

Subtype ASThermal i 8-10 series

Certificate Holder	Guangdong Answer Technology Co., Ltd.
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City	Guangdong
Country	CN
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	ASThermal i 8-10 series
Registration number	011-1W1021
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	1.07 kg
Certification Date	18.03.2025
Testing basis	HP KEYMARK certification scheme rules rev. 14

**Model AMH-8R2**

Model name	AMH-8R2
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Warmer, Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
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	8.30 kW	7.87 kW
El input	1.64 kW	2.38 kW
COP	5.09	3.31

**EN 14511-2 | Cooling**

	+7°C/+12°C	+18°C/+23°C
El input	2.18 kW	1.63 kW
Cooling capacity	7.52	8.40
EER	3.45	5.17

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
ηs	198 %	153 %
Prated	8.15 kW	7.35 kW
SCOP	5.01	3.90
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C

Pdh Tj = -7°C	7.21 kW	6.50 kW
COP Tj = -7°C	3.00	2.32
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.62 kW	4.16 kW
COP Tj = +2°C	4.98	3.98
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.91 kW	3.73 kW
COP Tj = +7°C	6.99	5.21
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.55 kW	4.32 kW
COP Tj = 12°C	8.99	6.74
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.21 kW	6.50 kW
COP Tj = Tbiv	3.00	2.32
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.83 kW	6.96 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.52	2.02
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	8 W	8 W
PTO	8 W	8 W
PSB	8 W	8 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.32 kW	0.39 kW
Annual energy consumption Qhe	3357 kWh	3899 kWh

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	264 %	187 %
Prated	8.25 kW	8.24 kW
SCOP	6.68	4.75
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.25 kW	8.23 kW
COP Tj = +2°C	3.65	2.48
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.56 kW	5.60 kW
COP Tj = +7°C	6.16	4.19
Cdh Tj = +7 °C	0.900	0.900

Pdh Tj = 12°C	4.51 kW	4.32 kW
COP Tj = 12°C	8.62	6.38
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.25 kW	8.23 kW
COP Tj = Tbiv	3.65	2.48
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.25 kW	8.23 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.65	2.48
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	8 W	8 W
PTO	8 W	8 W
PSB	8 W	8 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1649 kWh	2317 kWh

#### EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	7.52 kW	8.40 kW
SEER	5.49	7.44
Pdc Tj = 35°C	7.51 kW	8.40 kW
EER Tj = 35°C	3.45	5.17
Cdc Tj = 35 °C	0.900	0.900
Pdc Tj = 30°C	5.72 kW	6.43 kW
EER Tj = 30°C	4.90	6.79
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	3.85 kW	4.83 kW
EER Tj = 25°C	6.35	8.71
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	3.78 kW	4.58 kW
EER Tj = 20°C	6.94	9.18
Cdc Tj = 20 °C	0.900	0.900
Poff	8 W	8 W
PTO	0 W	0 W
PSB	8 W	8 W
PCK	0 W	0 W
Annual energy consumption Qce	822 kWh	678 kWh

**Model AMH-10R2**

Model name	AMH-10R2
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Warmer, Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
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	9.99 kW	9.53 kW
El input	2.11 kW	3.01 kW
COP	4.73	3.16

**EN 14511-2 | Cooling**

	+7°C/+12°C	+18°C/+23°C
El input	2.70 kW	2.11 kW
Cooling capacity	8.58	10.02
EER	3.18	4.75

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level outdoor	59 dB(A)	59 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
ηs	195 %	153 %
Prated	9.26 kW	8.40 kW
SCOP	4.95	3.90
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C

Pdh Tj = -7°C	8.19 kW	7.43 kW
COP Tj = -7°C	2.79	2.25
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.01 kW	4.67 kW
COP Tj = +2°C	4.90	3.93
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.92 kW	3.75 kW
COP Tj = +7°C	7.08	5.32
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.55 kW	4.34 kW
COP Tj = 12°C	9.01	6.82
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.19 kW	7.43 kW
COP Tj = Tbiv	2.79	2.25
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.59 kW	7.76 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.46	1.96
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	8 W	8 W
PTO	8 W	8 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.67 kW	0.64 kW
Annual energy consumption Qhe	3865 kWh	4457 kWh

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level outdoor	59 dB(A)	59 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	265 %	189 %
Prated	8.60 kW	8.87 kW
SCOP	6.71	4.79
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.60 kW	8.87 kW
COP Tj = +2°C	3.54	2.46
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.71 kW	5.78 kW
COP Tj = +7°C	6.16	4.18
Cdh Tj = +7 °C	0.900	0.900

Pdh Tj = 12°C	4.52 kW	4.35 kW
COP Tj = 12°C	8.68	6.45
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.60 kW	8.87 kW
COP Tj = Tbiv	3.54	2.46
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.60 kW	8.87 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.54	2.46
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	8 W	8 W
PTO	8 W	8 W
PSB	8 W	8 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1712 kWh	2474 kWh

#### EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	8.58 kW	10.02 kW
SEER	5.45	7.59
Pdc Tj = 35°C	8.58 kW	10.02 kW
EER Tj = 35°C	3.18	4.75
Cdc Tj = 35 °C	0.900	0.900
Pdc Tj = 30°C	6.63 kW	7.60 kW
EER Tj = 30°C	4.63	6.93
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	4.16 kW	4.89 kW
EER Tj = 25°C	6.33	8.78
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	3.85 kW	4.64 kW
EER Tj = 20°C	7.29	9.24
Cdc Tj = 20 °C	0.900	0.900
Poff	8 W	8 W
PTO	0 W	0 W
PSB	8 W	8 W
PCK	0 W	0 W
Annual energy consumption Qce	944 kWh	792 kWh

**Model AMH-8R2B3**

Model name	AMH-8R2B3
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Warmer, Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
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	8.30 kW	7.87 kW
El input	1.64 kW	2.38 kW
COP	5.09	3.31

**EN 14511-2 | Cooling**

	+7°C/+12°C	+18°C/+23°C
El input	2.18 kW	1.63 kW
Cooling capacity	7.52	8.40
EER	3.45	5.17

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
ηs	198 %	153 %
Prated	8.15 kW	7.35 kW
SCOP	5.01	3.90
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C

Pdh Tj = -7°C	7.21 kW	6.50 kW
COP Tj = -7°C	3.00	2.32
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.62 kW	4.16 kW
COP Tj = +2°C	4.98	3.98
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.91 kW	3.73 kW
COP Tj = +7°C	6.99	5.21
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.55 kW	4.32 kW
COP Tj = 12°C	8.99	6.74
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.21 kW	6.50 kW
COP Tj = Tbiv	3.00	2.32
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.83 kW	6.96 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.52	2.02
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	8 W	8 W
PTO	8 W	8 W
PSB	8 W	8 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.32 kW	0.39 kW
Annual energy consumption Qhe	3357 kWh	3899 kWh

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	264 %	187 %
Prated	8.25 kW	8.24 kW
SCOP	6.68	4.75
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.25 kW	8.23 kW
COP Tj = +2°C	3.65	2.48
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.56 kW	5.60 kW
COP Tj = +7°C	6.16	4.19
Cdh Tj = +7 °C	0.900	0.900

Pdh Tj = 12°C	4.51 kW	4.32 kW
COP Tj = 12°C	8.62	6.38
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.25 kW	8.23 kW
COP Tj = Tbiv	3.65	2.48
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.25 kW	8.23 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.65	2.48
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	8 W	8 W
PTO	8 W	8 W
PSB	8 W	8 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1649 kWh	2317 kWh

#### EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	7.52 kW	8.40 kW
SEER	5.49	7.44
Pdc Tj = 35°C	7.51 kW	8.40 kW
EER Tj = 35°C	3.45	5.17
Cdc Tj = 35 °C	0.900	0.900
Pdc Tj = 30°C	5.72 kW	6.43 kW
EER Tj = 30°C	4.90	6.79
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	3.85 kW	4.83 kW
EER Tj = 25°C	6.35	8.71
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	3.78 kW	4.58 kW
EER Tj = 20°C	6.94	9.18
Cdc Tj = 20 °C	0.900	0.900
Poff	8 W	8 W
PTO	0 W	0 W
PSB	8 W	8 W
PCK	0 W	0 W
Annual energy consumption Qce	822 kWh	678 kWh

**Model AMH-10R2B3**

Model name	AMH-10R2B3
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Warmer, Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
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	9.99 kW	9.53 kW
El input	2.11 kW	3.01 kW
COP	4.73	3.16

**EN 14511-2 | Cooling**

	+7°C/+12°C	+18°C/+23°C
El input	2.70 kW	2.11 kW
Cooling capacity	8.58	10.02
EER	3.18	4.75

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level outdoor	59 dB(A)	59 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
ηs	195 %	153 %
Prated	9.26 kW	8.40 kW
SCOP	4.95	3.90
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C

Pdh Tj = -7°C	8.19 kW	7.43 kW
COP Tj = -7°C	2.79	2.25
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.01 kW	4.67 kW
COP Tj = +2°C	4.90	3.93
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.92 kW	3.75 kW
COP Tj = +7°C	7.08	5.32
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.55 kW	4.34 kW
COP Tj = 12°C	9.01	6.82
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.19 kW	7.43 kW
COP Tj = Tbiv	2.79	2.25
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.59 kW	7.76 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.46	1.96
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	8 W	8 W
PTO	8 W	8 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.67 kW	0.64 kW
Annual energy consumption Qhe	3865 kWh	4457 kWh

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level outdoor	59 dB(A)	59 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	265 %	189 %
Prated	8.60 kW	8.87 kW
SCOP	6.71	4.79
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.60 kW	8.87 kW
COP Tj = +2°C	3.54	2.46
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.71 kW	5.78 kW
COP Tj = +7°C	6.16	4.18
Cdh Tj = +7 °C	0.900	0.900

Pdh Tj = 12°C	4.52 kW	4.35 kW
COP Tj = 12°C	8.68	6.45
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.60 kW	8.87 kW
COP Tj = Tbiv	3.54	2.46
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.60 kW	8.87 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.54	2.46
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	8 W	8 W
PTO	8 W	8 W
PSB	8 W	8 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1712 kWh	2474 kWh

#### EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	8.58 kW	10.02 kW
SEER	5.45	7.59
Pdc Tj = 35°C	8.58 kW	10.02 kW
EER Tj = 35°C	3.18	4.75
Cdc Tj = 35 °C	0.900	0.900
Pdc Tj = 30°C	6.63 kW	7.60 kW
EER Tj = 30°C	4.63	6.93
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	4.16 kW	4.89 kW
EER Tj = 25°C	6.33	8.78
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	3.85 kW	4.64 kW
EER Tj = 20°C	7.29	9.24
Cdc Tj = 20 °C	0.900	0.900
Poff	8 W	8 W
PTO	0 W	0 W
PSB	8 W	8 W
PCK	0 W	0 W
Annual energy consumption Qce	944 kWh	792 kWh