

1.Line-up

1-1. Outdoor Units

Capacity		8.0 kW	12.0 kW	14.0 kW
Image				
Model	1 phase	AE080BXYDEG/EU	AE120BXYDEG/EU	AE140BXYDEG/EU
	3 phase	AE080BXYDGG/EU	AE120BXYDGG/EU	AE140BXYDGG/EU

1-2. Tank integrated hydro unit

Type \ Capacity	200 L	260 L
Model	AE200RNWMEG/EU	AE260RNWMGG/EU
Hydro unit		

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit			AE200RNWMEG/EU	AE200RNWMEG/EU	AE200RNWMEG/EU			
		Outdoor Unit			AE080BXYDEG/EU	AE120BXYDEG/EU	AE140BXYDEG/EU			
Power Supply				Φ, #, V, Hz	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50			
System	Mode				-	Heat Pump (A2W)	Heat Pump (A2W)	Heat Pump (A2W)		
	Performance	Capacity	Heating	A2W Condition #1. (A7/W30-35)	W	8,000	12,000	14,000		
				A2W condition #2. (A7/W40-45)	Btu/h	27,300	40,900	47,800		
				A2W condition #3. (A7/W47-55)	W	8,000	12,000	14,000		
				A2/W35 4)*		8,000	12,000	14,000		
				A-7/W35 4)*		8,000	12,000	14,000		
			Cooling	A2W Condition #1. (A35/W23-18)	W	8,000	12,000	14,000		
				A2W condition #2. (A35/W12-7)	Btu/h	27,300	40,900	47,800		
					W	7,500	11,500	12,500		
	Power	Power Input	Heating	A2W Condition #1. (A7/W30-35)	W	1,600	2,350	2,770		
						A2W condition #2. (A7/W40-45)	2,051	3,000	3,544	
						A2W condition #3. (A7/W47-55)	2,500	3,529	4,179	
						A2/W35 4)*	1,818	2,791	3,333	
						A-7/W35 4)*	2,462	3,810	4,516	
			Cooling	A2W Condition #1. (A35/W23-18)	W	1,700	2,640	3,140		
				A2W condition #2. (A35/W12-7)		2,273	3,594	3,968		
			Current Input	Heating	A2W Condition #1.	A	7.56	11.12	13.10	
				Cooling			8.04	12.46	14.87	
				Heating			A2W condition #2	A	9.69	14.18
		Cooling		10.74					16.98	18.75
		Current	MCA		A	26.0	32.0	32.0		
			MFA			28.6	35.2	35.2		
	Efficiency	COP (Nominal Heating) A2W condition #1. (A7/W30-35)				5.00	5.11	5.05		
		EER (Nominal Cooling) A2W condition #1. (A35/W23-18)				4.71	4.55	4.46		
		EER (Nominal Cooling) A2W condition #2. (A35/W12-7)				3.30	3.20	3.15		
		COP		A2W condition #2. (A7/W40-45)	W/W	3.90	4.00	3.95		
						A2W condition #3. (A7/W47-55)	3.20	3.40	3.35	
						A2/W35 4)*	4.40	4.30	4.20	
						A-7/W35 4)*	3.25	3.15	3.10	
			PdesignH (LWT 35°C)				9,500	12,600	13,600	
			PdesignH (LWT 55°C)				9,500	12,600	13,600	
		SCOP (35°C)				4.64	4.90	4.83		
		SCOP (55°C)				3.38	3.78	3.75		
		SCOP Class (35°C)				A+++	A+++	A+++		
		SCOP Class (55°C)				A++	A++	A++		
		SEER				4.75	5.00	5.00		
	Water Connections	Water Flow Rate (Nominal)		Heating	LPM	23.1	34.6	40.4		
				Cooling	LPM	23.1	34.6	40.4		
		Water Flow Rate		Min	LPM	7	7	7		
				Max	LPM	48	58	58		
		Water Pressure (Max)			bar	3	3	3		
		Water Pipe Type	threaded male	Inlet	Φ, mm	28	28	28		
					Outlet	Φ, mm	28	28	28	
		Leaving Water Temperature	Min.	Heating	°C	15	15	15		
						°C	70	70	70	
			Max.	Cooling	°C	5	5	5		
					°C	25	25	25		
	Refrigerant	Type			-	R32	R32	R32		
		Factory Charging			kg	2.7	3.3	3.3		
					tCO _{2e}	1.82	2.23	2.23		
		Control Method			-	EEV	EEV	EEV		
Outdoor Unit	Compressor	Type			-	Scroll	Scroll	Scroll		
		Model Name			-	DS2BB5033FVA	DS2BB5033FVA	DS2BB5033FVA		
		Oil	Type		-	POE(Kixx RF P85)	POE(Kixx RF P85)	POE(Kixx RF P85)		
			Initial Charge		cc	1,100	1,100	1,100		
		Quantity			EA	1	1	1		
		Output			W	3,622	3,622	3,622		
		Starting method			-	Inverter driven	Inverter driven	Inverter driven		
		Motor	Crankcase heater	Output		W	-	-	-	

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit		AE200RNWMEG/EU	AE200RNWMEG/EU	AE200RNWMEG/EU	
		Outdoor Unit		AE080BXYDEG/EU	AE120BXYDEG/EU	AE140BXYDEG/EU	
Outdoor Unit	Heat exchanger	Length		mm	1,224/1,195	1,216/1,187/1,159	1,216/1,187/1,159
		Rows	Quantity	EA	2	3	3
		Fin pitch		mm	1.5	1.5	1.5
		Passes	Quantity	EA	8	11	11
		Face area		m ²	1.15	1.15	1.15
		Stages	Quantity	EA	46	46	46
		Empty tubeplate hole	Quantity	EA	-	-	-
		Tube type		Φ	7	7	7
		Fin	Type	-	Corrugate	Corrugate	Corrugate
			Treatment	-	Anti Salt	Anti Salt	Anti Salt
	Fan	Type		-	Propeller Fan	Propeller Fan	Propeller Fan
		Discharged direction			Horizontal	Horizontal	Horizontal
		Air Flow Rate	Heating	m ³ /min	92	95	95
			Cooling	m ³ /min	85	90	90
		Quantity		EA	1	1	1
	Fan motor	Quantity		EA	1	1	1
		Model		-	SIC-88FWJ-F1122-1	SIC-88FWJ-F1122-1	SIC-88FWJ-F1122-1
		Output		W	122	122	122
		Drive		-	Direct drive	Direct drive	Direct drive
		Speed	Steps	-	-	-	-
			Heating	rpm	550	590	590
	Cooling		rpm	510	560	580	
	Sound	Sound Pressure	Heating	dB(A)	42	46	47
			Cooling	dB(A)	42	46	47
			Night Mode(3m)	dB(A)	35	35	35
		Sound Power	Heating	dB(A)	56	59	60
			Cooling	dB(A)	56	59	60
	Connections	Water pipe	inlet	Φ, inch	BSPP male 1	BSPP male 1	BSPP male 1
			outlet	Φ, inch	BSPP male 1	BSPP male 1	BSPP male 1
		Casing		Color	-	Shadow Gray	Shadow Gray
	Packing	Material		-	GI-SGCC	GI-SGCC	GI-SGCC
		Weight		kg	20.0	20.0	20.0
		External Dimension	Net Weight		kg	126.0	137.0
Shipping Weight			kg	146.0	157.0	157.0	
Net Dimensions(WxHxD)			mm	1,270 x 1,018 x 530	1,270 x 1,018 x 530	1,270 x 1,018 x 530	
Shipping Dimensions(WxHxD)			mm	1,330 x 1,226 x 630	1,330 x 1,226 x 630	1,330 x 1,226 x 630	
Operating Temp. Range	Heating		°C	-30 ~ 43	-30 ~ 43	-30 ~ 43	
	Cooling		°C	10 ~ 46	10 ~ 46	10 ~ 46	
	D.Hot Water		°C	-30 ~43	-30 ~43	-30 ~43	

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) Sound pressure 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 R32 (GWP=675) 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).

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit			AE260RNWMGG/EU	AE260RNWMGG/EU	AE260RNWMGG/EU		
		Outdoor Unit			AE080BXYDGG/EU	AE120BXYDGG/EU	AE140BXYDGG/EU		
Power Supply				Φ, #, V, Hz	3,4,380-415,50	3,4,380-415,50	3,4,380-415,50		
System	Mode				-	Heat Pump (A2W)	Heat Pump (A2W)	Heat Pump (A2W)	
Performance	Capacity	Heating	A2W Condition #1. (A7/W30-35)	W	8,000	12,000	14,000		
				Btu/h	27,300	40,900	47,800		
			A2W condition #2. (A7/W40-45)	W	8,000	12,000	14,000		
					8,000	12,000	14,000		
			A2W condition #3. (A7/W47-55)	W	8,000	12,000	14,000		
					8,000	12,000	14,000		
		A-7/W35 4)*	W	8,000	12,000	14,000			
				8,000	12,000	14,000			
		Cooling	A2W Condition #1. (A35/W23-18)	W	8,000	12,000	14,000		
				Btu/h	27,300	40,900	47,800		
			A2W condition #2. (A35/W12-7)	W	7,500	11,500	12,500		
					7,500	11,500	12,500		
	A2W Condition #1. (A7/W30-35)		W	1,600	2,350	2,770			
				2,051	3,000	3,544			
	A2W condition #2. (A7/W40-45)	W	2,500	3,529	4,179				
			1,818	2,791	3,333				
	A-7/W35 4)*	W	2,462	3,810	4,516				
			2,462	3,810	4,516				
	Power	Power Input	Heating	A2W Condition #1. (A7/W30-35)	W	1,600	2,350	2,770	
						2,051	3,000	3,544	
			A2W condition #2. (A7/W40-45)	W	2,500	3,529	4,179		
					1,818	2,791	3,333		
			A-7/W35 4)*	W	2,462	3,810	4,516		
					2,462	3,810	4,516		
		Cooling	A2W Condition #1. (A35/W23-18)	W	1,700	2,640	3,140		
					2,273	3,594	3,968		
		Current Input	Heating	A2W Condition #1.	A	2.51	3.69	4.35	
2.67						4.14	4.94		
Cooling	A2W condition #2		A	3.22	4.71	5.56			
				3.92	5.54	6.56			
Current	MCA	A	16.1	16.1	16.1				
			MFA	A	17.7	17.7	17.7		
Efficiency	COP (Nominal Heating) A2W condition #1. (A7/W30-35)				5.00	5.11	5.05		
	EER (Nominal Cooling) A2W condition #1. (A35/W23-18)				4.71	4.55	4.46		
	EER (Nominal Cooling) A2W condition #2. (A35/W12-7)				3.30	3.20	3.15		
	COP	A2W condition #2. (A7/W40-45)	W/W	3.90	4.00	3.95			
				3.20	3.40	3.35			
				4.40	4.30	4.20			
				3.25	3.15	3.10			
				3.25	3.15	3.10			
	PdesignH (LWT 35°C)				9,500	12,600	13,600		
	PdesignH (LWT 55°C)				9,500	12,600	13,600		
	SCOP (35°C)				4.64	4.90	4.83		
	SCOP (55°C)				3.38	3.78	3.75		
	SCOP Class (35°C)				A+++	A+++	A+++		
SCOP Class (55°C)				A++	A++	A++			
SEER				4.75	5.00	5.00			
Water Connections	Water Flow Rate (Nominal)	Heating	LPM	23.1	34.6	40.4			
			Cooling	LPM	23.1	34.6	40.4		
	Water Flow Rate	Min	LPM	7	7	7			
			Max	LPM	48	58	58		
	Water Pressure (Max)			bar	3	3	3		
	Water Pipe Type	threaded male	Inlet	Φ, mm	28	28	28		
			Outlet	Φ, mm	28	28	28		
	Leaving Water Temperature	Min.	Heating	°C	15	15	15		
				°C	70	70	70		
		Max.	Cooling	°C	5	5	5		
°C				25	25	25			
Refrigerant	Type			-	R32	R32	R32		
	Factory Charging			kg	2.7	3.3	3.3		
				tCO ₂ e	1.82	2.23	2.23		
	Control Method			-	EEV	EEV	EEV		
Outdoor Unit	Compressor	Type			-	Scroll	Scroll	Scroll	
		Model Name			-	DS2BB5033FVA	DS2BB5033FVA	DS2BB5033FVA	
		Oil	Type	-	POE(Kixx RF P85)	POE(Kixx RF P85)	POE(Kixx RF P85)		
				Initial Charge	cc	1,100	1,100	1,100	
		Quantity			EA	1	1	1	
		Output			W	3,622	3,622	3,622	
		Starting method			-	Inverter driven	Inverter driven	Inverter driven	
		Motor	Crankcase heater	Output		W	-	-	-

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit		AE260RNWMGG/EU	AE260RNWMGG/EU	AE260RNWMGG/EU	
		Outdoor Unit		AE080BXYDGG/EU	AE120BXYDGG/EU	AE140BXYDGG/EU	
Outdoor Unit	Heat exchanger	Length		mm	1,224/1,195	1,216/1,187/1,159	1,216/1,187/1,159
		Rows	Quantity	EA	2	3	3
		Fin pitch		mm	1.5	1.5	1.5
		Passes	Quantity	EA	8	11	11
		Face area		m ²	1.15	1.15	1.15
		Stages	Quantity	EA	46	46	46
		Empty tubeplate hole	Quantity	EA	-	-	-
		Tube type		Φ	7	7	7
		Fin	Type	-	Corrugate	Corrugate	Corrugate
			Treatment	-	Anti Salt	Anti Salt	Anti Salt
	Fan	Type		-	Propeller Fan	Propeller Fan	Propeller Fan
		Discharge direction			Horizontal	Horizontal	Horizontal
		Air Flow Rate	Heating	m ³ /min	92	95	95
			Cooling	m ³ /min	85	90	90
	Quantity		EA	1	1	1	
	Fan motor	Quantity		EA	1	1	1
		Model		-	SIC-88FWJ-F1122-1	SIC-88FWJ-F1122-1	SIC-88FWJ-F1122-1
		Output		W	122	122	122
		Drive		-	Direct drive	Direct drive	Direct drive
		Speed	Steps	-	-	-	-
	Heating		rpm	550	590	590	
	Cooling		rpm	510	560	580	
	Sound	Sound Pressure	Heating	dB(A)	42	46	47
			Cooling	dB(A)	42	46	47
			Night Mode(3m)	dB(A)	35	35	35
		Sound Power	Heating	dB(A)	56	59	60
			Cooling	dB(A)	56	59	60
	Connections	Water pipe	inlet	Φ, inch	BSP male 1	BSP male 1	BSP male 1
			outlet	Φ, inch	BSP male 1	BSP male 1	BSP 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	20.0	20.0	20.0		
External Dimension	Net Weight		kg	126.0	137.0	137.0	
	Shipping Weight		kg	146.0	157.0	157.0	
	Net Dimensions(WxHxD)		mm	1,270 x 1,018 x 530	1,270 x 1,018 x 530	1,270 x 1,018 x 530	
	Shipping Dimensions(WxHxD)		mm	1,330 x 1,226 x 630	1,330 x 1,226 x 630	1,330 x 1,226 x 630	
Operating Temp. Range	Heating		°C	-30 ~ 43	-30 ~ 43	-30 ~ 43	
	Cooling		°C	10 ~ 46	10 ~ 46	10 ~ 46	
	D.Hot Water		°C	-30 ~ 43	-30 ~ 43	-30 ~ 43	

NOTE

- Specifications may be subject to change without prior notice.
- 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].
 - 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].
 - A2W Condition #3 : (Heating) Water In/Out 47°C/55°C, Outdoor Air 7°C[DB]/6°C[WB].
 - 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)
 - Select wire size based on the value of MCA
 - Sound pressure 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.
 - dB(A) = A-weighted sound pressure level
 - Reference acoustic pressure 0 dB = 20uPa
 - Sound power level is an absolute value that a sound source generates.
 - dB(A) = A-weighted Sound power level
 - Reference power : 1pW
 - Measured according to ISO 3741
 - These products contain R32 (GWP=675) which is fluorinated greenhouse gas.
 - The system is operated in (-25°C ≤ Outdoor temp. < -20°C) condition, but no guarantee of capacity.
 - The system is operated by only Booster Heater in special condition (35 °C < Outdoor temp. ≤ 43°C).

2. Outdoor Units

2-2. Electrical characteristics

Capacity [kW]	Model	Power Supply				Voltage Range [V]		Nominal Running Current [A]		Current [A]	
		Φ	#	Hz	Voltage	Min. (-10%)	Max. (+10%)	Cooling	Heating	MCA	MFA
8.0	AE080BXYDEG/EU	1	2	50	220-240	198	264	7.56	8.04	26.0	28.6
12.0	AE120BXYDEG/EU	1	2	50	220-240	198	264	11.12	12.46	32.0	35.2
14.0	AE140BXYDEG/EU	1	2	50	220-240	198	264	13.10	14.87	32.0	35.2
8.0	AE080BXYDGG/EU	3	4	50	380-415	342	457	2.51	2.67	16.1	17.7
12.0	AE120BXYDGG/EU	3	4	50	380-415	342	457	3.69	4.14	16.1	17.7
14.0	AE140BXYDGG/EU	3	4	50	380-415	342	457	4.35	4.94	16.1	17.7

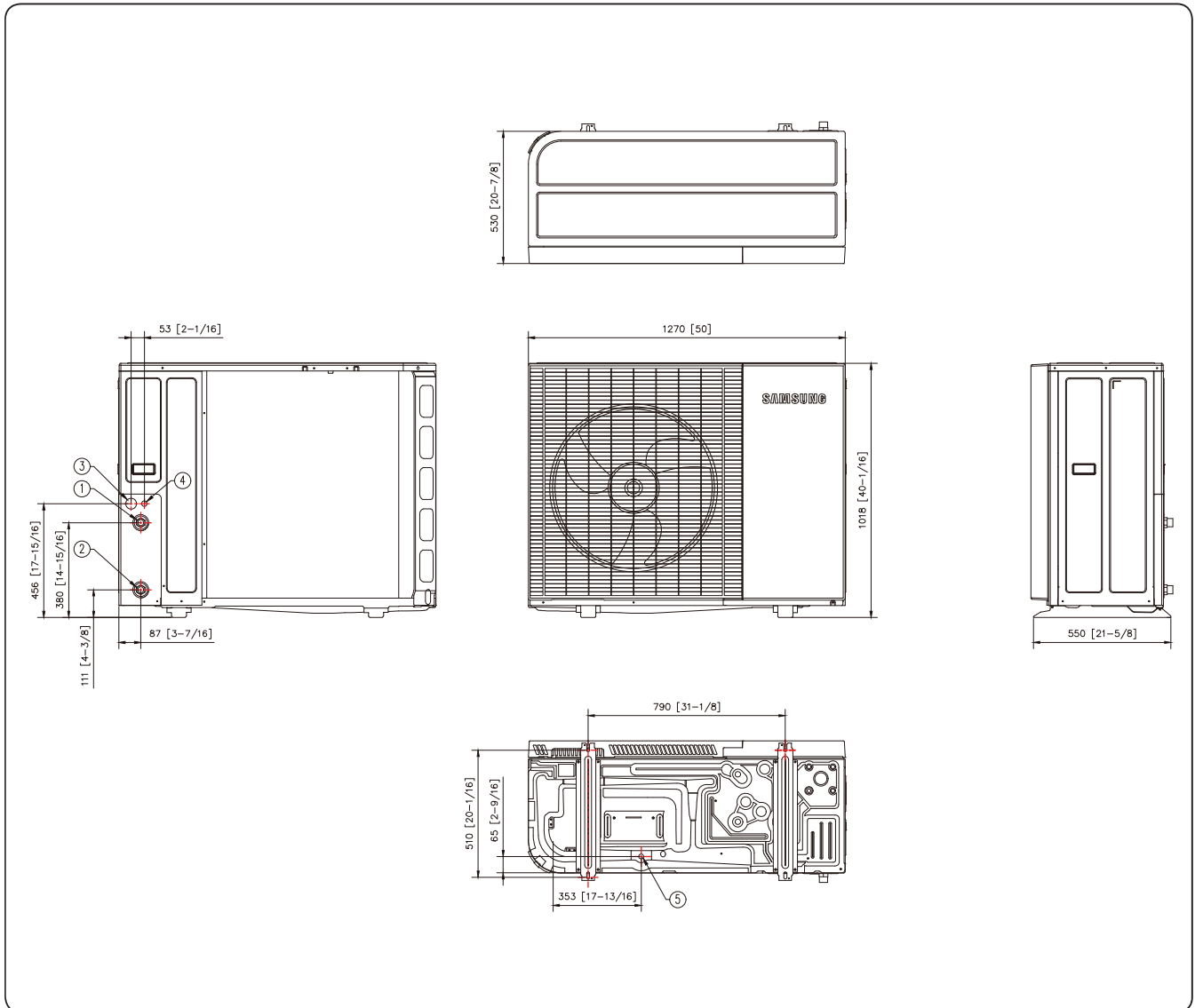
NOTE

- MCA : Minimum circuit amperes
- MFA : Maximum fuse amperes
- Select wire size based on the value of MCA

2. Outdoor Units

2-3. Dimensional drawing

Units : mm [inches]

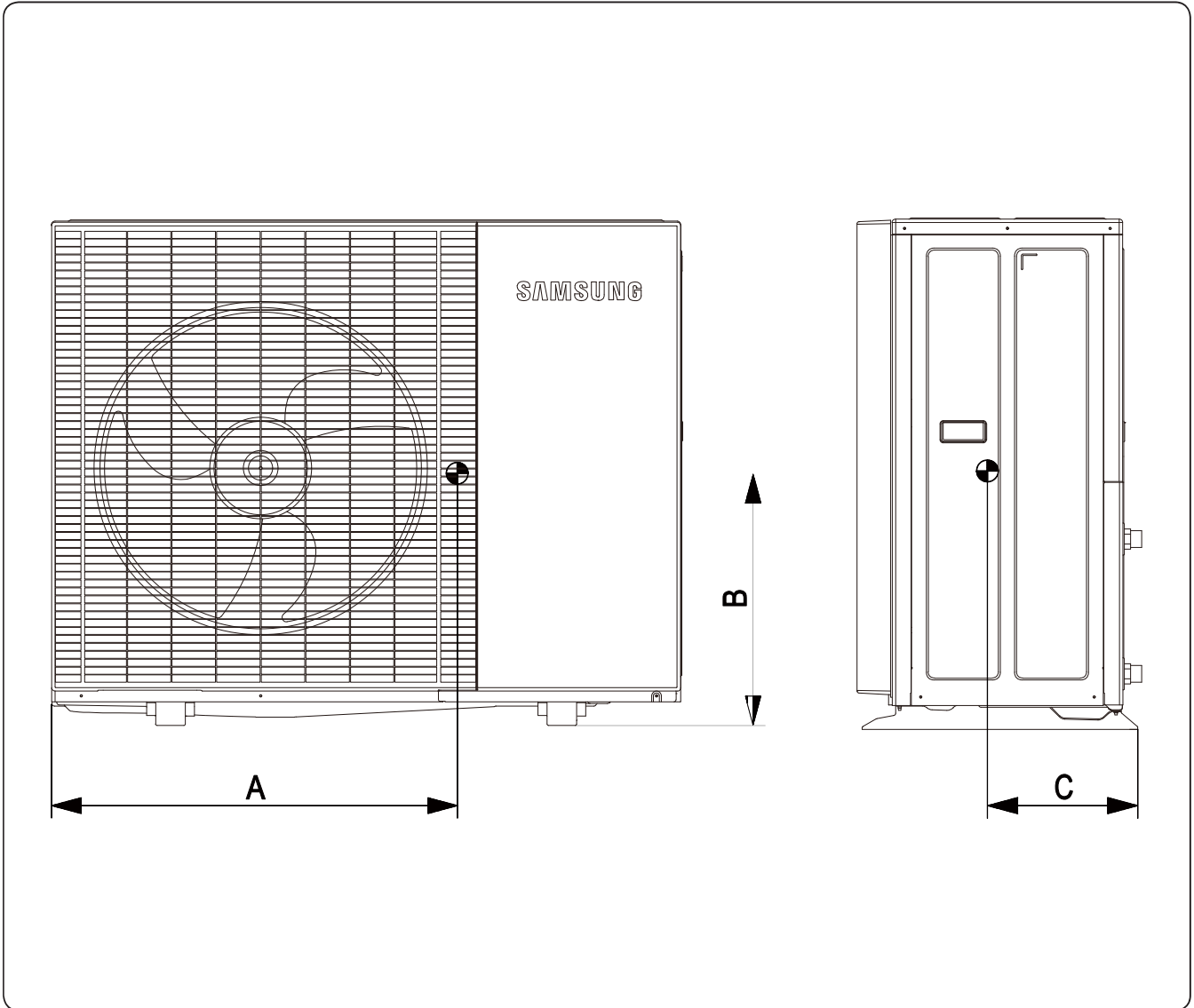


NO	Name	Description
1	Water Pipe(Out)	Φ28
2	Water Pipe(In)	Φ28
3	Power wiring conduit	Φ44
4	communication wiring conduit	Φ22
5	Drain holes	connect with the provided drain plug

2. Outdoor Units

2-4. Center of Gravity

Units : mm [inches]



Model	A	B	C
AE*****	800 [31-1/2]	214 [8-7/16]	361 [14-3/16]