

SAMSUNG

EHS

Technical Data Book

**EHS Mono for Europe
(R290, 50Hz, HP)**



Model : Outdoor unit (AE***CXVD*K/EU)
Hydro unit (AE***CNWM*G/EU)

History

Version	Modification	Date	Remark
Ver.1.0	Released EHS Mono for Europe TDB (R290, 50Hz, HP)	23. 06. 15	

Nomenclature

Model Name

AE

160

C

X

Y

D

G

K

/

EU

(1)

(2)

(3)

(4)

(5)

(6)

(7)

(8)

Buyer

(1) Classification

AE	EHS
----	-----

(5) Feature 1

Y	MONO
---	------

(2) Capacity

X 1/10 kW (3 digits)

(6) Feature 2

D	DELUXE
---	--------

(3) Version

C	2023
---	------

(7) Rating Voltage

E	220~240V, 50Hz, 1Φ
G	380~415V, 50Hz, 3Φ

(4) Product Type

N	Indoor Unit
X	Outdoor Unit

(8) Mode

K	Heat Pump (R290)
---	------------------

Nomenclature

Model Name

AE

200

C

N

W

M

E

G

/

EU

(1)

(2)

(3)

(4)

(5)

(6)

(7)

(8)

Buyer

(1) Classification

AE	EHS
----	-----

(5) Product Notation

W	Tank integrated hydro unit
---	----------------------------

(2) Capacity

x Liter (3 digits)

(6) Feature

M	Mono
---	------

(3) Version

C	2023
---	------

(7) Rating Voltage

E	220~240V, 50Hz, 1Φ
G	380~415V, 50Hz, 3Φ

(4) Product Type

N	Indoor Unit
X	Outdoor Unit

(8) Mode

G	Heat Pump (R32)
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Features & Benefits

EHS Mono

TBD

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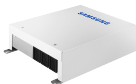
1.Line-up

1-1. Outdoor unit

Capacity		5.0 kW	8.0 kW	12.0 kW	16.0 kW
Image					
Model	1 phase	AE050CXYDEK/EU	AE080CXYDEK/EU	AE120CXYDEK/EU	AE160CXYDEK/EU
	3 phase	-	AE080CXYDGK/EU	AE120CXYDGK/EU	AE160CXYDGK/EU

1-2. Tank Integrated hydro unit

Capacity		200 L	260 L
Type	Model	AE200CNWMEG/EU	AE260CNWM*G/EU
Hydro unit			

Model	MIM-E03CN	MIM-E03EN
Control Kit		

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit				AE200CNWMEG/EU		AE200CNWMEG/EU		
		Outdoor Unit				AE050CXYDEK/EU		AE080CXYDEK/EU		
Power Supply					Φ, #, V, Hz	1, 2, 220~240, 50		1, 2, 220~240, 50		
System	Mode				-				Heat Pump (A2W)	
	Performance	Capacity	Heating	A2W Condition #1. (A7/W35) ^{1)*} *	W	5,000		8,000		
					Btu/h	17,100		27,300		
				A2W condition #2	W	5,000		8,000		
				A2W condition #3		5,000		8,000		
				A2/W35 ^{4)*}		5,000(TBD)		8,000(TBD)		
			A-7/W35 ^{4)*}	5,000(TBD)		8,000(TBD)				
			Cooling	A2W Condition #1. (A7/W35) ^{1)*} *	W	5,000		8,000		
					Btu/h	17,100		27,300		
				A2W condition #2	W	3,900		5,700		
			Power	Power Input	Heating	A2W Condition #1. (A7/W35) ^{1)*} *	W	1,000		1,630
	A2W condition #2	1,320				2,160				
	A2W condition #3	1,610				2,670				
	A2/W35 ^{4)*}	1,160				1,900				
	A-7/W35 ^{4)*}	1,670				2,670				
	Cooling	A2W Condition #1. (A7/W35) ^{1)*} *			W	1,280		2,050		
		A2W condition #2				1,279		1,900		
	Current Input	Heating			A2W Condition #1. (A7/W35) ^{1)*} *	A	4.73		7.70	
		Cooling					6.05		9.69	
		Heating			A2W condition #2	A	6.24		10.21	
		Cooling			7.61		12.62			
	Current	MCA				A	16.1		26.0	
		MFA				A	17.6		28.6	
	Efficiency	COP (Nominal Heating) A2W condition #1				5.00		4.91		
		EER (Nominal Cooling) A2W condition #1				3.91		3.90		
		EER (Nominal Cooling) A2W condition #2				3.05		3.00		
		COP			A2W condition #2	W/W	3.80		3.70	
			A2W condition #3		3.10		3.00			
			A2/W35 ^{4)*}		4.30(TBD)		4.20(TBD)			
			A-7/W35 ^{4)*}		3.00(TBD)		3.00(TBD)			
		PdesignH (LWT 35°C)				5,500		8,500		
		PdesignH (LWT 55°C)				5,500		8,000		
		SCOP (35°C)				5.00		4.80		
		SCOP (55°C)				3.60		3.55		
		SCOP Class (35°C)				A+++		A+++		
		SCOP Class (55°C)				A++		A++		
		SEER				4.20		4.30		
		Water Connections	Water Flow Rate (Nominal)		Heating	LPM	14.4		23.1	
					Cooling	LPM	14.4		21.6	
			Water Flow Rate		Min	LPM	7		7	
	Max				LPM	48		48		
	Water Pressure (Max)				bar		3			
	Water Pipe Type		threaded male	Inlet	Φ, mm	28		28		
				Outlet	Φ, mm	28		28		
	Leaving Water Temperature		Min.	Heating	°C	15		15		
					°C	75		75		
			Max.	Cooling	°C	5		5		
°C		25			25					
Refrigerant	Type				-	R290		R290		
	Factory Charging				kg	630		870		
					tCO ₂ e	0.00189		0.00255		
	Control Method				-	EEV		EEV		
Outdoor Unit	Compressor	Type				-	Rotary		Rotary	
		Model Name				-	UF8HC5180FEU		UF5HC5260FEX	
		Oil		Type		-	Mineral		Mineral	
				Initial Charge		cc	590		850	
		Quantity				EA	1		1	
		Output				W	1,551		2,236	
		Starting method				-	Inverter driven		Inverter driven	
Motor		Crankcase heater	Output		W	-		-		

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit		AE200CNWMEG/EU	AE200CNWMEG/EU
		Outdoor Unit		AE050CXYDEK/EU	AE080CXYDEK/EU
Outdoor Unit	Heat exchanger	Length		mm	986/957
		Rows	Quantity	EA	2
		Fin pitch		mm	1.5
		Passes	Quantity	EA	6-6
		Face area		m ²	0.79
		Stages	Quantity	EA	38
		Empty tubeplate hole	Quantity	EA	-
		Tube type		-	Φ7
		Fin	Type	-	Corrugate
			Treatment	-	Anti Salt
	Fan	Type		-	Propeller Fan
		Discharge direction		-	Horizontal
		Air Flow Rate	Heating	m ³ /min	92
			Cooling	m ³ /min	85
		Quantity		EA	1
	Fan motor	Quantity		EA	1
		Model		-	SIC-88FWJ-F1122-1
		Output		W	122
		Drive		-	Direct drive
		Speed	Steps	-	-
			Heating	rpm	550
			Cooling	rpm	510
	Sound Level	Sound Pressure Level	Heating	dB(A)	41(TBD)
			Cooling	dB(A)	45
			Night Mode(3m)	dB(A)	35
		Sound Power Level	Heating	dB(A)	55 (TBD)
			Cooling	dB(A)	59
	Connections	Water pipe	Inlet	-	BSPP male 1"
			Outlet	-	BSPP male 1"
	Casing	Color		-	Shadow Gray
		Material		-	GI-SGCC
	Packing	Material		-	EPS/BOX
		Weight		kg	13
	External Dimension	Net Weight		kg	86
		Shipping Weight		kg	99
		Net Dimensions (WxHxD)		mm	998x850x500
		Shipping Dimensions (WxHxD)		mm	1,070x1,028x630
	Operating Temp. Range	Heating	Min.	°C	-25
			Max.	°C	35
		Cooling	Min.	°C	10
			Max.	°C	46
		D.Hot Water	Min.	°C	-25
			Max.	°C	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) 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).

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit			AE200CNWMEG/EU	AE200CNWMEG/EU	AE260CNWMEG/EU
		Outdoor Unit			AE120CXYDEK/EU	AE160CXYDEK/EU	AE080CXYDEK/EU
Outdoor Unit	Heat exchanger	Length		mm	1,216/1,187/1,159	1,216/1,187/1,159	986/957/928
		Rows	Quantity	EA	3	3	3
		Fin pitch		mm	1.5	1.5	1.5
		Passes	Quantity	EA	22-12	22-12	9-9
		Face area		m²	1.17	1.17	0.79
		Stages	Quantity	EA	46	46	38
		Empty tubeplate hole	Quantity	EA	-	-	-
		Tube type		-	Φ7	Φ7	Φ7
		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	m³/min	95	95	92
			Cooling	m³/min	90	90	85
		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	590	590	550
			Cooling	rpm	560	560	510
	Sound	Sound Pressure	Heating	dB(A)	47	51(TBD)	45
			Cooling	dB(A)	47	51(TBD)	45
			Night Mode(3m)	dB(A)	35	35	35
		Sound Power	Heating	dB(A)	60	65	59
			Cooling	dB(A)	60	65	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	20	20	13
	External Dimension	Net Weight		kg	140	140	98
		Shipping Weight		kg	160	160	111
		Net Dimensions (WxHxD)		mm	1,270x1,018x530	1,270x1,018x530	998x850x500
Shipping Dimensions (WxHxD)		mm	1,330x1,226x630	1,330x1,226x630	1,070x1,028x630		
Operating Temp. Range	Heating	Min.	°C	-25	-25	-25	
		Max.	°C	35	35	35	
	Cooling	Min.	°C	10	10	10	
		Max.	°C	46	46	46	
	D.Hot Water	Min.	°C	-25	-25	-25	
		Max	°C	43	43	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) 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).

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit				AE260CNWMEG/EU		AE260CNWMEG/EU		
		Outdoor Unit				AE120CXYDEK/EU		AE160CXYDEK/EU		
Power Supply					Φ, #, V, Hz	1, 2, 220~240, 50		1, 2, 220~240, 50		
System	Mode				-		Heat Pump (A2W)		Heat Pump (A2W)	
	Performance	Capacity	Heating	A2W Condition #1. (A7/W35) ^{1)*}	W	12,000		16,000		
				W	Btu/h	40,900		54,600		
					A2W condition #2	W	12,000		16,000	
					A2W condition #3		12,000		16,000	
					A2/W35 ^{4)*}		12,000(TBD)		16,000(TBD)	
			A-7/W35 ^{4)*}	12,000(TBD)			16,000(TBD)			
			Cooling	A2W Condition #1. (A7/W35) ^{1)*}	W	12,000		14,000		
				W	Btu/h	40,900		47,800		
					A2W condition #2	W	9,000		10,400	
			Power	Power Input	Heating	A2W Condition #1. (A7/W35) ^{1)*}	W	2,500		3,550
	A2W condition #2	3,240				4,570				
	A2W condition #3	4,000				5,520				
	A2/W35 ^{4)*}	2,790				3,810				
	A-7/W35 ^{4)*}	4,000				5,520				
	Cooling	A2W Condition #1. (A7/W35) ^{1)*}			W	3,000		3,680		
		A2W condition #2				3,103		3,586		
		Current Input				Heating	A	11.81		16.78
	Cooling				14.18			17.39		
	Heating				A	15.31		21.60		
	Cooling			18.90		26.09				
	Current	MCA			A	32.0		32.0		
		MFA			A	35.2		35.2		
	Efficiency	COP (Nominal Heating) A2W condition #1				4.80		4.51		
		EER (Nominal Cooling) A2W condition #1				4.00		3.80		
		EER (Nominal Cooling) A2W condition #2				2.90		2.90		
		COP				A2W condition #2	W/W	3.70		3.50
			A2W condition #3			3.00		2.90		
			A2/W35 ^{4)*}			4.30(TBD)		4.20(TBD)		
			A-7/W35 ^{4)*}			3.00(TBD)		2.90(TBD)		
			PdesignH (LWT 35°C)					12,000		15,500
		PdesignH (LWT 55°C)				12,000		14,500		
		SCOP (35°C)				4.90		4.70		
		SCOP (55°C)				3.65(TBD)		3.55(TBD)		
		SCOP Class (35°C)				A+++		A+++		
		SCOP Class (55°C)				A++		A++		
		SEER				4.80		5.00		
		Water Connections	Water Flow Rate (Nominal)		Heating	LPM	34.6		46.2	
					Cooling	LPM	34.6		40.4	
			Water Flow Rate		Min	LPM	7		7	
					Max	LPM	58		58	
			Water Pressure (Max)			bar	3		3	
			Water Pipe Type	threaded male	Inlet	Φ, mm	28		28	
	Outlet				Φ, mm	28		28		
	Leaving Water Temperature		Min.	Heating	°C	15		15		
					°C	75		75		
			Max.	Cooling	°C	5		5		
°C		25			25					
Refrigerant	Type				-	R290		R290		
	Factory Charging				kg	1,250		1,250		
					tCO ₂ e	0.00375		0.00375		
	Control Method				-	EEV		EEV		
Outdoor Unit	Compressor	Type			-	Scroll		Scroll		
		Model Name			-	DS4HC5066FNA		DS4HC5066FNA		
		Oil	Type		-	Kixx RF P85		Kixx RF P85		
			Initial Charge		cc	1,100		1,100		
		Quantity			EA	1		1		
		Output			W	3,803		3,803		
		Starting method			-	Inverter driven		Inverter driven		
Motor	Crankcase heater	Output		W	-		-			

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit			AE260CNWMEG/EU	AE260CNWMEG/EU
		Outdoor Unit			AE120CXYDEK/EU	AE160CXYDEK/EU
Outdoor Unit	Heat exchanger	Length		mm	1216/1187/1159	1,216/1,187/1,159
		Rows	Quantity	EA	3	3
		Fin pitch		mm	1.5	1.5
		Passes	Quantity	EA	22-12	22-12
		Face area		m²	1.17	1.17
		Stages	Quantity	EA	46	46
		Empty tubeplate hole	Quantity	EA	-	-
		Tube type		-	Φ7	Φ7
		Fin	Type	-	Corrugate	Corrugate
	Treatment		-	Anti Salt	Anti Salt	
	Fan	Type		-	Propeller Fan	Propeller Fan
		Discharge direction		-	Horizontal	Horizontal
		Air Flow Rate	Heating	m³/min	95	95
			Cooling	m³/min	90	90
		Quantity		EA	1	1
	Fan motor	Quantity		EA	1	1
		Model		-	SIC-88FWJ-F1122-1	SIC-88FWJ-F1122-1
		Output		W	122	122
		Drive		-	Direct drive	Direct drive
		Speed	Steps	-	-	-
			Heating	rpm	590	590
			Cooling	rpm	560	560
	Sound Level	Sound Pressure Level	Heating	dB(A)	47	51(TBD)
			Cooling	dB(A)	47	51(TBD)
			Night Mode(3m)	dB(A)	35	35
		Sound Power Level	Heating	dB(A)	60	65
			Cooling	dB(A)	60	65
	Connections	Water pipe	Inlet	-	BSPP male 1"	BSPP male 1"
			Outlet	-	BSPP male 1"	BSPP male 1"
	Casing	Color		-	Shadow Gray	Shadow Gray
		Material		-	GI-SGCC	GI-SGCC
	Packing	Material		-	EPS/BOX	EPS/BOX
		Weight		kg	20	20
	External Dimension	Net Weight		kg	140	140
		Shipping Weight		kg	160	160
		Net Dimensions (WxHxD)		mm	1,270x1,018x530	1,270x1,018x530
		Shipping Dimensions (WxHxD)		mm	1,330x1,226x630	1,330x1,226x630
	Operating Temp. Range	Heating	Min.	°C	-25	-25
			Max.	°C	35	35
		Cooling	Min.	°C	10	10
			Max.	°C	46	46
		D.Hot Water	Min.	°C	-25	-25
			Max	°C	43	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) 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).

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit			AE260CNWMGG/EU	AE260CNWMGG/EU	AE260CNWMGG/EU			
		Outdoor Unit			AE080CXYDGK/EU	AE120CXYDGK/EU	AE160CXYDGK/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/W35) ^{1)*}	W	8,000	12,000	16,000		
				A2W condition #2	Btu/h	27,300	40,900	54,600		
						A2W condition #3	W	8,000	12,000	16,000
								8,000	12,000	16,000
								A2/W35 ^{4)*}	8,000(TBD)	12,000(TBD)
			A-7/W35 ^{4)*}	8,000(TBD)	12,000(TBD)	16,000(TBD)				
			Cooling	A2W Condition #1. (A7/W35) ^{1)*}	W	8,000	12,000	14,000		
				A2W condition #2	Btu/h	27,300	40,900	47,800		
					W	5,700	9,000	10,400		
			Power	Power Input	Heating	A2W Condition #1. (A7/W35) ^{1)*}	W	1,630	2,500	3,550
	A2W condition #2	2,160				3,240		4,570		
	A2W condition #3	2,670				4,000		5,520		
	A2/W35 ^{4)*}	1,900				2,790		3,810		
	A-7/W35 ^{4)*}	2,670				4,000		5,520		
	Cooling	A2W Condition #1. (A7/W35) ^{1)*}			W	2,050	3,000	3,680		
		A2W condition #2				1,900	3,103	3,714		
		Current Input				Heating	A2W Condition #1. (A7/W35) ^{1)*}	A	2.56	3.92
	Cooling				A2W condition #2	A	3.39		5.08	7.17
	Current	MCA			A	16.1	16.1	16.1		
		MFA		A	17.7	17.7	17.7			
	Efficiency	COP (Nominal Heating) A2W condition #1				4.91	4.80	4.51		
		EER (Nominal Cooling) A2W condition #1				3.90	4.00	4.51		
		EER (Nominal Cooling) A2W condition #2				3.00	2.90	2.80		
		COP		A2W condition #2	W/W	3.70	3.70	3.50		
						3.00	3.00	2.90		
			4.20(TBD)			4.30(TBD)	4.20(TBD)			
			3.00(TBD)			3.00(TBD)	2.90(TBD)			
			PdesignH (LWT 35°C)				8,000	12,000	15,500	
		PdesignH (LWT 55°C)				8,000	12,000	15,500		
		SCOP (35°C)				4.80	4.90(TBD)	4.70(TBD)		
		SCOP (55°C)				3.55	3.65(TBD)	3.55(TBD)		
		SCOP Class (35°C)				A+++	A+++	A+++		
		SCOP Class (55°C)				A++	A++	A++		
		SEER				4.30	4.80	5.00		
	Water Connections	Water Flow Rate (Nominal)		Heating	LPM	23.1	34.6	46.2		
				Cooling	LPM	21.6	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	75	75	75		
			Max.	Cooling	°C	5	5	5		
					°C	25	25	25		
		Refrigerant	Type			-	R290	R290	R290	
	Factory Charging			kg	870	1,250	1,250			
	Control Method			tCO ₂ e	0.00255	0.00375	0.00375			
	Outdoor Unit	Compressor	Type			-	Rotary	Scroll	Scroll	
			Model Name			-	UF5HC5260FEX	DS4HC5066FNA	DS4HC5066FNA	
			Oil	Type	-	Mineral	Kixx RF P85	Kixx RF P85		
				Initial Charge	cc	850	1,100	1,100		
Quantity			EA	1	1	1				
Output			W	2,236	3,803	3,803				
Starting method			-	Inverter driven	Inverter driven	Inverter driven				
Motor	Crankcase heater	Output	W	-	-	-				

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit		AE260CNWMGG/EU	AE260CNWMGG/EU	AE260CNWMGG/EU
		Outdoor Unit		AE080CXYDGK/EU	AE120CXYDGK/EU	AE160CXYDGK/EU
Outdoor Unit	Heat exchanger	Length		mm	986/957/928	1,216/1,187/1,159
		Rows	Quantity	EA	3	3
		Fin pitch		mm	1.5	1.5
		Passes	Quantity	EA	9-9	22-12
		Face area		m ²	0.79	1.17
		Stages	Quantity	EA	38	46
		Empty tubeplate hole	Quantity	EA	-	-
		Tube type		-	Φ7	Φ7
		Fin	Type	-	Corrugate	Corrugate
			Treatment	-	Anti Salt	Anti Salt
	Fan	Type		-	Propeller Fan	Propeller Fan
		Discharge direction		-	Horizontal	Horizontal
		Air Flow Rate	Heating	m ³ /min	92	95
			Cooling	m ³ /min	85	90
		Quantity		EA	1	1
	Fan motor	Quantity		EA	1	1
		Model		-	SIC-88FWJ-F1122-1	SIC-88FWJ-F1122-1
		Output		W	122	122
		Drive		-	Direct drive	Direct drive
		Speed	Steps	-	-	-
			Heating	rpm	550	590
			Cooling	rpm	510	560
	Sound Level	Sound Pressure Level	Heating	dB(A)	45	51(TBD)
			Cooling	dB(A)	45	51(TBD)
			Night Mode(3m)	dB(A)	35	35
		Sound Power Level	Heating	dB(A)	59	65
			Cooling	dB(A)	59	65
	Connections	Water pipe	Inlet	-	BSPP male 1"	BSPP male 1"
			Outlet	-	BSPP male 1"	BSPP male 1"
	Casing	Color		-	Shadow Gray	Shadow Gray
		Material		-	GI-SGCC	GI-SGCC
	Packing	Material		-	EPS/BOX	EPS/BOX
		Weight		kg	13	20
	External Dimension	Net Weight		kg	98	140
		Shipping Weight		kg	111	160
		Net Dimensions (WxHxD)		mm	998x850x500	1,270x1,018x530
		Shipping Dimensions (WxHxD)		mm	1,070x1,028x630	1,330x1,226x630
	Operating Temp. Range	Heating	Min.	°C	-25	-25
			Max.	°C	35	35
		Cooling	Min.	°C	10	10
			Max.	°C	46	46
		D.Hot Water	Min.	°C	-25	-25
			Max.	°C	43	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) 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).

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
5.0	AE050CXYDEK/EU	1	2	50	220-240	198	264	6.05	4.73	16.1	17.6
8.0	AE080CXYDEK/EU	1	2	50	220-240	198	264	9.69	7.70	26.0	28.6
12.0	AE120CXYDEK/EU	1	2	50	220-240	198	264	14.18	11.81	32.0	35.2
16.0	AE160CXYDEK/EU	1	2	50	220-240	198	264	17.39	16.78	32.0	35.2
8.0	AE080CXYDGK/EU	3	4	50	380-415	342	457	3.22	2.56	16.1	17.7
12.0	AE120CXYDGK/EU	3	4	50	380-415	342	457	4.71	3.92	16.1	17.7
16.0	AE160CXYDGK/EU	3	4	50	380-415	342	457	5.77	5.57	16.1	17.7

NOTE

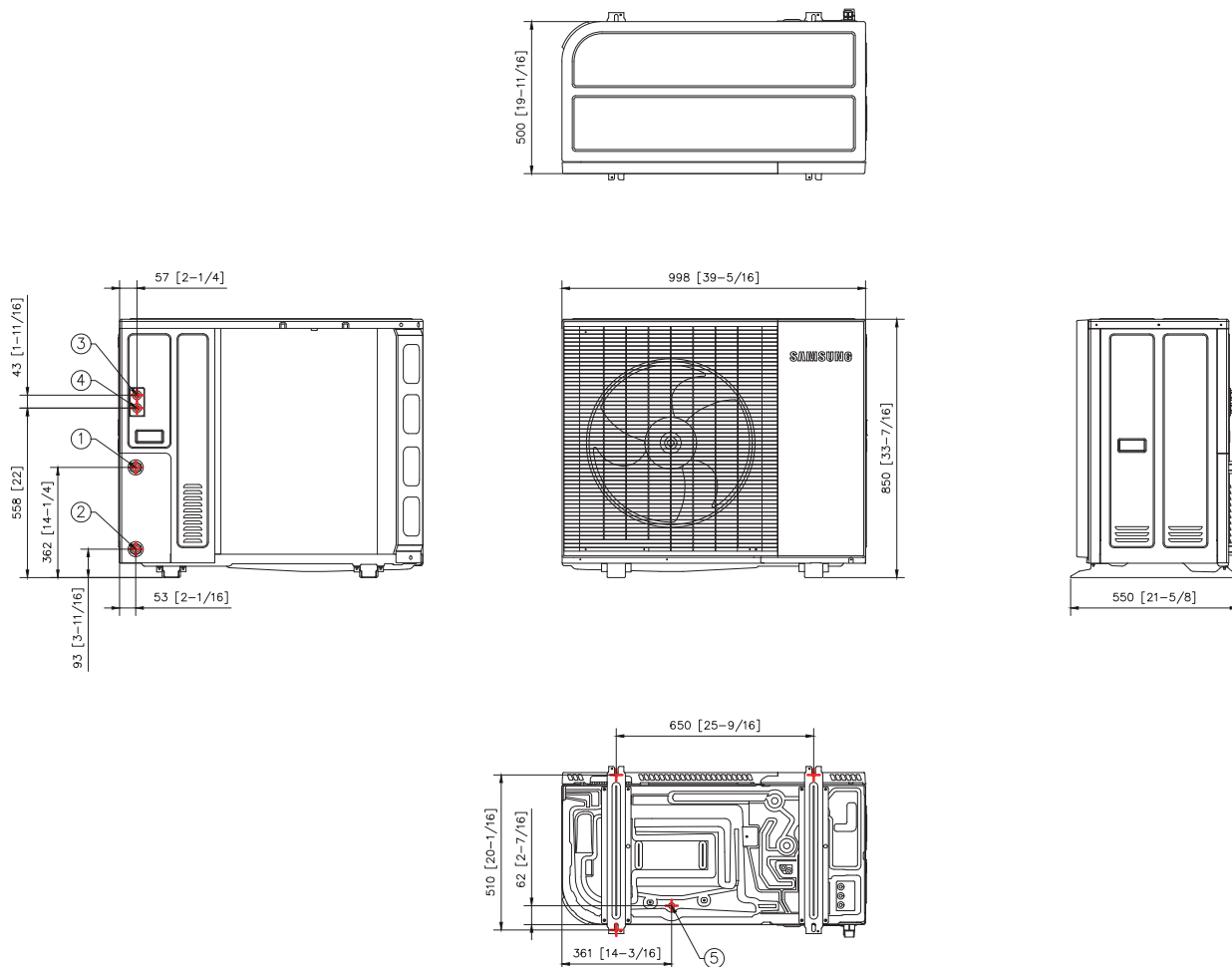
- MCA : Minimum circuit amperes
- MFA : Maximum fuse amperes
- Select wire size based on the value of MCA

2. Outdoor Units

2-3. Dimensional drawing

AE050CXYDEK/EU, 080CXYD*K/EU

Units : mm [inches]



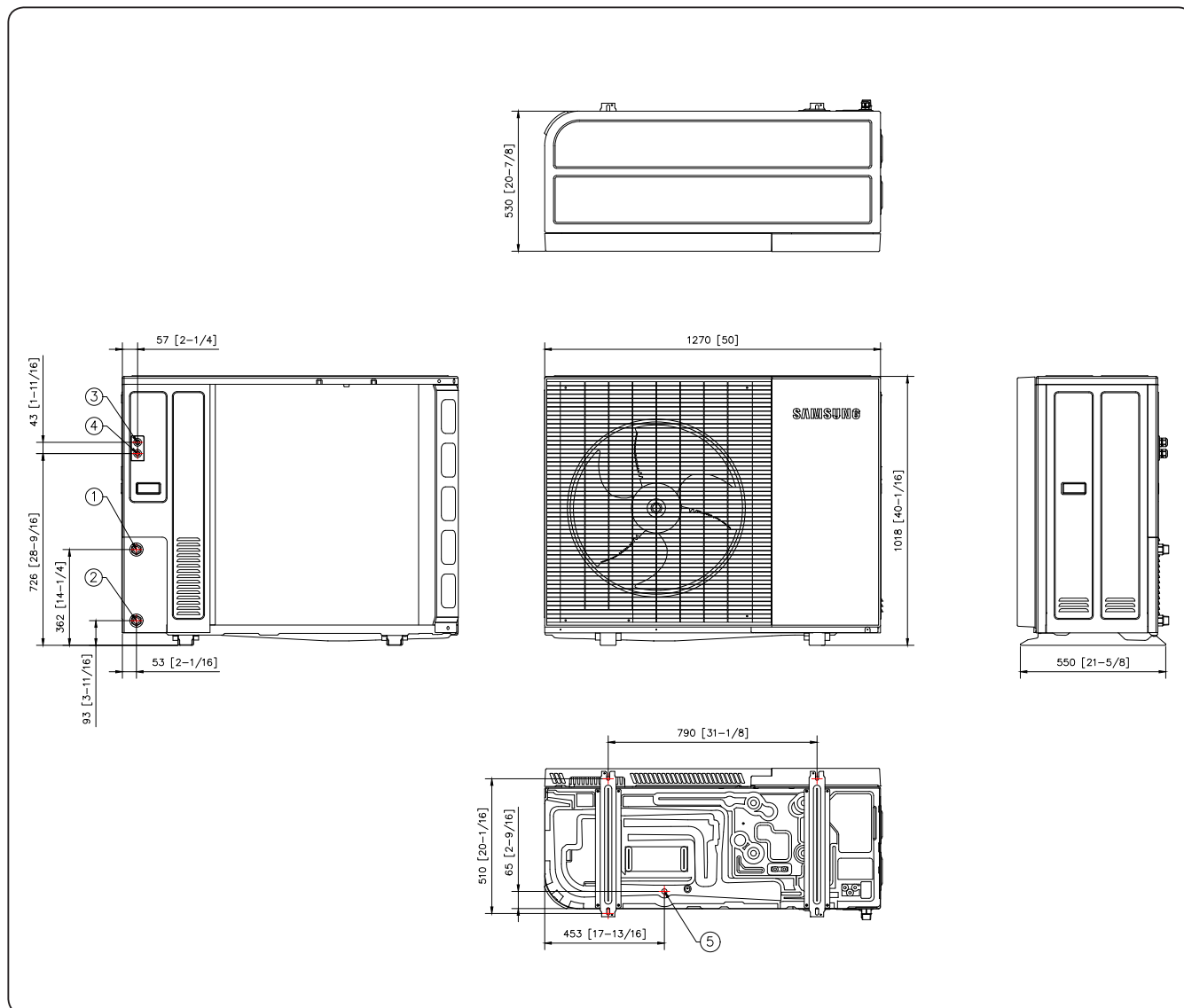
NO	Name	Description
1	Water Pipe(Out)	Φ28
2	Water Pipe(In)	Φ28
3	Power wiring conduit	Φ44
4	Communication wiring conduit	Φ22
5	Drain holes	Connect with the provided drain plug

2. Outdoor Units

2-3. Dimensional drawing

AE120/160CXYD*K/EU

Units : mm [inches]



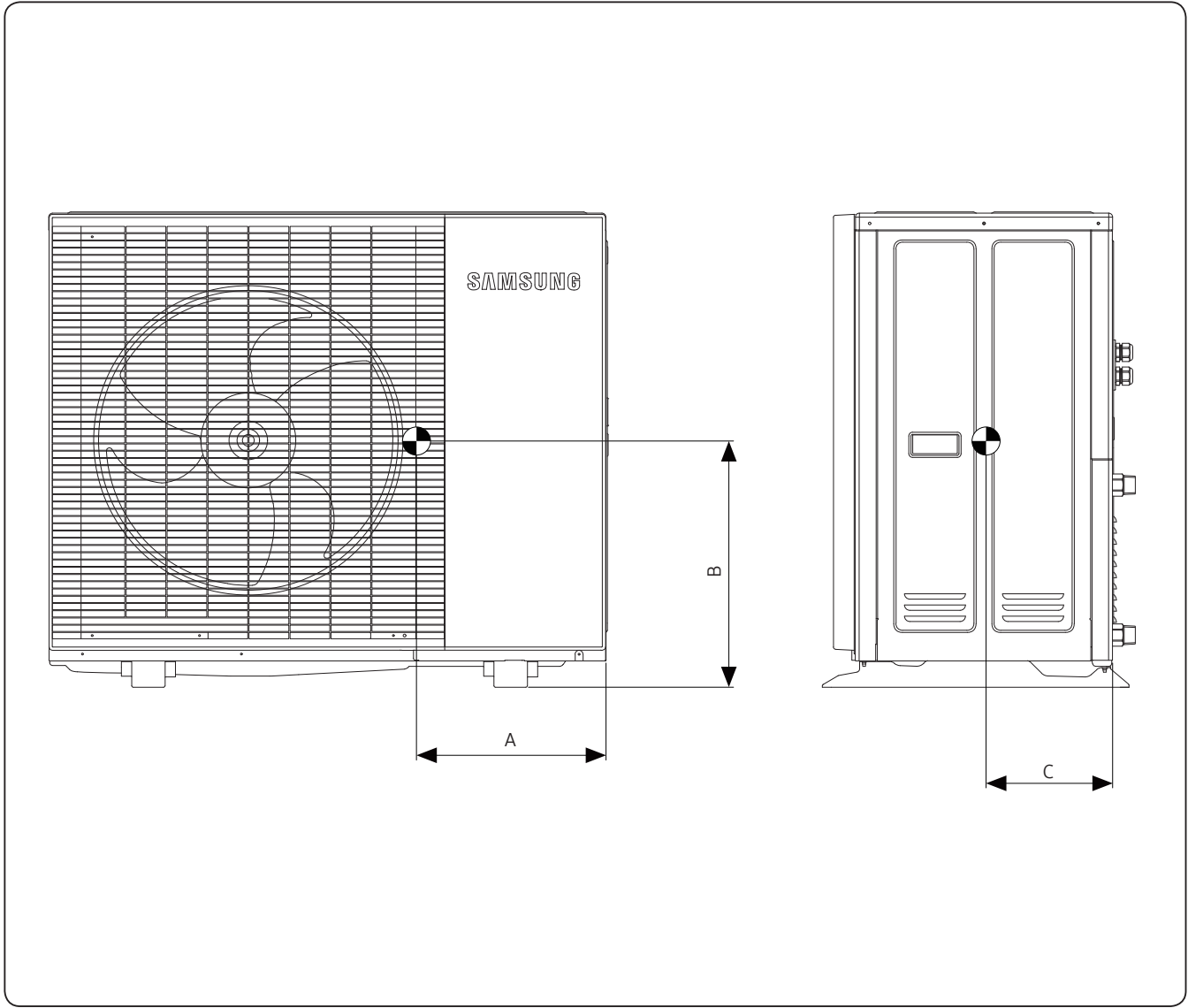
NO	Name	Description
1	Water Pipe(Out)	Φ28
2	Water Pipe(In)	Φ28
3	Power wiring conduit	Φ44
4	Communication wiring conduit	Φ22
5	Drain holes	Connect with the provided drain plug

2. Outdoor Units

2-4. Center of Gravity

AE050CXYDEK/EU, 080CXYD*K/EU

Units : mm [inches]



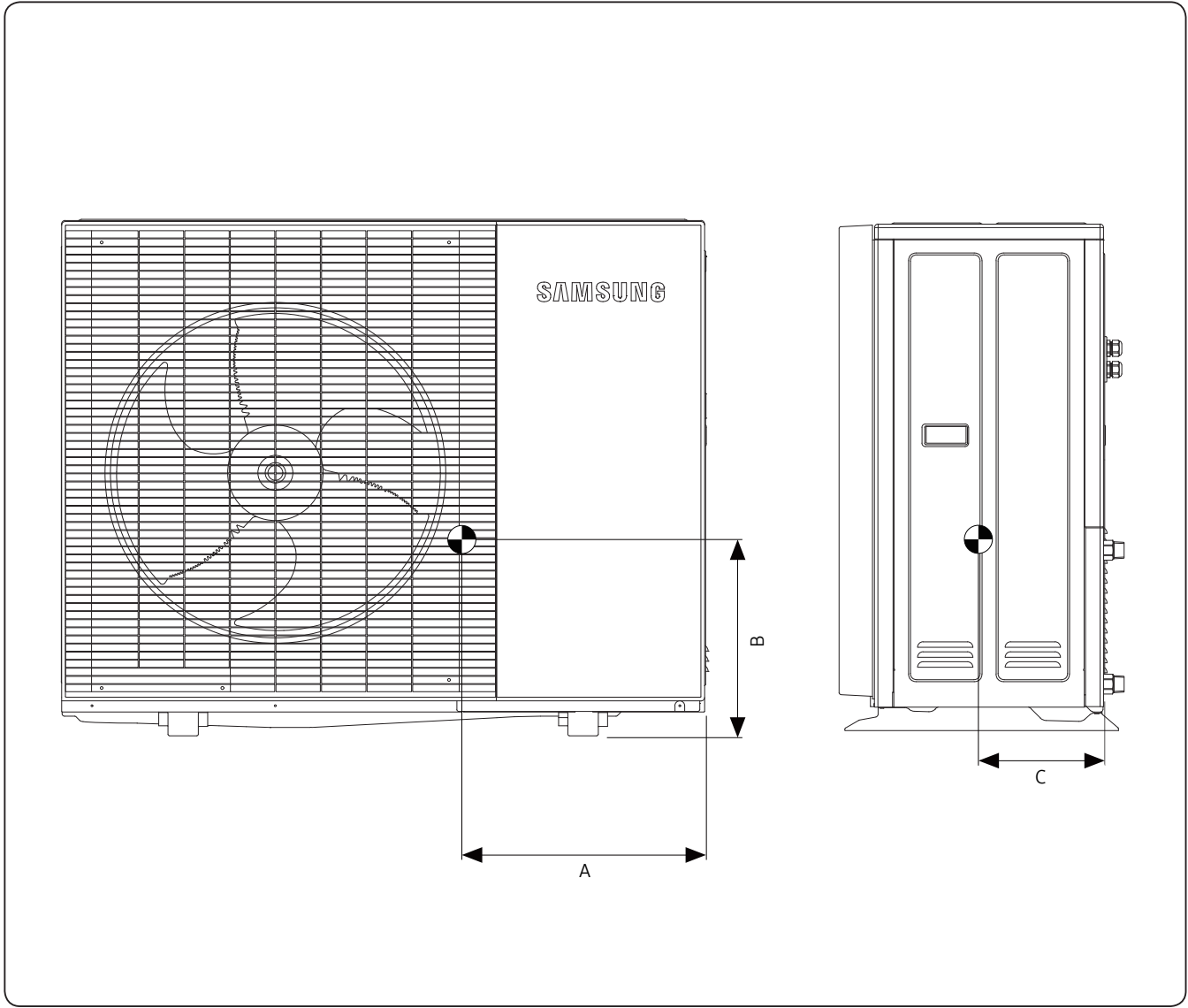
Model	A	B	C
AE050CXYDEK/EU AE080CXYDEG/EU AE080CXYDGG/EU	340 [13 3/8]	396 [15 9/16]	227 [8 15/16]

2. Outdoor Units

2-4. Center of Gravity

AE120/160CXYD*K/EU

Units : mm [inches]



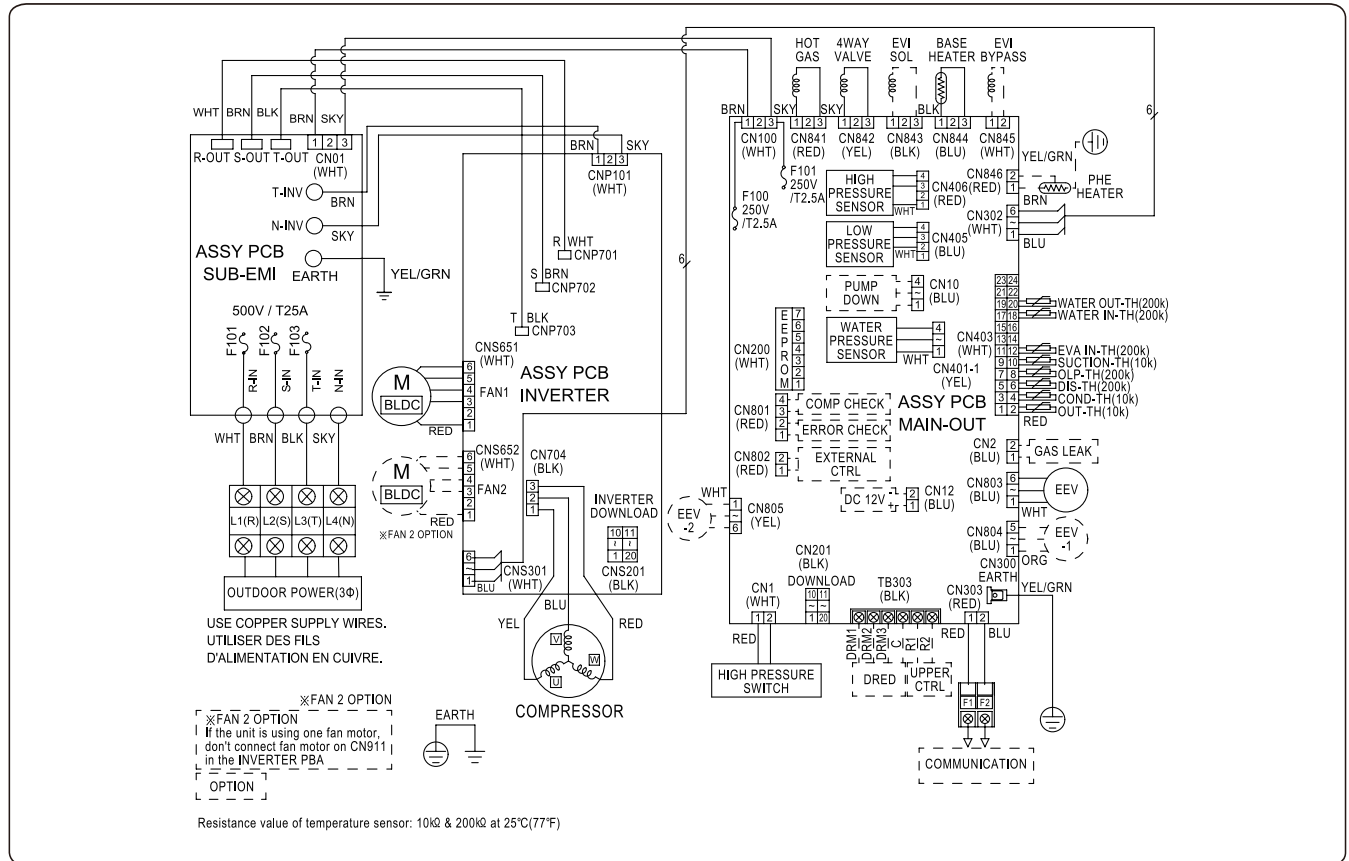
Model	A	B	C
AE120CXYD*K/EU AE160CXYD*G/EU	472 [18 9/16]	408 [16 1/16]	239 [9 7/16]

1. This wiring diagram applies only to the Outdoor unit.
2. Symbols show as follow :
BLK: black, RED: red, BLU: blue, WHT: white, YEL: yellow, BRN: brown, SKY: skyblue, GRN: green
3. For connection wiring indoor-outdoor transmission F1-F2.
4. Protective earth(SCREW)

2. Outdoor Units

2-5. Electrical wiring diagram

AE120/160CX*YD*/K/EU



ASSY PCB MAIN-OUT	Printed circuit board(MAIN)	WATER OUT-TH(200k)	Thermistor (WATER OUT_200Kohm)
ASSY PCB INVER	Printed circuit board(INVERTER)	HOT GAS	Solenoid Valve - Hot Gas bypass
ASSY PCB SUB-EMI	Printed circuit board(EMI)	4WAY VALVE	Solenoid Valve - 4Way
OUT-TH(10k)	Thermistor (OUT_10Kohm)	EVI SOL	Solenoid Valve - EVI
COND-TH(10k)	Thermistor (COND_10Kohm)	EVI BYPASS	Solenoid Valve - EVI Bypass
DIS-TH(200k)	Thermistor (DISCHARGE_200Kohm)	M-BLDC	Motor for Outdoor Fan
OLP-TH(200k)	Thermistor (OLP_200Kohm)	EEV	Electronic Expansion Valve
SUCTION-TH(10k)	Thermistor (SUCTION_10kKohm)	EXTERNAL CTRL	External Control
EVA IN-TH(200k)	Thermistor (EVA IN_200Kohm)	UPPER CTRL	Upper Control
WATER IN-TH(200k)	Thermistor (WATER IN_200Kohm)		

NOTES

- This wiring diagram applies only to the Outdoor unit.
- Symbols show as follow :
BLK: black, RED: red, BLU: blue, WHT: white, YEL: yellow, BRN: brown, SKY: skyblue, GRN: green
- For connection wiring indoor-outdoor transmission F1-F2.
- ⏚ Protective earth(SCREW)

2. Outdoor Units

2-6. Sound data

Summary

Capacity (kW)	Model	Sound Pressure dB(A)	Sound Power dB(A)
		Heating	Heating
5.0	AE050CXYDEK/EU	41	55
8.0	AE080CXYDEK/EU	45	59
12.0	AE120CXYDEK/EU	47	60
16.0	AE160CXYDEK/EU	51	65
8.0	AE080CXYDGK/EU	45	59
12.0	AE120CXYDGK/EU	47	60
16.0	AE160CXYDGK/EU	51	65

NOTE

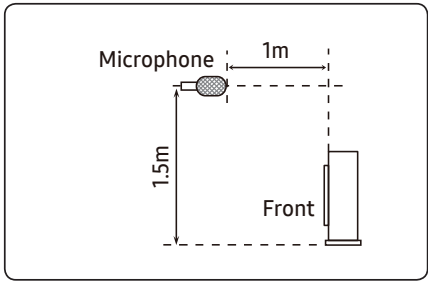
- Specifications may be subject to change without prior notice.
- Sound Pressure Level
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dBA = A-weighted sound pressure level
 - Reference acoustic pressure 0 dB = 20μPa
- Sound Power Level
 - 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.

2. Outdoor Units

2-6. Sound data

Sound Pressure level

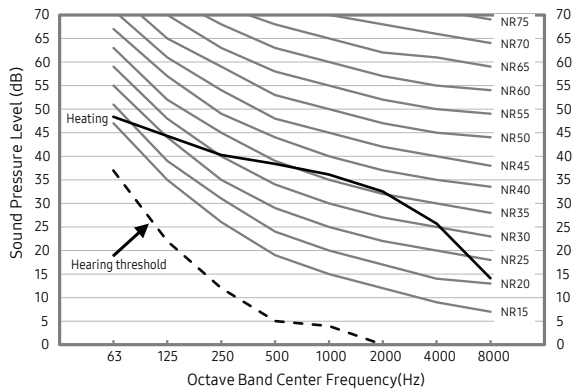
Unit: dB(A)



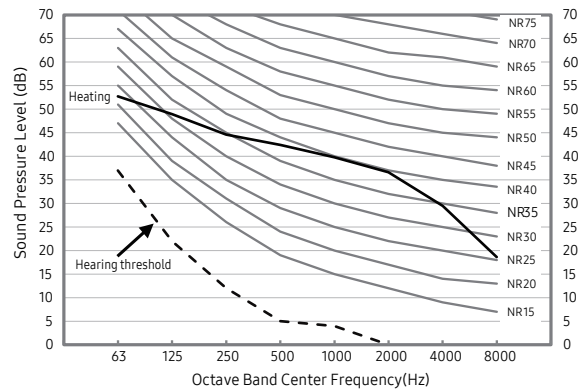
Model	Heating
AE050CXYDEK/EU	41
AE080CXYDEK/EU	45
AE120CXYDEK/EU	47
AE160CXYDEK/EU	51

- NR Curve

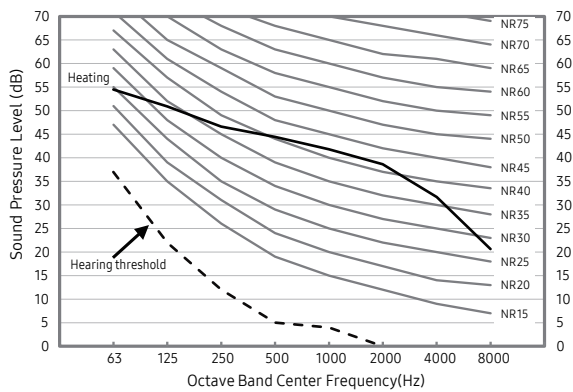
1) AE050CXYDEK/EU



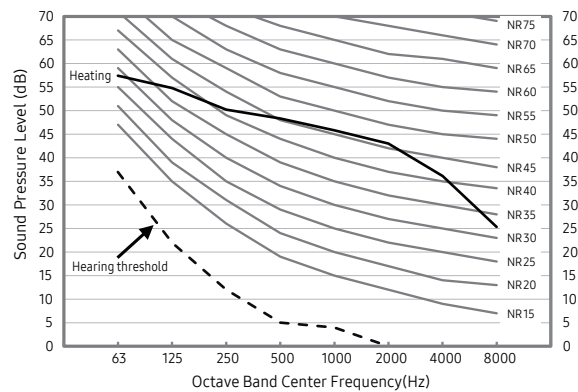
2) AE080CXYDEK/EU



3) AE120CXYDEK/EU



4) AE160CXYDEK/EU

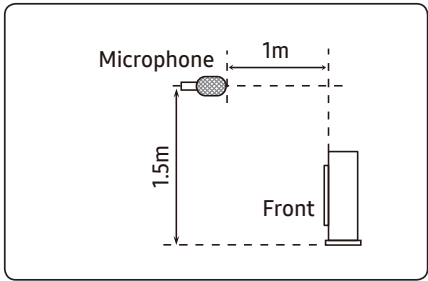


2. Outdoor Units

2-6. Sound data

Sound Pressure level

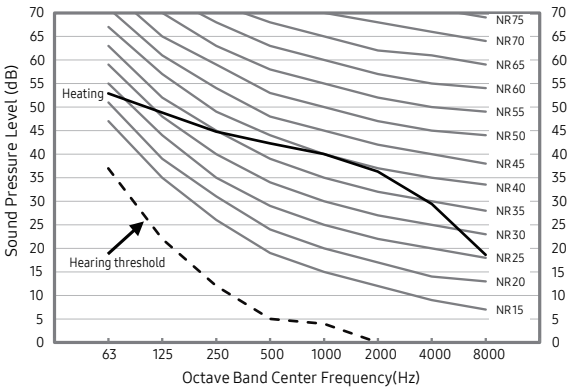
Unit: dB(A)



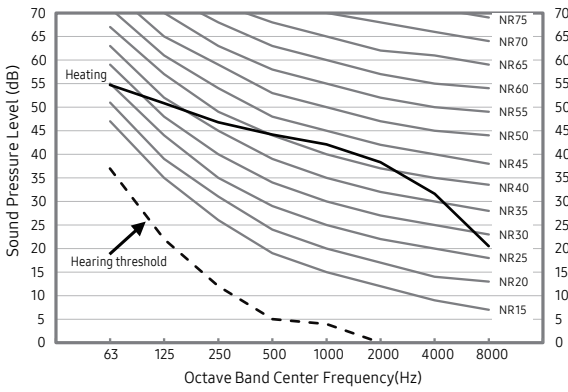
Model	Heating
AE080CXYDGK/EU	45
AE120CXYDGK/EU	47
AE160CXYDGK/EU	51

- NR Curve

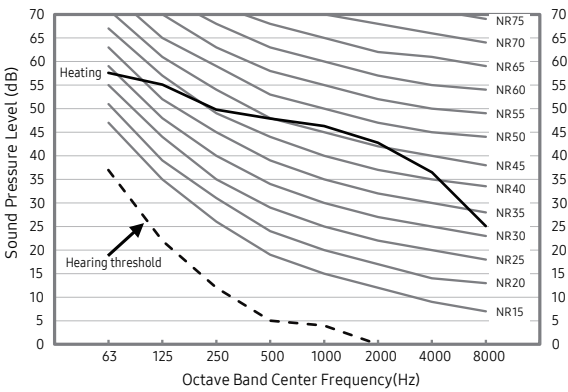
5) AE080CXYDGK/EU



6) AE120CXYDGK/EU



7) AE160CXYDGK/EU



2. Outdoor Units

2-6. Sound data

Sound Power level

Unit: dB(A)

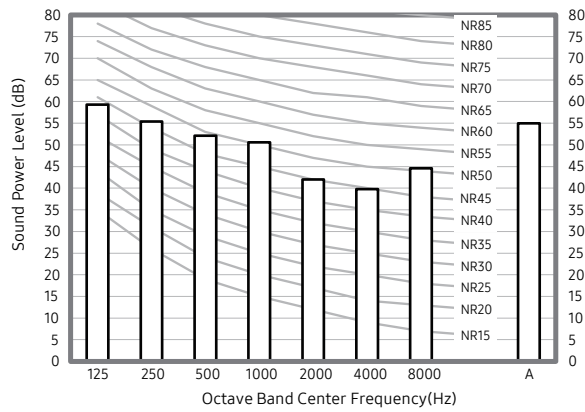
NOTE

- Specifications may be subject to change without prior notice
 - 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.

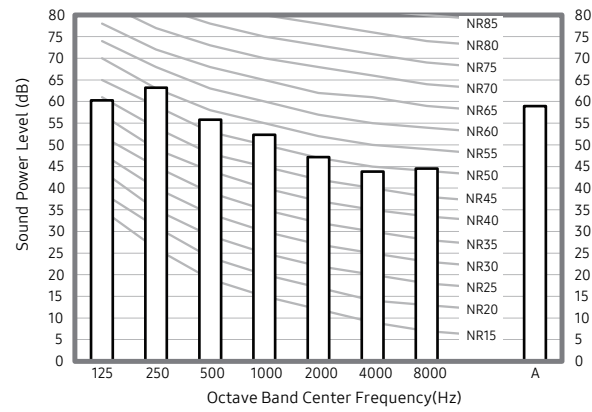
Model	Heating
AE050CXYDEK/EU	55
AE080CXYDEK/EU	59
AE120CXYDEK/EU	60
AE160CXYDEK/EU	65

NR Curve

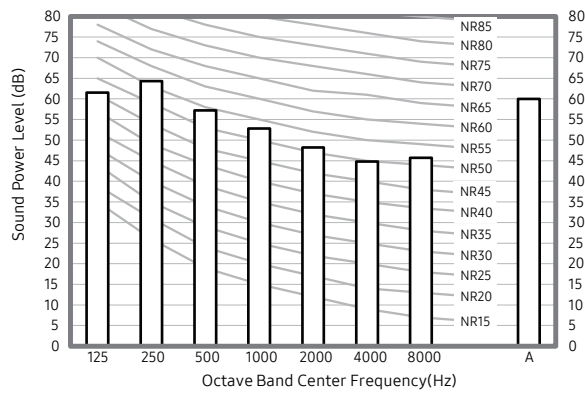
1) AE050CXYDEK/EU



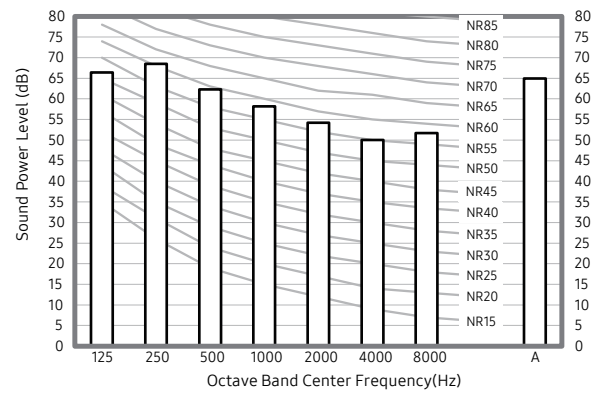
2) AE080CXYDEK/EU



3) AE120CXYDEK/EU



4) AE160CXYDEK/EU



2. Outdoor Units

2-6. Sound data

Sound Power level

Unit: dB(A)

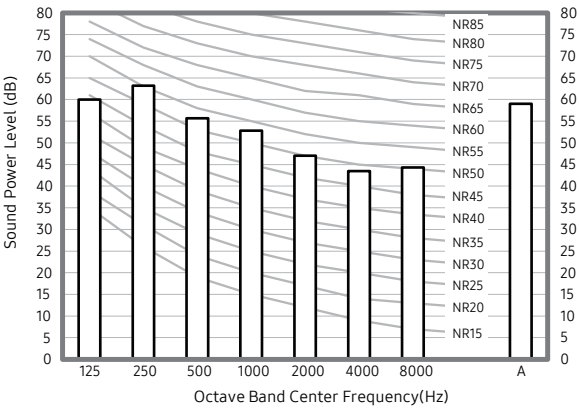
NOTE

- Specifications may be subject to change without prior notice
 - 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.

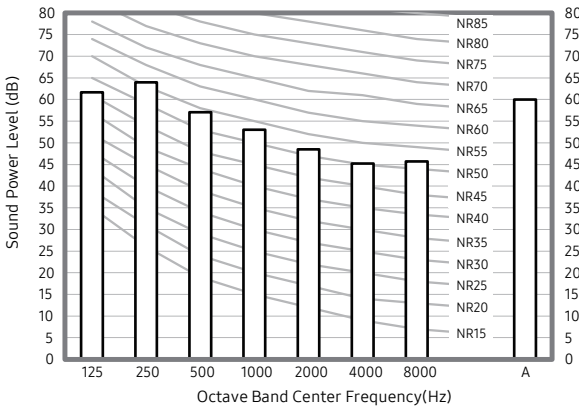
Model	Heating
AE080CXYDGK/EU	59
AE120CXYDGK/EU	60
AE160CXYDGK/EU	65

- NR Curve

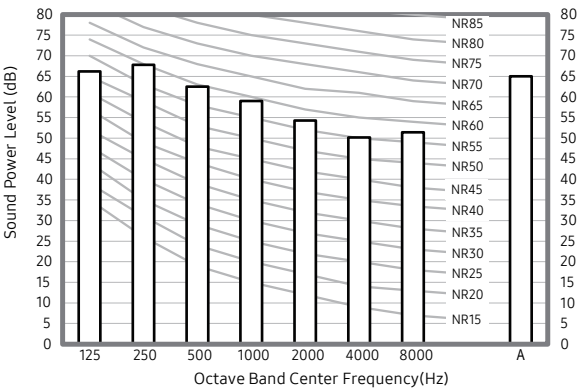
5) AE080CXYDGK/EU



6) AE120CXYDGK/EU



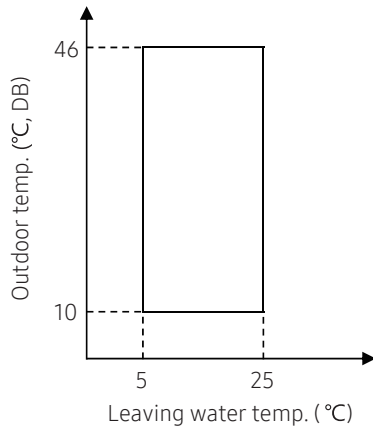
7) AE160CXYDGK/EU



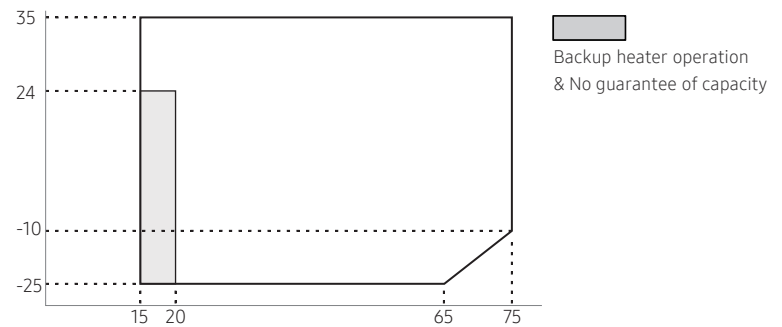
2. Outdoor Units

2-7. Operation range

1) Cooling



2) Heating



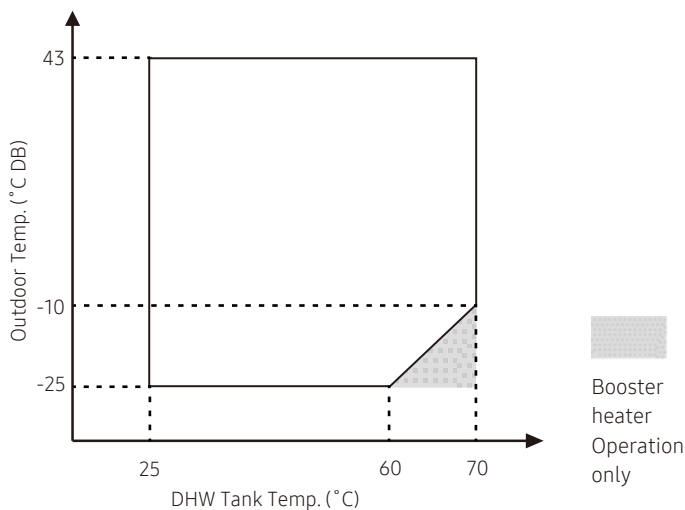
MONO Outdoor Unit		Water Temp. (°C)			Water Flow Rates (LPM)			Air Temp. (°C, DB/WB)		
		Min	Std	Max	Min	Std	Max	Min	Std	Max
Controller	Cooling	5	-	25						
	Heating	15	-	75						
Cooling	Inlet	-	23 (12 ^{*2})	30	7	Δ 5°C	58 (48 ^{*1})	10/-	35/24	46/28
	Outlet	5	18 (7 ^{*2})	25						
Heating	Inlet	5	30 (40 ^{*2})	-				-25/-	7/6	43/34.5
	Outlet	25 (15 ^{*3})	35 (45 ^{*2})	75						

*1) Model : AE050CXYDEK/EU
AE080CXYD*K/EU

*2) Eurovent Test Condition #2

*3) Back up heater operation.

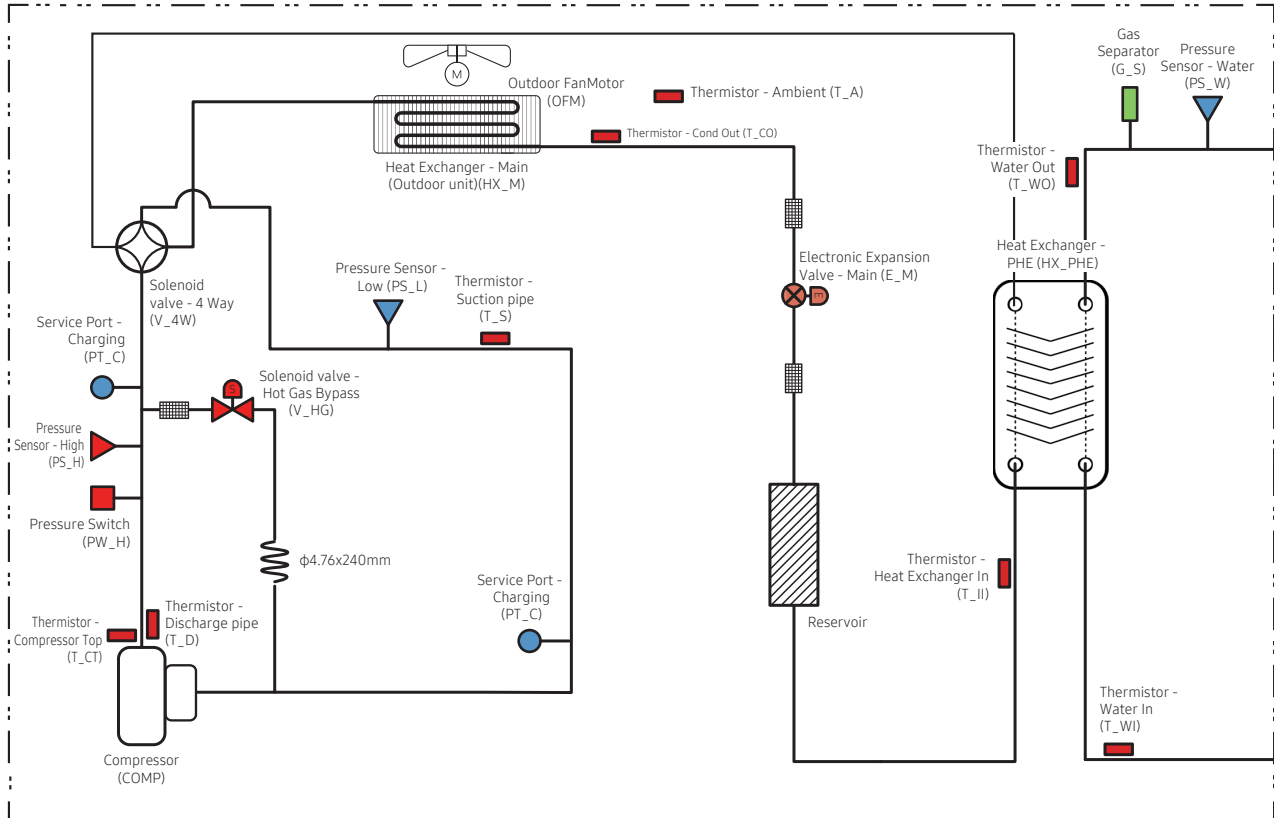
3) DHW (Domestic Hot Water Tank)



2. Outdoor Units

2-8 Piping diagram

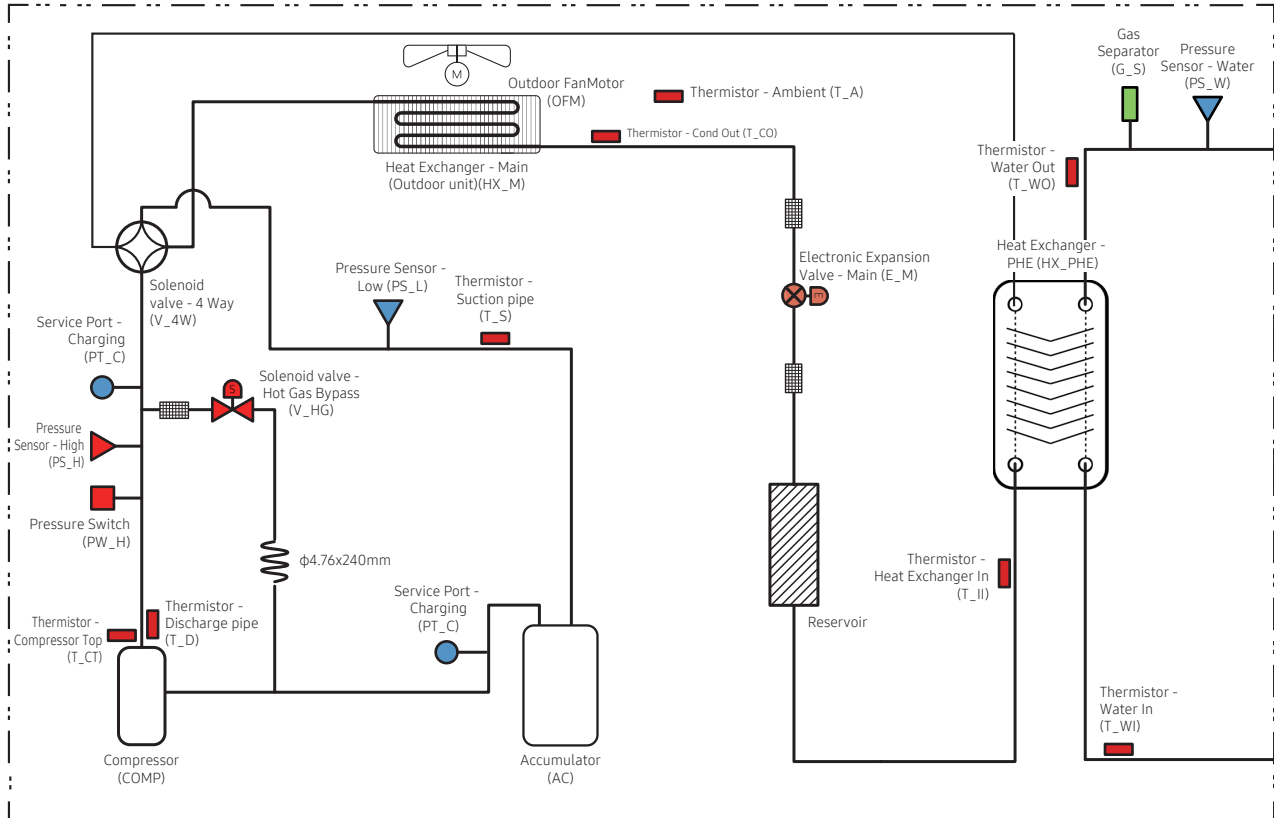
AE050CXYDEK/EU, 080CXYD*K/EU



2. Outdoor Units

2-8 Piping diagram

AE120/160CXVD*K/EU



2. Outdoor Units

2-9. Capacity table

TBD

2. Outdoor Units

2-10. Silent mode corrections

TBD

3. Tank integrated hydro unit

3-1. Specifications

Model Name		Indoor Unit	AE200CNWMEG/EU	AE200CNWMEG/EU	AE200CNWMEG/EU	AE200CNWMEG/EU
		Outdoor Unit	AE050CXYDEK/EU	AE080CXYDEK/EU	AE120CXYDEK/EU	AE160CXYDEK/EU
Mode		-	Heat Pump (A2W)	Heat Pump (A2W)	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50
Power input	Cooling (Nominal)	kW	0.2	0.2	0.2	0.2
	Heating (Nominal)	kW	0.2	0.2	0.2	0.2
	Cooling (Max)	kW	0.2	0.2	0.2	0.2
	Heating (Max)	kW	5.2	5.2	5.2	5.2
Current Input	Cooling (Nominal)	A	0.9	0.9	0.9	0.9
	Heating (Nominal)	A	0.9	0.9	0.9	0.9
	Cooling (Max)	A	0.9	0.9	0.9	0.9
	Heating (Max)	A	22.7	22.7	22.7	22.7
Field Wiring	MCA	A	22.7	22.7	22.7	22.7
	MFA		28.4	28.4	28.4	28.4
Heating up time		h /min	TBD	TBD	TBD	TBD
Water Heating	Declared load profile	-	TBD	TBD	TBD	TBD
	Energy efficiency Class	-	TBD	TBD	TBD	TBD
Water Connections	Water Flow Rate (Std)[H/C]		LPM	TBD	TBD	TBD
	Water Pressure (Max)		bar	3	3	3
	Water pipe (To outdoor unit)	Type	-	Straight pipe	Straight pipe	Straight pipe
		Inlet	Φ, mm	28	28	28
		Outlet	Φ, mm	28	28	28
	Water pipe (Space heating)	Type	-	Straight pipe	Straight pipe	Straight pipe
		Inlet	Φ, mm	28	28	28
		Outlet	Φ, mm	28	28	28
	Water pipe (DHW)	Type	-	Straight pipe	Straight pipe	Straight pipe
		Inlet	Φ, mm	22	22	22
		Outlet	Φ, mm	22	22	22
	Water pipe (Secondary water return, Only 260L)	Type	-	-	-	-
		Inlet	Φ, mm	-	-	-
	Leaving Water Temperature	Heating	°C	15~75	15~75	15~75
		Cooling	°C	5~25	5~25	5~25
DHW Tank	Nominal Water Volume		liter	200	200	200
	Net Water Volume		liter	194	194	194
	Material		-	SUS 316L	SUS 316L	SUS 316L
	Max. water pressure		bar	10	10	10
	Max. water temperature		°C	70	70	70
	Immersion heater (= booster heater)		kW	3 (230V)	3 (230V)	3 (230V)
	Insulation		-	PU Foam	PU Foam	PU Foam
Water Pump	Type		-	Centrifurugal (GPA 25-9H)	Centrifurugal (GPA 25-9H)	Centrifurugal (GPA 25-9H)
	Motor Input		W	100	100	100
	Number of Unit		EA	1	1	1
Backup Heater	Power		kW	2 (230V)	2 (230V)	2 (230V)
	Thermostat		°C	85±4	85±4	85±4
	Thermostat (Thermal Fuse)		°C	98 +0 -5	98 +0 -5	98 +0 -5
Safety device	Pressure relief valve		bar	2.9	2.9	2.9
	Flow Sensor		LPM	5~60	5~60	5~60
	Temperature & Pressure relief valve(Tank)		bar, °C	7, 90	7, 90	7, 90
	Thermostat (for immersion heater)		°C	80 ±5 (Auto) 90 ±5 (Manual)	80 ±5 (Auto) 90 ±5 (Manual)	80 ±5 (Auto) 90 ±5 (Manual)

3. Tank integrated hydro unit

3-1. Specifications

Model Name			Indoor Unit	AE200CNWMEG/EU	AE200CNWMEG/EU	AE200CNWMEG/EU	AE200CNWMEG/EU
			Outdoor Unit	AE050CXYDEK/EU	AE080CXYDEK/EU	AE120CXYDEK/EU	AE160CXYDEK/EU
Expansion vessel	Internal water volume		liter	8	8	8	8
	Working pressure		MPa	0.3	0.3	0.3	0.3
Water Pump (Primary)	Type		-	BLDC Inv	BLDC Inv	BLDC Inv	BLDC Inv
	Max static pressure		mAq	9.0	9.0	9.0	9.0
Water Heat Exchanger	Type		-	Braszed Plate Exchanger	Braszed Plate Exchanger	Braszed Plate Exchanger	Braszed Plate Exchanger
	Quantity		EA	1	1	1	1
	Internal water volume		L	1.01(Water Side) 0.98(Refrigerant Side)	1.01(Water Side) 0.98(Refrigerant Side)	1.01(Water Side) 0.98(Refrigerant Side)	1.01(Water Side) 0.98(Refrigerant Side)
	Water flow rate	Min.	L/min	7	7	12	12
		Max.	L/min	48	48	58	58
	Insulation material			-	PE-FOAM	PE-FOAM	PE-FOAM
IP Class			-	IPX1	IPX1	IPX1	IPX1
Air Purge Valve			Φ, inch	BSPP male 3/8	BSPP male 3/8	BSPP male 3/8	BSPP male 3/8
Sound Level	Sound Pressure Level	Heating	dB(A)	26	26	30	30
		Cooling	dB(A)	26	26	30	30
	Sound Power Level	Heating	dB(A)	40	40	44	44
Casing	Color		-	Earth brown	Earth brown	Earth brown	Earth brown
	Material		-	Poweder coated Galvanised steel	Poweder coated Electro galvanized steel	Poweder coated Electro galvanized steel	Poweder coated Electro galvanized steel
Packing	Material		-	EPS/BOX	EPS/BOX	EPS/BOX	EPS/BOX
	Packing Weight		kg	12.0	12.0	12.0	12.0
External Dimension	Net Weight		kg	128.0	128.0	128.0	128.0
	Shipping Weight		kg	140.0	140.0	140.0	140.0
	Net Dimensions (WxHxD)		mm	595 x 1,800 x 700	595 x 1,800 x 700	595 x 1,800 x 700	595 x 1,800 x 700
	Shipping Dimensions (WxHxD)		mm	700 x 2,000 x 780	700 x 2,000 x 780	700 x 2,000 x 780	700 x 2,000 x 780

NOTE

- Specifications may be subject to change without prior notice.

3. Tank integrated hydro unit

3-1. Specifications

Model Name		Indoor Unit	AE260CNWMEG/EU	AE260CNWMEG/EU	AE260CNWMEG/EU
		Outdoor Unit	AE080CXYDEK/EU	AE120CXYDEK/EU	AE160CXYDEK/EU
Mode		-	Heat Pump (A2W)	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50
Power input	Cooling (Nominal)	kW	0.2	0.2	0.2
	Heating (Nominal)	kW	0.2	0.2	0.2
	Cooling (Max)	kW	0.2	0.2	0.2
	Heating (Max)	kW	5.2	5.2	5.2
Current Input	Cooling (Nominal)	A	0.9	0.9	0.9
	Heating (Nominal)	A	0.9	0.9	0.9
	Cooling (Max)	A	0.9	0.9	0.9
	Heating (Max)	A	22.7	22.7	22.7
Field Wiring	MCA	A	22.7	22.7	22.7
	MFA		28.4	28.4	28.4
Heating up time		h /min	TBD	TBD	TBD
Water Heating	Declared load profile	-	TBD	TBD	TBD
	Energy efficiency Class	-	TBD	TBD	TBD
Water Connections	Water Flow Rate (Std)[H/C]		LPM	TBD	TBD
	Water Pressure (Max)		bar	3	3
	Water pipe (To outdoor unit)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (DHW)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	22	22
		Outlet	Φ, mm	22	22
	Water pipe (Secondary water return, Only 260L)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	22	22
	Leaving Water Temperature	Heating	°C	15~75	15~75
		Cooling	°C	5~25	5~25
DHW Tank	Nominal Water Volume		liter	200	260
	Net Water Volume		liter	194	254
	Material		-	SUS 316L	SUS 316L
	Max. water pressure		bar	10	10
	Max. water temperature		°C	70	70
	Immersion heater (= booster heater)		kW	3 (230V)	3 (230V)
	Insulation		-	PU Foam	PU Foam
Water Pump	Type		-	Centrifurugal (GPA 25-9H)	Centrifurugal (GPA 25-9H)
	Motor Input		W	100	100
	Number of Unit		EA	1	1
Backup Heater	Power		kW	2 (230V)	2 (230V)
	Thermostat		°C	85±4	85±4
	Thermostat (Thermal Fuse)		°C	98 +0 -5	98 +0 -5
Safety device	Pressure relief valve		bar	2.9	2.9
	Flow Sensor		LPM	5~60	5~60
	Temperature & Pressure relief valve(Tank)		bar, °C	7, 90	7, 90
	Thermostat (for immersion heater)		°C	80 ±5 (Auto) 90 ±5 (Manual)	80 ±5 (Auto) 90 ±5 (Manual)

3. Tank integrated hydro unit

3-1. Specifications

Model Name			Indoor Unit	AE260CNWMEG/EU	AE260CNWMEG/EU	AE260CNWMEG/EU
			Outdoor Unit	AE080CXYDEK/EU	AE120CXYDEK/EU	AE160CXYDEK/EU
Expansion vessel	Internal water volume		liter	8	8	8
	Working pressure		MPa	0.3	0.3	0.3
Water Pump (Primary)	Type		-	BLDC Inv	BLDC Inv	BLDC Inv
	Max static pressure		mAq	9.0	9.0	9.0
Water Heat Exchanger	Type		-	Braszed Plate Exchager	Braszed Plate Exchager	Braszed Plate Exchager
	Quantity		EA	1	1	1
	Internal water volume		L	1.01(Water Side) 0.98(Refrigerant Side)	1.01(Water Side) 0.98(Refrigerant Side)	1.01(Water Side) 0.98(Refrigerant Side)
	Water flow rate	Min.	L/min	12	7	12
		Max.	L/min	58	48	58
Insulation material			-	PE-FOAM	PE-FOAM	PE-FOAM
IP Class			-	IPX1	IPX1	IPX1
Air Purge Valve			Φ, inch	BSPP male 3/8	BSPP male 3/8	BSPP male 3/8
Sound Level	Sound Pressure Level	Heating	dB(A)	26	30	30
		Cooling	dB(A)	26	30	30
	Sound Power Level	Heating	dB(A)	40	44	44
Casing	Color		-	Earth brown	Earth brown	Earth brown
	Material		-	Poweder coated Electro galvanized steel	Poweder coated Electro galvanized steel	Poweder coated Electro galvanized steel
Packing	Material		-	EPS/BOX	EPS/BOX	EPS/BOX
	Packing Weight		kg	12.0	12.0	12.0
External Dimension	Net Weight		kg	128.0	136.0	136.0
	Shipping Weight		kg	140.0	148.0	148.0
	Net Dimensions (WxHxD)		mm	595 x 1,800 x 700	595 x 1,800 x 700	595 x 1,800 x 700
	Shipping Dimensions (WxHxD)		mm	700 x 2,000 x 780	700 x 2,000 x 780	700 x 2,000 x 780

NOTE

- Specifications may be subject to change without prior notice.

3. Tank integrated hydro unit

3-1. Specifications

Model Name			Indoor Unit	AE260CNWMGG/EU	AE260CNWMGG/EU	AE260CNWMGG/EU
			Outdoor Unit	AE080CXYDGK/EU	AE120CXYDGK/EU	AE160CXYDGK/EU
Mode			-	Heat Pump (A2W)	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply			Φ, #, V, Hz	1,2,220-240,50 3,4,380-415,50	1,2,220-240,50 3,4,380-415,50	1,2,220-240,50 3,4,380-415,50
Power input	Cooling (Nominal)		kW	3Φ - / 1Φ 0.20	3Φ - / 1Φ 0.20	3Φ - / 1Φ 0.20
	Heating (Nominal)		kW	3Φ - / 1Φ 0.20	3Φ - / 1Φ 0.20	3Φ - / 1Φ 0.20
	Cooling (Max)		kW	3Φ - / 1Φ 0.20	3Φ - / 1Φ 0.20	3Φ - / 1Φ 0.20
	Heating (Max)		kW	3Φ 6.00 / 1Φ 3.20	3Φ 6.00 / 1Φ 3.20	3Φ 6.00 / 1Φ 3.20
Current Input	Cooling (Nominal)		A	3Φ - / 1Φ 0.9	3Φ - / 1Φ 0.9	3Φ - / 1Φ 0.9
	Heating (Nominal)		A	3Φ - / 1Φ 0.9	3Φ - / 1Φ 0.9	3Φ - / 1Φ 0.9
	Cooling (Max)		A	3Φ - / 1Φ 0.9	3Φ - / 1Φ 0.9	3Φ - / 1Φ 0.9
	Heating (Max)		A	3Φ 8.7 / 1Φ 14.0	3Φ 8.7 / 1Φ 14.0	3Φ 8.7 / 1Φ 14.0
Field Wiring	MCA		A	3Φ 8.7 / 1Φ 14.0	3Φ 8.7 / 1Φ 14.0	3Φ 8.7 / 1Φ 14.0
	MFA			3Φ 10.9 / 1Φ 17.5	3Φ 10.9 / 1Φ 17.5	3Φ 10.9 / 1Φ 17.5
Heating up time			h /min	TBD	TBD	TBD
Water Heating	Declared load profile		-	TBD	TBD	TBD
	Energy efficiency Class		-	TBD	TBD	TBD
Water Connections	Water Flow Rate (Std)[H/C]		LPM	TBD	TBD	TBD
	Water Pressure (Max)		bar	3	3	3
	Water pipe (To outdoor unit)	Type	-	Straight pipe	Straight pipe	Straight pipe
		Inlet	Φ, mm	28	28	28
		Outlet	Φ, mm	28	28	28
	Water pipe (Space heating)	Type	-	Straight pipe	Straight pipe	Straight pipe
		Inlet	Φ, mm	28	28	28
		Outlet	Φ, mm	28	28	28
	Water pipe (DHW)	Type	-	Straight pipe	Straight pipe	Straight pipe
		Inlet	Φ, mm	22	22	22
		Outlet	Φ, mm	22	22	22
	Water pipe (Secondary water return, Only 260L)	Type	-	Straight pipe	Straight pipe	Straight pipe
		Inlet	Φ, mm	22	22	22
Leaving Water Temperature	Heating	℃	15~75	15~75	15~75	
	Cooling	℃	5~25	5~25	5~25	
DHW Tank	Nominal Water Volume		liter	260	260	260
	Net Water Volume		liter	254	254	254
	Material		-	SUS 316L	SUS 316L	SUS 316L
	Max. water pressure		bar	10	10	10
	Max. water temperature		℃	70	70	70
	Immersion heater (= booster heater)		kW	3 (230V)	3 (230V)	3 (230V)
	Insulation		-	PU Foam	PU Foam	PU Foam
Water Pump	Type		-	Centrifurugal (GPA 25-9H)	Centrifurugal (GPA 25-9H)	Centrifurugal (GPA 25-9H)
	Motor Input		W	100	100	100
	Number of Unit		EA	1	1	1
Backup Heater	Power		kW	6 (3Φ 400V)	6 (3Φ 400V)	6 (3Φ 400V)
	Thermostat		℃	85±4	85±4	85±4
	Thermostat (Thermal Fuse)		℃	98 +0 -5	98 +0 -5	98 +0 -5
Safety device	Pressure relief valve		bar	2.9	2.9	2.9
	Flow Sensor		LPM	5~60	5~60	5~60
	Temperature & Pressure relief valve(Tank)		bar, ℃	7, 90	7, 90	7, 90
	Thermostat (for immersion heater)		℃	80 ±5 (Auto) 90 ±5 (Manual)	80 ±5 (Auto) 90 ±5 (Manual)	80 ±5 (Auto) 90 ±5 (Manual)

3. Tank integrated hydro unit

3-1. Specifications

Model Name			Indoor Unit	AE260CNWMGG/EU	AE260CNWMGG/EU	AE260CNWMGG/EU
			Outdoor Unit	AE080CXYDGK/EU	AE120CXYDGK/EU	AE160CXYDGK/EU
Expansion vessel	Internal water volume		liter	8	8	8
	Working pressure		MPa	0.3	0.3	0.3
Water Pump (Primary)	Type		-	BLDC Inv	BLDC Inv	BLDC Inv
	Max static pressure		mAq	9.0	9.0	9.0
Water Heat Exchanger	Type		-	Braszed Plate Exchager	Braszed Plate Exchager	Braszed Plate Exchager
	Quantity		EA	1	1	1
	Internal water volume		L	1.01(Water Side) 0.98(Refrigerant Side)	1.01(Water Side) 0.98(Refrigerant Side)	1.01(Water Side) 0.98(Refrigerant Side)
	Water flow rate	Min.	l/min	7	12	12
		Max.	l/min	48	58	58
Insulation material			-	PE-FOAM	PE-FOAM	PE-FOAM
IP Class			-	IPX1	IPX1	IPX1
Air Purge Valve			Φ, inch	BSPP male 3/8	BSPP male 3/8	BSPP male 3/8
Sound Level	Sound Pressure Level	Heating	dB(A)	26	30	30
		Cooling	dB(A)	26	30	30
	Sound Power Level	Heating	dB(A)	40	44	44
Casing	Color		-	Earth brown	Earth brown	Earth brown
	Material		-	Poweder coated Electro galvanized steel	Poweder coated Electro galvanized steel	Poweder coated Electro galvanized steel
Packing	Material		-	EPS/BOX	EPS/BOX	EPS/BOX
	Packing Weight		kg	12.0	12.0	12.0
External Dimension	Net Weight		kg	138.0	138.0	138.0
	Shipping Weight		kg	150.0	150.0	150.0
	Net Dimensions (WxHxD)		mm	595 x 1,800 x 700	595 x 1,800 x 700	595 x 1,800 x 700
	Shipping Dimensions (WxHxD)		mm	700 x 2,000 x 780	700 x 2,000 x 780	700 x 2,000 x 780

NOTE

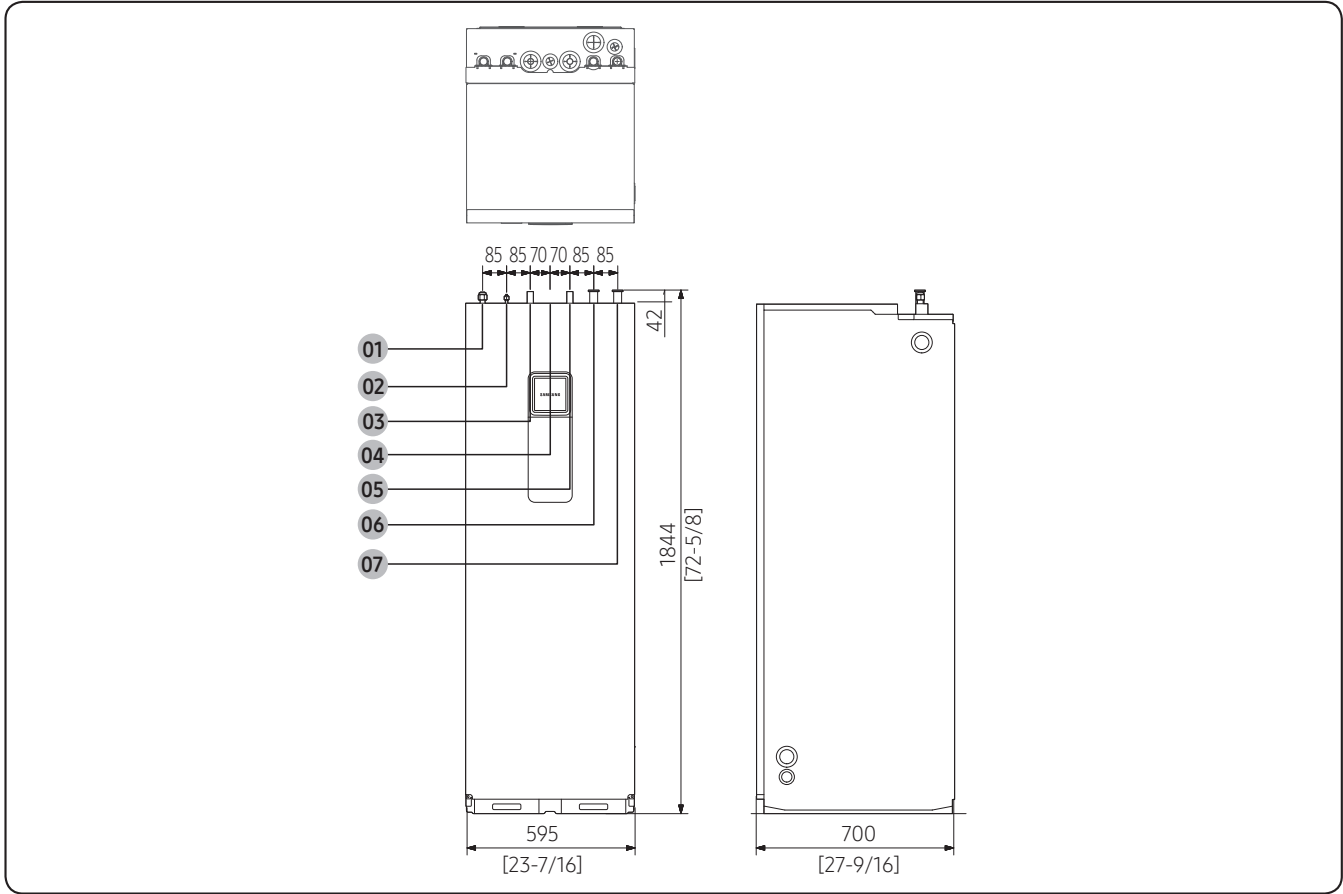
- Specifications may be subject to change without prior notice.

3. Tank integrated hydro unit

3-2. Dimensional drawing

AE200/260CNWM*G/EU

Unit : mm

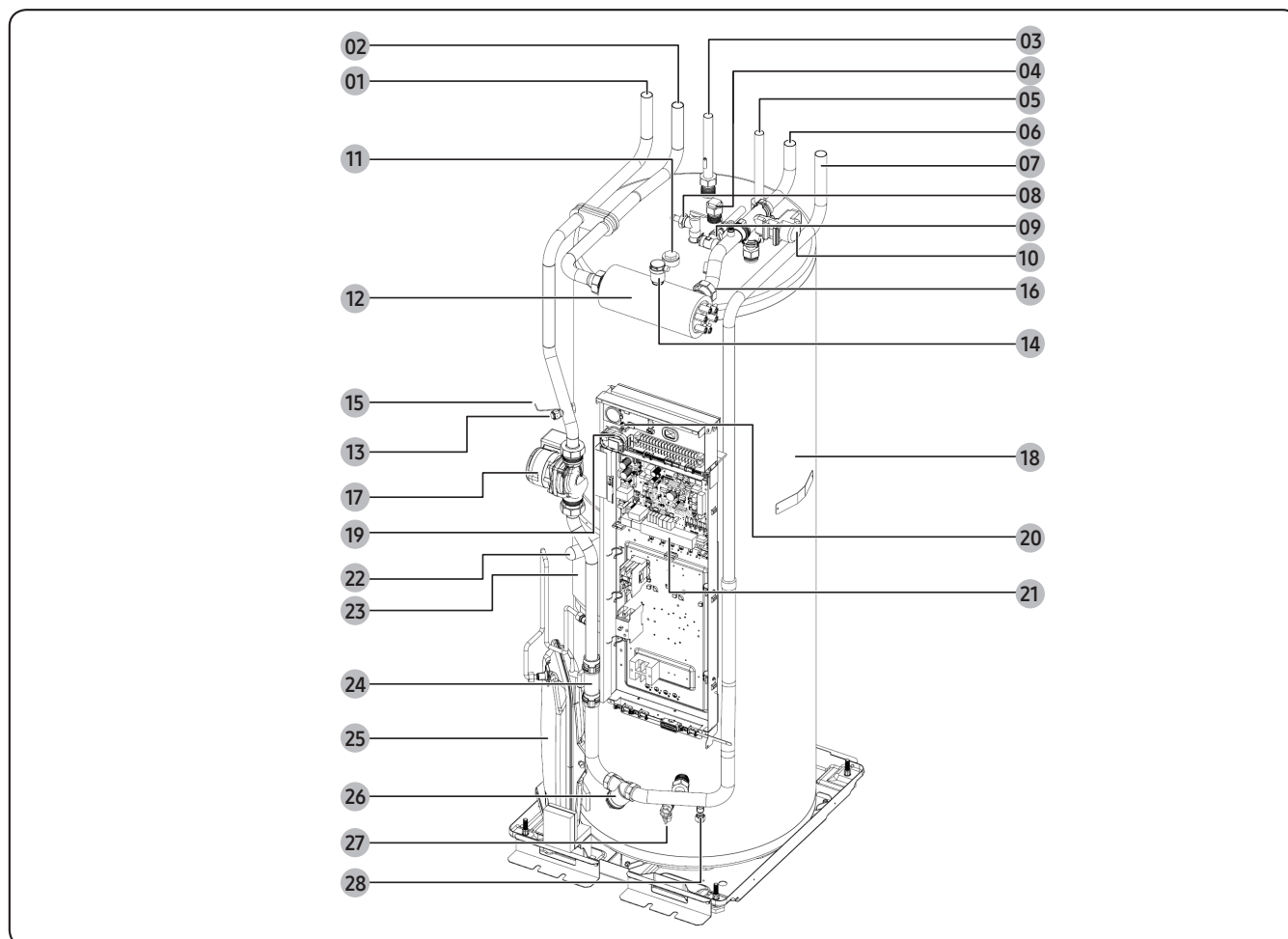


NO	Name	Description
01	Mono outdoor outlet	Ø28, T1.2
02	Mono outdoor inlet	Ø28, T1.2
03	Hot water outlet	Ø22, T1.0
04	Secondary return (260L option)	Ø22, T1.0
05	Cold water inlet	Ø22, T1.0
06	Space heating outlet	Ø28, T1.2
07	Space heating inlet	Ø28, T1.2

3. Tank integrated hydro unit

3-2. Dimensional drawing

Main components

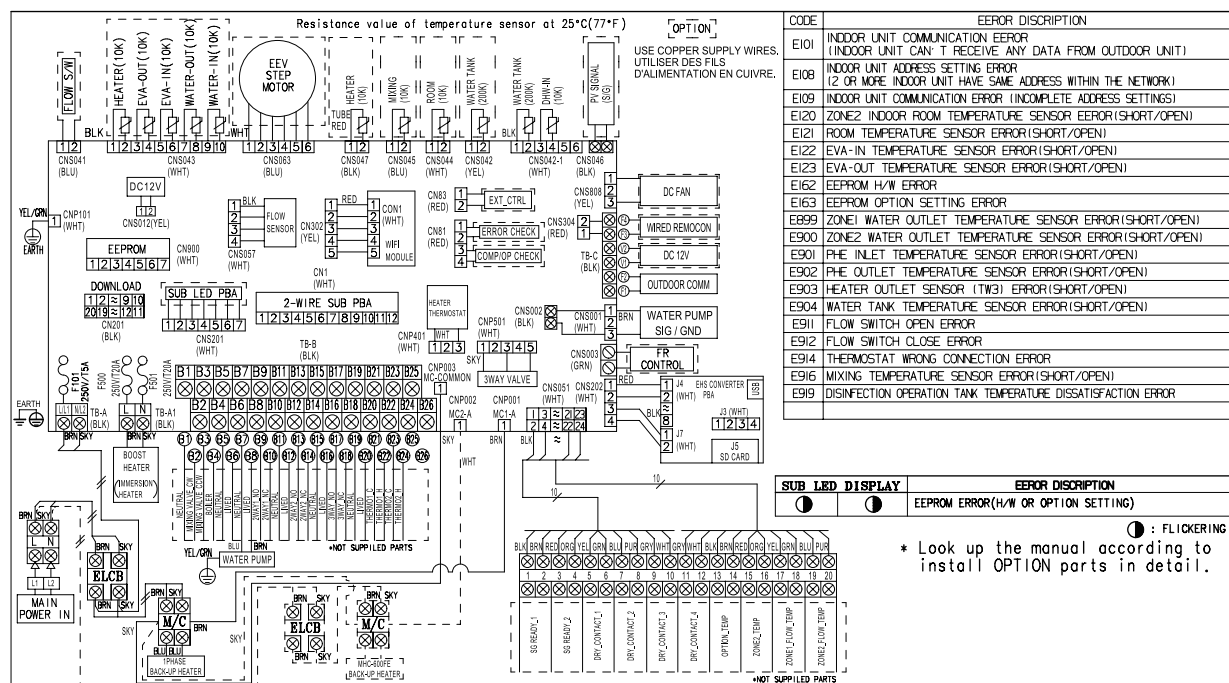


NO	Part name	Note	NO	Part name	Note
01	Water pipe (Return to heat pump)	ø28, Straight pipe	15	Tank thermistor	
02	Water pipe (Flow from heat pump)	ø28, Straight pipe	16	Heater thermistor	
03	Hot water outlet	ø22, Straight pipe	17	Water pump	
04	Secondary return	ø22, Straight pipe (260 L option)	18	Water tank	200 L / 260 L
05	Cold water inlet	ø22, Straight pipe	19	Manometer	0~4 bar
06	Space heating outlet	ø28, Straight pipe	20	S/D converter	
07	Space heating inlet	ø28, Straight pipe	21	Control box	
08	T/P valve	7 bar, 90°C	22	Booster heater	3kW
09	Pressure relief valve	3 bar, BSPP 1/2"	23	Booster heater thermostat	
10	3-way valve		24	Flow sensor	
11	Anode bar	BSPP 1"	25	Expasion vessel	8 L, Pre-charge gas: 0.1 MPa, N2, BSPP 3/8"
12	Back-up heater		26	Strainer	
13	Drain port		27	Tank drain valve	
14	Air vent	BSPP 3/8"	28	Drain port	Primary circuit

3. Tank integrated hydro unit

3-3. Electrical wiring diagram

AE200/260CNWMEG/EU



※ It does not support external input(CNS083)/output(CNS081) signal function

HEATER	Thermistor HEATER(10K)	EVA-OUT	Thermistor EVA-OUT(10K)
EVA-IN	Thermistor EVA-IN(10K)	WATER-OUT	Thermistor WATER-OUT(10K)
WATER-IN	Thermistor WATER-IN(10K)	WATER TANK	Thermistor WATER TANK(200K)
MIXING	Thermistor MIXING VALVE(10K)	DHW-IN	Thermistor DHW-IN (10K)
OUTDOOR COMM	Outdoor Communication	WIRED REMOCON	Wired Remote Controller
ELCB	Earth Leakage Circuit Breaker	SIG/GND	Signal/Ground
		M/C	Magnetic Contactor

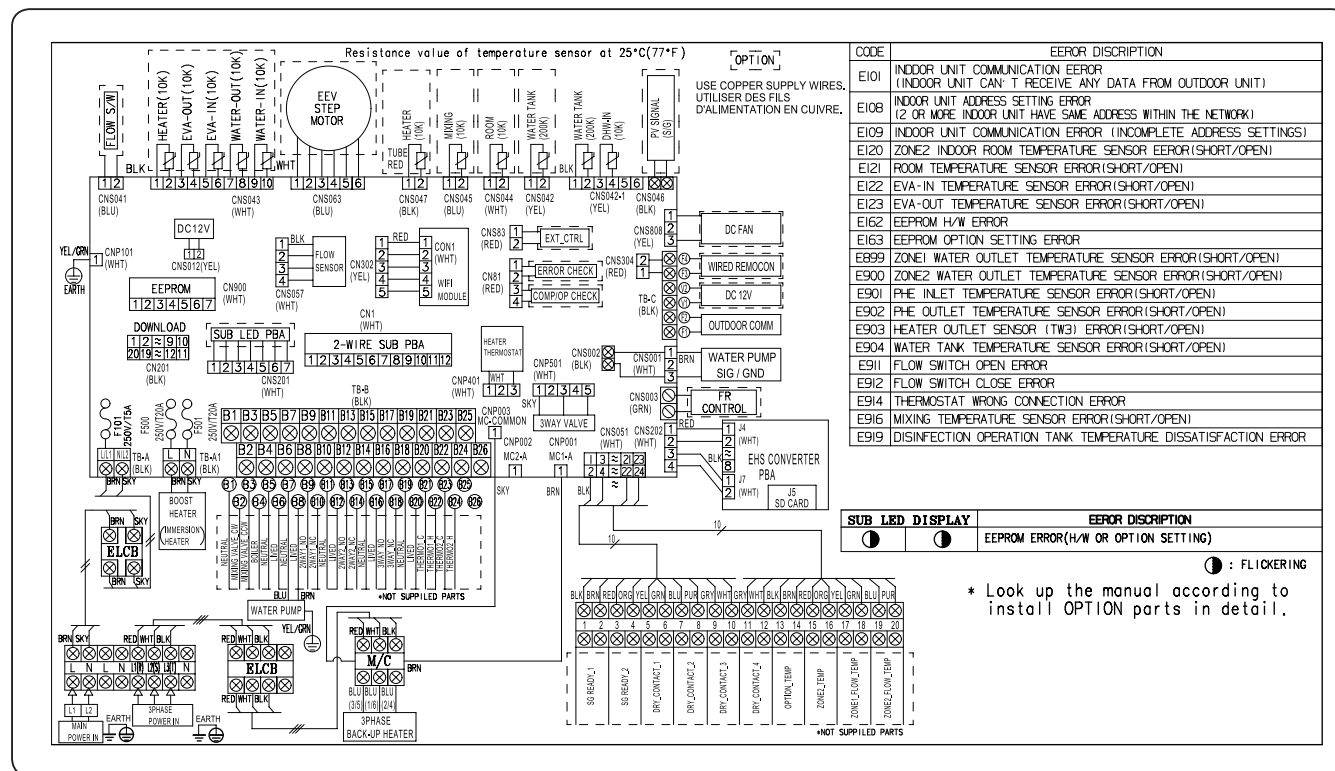
NOTES

1. This wiring diagram applies only to the Indoor unit.
2. Symbols show as follow :
blk: black, red: red, blu: blue, wht: white, yel: yellow, brn: brown, sky: skyblue, grn: green
3. For connection wiring indoor-outdoor transmission F1-F2, indoor-wired remote controller transmission F3-F4.
4. Protective earth(SCREW)

3. Tank integrated hydro unit

3-3. Electrical wiring diagram

AE260CNWMGG/EU



※ It does not support external input(CNS083)/output(CNS081) signal function

HEATER	Thermistor HEATER(10K)	EVA-OUT	Thermistor EVA-OUT(10K)
EVA-IN	Thermistor EVA-IN(10K)	WATER-OUT	Thermistor WATER-OUT(10K)
WATER-IN	Thermistor WATER-IN(10K)	WATER TANK	Thermistor WATER TANK(200K)
MIXING	Thermistor MIXING VALVE(10K)	DHW-IN	Thermistor DHW-IN (10K)
OUTDOOR COMM	Outdoor Communication	WIRED REMOCON	Wired Remote Controller
ELCB	Earth Leakage Circuit Breaker	SIG/GND	Signal/Ground
		M/C	Magnetic Contactor

NOTES

1. This wiring diagram applies only to the Indoor unit.
2. Symbols show as follow :
blk: black, red: red, blu: blue, wht: white, yel: yellow, brn: brown, sky: skyblue, grn: green
3. For connection wiring indoor-outdoor transmission F1-F2, indoor-wired remote controller transmission F3-F4.
4. ⚡ Protective earth(SCREW)

3. Tank integrated hydro unit

3-4. Sound data

Capacity (Liter)	Model	Sound Pressure dB(A) (Heating)	Sound Power dB(A) (Heating)
200	AE200CNWMEG/EU+AE050CXYDEK/EU	26	40
	AE200CNWMEG/EU+AE080CXYDEK/EU	26	40
	AE200CNWMEG/EU+AE120CXYDEK/EU	30	44
	AE200CNWMEG/EU+AE140CXYDEK/EU	30	44
260	AE260CNWM*G/EU+AE080CXYD*K/EU	26	40
	AE260CNWM*G/EU+AE120CXYD*K/EU	30	44
	AE260CNWM*G/EU+AE140CXYD*K/EU	30	44

NOTE

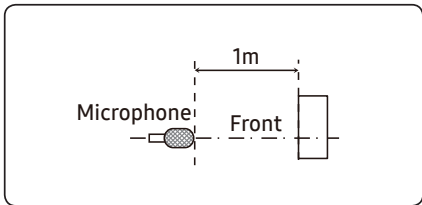
- Specifications may be subject to change without prior notice.
- Sound Pressure Level
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dBA = A-weighted sound pressure level
 - Reference acoustic pressure 0 dB = 20μPa
- Sound Power Level
 - 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.

3. Tank integrated hydro unit

3-4. Sound data

Sound Pressure level

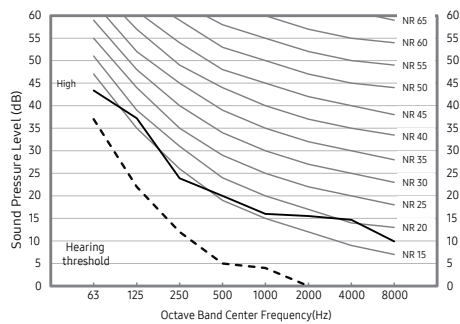
Unit: dB(A)



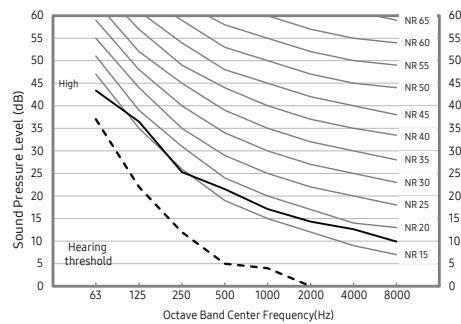
Model	Heating
AE200*NWMEG/EU+AE050CXYDEK/EU	26
AE200*NWMEG/EU+AE080CXYDEK/EU	26
AE200*NWMEG/EU+AE120CXYDEK/EU	30
AE200*NWMEG/EU+AE160CXYDEK/EU	30

• NR Curve

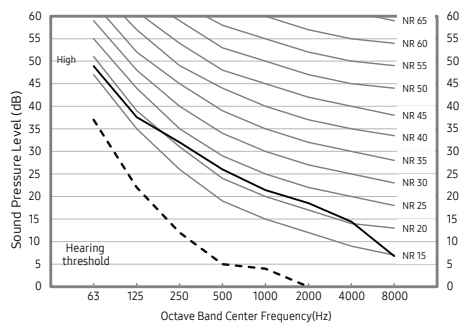
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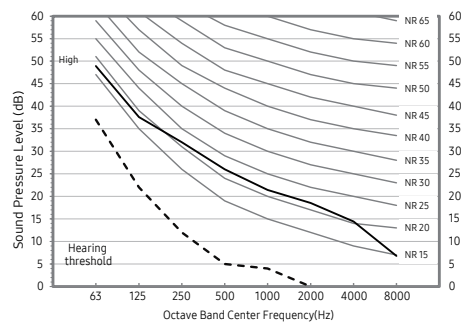
2) AE200*NWMEG/EU+AE080CXYDEK/EU



3) AE200*NWMEG/EU+AE120CXYDEK/EU



4) AE200*NWMEG/EU+AE160CXYDEK/EU



 NOTE

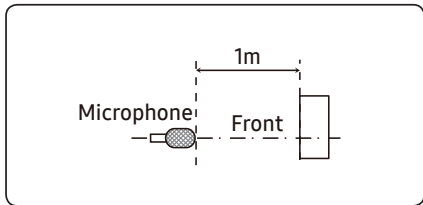
- Specifications may be subject to change without prior notice.
- Sound Pressure Level
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dBA = A weighted sound pressure level
 - Reference acoustic pressure 0 dB = 20μPa

3. Tank integrated hydro unit

3-4. Sound data

Sound Pressure level

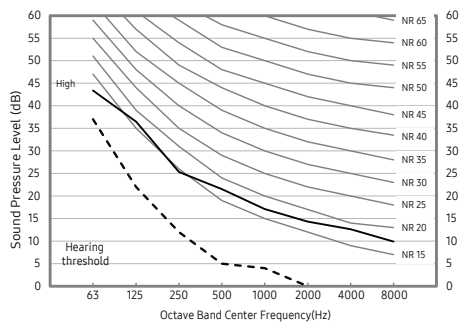
Unit: dB(A)



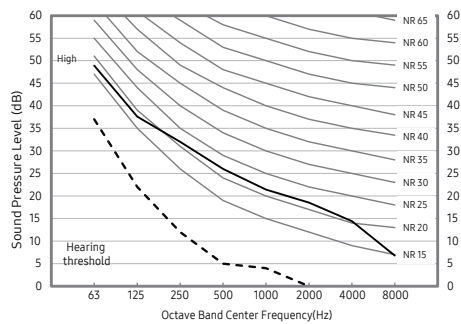
Model	Heating
AE260*NWMEG/EU+AE080CXYDEK/EU	26
AE260*NWMEG/EU+AE120CXYDEK/EU	30
AE260*NWMEG/EU+AE160CXYDEK/EU	30

- NR Curve

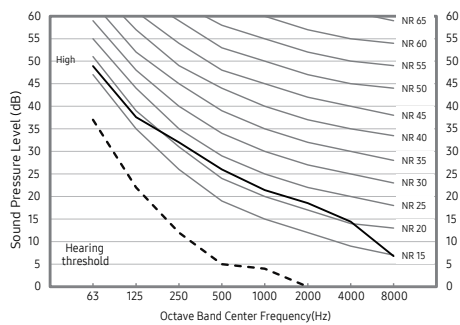
1) AE260*NWMEG/EU+AE080CXYDEK/EU



2) AE260*NWMEG/EU+AE120CXYDEK/EU



3) AE260*NWMEG/EU+AE160CXYDEK/EU



NOTE

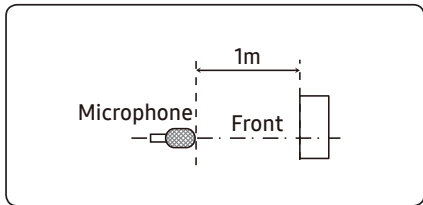
- Specifications may be subject to change without prior notice.
- Sound Pressure Level
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
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 - Reference acoustic pressure 0 dB = 20μPa

3. Tank integrated hydro unit

3-4. Sound data

Sound Pressure level

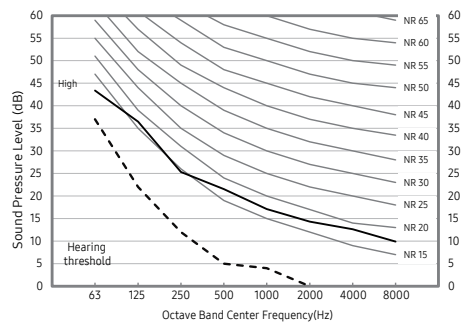
Unit: dB(A)



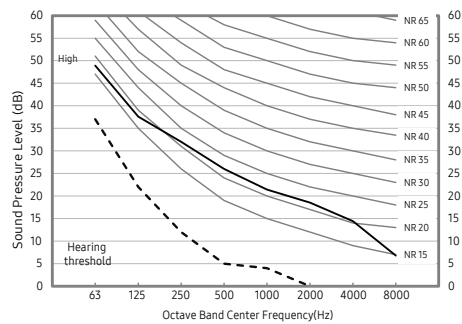
Model	Heating
AE260*NWMGG/EU+AE080CXYDGK/EU	26
AE260*NWMGG/EU+AE120CXYDGK/EU	30
AE260*NWMGG/EU+AE160CXYDGK/EU	30

- NR Curve

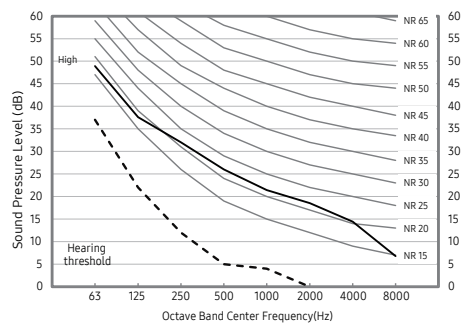
1) AE260*NWMGG/EU+AE080CXYDGK/EU



2) AE260*NWMGG/EU+AE120CXYDGK/EU



3) AE260*NWMGG/EU+AE160CXYDGK/EU



NOTE

- Specifications may be subject to change without prior notice.
- Sound Pressure Level
 - 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 = 20μPa

3. Tank integrated hydro unit

3-4. Sound data

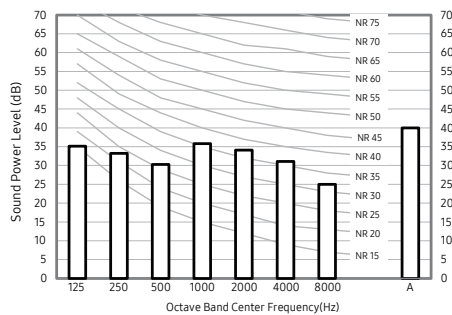
Sound Power level

NOTE

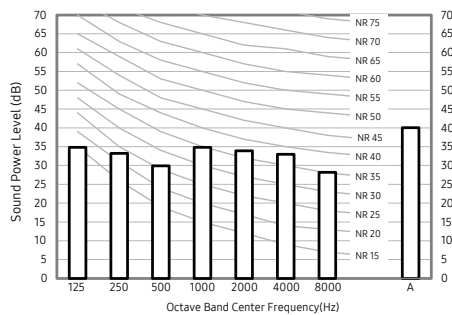
- Specifications may be subject to change without prior notice
 - Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

Model	Power (dBA)
AE200*NWMEG/EU + AE050CXYDEK/EU	40
AE200*NWMEG/EU + AE080CXYDEK/EU	40
AE200*NWMEG/EU + AE120CXYDEK/EU	44
AE200*NWMEG/EU + AE160CXYDEK/EU	44

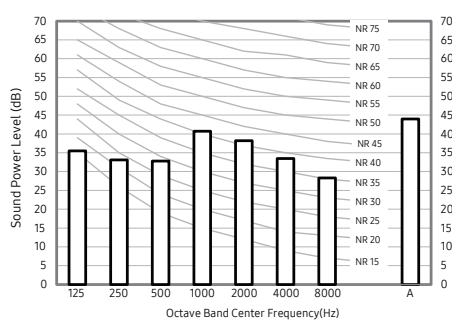
1) AE200*NWMEG/EU+AE050CXYDEK/EU



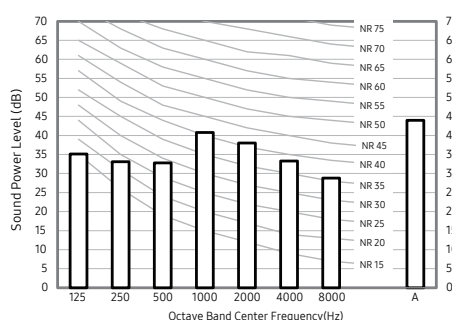
2) AE200*NWMEG/EU+AE080CXYDEK/EU



3) AE200*NWMEG/EU+AE120CXYDEK/EU



4) AE200*NWMEG/EU+AE160CXYDEK/EU



3. Tank integrated hydro unit

3-4. Sound data

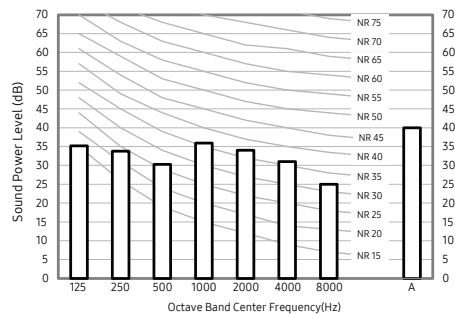
Sound Power level

NOTE

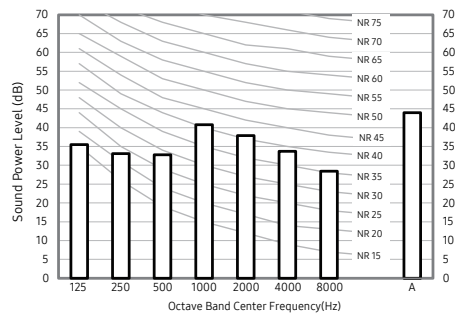
- Specifications may be subject to change without prior notice
 - Sound power level is an absolute value that a sound source generates.
 - dB(A) = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

Model	Power (dBA)
AE260*NWMEG/EU + AE080CXYDEK/EU	40
AE260*NWMEG/EU + AE120CXYDEK/EU	44
AE260*NWMEG/EU + AE160CXYDEK/EU	44

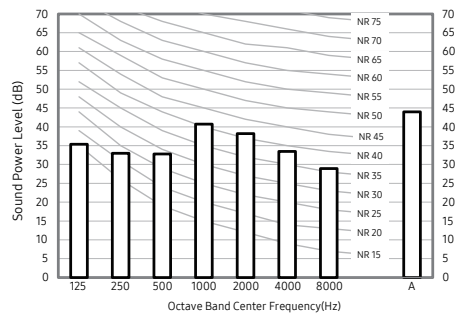
1) AE260*NWMEG/EU+AE080CXYDEK/EU



2) AE260*NWMEG/EU+AE120CXYDEK/EU



3) AE260*NWMEG/EU+AE160CXYDEK/EU



3. Tank integrated hydro unit

3-4. Sound data

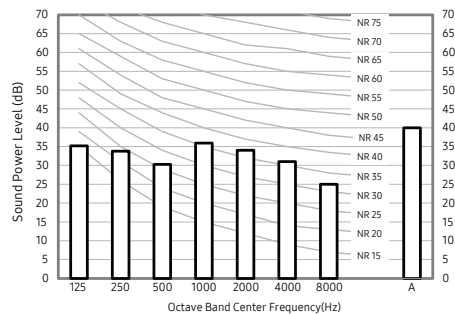
Sound Power level

NOTE

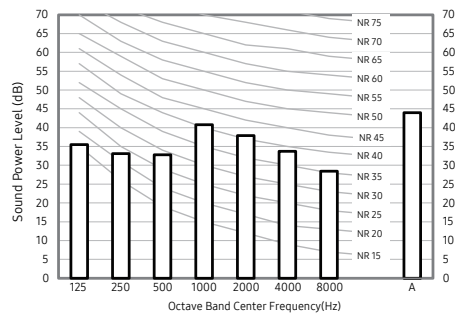
- Specifications may be subject to change without prior notice
 - Sound power level is an absolute value that a sound source generates.
 - dB(A) = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

Model	Power (dBA)
AE260*NWMEG/EU + AE080CXYDEK/EU	40
AE260*NWMEG/EU + AE120CXYDEK/EU	44
AE260*NWMEG/EU + AE160CXYDEK/EU	44

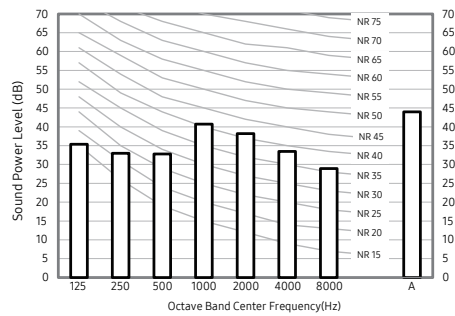
1) AE260*NWMGG/EU+AE080CXYDGK/EU



2) AE260*NWMGG/EU+AE120CXYDGK/EU



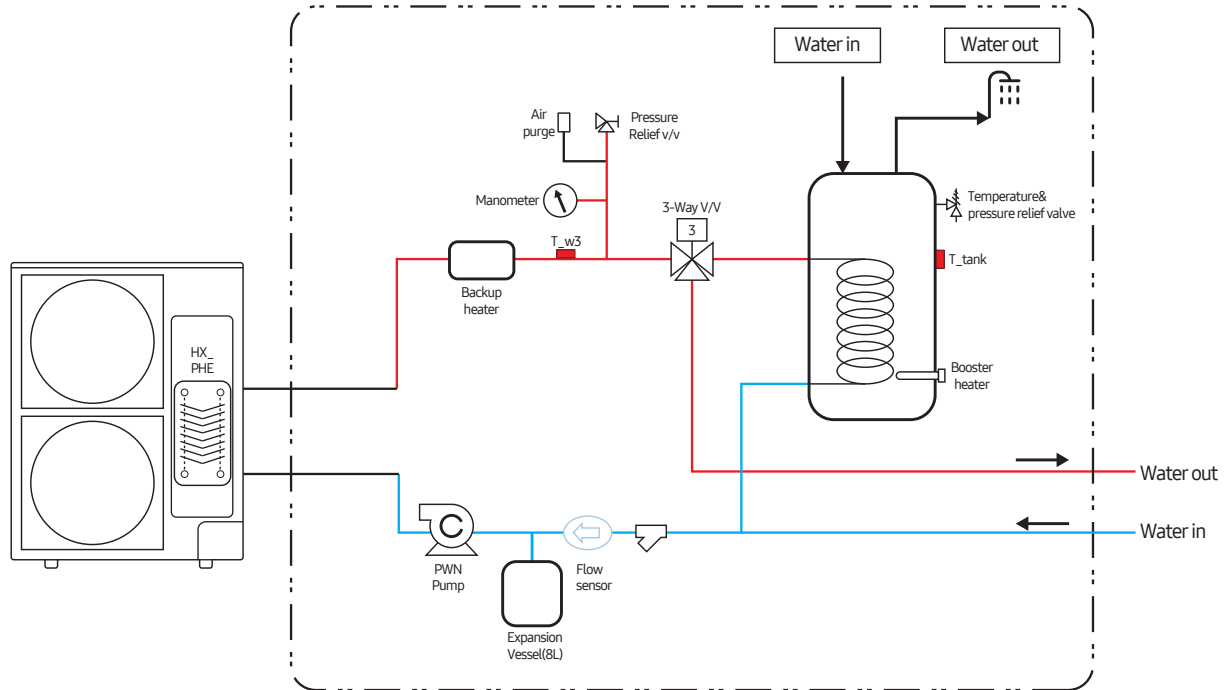
3) AE260*NWMGG/EU+AE160CXYDGK/EU



3. Tank integrated hydro unit

3-5. Piping diagram

AE200/260CNWM*G/EU



4. Installation

Tank integrated hydro unit

TBD



2023. 06
Ver.1.0

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