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Midea

MHA-V4W/D2N8
SMK-60/CD30GN8
BS475

XXL

A+++

A+++
A++
A+
A
B
C
D

A+
A
B
C
D
E
F

A

43dB

61dB

6 kW
6 kW
6 kW

2019

811/2013

Product Fiche

Manufacture: GD Midea Heating & Ventilating Equipment Co.,Ltd.

Address: Penglai Industry Road, Beijiao, Shunde, Foshan, Guangdong, 528311, P.R. China

Importer: Frigicoll SA C/ BLASCO DE GARAY Nº4 08960 SANT JUST DESVERN BARCELONA Spain

Models		Climate condition	Sound power level(indoor/outdoor), L_{WA}[dB]	Medium - temperature application				Low-temperature application			
Outdoor unit	Indoor unit			Rated heat output [kW]	Energy efficiency	Annual energy consumption [kWh]	Energy efficiency classes	Rated heat output [kW]	Energy efficiency	Annual energy consumption [kWh]	Energy efficiency classes
MHA-V4W/D2N8	SMK-60/CGN8	Average	43 / 61	6	130.6%	3712	A++	6	187.5%	2692	A+++
		Colder	/	5	108.0%	4524	/	6	159.5%	3572	/
		Warmer	/	6	167.3%	1888	/	6	252.5%	1167	/
MHA-V6W/D2N8	SMK-60/CGN8	Average	43/ 62	6	130.6%	3712	A++	6	187.5%	2692	A+++
		Colder	/	5	108.0%	4524	/	5	159.5%	3572	/
		Warmer	/	6	167.3%	1888	/	6	252.5%	1167	/
MHA-V8W/D2N8	SMK-80/CGN8	Average	43 / 63	8	128.0%	4995	A++	9	188.4%	3834	A+++
		Colder	/	7	103.5%	6467	/	8	157.4%	4825	/
		Warmer	/	8	167.8%	2626	/	8	262.9%	1603	/
MHA-V10W/D2N8	SMK-80/CGN8	Average	43 /65	8	128.0%	4995	A++	9	188.4%	3834	A+++
		Colder	/	7	103.5%	6467	/	8	157.4%	4825	/
		Warmer	/	8	167.8%	2626	/	8	262.9%	1603	/

English
Model: Indoor
Model: Outdoor
Climate condition
Sound power level (Indoor/Outdoor)
Medium - temperature application
Low-temperature application
Rated heat output
Energy efficiency
Annual energy consumption
Energy efficiency classes

Español
Modelo: Interior
Modelo: Exterior
Condición climática
Nivel de potencia acústica
Aplicación a temperatura media
Aplicación a baja temperatura
Salida de calor nominal
Eficiencia energética
Consumo anual de energia
Clases de eficiencia energética

Française
Modèle: Intérieur
Modèle: Extérieur
Condition climatique
Niveau de puissance acoustique
Application à moyenne température
Application à basse température
Puissance thermique nominale
Efficacité énergétique
Consommation d'énergie annuelle
Classes d'efficacité énergétique

Technical parameters

Model(s):	Outdoor unit: MHA-V4W/D2N8 Indoor unit: SMK-60/CGN8
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	6.0	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7℃	Pdh	5.31	kW
Tj = 2℃	Pdh	3.38	kW
Tj = 7℃	Pdh	2.31	kW
Tj = 12℃	Pdh	1.34	kW
Tj = bivalent temperature	Pdh	5.31	kW
Tj = operating limit	Pdh	4.62	kW
For air-to-water heat pumps: Tj = -15℃	Pdh	-	kW
Bivalent temperature	T_{biv}	-7	°C
Cycling interval capacity for heating	P_{cych}	-	kW
Degradation co-efficient (**)	C_{dh}	0.9	--
Power consumption in modes other than active mode			
Off mode	P_{off}	0.029	kW
Standby mode	P_{sb}	0.015	kW
Thermostat-off mode	P_{to}	0.015	kW
Crankcase heater mode	P_{ck}	0.000	kW

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	130.6	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7℃	COPd	2.00	-
Tj = 2℃	COPd	3.23	-
Tj = 7℃	COPd	4.60	-
Tj = 12℃	COPd	6.10	-
Tj = bivalent temperature	COPd	2.00	-
Tj = operating limit	COPd	1.62	-
For air-to-water heat pumps: Tj = -15℃	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval efficiency	COP_{cyc}	-	-
Heating water operating limit temperature	W_{TOL}	60	°C
Supplementary heater			
Rated heat output (**)	P_{sup}	1.40	kW
Type of energy input	Electrical		

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L_{WA}	43/61	dB
Annual energy consumption	Q_{HE}	3712	kWh

For air-to-water heat pumps: Rated air flow rate, outdoors	-	3250	m^3/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m^3/h

For heat pump combination heater:							
Declared load profile	-			**Water heating energy efficiency**	η_{wh}	-	%
Daily electricity consumption	Q_{clec}	-	kWh	Daily fuel consumption	Q_{fuel}	-	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):	Outdoor unit: MHA-V4W/D2N8 Indoor unit: SMK-60/CGN8
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	5.1	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7℃	Pdh	3.24	kW
Tj = 2℃	Pdh	1.99	kW
Tj = 7℃	Pdh	1.51	kW
Tj = 12℃	Pdh	1.40	kW
Tj = bivalent temperature	Pdh	4.16	kW
Tj = operating limit	Pdh	2.89	kW
For air-to-water heat pumps: Tj = -15℃	Pdh	4.16	kW
Bivalent temperature	T_{biv}	-15	°C
Cycling interval capacity for heating	P_{cych}	-	kW
Degradation co-efficient (**)	C_{dh}	0.9	--
Power consumption in modes other than active mode			
Off mode	P_{off}	0.029	kW
Standby mode	P_{sb}	0.015	kW
Thermostat-off mode	P_{to}	0.015	kW
Crankcase heater mode	P_{ck}	0.000	kW

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	108.0	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7℃	COPd	2.36	-
Tj = 2℃	COPd	3.31	-
Tj = 7℃	COPd	4.80	-
Tj = 12℃	COPd	6.96	-
Tj = bivalent temperature	COPd	1.69	-
Tj = operating limit	COPd	1.14	-
For air-to-water heat pumps: Tj = -15℃	COPd	1.69	-
For air-to-water heat pumps: Operation limit temperature	TOL	-18	°C
Cycling interval efficiency	COP_{cyc}	-	-
Heating water operating limit temperature	W_{TOL}	60	°C
Supplementary heater			
Rated heat output (**)	P_{sup}	5.10	kW
Type of energy input	Electrical		

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L_{WA}	-	dB
Annual energy consumption	Q_{HE}	4524	kWh

For air-to-water heat pumps: Rated air flow rate, outdoors	-	3250	m^3/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m^3/h

For heat pump combination heater:							
Declared load profile	-			**Water heating energy efficiency**	η_{wh}	-	%
Daily electricity consumption	Q_{clec}	-	kWh	Daily fuel consumption	Q_{fuel}	-	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):	Outdoor unit: MHA-V4W/D2N8 Indoor unit: SMK-60/CGN8
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	6.0	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7℃	Pdh	-	kW
Tj = 2℃	Pdh	5.85	kW
Tj = 7℃	Pdh	3.87	kW
Tj = 12℃	Pdh	1.82	kW
Tj = bivalent temperature	Pdh	3.87	kW
Tj = operating limit	Pdh	5.85	kW
For air-to-water heat pumps: Tj = -15℃	Pdh	-	kW
Bivalent temperature	T_{biv}	7	°C
Cycling interval capacity for heating	P_{cych}	-	kW
Degradation co-efficient (**)	C_{dh}	0.9	--
Power consumption in modes other than active mode			
Off mode	P_{off}	0.029	kW
Standby mode	P_{sb}	0.015	kW
Thermostat-off mode	P_{to}	0.015	kW
Crankcase heater mode	P_{ck}	0.000	kW

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	167.3	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7℃	COPd	-	-
Tj = 2℃	COPd	2.30	-
Tj = 7℃	COPd	3.57	-
Tj = 12℃	COPd	5.72	-
Tj = bivalent temperature	COPd	3.57	-
Tj = operating limit	COPd	2.30	-
For air-to-water heat pumps: Tj = -15℃	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval efficiency	COP_{cyc}	-	-
Heating water operating limit temperature	W_{TOL}	60	°C
Supplementary heater			
Rated heat output (**)	P_{sup}	0	kW
Type of energy input	Electrical		

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L_{WA}	-	dB
Annual energy consumption	Q_{HE}	1888	kWh

For air-to-water heat pumps: Rated air flow rate, outdoors	-	3250	m^3/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m^3/h

For heat pump combination heater:							
Declared load profile	-			**Water heating energy efficiency**	η_{wh}	-	%
Daily electricity consumption	Q_{clec}	-	kWh	Daily fuel consumption	Q_{fuel}	-	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.

Information requirements for comfort chillers

Model(s):	Outdoor unit: MHA-V4W/D2N8 Indoor unit: SMK-60/CGN8
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	$P_{rated,c}$	4.2	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	199.5	%
Declared cooling capacity for part load at given outdoor temperature Tj				Declared energy efficiency ratio for part load at given outdoor temperature Tj			
Tj=+35°C	P_{dc}	4.17	kW	Tj=+35°C	EER_d	3.08	-
Tj=+30°C	P_{dc}	3.23	kW	Tj=+30°C	EER_d	4.50	-
Tj=+25°C	P_{dc}	2.04	kW	Tj=+25°C	EER_d	5.98	-
Tj=+20°C	P_{dc}	1.04	kW	Tj=+20°C	EER_d	6.75	-
Degradation co-efficient for chillers (*)	C_{dc}	0.9	-				
Power consumption in modes other than "active mode"							
Off mode	P_{OFF}	0.015	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.009	kW	Standby mode	P_{SB}	0.015	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	3250	m^3/h
Sound power level, indoors / outdoors	L_{WA}	43/62	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^3/h
GWP of the refrigerant	-	675	kg CO_2 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):	Outdoor unit: MHA-V4W/D2N8 Indoor unit: SMK-60/CGN8
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	$P_{rated,c}$	4.3	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	317.8	%
Declared cooling capacity for part load at given outdoor temperature Tj				Declared energy efficiency ratio for part load at given outdoor temperature Tj			
Tj=+35°C	P_{dc}	4.33	kW	Tj=+35°C	EER_d	5.36	-
Tj=+30°C	P_{dc}	3.28	kW	Tj=+30°C	EER_d	7.22	-
Tj=+25°C	P_{dc}	2.16	kW	Tj=+25°C	EER_d	9.15	-
Tj=+20°C	P_{dc}	1.42	kW	Tj=+20°C	EER_d	12.70	-
Degradation co-efficient for chillers (*)	C_{dc}	0.9	-				
Power consumption in modes other than "active mode"							
Off mode	P_{OFF}	0.015	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.009	kW	Standby mode	P_{SB}	0.015	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	3250	m^3/h
Sound power level, indoors / outdoors	L_{WA}	43/58	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^3/h
GWP of the refrigerant	-	675	kg 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.

Condition (℃)	Outdoor unit Model	Indoor unit Model	Capacity (kW)	Power input (kW)	EER/COP (/)
Ambient Temperature：35 Water temperature：7	MHA-V4W/D2N8	SMK-60/CGN8	4.50	1.36	3.32
	MHA-V6W/D2N8	SMK-60/CGN8	6.50	2.20	2.95
	MHA-V8W/D2N8	SMK-80/CGN8	7.38	2.44	3.02
	MHA-V10W/D2N8	SMK-80/CGN8	8.15	2.76	2.95
Ambient Temperature：35 Water temperature：18	MHA-V4W/D2N8	SMK-60/CGN8	4.30	0.77	5.60
	MHA-V6W/D2N8	SMK-60/CGN8	6.45	1.32	4.88
	MHA-V8W/D2N8	SMK-80/CGN8	8.35	1.79	4.67
	MHA-V10W/D2N8	SMK-80/CGN8	10.2	2.40	4.25
Ambient Temperature：7 Water temperature：35	MHA-V4W/D2N8	SMK-60/CGN8	4.20	0.82	5.15
	MHA-V6W/D2N8	SMK-60/CGN8	6.50	1.34	4.85
	MHA-V8W/D2N8	SMK-80/CGN8	8.40	1.73	4.85
	MHA-V10W/D2N8	SMK-80/CGN8	10.0	2.15	4.65
Ambient Temperature：2 Water temperature：35	MHA-V4W/D2N8	SMK-60/CGN8	4.25	1.09	3.90
	MHA-V6W/D2N8	SMK-60/CGN8	5.58	1.44	3.88
	MHA-V8W/D2N8	SMK-80/CGN8	7.10	1.83	3.88
	MHA-V10W/D2N8	SMK-80/CGN8	8.25	2.29	3.60
Ambient Temperature：-7 Water temperature：35	MHA-V4W/D2N8	SMK-60/CGN8	4.80	1.60	3.00
	MHA-V6W/D2N8	SMK-60/CGN8	6.00	2.04	2.94
	MHA-V8W/D2N8	SMK-80/CGN8	7.05	2.32	3.04
	MHA-V10W/D2N8	SMK-80/CGN8	8.20	2.78	2.95
Ambient Temperature：7 Water temperature：45	MHA-V4W/D2N8	SMK-60/CGN8	4.20	1.15	3.65
	MHA-V6W/D2N8	SMK-60/CGN8	6.35	1.74	3.64
	MHA-V8W/D2N8	SMK-80/CGN8	8.05	2.16	3.73
	MHA-V10W/D2N8	SMK-80/CGN8	9.85	2.72	3.62
Ambient Temperature：2 Water temperature：45	MHA-V4W/D2N8	SMK-60/CGN8	4.30	1.41	3.05
	MHA-V6W/D2N8	SMK-60/CGN8	5.65	1.87	3.02
	MHA-V8W/D2N8	SMK-80/CGN8	7.50	2.38	3.15
	MHA-V10W/D2N8	SMK-80/CGN8	7.95	2.62	3.04
Ambient Temperature：-7 Water temperature：45	MHA-V4W/D2N8	SMK-60/CGN8	4.15	1.74	2.39
	MHA-V6W/D2N8	SMK-60/CGN8	5.50	2.27	2.42
	MHA-V8W/D2N8	SMK-80/CGN8	6.65	2.71	2.45
	MHA-V10W/D2N8	SMK-80/CGN8	7.80	3.24	2.41
Ambient Temperature：7 Water temperature：55	MHA-V4W/D2N8	SMK-60/CGN8	4.10	1.44	2.85
	MHA-V6W/D2N8	SMK-60/CGN8	5.75	1.98	2.90
	MHA-V8W/D2N8	SMK-80/CGN8	7.50	2.49	3.01
	MHA-V10W/D2N8	SMK-80/CGN8	9.30	3.25	2.86
Ambient Temperature：2 Water temperature：55	MHA-V4W/D2N8	SMK-60/CGN8	4.20	1.79	2.35
	MHA-V6W/D2N8	SMK-60/CGN8	5.55	2.27	2.44
	MHA-V8W/D2N8	SMK-80/CGN8	6.90	2.80	2.46
	MHA-V10W/D2N8	SMK-80/CGN8	7.90	3.22	2.45
Ambient Temperature：-7 Water temperature：55	MHA-V4W/D2N8	SMK-60/CGN8	3.85	2.04	1.89
	MHA-V6W/D2N8	SMK-60/CGN8	5.10	2.62	1.95
	MHA-V8W/D2N8	SMK-80/CGN8	6.60	3.38	1.95
	MHA-V10W/D2N8	SMK-80/CGN8	6.90	3.79	1.82