

Technical parameters							
Model(s):	Outdoor unit: ACHP-H16/5R3HA-O Indoor unit: ACHP-H16/5R3HA-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:	no						
Declared climate condition	Warmer						
Declared temperature application	Low						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output(*)	Prated	13.1	kW	Seasonal space heating energy efficiency	$\eta_s$	240	%
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature $T_j$				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature $T_j$			
$T_j = -7^\circ\text{C}$	Pdh	-	kW	$T_j = -7^\circ\text{C}$	COPd	-	-
$T_j = +2^\circ\text{C}$	Pdh	12.97	kW	$T_j = +2^\circ\text{C}$	COPd	3.35	-
$T_j = +7^\circ\text{C}$	Pdh	8.41	kW	$T_j = +7^\circ\text{C}$	COPd	5.36	-
$T_j = +12^\circ\text{C}$	Pdh	3.87	kW	$T_j = +12^\circ\text{C}$	COPd	8.11	-
$T_j =$ bivalent temperature	Pdh	8.41	kW	$T_j =$ bivalent temperature	COPd	5.36	-
$T_j =$ operation limit temperature	Pdh	12.97	kW	$T_j =$ operation limit temperature	COPd	3.35	-
For air-to-water heat pumps: $T_j = -15^\circ\text{C}$ (if TOL < $-20^\circ\text{C}$ )	Pdh	-	kW	For air-to-water heat pumps: $T_j = -15^\circ\text{C}$ (if TOL < $-20^\circ\text{C}$ )	COPd	-	-
Bivalent temperature	$T_{biv}$	7	$^\circ\text{C}$	For air-to-water heat pumps: Operation limit temperature	TOL	2	$^\circ\text{C}$
Cycling interval capacity for heating	$P_{cych}$	-	kW	Cycling interval efficiency	COPcyc	-	-
Degradation co-efficient(**)	Cdh	0.9	-	Heating water operating limit temperature	WTOL	60	$^\circ\text{C}$
Power consumption in modes other than active mode				Supplementary heater			
Off mode	$P_{OFF}$	0.020	kW	Rated heat output (*)	$P_{sup}$	0.13	kW
Thermostat-off mode	$P_{TO}$	0.030	kW	Type of energy input	Electricity		
Standby mode	$P_{SB}$	0.020	kW				
Crankcase heater mode	$P_{CK}$	0.000	kW				
Other items							
Capacity control	Variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4650	$\text{m}^3/\text{h}$
Sound power level, indoors/outdoors	$L_{WA}$	-	dB	For water-/brine-to-water heat pumps:Rated brine or water flow rate, outdoor heat exchanger	-	-	$\text{m}^3/\text{h}$
Annual energy consumption	$Q_{HE}$	2884	kWh				
For heat pump combination heater							
Declaed load profile	-			Water heating energy efficiency	$\eta_{wh}$	-	%
Daily electricity consumption	$Q_{elec}$	-	kWh	Daily fuel consumption	$Q_{fuel}$	-	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( $T_j$ ).							
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9							

Technical parameters							
Model(s):	Outdoor unit: ACHP-H16/5R3HA-O Indoor unit: ACHP-H16/5R3HA-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:	no						
Declared climate condition	Warmer						
Declared temperature application	Medium						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output(*)	Prated	13.8	kW	Seasonal space heating energy efficiency	$\eta_s$	174	%
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature $T_j$				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature $T_j$			
$T_j = -7^\circ\text{C}$	Pdh	-	kW	$T_j = -7^\circ\text{C}$	COPd	-	-
$T_j = +2^\circ\text{C}$	Pdh	13.67	kW	$T_j = +2^\circ\text{C}$	COPd	2.25	-
$T_j = +7^\circ\text{C}$	Pdh	8.87	kW	$T_j = +7^\circ\text{C}$	COPd	3.84	-
$T_j = +12^\circ\text{C}$	Pdh	3.94	kW	$T_j = +12^\circ\text{C}$	COPd	5.88	-
$T_j =$ bivalent temperature	Pdh	8.87	kW	$T_j =$ bivalent temperature	COPd	3.84	-
$T_j =$ operation limit temperature	Pdh	13.67	kW	$T_j =$ operation limit temperature	COPd	2.25	-
For air-to-water heat pumps: $T_j = -15^\circ\text{C}$ (if TOL < $-20^\circ\text{C}$ )	Pdh	-	kW	For air-to-water heat pumps: $T_j = -15^\circ\text{C}$ (if TOL < $-20^\circ\text{C}$ )	COPd	-	-
Bivalent temperature	$T_{biv}$	7	$^\circ\text{C}$	For air-to-water heat pumps: Operation limit temperature	TOL	2	$^\circ\text{C}$
Cycling interval capacity for heating	$P_{cych}$	-	kW	Cycling interval efficiency	COPcyc	-	-
Degradation co-efficient(**)	Cdh	0.9	-	Heating water operating limit temperature	WTOL	60	$^\circ\text{C}$
Power consumption in modes other than active mode				Supplementary heater			
Off mode	$P_{OFF}$	0.020	kW	Rated heat output (*)	$P_{sup}$	0.13	kW
Thermostat-off mode	$P_{TO}$	0.030	kW	Type of energy input	Electricity		
Standby mode	$P_{SB}$	0.020	kW				
Crankcase heater mode	$P_{CK}$	0.000	kW				
Other items							
Capacity control	Variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4650	$\text{m}^3/\text{h}$
Sound power level, indoors/outdoors	$L_{WA}$	-	dB	For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	$\text{m}^3/\text{h}$
Annual energy consumption	$Q_{HE}$	4184	kWh				
For heat pump combination heater							
Declaed load profile	-			Water heating energy efficiency	$\eta_{wh}$	-	%
Daily electricity consumption	$Q_{elec}$	-	kWh	Daily fuel consumption	$Q_{fuel}$	-	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 $P_{designh}$ , and the rated heat output of a supplementary heater $P_{sup}$ is equal to the supplementary capacity for heating $sup(T_j)$ .							
(**) If Cdh is not determined by measurement then the default degradation coefficient is $Cdh = 0.9$							

Technical parameters							
Model(s):		Outdoor unit: ACHP-H16/5R3HA-O Indoor unit: ACHP-H16/5R3HA-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:		no					
Declared climate condition		Average					
Declared temperature application		Low					
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output(*)	Prated	16.1	kW	Seasonal space heating energy efficiency	$\eta_s$	190	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature $T_j$				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature $T_j$			
$T_j = -7^\circ\text{C}$	Pdh	14.24	kW	$T_j = -7^\circ\text{C}$	COPd	3.04	-
$T_j = +2^\circ\text{C}$	Pdh	8.67	kW	$T_j = +2^\circ\text{C}$	COPd	4.70	-
$T_j = +7^\circ\text{C}$	Pdh	5.57	kW	$T_j = +7^\circ\text{C}$	COPd	6.62	-
$T_j = +12^\circ\text{C}$	Pdh	2.48	kW	$T_j = +12^\circ\text{C}$	COPd	8.91	-
$T_j =$ bivalent temperature	Pdh	14.24	kW	$T_j =$ bivalent temperature	COPd	3.04	-
$T_j =$ operation limit temperature	Pdh	12.31	kW	$T_j =$ operation limit temperature	COPd	2.67	-
For air-to-water heat pumps: $T_j = -15^\circ\text{C}$ (if TOL < $-20^\circ\text{C}$ )	Pdh	-	kW	For air-to-water heat pumps: $T_j = -15^\circ\text{C}$ (if TOL < $-20^\circ\text{C}$ )	COPd	-	-
Bivalent temperature	$T_{biv}$	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	$P_{cych}$	-	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	$P_{OFF}$	0.020	kW	Rated heat output (*)	$P_{sup}$	3.79	kW
Thermostat-off mode	$P_{TO}$	0.030	kW	Type of energy input	Electricity		
Standby mode	$P_{SB}$	0.020	kW				
Crankcase heater mode	$P_{CK}$	0.000	kW				
Other items							
Capacity control	Variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4650	$\text{m}^3/\text{h}$
Sound power level, indoors/outdoors	$L_{WA}$	43/68	dB	For water-/brine-to-water heat pumps:Rated brine or water flow rate, outdoor heat exchanger	-	-	$\text{m}^3/\text{h}$
Annual energy consumption	$Q_{HE}$	6892	kWh				
For heat pump combination heater							
Declaed load profile	-			Water heating energy efficiency	$\eta_{wh}$	-	%
Daily electricity consumption	$Q_{elec}$	-	kWh	Daily fuel consumption	$Q_{fuel}$	-	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( $T_j$ ). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9							

Technical parameters							
Model(s):		Outdoor unit: ACHP-H16/5R3HA-O Indoor unit: ACHP-H16/5R3HA-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:		no					
Declared climate condition		Average					
Declared temperature application		Medium					
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output(*)	Prated	14	kW	Seasonal space heating energy efficiency	$\eta_s$	135	%
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature $T_j$				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature $T_j$			
$T_j = -7^\circ\text{C}$	Pdh	12.38	kW	$T_j = -7^\circ\text{C}$	COPd	2.06	-
$T_j = +2^\circ\text{C}$	Pdh	7.54	kW	$T_j = +2^\circ\text{C}$	COPd	3.50	-
$T_j = +7^\circ\text{C}$	Pdh	4.85	kW	$T_j = +7^\circ\text{C}$	COPd	4.33	-
$T_j = +12^\circ\text{C}$	Pdh	2.15	kW	$T_j = +12^\circ\text{C}$	COPd	6.97	-
$T_j =$ bivalent temperature	Pdh	12.38	kW	$T_j =$ bivalent temperature	COPd	2.06	-
$T_j =$ operation limit temperature	Pdh	10.50	kW	$T_j =$ operation limit temperature	COPd	1.80	-
For air-to-water heat pumps: $T_j = -15^\circ\text{C}$ (if TOL < $-20^\circ\text{C}$ )	Pdh	-	kW	For air-to-water heat pumps: $T_j = -15^\circ\text{C}$ (if TOL < $-20^\circ\text{C}$ )	COPd	-	-
Bivalent temperature	$T_{biv}$	-7	$^\circ\text{C}$	For air-to-water heat pumps: Operation limit temperature	TOL	-10	$^\circ\text{C}$
Cycling interval capacity for heating	$P_{cyc}$	-	kW	Cycling interval efficiency	COPcyc	-	-
Degradation co-efficient(**)	Cdh	0.9	-	Heating water operating limit temperature	WTOL	60	$^\circ\text{C}$
Power consumption in modes other than active mode				Supplementary heater			
Off mode	$P_{OFF}$	0.020	kW	Rated heat output (*)	$P_{sup}$	3.5	kW
Thermostat-off mode	$P_{TO}$	0.030	kW	Type of energy input	Electricity		
Standby mode	$P_{SB}$	0.020	kW				
Crankcase heater mode	$P_{CK}$	0.000	kW				
Other items							
Capacity control	Variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4650	$\text{m}^3/\text{h}$
Sound power level, indoors/outdoors	$L_{WA}$	43/68	dB	For water-/brine-to-water heat pumps:Rated brine or water flow rate, outdoor heat exchanger	-	-	$\text{m}^3/\text{h}$
Annual energy consumption	$Q_{HE}$	8380	kWh				
For heat pump combination heater							
Declaed load profile	-			Water heating energy efficiency	$\eta_{wh}$	-	%
Daily electricity consumption	$Q_{elec}$	-	kWh	Daily fuel consumption	$Q_{fuel}$	-	kWh
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(*) 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):	Outdoor unit: ACHP-H16/5R3HA-O Indoor unit: ACHP-H16/5R3HA-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:	no						
Declared climate condition	Colder						
Declared temperature application	Low						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output(*)	Prated	13.7	kW	Seasonal space heating energy efficiency	$\eta_s$	157	%
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature $T_j$				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature $T_j$			
$T_j = -7^\circ\text{C}$	Pdh	8.31	kW	$T_j = -7^\circ\text{C}$	COPd	3.37	-
$T_j = +2^\circ\text{C}$	Pdh	5.26	kW	$T_j = +2^\circ\text{C}$	COPd	4.86	-
$T_j = +7^\circ\text{C}$	Pdh	3.62	kW	$T_j = +7^\circ\text{C}$	COPd	6.49	-
$T_j = +12^\circ\text{C}$	Pdh	3.34	kW	$T_j = +12^\circ\text{C}$	COPd	7.40	-
$T_j =$ bivalent temperature	Pdh	11.22	kW	$T_j =$ bivalent temperature	COPd	2.43	-
$T_j =$ operation limit temperature	Pdh	8.88	kW	$T_j =$ operation limit temperature	COPd	1.97	-
For air-to-water heat pumps: $T_j = -15^\circ\text{C}$ (if TOL < $-20^\circ\text{C}$ )	Pdh	-	kW	For air-to-water heat pumps: $T_j = -15^\circ\text{C}$ (if TOL < $-20^\circ\text{C}$ )	COPd	-	-
Bivalent temperature	$T_{biv}$	-15	$^\circ\text{C}$	For air-to-water heat pumps: Operation limit temperature	TOL	-22	$^\circ\text{C}$
Cycling interval capacity for heating	$P_{cych}$	-	kW	Cycling interval efficiency	COPcyc	-	-
Degradation co-efficient(**)	Cdh	0.9	-	Heating water operating limit temperature	WTOL	52	$^\circ\text{C}$
Power consumption in modes other than active mode				Supplementary heater			
Off mode	$P_{OFF}$	0.020	kW	Rated heat output (*)	$P_{sup}$	4.82	kW
Thermostat-off mode	$P_{TO}$	0.030	kW	Type of energy input	Electricity		
Standby mode	$P_{SB}$	0.020	kW				
Crankcase heater mode	$P_{CK}$	0.000	kW				
Other items							
Capacity control	Variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4650	$\text{m}^3/\text{h}$
Sound power level, indoors/outdoors	$L_{WA}$	-	dB	For water-/brine-to-water heat pumps:Rated brine or water flow rate, outdoor heat exchanger	-	-	$\text{m}^3/\text{h}$
Annual energy consumption	$Q_{HE}$	8438	kWh				
For heat pump combination heater							
Declaed load profile	-			Water heating energy efficiency	$\eta_{wh}$	-	%
Daily electricity consumption	$Q_{elec}$	-	kWh	Daily fuel consumption	$Q_{fuel}$	-	kWh
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(*) 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( $T_j$ ).							
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh =0.9							

Technical parameters							
Model(s):		Outdoor unit: ACHP-H16/5R3HA-O Indoor unit: ACHP-H16/5R3HA-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:		no					
Declared climate condition		Colder					
Declared temperature application		Medium					
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output(*)	Prated	11.8	kW	Seasonal space heating energy efficiency	$\eta_s$	121	%
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature $T_j$				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature $T_j$			
$T_j = -7^\circ\text{C}$	Pdh	7.64	kW	$T_j = -7^\circ\text{C}$	COPd	2.65	-
$T_j = +2^\circ\text{C}$	Pdh	4.42	kW	$T_j = +2^\circ\text{C}$	COPd	3.79	-
$T_j = +7^\circ\text{C}$	Pdh	2.97	kW	$T_j = +7^\circ\text{C}$	COPd	4.81	-
$T_j = +12^\circ\text{C}$	Pdh	3.43	kW	$T_j = +12^\circ\text{C}$	COPd	6.29	-
$T_j =$ bivalent temperature	Pdh	9.61	kW	$T_j =$ bivalent temperature	COPd	1.86	-
$T_j =$ operation limit temperature	Pdh	5.21	kW	$T_j =$ operation limit temperature	COPd	1.23	-
For air-to-water heat pumps: $T_j = -15^\circ\text{C}$ (if TOL < $-20^\circ\text{C}$ )	Pdh	-	kW	For air-to-water heat pumps: $T_j = -15^\circ\text{C}$ (if TOL < $-20^\circ\text{C}$ )	COPd	-	-
Bivalent temperature	$T_{biv}$	-15	$^\circ\text{C}$	For air-to-water heat pumps: Operation limit temperature	TOL	-22	$^\circ\text{C}$
Cycling interval capacity for heating	$P_{cych}$	-	kW	Cycling interval efficiency	COPcyc	-	-
Degradation co-efficient(**)	Cdh	0.9	-	Heating water operating limit temperature	WTOL	52	$^\circ\text{C}$
Power consumption in modes other than active mode				Supplementary heater			
Off mode	$P_{OFF}$	0.020	kW	Rated heat output (*)	$P_{sup}$	6.59	kW
Thermostat-off mode	$P_{TO}$	0.030	kW	Type of energy input	Electricity		
Standby mode	$P_{SB}$	0.020	kW				
Crankcase heater mode	$P_{CK}$	0.000	kW				
Other items							
Capacity control	Variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4000	$\text{m}^3/\text{h}$
Sound power level, indoors/outdoors	$L_{WA}$	-	dB	For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	$\text{m}^3/\text{h}$
Annual energy consumption	$Q_{HE}$	9362	kWh				
For heat pump combination heater							
Declaed load profile	-			Water heating energy efficiency	$\eta_{wh}$	-	%
Daily electricity consumption	$Q_{elec}$	-	kWh	Daily fuel consumption	$Q_{fuel}$	-	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( $T_j$ ).							
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9							