

## Subtype Monobloc ACHP-H series 08/H10

Certificate Holder	Ningbo AUX Electric Co., Ltd
Address	1166 Mingguang North Road
ZIP	315191
City	Ningbo Zhejiang
Country	CN
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	Monobloc ACHP-H series 08/H10
Registration number	011-1W0586
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.45 kg
Certification Date	17.02.2023
Testing basis	European KEYMARK Scheme for Heat Pumps Rev. 11 (as of 2022-09)

## Model ACHP-H08/4R3HA-M

Model name	ACHP-H08/4R3HA-M
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Warmer, Warmer Climate
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 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
$\eta_s$	205 %	132 %
Prated	8.10 kW	6.60 kW
SCOP	5.20	3.41
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.18 kW	5.84 kW
COP Tj = -7°C	3.30	2.30
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.36 kW	3.55 kW
COP Tj = +2°C	5.09	3.30
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	2.80 kW	2.28 kW
COP Tj = +7°C	6.82	4.28
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	1.25 kW	1.02 kW
COP Tj = 12°C	8.35	5.33
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.17 kW	5.84 kW
COP Tj = Tbiv	3.30	2.16

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.44 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.04	1.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	30 W	30 W
PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.66 kW	1.70 kW
Annual energy consumption Qhe	3216 kWh	4015 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
$\eta_s$	272 %	173 %
Prated	8.10 kW	7.60 kW
SCOP	6.51	4.24
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.80 kW	7.30 kW
COP Tj = +2°C	3.98	2.59
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.22 kW	4.89 kW
COP Tj = +7°C	5.88	3.90
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.31 kW	2.17 kW
COP Tj = 12°C	9.23	5.55
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	5.21 kW	4.89 kW
COP Tj = Tbiv	6.26	3.92
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.80 kW	7.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.98	2.59
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	30 W	30 W

PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.30 kW	0.30 kW
Annual energy consumption Q <sub>he</sub>	1573 kWh	2304 kWh

## Model ACHP-H10/4R3HA-M

Model name	ACHP-H10/4R3HA-M
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Warmer, Warmer Climate
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 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
$\eta_s$	200 %	136 %
Prated	9.20 kW	7.70 kW
SCOP	5.07	3.44
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.14 kW	6.81 kW
COP Tj = -7°C	3.17	2.03
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.95 kW	4.15 kW
COP Tj = +2°C	5.02	3.46
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.18 kW	2.67 kW
COP Tj = +7°C	6.30	4.50
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	1.42 kW	1.18 kW
COP Tj = 12°C	8.33	7.01
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.14 kW	6.81 kW
COP Tj = Tbiv	3.17	2.03

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.40 kW	5.23 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.86	1.63
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	30 W	30 W
PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.80 kW	2.47 kW
Annual energy consumption Qhe	3743 kWh	4553 kWh

#### 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
$\eta_s$	267 %	177 %
Prated	8.60 kW	8.60 kW
SCOP	6.42	4.36
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.20 kW	8.20 kW
COP Tj = +2°C	3.84	2.59
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.53 kW	5.53 kW
COP Tj = +7°C	5.85	3.93
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.46 kW	2.53 kW
COP Tj = 12°C	9.04	5.82
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	5.53 kW	5.53 kW
COP Tj = Tbiv	5.85	3.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.20 kW	8.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.84	2.59
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	30 W	30 W

PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.40 kW	0.40 kW
Annual energy consumption Q <sub>he</sub>	1701 kWh	2545 kWh

## Model ACHP-H08/4R3HA-M(NE)

Model name	ACHP-H08/4R3HA-M(NE)
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Warmer, Warmer Climate
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 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
$\eta_s$	205 %	132 %
Prated	8.10 kW	6.60 kW
SCOP	5.20	3.41
Tbiv	-7 °C	-7 °C
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COP Tj = +2°C	5.09	3.30
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	2.80 kW	2.28 kW
COP Tj = +7°C	6.82	4.28
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	1.25 kW	1.02 kW
COP Tj = 12°C	8.35	5.33
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.17 kW	5.84 kW
COP Tj = Tbiv	3.30	2.16



Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.44 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.04	1.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	30 W	30 W
PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.66 kW	1.70 kW
Annual energy consumption Qhe	3216 kWh	4015 kWh

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PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.30 kW	0.30 kW
Annual energy consumption Q <sub>he</sub>	1573 kWh	2304 kWh

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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

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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.80 kW	2.47 kW
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Pdh Tj = Tbiv	5.53 kW	5.53 kW
COP Tj = Tbiv	5.85	3.93
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COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.84	2.59
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	30 W	30 W

PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.40 kW	0.40 kW
Annual energy consumption Q <sub>he</sub>	1701 kWh	2545 kWh