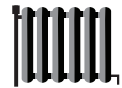




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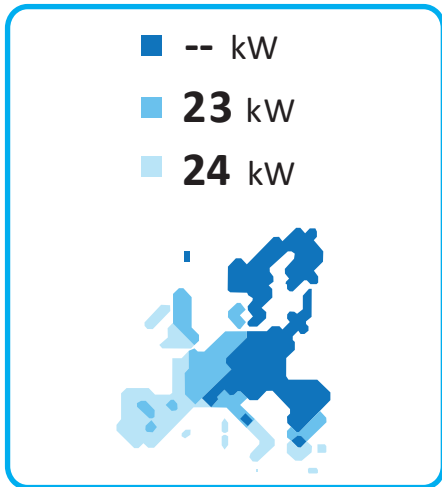
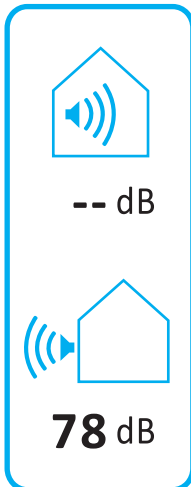
MC-SU30-RN8L



35°C



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Midea®

## APPLICABLE MODELS AND MAIN PARAMETERS

Model		MC-SU30-RN8L	MC-SU60-RN8L
Cooling capacity	kW	27.5	55
Heating capacity	kW	32.0	62
Standard cooling input	kW	10.3	21.5
Cooling rated current	A	15.9	33.1
Standard heating input	kW	10.0	20.0
Heating rated current	A	15.4	30.8
Power supply	380-415V 3N~ 50Hz		
Operation control	Control of wired controller, auto startup, running state display, failure alert etc.		
Safety device	High or low pressure switch, freeze-proof device, water flow volume controller, Overcurrent device, power phase sequence device etc.		
Refrigerant	Type	R32	
	Chargeing volume kg	7.9	14.0
Water pipe system	Waterflow volume m <sup>3</sup> /h	5.0	9.8
	Hydraulic resistance lose kPa	55	61
	Water side heat exchanger	Plate heat exchanger	
	Max. pressure MPa	1.0	
	Min. pressure MPa	0.05	
	Inlet and outlet pipe dia.	DN40	DN50
Air side heat exchanger	Type	Fin coil model	
	Air flow volume m <sup>3</sup> /h	12500	24000
Outline dimension N.W. of the unit	L mm	1870	2220
	W mm	1000	1055
	H mm	1175	1325
Net Weight	kg	300	480
Operation Weight	kg	310	490
Packing dimension	L × W × H mm	1910×1035×1225	2250×1090×1370

# INFORMATION REQUIREMENTS

Information requirements for comfort chillers							
Model(s):	MC-SU30-RN8L						
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	$P_{rated,c}$	28.95	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	181.5	%
Declared cooling capacity for part load at given outdoor temperature $T_j$				Declared energy efficiency ratio for part load at given outdoor temperature $T_j$			
$T_j = + 35^{\circ}\text{C}$	$P_{dc}$	28.95	kW	$T_j = + 35^{\circ}\text{C}$	$EER_d$	2.65	--
$T_j = + 30^{\circ}\text{C}$	$P_{dc}$	21.11	kW	$T_j = + 30^{\circ}\text{C}$	$EER_d$	3.90	--
$T_j = + 25^{\circ}\text{C}$	$P_{dc}$	13.15	kW	$T_j = + 25^{\circ}\text{C}$	$EER_d$	5.35	--
$T_j = + 20^{\circ}\text{C}$	$P_{dc}$	6.58	kW	$T_j = + 20^{\circ}\text{C}$	$EER_d$	6.90	--
Degradation co-efficient for chillers (*)	$C_{dc}$	0.90	--				
Power consumption in modes other than 'active mode'							
Off mode	$P_{OFF}$	0.02	kW	Crankcase heater mode	$P_{CK}$	0	kW
Thermostat-off mode	$P_{TO}$	0.171	kW	Standby mode	$P_{SB}$	0.02	kW
Other items							
Capacity control	Variable			For air-to-water comfort chillers: air flow rate, outdoor measured	--	12500	$\text{m}_3/\text{h}$
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	--	--	$\text{m}_3/\text{h}$
Emissions of nitrogen oxides (if applicable)	$\text{NO}_x(**)$	--	mg/kWh input GCV				
GWP of the refrigerant	--	675	kg $\text{CO}_2$ 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-SU30-RN8L					
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]	
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 <sup>(3)</sup> at T <sub>designh</sub> = -10 (-11) °C	Prated = P <sub>designh</sub>	23.65	kW	Seasonal space heating energy efficiency	η <sub>s</sub>	166.8	%
Seasonal coefficient of performance	SCOP	4.24	--	Active mode coef. of performance	SCOP <sub>on</sub>	--	--
				Net seasonal coef. of performance	SCOP <sub>net</sub>	--	--
T <sub>j</sub> = -7°C	P <sub>dh</sub>	20.92	kW	T <sub>j</sub> = -7°C	COP <sub>d</sub>	2.86	--
T <sub>j</sub> = +2°C	P <sub>dh</sub>	12.85	kW	T <sub>j</sub> = +2°C	COP <sub>d</sub>	3.98	--
T <sub>j</sub> = +7°C	P <sub>dh</sub>	8.66	kW	T <sub>j</sub> = +7°C	COP <sub>d</sub>	5.75	--
T <sub>j</sub> = +12°C	P <sub>dh</sub>	8.7	kW	T <sub>j</sub> = +12°C	COP <sub>d</sub>	6.82	--
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	20.92	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	2.86	--
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	23.57	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	2.57	--
For air-to-water heat pumps: T <sub>j</sub> = -15 °C (if TOL < -20 °C)	P <sub>dh</sub>	--	kW	For air-to-water heat pumps: T <sub>j</sub> = -15°C (if TOL < -20°C)	COP <sub>d</sub>	--	--
Bivalent temperature (maximum +2°C)	T <sub>biv</sub>	-10	°C	For air-to-water HP : Operation limit temperature (maximum -7°C)	TOL	-10	°C
Cycling interval capacity for heating at T <sub>j</sub> = -7°C	P <sub>cyh</sub>	--	kW	Heating water operating limit temperature	WTOL	--	°C
Degradation coefficient <sup>(4)</sup> at T = -7°C	C <sub>dh</sub>	--	--	Cycling interval efficiency at T <sub>j</sub> = +7°C	COP <sub>cyh</sub>	--	--
Cycling interval capacity for heating at T <sub>j</sub> = +2°C	P <sub>cyh</sub>	--	kW	Cycling interval capacity for heating at T <sub>j</sub> = +12°C	COP <sub>cyh</sub>	--	--
Degradation coefficient <sup>(4)</sup> at T = +2°C	C <sub>dh</sub>	--	--	Cycling interval efficiency at T <sub>j</sub> = +7°C	COP <sub>cyh</sub>	--	--
Cycling interval capacity for heating at T <sub>j</sub> = +7°C	P <sub>cyh</sub>	--	kW	Cycling interval capacity for heating at T <sub>j</sub> = +12°C	COP <sub>cyh</sub>	--	--
Degradation coefficient <sup>(4)</sup> at T <sub>j</sub> = +7°C	C <sub>dh</sub>	--	--	Supplementary heater (to be declared even if not provided in the unit)			
Cycling interval capacity for heating at T <sub>j</sub> = +12°C	P <sub>cyh</sub>	--	kW	Rated heat output(3)	P <sub>sup</sub> = sup(T <sub>j</sub> )	x, x	kW
Degradation coefficient <sup>(4)</sup> at T <sub>j</sub> = +12°C	C <sub>dh</sub>	--	--	Type of energy input			
Power consumption in modes other than active mode				Outdoor heat exchanger			
Off mode	P <sub>OFF</sub>	0.02	kW	For air-to-water HP: Rated air flow rate	Q <sub>airsource</sub>	12500	m <sup>3</sup> /h
Thermostat-off mode	P <sub>TO</sub>	0.198	kW	For water-to-water: Rated water flow rate	Q <sub>watersource</sub>	x	m <sup>3</sup> /h
Standby mode	P <sub>SB</sub>	0.02	kW	For brine-to-water: Rated brine flow rate	Q <sub>brinesource</sub>	x	m <sup>3</sup> /h
Crankcase heater mode	P <sub>CK</sub>	0	kW				
Other items							
Capacity control	Fixed/Variable	Variable					
Sound power level, indoors	L <sub>WA</sub>	x	dB(A)				
Sound power level, outdoors	L <sub>WA</sub>	78	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.							