

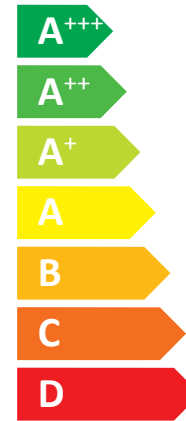


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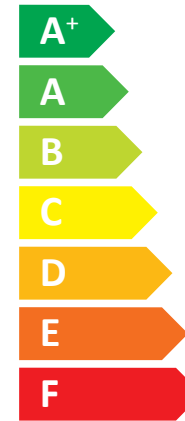
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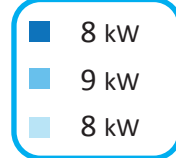
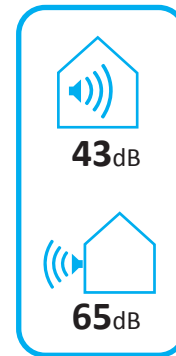
MHA-V10W/D2N8
SMK-80/CD30GN8
BS475



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2019

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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), LWA[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 energía
 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-V10W/D2N8 Indoor unit: SMK-80/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:	YES
Heat pump combination heater:	NO
Declared climate condition:	AVERAGE

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	7.9	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 C	Pdh	7.01	kW
Tj = 2 C	Pdh	4.46	kW
Tj = 7 C	Pdh	2.95	kW
Tj = 12 C	Pdh	1.38	kW
Tj = bivalent temperature	Pdh	7.01	kW
Tj = operating limit	Pdh	6.62	kW
For air-to-water heat pumps: Tj = -15 C	Pdh	-	kW
Bivalent temperature	Tbiv	-7	°C
Cycling interval capacity for heating	Pcych	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.029	kW
Standby mode	Psb	0.014	kW
Thermostat-off mode	Pto	0.014	kW
Crankcase heater mode	Pck	0.000	kW
Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	LWA	45/65	dB
Annual energy consumption	QHE	4995	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	128.0	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 C	COPd	2.02	-
Tj = 2 C	COPd	3.19	-
Tj = 7 C	COPd	4.41	-
Tj = 12 C	COPd	5.11	-
Tj = bivalent temperature	COPd	2.02	-
Tj = operating limit	COPd	1.65	-
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	COPcyc	-	-
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output (**)	Psup	1.28	kW
Type of energy input	Electrical		
For air-to-water heat pumps: Rated air flow rate, outdoors			
	-	4950	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:				
Declared load profile	-			
Daily electricity consumption	Qelec	-	kWh	
Annual electricity consumption	AEC	-	kWh	
Water heating energy efficiency	ηwh	-	%	
Daily fuel consumption	Qfuel	-	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-V10W/D2N8 Indoor unit: SMK-80/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	7.0	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 C	Pdh	4.40	kW
Tj = 2 C	Pdh	2.71	kW
Tj = 7 C	Pdh	1.85	kW
Tj = 12 C	Pdh	1.46	kW
Tj = bivalent temperature	Pdh	5.70	kW
Tj = operating limit	Pdh	3.49	kW
For air-to-water heat pumps: Tj = -15 C	Pdh	5.70	kW
Bivalent temperature	Tbiv	-15	°C
Cycling interval capacity for heating	Pcych	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.029	kW
Standby mode	Psb	0.014	kW
Thermostat-off mode	Pto	0.014	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	LWA	-	dB
Annual energy consumption	QHE	6467	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	103.5	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 C	COPd	2.26	-
Tj = 2 C	COPd	3.20	-
Tj = 7 C	COPd	4.35	-
Tj = 12 C	COPd	5.82	-
Tj = bivalent temperature	COPd	1.68	-
Tj = operating limit	COPd	0.98	-
For air-to-water heat pumps: Tj = -15 C	COPd	1.68	-
For air-to-water heat pumps: Operation limit temperature	TOL	-18	°C
Cycling interval efficiency	COPcyc	-	-
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output (**)	Psup	7.00	kW
Type of energy input	Electrical		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	4950	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:				
Declared load profile	-			
Daily electricity consumption	Qclec	-	kWh	
Annual electricity consumption	AEC	-	kWh	
Water heating energy efficiency	ηwh	-	%	
Daily fuel consumption	Qfuel	-	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):	Outdoor unit: MHA-V10W/D2N8 Indoor unit: SMK-80/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	8.4	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	8.06	kW
Tj = 7 C	Pdh	5.40	kW
Tj = 12 C	Pdh	2.52	kW
Tj = bivalent temperature	Pdh	5.40	kW
Tj = operating limit	Pdh	8.06	kW
For air-to-water heat pumps: Tj = -15 C	Pdh	-	kW
Bivalent temperature	Tbiv	7	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.029	kW
Standby mode	Psb	0.014	kW
Thermostat-off mode	Pto	0.014	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	LWA	-	dB
Annual energy consumption	QHE	2626	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	167.8	%
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	2.42	-
Tj = 7 C	COPd	3.63	-
Tj = 12 C	COPd	5.61	-
Tj = bivalent temperature	COPd	3.63	-
Tj = operating limit	COPd	2.42	-
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	COPcyc	-	-
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output (**)	Psup	0.34	kW
Type of energy input	Electrical		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	4950	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:				
Declared load profile	-			
Daily electricity consumption	Qclec	-	kWh	
Annual electricity consumption	AEC	-	kWh	
Water heating energy efficiency	ηwh	-	%	
Daily fuel consumption	Qfuel	-	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-V10W/D2N8 Indoor unit: SMK-80/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	$P_{rated,c}$	7.9	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	194.6	%
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}	7.93	kW	$T_j=+35^{\circ}\text{C}$	EER_d	2.70	-
$T_j=+30^{\circ}\text{C}$	P_{dc}	6.05	kW	$T_j=+30^{\circ}\text{C}$	EER_d	3.82	-
$T_j=+25^{\circ}\text{C}$	P_{dc}	4.05	kW	$T_j=+25^{\circ}\text{C}$	EER_d	5.84	-
$T_j=+20^{\circ}\text{C}$	P_{dc}	1.87	kW	$T_j=+20^{\circ}\text{C}$	EER_d	7.28	-
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}	0.009	kW	Standby mode	P_{SB}	0.014	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	4950	m^3/h
Sound power level, indoors / outdoors	L_{WA}	43/68	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-V10W/D2N8 Indoor unit: SMK-80/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	$P_{rated,c}$	10.0	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	300.8	%
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}	10.01	kW	$T_j=+35^{\circ}\text{C}$	EER_d	4.07	-
$T_j=+30^{\circ}\text{C}$	P_{dc}	7.59	kW	$T_j=+30^{\circ}\text{C}$	EER_d	5.71	-
$T_j=+25^{\circ}\text{C}$	P_{dc}	4.88	kW	$T_j=+25^{\circ}\text{C}$	EER_d	9.10	-
$T_j=+20^{\circ}\text{C}$	P_{dc}	2.33	kW	$T_j=+20^{\circ}\text{C}$	EER_d	11.82	-
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}	0.009	kW	Standby mode	P_{SB}	0.014	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	4950	m^3/h
Sound power level, indoors / outdoors	L_{WA}	43/66	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 (°C)	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