air-to-water heat pumps: Operation limit temperature	TOL	-22	$^{\circ}$
	D 1 N4	1-337	Cycling interval efficiency	COPcyc	NA	_	
Cycling interval capacity for heating	Pcych	NA	kW	Heating water operating limit temperature	WTOL	65	${\mathbb C}$
Power consumption in mo	des other tha	n active mod	le	Supplementary heater			
Off mode	$P_{OFF}$	0.025	kW	Rated heat output (*)	Psup	4.85	kW
Thermostat-off mode	$P_{TO}$	0.025	kW				
Standby mode	$P_{SB}$	0.025	kW	Type of energy input	Electric		
Crankcase heater mode	$P_{\rm CK}$	0	kW				
Other	items						
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4972	m 3 /h
Sound power level, outdoors	$L_{WA}$	64	dB	For water- or brine-to-water heat pumps: Rated brine or water flow		NIA	m 3 /h
Annual energy consumption	$Q_{\text{HE}}$	5115	kWh	rate, outdoor heat exchanger	- NA		5 /11
		For 1	heat pump co	ombination heater:			
Declared load profile		L		Water heating energy efficiency	ηwh	90	%
Daily electricity consumption	Qelec	5.416	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption Contact details:	AEC	1133	kWh	Annual fuel consumption	AFC	NA	GJ
West Jinji Rd, Qianshan, Zhuhai, Gua		na, 519070		Name of the supplier: GREE ELECTRIC APPLIANCES,IN			

<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 neat pump combination heaters)				
Model(s): GRS-CQ10PdG/NhH3-M	(псат р	ump space n		teat pump combination neaters)				
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	10	kW	Seasonal space heating energy efficiency	ηs	230	%	
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	NA	kW					
Degradation co-efficient (**)	Cdh	NA	-	Tj = − 7 °C	COPd	NA	_	
Tj = 2 ℃	Pdh	9.55	kW	Ti: 0.00	GOD 1	2.20		
Degradation co-efficient (**)	Cdh	0.99	-	Tj = 2 ℃	COPd	3.38	_	
Tj = 7 ℃	Pdh	5.83	kW					
Degradation co-efficient (**)	Cdh	0.98	_	Tj = 7 ℃	COPd	5.07	_	
Tj = 12℃	Pdh	2.78	kW	T: 1000	GOD 1	7.32		
Degradation co-efficient (**)	Cdh	0.93	-	Tj = 12℃	COPd		_	
Tj = bivalent temperature	Pdh 9.55 kW		kW	Tj = bivalent temperature	COPd	3.38	-	
Tj = operation limit temperature	Pdh	Pdh 9.55 kW		Tj = operation limit temperature	COPd	3.38	_	
For air-to-water heat pumps: Tj = -15	Pdh	NA	kW	For air-to-water heat pumps: $Tj = -15^{\circ}C$ (if $TOL < -20^{\circ}C$ )	COPd	NA	_	
Bivalent temperature	Tbiv	2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	$^{\circ}$	
		1 777	Cycling interval efficiency	СОРсус	NA	_		
Cycling interval capacity for heating	Pcych	NA	kW	Heating water operating limit temperature	WTOL 65		$^{\circ}$	
Power consumption in mo	des other tha	n active mod	le	Supplementary heater				
Off mode	$P_{\rm OFF}$	0.025	kW	Rated heat output (*)	Psup	0.45	kW	
Thermostat-off mode	$P_{TO}$	0.025	kW					
Standby mode	$P_{\scriptscriptstyle SB}$	0.025	kW	Type of energy input		Electric		
Crankcase heater mode	$P_{CK}$	0	kW					
Other	items							
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4972	m 3 /h	
Sound power level, outdoors	$L_{wa}$	64	dB	For water- or brine-to-water heat		NIA	m 3 /h	
Annual energy consumption	$Q_{\text{HE}}$	2182	kWh	pumps: Rated brine or water flow rate, outdoor heat exchanger		INA	111 3 /11	
		For 1	heat pump co	ombination heater:				
Declared load profile		L		Water heating energy efficiency	ηwh	118	%	
Daily electricity consumption	Qelec	4.236	kWh	Daily fuel consumption	Qfuel	NA	kWh	
Annual electricity consumption	AEC	867	kWh	Annual fuel consumption	AFC	NA	GJ	
Contact details: West Jinji Rd, Qianshan, Zhuhai, Gua	ngdong, Chi	na, 519070		Name of the supplier: GREE ELECTRIC APPLIANCES,IN	C. OF ZHUI	HAI		

<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.

