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Summary of	M thermal P series 12 14 16 kW	Reg. No.	041-K007-15
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 P series 12 14 16 kW		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R32		
Mass of Refrigerant	1.8 kg		
Certification Date	14.12.2021		
Testing basis	Heat Pump Keymark Scheme Rules Rev 09		

# Model: MHC-V12WD2N8-C

Configure model		
Model name MHC-V12WD2N8-C		
Application	Heating (medium temp)	
Units Outdoor		
Climate Zone Colder Climate + Warmer Climate		
Reversibility Yes		
Cooling mode application (optional) n/a		

General Data		
Power supply 1x230V 50Hz		

# Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	12.2 kW	12 kW	
El input	2.49 kW	4 kW	
СОР	4.9	3	

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

## Warmer Climate



EN 12102-1		
Low temperature Medium temperature		
Sound power level outdoor	70 dB(A)	70 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_s$	262.3 %	179 %
Prated	12.1 kW	12 kW
SCOP	6.63	4.55
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	12.1 kW	12 kW
COP Tj = +2°C	3.53	2.39
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	7.78 kW	7.73 kW
$COP Tj = +7^{\circ}C$	5.82	3.86
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	3.64 kW	3.59 kW
COP Tj = 12°C	8.31	5.88
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	7.78 kW	7.73 kW
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COP Tj = Tbiv	5.82	3.86
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.1 kW	12 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.53	2.39
WTOL	65 °C	65 °C
Poff	13 W	13 W
РТО	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 kW
Annual energy consumption Qhe	2437 kWh	3524 kWh

### Colder Climate

EN 12102-1			
Low temperature Medium temperature			
Sound power level outdoor	70 dB(A)	70 dB(A)	

EN 14825			
Low temperature Medium temperature			
168.8 %	126 %		
12.5 kW	11.3 kW		
	Low temperature		





This information was gener	ated by the HE KETMA	RK database on 23 Jun 202
SCOP	4.3	3.23
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.08 kW	7.09 kW
COP Tj = -7°C	3.64	2.75
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	4.93 kW	4.44 kW
COP Tj = +2°C	5.34	3.88
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = $+7^{\circ}$ C	3.17 kW	3 kW
$COP Tj = +7^{\circ}C$	5.28	4.88
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	3.69 kW	3.6 kW
COP Tj = 12°C	9.34	6.61
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	10.17 kW	9.21 kW
COP Tj = Tbiv	2.66	1.92
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.72 kW	7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.08	1.38
WTOL	65 °C	65 °C
Poff	13 W	13 W





РТО	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	3.78 kW	4.3 kW
Annual energy consumption Qhe	7153 kWh	8628 kWh
Pdh Tj = -15°C (if TOL<-20°C)	10.17	9.21
COP Tj = $-15$ °C (if TOL< $-20$ °C)	2.66	1.92
Cdh Tj = -15 °C	0.9	0.9

# Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	70 dB(A)	70 dB(A)

Low temperature	Medium temperature
200.1 %	141.6 %
12.3 kW	12.5 kW
5.08	3.62
-7 °C	-7 °C
_	12.3 kW 5.08





This information was generated by the HP KEYMARK database on 23 jun 202			
TOL	-10 °C	-10 °C	
Pdh Tj = -7°C	10.85 kW	11.06 kW	
COP Tj = -7°C	3.11	2.15	
Cdh Tj = -7 °C	0.9	0.9	
Pdh Tj = +2°C	6.79 kW	6.91 kW	
$COP Tj = +2^{\circ}C$	4.86	3.59	
Cdh Tj = +2 °C	0.9	0.9	
Pdh Tj = +7°C	4.79 kW	4.64 kW	
$COP Tj = +7^{\circ}C$	6.98	5.07	
Cdh Tj = +7 °C	0.9	0.9	
Pdh Tj = 12°C	3.73 kW	2.15 kW	
COP Tj = 12°C	9.02	4.52	
Cdh Tj = +12 °C	0.9	0.9	
Pdh Tj = Tbiv	10.85 kW	11.06 kW	
COP Tj = Tbiv	3.11	2.15	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.3 kW	10.97 kW	
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.8	1.98	
WTOL	65 °C	65 °C	
Poff	13 W	13 W	
РТО	20 W	20 W	
PSB	13 W	13 W	



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PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	1.53 kW
Annual energy consumption Qhe	5004 kWh	7148 kWh



# Model: MHC-V14WD2N8-C

Configure model		
Model name	MHC-V14WD2N8-C	
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

# Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	14.10 kW	14.00 kW	
El input	3.00 kW	4.75 kW	
СОР	4.70	2.95	

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

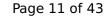
## Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	72 dB(A)	72 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	260.5 %	184.6 %
Prated	13.20 kW	14.20 kW
SCOP	6.59	4.69
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	12.94 kW	13.01 kW
COP Tj = +2°C	3.51	2.37
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	8.51 kW	9.12 kW
COP Tj = +7°C	5.72	3.95
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.96 kW	4.26 kW
COP Tj = 12°C	8.51	6.37
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	8.51 kW	9.12 kW

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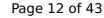


COP Tj = Tbiv	5.72	3.95
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.94 kW	13.01 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.51	2.37
WTOL	65.00 °C	65.00 °C
Poff	13.00 W	13.00 W
РТО	20.00 W	20.00 W
PSB	13.00 W	13.00 W
PCK	0.00 W	0.00 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.26 kW	1.18 kW
Annual energy consumption Qhe	2684 kWh	4040 kWh

### Colder Climate

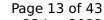
EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	72 dB(A)	72 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{S}$	171.3 %	126.6 %
Prated	14.31 kW	12.49 kW





SCOP	4.36	3.24
Tbiv	-15.00 °C	-15.00 °C
TOL	-22.00 °C	-22.00 °C
Pdh Tj = -7°C	8.74 kW	7.80 kW
COP Tj = -7°C	3.59	2.77
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	5.52 kW	4.64 kW
COP Tj = +2°C	5.35	3.91
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	3.70 kW	3.00 kW
COP Tj = +7°C	7.06	4.88
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.69 kW	3.61 kW
COP Tj = 12°C	9.34	6.61
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	11.67 kW	10.19 kW
COP Tj = Tbiv	2.58	1.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.14 kW	7.28 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.02	1.35
WTOL	65.00 °C	65.00 °C
Poff	13.00 W	13.00 W





20.00 W	20.00 W
13.00 W	13.00 W
0.00 W	0.00 W
Electricity	Electricity
5.17 kW	5.21 kW
8095 kWh	9496 kWh
11.67	10.19
2.58	1.91
0.90	0.90
	13.00 W  0.00 W  Electricity  5.17 kW  8095 kWh  11.67  2.58

# Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level outdoor	72 dB(A)	72 dB(A)	

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	192.5 %	141.8 %
Prated	14.15 kW	14.15 kW
SCOP	4.89	3.62
Tbiv	-7 °C	-7 °C





This information was gener	acca by the in Reimin	riik database on 25 jan 202
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.52 kW	12.52 kW
$COP Tj = -7^{\circ}C$	2.97	2.20
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = $+2^{\circ}$ C	7.98 kW	7.71 kW
COP Tj = +2°C	4.56	3.58
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = $+7^{\circ}$ C	5.04 kW	5.07 kW
$COP Tj = +7^{\circ}C$	7.01	5.06
Cdh Tj = $+7$ °C	0.90	0.90
Pdh Tj = 12°C	3.73 kW	2.15 kW
COP Tj = 12°C	9.02	4.52
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	12.52 kW	12.52 kW
COP Tj = Tbiv	2.97	2.20
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.41 kW	11.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.66	1.96
WTOL	65.00 °C	65.00 °C
Poff	13.00 W	13.00 W
	20.00 W	20.00 W
PTO	20.00 W	20.00 11



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PCK	0.00 W	0.00 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.75 kW	2.65 kW
Annual energy consumption Qhe	5984 kWh	8079 kWh

# Model: MHC-V16WD2N8-C

Configure model		
Model name	MHC-V16WD2N8-C	
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

# Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	16.00 kW	16.00 kW	
El input	3.56 kW	5.61 kW	
СОР	4.50	2.85	

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

## Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	72 dB(A)	72 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	255.4 %	184 %
Prated	14.20 kW	14.50 kW
SCOP	6.46	4.68
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	14.20 kW	13.62 kW
COP Tj = +2°C	3.22	2.35
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	9.15 kW	9.35 kW
COP Tj = +7°C	5.41	3.94
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	4.24 kW	4.26 kW
COP Tj = 12°C	8.56	6.37
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	9.15 kW	9.35 kW

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COP Tj = Tbiv5.41 3.94 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 14.20 kW 13.62 kW COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 3.22 2.35 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

0.00 kW

2937 kWh

0.91 kW

4154 kWh

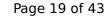
### Colder Climate

Supplementary Heater: PSUP

Annual energy consumption Qhe

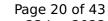
EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	72 dB(A)	72 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{S}$	170.9 %	124.3 %
Prated	15.10 kW	13.52 kW
	<u> </u>	





This information was gener		
SCOP	4.35	3.18
Tbiv	-15.00 °C	-15.00 °C
TOL	-22.00 °C	-22.00 °C
Pdh Tj = $-7^{\circ}$ C	9.26 kW	8.43 kW
$COP Tj = -7^{\circ}C$	3.59	2.77
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = $+2^{\circ}$ C	5.76 kW	5.20 kW
$COPTj = +2^{\circ}C$	5.35	3.74
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = $+7^{\circ}$ C	3.76 kW	3.53 kW
$COPTj = +7^{\circ}C$	7.04	5.19
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.72 kW	3.61 kW
COP Tj = 12°C	8.78	6.61
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	12.30 kW	11.03 kW
COP Tj = Tbiv	2.58	1.85
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.43 kW	7.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.00	1.30
WTOL	65.00 °C	65.00 °C
Poff	13.00 W	13.00 W
	_[	





This information was generated by the HP KEYMARK database on 23 Jun 2022 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 5.67 kW 6.00 kW Annual energy consumption Qhe 8546 kWh 10473 kWh 12.30 Pdh Tj = -15°C (if TOL<-20°C) 11.03 COP Tj = -15°C (if TOL<-20°C) 2.58 1.85

## **Average Climate**

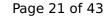
Cdh Tj = -15  $^{\circ}$ C

EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	72 dB(A)	72 dB(A)

0.90

0.90

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	190.5 %	140.6 %
Prated	15.23 kW	14.70 kW
SCOP	4.84	3.59
Tbiv	-7 °C	-7 °C





Inis information was gener	ated by the Hi KETMA	ink database on 25 jun 202
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	13.49 kW	13.03 kW
COP Tj = -7°C	2.87	2.16
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	8.59 kW	8.50 kW
COP Tj = +2°C	4.53	3.55
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	5.55 kW	5.27 kW
$COP Tj = +7^{\circ}C$	7.01	5.05
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.73 kW	2.15 kW
COP Tj = 12°C	9.02	4.52
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	13.49 kW	13.03 kW
COP Tj = Tbiv	2.87	2.16
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.05 kW	12.07 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.94
WTOL	65.00 °C	65.00 °C
Poff	13.00 W	13.00 W
РТО	20.00 W	20.00 W
PSB	13.00 W	13.00 W



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PCK	0.00 W	0.00 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.18 kW	2.63 kW
Annual energy consumption Qhe	6510 kWh	8471 kWh



# Model: MHC-V12WD2RN8-C

Configure model		
Model name	MHC-V12WD2RN8-C	
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply 1x230V 50Hz		

## Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	12.2 kW	12 kW	
El input	2.49 kW	4 kW	
COP	4 9	3	

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

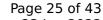
## Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	70 dB(A)	70 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	262.5 %	179 %
Prated	12.1 kW	12 kW
SCOP	6.64	4.55
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	12.1 kW	12 kW
COP Tj = +2°C	3.53	2.39
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	7.78 kW	7.73 kW
COP Tj = +7°C	5.82	3.86
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	3.64 kW	3.59 kW
COP Tj = 12°C	8.31	5.88
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	7.78 kW	7.73 kW

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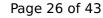


COP Tj = Tbiv	5.82	3.86
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.1 kW	12 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.53	2.39
WTOL	65 °C	65 °C
Poff	6 W	6 W
РТО	18 W	18 W
PSB	6 W	6 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	2435 kWh	3523 kWh

### Colder Climate

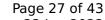
EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	70 dB(A)	70 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	168.8 %	126 %
Prated	12.5 kW	11.3 kW
		=====





SCOP	4.3	3.23
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = $-7$ °C	8.08 kW	7.09 kW
$COP Tj = -7^{\circ}C$	3.64	2.75
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = $+2^{\circ}$ C	4.93 kW	4.44 kW
COP Tj = +2°C	5.34	3.88
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = $+7^{\circ}$ C	3.17 kW	3 kW
$COP Tj = +7^{\circ}C$	5.28	4.88
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	3.69 kW	3.6 kW
COP Tj = 12°C	9.34	6.61
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	10.17 kW	9.21 kW
COP Tj = Tbiv	2.66	1.92
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.72 kW	7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.08	1.38
WTOL	65 °C	65 °C
Poff	6 W	6 W





PTO	18 W	18 W
PSB	6 W	6 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.78 kW	4.3 kW
Annual energy consumption Qhe	7153 kWh	8628 kWh
Pdh Tj = -15°C (if TOL<-20°C)	10.17	9.21
COP Tj = -15°C (if TOL $<$ -20°C)	2.66	1.92
Cdh Tj = -15 °C	0.9	0.9

## Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level outdoor	70 dB(A)	70 dB(A)	

EN 14825		
Low temperature	Medium temperature	
200.2 %	141.6 %	
12.3 kW	12.5 kW	
5.08	3.62	
-7 °C	-7 °C	
	Low temperature 200.2 % 12.3 kW 5.08	





This information was gener	ated by the HP KETMA	irk database on 23 jun 2022
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.85 kW	11.06 kW
COP Tj = -7°C	3.11	2.15
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	6.79 kW	6.91 kW
COP Tj = +2°C	4.86	3.59
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	4.79 kW	4.64 kW
$COP Tj = +7^{\circ}C$	6.98	5.07
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	3.73 kW	2.15 kW
COP Tj = 12°C	9.02	4.52
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	10.85 kW	11.06 kW
COP Tj = Tbiv	3.11	2.15
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.3 kW	10.97 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.8	1.98
WTOL	65 °C	65 °C
Poff	6 W	6 W
РТО	18 W	18 W
PSB	6 W	6 W



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PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	1.53 kW
Annual energy consumption Qhe	5003 kWh	7148 kWh



# Model: MHC-V14WD2RN8-C

Configure model		
Model name	MHC-V14WD2RN8-C	
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

# Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	14.10 kW	14.00 kW	
El input	3.00 kW	4.75 kW	
СОР	4.70	2.95	

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

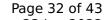
## Warmer Climate



EN 12102-1			
Low temperature Medium temperature			
Sound power level outdoor	72 dB(A)	72 dB(A)	

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	260.6 %	184.6 %
Prated	13.20 kW	14.20 kW
SCOP	6.59	4.69
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	12.94 kW	13.01 kW
COP Tj = +2°C	3.51	2.37
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = $+7$ °C	8.51 kW	9.12 kW
$COP Tj = +7^{\circ}C$	5.72	3.95
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.96 kW	4.26 kW
COP Tj = 12°C	8.51	6.37
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	8.51 kW	9.12 kW
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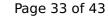


COP Tj = Tbiv	5.72	3.95
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.94 kW	13.01 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.51	2.37
WTOL	65.00 °C	65.00 °C
Poff	6.00 W	6.00 W
РТО	18.00 W	18.00 W
PSB	6.00 W	6.00 W
PCK	0.00 W	0.00 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.26 kW	1.18 kW
Annual energy consumption Qhe	2683 kWh	4039 kWh

### Colder Climate

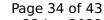
EN 12102-1			
Low temperature Medium temperature			
Sound power level outdoor	72 dB(A)	72 dB(A)	

EN 14825		
	Low temperature	Medium temperature
$\eta_{S}$	171.3 %	126.6 %
Prated	14.30 kW	12.50 kW





SCOP	4.36	3.24
Tbiv	-15.00 °C	-15.00 °C
TOL	-22.00 °C	-22.00 °C
Pdh Tj = -7°C	8.74 kW	7.80 kW
COP Tj = -7°C	3.59	2.77
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	5.52 kW	4.64 kW
COP Tj = +2°C	5.35	3.91
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	3.70 kW	3.00 kW
$COP Tj = +7^{\circ}C$	7.06	4.88
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.69 kW	3.61 kW
COP Tj = 12°C	9.34	6.61
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	11.67 kW	10.19 kW
COP Tj = Tbiv	2.58	1.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.14 kW	7.28 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.02	1.35
WTOL	65.00 °C	65.00 °C
Poff	6.00 W	6.00 W



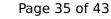


РТО	18.00 W	18.00 W
PSB	6.00 W	6.00 W
PCK	0.00 W	0.00 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.16 kW	5.22 kW
Annual energy consumption Qhe	8095 kWh	9496 kWh
Pdh Tj = -15°C (if TOL<-20°C)	11.67	10.19
COP Tj = -15°C (if TOL $<$ -20°C)	2.58	1.91
Cdh Tj = -15 °C	0.90	0.90

# Average Climate

EN 12102-1			
Low temperature Medium temperature			
Sound power level outdoor	72 dB(A)	72 dB(A)	

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	192.5 %	141.8 %
Prated	14.20 kW	14.20 kW
SCOP	4.89	3.62
Tbiv	-7 °C	-7 °C





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TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.52 kW	12.52 kW
$COP Tj = -7^{\circ}C$	2.97	2.20
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	7.98 kW	7.71 kW
COP Tj = +2°C	4.56	3.58
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = $+7^{\circ}$ C	5.04 kW	5.07 kW
$COP Tj = +7^{\circ}C$	7.01	5.06
Cdh Tj = $+7$ °C	0.90	0.90
Pdh Tj = 12°C	3.73 kW	2.15 kW
COP Tj = 12°C	9.02	4.52
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	12.52 kW	12.52 kW
COP Tj = Tbiv	2.97	2.20
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.41 kW	11.51 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.66	1.96
WTOL	65.00 °C	65.00 °C
Poff	6.00 W	6.00 W
РТО	18.00 W	18.00 W
PSB	6.00 W	6.00 W
		•



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PCK	0.00 W	0.00 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.80 kW	2.69 kW
Annual energy consumption Qhe	5984 kWh	8079 kWh

# Model: MHC-V16WD2RN8-C

Configure model		
Model name MHC-V16WD2RN8-C		
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

# Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	16.00 kW	16.00 kW
El input	3.56 kW	5.61 kW
СОР	4.50	2.85

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

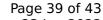
## Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	72 dB(A)	72 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	255.5 %	184 %
Prated	14.20 kW	14.50 kW
SCOP	6.46	4.68
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	14.20 kW	13.62 kW
$COPTj = +2^{\circ}C$	3.22	2.35
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = $+7^{\circ}$ C	9.15 kW	9.35 kW
COP Tj = +7°C	5.41	3.94
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	4.24 kW	4.26 kW
COP Tj = 12°C	8.56	6.37
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	9.15 kW	9.35 kW

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COP Tj = Tbiv	5.41	3.94
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.20 kW	13.62 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.22	2.35
WTOL	65.00 °C	65.00 °C
Poff	6.00 W	13.00 W
РТО	18.00 W	20.00 W
PSB	6.00 W	13.00 W
PCK	0.00 W	0.00 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.91 kW
Annual energy consumption Qhe	2935 kWh	4153 kWh

### Colder Climate

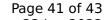
EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	72 dB(A)	72 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	170.9 %	124.3 %
Prated	15.10 kW	13.50 kW
	·	





SCOP	4.35	3.18
Tbiv	-15.00 °C	-15.00 °C
TOL	-22.00 °C	-22.00 °C
Pdh Tj = -7°C	9.26 kW	8.43 kW
COP Tj = -7°C	3.59	2.77
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	5.76 kW	5.20 kW
COP Tj = +2°C	5.35	3.74
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	3.76 kW	3.53 kW
COP Tj = +7°C	7.04	5.19
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.72 kW	3.61 kW
COP Tj = 12°C	8.78	6.61
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	12.30 kW	11.03 kW
COP Tj = Tbiv	2.58	1.85
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.43 kW	7.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.00	1.30
WTOL	65.00 °C	65.00 °C
Poff	6.00 W	6.00 W





18.00 W	18.00 W
6.00 W	6.00 W
0.00 W	0.00 W
Electricity	Electricity
5.67 kW	5.98 kW
8546 kWh	10473 kWh
12.30	11.03
2.58	1.85
0.90	0.90
	6.00 W  0.00 W  Electricity  5.67 kW  8546 kWh  12.30  2.58

# Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level outdoor	72 dB(A)	72 dB(A)	

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	190.5 %	140.7 %
Prated	15.20 kW	14.70 kW
SCOP	4.84	3.59
Tbiv	-7 °C	-7 °C





This information was gener	ated by the III REITH	aatabase on Es jan Es.
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	13.49 kW	13.03 kW
COP Tj = -7°C	2.87	2.16
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	8.59 kW	8.50 kW
COP Tj = +2°C	4.53	3.55
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	5.55 kW	5.27 kW
COP Tj = +7°C	7.01	5.05
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.73 kW	2.15 kW
COP Tj = 12°C	9.02	4.52
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	13.49 kW	13.03 kW
COP Tj = Tbiv	2.87	2.16
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.05 kW	12.07 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.94
WTOL	65.00 °C	65.00 °C
Poff	6.00 W	6.00 W
PTO	18.00 W	18.00 W
PSB	6.00 W	6.00 W



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PCK	0.00 W	0.00 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.15 kW	2.63 kW
Annual energy consumption Qhe	6509 kWh	8460 kWh