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Summary of	M thermal A Series 4 6kW with 190L tank	Reg. No.	041-K007-04
Certificate Holder			
Name	GD Midea Heating & Ventilating Equipment Co., Ltd.		
Address	Penglai Industry Road	Zip	528311
City	Beijiao, Shunde, Foshan	Country	China
Certification Body	BRE Global Limited		
Subtype title	M thermal A Series 4 6kW with 190L tank		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R32		
Mass Of Refrigerant	1.5 kg		
Certification Date	12.06.2020		
Testing basis	Heat Pump Keymark Scheme Rules Rev 08		



Model: MHA-V4W/D2N8-B+HBT-A100/190C****GN8-B

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	4.25 kW	4.40 kW	
El input	0.82 kW	1.49 kW	
СОР	5.20	2.95	

Average Climate



EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	42 dB(A)	42 dB(A)	
Sound power level outdoor	56 dB(A)	56 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{s}	191 %	130 %
Prated	5.52 kW	4.40 kW
SCOP	4.85	3.31
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.88 kW	3.89 kW
COP Tj = -7°C	3.19	2.17
Cdh	0.90	0.90
Pdh Tj = +2°C	3.06 kW	2.38 kW
$COP Tj = +2^{\circ}C$	4.78	3.30
Cdh	0.90	0.90
Pdh Tj = +7°C	1.93 kW	2.95 kW
COP Tj = +7°C	6.13	4.41
Cdh	0.90	0.90

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Pdh Tj = 12°C	1.48 kW	1.32 kW
COP Tj = 12°C	8.05	5.66
Cdh	0.90	0.90
Pdh Tj = Tbiv	4.88 kW	3.89 kW
COP Tj = Tbiv	3.19	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.42 kW	3.42 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.86	1.91
WTOL	65 °C	65 °C
Poff	14 W	14 W
РТО	24 W	24 W
PSB	14 W	14 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	1.11 kW	0.98 kW
Annual energy consumption Qhe	2351 kWh	2744 kWh

Warmer Climate

EN 12102-1				
	Low temperature	Medium temperature		
Sound power level indoor	42 dB(A)	42 dB(A)		
Sound power level outdoor	56 dB(A)	56 dB(A)		





EN 14825

	Low temperature	Medium temperature
η_{s}	254 %	162 %
Prated	5.54 kW	5.02 kW
SCOP	6.52	4.14
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.35 kW	4.84 kW
COP Tj = +2°C	3.94	2.51
Cdh	0.90	0.90
Pdh Tj = +7°C	3.56 kW	3.23 kW
COP Tj = +7°C	5.92	3.68
Cdh	0.90	0.90
Pdh Tj = 12°C	1.64 kW	1.47 kW
COP Tj = 12°C	7.91	5.15
Cdh	0.90	0.90
Pdh Tj = Tbiv	3.56 kW	3.23 kW
COP Tj = Tbiv	5.92	3.68
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.35 kW	4.84 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.94	2.51
WTOL	65 °C	65 °C





Poff	14 W	14 W
РТО	24 W	24 W
PSB	14 W	14 W
PCK	o w	o w
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	0.19 kW	0.18 kW
Annual energy consumption Qhe	1152 kWh	1621 kWh

Colder Climate

EN 14825		
	Low temperature	Medium temperature
η_{s}	159 %	102 %
Prated	4.57 kW	3.37 kW
SCOP	4.06	2.63
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	2.76 kW	2.14 kW
COP Tj = -7°C	3.49	2.32
Cdh	0.90	0.90
Pdh Tj = +2°C	1.77 kW	1.28 kW
COP Tj = +2°C	4.95	2.99

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Cdh	0.90	0.90
Pdh Tj = $+7^{\circ}$ C	1.17 kW	1.01 kW
$COPTj = +7^{\circ}C$	5.53	3.86
Cdh	0.90	0.90
Pdh Tj = 12°C	1.43 kW	1.36 kW
COP Tj = 12°C	7.67	6.28
Cdh	0.90	0.90
Pdh Tj = Tbiv	3.72 kW	2.75 kW
COP Tj = Tbiv	2.57	1.74
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.80 kW	1.64 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.97	1.02
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	o w	o w
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	1.76 kW	1.73 kW
Annual energy consumption Qhe	2770 kWh	3159 kWh
Pdh Tj = -15°C (if TOL<-20°C)	3.72	2.75
COP Tj = -15 °C (if TOL< -20 °C)	2.57	1.74

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Cdh	0.90	0.90
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EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

Domestic Hot Water (DHW)

Average Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	127 %	
СОР	3.10	
Heating up time	1:47 h:min	
Standby power input	22.0 W	
Reference hot water temperature	47.0 °C	
Mixed water at 40°C	200	

Warmer Climate



EN 16147		
Declared load profile	L	
Efficiency ηDHW	157 %	
СОР	3.80	
Heating up time	1:31 h:min	
Standby power input	21.0 W	
Reference hot water temperature	47.0 °C	
Mixed water at 40°C	200 I	

Colder Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	102 %	
СОР	2.50	
Heating up time	1:54 h:min	
Standby power input	24.0 W	
Reference hot water temperature	47.0 °C	
Mixed water at 40°C	200 I	



Model: MHA-V6W/D2N8-B+HBT-A100/190C****GN8-B

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	6.20 kW	6.00 kW	
El input	1.24 kW	2.00 kW	
СОР	5.00	3.00	

Average Climate

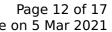


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EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	195 %	138 %
Prated	6.82 kW	5.70 kW
SCOP	4.95	3.52
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.03 kW	5.05 kW
COP Tj = -7°C	3.09	2.17
Cdh	0.90	0.90
Pdh Tj = $+2^{\circ}$ C	3.88 kW	3.12 kW
COP Tj = +2°C	4.85	3.51
Cdh	0.90	0.90
Pdh Tj = +7°C	2.40 kW	2.09 kW
COP Tj = +7°C	6.63	4.54
Cdh	0.90	0.90

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Pdh Tj = 12°C	1.39 kW	1.28 kW
COP Tj = 12°C	7.83	5.59
Cdh	0.90	0.90
Pdh Tj = Tbiv	6.03 kW	5.05 kW
COP Tj = Tbiv	3.09	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.36 kW	4.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.76	1.91
WTOL	65 °C	65 °C
Poff	14 W	14 W
РТО	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	1.45 kW	1.18 kW

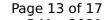
Warmer Climate

Annual energy consumption Qhe

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

2846 kWh

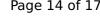
3345 kWh





EN 14825

	Low temperature	Medium temperature
η_{s}	258 %	165 %
Prated	6.12 kW	5.15 kW
SCOP	6.63	4.19
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.94 kW	5.03 kW
$COP Tj = +2^{\circ}C$	3.91	2.48
Cdh	0.90	0.90
Pdh Tj = +7°C	3.93 kW	3.31 kW
$COP Tj = +7^{\circ}C$	5.89	3.67
Cdh	0.90	0.90
Pdh Tj = 12°C	1.80 kW	1.60 kW
COP Tj = 12°C	8.20	5.29
Cdh	0.90	0.90
Pdh Tj = Tbiv	3.93 kW	3.31 kW
COP Tj = Tbiv	5.89	3.67
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.94 kW	5.03 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.91	2.48
WTOL	65 °C	65 °C





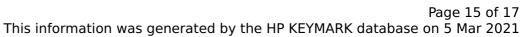
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Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	0.18 kW	0.12 kW
Annual energy consumption Qhe	1251 kWh	1640 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825		
Low temperature	Medium temperature	
165 %	111 %	
5.63 kW	4.26 kW	
4.21	2.85	
-15 °C	-15 °C	
-22 °C	-22 °C	
	Low temperature 165 % 5.63 kW 4.21 -15 °C	





Pdh Tj = -7 °C	3.42 kW	2.70 kW
COP Tj = -7°C	3.59	2.46
Cdh	0.90	0.90
Pdh Tj = +2°C	2.06 kW	1.61 kW
COPTj = +2°C	5.21	3.36
Cdh	0.90	0.90
Pdh Tj = +7°C	1.47 kW	1.02 kW
COP Tj = +7°C	6.24	3.94
Cdh	0.90	0.90
Pdh Tj = 12°C	1.44 kW	1.37 kW
COP Tj = 12°C	7.66	6.35
Cdh	0.90	0.90
Pdh Tj = Tbiv	4.60 kW	3.48 kW
COP Tj = Tbiv	2.53	1.86
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.48 kW	2.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.96	1.13
WTOL	65 °C	65 °C
Poff	20 W	20 W
РТО	24 W	24 W
PSB	14 W	14 W
PCK	0 W	o w



Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	2.15 kW	2.16 kW
Annual energy consumption Qhe	3301 kWh	3681 kWh
Pdh Tj = -15°C (if TOL<-20°C)	4.60	3.48
COP Tj = -15°C (if TOL $<$ -20°C)	2.53	1.86
Cdh	0.90	0.90

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	127 %
СОР	3.10
Heating up time	1:47 h:min
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Colder Climate

EN 16147		
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Efficiency ηDHW	102 %	
СОР	2.50	
Heating up time	1:54 h:min	
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