

## AIR TO WATER HEAT PUMP PRODUCT FICHE

[Original instructions]
KEEP THIS MANUAL FOR FUTURE REFERENCE

Product fiche according to Commission Delegated Regulation (EU) 811/2013

Model			AEYC- 0643XU-CH		AEYC- 1043XU-CH		AEYC-		AEYC- 1643XU-CH	
Temperature application			55	35	55	35	55	35	55	35
Seasonal space heating energy efficiency class			A++	A+++	A++	A+++	A++	A+++	A++	A+++
Rated heat output		kW	5	4	7	8	9	10	12	13
Seasonal space heating energy efficiency		%	125	185	125	190	127	184	126	176
Annual energy consumption		kWh	3011	1928	4598	3342	5901	4332	7496	5946
Specific precautions in assembled, installed or maintained			Refer to the installation and operating manuals.							
Rated heat output	Colder climate	kW	-	_	-	-	-	_	-	-
	Warmer climate	kW	4	5	6	7	7	9	11	13
Annual energy consumption	Colder climate	kWh	-	-	-	-	-	-	-	_
	Warmer climate	kWh	1436	1016	2128	1551	2343	1767	3360	2743
Seasonal space heating energy efficiency	Colder climate	%	_	_	-	-	-	_	-	-
	Warmer climate	%	140	233	154	243	157	266	165	251
Sound power level	Outdoor unit	dB	62	60	66	64	60	62	62	62

**Specifications** 

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Model			AEYC- 0643XU-CH	AEYC- 1043XU-CH	AEYC- 1242XU-CH	AEYC- 1643XU-CH			
Туре			Heating and Cooling Monobloc Type						
Power source	1∅ ~230 V 50 Hz								
Max. current			11.2	17.5	23.0	25.3			
Max. pressure MP			4.2						
Refrigerant (R32)			0.80	0.80 1.55		2.80			
Dimension (H × W × D) & weight	Outdoor unit	mm	$675 \times 825 \times 300$	$882 \times 850 \times 330$	1418 × 1000 × 330				
(NET)	Outdoor unit	kg	50	69	98	116			
Outdoor temperature range	Heating	°C		-20 to 43					
	Cooling	°C							

## Acoustic Noise Information:

The maximum sound power level is less than 70 dB (A) for outdoor unit. According to IEC 704-1 and ISO 3744.

- If the air to water heat pump is operated under higher temperature conditions than those listed, the built-in protection circuit may operate to prevent internal circuit damage. Also, during Cooling modes, if the unit is used under conditions of lower temperatures than those listed above, the heatexchanger may freeze, leading to water leakage and other damage.
- Do not use this unit for any purposes other than the Heating and Cooling.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- The appliance is accessible to the general public.

## Refrigerant instructions

 $\Lambda$  Caution

Do not vent R32 into the atmosphere:

R32 is a fluorinated greenhouse gas, covered by the Kyoto Protocol, with a Global Warming Potential (GWP)=675 This unit is a hermetically sealed system.

Product information according to Commission Delegated Regulation (EU) 813/2013 Product information is based on the average climate condition and medium-temperature.

Model				AEYC- 0643XU-CH		AEYC- 1043XU-CH		AEYC- 1242XU-CH		AEYC- 1643XU-CH	
Air-to-water heat pump			YES		YES		YES		YES		
Water-to-water heat pump			NO		NO		NO		NO		
Brine-to-water heat pump			NO		NO		NO		NO		
Low-temperature heat pump			NO		NO		NO		NO		
Equipped with a supplementary heater			NO		NO		NO		NO		
Heat pump combination heater				0	NO		NO		NO		
Temperature application °C			55	35	55	35	55	35	55	35	
Rated heat output (*)	Prated	kW	5	4	7	8	9	10	12	13	
Seasonal space heating energy efficiency	ηs	%	125	185	125	190	127	184	126	176	
Declared capacity for heating for part load at o				100	120		127		120	170	
Ti = -7° C	Pdh	kW	4.10	3.86	6.29	6.88	8.16	8.61	10.26	11.37	
Ti = +2° C	Pdh	kW	2.50	2.46	3.87	4.29	5.21	5.33	5.86	6.88	
Ti = +7° C	Pdh	kW	1.57	1.57	2.48	2.62	3.35	3.46	4.15	4.38	
Tj = +12° C	Pdh	kW	1.23	1.54	2.88	2.99	3.28	3.28	4.60	5.40	
Tj = bivalent temperature	Pdh	kW	4.10	3.86	6.29	6.88	8.16	8.61	10.26	11.37	
Tj = operation limit temperature	Pdh	kW	3.51	3.54	5.65	6.87	6.79	8.65	9.03	12.00	
T <sub>j</sub> = $-15^{\circ}$ C (if TOL $< -20^{\circ}$ C)	Pdh	kW	-	-	-	-	-	-	-	-	
Bivalent temperature	Tbiv	°C	-7	-7	-7	-7	-7	-7	-7	-7	
Cycling interval capacity for heating	Pcych	kW		,	,		plicable		,	,	
Degradation co-efficient (**)	Cdh	— NVV	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	
Declared coefficient of performance or primary								0.5	0.0	0.5	
$T_i = -7^\circ$ C	COPd	— —	1.79	2.60	1.83	2.72	1.77	2.64	1.92	2.77	
Tj = +2° C	COPd	_	3.12	4.59	3.03	4.65	3.00	4.17	3.00	4.08	
Ti = +7° C	COPd		4.53	7.05	4.69	7.20	5.21	8.05	4.65	6.85	
Tj = +12° C	COPd	_		9.38	7.53	9.37	8.03	9.84	7.16	9.19	
Tj = bivalent temperature	COPd		6.53 1.79	2.60	1.83	2.72	1.77	2.64	1.92	2.77	
		_									
Tj = operation limit temperature COPd Tj = -15° C (if TOL < -20° C)	COPd	_	1.51	2.39	1.59	2.54	1.57	2.57	1.69	2.54	
-	COPd TOL	°C	-10	-10	-10	-10	-10	-10	-10	-10	
Operation limit temperature		_	-10	-10	-10				-10	-10	
Cycling interval efficiency	COPcyc	°C	00	00	00		plicable				
Heating water operating limit temperature	WTOL	C	60	60	60	60	60	60	60	60	
Power consumption in modes other than active	T	1.14/	0.007	0.007	0.007	0.007	0.000	0.000	0.000	0.000	
Off mode	POFF	kW	0.007	0.007	0.007			0.006			
Thermostat-off mode	PTO	kW	0.109		0.094		0.136		0.160		
Standby mode	PSB	kW	0.012	_	0.012	0.012	0.012		0.012		
Crankcase heater mode	PCK	kW	0	0	0	0	0	0	0	0	
Supplementary heater		1 111	4.0	0.0	4-	0.0					
Rated heat output (*)	Psup	kW	1.2	0.8	1.5	0.9	2.5	1.1	2.6	0.9	
Type of energy input			_	_	_	_	_	_	_	_	
Other items											
Capacity control			Remote Controller								
Sound power level	LWA	dB	62	60	66	64	60	62	62	62	
Emissions of nitrogen oxides	NOx	mg/kWh					plicable				
Rated air flow rate	_	m³/h	2082	2082	2928	2928	5288	5288	4464	4464	
Contact details			CHOFU SEISAKUSHO CO.,LTD 2-1 CHOFU OHGIMACHI,SHIMONOSEKI CITY, YAMAGUCHI PREF.,JAPAN								

<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.

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