



**ENERG**  
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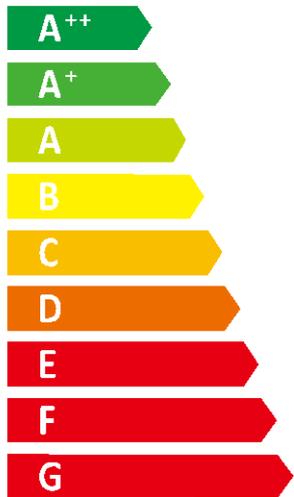


**MHC-V10W/D2N1**



55 °C

35 °C



-- dB

**66** dB

■ 10	■ 11
■ <b>11</b>	■ <b>10</b>
■ 10	■ 10
kW	kW

2015

811/2013

### Technical parameters

Model(s):	MHC-V10W/D2N1
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	YES
Heat pump combination heater:	NO

Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps. For low-temperature heat pumps, parameters shall be declared for low-temperature application.

Parameters shall be declared for average, colder and warmer climate conditions

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	11	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7°C	Pdh	10.0	kW
Tj = 2°C	Pdh	6.3	kW
Tj = 7°C	Pdh	4.0	kW
Tj = 12°C	Pdh	2.6	kW
Tj = bivalent temperature	Pdh	10.0	kW
Tj = operating limit	Pdh	10.9	kW
For air-to-water heat pumps: Tj = -15°C	Pdh	-	kW
Bivalent temperature	T <sub>biv</sub>	-7	°C
Cycling interval capacity for heating	P <sub>cych</sub>	-	kW
Degradation co-efficient (**)	C <sub>dh</sub>	0.9	--
Power consumption in modes other than active mode			
off mode	P <sub>off</sub>	0.017	kW
standby mode	P <sub>sb</sub>	0.017	kW
thermostat-off mode	P <sub>to</sub>	0.006	kW
crankcase heater mode	P <sub>ck</sub>	0.018	kW

Other items			
Capacity control	variable		
Sound power level, indoors/ outdoors	L <sub>WA</sub>	-/66	dB
Annual energy consumption	Q <sub>HE</sub>	7025	kWh or GJ

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η <sub>s</sub>	129	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7°C	COPd	2.01	-
Tj = 2°C	COPd	3.18	-
Tj = 7°C	COPd	4.54	-
Tj = 12°C	COPd	5.37	-
Tj = bivalent temperature	COPd	2.01	-
Tj = operating limit	COPd	1.76	-
For air-to-water heat pumps: Tj = -15°C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval efficiency	COP <sub>cyc</sub> or PERCyc	-	%
Heating water operating limit temperature	W <sub>TOL</sub>	49	°C
Supplementary heater			
Rated heat output (**)	P <sub>sup</sub>	0.4	kW
Type of energy input	Electrical Heating		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	6150	m³/h
For water- or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h

For heat pump combination heater:							
<b>Declared load profile</b>	-			<b>Water heating energy efficiency</b>	η <sub>wh</sub>	-	%
Daily electricity consumption	Q <sub>elec</sub>	-	kWh	Daily fuel consumption	Q <sub>fuel</sub>	-	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 Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

## Technical parameters

Model(s):	MHC-V10W/D2N1
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Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	YES
Heat pump combination heater:	NO
Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps. For low-temperature heat pumps, parameters shall be declared for low-temperature application.	
Parameters shall be declared for average, colder and warmer climate conditions	

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7°C	Pdh	6.2	kW
Tj = 2°C	Pdh	3.9	kW
Tj = 7°C	Pdh	2.5	kW
Tj = 12°C	Pdh	1.2	kW
Tj = bivalent temperature	Pdh	8.4	kW
Tj = operating limit	Pdh	7.1	kW
For air-to-water heat pumps: Tj = -15°C	Pdh	8.4	kW
Bivalent temperature	T <sub>biv</sub>	-15	°C
Cycling interval capacity for heating	P <sub>cych</sub>	-	kW
Degradation co-efficient (**)	C <sub>dh</sub>	0.9	--
Power consumption in modes other than active mode			
off mode	P <sub>off</sub>	0.017	kW
standby mode	P <sub>sb</sub>	0.017	kW
thermostat-off mode	P <sub>to</sub>	0.006	kW
crankcase heater mode	P <sub>ck</sub>	0.018	kW

Other items			
Capacity control	variable		
Sound power level, indoors/ outdoors	L <sub>WA</sub>	-66	dB
Annual energy consumption	Q <sub>HE</sub>	9946	kWh or GJ

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η <sub>s</sub>	99	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7°C	COP <sub>d</sub>	2.17	-
Tj = 2°C	COP <sub>d</sub>	3.00	-
Tj = 7°C	COP <sub>d</sub>	4.09	-
Tj = 12°C	COP <sub>d</sub>	3.10	-
Tj = bivalent temperature	COP <sub>d</sub>	1.68	-
Tj = operating limit	COP <sub>d</sub>	1.31	-
For air-to-water heat pumps: Tj = -15°C	COP <sub>d</sub>	1.68	-
For air-to-water heat pumps: Operation limit temperature	TOL	-20	°C
Cycling interval efficiency	COP <sub>cyc</sub> or PER <sub>cyc</sub>	-	%
Heating water operating limit temperature	W <sub>TOL</sub>	40	°C
Supplementary heater			
Rated heat output (**)	P <sub>sup</sub>	2.6	kW
Type of energy input	Electrical heating		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	6150	m <sup>3</sup> /h
For water- or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m <sup>3</sup> /h

For heat pump combination heater:							
<b>Declared load profile</b>	-			<b>Water heating energy efficiency</b>	η <sub>wh</sub>	-	%
Daily electricity consumption	Q <sub>elec</sub>	-	kWh	Daily fuel consumption	Q <sub>fuel</sub>	-	kWh
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ

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(\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Technical parameters							
Model(s):		MHC-V10W/D2N1					
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Brine-to-water heat pump:		NO					
Low-temperature heat pump:		NO					
Equipped with a supplementary heater:		YES					
Heat pump combination heater:		NO					
Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps. For low-temperature heat pumps, parameters shall be declared for low-temperature application.							
Parameters shall be declared for average, colder and warmer climate conditions							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10	kW	Seasonal space heating energy efficiency	$\eta_s$	153	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7°C	Pdh	-	kW	Tj = -7°C	COPd	-	-
Tj = 2°C	Pdh	10.2	kW	Tj = 2°C	COPd	2.35	-
Tj = 7°C	Pdh	6.6	kW	Tj = 7°C	COPd	3.38	-
Tj = 12°C	Pdh	3.0	kW	Tj = 12°C	COPd	4.95	-
Tj = bivalent temperature	Pdh	6.6	kW	Tj = bivalent temperature	COPd	3.38	-
Tj = operating limit	Pdh	10.2	kW	Tj = operating limit	COPd	2.35	-
For air-to-water heat pumps: Tj = -15°C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15°C	COPd	-	-
Bivalent temperature	T <sub>biv</sub>	7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval capacity for heating	P <sub>cych</sub>	-	kW	Cycling interval efficiency	COP <sub>cyc</sub> or PER <sub>cyc</sub>	-	%
Degradation co-efficient (**)	C <sub>dh</sub>	0.9	-	Heating water operating limit temperature	W <sub>TOL</sub>	60	°C
Power consumption in modes other than active mode				Supplementary heater			
off mode	P <sub>off</sub>	0.017	kW	Rated heat output (**)	P <sub>sup</sub>	0.1	kW
standby mode	P <sub>sb</sub>	0.017	kW	Type of energy input	Electrical heating		
thermostat-off mode	P <sub>to</sub>	0.006	kW				
crankcase heater mode	P <sub>ck</sub>	0.018	kW				
Other items							
Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	6150	m³/h
Sound power level, indoors/outdoors	L <sub>WA</sub>	-/66	dB	For water- or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h
Annual energy consumption	Q <sub>HE</sub>	3534	kWh or GJ				
For heat pump combination heater:							
Declared load profile	-			Water heating energy efficiency	$\eta_{wh}$	-	%
Daily electricity consumption	Q <sub>elec</sub>	-	kWh	Daily fuel consumption	Q <sub>fuel</sub>	-	kWh
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ
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(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.							