

Page 1 of 10

#### This information was generated by the HP KEYMARK database on 21 Jun 2022

#### **Login**

Summary of	MHC-V12W/D2RN8, V14W/D2RN8, V16W/D2RN8	Reg. No.	ICIM-PDC-000059-00
Certificate Holder	Certificate Holder		
Name	GD Midea Heating & Ventilating Equipment Co., Ltd.		
Address	Penglai Industry Road	Penglai Industry Road Zip 528311	
City	Beijiao, Shunde, Foshan	Country	China
Certification Body	ICIM S.p.A.		
Subtype title	MHC-V12W/D2RN8, V14W/D2RN8, V16W/D2RN8		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R32		
Mass of Refrigerant	2.8 kg		
Certification Date	17.01.2020		
Testing basis	EN 14511:2013, EN 14825:2016, EN 12102:2013		

# Model: MHC-V12W/D2RN8

Configure model		
Model name	MHC-V12W/D2RN8	
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply 3x400V 50Hz		

## Heating

EN 14511-4		
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed	
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	

EN 14511-2		
	Low temperature	Medium temperature
Heat output	12.30 kW	11.90 kW
El input	2.54 kW	4.23 kW
СОР	4.84	2.81

### **Average Climate**



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	dB(A)	dB(A)
Sound power level outdoor	68 dB(A)	68 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	169 %	126 %
Prated	12.00 kW	13.00 kW
SCOP	4.29	3.23
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.52 kW	11.29 kW
COP Tj = -7°C	2.88	2.05
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	6.50 kW	7.31 kW
COP Tj = +2°C	4.15	3.14
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	4.12 kW	4.96 kW
COP Tj = +7°C	5.74	4.25
Cdh Tj = +7 °C	0.90	0.90



Pdh Tj = 12°C	2.23 kW	2.37 kW
COP Tj = 12°C	5.40	4.94
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	10.52 kW	11.29 kW
COP Tj = Tbiv	2.88	2.05
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.01 kW	11.88 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.79
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	9 W	9 W
РТО	15 W	15 W
PSB	9 W	9 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.90 kW
Annual energy consumption Qhe	5726 kWh	8164 kWh



# Model: MHC-V14W/D2RN8

Configure model		
Model name	MHC-V14W/D2RN8	
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply 3x400V 50Hz		

## Heating

EN 14511-4		
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed	
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed	
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	

EN 14511-2		
	Low temperature	Medium temperature
Heat output	14.10 kW	14.20 kW
El input	3.05 kW	5.09 kW
СОР	4.63	2.79

### **Average Climate**



EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	dB(A)	dB(A)	
Sound power level outdoor	71 dB(A)	71 dB(A)	

EN 14825			
	Low temperature	Medium temperature	
$\eta_{s}$	168 %	128 %	
Prated	14.00 kW	14.00 kW	
SCOP	4.27	3.26	
Tbiv	-7 °C	-7 °C	
TOL	-10 °C	-10 °C	
Pdh Tj = -7°C	12.47 kW	12.18 kW	
COP Tj = -7°C	2.84	2.05	
Cdh Tj = -7 °C	0.90	0.90	
Pdh Tj = $+2$ °C	7.48 kW	7.84 kW	
COP Tj = +2°C	4.19	3.18	
Cdh Tj = +2 °C	0.90	0.90	
Pdh Tj = +7°C	5.04 kW	5.21 kW	
COP Tj = +7°C	5.99	4.29	
Cdh Tj = +7 °C	0.90	0.90	



This information was generated by the HP KETMARK database on 21 jun 202			
Pdh Tj = 12°C	2.23 kW	2.57 kW	
COP Tj = 12°C	5.30	5.14	
Cdh Tj = +12 °C	0.90	0.90	
Pdh Tj = Tbiv	12.47 kW	12.18 kW	
COP Tj = Tbiv	2.84	2.05	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.72 kW	11.68 kW	
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.51	1.74	
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90	
WTOL	60 °C	60 °C	
Poff	9 W	9 W	
РТО	26 W	26 W	
PSB	9 W	9 W	
PCK	o w	0 W	
Supplementary Heater: Type of energy input	Electricity	Electricity	
Supplementary Heater: PSUP	1.40 kW	2.10 kW	

CEN heat pump KEYMARK

Annual energy consumption Qhe

6819 kWh

8724 kWh



# Model: MHC-V16W/D2RN8

Configure model			
Model name	MHC-V16W/D2RN8		
Application	Heating (medium temp)		
Units	Outdoor		
Climate Zone	n/a		
Reversibility	No		
Cooling mode application (optional)	n/a		

General Data		
Power supply	3x400V 50Hz	

## Heating

EN 14511-4			
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed		
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed		
Shutting off the heat transfer medium flow	passed		
Complete power supply failure	passed		
Defrost test	passed		

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	16.30 kW	16.10 kW	
El input	3.63 kW	5.83 kW	
СОР	4.49	2.76	

### **Average Climate**



EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	dB(A)	dB(A)	
Sound power level outdoor	71 dB(A)	71 dB(A)	

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	169 %	128 %
Prated	16.00 kW	15.00 kW
SCOP	4.30	3.27
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	14.15 kW	12.90 kW
COP Tj = $-7$ °C	2.72	2.04
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = $+2$ °C	8.92 kW	8.25 kW
COP Tj = +2°C	4.17	3.21
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	5.64 kW	5.45 kW
COP Tj = +7°C	5.86	4.32
Cdh Tj = +7 °C	0.90	0.90



Page 10 of 10

#### This information was generated by the HP KEYMARK database on 21 Jun 2022

Pdh Tj = 12°C	2.47 kW	2.57 kW
COP Tj = 12°C	6.28	5.12
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	14.15 kW	12.90 kW
COP Tj = Tbiv	2.72	2.04
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.93 kW	11.16 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.41	1.65
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	9 W	9 W
РТО	41 W	41 W
PSB	9 W	9 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.10 kW	3.40 kW
Annual energy consumption Qhe	7687 kWh	9216 kWh