




ENERG
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MC-SU30M-RN1L




35°C




A⁺



-- dB



78 dB



■ -- W k
■ 18 kW
■ -- kW

2015
811/2013

Information requirements for comfort chillers							
Model(s):		MC-SU30M/RN1L-2					
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	$P_{rated,c}$	28.2	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	154	%
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			
$T_j = +35\text{ °C}$	P_{dc}	28.2	kW	$T_j = +35\text{ °C}$	$EER_{s,c}$	2.58	--
$T_j = +30\text{ °C}$	P_{dc}	22.3	kW	$T_j = +30\text{ °C}$	$EER_{s,c}$	3.74	--
$T_j = +25\text{ °C}$	P_{dc}	14.67	kW	$T_j = +25\text{ °C}$	$EER_{s,c}$	5.23	--
$T_j = +20\text{ °C}$	P_{dc}	8.51	kW	$T_j = +20\text{ °C}$	$EER_{s,c}$	7.14	--
Degradation co-efficient for chillers (*)	C_{dc}	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}	0.425	kW	Standby mode	P_{sb}	0.075	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	12500	m ³ /h
Sound power level, indoors / outdoors	L_{WA}	-78	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_{dc} 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-SU30M-RN1L-2					
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	20.8	KW	Seasonal space heating energy efficiency	η_s	128	%
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			
$T_j = -7\text{ °C}$	P_{dh}	18.47	KW	$T_j = -7\text{ °C}$	COPd	2.56	-
$T_j = 2\text{ °C}$	P_{dh}	10.26	KW	$T_j = 2\text{ °C}$	COPd	3.64	-
$T_j = 7\text{ °C}$	P_{dh}	6.69	KW	$T_j = 7\text{ °C}$	COPd	4.73	-
$T_j = 12\text{ °C}$	P_{dh}	6.63	KW	$T_j = 12\text{ °C}$	COPd	6.04	-
T_j =bivalent temperature	P_{dh}	18.47	KW	T_j =bivalent temperature	COPd	2.56	-
T_j = operating limit	P_{dh}	21.18	KW	T_j = operating limit	COPd	2.25	-
For air-to-water heat pumps: $T_j = -15\text{ °C}$	P_{dh}	-	KW	For air-to-water heat pumps: $T_j = -15\text{ °C}$	COPd	-	-
Bivalent temperature	T_{biv}	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	C
Cycling interval capacity for heating	$P_{cy, ch}$	-	KW	Cycling interval efficiency	COP _{cy, c}	-	-
Degradation co-efficient (**)	C_{dh}	0.9	--	Heating water operating limit temperature	WTOL	-	C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P_{off}	0.075	kW	Rated heat output (**)	P_{sup}		
Standby mode	P_{sb}	0.075	kW	Type of energy input			
Thermostat-off mode	P_{to}	0.5	kW				
Crankcase heater mode	P_{ck}	0.075	kW				
Other items							
Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	12500	m ³ /h
Sound power level, outdoors	LWA	78	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	13189	kWh				
For heat pump combination heater:							
Declared load profile	-			Water heating energy efficiency	η_{wh}	-	%
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, P.R 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 C_{dh} is not determined by measurement then the default degradation coefficient is $C_{dh} = 0$,							

