

Technical parameters							
Model(s):	ACHP-H10/4R3HA-ME ACHP-H10/4R3HA-M (NE)						
Air-to-water heat ump:	yes						
Water-to-water heat pump:	no						
Brine-to-water heat pump:	no						
Low-temperature heat pump:	no						
Equipped with a supplementary heater:	no						
Heat pump combination heater:	no						
Declared climate condition	Warmer						
Declared temperature application	Low						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output(*)	Prated	8.6	kW	Seasonal space heating energy efficiency	$\eta_s$	267	%
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature Tj			
Tj = -7°C	Pdh	-	kW	Tj = -7°C	COPd	-	-
Tj = +2°C	Pdh	8.20	kW	Tj = +2°C	COPd	3.84	-
Tj = +7°C	Pdh	5.53	kW	Tj = +7°C	COPd	5.85	-
Tj = +12°C	Pdh	2.46	kW	Tj = +12°C	COPd	9.04	-
Tj = bivalent temperature	Pdh	5.53	kW	Tj = bivalent temperature	COPd	5.85	-
Tj = operation limit temperature	Pdh	8.20	kW	Tj = operation limit temperature	COPd	3.84	-
For air-to-water heat pumps: Tj = -15°C (ifTOL<-20°C)	Pdh	-	kW	For air-to-water heat pumps: Tj = -15°C (ifTOL<-20°C)	COPd	-	-
Bivalent temperature	Tbiv	7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval capacity for heating	Ppsych	-	kW	Cycling interval efficiency	COPcyc	-	-
Degradation co-efficient(**)	Cdh	0.9	-	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	POFF	0.020	kW	Rated heat output (*)	Psup	0.40	kW
Thermostat-off mode	P TO	0.030	kW				
Standby mode	┌SB	0.020	kW				
Crankcase heater mode	PcK	0.000	kW				
Type of energy input							
Electricity							
Other items							
Capacity control	Variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4000	m³/h
Sound power level,	LWA	-	dB	For water-/brine-to-water heat pumps:Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h
Annual energy consumption	QHE	1701	kWh				
For heat pump combination heater							
Declaed load profile	-			Water heating energy efficiency	Hwh	-	%
Daily electricity consumption	Qelec	-	kWh	Daily fuel consumption	Qfuel	-	kWh
Contact details	AUX Co., Ltd 1166 Mingguang North Road, Jiangshan Yinzhou District, Ningbo, 315191 Zhejiang, China						
(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9							

Technical parameters							
Model(s):	ACHP-H10/4R3HA-ME ACHP-H10/4R3HA-M (NE)						
Air-to-water heat ump:	yes						
Water-to-water heat pump:	no						
Brine-to-water heat pump:	no						
Low-temperature heat pump:	no						
Equipped with a supplementary heater:	no						
Heat pump combination heater:	no						
Declared climate condition	Warmer						
Declared temperature application	Medium						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output。 )	Prated	14.1	kW	Seasonal space heating energy efficiency	ηs	171	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature Tj			
Tj = -7°C	Pdh	-	kW	Tj = -7°C	COPd	-	-
Tj = +2°C	Pdh	13.7	kW	Tj = +2°C	COPd	2.49	-
Tj = +7°C	Pdh	9.06	kW	Tj = +7°C	COPd	3.46	-
Tj = +12°C	Pdh	4.03	kW	Tj = +12°C	COPd	6.01	-
Tj = bivalent temperature	Pdh	9.06	kW	Tj = bivalent temperature	COPd	3.46	-
Tj = operation limit temperature	Pdh	13.7	kW	Tj = operation limit temperature	COPd	2.49	-
For air-to-water heat pumps: Tj = -15°C (ifTOL<-20°C)	Pdh	-	kW	For air-to-water heat pumps: Tj = -15°C(ifTOL<-20°C)	COPd	-	-
Bivalent temperature	Tbiv	7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval capacity for heating	Ppsych	-	kW	Cycling interval efficiency	COPcyc	-	-
Degradation co-efficient(**)	Cdh	0.9	-	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Suppiemantary heater			
Off mode	POFF	0.020	kW	Rated heat output (*)	Psup	0.40	kW
Thermostat-off mode	P TO	0.030	kW	Type of energy input	Electricity		
Standby mode	┌SB	0.020	kW				
Crankcase heater mode	PcK	0.000	kW				
Other items							
Capacity control	Variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4000	m <sup>3</sup> /h
Sound power level	LWA	-	dB	For water-/brine-to-water heat pumps:Rated brine or water flow rate, outdoor heat exchanger	-	-	m <sup>3</sup> /h
Annual energy consumption	QHE	4331	kWh				
For heat pump combination heater							
Declaed load profile	-			Water heating energy efficiency	Hwh	-	%
Daily electricity consumption	Qelec	-	kWh	Daily fuel consumption	Qfuel	-	kWh
Contact details	AUX Co., Ltd 1166 Mingguang North Road, Jiangshan Yinzhou District, Ningbo, 315191 Zhejiang, China						
(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9							

Technical parameters							
Model(s):	ACHP-H10/4R3HA-ME ACHP-H10/4R3HA-M (NE)						
Air-to-water heat ump:	yes						
Water-to-water heat pump:	no						
Brine-to-water heat pump:	no						
Low-temperature heat pump:	no						
Equipped with a supplementary heater:	no						
Heat pump combination heater:	no						
Declared climate condition	Average						
Declared temperature application	Low						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output(*)	Prated	9.2	kW	Seasonal space heating energy efficiency	$\eta_s$	198	%
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T <sub>i</sub>				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = -7°C	P <sub>dh</sub>	8.14	kW	T <sub>j</sub> = -7°C	COP <sub>d</sub>	3.17	-
T <sub>j</sub> = +2°C	P <sub>dh</sub>	4.95	kW	T <sub>j</sub> = +2°C	COP <sub>d</sub>	5.02	-
T <sub>j</sub> = +7°C	P <sub>dh</sub>	3.18	kW	T <sub>j</sub> = +7°C	COP <sub>d</sub>	6.30	-
T <sub>j</sub> = +12°C	P <sub>dh</sub>	1.42	kW	T <sub>j</sub> = +12°C	COP <sub>d</sub>	8.33	-
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	8.14	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	3.17	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	7.40	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	2.86	-
For air-to-water heat pumps: T <sub>j</sub> = -15°C (if TOL < -20°C)	P <sub>dh</sub>	-	kW	For air-to-water heat pumps: T <sub>j</sub> = -15°C (if TOL < -20°C)	COP <sub>d</sub>	-	-
Bivalent temperature	T <sub>biv</sub>	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	P <sub>psych</sub>	-	kW	Cycling interval efficiency	COP <sub>psych</sub>	-	-
Degradation co-efficient(**)	C <sub>dh</sub>	0.9	-	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P <sub>OFF</sub>	0.020	kW	Rated heat output (*)	P <sub>sup</sub>	1.8	kW
Thermostat-off mode	P <sub>TO</sub>	0.030	kW	Type of energy input	Electricity		
Standby mode	P <sub>sB</sub>	0.020	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				
Other items							
Capacity control	Variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4000	m <sup>3</sup> /h
Sound power level	L <sub>WA</sub>	-	dB	For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m <sup>3</sup> /h
Annual energy consumption	Q <sub>HE</sub>	3774	kWh				
For heat pump combination heater							
Declared load profile	-			Water heating energy efficiency	O <sub>wh</sub>	-	%
Daily electricity consumption	Q <sub>elec</sub>	-	kWh	Daily fuel consumption	Q <sub>fuel</sub>	-	kWh
Contact details	AUX Co., Ltd 1166 Mingguang North Road, Jiangshan Yinzhou District, Ningbo, 315191 Zhejiang, China						
(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).							
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9							

Technical parameters							
Model(s):	ACHP-H10/4R3HA-ME ACHP-H10/4R3HA-M (NE)						
Air-to-water heat ump:	yes						
Water-to-water heat pump:	no						
Brine-to-water heat pump:	no						
Low-temperature heat pump:	no						
Equipped with a supplementary heater:	no						
Heat pump combination heater:	no						
Declared climate condition	Average						
Declared temperature application	Medium						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output(*)	Prated	7.7	kW	Seasonal space heating energy efficiency	$\eta_s$	136	%
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature Tj			
Tj = -7°C	Pdh	6.81	kW	Tj = -7°C	COPd	2.03	-
Tj = +2°C	Pdh	4.15	kW	Tj = +2°C	COPd	3.46	-
Tj = +7°C	Pdh	2.67	kW	Tj = +7°C	COPd	4.50	-
Tj = +12°C	Pdh	1.18	kW	Tj = +12°C	COPd	7.01	-
Tj = bivalent temperature	Pdh	6.81	kW	Tj = bivalent temperature	COPd	2.03	-
Tj = operation limit temperature	Pdh	5.23	kW	Tj = operation limit temperature	COPd	1.63	-
For air-to-water heat pumps: Tj = -15°C(ifTOL<-20°C)	Pdh	-	kW	For air-to-water heat pumps: Tj=-15°C(ifTOL<-20°C)	COPd	-	-
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	P <sub>psych</sub>	-	kW	Cycling interval efficiency	COP <sub>psych</sub>	-	-
Degradation co-efficient(**)	Cdh	0.9	-	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	POFF	0.020	kW	Rated heat output (*)	P <sub>sup</sub>	2.47	kW
Thermostat-off mode	PTO	0.030	kW	Type of energy input	Electricity		
Standby mode	PSB	0.020	kW				
Crankcase heater mode	PCK	0.000	kW				
Other items							
Capacity control	Variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4000	m <sup>3</sup> /h
Sound power level	LWA	60	dB	For water-/brine-to-water heat pumps:Rated brine or water flow rate, outdoor heat exchanger	-	-	m <sup>3</sup> /h
Annual energy consumption	QHE	4553	kWh				
For heat pump combination heater							
Declaed load profile	-			Water heating energy efficiency	Hwh	-	%
Daily electricity consumption	Qelec	-	kWh	Daily fuel consumption	Qfuel	-	kWh
Contact details	AUX Co., Ltd 1166 Mingguang North Road, Jiangshan Yinzhou District, Ningbo, 315191 Zhejiang, China						
(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj),							
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh =0.9							

Technical parameters							
Model(s):	ACHP-H10/4R3HA-ME ACHP-H10/4R3HA-M (NE)						
Air-to-water heat pump:	yes						
Water-to-water heat pump:	no						
Brine-to-water heat pump:	no						
Low-temperature heat pump:	no						
Equipped with a supplementary heater:	no						
Heat pump combination heater:	no						
Declared climate condition	Colder						
Declared temperature application	Low						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output(*)	Prated	7.7	kW	Seasonal space heating energy efficiency	$\eta_s$	168	%
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature Tj			
Tj = -7°C	Pdh	4.83	kW	Tj = -7°C	COPd	3.60	-
Tj = +2°C	Pdh	2.94	kW	Tj = +2°C	COPd	5.26	-
Tj = +7°C	Pdh	1.92	kW	Tj = +7°C	COPd	7.08	-
Tj = +12°C	Pdh	1.65	kW	Tj = +12°C	COPd	7.96	-
Tj = bivalent temperature	Pdh	6.32	kW	Tj = bivalent temperature	COPd	2.64	-
Tj = operation limit temperature	Pdh	4.62	kW	Tj = operation limit temperature	COPd	1.97	-
For air-to-water heat pumps: Tj = -15°C (if TOL < -20°C)	Pdh	-	kW	For air-to-water heat pumps: Tj = -15°C (if TOL < -20°C)	COPd	-	-
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval capacity for heating	Pcyc	-	kW	Cycling interval efficiency	COPcyc	-	-
Degradation co-efficient(**)	Cdh	0.9	-	Heating water operating limit temperature	WTOL	52	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	POFF	0.020	kW	Rated heat output (*)	Psup	3.08	kW
Thermostat-off mode	PTO	0.030	kW	Type of energy input	Electricity		
Standby mode	PSB	0.020	kW				
Crankcase heater mode	PCK	0.000	kW				
Other items							
Capacity control	Variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4000	m <sup>3</sup> /h
Sound power level	LWA	-	dB	For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m <sup>3</sup> /h
Annual energy consumption	QHE	4439	kWh				
For heat pump combination heater							
Declared load profile	-			Water heating energy efficiency	Owh	-	%
Daily electricity consumption	Qelec	-	kWh	Daily fuel consumption	Qfuel	-	kWh
Contact details	AUX Co., Ltd 1166 Mingguang North Road, Jiangshan Yinzhou District, Ningbo, 315191 Zhejiang, China						
(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).							
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9							

Technical parameters							
Model(s):	ACHP-H10/4R3HA-ME ACHP-H10/4R3HA-M (NE)						
Air-to-water heat ump:	yes						
Water-to-water heat pump:	no						
Brine-to-water heat pump:	no						
Low-temperature heat pump:	no						
Equipped with a supplementary heater:	no						
Heat pump combination heater:	no						
Declared climate condition	Colder						
Declared temperature application	Medium						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output(*)	Prated	6.7	kW	Seasonal space heating energy efficiency	$\eta_s$	116	%
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature Tj			
Tj = -7°C	Pdh	4.27	kW	Tj = -7°C	COPd	2.54	-
Tj = +2°C	Pdh	2.57	kW	Tj = +2°C	COPd	3.51	-
Tj = +7°C	Pdh	1.65	kW	Tj = +7°C	COPd	4.37	-
Tj = +12°C	Pdh	1.48	kW	Tj = +12°C	COPd	5.96	-
Tj = bivalent temperature	Pdh	5.47	kW	Tj = bivalent temperature	COPd	2.00	-
Tj = operation limit temperature	Pdh	2.80	kW	Tj = operation limit temperature	COPd	1.22	-
For air-to-water heat pumps: Tj = -15°C (if TOL < -20°C)	Pdh	-	kW	For air-to-water heat pumps: Tj = -15°C (if TOL < -20°C)	COPd	-	-
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-
Degradation co-efficient(**)	Cdh	0.9	-	Heating water operating limit temperature	WTOL	52	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	POFF	0.020	kW	Rated heat output (*)	Psup	3.9	kW
Thermostat-off mode	PTO	0.030	kW	Type of energy input	Electricity		
Standby mode	PSB	0.020	kW				
Crankcase heater mode	PCK	0.000	kW				
Other items							
Capacity control	Variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4000	m <sup>3</sup> /h
Sound power level	LWA	-	dB	For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m <sup>3</sup> /h
Annual energy consumption	QHE	5574	kWh				
For heat pump combination heater							
Declaed load profile	-			Water heating energy efficiency	Owh	-	%
Daily electricity consumption	Qelec	-	kWh	Daily fuel consumption	Qfuel	-	kWh
Contact details	AUX Co., Ltd 1166 Mingguang North Road, Jiangshan Yinzhou District, Ningbo, 315191 Zhejiang, China						
(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).							
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh =0.9							