Subtype Aqua Thermal Super 65 75	
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	Aqua Thermal Super 65 75
Registration number	041-K007-30
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	9 kg
Certification Date	01.04.2025
Testing basis	Heat Pump KEYMARK certification Scheme rules v12
Testing laboratory	Intertek Testing Services Shenzhen LTD. Guangzhou Branch, CN

Model MH-SU65-RN8L	
Model name	MH-SU65-RN8L
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	3x400V 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	64 kW	65 kW
El input	15.24 kW	18.3 kW
COP	4.2	3.55

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	80 dB(A)	80 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	177 %	133 %
Prated	48 kW	40 kW
SCOP	4.5	3.4
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	42.18 kW	35.59 kW
COP Tj = -7°C	3.24	2.42
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	24.59 kW	21.61 kW
COP Tj = +2°C	4.15	3.18
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	24 kW	15.06 kW
COP Tj = +7°C	6.2	4.46

Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	20.68 kW	18.43 kW
COP Tj = 12°C	8.23	6.06
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	42.18 kW	35.59 kW
COP Tj = Tbiv	3.24	2.42
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	47.6 kW	39.8 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.71	1.83
WTOL	65 °C	65 °C
Poff	80 W	80 W
PTO	350 W	350 W
PSB	80 W	80 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.4 kW	0.2 kW
Annual energy consumption Qhe	22032 kWh	24290 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level outdoor	80 dB(A)	80 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
ηs	152 %	106 %
Prated	40.00 kW	34.00 kW
SCOP	3.88	2.73
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-18 °C
Pdh Tj = -7°C	24.57 kW	21.53 kW
COP Tj = -7°C	3.11	2.55
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	15.59 kW	12.29 kW
COP Tj = +2°C	4.65	3.03
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	12.61 kW	11.14 kW
COP Tj = +7°C	5.63	3.80
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	15.31 kW	14.28 kW
COP Tj = 12°C	7.37	5.77
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	32.81 kW	27.88 kW
COP Tj = Tbiv	2.71	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	37.22 kW	31.81 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.97	1.71
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	65 °C	65 °C
Poff	80 W	80 W
PTO	350 W	350 W
PSB	80 W	80 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.78 kW	34.00 kW
Annual energy consumption Qhe	25415 kWh	30683 kWh
Pdh Tj = -15°C (if TOL	32.81	27.88
COP Tj = -15°C (if TOL	2.71	1.83
Cdh Tj = -15 °C	0.900	0.900

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	80 dB(A)	80 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	237 %	161 %
Prated	48 kW	40 kW
SCOP	6	4.12
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	47.76 kW	39.82 kW
COP Tj = +2°C	3.23	2.01
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	30.59 kW	24.93 kW
COP Tj = +7°C	5.47	3.71
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	15.7 kW	12.35 kW
COP Tj = 12°C	7.65	5.27
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	30.59 kW	24.93 kW
COP Tj = Tbiv	5.47	3.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	47.76 kW	39.82 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.23	2.01
WTOL	65 °C	65 °C
Poff	80 W	80 W
PTO	350 W	350 W
PSB	80 W	80 W

PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.24 kW	0.18 kW
Annual energy consumption Qhe	10683 kWh	12970 kWh

Model MH-SU65M-RN8L	
Model name	MH-SU65M-RN8L
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	3x400V 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	64 kW	65 kW
El input	16.37 kW	19.43 kW
COP	3.95	3.38

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	83 dB(A)	83 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	175 %	131 %
Prated	48 kW	40 kW
SCOP	4.47	3.36
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	42.15 kW	35.53 kW
COP Tj = -7°C	3.25	2.43
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	24.57 kW	21.55 kW
COP Tj = +2°C	4.1	3.15
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	23.95 kW	14.99 kW
COP Tj = +7°C	6.17	4.35

Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	20.62 kW	18.37 kW
COP Tj = 12°C	8.27	6
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	42.15 kW	35.53 kW
COP Tj = Tbiv	3.25	2.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	47.5 kW	39.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.71	1.86
WTOL	65 °C	65 °C
Poff	80 W	80 W
PTO	350 W	350 W
PSB	80 W	80 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.5 kW	0.3 kW
Annual energy consumption Qhe	22171 kWh	24568 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level outdoor	83 dB(A)	83 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
ηs	151 %	103 %
Prated	40.00 kW	34.00 kW
SCOP	3.87	2.67
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-18 °C
Pdh Tj = -7°C	24.52 kW	21.46 kW
COP Tj = -7°C	3.12	2.56
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	15.51 kW	12.23 kW
COP Tj = +2°C	4.62	2.87
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	12.54 kW	11.07 kW
COP Tj = +7°C	5.57	3.75
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	15.24 kW	14.21 kW
COP Tj = 12°C	7.52	5.85
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	32.73 kW	27.81 kW
COP Tj = Tbiv	2.73	1.81
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	37.16 kW	31.74 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.97	1.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	65 °C	65 °C
Poff	80 W	80 W
PTO	350 W	350 W
PSB	80 W	80 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.84 kW	34.00 kW
Annual energy consumption Qhe	25464 kWh	31338 kWh
Pdh Tj = -15°C (if TOL	32.73	27.81
COP Tj = -15°C (if TOL	2.73	1.81
Cdh Tj = -15 °C	0.900	0.900

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	83 dB(A)	83 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	235 %	159 %
Prated	48 kW	40 kW
SCOP	5.96	4.05
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	47.62 kW	39.87 kW
COP Tj = +2°C	3.23	2.02
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	30.57 kW	24.86 kW
COP Tj = +7°C	5.48	3.68
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	15.63 kW	12.28 kW
COP Tj = 12°C	7.5	5.1
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	30.57 kW	24.86 kW
COP Tj = Tbiv	5.48	3.68
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	47.62 kW	39.87 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.23	2.02
WTOL	65 °C	65 °C
Poff	80 W	80 W
PTO	350 W	350 W
PSB	80 W	80 W

PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.38 kW	0.13 kW
Annual energy consumption Qhe	10767 kWh	13207 kWh

Model MH-SU75-RN8L	
Model name	MH-SU75-RN8L
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	3x400V 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	77 kW	75 kW
El input	19.74 kW	22.06 kW
COP	3.9	3.4

EN 12102-1 | Average Climate	Low temperature	Medium temperature
Sound power level outdoor	86 dB(A)	86 dB(A)

EN 14825 | Average Climate	Low temperature	Medium temperature
ηs	177 %	133 %
Prated	48 kW	40 kW
SCOP	4.5	3.4
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	42.18 kW	35.59 kW
COP Tj = -7°C	3.24	2.42
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	24.59 kW	21.61 kW
COP Tj = +2°C	4.15	3.18
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	24 kW	15.06 kW
COP Tj = +7°C	6.2	4.46

Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	20.68 kW	18.43 kW
COP Tj = 12°C	8.23	6.06
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	42.18 kW	35.59 kW
COP Tj = Tbiv	3.24	2.42
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	47.6 kW	39.8 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.71	1.83
WTOL	65 °C	65 °C
Poff	80 W	80 W
PTO	350 W	350 W
PSB	80 W	80 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.4 kW	0.2 kW
Annual energy consumption Qhe	22032 kWh	24290 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level outdoor	86 dB(A)	86 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
ηs	152 %	106 %
Prated	40.00 kW	34.00 kW
SCOP	3.88	2.73
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-18 °C
Pdh Tj = -7°C	24.57 kW	21.53 kW
COP Tj = -7°C	3.11	2.55
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	15.59 kW	12.29 kW
COP Tj = +2°C	4.65	3.03
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	12.61 kW	11.14 kW
COP Tj = +7°C	5.63	3.80
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	15.31 kW	14.28 kW
COP Tj = 12°C	7.37	5.77
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	32.81 kW	27.88 kW
COP Tj = Tbiv	2.71	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	37.22 kW	31.81 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.97	1.71
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	65 °C	65 °C
Poff	80 W	80 W
PTO	350 W	350 W
PSB	80 W	80 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.78 kW	34.00 kW
Annual energy consumption Qhe	25415 kWh	30683 kWh
Pdh Tj = -15°C (if TOL	32.81	27.88
COP Tj = -15°C (if TOL	2.71	1.83
Cdh Tj = -15 °C	0.900	0.900

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	86 dB(A)	86 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	237 %	161 %
Prated	48 kW	40 kW
SCOP	6	4.12
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	47.76 kW	39.82 kW
COP Tj = +2°C	3.23	2.01
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	30.59 kW	24.93 kW
COP Tj = +7°C	5.47	3.71
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	15.7 kW	12.35 kW
COP Tj = 12°C	7.65	5.27
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	30.59 kW	24.93 kW
COP Tj = Tbiv	5.47	3.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	47.76 kW	39.82 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.23	2.01
WTOL	65 °C	65 °C
Poff	80 W	80 W
PTO	350 W	350 W
PSB	80 W	80 W

PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.24 kW	0.18 kW
Annual energy consumption Qhe	10683 kWh	12970 kWh

Model MH-SU75M-RN8L		
Model name	MH-SU75M-RN8L	
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	3x400V 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	77 kW	75 kW
El input	21.61 kW	23.51 kW
COP	3.59	3.22

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	89 dB(A)	89 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	175 %	131 %
Prated	48 kW	40 kW
SCOP	4.47	3.36
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	42.15 kW	35.53 kW
COP Tj = -7°C	3.25	2.43
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	24.57 kW	21.55 kW
COP Tj = +2°C	4.1	3.15
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	23.95 kW	14.99 kW
COP Tj = +7°C	6.17	4.35

Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	20.62 kW	18.37 kW
COP Tj = 12°C	8.27	6
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	42.15 kW	35.53 kW
COP Tj = Tbiv	3.25	2.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	47.5 kW	39.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.71	1.86
WTOL	65 °C	65 °C
Poff	80 W	80 W
PTO	350 W	350 W
PSB	80 W	80 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.5 kW	0.3 kW
Annual energy consumption Qhe	22171 kWh	24568 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level outdoor	89 dB(A)	89 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
ηs	151 %	103 %
Prated	40.00 kW	34.00 kW
SCOP	3.87	2.67
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-18 °C
Pdh Tj = -7°C	24.52 kW	21.46 kW
COP Tj = -7°C	3.12	2.56
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	15.51 kW	12.23 kW
COP Tj = +2°C	4.62	2.87
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	12.54 kW	11.07 kW
COP Tj = +7°C	5.57	3.75
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	15.24 kW	14.21 kW
COP Tj = 12°C	7.52	5.85
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	32.73 kW	27.81 kW
COP Tj = Tbiv	2.73	1.81
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	37.16 kW	31.74 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.97	1.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	65 °C	65 °C
Poff	80 W	80 W
PTO	350 W	350 W
PSB	80 W	80 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.84 kW	34.00 kW
Annual energy consumption Qhe	25464 kWh	31338 kWh
Pdh Tj = -15°C (if TOL	32.73	27.81
COP Tj = -15°C (if TOL	2.73	1.81
Cdh Tj = -15 °C	0.900	0.900

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	89 dB(A)	89 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	235 %	159 %
Prated	48 kW	40 kW
SCOP	5.96	4.05
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	47.62 kW	39.87 kW
COP Tj = +2°C	3.23	2.02
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	30.57 kW	24.86 kW
COP Tj = +7°C	5.48	3.68
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	15.63 kW	12.28 kW
COP Tj = 12°C	7.5	5.1
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	30.57 kW	24.86 kW
COP Tj = Tbiv	5.48	3.68
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	47.62 kW	39.87 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.23	2.02
WTOL	65 °C	65 °C
Poff	80 W	80 W
PTO	350 W	350 W
PSB	80 W	80 W

PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.38 kW	0.13 kW
Annual energy consumption Qhe	10767 kWh	13207 kWh

Model MDVM-V65D2BR8-AS	
Model name	MDVM-V65D2BR8-AS
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	3x400V 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	64 kW	65 kW
El input	15.24 kW	18.3 kW
COP	4.2	3.55

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	80 dB(A)	80 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	177 %	133 %
Prated	48 kW	40 kW
SCOP	4.5	3.4
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	42.18 kW	35.59 kW
COP Tj = -7°C	3.24	2.42
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	24.59 kW	21.61 kW
COP Tj = +2°C	4.15	3.18
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	24 kW	15.06 kW
COP Tj = +7°C	6.2	4.46

Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	20.68 kW	18.43 kW
COP Tj = 12°C	8.23	6.06
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	42.18 kW	35.59 kW
COP Tj = Tbiv	3.24	2.42
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	47.6 kW	39.8 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.71	1.83
WTOL	65 °C	65 °C
Poff	80 W	80 W
PTO	350 W	350 W
PSB	80 W	80 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.4 kW	0.2 kW
Annual energy consumption Qhe	22032 kWh	24290 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level outdoor	80 dB(A)	80 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
ηs	152 %	106 %
Prated	40 kW	34 kW
SCOP	3.88	2.73
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-18 °C
Pdh Tj = -7°C	24.57 kW	21.53 kW
COP Tj = -7°C	3.11	2.55
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	15.59 kW	12.29 kW
COP Tj = +2°C	4.65	3.03
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	12.61 kW	11.14 kW
COP Tj = +7°C	5.63	3.8
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	15.31 kW	14.28 kW
COP Tj = 12°C	7.37	5.77
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	32.81 kW	27.88 kW
COP Tj = Tbiv	2.71	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	37.22 kW	31.81 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.97	1.71
WTOL	65 °C	65 °C
Poff	80 W	80 W
PTO	350 W	350 W
PSB	80 W	80 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.78 kW	34 kW
Annual energy consumption Qhe	25415 kWh	30683 kWh
Pdh Tj = -15°C (if TOL	32.81	27.88
COP Tj = -15°C (if TOL	2.71	1.83
Cdh Tj = -15 °C	0.9	0.9

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	80 dB(A)	80 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	237 %	161 %
Prated	48 kW	40 kW
SCOP	6	4.12
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	47.76 kW	39.82 kW
COP Tj = +2°C	3.23	2.01
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	30.59 kW	24.93 kW
COP Tj = +7°C	5.47	3.71
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	15.7 kW	12.35 kW
COP Tj = 12°C	7.65	5.27
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	30.59 kW	24.93 kW
COP Tj = Tbiv	5.47	3.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	47.76 kW	39.82 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.23	2.01
WTOL	65 °C	65 °C
Poff	80 W	80 W
PTO	350 W	350 W
PSB	80 W	80 W
PCK	0 W	0 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.24 kW	0.18 kW
Annual energy consumption Qhe	10683 kWh	12970 kWh

Model MDVM-V65MD2BR8-AS	
Model name	MDVM-V65MD2BR8-AS
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	3x400V 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	64 kW	65 kW
El input	16.37 kW	19.43 kW
COP	3.95	3.38

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	83 dB(A)	83 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	175 %	131 %
Prated	48 kW	40 kW
SCOP	4.47	3.36
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	42.15 kW	35.53 kW
COP Tj = -7°C	3.25	2.43
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	24.57 kW	21.55 kW
COP Tj = +2°C	4.1	3.15
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	23.95 kW	14.99 kW
COP Tj = +7°C	6.17	4.35

Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	20.62 kW	18.37 kW
COP Tj = 12°C	8.27	6
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	42.15 kW	35.53 kW
COP Tj = Tbiv	3.25	2.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	47.5 kW	39.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.71	1.86
WTOL	65 °C	65 °C
Poff	80 W	80 W
PTO	350 W	350 W
PSB	80 W	80 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.5 kW	0.3 kW
Annual energy consumption Qhe	22171 kWh	24568 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level outdoor	83 dB(A)	83 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
ηs	151 %	103 %
Prated	40 kW	34 kW
SCOP	3.87	2.67
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-18 °C
Pdh Tj = -7°C	24.52 kW	21.46 kW
COP Tj = -7°C	3.12	2.56
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	15.51 kW	12.23 kW
COP Tj = +2°C	4.62	2.87
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	12.54 kW	11.07 kW
COP Tj = +7°C	5.57	3.75
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	15.24 kW	14.21 kW
COP Tj = 12°C	7.52	5.85
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	32.73 kW	27.81 kW
COP Tj = Tbiv	2.73	1.81
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	37.16 kW	31.74 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.97	1.72
WTOL	65 °C	65 °C
Poff	80 W	80 W
PTO	350 W	350 W
PSB	80 W	80 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.84 kW	34 kW
Annual energy consumption Qhe	25464 kWh	31338 kWh
Pdh Tj = -15°C (if TOL	32.73	27.81
COP Tj = -15°C (if TOL	2.73	1.81
Cdh Tj = -15 °C	0.9	0.9

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	83 dB(A)	83 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	235 %	159 %
Prated	48 kW	40 kW
SCOP	5.96	4.05
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	47.62 kW	39.87 kW
COP Tj = +2°C	3.23	2.02
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	30.57 kW	24.86 kW
COP Tj = +7°C	5.48	3.68
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	15.63 kW	12.28 kW
COP Tj = 12°C	7.5	5.1
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	30.57 kW	24.86 kW
COP Tj = Tbiv	5.48	3.68
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	47.62 kW	39.87 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.23	2.02
WTOL	65 °C	65 °C
Poff	80 W	80 W
PTO	350 W	350 W
PSB	80 W	80 W
PCK	0 W	0 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.38 kW	0.13 kW
Annual energy consumption Qhe	10767 kWh	13207 kWh

Model MDVM-V75D2BR8-AS	
Model name	MDVM-V75D2BR8-AS
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	3x400V 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	77 kW	75 kW
El input	19.74 kW	22.06 kW
COP	3.9	3.4

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	86 dB(A)	86 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	177 %	133 %
Prated	48 kW	40 kW
SCOP	4.5	3.4
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	42.18 kW	35.59 kW
COP Tj = -7°C	3.24	2.42
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	24.59 kW	21.61 kW
COP Tj = +2°C	4.15	3.18
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	24 kW	15.06 kW
COP Tj = +7°C	6.2	4.46

Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	20.68 kW	18.43 kW
COP Tj = 12°C	8.23	6.06
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	42.18 kW	35.59 kW
COP Tj = Tbiv	3.24	2.42
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	47.6 kW	39.8 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.71	1.83
WTOL	65 °C	65 °C
Poff	80 W	80 W
PTO	350 W	350 W
PSB	80 W	80 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.4 kW	0.2 kW
Annual energy consumption Qhe	22032 kWh	24290 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level outdoor	86 dB(A)	86 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
ηs	152 %	106 %
Prated	40 kW	34 kW
SCOP	3.88	2.73
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-18 °C
Pdh Tj = -7°C	24.57 kW	21.53 kW
COP Tj = -7°C	3.11	2.55
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	15.59 kW	12.29 kW
COP Tj = +2°C	4.65	3.03
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	12.61 kW	11.14 kW
COP Tj = +7°C	5.63	3.8
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	15.31 kW	14.28 kW
COP Tj = 12°C	7.37	5.77
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	32.81 kW	27.88 kW
COP Tj = Tbiv	2.71	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	37.22 kW	31.81 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.97	1.71
WTOL	65 °C	65 °C
Poff	80 W	80 W
PTO	350 W	350 W
PSB	80 W	80 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.78 kW	34 kW
Annual energy consumption Qhe	25415 kWh	30683 kWh
Pdh Tj = -15°C (if TOL	32.81	27.88
COP Tj = -15°C (if TOL	2.71	1.83
Cdh Tj = -15 °C	0.9	0.9

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	86 dB(A)	86 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	237 %	161 %
Prated	48 kW	40 kW
SCOP	6	4.12
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	47.76 kW	39.82 kW
COP Tj = +2°C	3.23	2.01
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	30.59 kW	24.93 kW
COP Tj = +7°C	5.47	3.71
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	15.7 kW	12.35 kW
COP Tj = 12°C	7.65	5.27
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	30.59 kW	24.93 kW
COP Tj = Tbiv	5.47	3.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	47.76 kW	39.82 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.23	2.01
WTOL	65 °C	65 °C
Poff	80 W	80 W
PTO	350 W	350 W
PSB	80 W	80 W
PCK	0 W	0 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.24 kW	0.18 kW
Annual energy consumption Qhe	10683 kWh	12970 kWh

Model MDVM-V75MD2BR8-AS	
Model name	MDVM-V75MD2BR8-AS
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	3x400V 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	77 kW	75 kW
El input	21.61 kW	23.51 kW
COP	3.59	3.22

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	89 dB(A)	89 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	175 %	131 %
Prated	48 kW	40 kW
SCOP	4.47	3.36
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	42.15 kW	35.53 kW
COP Tj = -7°C	3.25	2.43
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	24.57 kW	21.55 kW
COP Tj = +2°C	4.1	3.15
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	23.95 kW	14.99 kW
COP Tj = +7°C	6.17	4.35

Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	20.62 kW	18.37 kW
COP Tj = 12°C	8.27	6
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	42.15 kW	35.53 kW
COP Tj = Tbiv	3.25	2.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	47.5 kW	39.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.71	1.86
WTOL	65 °C	65 °C
Poff	80 W	80 W
PTO	350 W	350 W
PSB	80 W	80 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.5 kW	0.3 kW
Annual energy consumption Qhe	22171 kWh	24568 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level outdoor	89 dB(A)	89 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
ηs	151 %	103 %
Prated	40 kW	34 kW
SCOP	3.87	2.67
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-18 °C
Pdh Tj = -7°C	24.52 kW	21.46 kW
COP Tj = -7°C	3.12	2.56
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	15.51 kW	12.23 kW
COP Tj = +2°C	4.62	2.87
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	12.54 kW	11.07 kW
COP Tj = +7°C	5.57	3.75
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	15.24 kW	14.21 kW
COP Tj = 12°C	7.52	5.85
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	32.73 kW	27.81 kW
COP Tj = Tbiv	2.73	1.81
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	37.16 kW	31.74 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.97	1.72
WTOL	65 °C	65 °C
Poff	80 W	80 W
PTO	350 W	350 W
PSB	80 W	80 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.84 kW	34 kW
Annual energy consumption Qhe	25464 kWh	31338 kWh
Pdh Tj = -15°C (if TOL	32.73	27.81
COP Tj = -15°C (if TOL	2.73	1.81
Cdh Tj = -15 °C	0.9	0.9

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	89 dB(A)	89 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	235 %	159 %
Prated	48 kW	40 kW
SCOP	5.96	4.05
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	47.62 kW	39.87 kW
COP Tj = +2°C	3.23	2.02
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	30.57 kW	24.86 kW
COP Tj = +7°C	5.48	3.68
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	15.63 kW	12.28 kW
COP Tj = 12°C	7.5	5.1
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	30.57 kW	24.86 kW
COP Tj = Tbiv	5.48	3.68
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	47.62 kW	39.87 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.23	2.02
WTOL	65 °C	65 °C
Poff	80 W	80 W
PTO	350 W	350 W
PSB	80 W	80 W
PCK	0 W	0 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.38 kW	0.13 kW
Annual energy consumption Qhe	10767 kWh	13207 kWh