Subtype Monobloc ACHP-H series 12/14/16	
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 12/14/16
Registration number	011-1W0741
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	1.35 kg
Certification Date	27.11.2023
Testing basis	European KEYMARK Scheme for Heat Pumps Version 12 (2023-03)

Model ACHP-H12/5R2HA-M		
Model name	ACHP-H12/5R2HA-M	
Application	Heating (medium temp)	
Units	Outdoor	
Climate zone (for heating)	Warmer	
Reversibility	Yes	
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	12.00 kW	12.00 kW
El input	2.45 kW	3.69 kW
COP	4.90	3.25

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	186 %	150 %
Prated	12.20 kW	12.00 kW
SCOP	4.72	3.82
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.79 kW	10.62 kW
COP Tj = -7°C	3.02	2.40
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.57 kW	6.46 kW
COP Tj = +2°C	4.50	3.67
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.22 kW	4.15 kW

COP Tj = +7°C	6.60	5.18
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.69 kW	4.12 kW
COP Tj = 12°C	9.38	7.60
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	10.79 kW	10.62 kW
COP Tj = Tbiv	3.02	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.10 kW	9.16 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.61	2.15
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	2 W	2 W
PTO	30 W	30 W
PSB	2 W	2 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.10 kW	2.84 kW
Annual energy consumption Qhe	5314 kWh	6477 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	254 %	174 %
Prated	11.10 kW	12.50 kW
SCOP	6.42	4.42
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	10.90 kW	12.30 kW
COP Tj = +2°C	3.59	2.31
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	7.14 kW	8.04 kW
COP Tj = +7°C	5.82	3.82
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.61 kW	3.57 kW
COP Tj = 12°C	8.30	5.70
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.14 kW	8.04 kW
COP Tj = Tbiv	5.82	3.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.90 kW	12.30 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.59	2.31
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	2 W	2 W
PTO	30 W	30 W
PSB	2 W	2 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.20 kW	0.20 kW
Annual energy consumption Qhe	2308 kWh	3775 kWh

Model ACHP-H14/5R2HA-M	
Model name	ACHP-H14/5R2HA-M
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Warmer
Reversibility	Yes
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	14.00 kW	14.00 kW
El input	2.92 kW	4.38 kW
COP	4.80	3.20

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	186 %	150 %
Prated	14.50 kW	14.00 kW
SCOP	4.72	3.82
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.83 kW	12.38 kW
COP Tj = -7°C	3.00	2.40
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	7.81 kW	7.54 kW
COP Tj = +2°C	4.52	3.66
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.02 kW	4.85 kW

COP Tj = +7°C	6.40	5.18
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.68 kW	2.15 kW
COP Tj = 12°C	10.00	7.60
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	12.83 kW	12.38 kW
COP Tj = Tbiv	3.00	2.39
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.46 kW	10.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.73	2.13
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	2 W	2 W
PTO	30 W	30 W
PSB	2 W	2 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.04 kW	3.50 kW
Annual energy consumption Qhe	6317 kWh	7563 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	259 %	178 %
Prated	12.10 kW	13.70 kW
SCOP	6.55	4.52
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	12.00 kW	13.60 kW
COP Tj = +2°C	3.44	2.18
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	7.78 kW	8.83 kW
COP Tj = +7°C	5.84	3.91
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.23 kW	4.08 kW
COP Tj = 12°C	8.43	5.90
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.78 kW	8.83 kW
COP Tj = Tbiv	5.84	3.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.00 kW	13.60 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.44	2.18
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	2 W	2 W
PTO	30 W	30 W
PSB	2 W	2 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.10 kW	0.10 kW
Annual energy consumption Qhe	2463 kWh	4037 kWh

Model ACHP-H16/5R2HA-M		
Model name	ACHP-H16/5R2HA-M	
Application	Heating (medium temp)	
Units	Outdoor	
Climate zone (for heating)	Warmer	
Reversibility	Yes	
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	15.10 kW	15.10 kW
El input	3.21 kW	4.79 kW
COP	4.70	3.15
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
ηs	188 %	150 %
Prated	15.50 kW	14.00 kW
SCOP	4.77	3.82
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	13.71 kW	12.38 kW
COP Tj = -7°C	3.01	2.27
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	8.35 kW	7.54 kW
COP Tj = +2°C	4.48	3.66
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.37 kW	4.85 kW

COP Tj = +7°C	6.73	5.18
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.38 kW	4.43 kW
COP Tj = 12°C	10.05	8.75
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	13.71 kW	12.38 kW
COP Tj = Tbiv	3.01	2.39
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.42 kW	10.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.78	2.13
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	2 W	2 W
PTO	30 W	30 W
PSB	2 W	2 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.08 kW	3.50 kW
Annual energy consumption Qhe	6604 kWh	7563 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
ηs	246 %	176 %
Prated	13.10 kW	13.80 kW
SCOP	6.22	4.47
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	12.97 kW	13.67 kW
COP Tj = +2°C	3.35	2.25
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	8.42 kW	8.87 kW
COP Tj = +7°C	5.31	3.80
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.29 kW	3.94 kW
COP Tj = 12°C	8.23	5.88
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.42 kW	8.87 kW
COP Tj = Tbiv	5.31	3.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.97 kW	13.67 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.35	2.25
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	2 W	2 W
PTO	30 W	30 W
PSB	2 W	2 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.13 kW	0.13 kW
Annual energy consumption Qhe	2812 kWh	4118 kWh

Model ACHP-H12/5R2HA-M(NE)	
Model name	ACHP-H12/5R2HA-M(NE)
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Warmer
Reversibility	Yes
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	12.00 kW	12.00 kW
El input	2.45 kW	3.69 kW
COP	4.90	3.25

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	186 %	150 %
Prated	12.20 kW	12.00 kW
SCOP	4.72	3.82
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.79 kW	10.62 kW
COP Tj = -7°C	3.02	2.40
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.57 kW	6.46 kW
COP Tj = +2°C	4.50	3.67
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.22 kW	4.15 kW

COP Tj = +7°C	6.60	5.18
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.69 kW	4.12 kW
COP Tj = 12°C	9.38	7.60
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	10.79 kW	10.62 kW
COP Tj = Tbiv	3.02	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.10 kW	9.16 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.61	2.15
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	2 W	2 W
PTO	30 W	30 W
PSB	2 W	2 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.10 kW	2.84 kW
Annual energy consumption Qhe	5314 kWh	6477 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	254 %	174 %
Prated	11.10 kW	12.50 kW
SCOP	6.42	4.42
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	10.90 kW	12.30 kW
COP Tj = +2°C	3.59	2.31
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	7.14 kW	8.04 kW
COP Tj = +7°C	5.82	3.82
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.61 kW	3.57 kW
COP Tj = 12°C	8.30	5.70
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.14 kW	8.04 kW
COP Tj = Tbiv	5.82	3.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.90 kW	12.30 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.59	2.31
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	2 W	2 W
PTO	30 W	30 W
PSB	2 W	2 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.20 kW	0.20 kW
Annual energy consumption Qhe	2308 kWh	3775 kWh

Model ACHP-H14/5R2HA-M(NE)	
Model name	ACHP-H14/5R2HA-M(NE)
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Warmer
Reversibility	Yes
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	14.00 kW	14.00 kW
El input	2.92 kW	4.38 kW
COP	4.80	3.20

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	186 %	150 %
Prated	14.50 kW	14.00 kW
SCOP	4.72	3.82
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.83 kW	12.38 kW
COP Tj = -7°C	3.00	2.40
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	7.81 kW	7.54 kW
COP Tj = +2°C	4.52	3.66
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.02 kW	4.85 kW

COP Tj = +7°C	6.40	5.18
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.68 kW	2.15 kW
COP Tj = 12°C	10.00	7.60
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	12.83 kW	12.38 kW
COP Tj = Tbiv	3.00	2.39
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.46 kW	10.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.73	2.13
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	2 W	2 W
PTO	30 W	30 W
PSB	2 W	2 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.04 kW	3.50 kW
Annual energy consumption Qhe	6317 kWh	7563 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	259 %	178 %
Prated	12.10 kW	13.70 kW
SCOP	6.55	4.52
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	12.00 kW	13.60 kW
COP Tj = +2°C	3.44	2.18
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	7.78 kW	8.83 kW
COP Tj = +7°C	5.84	3.91
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.23 kW	4.08 kW
COP Tj = 12°C	8.43	5.90
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.78 kW	8.83 kW
COP Tj = Tbiv	5.84	3.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.00 kW	13.60 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.44	2.18
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	2 W	2 W
PTO	30 W	30 W
PSB	2 W	2 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.10 kW	0.10 kW
Annual energy consumption Qhe	2463 kWh	4037 kWh

Model ACHP-H16/5R2HA-M(NE)	
Model name	ACHP-H16/5R2HA-M(NE)
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Warmer
Reversibility	Yes
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	15.10 kW	15.10 kW
El input	3.21 kW	4.79 kW
COP	4.70	3.15

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
ηs	188 %	150 %
Prated	15.50 kW	14.00 kW
SCOP	4.77	3.82
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	13.71 kW	12.38 kW
COP Tj = -7°C	3.01	2.27
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	8.35 kW	7.54 kW
COP Tj = +2°C	4.48	3.66
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.37 kW	4.85 kW

COP Tj = +7°C	6.73	5.18
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.38 kW	4.43 kW
COP Tj = 12°C	10.05	8.75
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	13.71 kW	12.38 kW
COP Tj = Tbiv	3.01	2.39
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.42 kW	10.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.78	2.13
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	2 W	2 W
PTO	30 W	30 W
PSB	2 W	2 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.08 kW	3.50 kW
Annual energy consumption Qhe	6604 kWh	7563 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
ηs	246 %	176 %
Prated	13.10 kW	13.80 kW
SCOP	6.22	4.47
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	12.97 kW	13.67 kW
COP Tj = +2°C	3.35	2.25
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	8.42 kW	8.87 kW
COP Tj = +7°C	5.31	3.80
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.29 kW	3.94 kW
COP Tj = 12°C	8.23	5.88
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.42 kW	8.87 kW
COP Tj = Tbiv	5.31	3.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.97 kW	13.67 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.35	2.25
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	2 W	2 W
PTO	30 W	30 W
PSB	2 W	2 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.13 kW	0.13 kW
Annual energy consumption Qhe	2812 kWh	4118 kWh

Model ACHP-H12/4R2HA-M		
Model name	ACHP-H12/4R2HA-M	
Application	Heating (medium temp)	
Units	Outdoor	
Climate zone (for heating)	Warmer	
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	12.00 kW	12.00 kW
El input	2.45 kW	3.69 kW
COP	4.90	3.25

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	186 %	150 %
Prated	12.20 kW	12.00 kW
SCOP	4.72	3.82
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.79 kW	10.62 kW
COP Tj = -7°C	3.02	2.40
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.57 kW	6.46 kW
COP Tj = +2°C	4.50	3.67
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.22 kW	4.15 kW

COP Tj = +7°C	6.60	5.18
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.69 kW	4.12 kW
COP Tj = 12°C	9.38	7.60
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	10.79 kW	10.62 kW
COP Tj = Tbiv	3.02	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.10 kW	9.16 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.61	2.15
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	2 W	2 W
PTO	30 W	30 W
PSB	2 W	2 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.10 kW	2.84 kW
Annual energy consumption Qhe	5314 kWh	6477 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	254 %	174 %
Prated	11.10 kW	12.50 kW
SCOP	6.42	4.42
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	10.90 kW	12.30 kW
COP Tj = +2°C	3.59	2.31
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	7.14 kW	8.04 kW
COP Tj = +7°C	5.82	3.82
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.61 kW	3.57 kW
COP Tj = 12°C	8.30	5.70
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.14 kW	8.04 kW
COP Tj = Tbiv	5.82	3.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.90 kW	12.30 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.59	2.31
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	2 W	2 W
PTO	30 W	30 W
PSB	2 W	2 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.20 kW	0.20 kW
Annual energy consumption Qhe	2308 kWh	3775 kWh

Model ACHP-H14/4R2HA-M		
Model name	ACHP-H14/4R2HA-M	
Application	Heating (medium temp)	
Units	Outdoor	
Climate zone (for heating)	Warmer	
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	14.00 kW	14.00 kW
El input	2.92 kW	4.38 kW
COP	4.80	3.20

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	186 %	150 %
Prated	14.50 kW	14.00 kW
SCOP	4.72	3.82
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.83 kW	12.38 kW
COP Tj = -7°C	3.00	2.40
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	7.81 kW	7.54 kW
COP Tj = +2°C	4.52	3.66
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.02 kW	4.85 kW

COP Tj = +7°C	6.40	5.18
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.68 kW	2.15 kW
COP Tj = 12°C	10.00	7.60
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	12.83 kW	12.38 kW
COP Tj = Tbiv	3.00	2.39
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.46 kW	10.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.73	2.13
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	2 W	2 W
PTO	30 W	30 W
PSB	2 W	2 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.04 kW	3.50 kW
Annual energy consumption Qhe	6317 kWh	7563 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	259 %	178 %
Prated	12.10 kW	13.70 kW
SCOP	6.55	4.52
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	12.00 kW	13.60 kW
COP Tj = +2°C	3.44	2.18
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	7.78 kW	8.83 kW
COP Tj = +7°C	5.84	3.91
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.23 kW	4.08 kW
COP Tj = 12°C	8.43	5.90
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.78 kW	8.83 kW
COP Tj = Tbiv	5.84	3.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.00 kW	13.60 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.44	2.18
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	2 W	2 W
PTO	30 W	30 W
PSB	2 W	2 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.10 kW	0.10 kW
Annual energy consumption Qhe	2463 kWh	4037 kWh

Model ACHP-H16/4R2HA-M		
Model name	ACHP-H16/4R2HA-M	
Application	Heating (medium temp)	
Units	Outdoor	
Climate zone (for heating)	Warmer	
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	15.10 kW	15.10 kW
El input	3.21 kW	4.79 kW
COP	4.70	3.15

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
ηs	188 %	150 %
Prated	15.50 kW	14.00 kW
SCOP	4.77	3.82
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	13.71 kW	12.38 kW
COP Tj = -7°C	3.01	2.27
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	8.35 kW	7.54 kW
COP Tj = +2°C	4.48	3.66
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.37 kW	4.85 kW

COP Tj = +7°C	6.73	5.18
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.38 kW	4.43 kW
COP Tj = 12°C	10.05	8.75
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	13.71 kW	12.38 kW
COP Tj = Tbiv	3.01	2.39
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.42 kW	10.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.78	2.13
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	2 W	2 W
PTO	30 W	30 W
PSB	2 W	2 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.08 kW	3.50 kW
Annual energy consumption Qhe	6604 kWh	7563 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
ηs	246 %	176 %
Prated	13.10 kW	13.80 kW
SCOP	6.22	4.47
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	12.97 kW	13.67 kW
COP Tj = +2°C	3.35	2.25
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	8.42 kW	8.87 kW
COP Tj = +7°C	5.31	3.80
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.29 kW	3.94 kW
COP Tj = 12°C	8.23	5.88
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.42 kW	8.87 kW
COP Tj = Tbiv	5.31	3.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.97 kW	13.67 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.35	2.25
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	2 W	2 W
PTO	30 W	30 W
PSB	2 W	2 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.13 kW	0.13 kW
Annual energy consumption Qhe	2812 kWh	4118 kWh

Model ACHP-H12/4R2HA-M(NE)	
Model name	ACHP-H12/4R2HA-M(NE)
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Warmer
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	12.00 kW	12.00 kW
El input	2.45 kW	3.69 kW
COP	4.90	3.25

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	186 %	150 %
Prated	12.20 kW	12.00 kW
SCOP	4.72	3.82
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.79 kW	10.62 kW
COP Tj = -7°C	3.02	2.40
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.57 kW	6.46 kW
COP Tj = +2°C	4.50	3.67
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.22 kW	4.15 kW

COP Tj = +7°C	6.60	5.18
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.69 kW	4.12 kW
COP Tj = 12°C	9.38	7.60
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	10.79 kW	10.62 kW
COP Tj = Tbiv	3.02	2.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.10 kW	9.16 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.61	2.15
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	2 W	2 W
PTO	30 W	30 W
PSB	2 W	2 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.10 kW	2.84 kW
Annual energy consumption Qhe	5314 kWh	6477 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	58 dB(A)	58 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	254 %	174 %
Prated	11.10 kW	12.50 kW
SCOP	6.42	4.42
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	10.90 kW	12.30 kW
COP Tj = +2°C	3.59	2.31
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	7.14 kW	8.04 kW
COP Tj = +7°C	5.82	3.82
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.61 kW	3.57 kW
COP Tj = 12°C	8.30	5.70
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.14 kW	8.04 kW
COP Tj = Tbiv	5.82	3.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.90 kW	12.30 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.59	2.31
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	2 W	2 W
PTO	30 W	30 W
PSB	2 W	2 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.20 kW	0.20 kW
Annual energy consumption Qhe	2308 kWh	3775 kWh

Model ACHP-H14/4R2HA-M(NE)	
Model name	ACHP-H14/4R2HA-M(NE)
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Warmer
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	14.00 kW	14.00 kW
El input	2.92 kW	4.38 kW
COP	4.80	3.20

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	186 %	150 %
Prated	14.50 kW	14.00 kW
SCOP	4.72	3.82
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.83 kW	12.38 kW
COP Tj = -7°C	3.00	2.40
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	7.81 kW	7.54 kW
COP Tj = +2°C	4.52	3.66
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.02 kW	4.85 kW

COP Tj = +7°C	6.40	5.18
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.68 kW	2.15 kW
COP Tj = 12°C	10.00	7.60
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	12.83 kW	12.38 kW
COP Tj = Tbiv	3.00	2.39
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.46 kW	10.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.73	2.13
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	2 W	2 W
PTO	30 W	30 W
PSB	2 W	2 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.04 kW	3.50 kW
Annual energy consumption Qhe	6317 kWh	7563 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	259 %	178 %
Prated	12.10 kW	13.70 kW
SCOP	6.55	4.52
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	12.00 kW	13.60 kW
COP Tj = +2°C	3.44	2.18
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	7.78 kW	8.83 kW
COP Tj = +7°C	5.84	3.91
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.23 kW	4.08 kW
COP Tj = 12°C	8.43	5.90
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.78 kW	8.83 kW
COP Tj = Tbiv	5.84	3.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.00 kW	13.60 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.44	2.18
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	2 W	2 W
PTO	30 W	30 W
PSB	2 W	2 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.10 kW	0.10 kW
Annual energy consumption Qhe	2463 kWh	4037 kWh

Model ACHP-H16/4R2HA-M(NE)	
Model name	ACHP-H16/4R2HA-M(NE)
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Warmer
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	15.10 kW	15.10 kW
El input	3.21 kW	4.79 kW
COP	4.70	3.15

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
ηs	188 %	150 %
Prated	15.50 kW	14.00 kW
SCOP	4.77	3.82
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	13.71 kW	12.38 kW
COP Tj = -7°C	3.01	2.27
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	8.35 kW	7.54 kW
COP Tj = +2°C	4.48	3.66
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.37 kW	4.85 kW

COP Tj = +7°C	6.73	5.18
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.38 kW	4.43 kW
COP Tj = 12°C	10.05	8.75
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	13.71 kW	12.38 kW
COP Tj = Tbiv	3.01	2.39
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.42 kW	10.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.78	2.13
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	2 W	2 W
PTO	30 W	30 W
PSB	2 W	2 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.08 kW	3.50 kW
Annual energy consumption Qhe	6604 kWh	7563 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
ηs	246 %	176 %
Prated	13.10 kW	13.80 kW
SCOP	6.22	4.47
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	12.97 kW	13.67 kW
COP Tj = +2°C	3.35	2.25
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	8.42 kW	8.87 kW
COP Tj = +7°C	5.31	3.80
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.29 kW	3.94 kW
COP Tj = 12°C	8.23	5.88
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.42 kW	8.87 kW
COP Tj = Tbiv	5.31	3.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.97 kW	13.67 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.35	2.25
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	2 W	2 W
PTO	30 W	30 W
PSB	2 W	2 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.13 kW	0.13 kW
Annual energy consumption Qhe	2812 kWh	4118 kWh