




MC-SU60M-RN1L



35°C




A⁺



86 dB



31 kW



2015 811/2013

Information requirements for comfort chillers							
Model(s):		MC-SU60M/RN1L					
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	$P_{rated,c}$	55.0	kW	Seasonal space cooling energy efficiency	η_{sc}	168	%
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			
$T_j = +35\text{ }^\circ\text{C}$	P_{sc}	55.0	kW	$T_j = +35\text{ }^\circ\text{C}$	EER_d	2.44	--
$T_j = +30\text{ }^\circ\text{C}$	P_{sc}	43.35	kW	$T_j = +30\text{ }^\circ\text{C}$	EER_d	3.62	--
$T_j = +25\text{ }^\circ\text{C}$	P_{sc}	27.78	kW	$T_j = +25\text{ }^\circ\text{C}$	EER_d	5.25	--
$T_j = +20\text{ }^\circ\text{C}$	P_{sc}	14.81	kW	$T_j = +20\text{ }^\circ\text{C}$	EER_d	6.51	--
Degradation co-efficient for chillers (*)	C_{sc}	0.9	--				
Power consumption in modes other than 'active mode'							
Off mode	P_{OFF}	0.075	kW	Crankcase heater mode	P_{CK}	0.075	kW
Thermostat-off mode	P_{TO}	0.6	kW	Standby mode	P_{SB}	0.075	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	--	24000	m ³ /h
Sound power level, indoors / outdoors	L_{WA}	-87	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. Penglaj industry Road, Beijiao, Shunde, Foshan, Guangdong, 528311 P.R. China.						
(*) If C_{sc} is not determined by measurement then the default degradation coefficient of chillers shall be 0.9. (**) From 26 September 2018.							
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Information requirements for heat pump space heaters and heat pump combination heaters							
Model(s):		MC-SU60M/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	η_s	135	%
Declared capacity for heating for part load at outdoor temperature T_j				Declared coefficient of performance or primary energy ratio for part load at outdoor temperature T_j			
$T_j = -7\text{ }^\circ\text{C}$	Pdh	26.1	kW	$T_j = -7\text{ }^\circ\text{C}$	COPd	2.59	-
$T_j = 2\text{ }^\circ\text{C}$	Pdh	16.7	kW	$T_j = 2\text{ }^\circ\text{C}$	COPd	3.56	-
$T_j = 7\text{ }^\circ\text{C}$	Pdh	11.8	kW	$T_j = 7\text{ }^\circ\text{C}$	COPd	3.87	-
$T_j = 12\text{ }^\circ\text{C}$	Pdh	11.2	kW	$T_j = 12\text{ }^\circ\text{C}$	COPd	5.70	-
TJ=bivalent temperature	Pdh	31.0	kW	TJ=bivalent temperature	COPd	2.32	-
Tj = operating limit	Pdh	31.0	kW	Tj = operating limit	COPd	2.32	-
For air-to-water heat pumps: $T_j = -15\text{ }^\circ\text{C}$	Pdh	-	kW	For air-to-water heat pumps: $T_j = -15\text{ }^\circ\text{C}$	COPd	-	-
Bivalent temperature	Tbiv	-10	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	C
Cycling interval capacity for heating	Pcy ch	-	kW	Cycling interval efficiency	COPcy c	-	-
Degradation co-efficient (**)	Cdh	0.99	--	Heating water operating limit temperature	WTOL	35	C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	Pof f	0.075	kW	Rated heat output (**)	Psup		
Standby mode	Psb	0.075	kW	Type of energy input			
Thermostat-off mode	Pto	0.600	kW				
Crankcase heater mode	Pck	0.075	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	86	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	18998	kWh				
For heat pump combination heater:							
Declared load profile				Water heating energy efficiency			
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 (Penglaj 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.							

