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Midea®

MHC-V12W/D2RN1





55°C

35°C




**A++**

**A++**

  
 -- dB  
  
**68** dB

■ 11	■ 12
■ <b>11</b>	■ <b>12</b>
■ 12	■ 12
kW	kW



2015

811/2013

### Technical parameters

Model(s):	MHC-V12W/D2RN1
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	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	11	kW	Seasonal space heating energy efficiency	$\eta_s$	131	%
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	9.7	kW	Tj = -7°C	COPd	2.00	-
Tj = 2°C	Pdh	6.2	kW	Tj = 2°C	COPd	3.21	-
Tj = 7°C	Pdh	4.1	kW	Tj = 7°C	COPd	4.67	-
Tj = 12°C	Pdh	3.0	kW	Tj = 12°C	COPd	5.68	-
Tj = bivalent temperature	Pdh	9.7	kW	Tj = bivalent temperature	COPd	2.00	-
Tj = operating limit	Pdh	11.5	kW	Tj = operating limit	COPd	1.76	-
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>	-10	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	P <sub>cych</sub>	-	kW	Cycling interval efficiency	COP <sub>cyc</sub> or PERCyc	-	%
Degradation co-efficient (**)	C <sub>dh</sub>	0.9	--	Heating water operating limit temperature	W <sub>TOL</sub>	49	°C
Power consumption in modes other than active mode				Supplementary heater			
off mode	P <sub>off</sub>	0.027	kW	Rated heat output (**)	P <sub>sup</sub>	0	kW
standby mode	P <sub>sb</sub>	0.027	kW	Type of energy input	Electrical heating		
thermostat-off mode	P <sub>to</sub>	0.006	kW				
crankcase heater mode	P <sub>ck</sub>	0.001	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>	-68	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>	6757	kWh or GJ				

For heat pump combination heater:

<b>Declared load profile</b>	-			<b>Water heating energy efficiency</b>	$\eta_{wh}$	-	%
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

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-V12W/D2RN1
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	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	11	kW	Seasonal space heating energy efficiency	$\eta_s$	108	%
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	7.8	kW	Tj = -7°C	COPd	2.32	-
Tj = 2°C	Pdh	4.5	kW	Tj = 2°C	COPd	3.35	-
Tj = 7°C	Pdh	2.9	kW	Tj = 7°C	COPd	4.44	-
Tj = 12°C	Pdh	2.4	kW	Tj = 12°C	COPd	4.73	-
Tj = bivalent temperature	Pdh	9.8	kW	Tj = bivalent temperature	COPd	1.89	-
Tj = operating limit	Pdh	7.3	kW	Tj = operating limit	COPd	1.40	-
For air-to-water heat pumps: Tj = -15°C	Pdh	9.3	kW	For air-to-water heat pumps: Tj = -15°C	COPd	1.80	-
Bivalent temperature	T <sub>biv</sub>	-14	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-20	°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>	40	°C
Power consumption in modes other than active mode				Supplementary heater			
off mode	P <sub>off</sub>	0.027	kW	Rated heat output (**)	P <sub>sup</sub>	4.4	kW
standby mode	P <sub>sb</sub>	0.027	kW	Type of energy input	Electrical heating		
thermostat-off mode	P <sub>to</sub>	0.006	kW				
crankcase heater mode	P <sub>ck</sub>	0.001	kW				

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L <sub>WA</sub>	-68	dB
Annual energy consumption	Q <sub>HE</sub>	10958	kWh or GJ

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:

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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### Technical parameters

Model(s):	MHC-V12W/D2RN1
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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	12	kW	Seasonal space heating energy efficiency	$\eta_s$	149	%
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	12.2	kW	Tj = 2°C	COPd	2.42	-
Tj = 7°C	Pdh	8.0	kW	Tj = 7°C	COPd	3.50	-
Tj = 12°C	Pdh	3.4	kW	Tj = 12°C	COPd	5.25	-
Tj = bivalent temperature	Pdh	8.0	kW	Tj = bivalent temperature	COPd	3.50	-
Tj = operating limit	Pdh	12.2	kW	Tj = operating limit	COPd	2.42	-
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>	0.3	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	m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	-68	dB	For water- or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m <sup>3</sup> /h
Annual energy consumption	Q <sub>HE</sub>	4386	kWh or GJ				

For heat pump combination heater:

<b>Declared load profile</b>	-			<b>Water heating energy efficiency</b>	$\eta_{wh}$	-	%
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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