			Tech	nnical parameters							
Model(s):		ACHP-	H12/4F	R3HA-M (NE)							
Air-to-water heat ump:											
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	r								
Declared temperature application Low			_		Г	г т					
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit				
Rated heat output(*)	Prated	11.1	kW	Seasonal space heating energy efficiency	ηѕ	254	%				
Declared capacity for heating for part lo 20 °C and outdoor temperature Tj	oad at indoo	r tempera	ture	Declared coefficient of performance or primar indoor temperature 20°C and outdoor and outdoor 20°C and 00°C a		atio for pa	rt load a				
Tj = -7°C	Pdh	-	kW	Tj = -7°C	COPd	-	-				
$Tj = +2^{\circ}C$	Pdh	10.90	kW	$Tj = +2^{\circ}C$	COPd	3.59					
$Tj = +7^{\circ}C$	Pdh	7.14	kW	$Tj = +7^{\circ}C$	COPd	5.82					
$T_{j} = +12^{\circ}C$	Pdh	3.17	kW	$T_i = +12$ °C	COPd	7.94					
Tj = bivalent temperature	Pdh	7.14	kW	Tj = bivalent temperature	COPd	5.82					
Tj = operation limit temperature	Pdh	10.90	kW	Tj = operation limit temperature	COPd	3.59					
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	Pcych	-	kW	Cycling interval efficiency	СОРсус	-	-				
Degradation co-efficient(**)	Cdh	0.9	-	Heating water operating limit temperature	WTOL	60	°C				
Power consumption in modes other	than activ	e mode	•	Supplemantary heater							
Off mode	Poff	0.020	kW	Rated heat output (*)	Psup	0.20	kW				
Thermostat-off mode	Рто	0.030	kW								
Standby mode	PsB	0.020	kW	Type of energy input	E	Electricity					
Crankcase heater mode	PcK	0.000	kW	]							
Other items	1010	1 0.000	1 44	1	l						
Capacity control	V	ariable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4650	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	-	-	m <sup>3</sup> /h				
Annual energy consumption	QHE	2308	kWh	exchanger							
For heat pump combination heater	- Zim		r- / · · ·	-	<u> </u>	<u> </u>					
Declaed load profile		_		Water heating energy efficiency	Hwh	_	%				
Daily electricity consumption	Qelec	_	kWh	Daily fuel consumption	Qfuel	_	kWh				
Contact details	AUX Co.										

<sup>(\*)</sup> 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

			Tec	hnical parameters								
Model(s):		ACHP-		3HA-M (NE)								
Air-to-water heat ump:												
			no									
Brine-to-water heat pump:												
Low-temperature heat pump:												
		no										
		no										
Declared climate condition		Warme										
Declared temperature application	ı	Mediun	n	1								
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit					
Rated heat output(*)	Prated	14.1	kW	Seasonal space heating energy efficiency	ηs	176	%					
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Item Symbol Value Unit Seasonal space heating energy efficiency ns 176 %  Declared coeffient of performance or primary energy ratio for part load indoor temperature 20°C and outdoor temperature Tj  Tj = -7°C COPd Tj = +2°C COPd 2.54 - Tj = +7°C COPd 3.56 - Tj = +12°C COPd 6.16 - Tj = bivalent temperature COPd 3.56 - Tj = operation limit temperature COPd 3.56 - Tj = operation limit temperature COPd 2.54 - For air-to-water heat pumps: Tj = COPd15°C(ifTOL<-20°C) COPd For air-to-water heat pumps: Operation limit temperature COPd COPd Supplemantary heater  Rated heat output (*) Psup 0.20 kW  Type of energy input Electricity  For air-to-water heat pumps: Rated airflow rate, outdoors  For water-/brine-to-water heat pumps:Rated brine or water flow rate, outdoor heat m³/h								
Tj = -7°C	Pdh	-	kW	Tj = -7°C	COPd	-	-					
$Tj = +2^{\circ}C$	Pdh	13.9	kW	Tj= +2°C	COPd	2.54	=					
$Tj = +7^{\circ}C$	Pdh	9.06	kW	Tj= +7°C	COPd	3.56	-					
Tj = +12°C	Pdh	4.03	kW	Tj=+12°C	COPd	6.16	-					
Tj = bivalent temperature	Pdh	9.06	kW	Tj = bivalent temperature	COPd	3.56	=					
Tj = operation limit temperature	Pdh	13.9	kW	Ti = operation limit temperature	COPd	2.54	_					
For air-to-water heat pumps: Tj = -15°C (ifTOL<-20°C)	Pdh	-	kW	For air-to-water heat pumps: Tj =		-	-					
Bivalent temperature	Tbiv	7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C					
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-					
Degradation co-efficient(**)	Cdh	0.9	-	Heating water operating limit temperature	WTOL	60	°C					
Power consumption in modes other t	han activ	e mode		Supplemantary heater								
Off mode	POFF	0.020	kW	Rated heat output (*)	Psup	0.20	kW					
Thermostat-off mode	Рто	0.030	kW									
Standby mode	PSB	0.020	kW	Type of energy input	E	Electricity						
Crankcase heater mode	P CK	0.000	kW	1								
Other items	•			•								
Capacity control	V	/ariable		For air-to-water heat pumps: Rated airflow rate, outdoors	-	4650	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	_	_	m <sup>3</sup> /h					
Annual energy consumption	QHE	4206	kWh	exchanger								
For heat pump combination heater				•	1	ı						
Declaed load profile		_		Water heating energy efficiency	Hwh	_	%					
Daily electricity consumption	Qelec	_	kWh		Qfuel	_						
Contact details	AUX Co	., Ltd		Road, Jiangshan Yinzhou District, Ningbo, 31		<u> </u>						

<sup>(\*)</sup> 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

			Techi	nical parameters							
Model(s):		ACHP-	H12/4F	R3HA-M (NE)							
Air-to-water heat ump:		yes									
Water-to-water heat pump:		no	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	e								
Declared temperature application	ı	Low		T	<u> </u>	1					
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit				
Rated heat output。)	Prated	12.2	kW	Seasonal space heating energy efficiency	ηs	194	%				
Declared capacity for heating for part load and outdoor temperature Tj	at indoor t	emperatu	re 20°C	Declared coeffient of performance or prima at indoor temperature 20°C and outdoor ter			part loa				
Tj = -7°C	Pdh	10.79	kW	Tj = -7°C	COPd	3.02	-				
Tj = +2°C	Pdh	6.57	kW	Tj= +2°C	COPd	4.83	-				
$Tj = +7^{\circ}C$	Pdh	4.22	kW	Tj= +7°C	COPd	6.27	-				
Tj = +12°C	Pdh	1.88	kW	Tj=+12°C	COPd	9.38	-				
Tj = bivalent temperature	Pdh	10.79	kW	Tj = bivalent temperature	COPd	3.02	-				
Tj = operation limit temperature	Pdh	10.10	kW	Tj = operation limit temperature	COPd	2.61	-				
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	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-				
Degradation co-efficient(**)	Cdh	0.9	-	Heating water operating limit temperature	WTOL	60	°C				
Power consumption in modes other th	nan active	mode		Supplemantary heater		•					
Off mode	POFF	0.020	kW	Rated heat output (*)	Psup	2.10	kW				
Thermostat-off mode	Рто	0.030	kW			•	•				
Standby mode	PSB	0.020	kW	Type of energy input	]	Electricity	y				
Crankcase heater mode	Рск	0.000	kW								
Other items		•	•								
Capacity control	\	/ariable		For air-to-water heat pumps: Rated airflow rate, outdoors	-	4650	m <sup>3</sup> /h				
Sound power level	Lwa	-	dB	For water-/brine-to-water heat pumps:Rated brine or water flow rate,	_	_	m³/h				
Annual energy consumption	QHE	5114	kWh	outdoor heat exchanger			/11				
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		Road, Jiangshan Yinzhou District, Ningbo,	1 -	nejiang, C					

<sup>(\*)</sup> 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

			Techn	ical parameters			-					
Model(s):			ACHP-H12/4R3HA-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 heate	r:	no	no									
Heat pump combination heater:		no										
		Average	· · · · · · · · · · · · · · · · · · ·									
Declared temperature application		Mediun	n .									
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit					
Rated heat output(*)	Prated	12	kW	Seasonal space heating energy efficiency	ηs	139	%					
Declared capacity for heating for part load and outdoor temperature Tj	at indoor t	emperatu	re 20°C	Declared coefficient of performance or primary energy ratio for part at indoor temperature 20°C and outdoor temperature Tj								
Tj = -7°C	Pdh	10.62	kW	Tj = -7°C	COPd	2.11	-					
Tj = +2°C	Pdh	6.46	<del></del>	Tj = +2°C	COPd	3.43	-					
$Tj = +7^{\circ}C$	Pdh	4.15	kW	$Tj = +7^{\circ}C$	COPd	4.59	-					
Tj = +12°C	Pdh	1.85	kW	Tj = +12°C	COPd	6.90	-					
Tj = bivalent temperature	Pdh	10.62	kW	Tj = bivalent temperature	COPd	2.11	-					
Tj = operation limit temperature	Pdh	9.16	kW	Tj = operation limit temperature	COPd	2.68	-					
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	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-					
Degradation co-efficient(**)	Cdh	0.9	-	Heating water operating limit temperature	WTOL	60	°C					
Power consumption in modes other th	an active	mode		Supplemantary heater								
Off mode	Poff	0.020	kW	Rated heat output (*)	Psup	2.84	kW					
Thermostat-off mode	Рто	0.030	kW	1								
Standby mode	PSB	0.020	kW	Type of energy input	]	Electricity	y					
Crankcase heater mode	PcK	0.000	kW									
Other items					•							
Capacity control	V	/ariable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4650	m <sup>3</sup> /h					
Sound power level	Lwa	63	dB	For water-/brine-to-water heat pumps:Rated brine or water flow rate,	_	_	m³/h					
Annual energy consumption	QHE	6982	kWh	outdoor heat exchanger								
For heat pump combination heater			1	1	1	1	1					
Declaed load profile		_		Water heating energy efficiency	Hwh	-	%					
Daily electricity consumption	Qelec	_	kWh	Daily fuel consumption	Qfuel	_	kWh					
Contact details	AUX Co	., Ltd		Road, Jiangshan Yinzhou District, Ningbo	1 -	<u> </u>						

<sup>(\*)</sup> 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

			Techn	ical parameters							
Model(s):		ACHP-H12/4R3HA-M (NE)									
•		yes									
1 1		no	no								
Brine-to-water heat pump:		no									
1 1		no	no								
Equipped with a supplementary heater:		no									
Heat pump combination heater:		no									
Declared climate condition		Colder Low									
Declared temperature application	Declared temperature application			T	T	1					
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit				
Rated heat outputf*)	Prated	11.4	kW	Seasonal space heating energy efficiency	ηs	159	%				
Declared capacity for heating for part load and outdoor temperature Tj	at indoor	emperatu	re 20°C	Declared coefficient of performance or primary energy ratio for parati indoor temperature 20°C and outdoor temperature Tj							
Tj = -7°C	Pdh	7.05	kW	Tj = -7°C	COPd	3.48	-				
Tj = +2°C	Pdh	4.67	kW	Tj = +2°C	COPd	4.96	-				
$Tj = +7^{\circ}C$	Pdh	3.14	kW	$Tj = +7^{\circ}C$	COPd	6.10	-				
$Tj = +12^{\circ}C$	Pdh	3.57	kW	Tj = +12°C	COPd	7.87	-				
Tj = bivalent temperature	Pdh	9.28	kW	Tj = bivalent temperature	COPd	2.59	-				
Tj = operation limit temperature	Pdh	7.01	kW	Tj = operation limit temperature	COPd	1.98	-				
For air-to-water heat pumps: Tj = -15°C (ifTOL<-20°C)	Pdh	-	kW	For air-to-water heat pumps: $T_i = -15$ °C(ifTOL<-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	СОРсус	-	-				
Degradation co-efficient(**)	Cdh	0.9	-	Heating water operating limit temperature	WTOL	52	°C				
Power consumption in modes other th	an active	mode		Supplemantary heater							
Off mode	POFF	0.020	kW	Rated heat output (*)	Psup	4.39	kW				
Thermostat-off mode	P TO	0.030	kW								
Standby mode	PsB	0.020	kW	Type of energy input	] 1	Electricity	y				
Crankcase heater mode	PcK	0.000	kW								
Other items											
Capacity control	,	/ariable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4650	m <sup>3</sup> /h				
Sound power level	LWA	-	dB	For water-/bri ne-to-water heat pumps:Rated brine or water flow rate,	_	_	m <sup>3</sup> /h				
Annual energy consumption	QHE	6926	kWh	outdoor heat exchanger			/11				
For heat pump combination heater	1 4			1	1	1	<u> </u>				
Declaed load profile		_		Water heating energy efficiency	Owh	_	%				
Daily electricity consumption	Qelec	_	kWh	Daily fuel consumption	Qfuel	_	kWh				
Contact details	AUX Co	., Ltd		Road, Jiangshan Yinzhou District, Ningbo	-						

<sup>(\*)</sup> 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

				ical parameters							
		ACHP-H12/4R3HA-M (NE)									
•		yes									
1 1		no	no								
Brine-to-water heat pump:		no	no								
		no	no								
Equipped with a supplementary heater:		no	no								
Heat pump combination heater:		no									
		Colder Medium	_								
Declared temperature application	Declared temperature application				Γ		I				
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit				
Rated heat output(*)	Prated	10.3	kW	Seasonal space heating energy efficiency	ηs	117	%				
Declared capacity for heating for part load and outdoor temperature Tj	at indoor t	emperatu	re 20°C	Declared coefficient of performance or primat indoor temperature 20°C and outdoor to			r part lo				
Tj = -7°C	Pdh	6.63	kW	Tj = -7°C	COPd	2.63	-				
Tj = +2°C	Pdh	4.06	kW	$Tj = +2^{\circ}C$	COPd	3.60	-				
$Tj = +7^{\circ}C$	Pdh	2.78	kW	$Tj = +7^{\circ}C$	COPd	4.54	-				
Tj = +12°C	Pdh	3.33	kW	Tj = +12°C	COPd	6.25	-				
Tj = bivalent temperature	Pdh	8.41	kW	Tj = bivalent temperature	COPd	1.84	-				
Tj = operation limit temperature	Pdh	4.19	kW	Tj = operation limit temperature	COPd	1.13	-				
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	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C				
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	СОРсус	-	-				
Degradation co-efficient(**)	Cdh	0.9	-	Heating water operating limit temperature	WTOL	52	°C				
Power consumption in modes other th	an active	mode		Supplemantary heater							
Off mode	POFF	0.020	kW	Rated heat output (*)	Psup	6.11	kW				
Thermostat-off mode	P TO	0.030	kW			1					
Standby mode	PSB	0.020	kW	Type of energy input	] 1	Electricit	y				
Crankcase heater mode	P CK	0.000	kW	]							
Other items	1		1	1	1						
Capacity control	,	/ariable		For air-to-water heat pumps: Rated airflow rate, outdoors	-	4000	m <sup>3</sup> /h				
Sound power level	LWA	-	dB	For water-/b ri n e-to-water heat pumps:Rated brine or water flow rate,	-	-	m³/h				
Annual energy consumption	QHE	8453	kWh	outdoor heat exchanger							
For heat pump combination heater	. `	1	•			•	•				
Declaed load profile		-		Water heating energy efficiency	Hwh	_	%				
Daily electricity consumption	Qelec	_	kWh	Daily fuel consumption	Qfuel	_	kWh				
Contact details	AUX Co	., Ltd		Road, Jiangshan Yinzhou District, Ningbo	-	Zhejiang,					

<sup>(\*)</sup> 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