

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	10.10.2023
Testing basis	Heat Pump KEYMARK certification Scheme rules v12

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	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 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
η_s	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 Q _{he}	25415 kWh	30683 kWh
P _{dh} T _j = -15°C (if TOL	32.81	27.88
COP T _j = -15°C (if TOL	2.71	1.83
C _{dh} T _j = -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
η _s	237 %	161 %
Prated	48 kW	40 kW
SCOP	6	4.12
T _{biv}	7 °C	7 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	47.76 kW	39.82 kW
COP T _j = +2°C	3.23	2.01
C _{dh} T _j = +2 °C	0.9	0.9
P _{dh} T _j = +7°C	30.59 kW	24.93 kW
COP T _j = +7°C	5.47	3.71
C _{dh} T _j = +7 °C	0.9	0.9
P _{dh} T _j = 12°C	15.7 kW	12.35 kW
COP T _j = 12°C	7.65	5.27
C _{dh} T _j = +12 °C	0.9	0.9
P _{dh} T _j = T _{biv}	30.59 kW	24.93 kW
COP T _j = T _{biv}	5.47	3.71
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	47.76 kW	39.82 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	3.23	2.01
WTOL	65 °C	65 °C
P _{off}	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 Q _{he}	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	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 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
η_s	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 Q _{he}	25464 kWh	31338 kWh
P _{dh} T _j = -15°C (if TOL	32.73	27.81
COP T _j = -15°C (if TOL	2.73	1.81
C _{dh} T _j = -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
η _s	235 %	159 %
Prated	48 kW	40 kW
SCOP	5.96	4.05
T _{biv}	7 °C	7 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	47.62 kW	39.87 kW
COP T _j = +2°C	3.23	2.02
C _{dh} T _j = +2 °C	0.9	0.9
P _{dh} T _j = +7°C	30.57 kW	24.86 kW
COP T _j = +7°C	5.48	3.68
C _{dh} T _j = +7 °C	0.9	0.9
P _{dh} T _j = 12°C	15.63 kW	12.28 kW
COP T _j = 12°C	7.5	5.1
C _{dh} T _j = +12 °C	0.9	0.9
P _{dh} T _j = T _{biv}	30.57 kW	24.86 kW
COP T _j = T _{biv}	5.48	3.68
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	47.62 kW	39.87 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	3.23	2.02
WTOL	65 °C	65 °C
P _{off}	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 Q _{he}	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	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 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
η_s	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
η_s	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 Q _{he}	25415 kWh	30683 kWh
P _{dh} T _j = -15°C (if TOL	32.81	27.88
COP T _j = -15°C (if TOL	2.71	1.83
C _{dh} T _j = -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
η _s	237 %	161 %
Prated	48 kW	40 kW
SCOP	6	4.12
T _{biv}	7 °C	7 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	47.76 kW	39.82 kW
COP T _j = +2°C	3.23	2.01
C _{dh} T _j = +2 °C	0.9	0.9
P _{dh} T _j = +7°C	30.59 kW	24.93 kW
COP T _j = +7°C	5.47	3.71
C _{dh} T _j = +7 °C	0.9	0.9
P _{dh} T _j = 12°C	15.7 kW	12.35 kW
COP T _j = 12°C	7.65	5.27
C _{dh} T _j = +12 °C	0.9	0.9
P _{dh} T _j = T _{biv}	30.59 kW	24.93 kW
COP T _j = T _{biv}	5.47	3.71
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	47.76 kW	39.82 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	3.23	2.01
WTOL	65 °C	65 °C
P _{off}	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 Q _{he}	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	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 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
η_s	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 Q _{he}	25464 kWh	31338 kWh
P _{dh} T _j = -15°C (if TOL	32.73	27.81
COP T _j = -15°C (if TOL	2.73	1.81
C _{dh} T _j = -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
η _s	235 %	159 %
Prated	48 kW	40 kW
SCOP	5.96	4.05
T _{biv}	7 °C	7 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	47.62 kW	39.87 kW
COP T _j = +2°C	3.23	2.02
C _{dh} T _j = +2 °C	0.9	0.9
P _{dh} T _j = +7°C	30.57 kW	24.86 kW
COP T _j = +7°C	5.48	3.68
C _{dh} T _j = +7 °C	0.9	0.9
P _{dh} T _j = 12°C	15.63 kW	12.28 kW
COP T _j = 12°C	7.5	5.1
C _{dh} T _j = +12 °C	0.9	0.9
P _{dh} T _j = T _{biv}	30.57 kW	24.86 kW
COP T _j = T _{biv}	5.48	3.68
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	47.62 kW	39.87 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	3.23	2.02
WTOL	65 °C	65 °C
P _{off}	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 Q _{he}	10767 kWh	13207 kWh