

Subtype M thermal P series 5 7 9 kW

Certificate Holder	GD Midea Heating & Ventilating Equipment Co., Ltd.
Address	Penglai Industry Road
ZIP	528311
City	Beijiao, Shunde, Foshan
Country	CN
Certification Body	BRE Global Limited
Subtype title	M thermal P series 5 7 9 kW
Registration number	041-K007-14
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.25 kg
Certification Date	14.12.2021
Testing basis	Heat Pump Keymark Scheme Rules Rev 09
Testing laboratory	TÜV SÜD Certification and Testing Co., Ltd. Guangzhou Branch, CN

**Model MHC-V5W/D2N8-C**

Model name	MHC-V5W/D2N8-C
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	6.5 kW	6.3 kW
El input	1.23 kW	1.97 kW
COP	5.3	3.2

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level outdoor	60 dB(A)	60 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	201.8 %	140.72 %
Prated	6.52 kW	6.36 kW
SCOP	5.12	3.59
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.77 kW	5.62 kW
COP Tj = -7°C	3.43	2.36
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	3.74 kW	3.52 kW
COP Tj = +2°C	5.04	3.7
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	2.32 kW	2.2 kW

COP Tj = +7°C	6.06	4.21
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	1.87 kW	1.31 kW
COP Tj = 12°C	9.12	4.96
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	5.77 kW	5.62 kW
COP Tj = Tbiv	3.43	2.36
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.52 kW	6.04 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3	2.02
WTOL	65 °C	65 °C
Poff	13 W	13 W
PTO	20 W	20 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0.32 kW
Annual energy consumption Qhe	2631 kWh	3655 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level outdoor	60 dB(A)	60 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	173.4 %	113.12 %
Prated	6.13 kW	5.22 kW
SCOP	4.41	2.9
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.11 kW	3.21 kW
COP Tj = -7°C	3.76	2.6
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	2.38 kW	2.03 kW
COP Tj = +2°C	5.33	3.18
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	1.66 kW	1.56 kW
COP Tj = +7°C	5.78	4.5
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	1.87 kW	1.44 kW
COP Tj = 12°C	9.12	5.83
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	5 kW	4.25 kW
COP Tj = Tbiv	3.02	2

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.21 kW	3.24 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.12	1.32
WTOL	65 °C	65 °C
Poff	13 W	13 W
PTO	20 W	20 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.92 kW	1.98 kW
Annual energy consumption Qhe	3425 kWh	4428 kWh
Pdh Tj = -15°C (if TOL)	5	4.25
COP Tj = -15°C (if TOL)	3.02	2
Cdh Tj = -15 °C	0.9	0.9

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level outdoor	60 dB(A)	60 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	268.2 %	170.9 %
Prated	6.24 kW	6.17 kW
SCOP	6.78	4.35
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.69 kW	6.17 kW
COP Tj = +2°C	4.31	2.77
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	4.01 kW	3.97 kW
COP Tj = +7°C	6.39	3.9
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	2.07 kW	2.06 kW
COP Tj = 12°C	8.71	5.28
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	4.01 kW	3.97 kW
COP Tj = Tbiv	6.39	3.9
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.69 kW	6.17 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.31	2.77
WTOL	65 °C	65 °C
Poff	13 W	13 W
PTO	20 W	20 W
PSB	13 W	13 W

PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.55 kW	0 kW
Annual energy consumption Qhe	1229 kWh	1895 kWh

**Model MHC-V7W/D2N8-C**

Model name	MHC-V7W/D2N8-C
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	8.40 kW	8.20 kW
El input	1.66 kW	2.60 kW
COP	5.05	3.15

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level outdoor	63 dB(A)	63 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	203.99 %	143.64 %
Prated	7.90 kW	7.25 kW
SCOP	5.17	3.67
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.99 kW	6.42 kW
COP Tj = -7°C	3.29	2.31
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	4.51 kW	4.03 kW
COP Tj = +2°C	4.99	3.76
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	2.81 kW	2.56 kW

COP Tj = +7°C	6.72	4.48
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.87 kW	1.31 kW
COP Tj = 12°C	9.12	4.96
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	6.99 kW	6.42 kW
COP Tj = Tbiv	3.29	2.31
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.46 kW	6.85 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.87	1.98
WTOL	65.00 °C	65.00 °C
Poff	13.00 W	13.00 W
PTO	20.00 W	20.00 W
PSB	13.00 W	13.00 W
PCK	0.00 W	0.00 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.44 kW	0.40 kW
Annual energy consumption Qhe	3155 kWh	4088 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level outdoor	63 dB(A)	63 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	174.6 %	117.73 %
Prated	7.51 kW	6.06 kW
SCOP	4.44	3.02
Tbiv	-15.00 °C	-15.00 °C
TOL	-22.00 °C	-22.00 °C
Pdh Tj = -7°C	4.42 kW	3.95 kW
COP Tj = -7°C	3.67	2.75
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	2.99 kW	2.25 kW
COP Tj = +2°C	5.50	3.30
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	2.03 kW	1.56 kW
COP Tj = +7°C	6.69	4.50
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.87 kW	1.44 kW
COP Tj = 12°C	9.12	5.83
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	6.12 kW	4.94 kW
COP Tj = Tbiv	2.70	2.08

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.78 kW	3.24 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.16	1.32
WTOL	65.00 °C	65.00 °C
Poff	13.00 W	13.00 W
PTO	20.00 W	20.00 W
PSB	13.00 W	13.00 W
PCK	0.00 W	0.00 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.72 kW	2.82 kW
Annual energy consumption Qhe	4166 kWh	4948 kWh
Pdh Tj = -15°C (if TOL)	6.12	4.94
COP Tj = -15°C (if TOL	2.70	2.08
Cdh Tj = -15 °C	0.90	0.90

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level outdoor	63 dB(A)	63 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	274.74 %	185.3 %
Prated	8.06 kW	8.10 kW
SCOP	6.94	4.71
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.23 kW	7.80 kW
COP Tj = +2°C	4.04	2.68
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	5.18 kW	5.22 kW
COP Tj = +7°C	6.35	4.07
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	2.46 kW	2.36 kW
COP Tj = 12°C	9.30	6.07
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	5.18 kW	5.22 kW
COP Tj = Tbiv	6.35	4.07
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.23 kW	7.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.04	2.68
WTOL	65.00 °C	65.00 °C
Poff	13.00 W	13.00 W
PTO	20.00 W	20.00 W
PSB	13.00 W	13.00 W

PCK	0.00 W	0.00 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.84 kW	0.32 kW
Annual energy consumption Qhe	1551 kWh	2303 kWh

**Model MHC-V9WD2N8-C**

Model name	MHC-V9WD2N8-C
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	10 kW	9.4 kW
El input	2.13 kW	3.03 kW
COP	4.7	3.1

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	201.91 %	145.47 %
Prated	9.06 kW	8.16 kW
SCOP	5.12	3.71
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.02 kW	7.21 kW
COP Tj = -7°C	3.09	2.24
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	5.06 kW	4.56 kW
COP Tj = +2°C	4.92	3.86
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	3.22 kW	2.84 kW

COP Tj = +7°C	7.03	4.58
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	1.87 kW	1.31 kW
COP Tj = 12°C	9.12	4.96
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	8.02 kW	7.21 kW
COP Tj = Tbiv	3.09	2.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.88 kW	7.01 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.87	1.97
WTOL	65 °C	65 °C
Poff	13 W	13 W
PTO	20 W	20 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.18 kW	1.14 kW
Annual energy consumption Qhe	3654 kWh	4539 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	174.6 %	122.4 %
Prated	8.27 kW	7.21 kW
SCOP	4.44	3.14
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.42 kW	4.59 kW
COP Tj = -7°C	3.72	2.72
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	3.14 kW	2.82 kW
COP Tj = +2°C	5.56	3.6
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	2.16 kW	1.76 kW
COP Tj = +7°C	6.55	4.84
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	1.87 kW	1.44 kW
COP Tj = 12°C	9.12	5.83
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	6.75 kW	5.88 kW
COP Tj = Tbiv	2.59	2.1

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.08 kW	3.24 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.01	1.32
WTOL	65 °C	65 °C
Poff	13 W	13 W
PTO	20 W	20 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.19 kW	3.97 kW
Annual energy consumption Qhe	4591 kWh	5665 kWh
Pdh Tj = -15°C (if TOL)	6.75	5.88
COP Tj = -15°C (if TOL)	2.59	2.1
Cdh Tj = -15 °C	0.9	0.9

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
$\eta_s$	279.05 %	193.4 %
Prated	9.04 kW	9.03 kW
SCOP	7.05	4.91
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.29 kW	8.42 kW
COP Tj = +2°C	3.85	2.68
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	5.81 kW	5.81 kW
COP Tj = +7°C	6.24	4.16
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	2.67 kW	2.74 kW
COP Tj = 12°C	9.63	6.64
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	5.81 kW	5.81 kW
COP Tj = Tbiv	6.24	4.16
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.29 kW	8.42 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.85	2.68
WTOL	65 °C	65 °C
Poff	13 W	13 W
PTO	20 W	20 W
PSB	13 W	13 W

PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.75 kW	0.61 kW
Annual energy consumption Qhe	1714 kWh	2458 kWh