Model(s): Air-to-water heat ump: Water-to-water heat pump: Brine-to-water heat pump: Low-temperature heat pump: Equipped with a supplementary heated pump combination heater: Declared climate condition Declared temperature application tem	er:	yes no no no no no Warmer		ACHP-H10/4R3HA-O Indoor unit: ACHP-H	110/5R3H <i>i</i>	<b>\-</b> 1									
Water-to-water heat pump: Brine-to-water heat pump: Low-temperature heat pump: Equipped with a supplementary heate Heat pump combination heater: Declared climate condition Declared temperature application		no no no no no Warmer													
Brine-to-water heat pump:  _ow-temperature heat pump:  Equipped with a supplementary heate  Heat pump combination heater:  Declared climate condition  Declared temperature application		no no no no Warmer													
Low-temperature heat pump: Equipped with a supplementary heate Heat pump combination heater: Declared climate condition Declared temperature application		no no no Warmer													
Equipped with a supplementary heater Heat pump combination heater: Declared climate condition Declared temperature application		no no Warmer				no									
Heat pump combination heater: Declared climate condition Declared temperature application		no Warmer			no										
Declared climate condition Declared temperature application	Symbol	Warmer		no											
Declared temperature application	Symbol														
	Symbol	1													
tem	Symbol	Low			1										
	Symbol	Value	Unit	Item	Symbol	Value	Unit								
Rated heat output(*)	Prated	8.6	kW	Seasonal space heating energy efficiency	ηs	266	%								
Declared capacity for heating for part load at indoor tempera °C and outdoor temperature T <sub>j</sub>				Seasonal space heating energy efficiency  Declared coeffient of performance or primary energy ratio for part at indoor temperature 20°C and outdoor temperature T <sub>j</sub> T <sub>j</sub> = -7°C  COPd  T <sub>j</sub> = +2°C  COPd  Seasonal space heating energy efficiency  T <sub>j</sub> = -7°C  COPd  Seasonal space heating energy efficiency  T <sub>j</sub> = -7°C  COPd  Seasonal space heating energy efficiency  COPd  Seasonal space heating energy efficiency  COPd  COPd  Seasonal space heating energy efficiency  COPd  Seasonal space heating energy energy ratio for part at the part of the			art load								
Γ <sub>j</sub> = -7°C	Pdh	-	kW	T <sub>j</sub> = -7°C	COPd	-	-								
Γ <sub>j</sub> = +2°C	Pdh	8.20	kW	$T_j = +2^{\circ}C$	COPd	3.84	-								
Γ <sub>j</sub> = +7°C	Pdh	5.53	kW	$T_j = +7^{\circ}C$	COPd	6.18	-								
Γ <sub>j</sub> = +12°C	Pdh	2.46	kW	T <sub>j</sub> = +12°C	COPd	9.04	_								
Γ <sub>j</sub> = bivalent temperature	Pdh	5.53	kW	T <sub>j</sub> = bivalent temperature	COPd	6.18	-								
$\Gamma_{j}$ = operation limit temperature	Pdh	8.20	kW	T <sub>j</sub> = operation limit temperature	COPd	3.84	-								
For air-to-water heat pumps: Tj = -15°C (if TOL < -20°C)	Pdh	ı	kW	For air-to-water heat pumps: T <sub>j</sub> = -15°C (if TOL < -20°C)	COPd	-	-								
Bivalent temperature	T <sub>biv</sub>	7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C								
Cycling interval capacity for heating	P <sub>cych</sub>	-	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	$P_{OFF}$	0.020	kW	Rated heat output (*)	Psup	0.4	kW								
Thermostat-off mode	P <sub>TO</sub>	0.030	kW												
Standby mode	$P_{SB}$	0.020	kW	Type of energy input	E	Electricity	,								
Crankcase heater mode	P <sub>CK</sub>	0.000	kW												
Other items		<u> </u>		-	_										
Capacity control	V	ariable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4000	m <sup>3</sup> /h								
Sound power level, indoors/outdoors	L <sub>WA</sub>	-	dB	For water-/brine-to-water heat	_	-	m³/h								
Annual energy consumption	$Q_{HE}$	1709	kWh	outdoor heat exchanger											
or heat pump combination heater															
Declaed load profile		-		Water heating energy efficiency	$\eta_{\text{wh}}$	-	%								
Daily electricity consumption	Q <sub>elec</sub>		kWh	Daily fuel consumption	Q <sub>fuel</sub>	-	kWh								
Contact details	AUX Co.,		North F	Road, Jiangshan Yinzhou District, Ningbo, 31		iang, Ch	ina								

<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(T<sub>i</sub>).

<sup>(\*\*)</sup> If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9

			Techni	ical parameters									
Model(s):				ACHP-H10/4R3HA-O Indoor unit: ACHF	-H10/5R3I	HA-I							
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	Warmei												
Declared temperature application	T	Medium			1								
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit						
Rated heat output(*)	Prated	8.6	kW	Seasonal space heating energy efficiency	ηs	176	%						
Declared capacity for heating for part load at indoor temperature 20 $^{\circ}\text{C}$ and outdoor temperature T $_{j}$				Declared coeffient of performance or prin load at indoor temperature 20°C and outcome.	-		part						
T <sub>j</sub> = -7°C	Pdh	-	kW	T <sub>i</sub> = -7°C	COPd	-	-						
T <sub>j</sub> = +2°C	Pdh	8.20	kW	$T_i = +2^{\circ}C$	COPd	2.59	_						
T <sub>j</sub> = +7°C	Pdh	5.53	kW	T <sub>j</sub> = +7°C	COPd	4.10	-						
T <sub>j</sub> = +12°C	Pdh	2.53	kW	T <sub>j</sub> = +12°C	COPd	5.82	-						
T <sub>j</sub> = bivalent temperature	Pdh	5.53	kW	T <sub>j</sub> = bivalent temperature	COPd	4.10	-						
T <sub>i</sub> = operation limit temperature	Pdh	8.20	kW	T <sub>i</sub> = operation limit temperature	COPd	2.59	-						
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	T <sub>biv</sub>	7	°C	For air-to-water heat pumps:	TOL	2	°C						
Cycling interval capacity for heating	P <sub>cych</sub>	_	kW	Operation limit temperature  Cycling interval efficiency	COPcyc	_							
Degradation co-efficient(**)	Cdh	0.9	-	Heating water operating limit temperature	WTOL	60	°C						
Power consumption in modes other the	l nan active	mode		Supplemantary heater									
Off mode	P <sub>OFF</sub>	0.020	kW	Rated heat output (*)	Psup	0.4	kW						
Thermostat-off mode	P <sub>TO</sub>	0.030	kW	. ,,									
Standby mode	P <sub>SB</sub>	0.020	kW	Type of energy input		Electricity							
Crankcase heater mode	P <sub>CK</sub>	0.000	kW			·							
Other items					ı								
Capacity control	V	′ariable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4000	m <sup>3</sup> /h						
Sound power level, indoors/outdoors	L <sub>WA</sub>	-	dB	For water-/brine-to-water heat pumps:Rated brine or water flow rate,	_	_	m³/h						
Annual energy consumption	Q <sub>HE</sub>	2567	kWh	outdoor heat exchanger			111 /11						
For heat pump combination heater													
Declaed load profile		-		Water heating energy efficiency	$\eta_{wh}$	-	%						
Daily electricity consumption	$Q_{\rm elec}$	-	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												

<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(T<sub>i</sub>).

<sup>(\*\*)</sup> If Cdh is not determined by measurement then the default degradation coefficient is Cdh =0.9

				chnical parameters								
Model(s):		Outdoo	<u>r unit:</u> /	ACHP-H10/4R3HA-O Indoor unit: ACHP-H	110/5R3HA	·-I						
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 he	no											
Heat pump combination heater:		no										
Declared climate condition		Average	<del></del>									
Declared temperature application	<del> </del>	Low		П	T							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit					
Rated heat output(*)	Prated	9.2	kW	Seasonal space heating energy efficiency	$\eta_{\rm s}$	198	%					
Declared capacity for heating for part I 20°C and outdoor temperature T <sub>j</sub>	oad at indoo	or temper	ature	Declared coeffient of performance or primar at indoor temperature 20°C and outdoor tem		•	art load					
T <sub>j</sub> = -7°C	Pdh	8.14	kW	$T_j = -7^{\circ}C$	COPd	3.17	-					
T <sub>j</sub> = +2°C	Pdh	4.95	kW	$T_j = +2^{\circ}C$	COPd	5.02	-					
T <sub>j</sub> = +7°C	Pdh	3.18	kW	T <sub>i</sub> = +7°C	COPd	6.60	-					
T <sub>j</sub> = +12°C	Pdh	1.42	kW	T <sub>i</sub> = +12°C	COPd	8.33	-					
T <sub>j</sub> = bivalent temperature	Pdh	8.14	kW	T <sub>i</sub> = bivalent temperature	COPd	3.17	-					
T <sub>i</sub> = operation limit temperature	Pdh	7.40	kW	T <sub>i</sub> = operation limit temperature	COPd	2.86	-					
For air-to-water heat pumps: T <sub>j</sub> = -15°C (if TOL < -20°C)	Pdh	-	kW	For air-to-water heat pumps: T <sub>j</sub> = -15°C (if TOL < -20°C)	COPd	-	-					
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>cych</sub>	-	kW	Cycling interval efficiency	COPcyc	-	-					
Degradation co-efficient(**)	Cdh	0.9	-	Heating water operating limit temperature	WTOL	60	°C					
Power consumption in modes other	er than act	ive mode	ә	Supplemantary heater								
Off mode	P <sub>OFF</sub>	0.020	kW	Rated heat output (*)	Psup	1.8	kW					
Thermostat-off mode	P <sub>TO</sub>	0.030	kW		<del>                                     </del>							
Standby mode	P <sub>SB</sub>	0.020	kW	Type of energy input	Electricity	,						
Crankcase heater mode	P <sub>CK</sub>	0.000	kW		Licotrioity							
	CK	0.000	NVV.									
Other items		/ariable		For air-to-water heat pumps:		4000	3,					
Capacity control	v	anabie		Rated air flow rate, outdoors	-	4000	m <sup>3</sup> /					
Sound power level, indoors/outdoors	L <sub>WA</sub>	-	dB	For water-/brine-to-water heat pumps:Rated brine or water flow rate,	-	-	m <sup>3</sup> /					
Annual energy consumption	$Q_{HE}$	3752	kWh	outdoor heat exchanger			Ì					
For heat pump combination heater				Ш								
Declaed load profile		_		Water heating energy efficiency	$\eta_{wh}$	-	%					
Daily electricity consumption	0.	<u> </u>	k\Wh		1	<del>-  </del>						
Contact details	Q <sub>elec</sub> - kWh Daily fuel consumption Q <sub>fuel</sub> - kWh AUX Co., Ltd 1166 Mingguang North Road, Jiangshan Yinzhou District, Ningbo, 315191 Zhejiang, China											

<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(T<sub>j</sub>).

<sup>(\*\*)</sup> If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9

				Technical parameters						
Model(s):		Outdoo		ACHP-H10/4R3HA-O Indoor unit: ACHP-H10/5	R3HA-I					
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 supplementar	v heater:	no								
Heat pump combination heate		no								
Declared climate condition		Average	е							
Declared temperature applicat	ion	Medium								
Item	Symbol	Value								
Rated heat output(*)	Prated	7.7	kW	Seasonal space heating energy efficiency	$\eta_{\rm s}$	135	%			
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T <sub>j</sub>				Declared coeffient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature T <sub>j</sub>						
$T_j = -7^{\circ}C$	Pdh	6.81	kW	T <sub>j</sub> = -7°C	COPd	2.03	-			
T <sub>j</sub> = +2°C	Pdh	4.15	kW	$T_j = +2$ °C	COPd	3.46	-			
T <sub>j</sub> = +7°C	Pdh	2.67	kW	$T_j = +7^{\circ}C$	COPd	4.71	-			
T <sub>j</sub> = +12°C	Pdh	1.18	kW	T <sub>j</sub> = +12°C	COPd	7.01	-			
T <sub>j</sub> = bivalent temperature	Pdh	6.81	kW	T <sub>j</sub> = bivalent temperature	COPd	2.03	-			
T <sub>j</sub> = operation limit temperature	Pdh	5.23	kW	T <sub>j</sub> = operation limit temperature	COPd	1.63	-			
For air-to-water heat pumps: T <sub>j</sub> = -15°C (if TOL < -20°C)	Pdh	-	kW	For air-to-water heat pumps: T <sub>j</sub> = -15°C (if TOL < -20°C)	COPd	-	-			
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>cych</sub>	-	kW	Cycling interval efficiency	COPcyc	-	-			
Degradation co-efficient(**)	Cdh	0.9	_	Heating water operating limit temperature	WTOL	60	℃			
Power consumption in modes	other thar	active r	node	Supplemantary heater						
Off mode	P <sub>OFF</sub>	0.020	kW	Rated heat output (*)	Psup	2.47	kW			
Thermostat-off mode	P <sub>TO</sub>	0.030	kW		·					
Standby mode	P <sub>SB</sub>	0.020	kW	Type of energy input	١,	Electricity				
·			kW	, , , , , , , , , , , , , , , , , , ,						
Crankcase heater mode	P <sub>CK</sub>	0.000	KVV	<u>                                     </u>	<u> </u>					
Other items	1		,1							
Capacity control	٧	ariable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4000	m <sup>3</sup> /h			
Sound power level, indoors/outdoors	L <sub>WA</sub>	42/60	dB	For water-/brine-to-water heat pumps:Rated brine or water flow rate, outdoor heat		_	m³/h			
Annual energy consumption	$Q_{HE}$	4618	kWh	exchanger						
For heat pump combination he				•	•					
Declaed load profile - Water heating energy efficiency $\eta_{wh}$ -										
Daily electricity consumption	$Q_{\rm elec}$	-	kWh	Daily fuel consumption	Q <sub>fuel</sub>	_	% kWh			
Contact details	AUX Co.,			Road, Jiangshan Yinzhou District, Ningbo, 31519		China				
heating Pdesignh, and the rate $\sup(T_j)$ .	ed heat ou	tput of a	supple	nation heaters, the rated heat output Prated is equented to the supplemental to the supplemental default degradation coefficient is Cdh = 0.9		_				

			Tech	nnical parameters							
Model(s):	lel(s): Outdoor			ACHP-H10/4R3HA-O Indoor unit: ACHP-H	I10/5R3HA	I					
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:											
Declared climate condition											
Declared temperature application		Low									
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit				
Rated heat output(*)	Prated	7.7	kW	Seasonal space heating energy efficiency	$\eta_{\rm s}$	168	%				
Declared capacity for heating for part loa °C and outdoor temperature T <sub>j</sub>	ıd at indoor	temperat	ture 20	Declared coeffient of performance or primar at indoor temperature 20°C and outdoor ten		•	art load				
T <sub>j</sub> = -7°C	Pdh	4.83	kW	$T_j = -7^{\circ}C$	COPd	3.60	-				
T <sub>j</sub> = +2°C	Pdh	2.94	kW	T <sub>j</sub> = +2°C	COPd	5.26	-				
T <sub>j</sub> = +7°C	Pdh	1.92	kW	$T_j = +7^{\circ}C$	COPd	7.08	-				
T <sub>j</sub> = +12°C	Pdh	1.65	kW	$T_j = +12$ °C	COPd	7.96	-				
T <sub>j</sub> = bivalent temperature	Pdh	6.32	kW	T <sub>j</sub> = bivalent temperature	COPd	2.64	-				
$T_j$ = operation limit temperature	Pdh	4.62	kW	$T_j$ = 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	-	ı				
Bivalent temperature	$T_{biv}$	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C				
Cycling interval capacity for heating	P <sub>cych</sub>	-	kW	Cycling interval efficiency	COPcyc	-	ı				
Degradation co-efficient(**)	Cdh	0.9	-	Heating water operating limit temperature	WTOL	52	°C				
Power consumption in modes other	than activ	e mode		Supplemantary heater							
Off mode	P <sub>OFF</sub>	0.020	kW	Rated heat output (*)	Psup	3.08	kW				
Thermostat-off mode	P <sub>TO</sub>	0.030	kW								
Standby mode	$P_{SB}$	0.020	kW	Type of energy input		Electricity	′				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW								
Other items	I.	<u> </u>	<u> </u>		1						
Capacity control	V	′ariable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4000	m³/h				
Sound power level,			,_	For water-/brine-to-water heat							
indoors/outdoors	L <sub>WA</sub>	-	dB	pumps:Rated brine or water flow rate,	-	-	m <sup>3</sup> /h				
Annual energy consumption	$Q_{HE}$	4439	kWh	outdoor heat exchanger							
For heat pump combination heater											
Declaed load profile		=		Water heating energy efficiency	$\eta_{wh}$	-	%				
Daily electricity consumption	$Q_{\mathrm{elec}}$	-	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										

<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(T<sub>j</sub>).

<sup>(\*\*)</sup> If Cdh is not determined by measurement then the default degradation coefficient is Cdh =0.9

			Techr	nical parameters								
Model(s):				ACHP-H10/4R3HA-O Indoor unit: ACHP-	H10/5R3F	IA-I						
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										
		no										
Declared climate condition		Colder										
Declared temperature application			)									
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit					
Rated heat output(*)	Prated	6.7	kW	Seasonal space heating energy efficiency	$\eta_{\rm s}$	116	%					
Declared capacity for heating for part load °C and outdoor temperature T <sub>j</sub>	d at indoor	temperatu	ure 20	Declared coeffient of performance or primal load at indoor temperature 20°C and outdo		part						
T <sub>j</sub> = -7°C	Pdh	4.27	kW	T <sub>i</sub> = -7°C	COPd	2.54	-					
T <sub>j</sub> = +2°C	Pdh	2.57	kW	T <sub>i</sub> = +2°C	COPd	3.51	_					
	Pdh	1.65	kW	$T_i = +7^{\circ}C$	COPd	4.37						
$T_j = +7^{\circ}C$				,			-					
T <sub>j</sub> = +12°C	Pdh	1.48	kW	T <sub>j</sub> = +12°C	COPd	5.96	-					
T <sub>j</sub> = bivalent temperature	Pdh	5.47	kW	T <sub>j</sub> = bivalent temperature	COPd	2.00	-					
T <sub>j</sub> = operation limit temperature	Pdh	2.80	kW	$T_j$ = operation limit temperature	COPd	1.22	-					
For air-to-water heat pumps: $T_j = -15$ °C (if TOL < -20°C)	Pdh	-	kW	For air-to-water heat pumps: T <sub>i</sub> = -15°C (if TOL < -20°C)	COPd	-	-					
Bivalent temperature	$T_{biv}$	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C					
Cycling interval capacity for heating	$P_{\text{cych}}$	-	kW	Cycling interval efficiency	COPcyc	-	-					
Degradation co-efficient(**)	Cdh	0.9	-	Heating water operating limit temperature	WTOL	52	°C					
Power consumption in modes other t	han active	e mode		Supplemantary heater	<u> </u>							
Off mode	P <sub>OFF</sub>	0.020	kW	Rated heat output (*)	Psup	3.9	kW					
Thermostat-off mode	P <sub>TO</sub>	0.030	kW	, , , ,	· .							
Standby mode	P <sub>SB</sub>	0.020	kW	Type of energy input	ı	Electricity	,					
-				Type of energy input		_icoti icity						
Crankcase heater mode	P <sub>CK</sub>	0.000	kW									
Other items												
Capacity control	٧	'ariable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4000	m³/h					
Sound power level, indoors/outdoors	$L_WA$	-	dB	For water-/brine-to-water heat pumps:Rated brine or water flow rate,	_	-	m³/h					
Annual energy consumption	$Q_{HE}$	5574	kWh	outdoor heat exchanger								
For heat pump combination heater	-											
Declaed load profile		-		Water heating energy efficiency	$\eta_{wh}$	-	%					
Daily electricity consumption	Q <sub>elec</sub>	_	kWh	Daily fuel consumption	Q <sub>fuel</sub>	_	kWh					
Contact details	AUX Co.			Road, Jiangshan Yinzhou District, Ningbo, 3		ejiang, Cl						
1, ,	t output of	f a suppl	ementa	heaters, the rated heat output Prated is equary heater Psup is equal to the supplemental degradation coefficient is Cdh =0.9		_						