

1.Line-up

1-1. Outdoor unit

Capacity		5.0 kW	8.0 kW	12.0 kW	16.0 kW
Image					
Model	1 phase	AE050CXYBEK/EU	AE080CXYBEK/EU	AE120CXYBEK/EU	AE160CXYBEK/EU
	3 phase	-	AE080CXYBGK/EU	AE120CXYBGK/EU	AE160CXYBGK/EU

2. Outdoor Units

2-1. Specifications

Model Name					-	AE050CXYBEK/EU	AE080CXYBEK/EU	AE080CXYBGK/EU
Power Supply					Φ, #, V, Hz	1, 2, 220~240, 50	1, 2, 220~240, 50	3, 4, 380~415, 50
System	Mode				-	Heat Pump (A2W)	Heat Pump (A2W)	Heat Pump (A2W)
	Performance	Capacity	Heating	A2W Condition #1. (A7/W35) ^{1)*}	W Btu/h	5,000 17,100	8,000 27,300	8,000 27,300
			A2W condition #2			5,000	8,000	
			A2W condition #3	W	5,000	8,000	8,000	
			A2/W35 ^{4)*}		5,000	8,000	8,000	
			A-7/W35 ^{4)*}		5,000	8,000	8,000	
		Cooling	A2W Condition #1. (A35/W18) ^{1)*}	W Btu/h	5,000 17,100	8,000 27,300	8,000 27,300	
			A2W condition #2	W	3,900	5,700	5,700	
Power	Power Input	Heating	A2W Condition #1. (A7/W35) ^{1)*}	W	980	1,630	1,630	
			A2W condition #2		1,320	2,160	2,160	
			A2W condition #3		1,610	2,670	2,670	
			A2/W35 ^{4)*}		1,160	1,900	1,900	
			A-7/W35 ^{4)*}	1,670	2,670	2,670		
		Cooling	A2W Condition #1. (A35/W18) ^{1)*}	W	1,280	2,050	2,050	
			A2W condition #2		1,279	1,900	1,900	
		Current Input	Heating	A2W Condition #1.	A	4.63	7.70	2.56
	Cooling				6.05	9.69	3.22	
	Cooling		A2W condition #2	A	6.24	10.21	3.39	
			Cooling		7.61	12.62	4.19	
	Current	MCA		A	16.1	26.0	16.1	
		MFA		A	17.6	28.6	17.7	
	Efficiency	COP (Nominal Heating) A2W condition #1					5.10	4.91
EER (Nominal Cooling) A2W condition #1					3.91	3.90	3.90	
EER (Nominal Cooling) A2W condition #2					3.05	3.00	3.00	
COP				A2W condition #2	W/W	3.8	3.7	3.7
				A2W condition #3		3.1	3.0	3.0
				A2/W35 ^{4)*}		4.3	4.2	4.2
				A-7/W35 ^{4)*}		3.0	3.0	3.0
PdesignH (LWT 35°C)					5,500	8,000	8,000	
PdesignH (LWT 55°C)					5,500	8,000	8,000	
SCOP (35°C)					5.10	4.85	4.85	
SCOP (55°C)					3.60	3.55	3.55	
SCOP Class (35°C)					A+++	A+++	A+++	
SCOP Class (55°C)					A++	A++	A++	
SEER					4.2	4.3	4.3	
Water Connections	Water Flow Rate (Nominal)	Heating	LPM	14.4	23.1	23.1		
		Cooling	LPM	14.4	21.6	21.6		
	Water Flow Rate	Min	LPM	7	7	7		
		Max	LPM	48	48	48		
	Water Pressure (Max)		bar	3	3	3		
	Water Pipe	threaded	Inlet	Φ, mm	28	28	28	
		male	Outlet	Φ, mm	28	28	28	
	Leaving Water Temperature	Min.~Max	Heating	°C	15 ~ 75	15 ~ 75	15 ~ 75	
			Cooling	°C	5 ~ 25	5 ~ 25	5 ~ 25	
		Max.	DHW	°C	70	70	70	
Refrigerant	Type		-	R290	R290	R290		
	Factory Charging		kg	630	870	870		
	Control Method		-	tCO ₂ e	0.00189	0.00255	0.00255	
Outdoor Unit	Compressor	Type		-	Rotary	Rotary	Rotary	
		Model Name		-	UF8HC5180FEU	UF5HC5260FEX	UF5HC5260FEX	
		Oil	Type	-	Mineral	Mineral	Mineral	
			Initial Charge	cc	590	850	850	
		Quantity		EA	1	1	1	
		Output		W	1551	2236	2236	
	Heat exchanger	Starting method		-	Inverter driven	Inverter driven	Inverter driven	
		Length		mm	986/957/928	986/957/928	986/957/928	
		Rows	Quantity	EA	2	3	3	
		Fin pitch		mm	1.5	1.5	1.5	
		Passes	Quantity	EA	6-6	9-9	9-9	
		Face area		m ²	0.79	0.79	0.79	
		Stages	Quantity	EA	38	38	38	
		Tube type		Φ	7	7	7	
		Fin	Type	-	Corrugate	Corrugate	Corrugate	
			Treatment	-	Anti Salt	Anti Salt	Anti Salt	
	Water Heat Exchanger	Type		-	Braszed Plate Exchanger	Braszed Plate Exchanger	Braszed Plate Exchanger	
		Quantity		EA	1	1	1	
		Internal water volume		L	0.588	0.588	1.008	

2. Outdoor Units

2-1. Specifications

Model Name		-	AE050CXYBEK/EU	AE080CXYBEK/EU	AE080CXYBGK/EU			
Outdoor Unit	Fan	Type	-	Propeller Fan	Propeller Fan	Propeller Fan		
		Discharge direction		-	Horizontal	Horizontal	Horizontal	
		Air Flow Rate		Heating	m ³ /min	52	65	65
				Cooling	m ³ /min	55	69	69
		Quantity		EA	1	1	1	
	Fan motor	Quantity		EA	1	1	1	
		Model		-	FMDC531SSJ	FMDC531SSJ	FMDC531SSJ	
		Output		W	125	125	125	
		Drive		-	Direct drive	Direct drive	Direct drive	
		Speed		Heating	rpm	550	720	720
	Cooling			rpm	580	760	760	
	Base Heater		W	150	150	150		
	Water Pump	Model Name		-	UPM4K25-75/130	UPM4K25-75/130	UPM4K25-75/130	
		Motor Input	Max	W	60	60	60	
		Quantity		EA	1	1	1	
	Backup Heater	Power		kW	2/4/6 (Option)	2/4/6 (Option)	2/4/6 (Option)	
	Safety device	Pressure relief valve		bar	2.9	2.9	2.9	
		Flow Sensor		LPM	O(5~60)	O(5~60)	O(5~60)	
	Expansion vessel	Internal water volume		liter	10	10	10	
		Working pressure		MPa	0.3	0.3	0.3	
	Air vent		-	Gas seperator	Gas seperator	Gas seperator		
	Water Pressure Sensor		-	○	○	○		
	Strainer		-	○	○	○		
	Sound Level	Sound Pressure Level	Heating	dB(A)	41	45	45	
			Cooling	dB(A)	41	45	45	
			Night Mode(3m)	dB(A)	35	35	35	
		Sound Power Level	Heating	dB(A)	55	59	59	
Cooling			dB(A)	55	59	59		
Connections	Water pipe		inlet	-	BSPP male 1"	BSPP male 1"	BSPP male 1"	
			outlet	-	BSPP male 1"	BSPP male 1"	BSPP male 1"	
Casing	Color		-	Shadow Gray	Shadow Gray	Shadow Gray		
	Material		-	GI-SGCC	GI-SGCC	GI-SGCC		
Packing	Material		-	EPS/BOX	EPS/BOX	EPS/BOX		
	Weight		kg	13	13	13		
External Dimension	Net Weight		kg	113	125	125		
	Shipping Weight		kg	131	143	143		
	Net Dimensions (WxHxD)		mm	1,270 × 850 × 500	1,270 × 850 × 500	1,270 × 850 × 500		
	Shipping Dimensions (WxHxD)		mm	1,330 × 1,018 × 630	1,330 × 1,018 × 630	1,330 × 1,018 × 630		
Operating Temp. Range	Heating		°C	-25 ~ 35	-25 ~ 35	-25 ~ 43		
	Cooling		°C	10 ~ 46	10 ~ 46	10 ~ 46		
	D.Hot Water		°C	-25 ~ 43	-25 ~ 43	-25 ~ 43		
Additional Accessories	Wi-Fi Kit		-	○	○	○		
	Shutoff Valve 25A		-	1EA (IN) inc. Filter	1EA (IN) inc. Filter	1EA (IN) inc. Filter		
	Temperature Sensor for DHW Tank		-	○	○	○		
	Connector Wire -PV Control/Peak power control		-	○	○	○		
	Water Pressure Sensor		-	-	-	-		
Gas seperator		-	-	-	-			
Function	SD Card Converter		-	○	○	○		
	PV / SG Ready		-	○	○	○		
	muti zone (2 zone)		-	○	○	○		
	Comm Kit (OEM Modbus)		-	-	-	-		
	Control Kt (Controller of water part)		-	○	○	○		
	Remote Controller		-	Optional Part	Optional Part	Optional Part		
	Wi-Fi Enable		-	○ (Wi-Fi Module - Accessory)	○ (Wi-Fi Module - Accessory)	○ (Wi-Fi Module - Accessory)		

NOTE

- Specifications may be subject to change without prior notice.

1) A2W Condition #1 : (Heating) Water In/Out 30°C/35°C, Outdoor Air 7°C[DB]/6°C[WB]; (Cooling) Water In/Out 23°C/18°C, Outdoor Air 35°C[DB].

2) A2W Condition #2 : (Heating) Water In/Out 40°C/45°C, Outdoor Air 7°C[DB]/6°C[WB]; (Cooling) Water In/Out 12°C/7°C, Outdoor Air 35°C[DB].

3) A2W Condition #3 : (Heating) Water In/Out 47°C/55°C, Outdoor Air 7°C[DB]/6°C[WB].

4) A2W Condition : (A2W35) Water In/Out -/35°C, Outdoor Air 2°C[DB]/1°C[WB]; (A-7/W35) Water In/Out -/35°C, Outdoor Air -7°C[DB]/- (× Peak Capacity)

5) Select wire size based on the value of MCA

6) Soundpressure level is obtained in an anechoic room.

- Sound pressure level is a relative value, depending on the distance and acoustic environment.

- Sound pressure level may differ depending on operation condition.

- dBA = A-weighted sound pressure level

- Reference acoustic pressure 0 dB = 20uPa

7) Sound power level is an absolute value that a sound source generates.

- dBA = A-weighted Sound power level

- Reference power : 1pW

- Measured according to ISO 3741

8) These products contain R290 (GWP=3) which is fluorinated greenhouse gas.

9) The system is operated in (-25°C ≤ Outdoor temp. < -20°C) condition, but no guarantee of capacity.

10) The system is operated by only Booster Heater in special condition (35 °C < Outdoor temp. ≤ 43°C).