

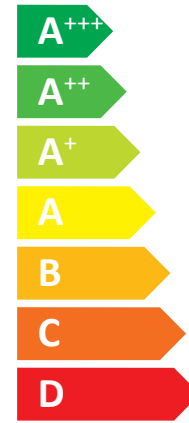


**ENERG**  
енергия · ενεργεια

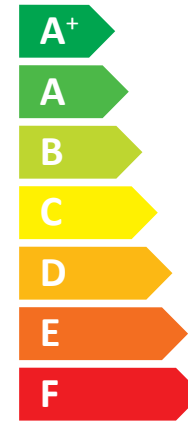
Y IJA  
IE IA



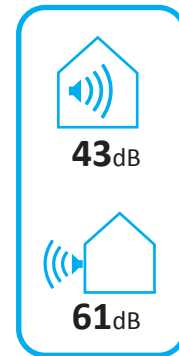
MHA-V4W/D2N8  
SMK-60/CD30GN8  
BSX270



**A+++**



**A**



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), 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-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	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.0	kW	Seasonal space heating energy efficiency	$\eta_s$	130.6	%
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	5.31	kW	Tj = -7 °C	COPd	2.00	-
Tj = 2 °C	Pdh	3.38	kW	Tj = 2 °C	COPd	3.23	-
Tj = 7 °C	Pdh	2.31	kW	Tj = 7 °C	COPd	4.60	-
Tj = 12 °C	Pdh	1.34	kW	Tj = 12 °C	COPd	6.10	-
Tj = bivalent temperature	Pdh	5.31	kW	Tj = bivalent temperature	COPd	2.00	-
Tj = operating limit	Pdh	4.62	kW	Tj = operating limit	COPd	1.62	-
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	P <sub>cyc</sub>	-	kW	Cycling interval efficiency	COP <sub>cyc</sub>	-	-
Degradation co-efficient (**)	Cdh	0.9	--	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P <sub>off</sub>	0.029	kW	Rated heat output (**)	P <sub>sup</sub>	1.40	kW
Standby mode	P <sub>sb</sub>	0.015	kW	Type of energy input	Electrical		
Thermostat-off mode	P <sub>to</sub>	0.015	kW				
Crankcase heater mode	P <sub>ck</sub>	0.000	kW				
Other items							
Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	3250	m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	43/61	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>	3712	kWh				
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
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 C	Pdh	3.24	kW
Tj = 2 C	Pdh	1.99	kW
Tj = 7 C	Pdh	1.51	kW
Tj = 12 C	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 C	Pdh	4.16	kW
Bivalent temperature	Tbiv	-15	°C
Cycling interval capacity for heating	P <sub>cyc</sub>	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	P <sub>off</sub>	0.029	kW
Standby mode	P <sub>sb</sub>	0.015	kW
Thermostat-off mode	P <sub>to</sub>	0.015	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>	-	dB
Annual energy consumption	Q <sub>HE</sub>	4524	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η <sub>s</sub>	108.0	%
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>	2.36	-
Tj = 2 C	COP <sub>d</sub>	3.31	-
Tj = 7 C	COP <sub>d</sub>	4.80	-
Tj = 12 C	COP <sub>d</sub>	6.96	-
Tj = bivalent temperature	COP <sub>d</sub>	1.69	-
Tj = operating limit	COP <sub>d</sub>	1.14	-
For air-to-water heat pumps: Tj = -15 C	COP <sub>d</sub>	1.69	-
For air-to-water heat pumps: Operation limit temperature	TOL	-18	°C
Cycling interval efficiency	COP <sub>cyc</sub>	-	-
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output (**)	P <sub>sup</sub>	5.10	kW
Type of energy input	Electrical		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	3250	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	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):	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 °C	Pdh	-	kW
Tj = 2 °C	Pdh	5.85	kW
Tj = 7 °C	Pdh	3.87	kW
Tj = 12 °C	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 °C	Pdh	-	kW
Bivalent temperature	Tbiv	7	°C
Cycling interval capacity for heating	P <sub>cyc</sub>	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	P <sub>off</sub>	0.029	kW
Standby mode	P <sub>sb</sub>	0.015	kW
Thermostat-off mode	P <sub>to</sub>	0.015	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>	-	dB
Annual energy consumption	Q <sub>HE</sub>	1888	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η <sub>s</sub>	167.3	%
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>	-	-
Tj = 2 °C	COP <sub>d</sub>	2.30	-
Tj = 7 °C	COP <sub>d</sub>	3.57	-
Tj = 12 °C	COP <sub>d</sub>	5.72	-
Tj = bivalent temperature	COP <sub>d</sub>	3.57	-
Tj = operating limit	COP <sub>d</sub>	2.30	-
For air-to-water heat pumps: Tj = -15 °C	COP <sub>d</sub>	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval efficiency	COP <sub>cyc</sub>	-	-
Heating water operating limit temperature	WTOL	60	°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	-	3250	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	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.

# 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 $T_j$				Declared energy efficiency ratio for part load at given outdoor temperature $T_j$			
$T_j=+35^{\circ}\text{C}$	$P_{dc}$	4.17	kW	$T_j=+35^{\circ}\text{C}$	$EER_d$	3.08	-
$T_j=+30^{\circ}\text{C}$	$P_{dc}$	3.23	kW	$T_j=+30^{\circ}\text{C}$	$EER_d$	4.50	-
$T_j=+25^{\circ}\text{C}$	$P_{dc}$	2.04	kW	$T_j=+25^{\circ}\text{C}$	$EER_d$	5.98	-
$T_j=+20^{\circ}\text{C}$	$P_{dc}$	1.04	kW	$T_j=+20^{\circ}\text{C}$	$EER_d$	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	$\text{m}^3/\text{h}$
Sound power level, indoors / outdoors	$L_{WA}$	43/62	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	-	675	kg $\text{CO}_2$ 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 $T_j$					Declared energy efficiency ratio for part load at given outdoor temperature $T_j$			
$T_j=+35^{\circ}\text{C}$	$P_{dc}$	4.33	kW		$T_j=+35^{\circ}\text{C}$	$EER_d$	5.36	-
$T_j=+30^{\circ}\text{C}$	$P_{dc}$	3.28	kW		$T_j=+30^{\circ}\text{C}$	$EER_d$	7.22	-
$T_j=+25^{\circ}\text{C}$	$P_{dc}$	2.16	kW		$T_j=+25^{\circ}\text{C}$	$EER_d$	9.15	-
$T_j=+20^{\circ}\text{C}$	$P_{dc}$	1.42	kW		$T_j=+20^{\circ}\text{C}$	$EER_d$	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 <sup>3</sup> /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 <sup>3</sup> /h
GWP of the refrigerant	-	675	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.								

Condition (°C)	Outdoor unit Model	Indoor unit Model	Capacity (kW)	Power input (kW)	EER/COP (/)
<b>Ambient Temperature: 35</b> <b>Water temperature: 7</b>	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
<b>Ambient Temperature: 35</b> <b>Water temperature: 18</b>	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
<b>Ambient Temperature: 7</b> <b>Water temperature: 35</b>	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
<b>Ambient Temperature: 2</b> <b>Water temperature: 35</b>	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
<b>Ambient Temperature: -7</b> <b>Water temperature: 35</b>	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
<b>Ambient Temperature: 7</b> <b>Water temperature: 45</b>	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
<b>Ambient Temperature: 2</b> <b>Water temperature: 45</b>	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
<b>Ambient Temperature: -7</b> <b>Water temperature: 45</b>	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
<b>Ambient Temperature: 7</b> <b>Water temperature: 55</b>	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
<b>Ambient Temperature: 2</b> <b>Water temperature: 55</b>	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
<b>Ambient Temperature: -7</b> <b>Water temperature: 55</b>	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