Information requirements for comfort chillers

Model(s):	**MC-SU90M/RN1L**
Outdoor side heat exchanger of chiller:	Air to water
Indoor side heat exchanger chiller:	Water to air
Type:	Compressor driven vapour compression
Driver of compressor:	Electric motor

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	82.35	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	150.11	%
Declared cooling capacity for part load at given outdoor temperature T_j				Declared energy efficiency ratio for part load at given outdoor temperature T_j			
T_j = + 35 °C	P_{dc}	82.35	kW	T_j = + 35 °C	EER_d	2.17	--
T_j = + 30 °C	P_{dc}	63.25	kW	T_j = + 30 °C	EER_d	3.57	--
T_j = + 25 °C	P_{dc}	41.75	kW	T_j = + 25 °C	EER_d	4.46	--
T_j = + 20 °C	P_{dc}	31.25	kW	T_j = + 20 °C	EER_d	6.02	--
Degradation co-efficient for chillers (*)	C_{dc}	0.9	--				
Power consumption in modes other than 'active mode'							
Off mode	P_{OFF}	0.04	kW	Crankcase heater mode	P_{CK}	0.04	kW
Thermostat-off mode	P_{TO}	1.40	kW	Standby mode	P_{SB}	0.04	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	--	38000	m^3/h
Sound power level, indoors / outdoors	L_{WA}	-/89	dB	For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	--	--	m^3/h
Emissions of nitrogen oxides (if applicable)	NO_X (**)	--	mg/kWh input GCV				
GWP of the refrigerant	--	2088	kg $CO_{2\,eq}$ (100 years)				

Standard rating conditions used:	Low temperature application
Contact details	GD Midea Heating & Ventilating Equipment Co. , Ltd. Penglai industry Road, Beijiao, Shunde, Foshan, Guangdong, 528311 P.R. China.

(*) If C_d is not determined by measurement then the default degradation coefficient of chillers shall be 0,9.
(**) From 26 September 2018.

Information requirements for heat pump space heaters and heat pump combination heaters

Model(s):	MC-SU90M/RN1L
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	YES
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	AVERAGE

Parameters are declared for low-temperature application.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	31	KW	Seasonal space heating energy efficiency	ηs	147	%
Declared capacity for heating for part load at outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at outdoor temperature Tj			
Tj = -7 °C	Pdh	57.63	KW	Tj = -7 °C	COPd	147	-
Tj = 2 °C	Pdh	34.88	KW	Tj = 2 °C	COPd	3.54	-
Tj = 7 °C	Pdh	27.11	KW	Tj = 7 °C	COPd	4.93	-
Tj = 12 °C	Pdh	31.93	KW	Tj = 12 °C	COPd	6.33	-
Tj=bivalent temperature	Pdh	57.63	KW	Tj=bivalent temperature	COPd	2.41	-
Tj = operating limit	Pdh	64.13	KW	Tj = operating limit	COPd	2.07	-
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	KW	For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
Bivalent temperature	Tbiv	-10	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity forheating	Pcy ch	-	KW	Cycling interval efficiency	COPcy c	-	-
Degradation co-efficient (**)	Cdh	--	--	Heating water operating limit temperature	WTOL	-	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	Pof f	1.00	kW	Rated heat output (**)	Psup		
Standby mode	Psb	0.04	kW				
Thermostat-off mode	Pto	0.04	kW	Type of energy input			
Crankcase heater mode	Pck	0.04	kW				
Other items							
Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	24000	m^3/h
Sound power level, outdoors	LWA	89	dB	For water- or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m^3/h
Annual energy consumption	QHE	--	kWh				
For heat pump combination heater:							
Declared load profile	-			**Water heating energy efficiency**	ηwh	-	%
Daily electricity consumption	Qelec	-	kWh	Daily fuel consumption	Qf uel	-	kWh
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ
Contact details	GD Midea Heating & Ventilating Equipment Co. Ltd (Penglai industry road, Beijiao, Shunde, Foshan, Guangdong, PR China)						

(*) 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 =0.99.