Information requirements for comfort chillers							
Model(s):	MC-SU90-RN8L-B						
Outdoor side heat exchanger of chiller:	Air to water						
Indoor side heat exchanger chiller:	Water						
Type:	Compressor driven vapour compression						
Driver of compressor:	Electric motor						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	81.85	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	180.18	%
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}	81.85	kW	T_j = + 35°C	EER_d	2.93	--
T_j = + 30°C	P_{dc}	59.44	kW	T_j = + 30°C	EER_d	4.20	--
T_j = + 25°C	P_{dc}	38.49	kW	T_j = + 25°C	EER_d	5.28	--
T_j = + 20°C	P_{dc}	26.51	kW	T_j = + 20°C	EER_d	5.91	--
Degradation co-efficient for chillers (*)	C_{dc}	0.9	--				
Power consumption in modes other than 'active mode'							
Off mode	P_{OFF}	0.090	kW	Crankcase heater mode	P_{CK}	0	kW
Thermostat-off mode	P_{TO}	0.700	kW	Standby mode	P_{SB}	0.090	kW
Other items							
Capacity control	Variable			For air-to-water comfort chillers: air flow rate, outdoor measured	--	35000	m^3/h
Sound power level, indoors/outdoors	L_{WA}	83	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	--	675	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_{dc} 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-SU90-RN8L-B						
Air-to-water heat pump:	[yes]						
Water-to-water heat pump:	[yes/no]						
Brine-to-water heat pump:	[yes/no]						
Low-temperature heat pump:	[yes/no]						
Equipped with a supplementary heater:	[yes/no]						
Heat pump combination heater:	[yes/no]						
For low-temperature heat pumps, parameters shall be declared for low-temperature application. Otherwise, parameters shall be declared for medium-temperature application. Parameters shall be declared for average climate conditions.							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output(3) at Tdesignh = -10 (-11) °C	Prated =Pdesignh	77.1	kW	Seasonal space heating energy efficiency	η_s	155.90	%
Seasonal coefficient of performance	SCOP	3.97	--	Active mode coef. of performance	$SCOP_{on}$	--	--
				Net seasonal coef. of performance	$SCOP_{net}$	--	--
T_j = -7°C	Pdh	68.21	kW	T_j = -7°C	COPd	2.49	--
T_j = +2°C	Pdh	43.18	kW	T_j = +2°C	COPd	3.78	--
T_j = +7°C	Pdh	27.65	kW	T_j = +7°C	COPd	5.63	--
T_j = +12°C	Pdh	28.53	kW	T_j = +12°C	COPd	5.70	--
T_j = bivalent temperature	Pdh	68.21	kW	T_j = bivalent temperature	COPd	2.49	--
T_j = operation limit temperature	Pdh	71.09	kW	T_j = operation limit temperature	COPd	2.36	--
For air-to-water heat pumps: T_j = – 15 °C (if TOL < – 20 °C)	Pdh	--	kW	For air-to-water heat pumps: T_j = –15°C (if TOL<–20°C)	COPd	--	--
Bivalent temperature (maximum +2°C)	Tbiv	-7	°C	For air-to-water HP: Operation limit temperature(maximum-7°C)	TOL	-10	°C
Cycling interval capacity for heating at T_j = -7°C	Pcych	--	kW				
Degradation coefficient(4) at T= -7°C	Cdh	--	--	Heating water operating limit temperature	WTOL	--	°C
Cycling interval capacity for heating at T_j = +2°C	Pcych	--	kW	Cycling interval efficiency at T_j = +7°C	COPcyc	--	--
Degradation coefficient(4) at T= +2°C	Cdh	--	--				
Cycling interval capacity for heating at T_j = +7°C	Pcych	--	kW	Cycling interval capacity for heating at T_j=+12°C	COPcyc	--	--
Degradation coefficient(4) at T_j = +7°C	Cdh	--	--	Cycling interval efficiency at T_j = +7°C	COPcyc	--	--
Cycling interval capacity for heating at T_j=+12°C	Pcych	--	kW	Cycling interval capacity for heating at Tj=+12°C	COPcyc	--	--
Degradation coefficient(4) at T_j = +12°C	Cdh	--	--				
Power consumption in modes other than active mode				Supplementary heater (to be declared even if not provided in the unit)			
Off mode	P_{OFF}	0.090	kW	Rated heat output(3)	Psup = sup(Tj)	--	kW
Thermostat-off mode	P_{TO}	0.700	kW	Type of energy input			
Standby mode	P_{SB}	0.090	kW	Outdoor heat exchanger			
Crankcase heater mode	P_{CK}	0	kW	For air-to-water HP: Rated air flow rate	$Q_{airsource}$	35000	m^3/h
Other items				For water-to-water: Rated water flow rate	$Q_{watersource}$	--	m^3/h
Capacity control	Fixed/Variable	Variable		For brine-to-water: Rated brine flow rate	$Q_{brinesource}$	--	m^3/h
Sound power level, indoors	L_{WA}	--	dB(A)				
Sound power level, outdoors	L_{WA}	83	dB(A)				
Contact details	Name and address of the manufacturer or its authorised representative.						
(1) 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). (2) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.							