

Subtype M thermal A HT Series 8 10 kW

| | |
|---------------------|----------------------------------------------------|
| Certificate Holder | GD Midea Heating & Ventilating Equipment Co., Ltd. |
| Address | Penglai Industry Road |
| ZIP | 528311 |
| City | Beijiao, Shunde, Foshan |
| Country | CN |
| Certification Body | ICIM S.p.A. |
| Subtype title | M thermal A HT Series 8 10 kW |
| Registration number | ICIM-PDC-000198 |
| Heat Pump Type | Outdoor Air/Water |
| Refrigerant | R290 |
| Mass of Refrigerant | 1.1 kg |
| Certification Date | 08.09.2023 |
| Testing basis | V12 |

Model MHC-V8WD2N7-***

| | |
|-------------------------------------|-----------------------|
| Model name | MHC-V8WD2N7-*** |
| Application | Heating (medium temp) |
| Units | Outdoor |
| Climate zone (for heating) | Colder, Warmer |
| 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 | 8.4 kW | 7.8 kW |
| EI input | 1.68 kW | 2.44 kW |
| COP | 5.00 | 3.20 |

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 |
|----------------|-----------------|--------------------|
| η_s | 204 % | 149 % |
| Prated | 8.00 kW | 6.80 kW |
| SCOP | 5.19 | 3.82 |
| Tbiv | -7 °C | -7 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 7.09 kW | 5.97 kW |
| COP Tj = -7°C | 3.06 | 2.37 |
| Cdh Tj = -7 °C | 0.900 | 0.900 |
| Pdh Tj = +2°C | 4.53 kW | 3.71 kW |
| COP Tj = +2°C | 5.10 | 3.85 |
| Cdh Tj = +2 °C | 0.900 | 0.900 |
| Pdh Tj = +7°C | 3.96 kW | 3.62 kW |
| COP Tj = +7°C | 7.47 | 5.12 |

| | | |
|-----------------------------------------------------|-------------|-------------|
| Cdh Tj = +7 °C | 0.900 | 0.900 |
| Pdh Tj = 12°C | 4.51 kW | 4.31 kW |
| COP Tj = 12°C | 9.66 | 6.77 |
| Cdh Tj = +12 °C | 0.900 | 0.900 |
| Pdh Tj = Tbiv | 7.09 kW | 5.97 kW |
| COP Tj = Tbiv | 3.06 | 2.37 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 7.97 kW | 6.46 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.56 | 2.08 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | | |
| WTOL | 75 °C | 75 °C |
| Poff | 9 W | 9 W |
| PTO | 14 W | 14 W |
| PSB | 9 W | 9 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.03 kW | 0.34 kW |
| Annual energy consumption Qhe | 3184 kWh | 3676 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 | 174 % | 135 % |
| Prated | 6.8 kW | 7.0 kW |
| SCOP | 4.44 | 3.46 |
| Tbiv | -15.00 °C | -15.00 °C |
| TOL | -22.00 °C | -22.00 °C |
| Pdh Tj = -7°C | 4.11 kW | 4.49 kW |
| COP Tj = -7°C | 3.97 | 2.87 |
| Cdh Tj = -7 °C | 0.90 | 0.90 |
| Pdh Tj = +2°C | 3.18 kW | 3.07 kW |
| COP Tj = +2°C | 5.60 | 4.38 |
| Cdh Tj = +2 °C | 0.90 | 0.90 |
| Pdh Tj = +7°C | 3.90 kW | 3.67 kW |
| COP Tj = +7°C | 6.46 | 5.58 |
| Cdh Tj = +7 °C | 0.90 | 0.90 |
| Pdh Tj = 12°C | 4.43 kW | 4.36 kW |
| COP Tj = 12°C | 8.67 | 7.22 |
| Cdh Tj = +12 °C | 0.90 | 0.90 |
| Pdh Tj = Tbiv | 5.48 kW | 5.69 kW |
| COP Tj = Tbiv | 2.73 | 2.09 |

| | | |
|-----------------------------------------------------|-------------|-------------|
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 5.64 kW | 5.08 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.09 | 1.54 |
| WTOL | 75.00 °C | 75.00 °C |
| Poff | 9.00 W | 9.00 W |
| PTO | 14 W | 14 W |
| PSB | 9.00 W | 9.00 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 1.15 kW | 1.92 kW |
| Annual energy consumption Qhe | 3772.00 kWh | 4992.00 kWh |
| Pdh Tj = -15°C (if TOL) | 5.48 | 5.69 |
| COP Tj = -15°C (if TOL) | 2.73 | 2.09 |
| 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 | 259.00 % | 184.00 % |
| Prated | 8.2 kW | 8.3 kW |
| SCOP | 6.56 | 4.68 |
| Tbiv | 7.00 °C | 7.00 °C |
| TOL | 2.00 °C | 2.00 °C |
| Pdh Tj = +2°C | 8.20 kW | 7.99 kW |
| COP Tj = +2 °C | 3.59 | 2.54 |
| Cdh Tj = +2 °C | 0.90 | 0.90 |
| Pdh Tj = +7°C | 5.27 kW | 5.36 kW |
| COP Tj = +7°C | 6.03 | 4.15 |
| Cdh Tj = +7 °C | 0.90 | 0.90 |
| Pdh Tj = 12°C | 4.46 kW | 4.21 kW |
| COP Tj = 12°C | 8.58 | 6.35 |
| Cdh Tj = +12 °C | 0.90 | 0.90 |
| Pdh Tj = Tbiv | 5.27 kW | 5.36 kW |
| COP Tj = Tbiv | 6.03 | 4.15 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8.27 kW | 7.99 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.59 | 2.54 |
| WTOL | 75.00 °C | 75.00 °C |
| Poff | 9.00 W | 9.00 W |
| PTO | 14.00 W | 14.00 W |
| PSB | 9 W | 9 W |

| | | |
|--------------------------------------------|-------------|-------------|
| PCK | 0.00 W | 0.00 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.00 kW | 0.30 kW |
| Annual energy consumption Qhe | 1669.00 kWh | 2368.00 kWh |

Model MHC-V10WD2N7-***

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|-------------------------------------|-----------------------|
| Model name | MHC-V10WD2N7-*** |
| Application | Heating (medium temp) |
| Units | Outdoor |
| Climate zone (for heating) | Colder, Warmer |
| 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 | 10.0 kW | 9.5 kW |
| EI input | 2.13 kW | 3.11 kW |
| COP | 4.70 | 3.05 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 61 dB(A) | 61 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| η_s | 199 % | 149 % |
| Prated | 9.2 kW | 7.8 kW |
| SCOP | 5.07 | 3.82 |
| Tbiv | -7 °C | -7 °C |
| TOL | -10.00 °C | -10.00 °C |
| Pdh Tj = -7°C | 8.11 kW | 6.88 kW |
| COP Tj = -7°C | 2.84 | 2.31 |
| Cdh Tj = -7 °C | 0.90 | 0.90 |
| Pdh Tj = +2°C | 5.10 kW | 4.23 kW |
| COP Tj = +2°C | 4.96 | 3.80 |
| Cdh Tj = +2 °C | 0.90 | 0.90 |
| Pdh Tj = +7°C | 3.96 kW | 3.62 kW |
| COP Tj = +7°C | 7.47 | 5.21 |

| | | |
|-----------------------------------------------------|-------------|-------------|
| Cdh Tj = +7 °C | 0.90 | 0.90 |
| Pdh Tj = 12°C | 4.48 kW | 4.31 kW |
| COP Tj = 12°C | 9.56 | 6.86 |
| Cdh Tj = +12 °C | 0.90 | 0.90 |
| Pdh Tj = Tbiv | 8.11 kW | 6.88 kW |
| COP Tj = Tbiv | 2.84 | 2.31 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8.50 kW | 7.42 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.52 | 1.99 |
| WTOL | 75.00 °C | 75.00 °C |
| Poff | 9.00 W | 9.00 W |
| PTO | 14.00 W | 14.00 W |
| PSB | 9.00 W | 9.00 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.66 kW | 0.35 kW |
| Annual energy consumption Qhe | 3744 kWh | 4215 kWh |

EN 12102-1 | Colder Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 61 dB(A) | 61 dB(A) |

EN 14825 | Colder Climate

| | Low temperature | Medium temperature |
|-----------------------------------------------------|-----------------|--------------------|
| ηs | 178 % | 136 % |
| Prated | 7.9 kW | 8.0 kW |
| SCOP | 4.54 | 3.49 |
| Tbiv | -15.00 °C | -15.00 °C |
| TOL | -22.00 °C | -22.00 °C |
| Pdh Tj = -7°C | 4.89 kW | 4.86 kW |
| COP Tj = -7°C | 3.74 | 2.90 |
| Cdh Tj = -7 °C | 0.90 | 0.90 |
| Pdh Tj = +2°C | 3.07 kW | 3.09 kW |
| COP Tj = +2°C | 5.66 | 4.38 |
| Cdh Tj = +2 °C | 0.90 | 0.90 |
| Pdh Tj = +7°C | 3.83 kW | 3.76 kW |
| COP Tj = +7°C | 7.63 | 5.64 |
| Cdh Tj = +7 °C | 0.90 | 0.90 |
| Pdh Tj = 12°C | 4.46 kW | 4.32 kW |
| COP Tj = 12°C | 9.24 | 6.92 |
| Cdh Tj = +12 °C | 0.90 | 0.90 |
| Pdh Tj = Tbiv | 6.42 kW | 6.55 kW |
| COP Tj = Tbiv | 2.69 | 1.99 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 6.39 kW | 5.80 kW |

| | | |
|-----------------------------------------------------|-------------|-------------|
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.08 | 1.57 |
| WTOL | 75.00 °C | 75.00 °C |
| Poff | 9.00 W | 9.00 W |
| PTO | 14 W | 14 W |
| PSB | 9.00 W | 9.00 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 1.48 kW | 2.20 kW |
| Annual energy consumption Qhe | 4269.00 kWh | 5659.00 kWh |
| Pdh Tj = -15°C (if TOL | 6.42 | 6.55 |
| COP Tj = -15°C (if TOL | 2.69 | 1.99 |
| Cdh Tj = -15 °C | 0.9 | 0.9 |

EN 12102-1 | Warmer Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 61 dB(A) | 61 dB(A) |

EN 14825 | Warmer Climate

| | Low temperature | Medium temperature |
|-----------------------------------------------------|-----------------|--------------------|
| ηs | 281.00 % | 188.00 % |
| Prated | 8.6 kW | 8.8 kW |
| SCOP | 7.11 | 4.79 |
| Tbiv | 7.00 °C | 7.00 °C |
| TOL | 2.00 °C | 2.00 °C |
| Pdh Tj = +2°C | 8.60 kW | 8.54 kW |
| COP Tj = +2°C | 3.62 | 2.50 |
| Cdh Tj = +2 °C | 0.90 | 0.90 |
| Pdh Tj = +7°C | 5.52 kW | 5.68 kW |
| COP Tj = +7°C | 6.26 | 4.20 |
| Cdh Tj = +7 °C | 0.90 | 0.90 |
| Pdh Tj = 12°C | 4.61 kW | 4.29 kW |
| COP Tj = 12°C | 9.84 | 6.53 |
| Cdh Tj = +12 °C | 0.90 | 0.90 |
| Pdh Tj = Tbiv | 5.52 kW | 5.68 kW |
| COP Tj = Tbiv | 6.26 | 4.20 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8.61 kW | 8.54 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.62 | 2.50 |
| WTOL | 75.00 °C | 75.00 °C |
| Poff | 9.00 W | 9.00 W |
| PTO | 14.00 W | 14.00 W |
| PSB | 9 W | 9 W |
| PCK | 0.00 W | 0.00 W |

| | | |
|--------------------------------------------|-------------|-------------|
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.00 kW | 0.26 kW |
| Annual energy consumption Qhe | 1614.00 kWh | 2456.00 kWh |

Model BMHC-V10WD2N7

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|-------------------------------------|-----------------------|
| Model name | BMHC-V10WD2N7 |
| Application | Heating (medium temp) |
| Units | Outdoor |
| Climate zone (for heating) | n/a |
| 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 | 8.5 kW | 8 kW |
| El input | 1.71 kW | 2.52 kW |
| COP | 4.98 | 3.18 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level outdoor | 49 dB(A) | 49 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| η_s | 205.1 % | 152.7 % |
| Prated | 8 kW | 7.8 kW |
| SCOP | 5.2 | 3.89 |
| Tbiv | -7 °C | -7 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 7.39 kW | 6.95 kW |
| COP Tj = -7°C | 3.11 | 2.36 |
| Cdh Tj = -7 °C | 1 | 1 |
| Pdh Tj = +2°C | 4.27 kW | 4.09 kW |
| COP Tj = +2°C | 5.12 | 3.83 |
| Cdh Tj = +2 °C | 1 | 1 |
| Pdh Tj = +7°C | 3.66 kW | 3.47 kW |

| | | |
|-----------------------------------------------------|-------------|-------------|
| COP Tj = +7°C | 6.85 | 5.05 |
| Cdh Tj = +7 °C | 0.98 | 0.99 |
| Pdh Tj = 12°C | 4.33 kW | 4.03 kW |
| COP Tj = 12°C | 8.9 | 6.41 |
| Cdh Tj = +12 °C | 0.98 | 0.99 |
| Pdh Tj = Tbiv | 7.39 kW | 6.95 kW |
| COP Tj = Tbiv | 3.11 | 2.36 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8 kW | 7.71 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.59 | 2.02 |
| WTOL | 75 °C | 75 °C |
| Poff | 8.9 W | 8.9 W |
| PTO | 9 W | 9 W |
| PSB | 8.9 W | 8.9 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0 kW | 0.09 kW |
| Annual energy consumption Qhe | 3176 kWh | 4140 kWh |