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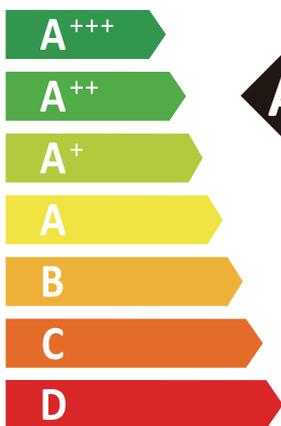
**Midea**

MHC-V30WD2RN7



55°C

35°C



**A++**

**A+++**

-- dB

**74dB**

■ 28	■ 28
■ <b>30</b>	■ <b>30</b>
■ 30	■ 30
kW	kW

2019

811/2013

## Technical parameters

Model(s):	MHC-V30WD2RN7
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:	NO
Heat pump combination heater:	NO
Declared climate condition:	AVERAGE

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	30	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	27.5	kW
Tj = 2 °C	Pdh	16.6	kW
Tj = 7 °C	Pdh	10.8	kW
Tj = 12 °C	Pdh	6.5	kW
Tj = bivalent temperature	Pdh	27.5	kW
Tj = operating limit	Pdh	30.1	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW
Bivalent temperature	Tbiv	-7	°C
Cycling interval capacity for heating	P <sub>cyh</sub>	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	P <sub>off</sub>	0.014	kW
Standby mode	P <sub>sb</sub>	0.013	kW
Thermostat-off mode	P <sub>to</sub>	0.014	kW
Crankcase heater mode	P <sub>ck</sub>	0.000	kW
Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L <sub>WA</sub>	-74	dB
Annual energy consumption	Q <sub>HE</sub>	16,346	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η <sub>s</sub>	148.7	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	2.06	-
Tj = 2 °C	COPd	3.70	-
Tj = 7 °C	COPd	5.51	-
Tj = 12 °C	COPd	7.00	-
Tj = bivalent temperature	COPd	2.06	-
Tj = operating limit	COPd	1.88	-
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>cyh</sub>	-	-
Heating water operating limit temperature	W <sub>TOL</sub>	85	°C
Supplementary heater			
Rated heat output (**)	P <sub>sup</sub>	0	kW
Type of energy input	Electrical		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	10,500	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	-						
Daily electricity consumption	Q <sub>elec</sub>	-	kWh	Water heating energy efficiency	η <sub>wh</sub>	-	%
Annual electricity consumption	AEC	-	kWh	Daily fuel consumption	Q <sub>fuel</sub>	-	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-V30WD2RN7
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:	NO
Heat pump combination heater:	NO
Declared climate condition:	COLDER

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	28	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	16.5	kW
Tj = 2 °C	Pdh	10.7	kW
Tj = 7 °C	Pdh	6.7	kW
Tj = 12 °C	Pdh	6.8	kW
Tj = bivalent temperature	Pdh	16.5	kW
Tj = operating limit	Pdh	19.9	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW
Bivalent temperature	Tbiv	-7	°C
Cycling interval capacity for heating	P <sub>cyh</sub>	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	P <sub>off</sub>	0.014	kW
Standby mode	P <sub>sb</sub>	0.013	kW
Thermostat-off mode	P <sub>to</sub>	0.014	kW
Crankcase heater mode	P <sub>ck</sub>	0.000	kW
Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L <sub>WA</sub>	-74	dB
Annual energy consumption	Q <sub>HE</sub>	21,950	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η <sub>s</sub>	122.8	%
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>	2.50	-
Tj = 2 °C	COP <sub>d</sub>	3.76	-
Tj = 7 °C	COP <sub>d</sub>	5.52	-
Tj = 12 °C	COP <sub>d</sub>	6.75	-
Tj = bivalent temperature	COP <sub>d</sub>	2.50	-
Tj = operating limit	COP <sub>d</sub>	1.70	-
For air-to-water heat pumps: Tj = -15 °C	COP <sub>d</sub>	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval efficiency	COP <sub>cyh</sub>	-	-
Heating water operating limit temperature	W <sub>TOL</sub>	85	°C
Supplementary heater			
Rated heat output (**)	P <sub>sup</sub>	7.06	kW
Type of energy input	-		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	10,500	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	-		
Daily electricity consumption	Q <sub>elec</sub>	-	kWh
Annual electricity consumption	AEC	-	kWh
Water heating energy efficiency	η <sub>wh</sub>	-	%
Daily fuel consumption	Q <sub>fuel</sub>	-	kWh
Annual fuel consumption	AFC	-	GJ

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(\*) 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-V30WD2RN7
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:	NO
Heat pump combination heater:	NO
Declared climate condition:	WARMER

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	30	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	-	kW
Tj = 2 °C	Pdh	29.8	kW
Tj = 7 °C	Pdh	19.1	kW
Tj = 12 °C	Pdh	9.1	kW
Tj = bivalent temperature	Pdh	19.1	kW
Tj = operating limit	Pdh	29.8	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW
Bivalent temperature	Tbiv	7	°C
Cycling interval capacity for heating	P <sub>cyh</sub>	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	P <sub>off</sub>	0.014	kW
Standby mode	P <sub>sb</sub>	0.013	kW
Thermostat-off mode	P <sub>to</sub>	0.014	kW
Crankcase heater mode	P <sub>ck</sub>	0.000	kW
Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L <sub>WA</sub>	-74	dB
Annual energy consumption	Q <sub>HE</sub>	8,177	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η <sub>s</sub>	193.1	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	-	-
Tj = 2 °C	COPd	2.44	-
Tj = 7 °C	COPd	4.03	-
Tj = 12 °C	COPd	6.70	-
Tj = bivalent temperature	COPd	4.03	-
Tj = operating limit	COPd	2.44	-
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval efficiency	COP <sub>cyh</sub>	-	-
Heating water operating limit temperature	W <sub>TOL</sub>	85	°C
Supplementary heater			
Rated heat output (**)	P <sub>sup</sub>	0.24	kW
Type of energy input	-		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	10,500	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	-		
Daily electricity consumption	Q <sub>elec</sub>	-	kWh
Annual electricity consumption	AEC	-	kWh
Water heating energy efficiency	η <sub>wh</sub>	-	%
Daily fuel consumption	Q <sub>fuel</sub>	-	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.

# Information requirements for comfort chillers

Model(s):	MHC-V30WD2RN7						
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	$P_{rated,c}$	30	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	196.8	%
Declared cooling capacity for part load at given outdoor temperature $T_j$				Declared energy efficiency ratio for part load at given outdoor temperature $T_j$			
$T_j=+35^\circ\text{C}$	$P_{dc}$	29.9	kW	$T_j=+35^\circ\text{C}$	$EER_d$	2.88	-
$T_j=+30^\circ\text{C}$	$P_{dc}$	22.3	kW	$T_j=+30^\circ\text{C}$	$EER_d$	3.97	-
$T_j=+25^\circ\text{C}$	$P_{dc}$	14.3	kW	$T_j=+25^\circ\text{C}$	$EER_d$	5.38	-
$T_j=+20^\circ\text{C}$	$P_{dc}$	6.7	kW	$T_j=+20^\circ\text{C}$	$EER_d$	8.56	-
Degradation co-efficient for chillers (*)	$C_{dc}$	0.9	-				
Power consumption in modes other than "active mode"							
Off mode	$P_{OFF}$	0.014	kW	Crankcase heater mode	$P_{CK}$	0.000	kW
Thermosat-off mode	$P_{TO}$	0.017	kW	Standby mode	$P_{SB}$	0.014	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	10500	m <sup>3</sup> /h
Sound power level, indoors / outdoors	LWA	-/74	dB				
Emissions of nitrogen oxides (if applicable)	$NO_x$ (**)	-	mg/kWh input GCV	For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m <sup>3</sup> /h
GWP of the refrigerant	-	3	kg CO <sub>2</sub> eq (100years)				
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 comfort chillers

Model(s):	MHC-V30WD2RN7						
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	$P_{rated,c}$	30	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	268.9	%
Declared cooling capacity for part load at given outdoor temperature $T_j$				Declared energy efficiency ratio for part load at given outdoor temperature $T_j$			
$T_j=+35^\circ\text{C}$	$P_{dc}$	30.3	kW	$T_j=+35^\circ\text{C}$	$EER_d$	4.28	-
$T_j=+30^\circ\text{C}$	$P_{dc}$	22.4	kW	$T_j=+30^\circ\text{C}$	$EER_d$	5.51	-
$T_j=+25^\circ\text{C}$	$P_{dc}$	14.4	kW	$T_j=+25^\circ\text{C}$	$EER_d$	7.40	-
$T_j=+20^\circ\text{C}$	$P_{dc}$	6.4	kW	$T_j=+20^\circ\text{C}$	$EER_d$	11.27	-
Degradation co-efficient for chillers (*)	$C_{dc}$	0.9	-				
Power consumption in modes other than "active mode"							
Off mode	$P_{OFF}$	0.014	kW	Crankcase heater mode	$P_{CK}$	0.000	kW
Thermosat-off mode	$P_{TO}$	0.017	kW	Standby mode	$P_{SB}$	0.014	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	10500	$\text{m}^3/\text{h}$
Sound power level, indoors / outdoors	$L_{WA}$	-/74	dB				
Emissions of nitrogen oxides (if applicable)	$\text{NO}_x$ (**)	-	mg/kWh input GCV	For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	$\text{m}^3/\text{h}$
GWP of the refrigerant	-	3	kg $\text{CO}_2$ eq (100years)				
Standard rating conditions used	Medium 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 comfort chillers

Model(s):	MHC-V30WD2RN7						
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	$P_{rated,c}$	32	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	190.0	%
Declared cooling capacity for part load at given outdoor temperature $T_j$				Declared energy efficiency ratio for part load at given outdoor temperature $T_j$			
$T_j=+35^\circ\text{C}$	$P_{dc}$	31.6	kW	$T_j=+35^\circ\text{C}$	$EER_d$	2.64	-
$T_j=+30^\circ\text{C}$	$P_{dc}$	23.4	kW	$T_j=+30^\circ\text{C}$	$EER_d$	3.93	-
$T_j=+25^\circ\text{C}$	$P_{dc}$	14.9	kW	$T_j=+25^\circ\text{C}$	$EER_d$	5.39	-
$T_j=+20^\circ\text{C}$	$P_{dc}$	6.4	kW	$T_j=+20^\circ\text{C}$	$EER_d$	7.69	-
Degradation co-efficient for chillers (*)	$C_{dc}$	0.9	-				
Power consumption in modes other than "active mode"							
Off mode	$P_{OFF}$	0.014	kW	Crankcase heater mode	$P_{CK}$	0.000	kW
Thermosat-off mode	$P_{TO}$	0.017	kW	Standby mode	$P_{SB}$	0.014	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	10500	m <sup>3</sup> /h
Sound power level, indoors / outdoors	$L_{WA}$	-75	dB				
Emissions of nitrogen oxides (if applicable)	$NO_x$ (**)	-	mg/kWh input GCV	For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m <sup>3</sup> /h
GWP of the refrigerant	-	3	kg CO <sub>2</sub> eq (100years)				
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 comfort chillers

Model(s):	MHC-V30WD2RN7						
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	$P_{rated,c}$	35	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	254.2	%
Declared cooling capacity for part load at given outdoor temperature $T_j$				Declared energy efficiency ratio for part load at given outdoor temperature $T_j$			
$T_j=+35^\circ\text{C}$	$P_{dc}$	35.1	kW	$T_j=+35^\circ\text{C}$	$EER_d$	3.84	-
$T_j=+30^\circ\text{C}$	$P_{dc}$	26.3	kW	$T_j=+30^\circ\text{C}$	$EER_d$	5.37	-
$T_j=+25^\circ\text{C}$	$P_{dc}$	16.7	kW	$T_j=+25^\circ\text{C}$	$EER_d$	70.4	-
$T_j=+20^\circ\text{C}$	$P_{dc}$	7.4	kW	$T_j=+20^\circ\text{C}$	$EER_d$	10.61	-
Degradation co-efficient for chillers (*)	$C_{dc}$	0.9	-				
Power consumption in modes other than "active mode"							
Off mode	$P_{OFF}$	0.014	kW	Crankcase heater mode	$P_{CK}$	0.000	kW
Thermosat-off mode	$P_{TO}$	0.017	kW	Standby mode	$P_{SB}$	0.014	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	10500	m <sup>3</sup> /h
Sound power level, indoors / outdoors	$L_{WA}$	-75	dB				
Emissions of nitrogen oxides (if applicable)	$NO_x$ (**)	-	mg/kWh input GCV	For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m <sup>3</sup> /h
GWP of the refrigerant	-	3	kg CO <sub>2</sub> eq (100years)				
Standard rating conditions used	Medium 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.							