CHOFU

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-0649ZU-CH		AEYC-0849ZU-CH		AEYC-1249ZU-CH		AEYC-0449ZU-CH1		AEYC-0649ZU-CH1		AEYC-1049ZU-CH1	
Temperature application		℃	55	35	55	35	55	35	55	35	55	35	55	35
Seasonal space heating energy efficiency class			A++	A+++	A++	A+++	A++	A+++	A++	A+++	A++	A+++	A++	A+++
Rated heat output		kW	5	5	7	7	11	11	5	5	7	7	11	11
Seasonal space heating energy efficiency		%	130	179	135	178	142	187	129	176	134	175	141	184
Annual energy consumption		kWh	2936	2419	3947	3178	6011	4871	3003	2400	4034	3153	6146	4835
Specific precautions in assembled, installed or maintained			Refer to the installation and operating manuals.											
Rated heat output	Colder climate	kW	–	–	–	–	–	–	–	–	–	–	–	–
	Warmer climate	kW	5	5	7	7	11	11	5	5	7	7	11	11
Annual energy consumption	Colder climate	kWh	–	–	–	–	–	–	–	–	–	–	–	–
	Warmer climate	kWh	1557	1113	2020	1467	3041	2247	1586	1077	2057	1411	3096	2163
Seasonal space heating energy efficiency	Colder climate	%	–	–	–	–	–	–	–	–	–	–	–	–
	Warmer climate	%	166	248	183	245	185	254	166	252	183	250	185	259
Sound power level(A7W55)	Outdoor unit	dB	56		57		59		54		54		54	

Specifications

Model			AEYC-0649ZU-CH	AEYC-0849ZU-CH	AEYC-1249ZU-CH	AEYC-0449ZU-CH1	AEYC-0649ZU-CH1	AEYC-1049ZU-CH1
Type			Heating and Cooling Monobloc Type					
Power source			1Ø ～230 V 50 Hz					
Max. current		A	12.0	16.6	24.0	12.0	16.6	24.0
Max. pressure		MPa	3.5					
Refrigerant (R32)		kg	0.50	0.85	1.15	0.50	0.85	1.15
Dimension (H × W × D) & weight (NET)	Outdoor unit	mm	886×1,000×330		1,418×1,000×330	886×1,000×330		1,418×1,000×330
		kg	66	82	117	66	82	117
Outdoor temperature range	Heating	℃	-25 to 45					
	Cooling	℃	15 to 45					

- Acoustic Noise Information:
  According to EN 12102.
- 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.
- Only start up the unit when the outside temperature is −20℃ or higher.

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

Model			AEYC-0649ZU-CH		AEYC-0849ZU-CH		AEYC-1249ZU-CH		AEYC-0449ZU-CH1		AEYC-0649ZU-CH1		AEYC-1049ZU-CH1	
Air-to-water heat pump			YES		YES		YES		YES		YES		YES	
Water-to-water heat pump			NO		NO		NO		NO		NO		NO	
Brine-to-water heat pump			NO		NO		NO		NO		NO		NO	
Low-temperature heat pump			NO		NO		NO		NO		NO		NO	
Equipped with a supplementary heater			NO		NO		NO		NO		NO		NO	
Heat pump combination heater			NO		NO		NO		NO		NO		NO	
Temperature application		℃	55	35	55	35	55	35	55	35	55	35	55	35
Rated heat output (*)	P_{rated}	kW	5	5	7	7	11	11	5	5	7	7	11	11
Seasonal space heating energy efficiency	η s	%	130	179	135	178	142	187	129	176	134	175	141	184
Declared capacity for heating for part load at outdoor temperature Tj														
Tj = −7° C	Pdh	kW	4.19	4.71	5.83	6.16	9.34	9.90	4.26	4.60	5.92	6.02	9.49	9.68
Tj = +2° C	Pdh	kW	2.60	3.03	3.48	3.86	5.73	5.92	2.62	2.86	3.51	3.65	5.78	5.59
Tj = +7° C	Pdh	kW	1.67	1.87	2.36	2.52	3.58	3.80	1.57	1.78	2.22	2.40	3.38	3.61
Tj = +12° C	Pdh	kW	1.49	1.66	2.25	2.41	3.03	3.34	1.47	1.61	2.23	2.34	3.00	3.24
Tj = bivalent temperature	Pdh	kW	4.19	4.71	5.83	6.16	9.34	9.90	4.26	4.60	5.92	6.02	9.49	9.68
Tj = operation limit temperature	Pdh	kW	3.79	4.26	5.60	5.93	8.48	9.04	3.83	4.13	5.66	5.75	8.57	8.76
Tj = −15° C (if TOL < −20° C)	Pdh	kW	–	–	–	–	–	–	–	–	–	–	–	–
Bivalent temperature	Tbiv	℃	−7	−7	−7	−7	−7	−7	−7	−7	−7	−7	−7	−7
Cycling interval capacity for heating	Pcych	kW	Not applicable											
Degradation co-efficient (**)	Cdh	—	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Declared coefficient of performance or primary energy ratio for part load at outdoor temperature Tj														
Tj = −7° C	COPd	—	1.94	2.70	2.01	2.72	2.23	3.00	1.99	2.66	2.05	2.68	2.28	2.96
Tj = +2° C	COPd	—	3.24	4.43	3.29	4.43	3.43	4.37	3.25	4.33	3.30	4.33	3.45	4.27
Tj = +7° C	COPd	—	4.55	6.46	4.87	6.11	5.04	6.92	4.29	6.38	4.59	6.03	4.74	6.83
Tj = +12° C	COPd	—	6.48	7.52	6.98	8.13	6.93	9.28	6.46	7.76	6.96	8.39	6.91	9.59
Tj = bivalent temperature	COPd	—	1.94	2.70	2.01	2.72	2.23	3.00	1.99	2.66	2.05	2.68	2.28	2.96
Tj = operation limit temperature COPd	COPd	—	1.74	2.47	1.78	2.55	1.98	2.71	1.77	2.42	1.82	2.51	2.02	2.67
Tj = −15° C (if TOL < −20° C)	COPd	—	–	–	–	–	–	–	–	–	–	–	–	–
Operation limit temperature	TOL	℃	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10
Cycling interval efficiency	COPcyc	—	Not applicable											
Heating water operating limit temperature	WTOL	℃	75	75	75	75	75	75	75	75	75	75	75	75
Power consumption in modes other than active mode														
Off mode	POFF	kW	0.005	0.005	0.011	0.010	0.006	0.005	0.005	0.005	0.011	0.010	0.006	0.005
Thermostat-off mode	PTO	kW	0.021	0.027	0.012	0.012	0.033	0.041	0.025	0.021	0.012	0.012	0.033	0.041
Standby mode	PSB	kW	0.005	0.005	0.011	0.010	0.006	0.005	0.025	0.005	0.011	0.010	0.006	0.005
Crankcase heater mode	PCK	kW	0	0	0	0	0	0	0	0	0	0	0	0
Supplementary heater														
Rated heat output (*)	Psup	kW	0.9	1.1	1.0	1.0	2.1	2.2	1.0	1.1	1.0	1.1	2.2	2.2
Type of energy input			–	–	–	–	–	–	–	–	–	–	–	–
Other items														
Capacity control			Remote Controller											
Sound power level (***)	LWA	dB	56		57		59		54		54		54	
Emissions of nitrogen oxides	NOx	mg/kWh	Not applicable											
Rated air flow rate	—	m^3/h	2119	2561	2700	2119	4492	3614	2119	2119	1865	2119	2489	3614
Contact details			CHOFU SEISAKUSHO CO.,LTD 2-1 CHOFU OHGIMACHI,SHIMONOSEKI CITY, YAMAGUCHI PREF.,JAPAN											

(*) 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.
(***) Test condition : A7W55

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