

SAMSUNG

EHS

Technical Data Book

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



Model : Outdoor unit (AE***CXD*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	
Ver.1.1	Updated the final Specification	23. 08. 17	
Ver.1.2	Updated the Control kit Specification	23. 11. 30	

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)
---	-----------------

Features & Benefits

EHS Mono R290



Highlights



R290 Refrigerant

The natural R290 refrigerant helps conserve the ozone layer and has less impact on global warming.



Hot Water Temperature of up to 75°C

Enjoy a consistent supply of extremely hot water of up to 75°C.

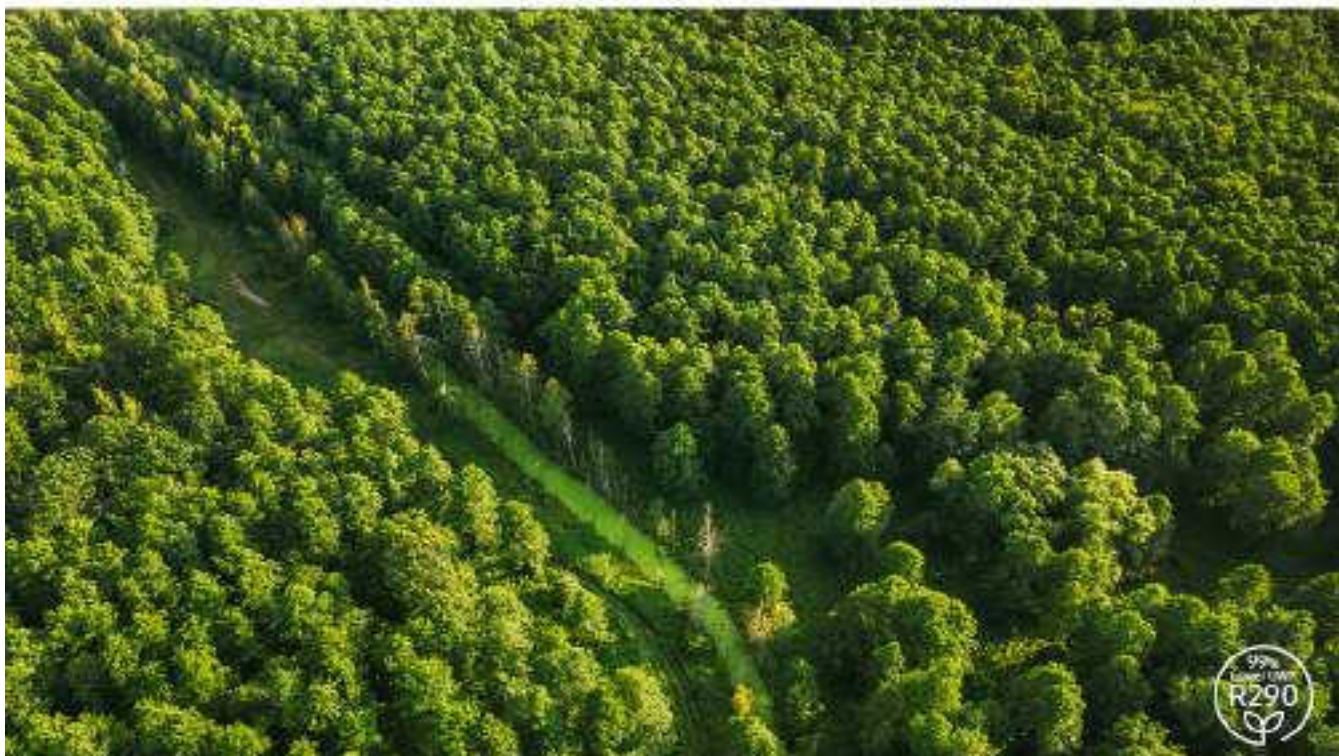


Low Sound Level of 35dB(A)

Make less noise whenever you need.

Features & Benefits

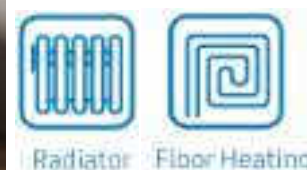
EHS Mono R290



R290 Refrigerant

The natural R290 refrigerant has an Ozone Depletion Potential (ODP) of zero and a Global Warming Potential (GWP) of 3, which is lower than conventional R32 or R410A refrigerants*. It also has a reinforced design with 5 layers of safety features to reduce the risks of using the R290 refrigerant.

* GWP by refrigerant: R290 = 3, R32 = 675, R410A = 2088.



Creates extremely hot water – up to 75°C

Enjoy a supply of extremely hot leaving water of up to 75°C*, which enables effective convection heating and provides sanitary water. It improves energy efficiency**, as it can supply sanitary water of up to 70°C*** using only a Heatpump. And it is hot enough to kill Legionella bacteria****.

* Leaving water temperature from an outdoor unit is 75°C when the outdoor temperature is -10~35°C. Sanitary water leaving a DHW tank is 70°C when the outdoor temperature is -10~43°C. Results may vary depending on the actual usage conditions.

** Based on internal testing compared to a conventional model AE***RXYD*G/EU.

*** Leaving water temperature of sanitary hot water, when the outdoor temperature is between -10~43°C. If the outdoor temperature is lower than -10°C, a Booster Heater is required. Results may vary depending on the actual usage conditions.

**** Sanitary hot water should be stored at 60°C or higher in order to kill Legionella bacteria.

Features & Benefits

EHS Mono R290



Adjustable, 4-step, low-noise operation Low Sound Level of 35dB(A)

Make less noise whenever you need. The 4-Step Quiet mode* enables adjustable low-noise operation to meet the noise level regulations in European countries. Simply select from four different steps and reduce the sound level by 3dB, 5dB, 7dB or keep it as low as 35dB(A)*** to reduce disturbance.

* The heating performance may be reduced when operating in Quiet mode.

** The Technical Instructions on Noise Abatement (German: TA-Lärm) contain regulations for protecting the general public or neighborhood from noise emissions.

*** Based on internal testing. The noise level is measured 3m away from the front of the outdoor unit. Results may vary depending on environmental factors and individual use.

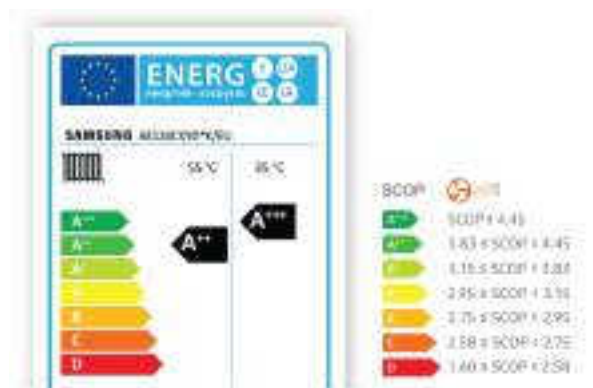
Enhanced efficiency High Efficiency (SCOP A+++)

Enjoy consistently high energy savings. It has an enhanced Seasonal Coefficient of Performance (SCOP) A+++ energy efficiency rating across the whole range of capacities*. It has been increased by up to 14%** compared to conventional models and is up to 15% more than the A+++ rating criteria***.

* Based on internal testing when generating 35°C water, in accordance with EN14825. Results may vary depending on the system configuration and actual usage conditions.

** Based on internal testing when generating 35°C water using an EHS R290 Mono 5kW model, AE050CXYDEK/EU (SCOP: 5.10), compared to an EHS R32 Mono model of the same capacity, AE050RXYDEG/EU (SCOP: 4.46).

*** Based on internal testing when generating 35°C water using an EHS R290 Mono 5kW model, AE050CXYDEK/EU (SCOP: 5.10), compared to the criteria of A+++, SCOP ≥ 4.45.



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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

Type \ Capacity	200 L	260 L
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)		Heat Pump (A2W)		
	Performance	Capacity	Heating	A2W Condition #1. (A7/W35) ^{1)*}	W	5,000		8,000			
				Btu/h	17,100		27,300				
					W	5,000		8,000			
						5,000		8,000			
						5,000		8,000			
			A-7/W35 ^{4)*}			8,000		8,000			
			Cooling	A2W Condition #1. (A35/W18) ^{1)*}	W	5,000		8,000			
				Btu/h	17,100		27,300				
					W	3,900		5,700			
			Power	Power Input	Heating	A2W Condition #1. (A7/W35) ^{1)*}	W	980		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. (A35/W18) ^{1)*}			W	1,280		2,050			
		A2W condition #2				1,279		1,900			
		Current Input				Heating	A2W Condition #1.	A	4.63		7.70
	Cooling				A2W condition #2	A	6.05		9.69		
	Heating						6.24		10.21		
	Current	MCA					A	16.1		26.0	
				MFA				A	17.6		28.6
	Efficiency	COP (Nominal Heating) A2W condition #1				5.10			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		4.20				
			A-7/W35 ^{4)*}		3.00		3.00				
		PdesignH (LWT 35°C)				5,500		8,000			
		PdesignH (LWT 55°C)				5,500		8,000			
		SCOP (35°C)				5.10		4.85			
		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			
				Cooling	°C	5		5			
	°C				25		25				
	Refrigerant	Type				-	R290		R290		
		Factory Charging				g	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	986/957/928
		Rows	Quantity	EA	2	3
		Fin pitch		mm	1.5	1.5
		Passes	Quantity	EA	6-6	9-9
		Face area		m²	0.79	0.79
		Stages	Quantity	EA	38	38
		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	52	65
			Cooling	m³/min	55	69
		Quantity		EA	1	1
	Fan motor	Quantity		EA	1	1
		Model		-	FMDC531SSJ	FMDC531SSJ
		Output		W	125	125
		Drive		-	Direct drive	Direct drive
		Speed	Steps	-	-	-
			Heating	rpm	550	720
			Cooling	rpm	580	760
	Sound Level	Sound Pressure Level	Heating	dB(A)	41	45
			Cooling	dB(A)	41	45
			Night Mode(3m)	dB(A)	35	35
		Sound Power Level	Heating	dB(A)	55	59
			Cooling	dB(A)	55	59
	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	13
	External Dimension	Net Weight		kg	86	98
		Shipping Weight		kg	96	108
		Net Dimensions (WxHxD)		mm	998x850x500	998x850x500
		Shipping Dimensions (WxHxD)		mm	1,070x1,018x630	1,070x1,018x630
	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				AE200CNWMEG/EU		AE200CNWMEG/EU		AE260CNWMEG/EU			
		Outdoor Unit				AE120CXYDEK/EU		AE160CXYDEK/EU		AE080CXYDEK/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/W35) ^{1)*}	W	12,000		16,000		8,000			
					Btu/h	40,900		54,600		27,300			
				A2W condition #2	W	12,000		16,000		8,000			
				A2W condition #3		12,000		16,000		8,000			
				A2/W35 ^{4)*}		12,000		16,000		8,000			
			A-7/W35 ^{4)*}	12,000		16,000		8,000					
			Cooling	A2W Condition #1. (A35/W18) ^{1)*}	W	12,000		14,000		8,000			
					Btu/h	40,900		47,800		27,300			
				A2W condition #2	W	9,000		10,400		5,700			
			Power	Power Input	Heating	A2W Condition #1. (A7/W35) ^{1)*}	W	2,500		3,550		1,630	
	A2W condition #2	3,240				4,570		2,160					
	A2W condition #3	4,000				5,520		2,670					
	A2/W35 ^{4)*}	2,790				4,100		1,900					
	A-7/W35 ^{4)*}	4,000				5,710		2,670					
	Cooling	A2W Condition #1. (A35/W18) ^{1)*}			W	3,000		3,680		2,050			
						3,103		3,586		1,900			
		A2W condition #2				11.81		16.78		7.70			
	Current Input	Heating			A2W Condition #1.	A	14.18		17.39		9.69		
		Cooling			A2W condition #2		A	15.31		21.60		10.21	
		Heating		A	18.90			26.09		12.62			
		Cooling			32.0		32.0		26.0				
	Current	MCA		A	35.2		35.2		28.6				
		MFA		A	35.2		35.2		28.6				
	Efficiency	COP		COP (Nominal Heating) A2W condition #1				4.80		4.51		4.91	
				EER (Nominal Cooling) A2W condition #1				4.00		3.80		3.90	
				EER (Nominal Cooling) A2W condition #2				2.90		2.90		3.00	
					A2W condition #2	W/W	3.70		3.50		3.70		
			3.00				2.90		3.00				
			4.30				3.90		4.20				
			3.00				2.80		3.00				
			PdesignH (LWT 35°C)				12,000		15,500		8,000		
			PdesignH (LWT 55°C)				12,000		14,500		8,000		
			SCOP (35°C)				4.90		4.70		4.85		
			SCOP (55°C)				3.65		3.55		3.55		
			SCOP Class (35°C)				A+++		A+++		A+++		
			SCOP Class (55°C)				A++		A++		A++		
			SEER				4.80		5.00		4.30		
		Water Connections	Water Flow Rate (Nominal)		Heating	LPM	34.6		46.2		23.1		
					Cooling	LPM	34.6		40.4		21.6		
			Water Flow Rate		Min	LPM	7		7		7		
					Max	LPM	58		58		48		
			Water Pressure (Max)				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				g	1,250		1,250		870				
				tCO ₂ e	0.00375		0.00375		0.00255				
Control Method				-	EEV		EEV		EEV				
Outdoor Unit	Compressor	Type				-	Scroll		Scroll		Rotary		
		Model Name				-	DS4HC5066FNA		DS4HC5066FNA		UF5HC5260FEX		
		Oil		Type		-	Kixx RF P85		Kixx RF P85		Mineral		
				Initial Charge		cc	1,100		1,100		850		
		Quantity				EA	1		1		1		
		Output				W	3,803		3,803		2,236		
		Starting method				-	Inverter driven		Inverter driven		Inverter driven		
		Motor	Crankcase heater	Output		W	-		-		-		

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	1,239/1,210/1,182	1,239/1,210/1,182	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	65
			Cooling	m³/min	90	90	69
	Fan motor	Quantity		EA	1	1	1
		Quantity		EA	1	1	1
		Model		-	SIC-88FWJ-F1122-1	SIC-88FWJ-F1122-1	FMDC531SSJ
		Output		W	122	122	125
		Drive		-	Direct drive	Direct drive	Direct drive
		Speed	Steps	-	-	-	-
			Heating	rpm	590	590	720
	Cooling		rpm	560	580	760	
	Sound	Sound Pressure	Heating	dB(A)	47	51	45
			Cooling	dB(A)	47	51	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	154	154	108
		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		
					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		16,000		
			A-7/W35 ^{4)*}	12,000		16,000				
			Cooling	A2W Condition #1. (A35/W18) ^{1)*}	W	12,000		14,000		
					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
						3,240		4,570		
	A2W condition #2	4,000				5,520				
	A2/W35 ^{4)*}	2,790				4,100				
	A-7/W35 ^{4)*}	4,000				5,710				
	Cooling	A2W Condition #1. (A35/W18) ^{1)*}			W	3,000		3,680		
							3,103		3,586	
		A2W condition #2				11.81		16.78		
	Current Input	Heating			A2W Condition #1.	A	14.18		17.39	
		Cooling					15.31		21.60	
		Heating		A2W condition #2	A	18.90		26.09		
		Cooling				32.0		32.0		
	Current	MCA			A	35.2		35.2		
		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		3.90	
					A-7/W35 ^{4)*}		3.00		2.80	
					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		3.55		
		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)				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			g	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		

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	1,239/1,210/1,182	1,239/1,210/1,182
		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	94
		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	580
	Sound Level	Sound Pressure Level	Heating	dB(A)	47	51
			Cooling	dB(A)	47	51
			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	154	154
		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				
				Btu/h	27,300	40,900	54,600					
					W	8,000	12,000	16,000				
						8,000	12,000	16,000				
						8,000	12,000	16,000				
			A-7/W35 ^{4)*}	8,000		12,000	16,000					
				Cooling	A2W Condition #1. (A35/W18) ^{1)*}	W	8,000	12,000	14,000			
					Btu/h	27,300	40,900	47,800				
						A2W condition #2	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	4,100		
	A-7/W35 ^{4)*}	2,670				4,000		5,710				
	Cooling	A2W Condition #1. (A35/W18) ^{1)*}			W	2,050	3,000	3,680				
		A2W condition #2				1,900	3,103	3,714				
		Current Input				Heating	A2W Condition #1.	A	2.56	3.92	5.57	
						Cooling	A2W condition #2		A	3.39	5.08	7.17
						Heating				4.19	6.28	8.66
	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	3.80				
		EER (Nominal Cooling) A2W condition #2				3.00	2.90	2.90				
		COP				A2W condition #2	W/W	3.70	3.70	3.50		
						A2W condition #3		3.00	3.00	2.90		
						A2/W35 ^{4)*}		4.20	4.30	3.90		
						A-7/W35 ^{4)*}		3.00	3.00	2.80		
						PdesignH (LWT 35°C)				8,000	12,000	15,500
		PdesignH (LWT 55°C)				8,000	12,000	15,500				
		SCOP (35°C)				4.85	4.90	4.70				
		SCOP (55°C)				3.55	3.65	3.55				
		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			g	870	1,250	1,250				
					tCO ₂ e	0.00255	0.00375	0.00375				
Control Method			-	EEV	EEV	EEV						
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	1,239/1,210/1,182
		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	65	95
			Cooling	m ³ /min	69	94
		Quantity		EA	1	1
	Fan motor	Quantity		EA	1	1
		Model		-	FMD531SSJ	SIC-88FWJ-F1122-1
		Output		W	125	122
		Drive		-	Direct drive	Direct drive
		Speed	Steps	-	-	-
			Heating	rpm	720	590
			Cooling	rpm	760	580
	Sound Level	Sound Pressure Level	Heating	dB(A)	45	51
			Cooling	dB(A)	45	51
			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	108	154
		Net Dimensions (WxHxD)		mm	998x850x500	1,270x1,018x530
		Shipping Dimensions (WxHxD)		mm	1,070x1,018x630	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	4.63	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

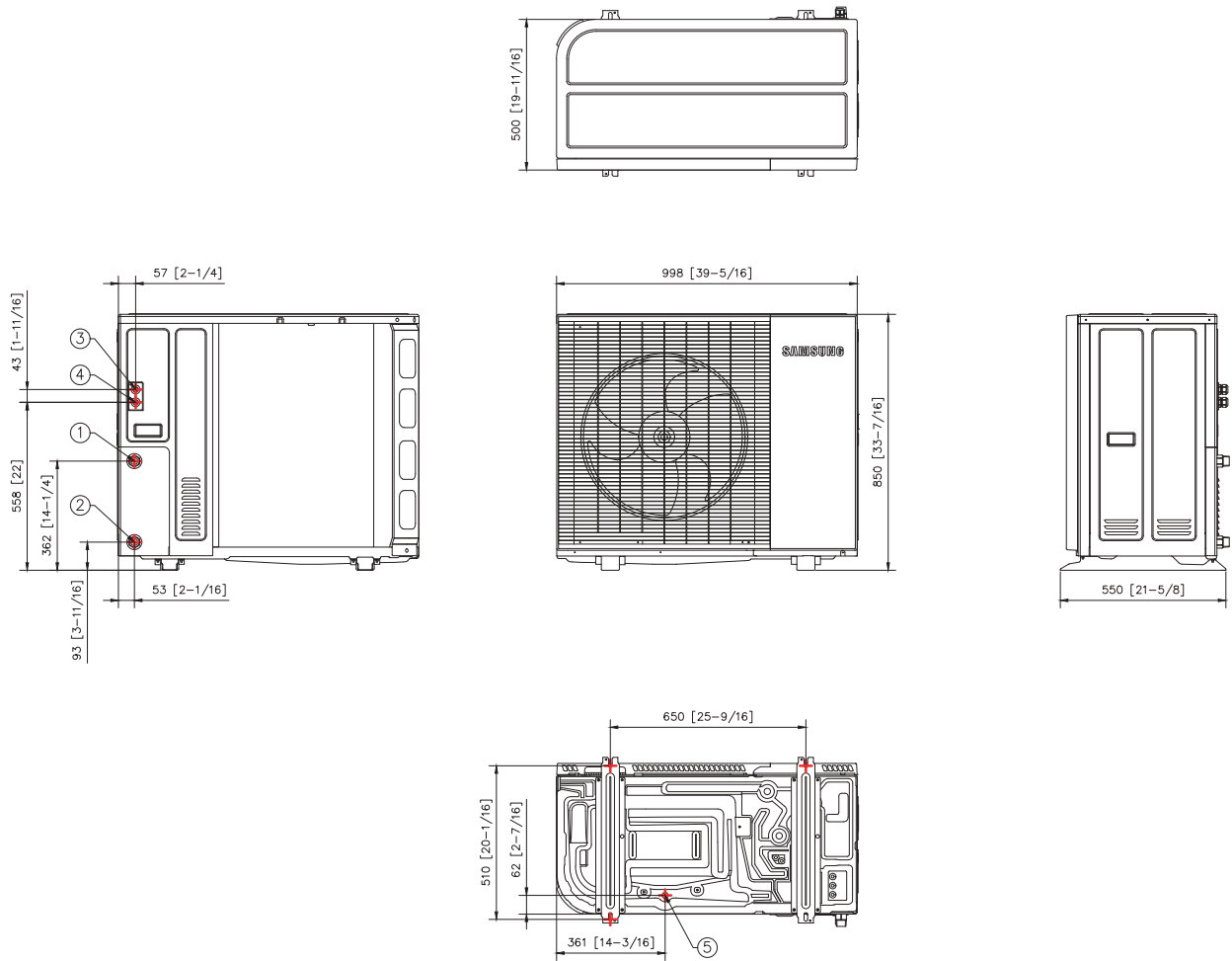
- MCA : Minimum circuit amperes
- MFA : Maximum fuse amperes
- Select wire size based on the value of MCA

2. Outdoor Units

2-3. Dimensional drawing

AE050CXYDEK/EU, 080CXYD*K/EU

Units : mm [inches]



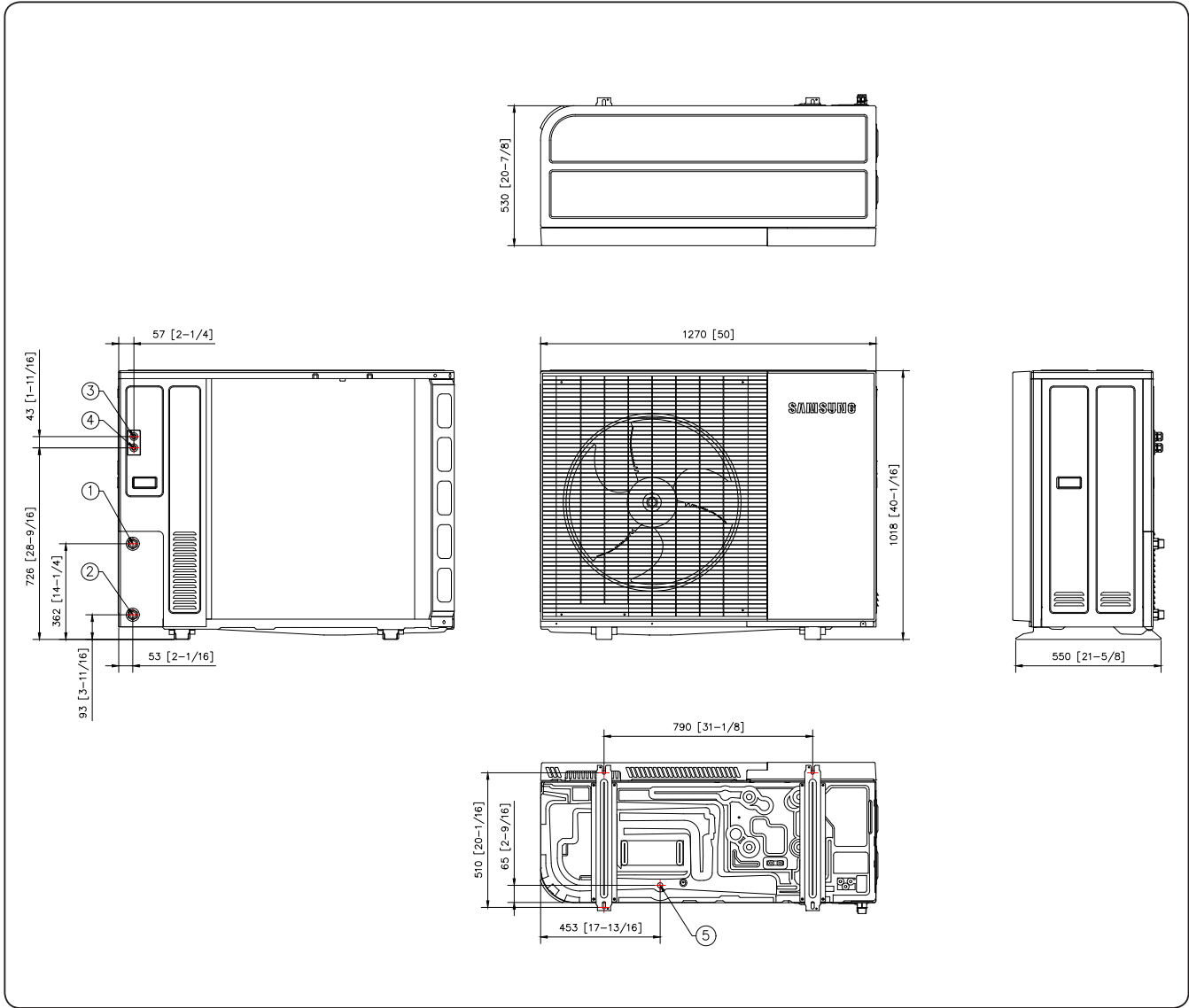
NO	Name	Description
1	Water Pipe(Out)	25A
2	Water Pipe(In)	25A
3	Power wiring conduit	M25x1.5 (Cable gland)
4	Communication wiring conduit	M25x1.5 (Cable gland)
5	Drain holes	Ø20 (connect with the provided drain plug)

2. Outdoor Units

2-3. Dimensional drawing

AE120/160CXVD*K/EU

Units : mm [inches]



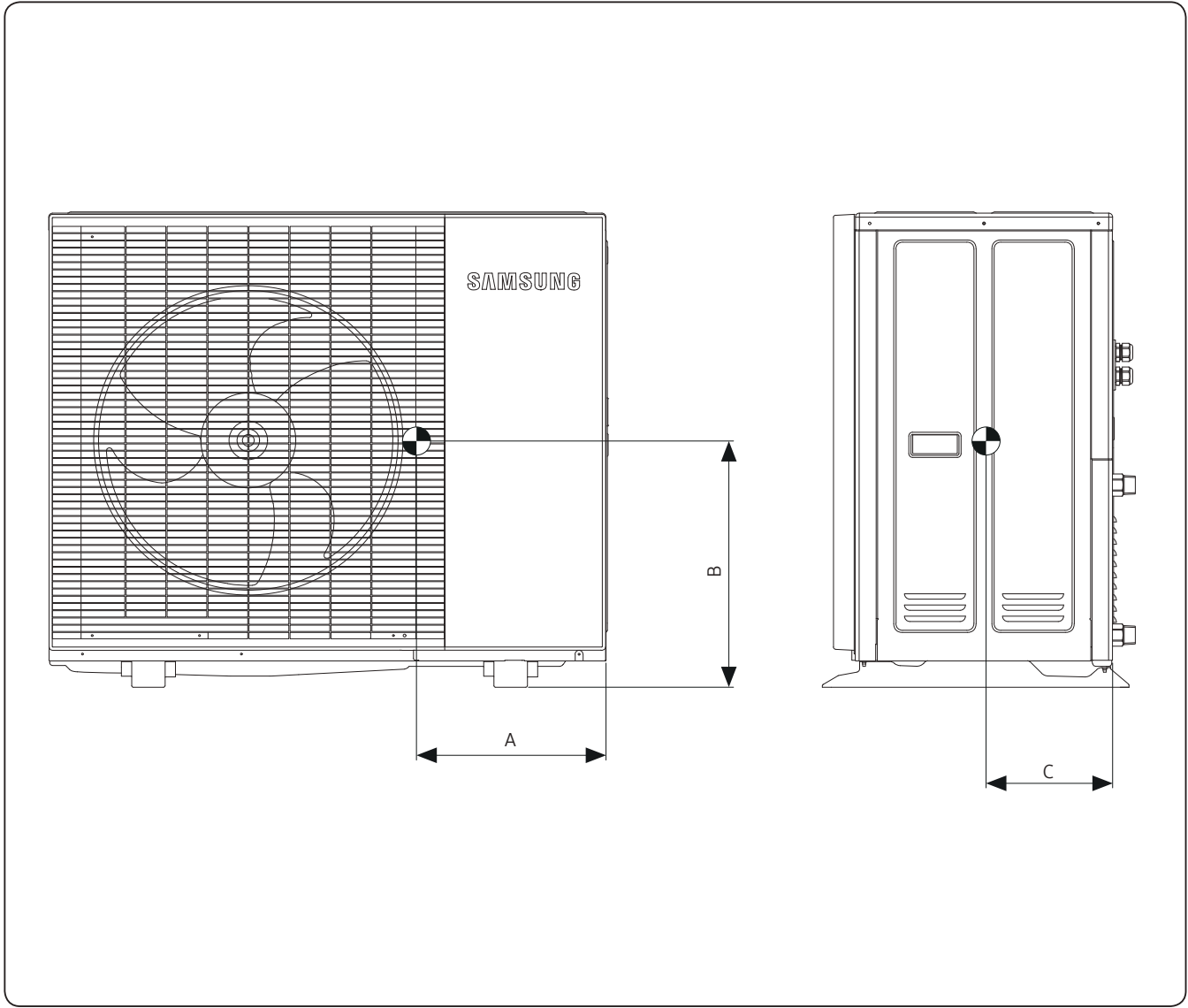
NO	Name	Description
1	Water Pipe(Out)	25A
2	Water Pipe(In)	25A
3	Power wiring conduit	M25x1.5 (Cable gland)
4	Communication wiring conduit	M25x1.5 (Cable gland)
5	Drain holes	Ø20 (connect with the provided drain plug)

2. Outdoor Units

2-4. Center of Gravity

AE050CXYDEK/EU, 080CXYD*K/EU

Units : mm [inches]



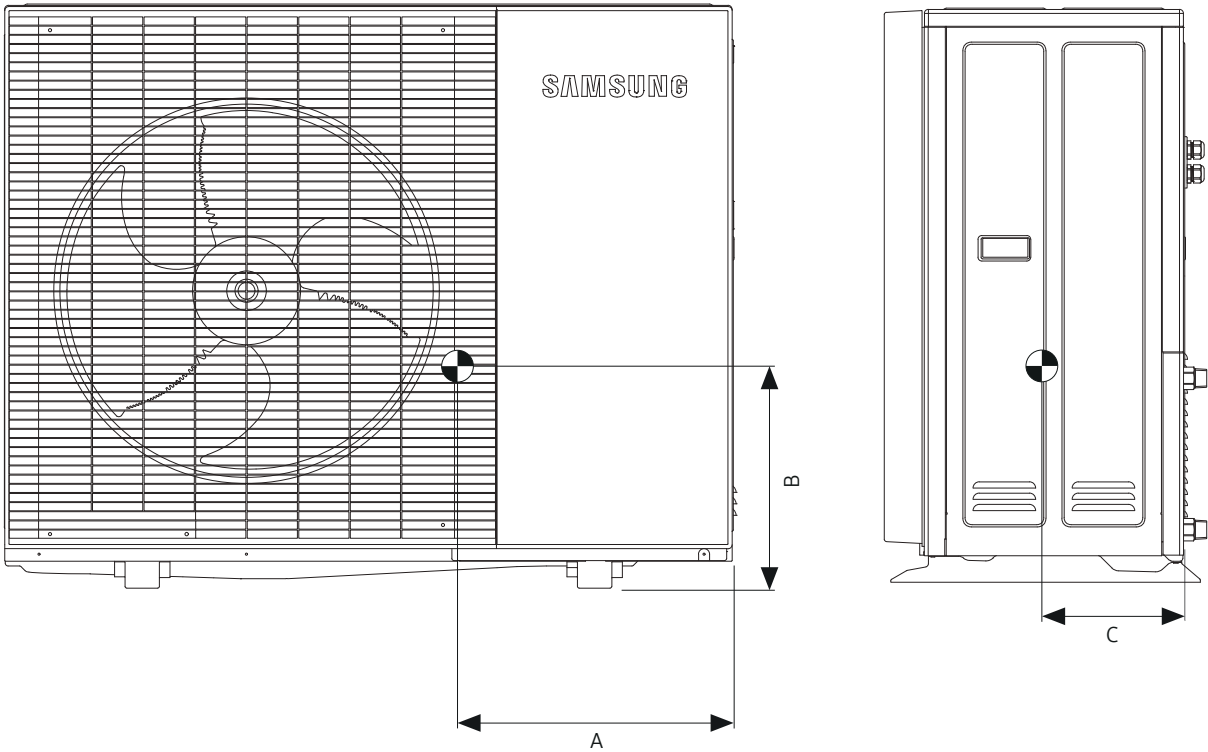
Model	A	B	C
AE050CXYDEK/EU AE080CXYDEK/EU AE080CXYDGK/EU	340 [13 3/8]	396 [15 9/16]	227 [8 15/16]

2. Outdoor Units

2-4. Center of Gravity

AE120/160CXYD*K/EU

Units : mm [inches]

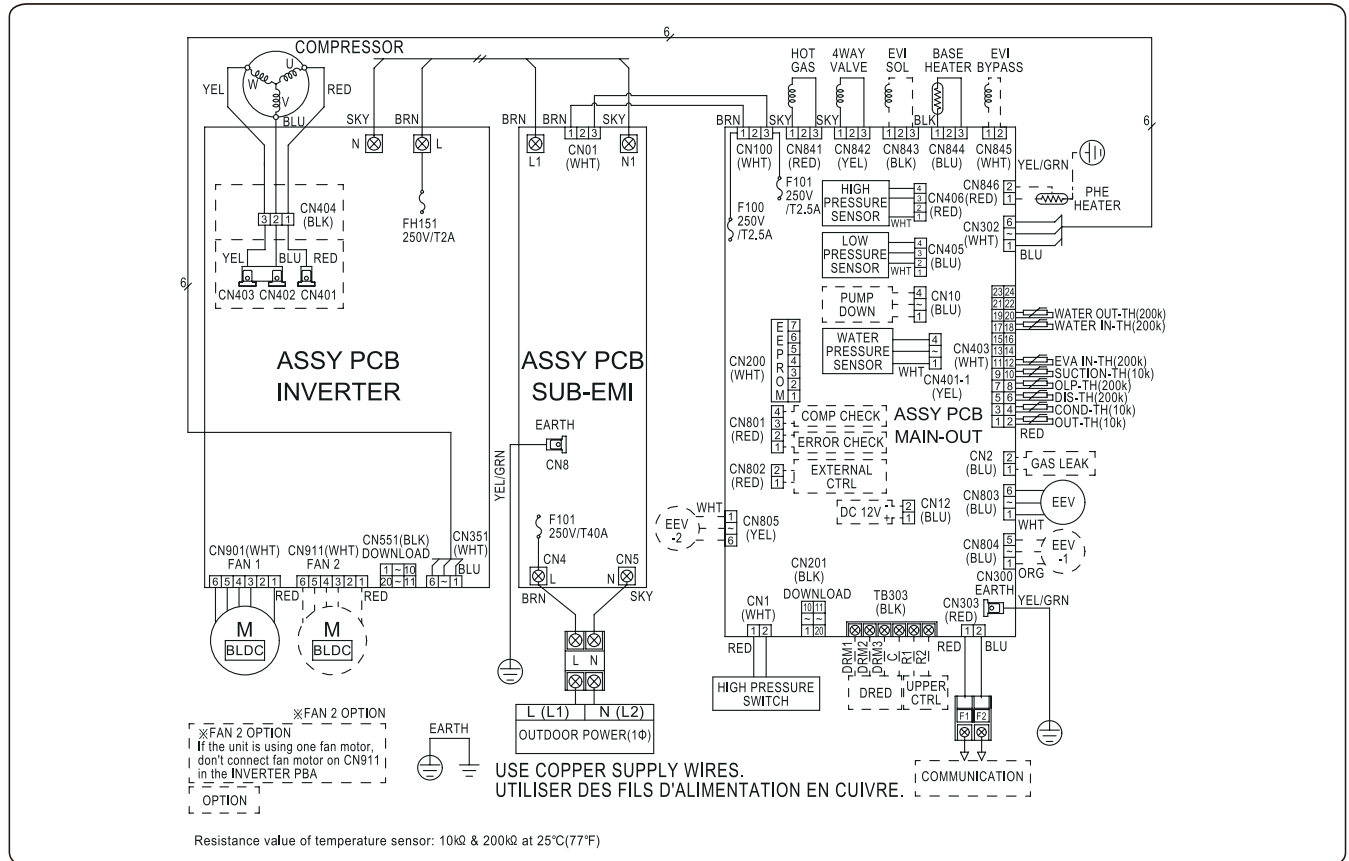


Model	A	B	C
AE120CXYD*K/EU AE160CXYD*K/EU	472 [18 9/16]	408 [16 1/16]	239 [9 7/16]

2. Outdoor Units

2-5. Electrical wiring diagram

AE050CXYDEK/EU, 080CXYD*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
SUCTON-TH(10k)	Thermistor (SUCTON_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)		

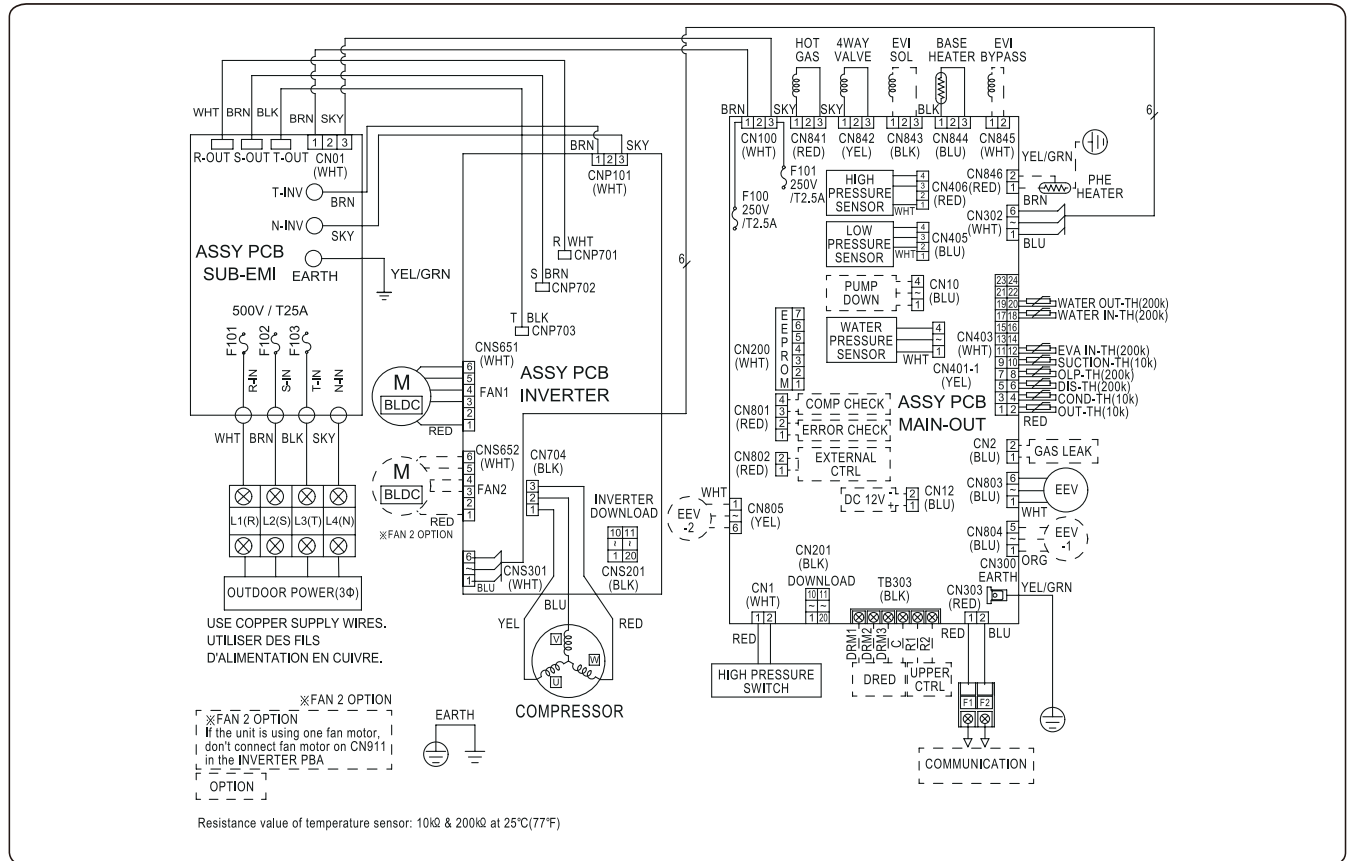
NOTES

- 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

2-5. 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	Cooling	Heating	Cooling
5.0	AE050CXYDEK/EU	41	41	55	55
8.0	AE080CXYDEK/EU	45	45	59	59
12.0	AE120CXYDEK/EU	47	47	60	60
16.0	AE160CXYDEK/EU	51	51	65	65
8.0	AE080CXYDGK/EU	45	45	59	59
12.0	AE120CXYDGK/EU	47	47	60	60
16.0	AE160CXYDGK/EU	51	51	65	65

NOTE

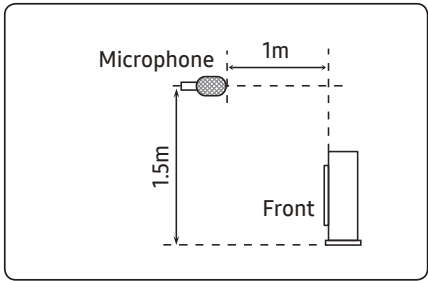
- Specifications may be subject to change without prior notice.
- Sound Pressure Level
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - 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

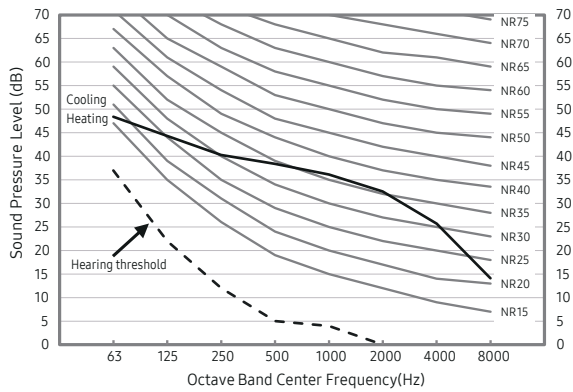
Unit: dB(A)



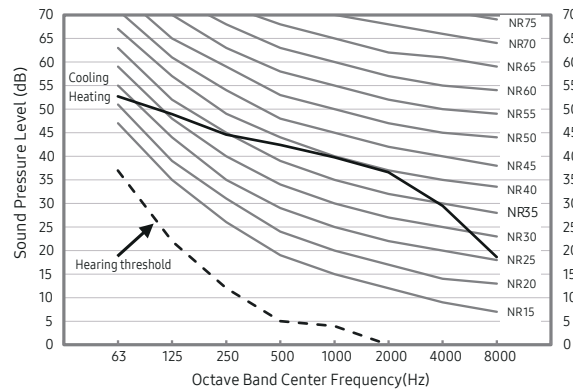
Model	Heating	Cooling
AE050CXYDEK/EU	41	41
AE080CXYDEK/EU	45	45
AE120CXYDEK/EU	47	47
AE160CXYDEK/EU	51	51

- NR Curve

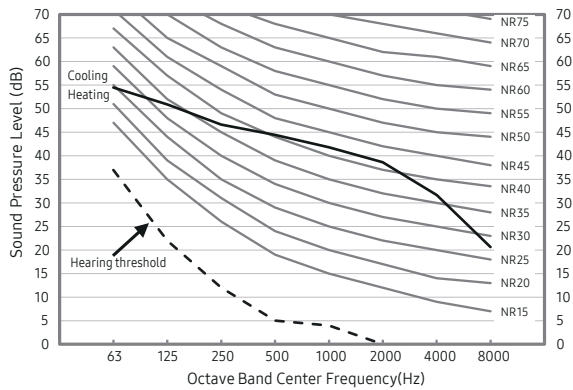
1) AE050CXYDEK/EU



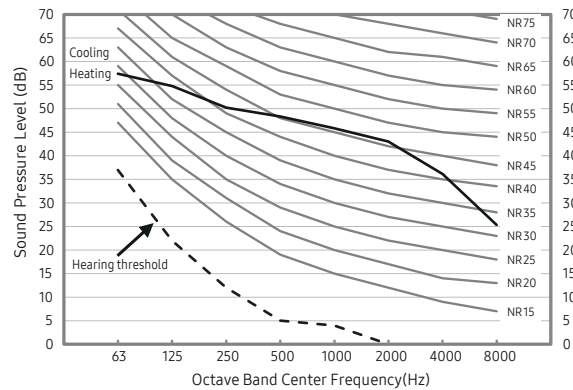
2) AE080CXYDEK/EU



3) AE120CXYDEK/EU



4) AE160CXYDEK/EU

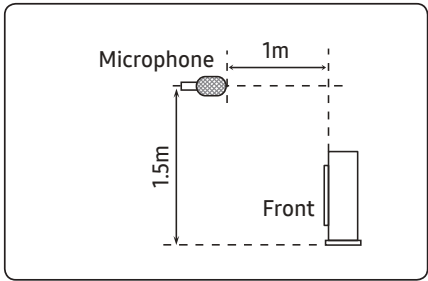


2. Outdoor Units

2-6. Sound data

Sound Pressure level

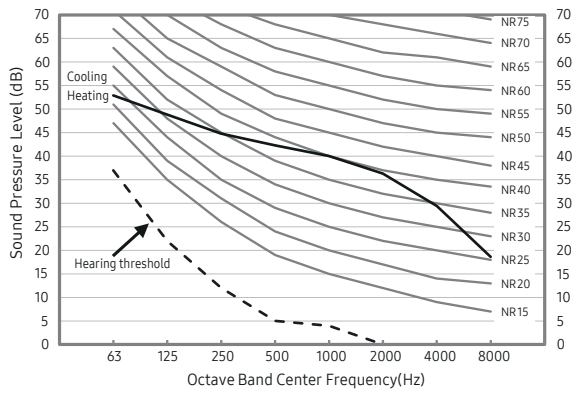
Unit: dB(A)



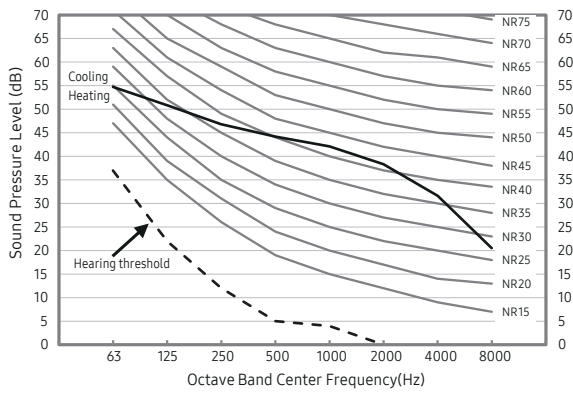
Model	Heating	Cooling
AE080CXYDGK/EU	45	45
AE120CXYDGK/EU	47	47
AE160CXYDGK/EU	51	51

- NR Curve

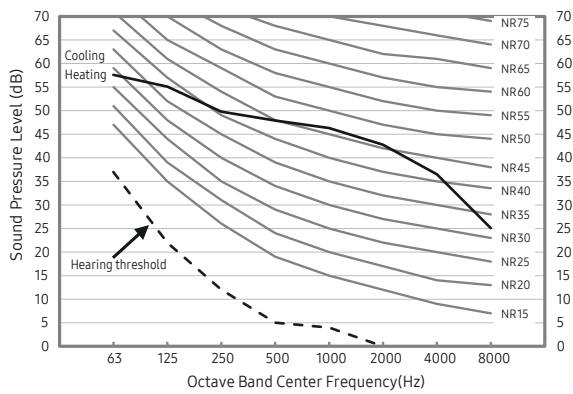
5) AE080CXYDGK/EU



6) AE120CXYDGK/EU



7) AE160CXYDGK/EU



2. Outdoor Units

2-6. Sound data

Sound Power level

Unit: dB(A)

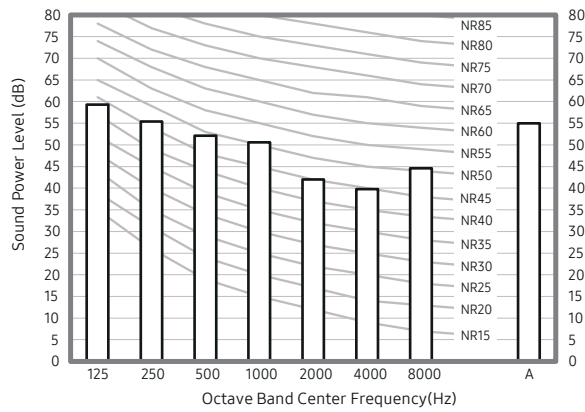
NOTE

- 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.

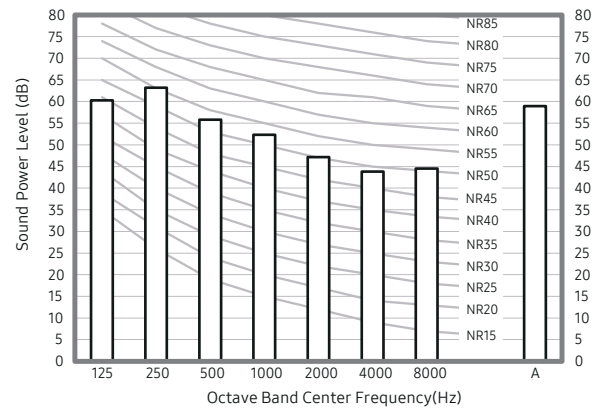
Model	Heating	Cooling
AE050CXYDEK/EU	55	55
AE080CXYDEK/EU	59	59
AE120CXYDEK/EU	60	60
AE160CXYDEK/EU	65	65

NR Curve

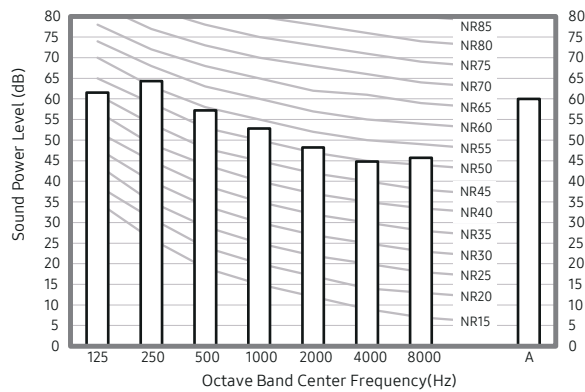
1) AE050CXYDEK/EU



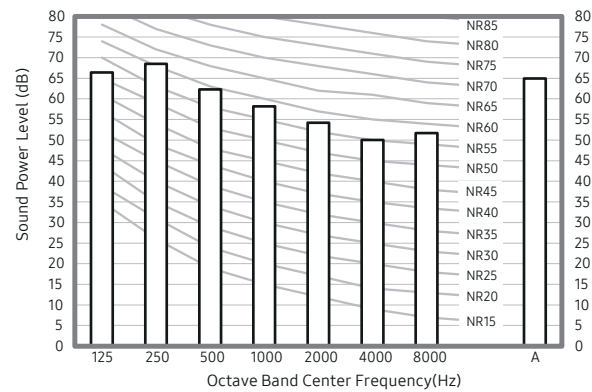
2) AE080CXYDEK/EU



3) AE120CXYDEK/EU



4) AE160CXYDEK/EU



2. Outdoor Units

2-6. Sound data

Sound Power level

Unit: dB(A)

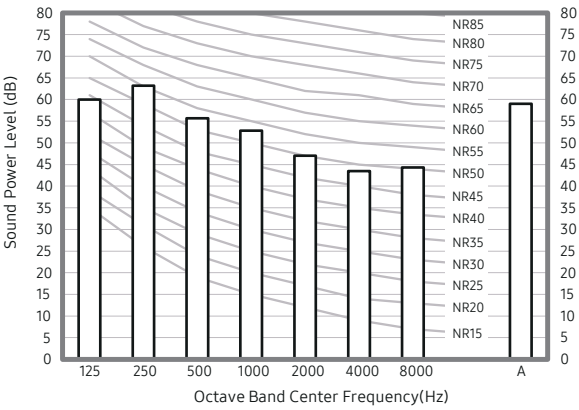
NOTE

- 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.

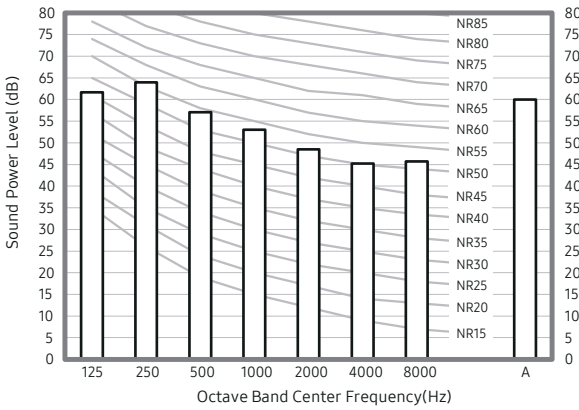
Model	Heating	Cooling
AE080CXDYGK/EU	59	59
AE120CXDYGK/EU	60	60
AE160CXDYGK/EU	65	65

- NR Curve

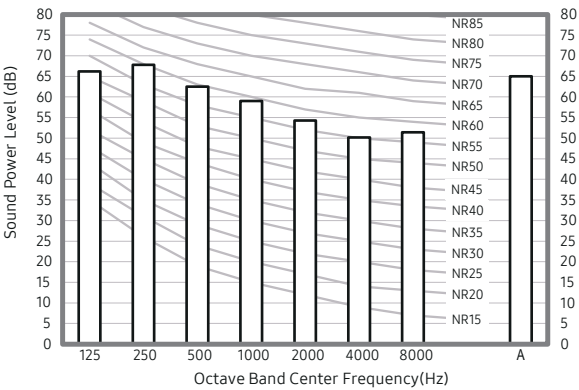
5) AE080CXDYGK/EU



6) AE120CXDYGK/EU



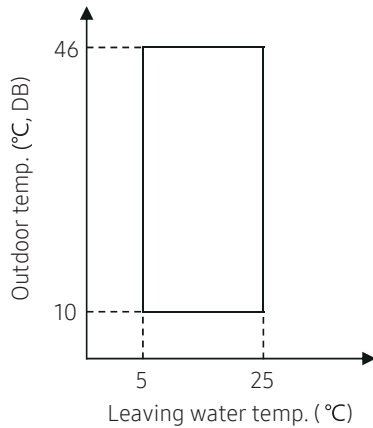
7) AE160CXDYGK/EU



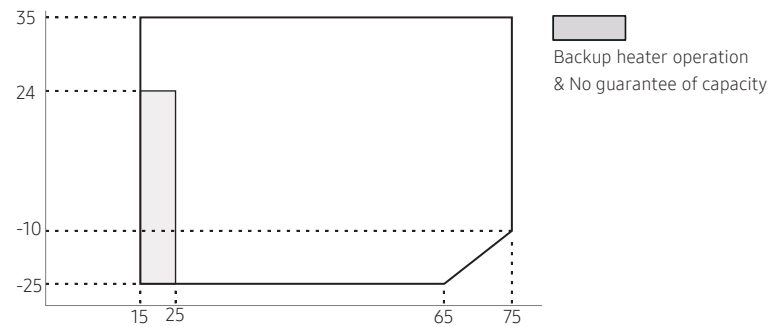
2. Outdoor Units

2-7. Operation range

1) Cooling



2) Heating



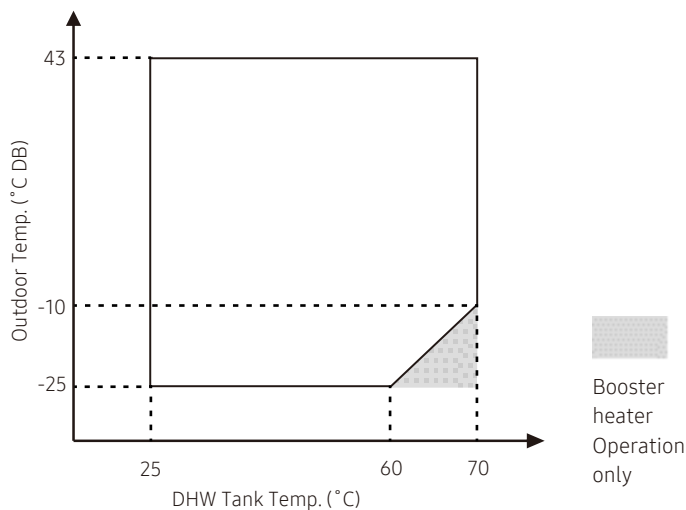
MONO Outdoor Unit		Water Temp. (°C)			Water Flow Rates (LPM)			Air Temp. (°C, DB/WB)		
		Min	Std	Max	Min	Std	Max	Min	Std	Max
Controller	Cooling	5	-	25						
	Heating	15	-	75						
Cooling	Inlet	-	23 (12 ^{*2})	30	7	Δ 5°C	58 (48 ^{*1})	10/-	35/24	46/28
	Outlet	5	18 (7 ^{*2})	25						
Heating	Inlet	5	30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

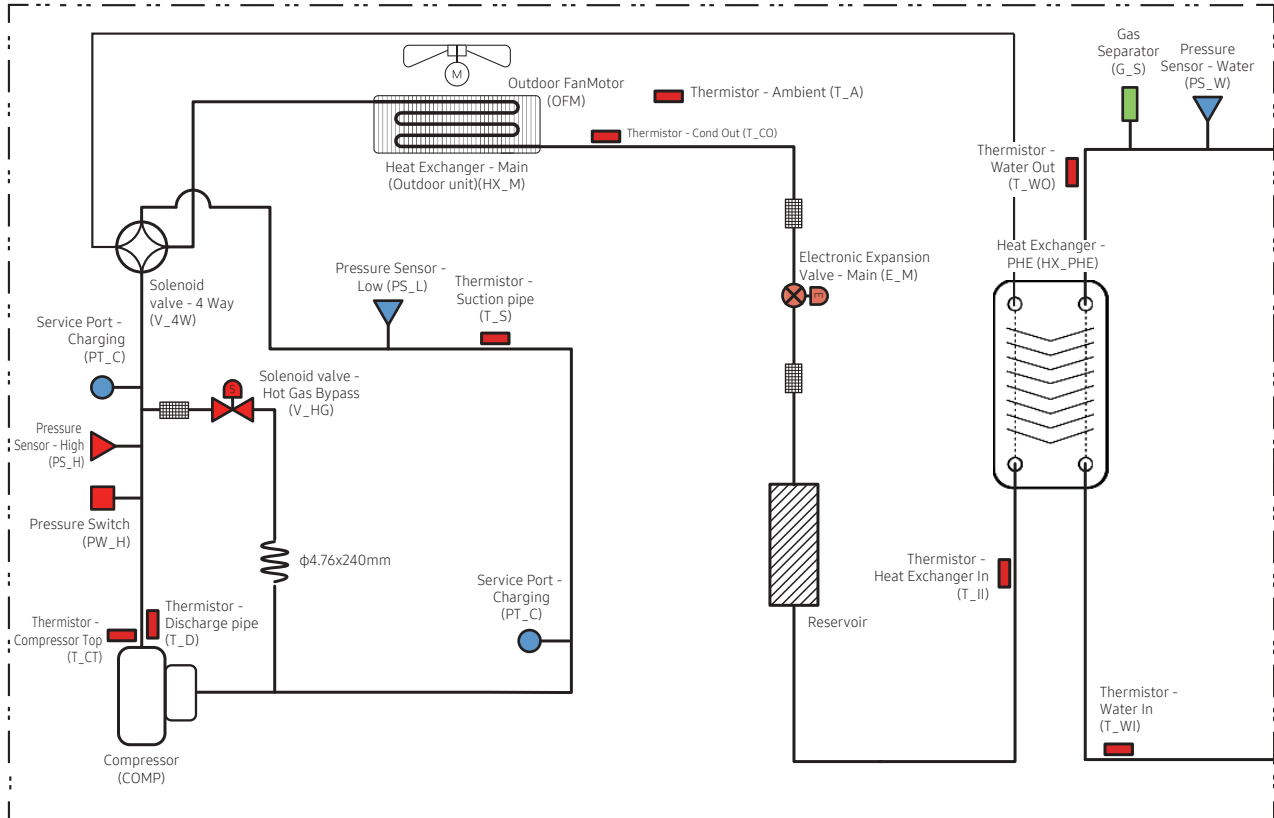
3) DHW (Domestic Hot Water Tank)



2. Outdoor Units

2-8. Piping diagram

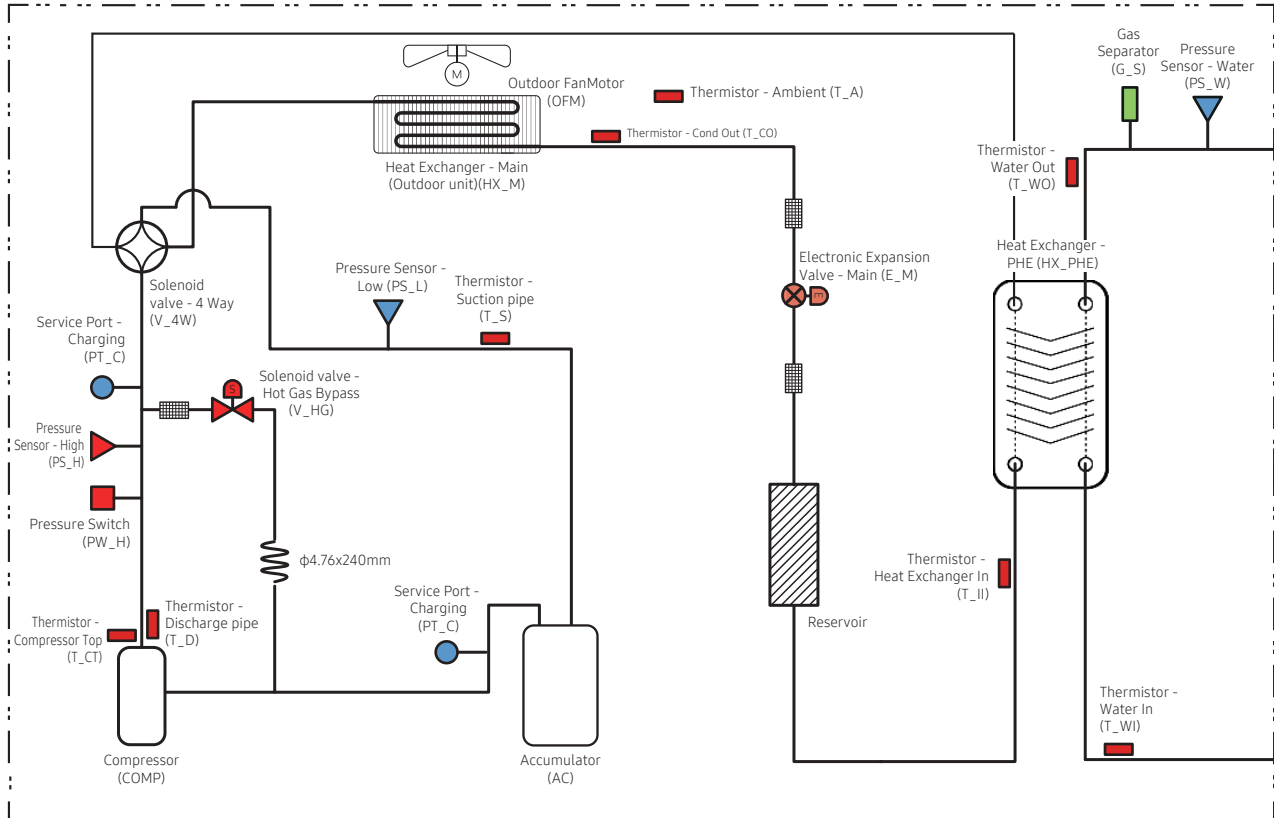
AE050CXYDEK/EU, 080CXYD*K/EU



2. Outdoor Units

2-8 Piping diagram

AE120/160CXVD*K/EU



2. Outdoor Units

2-9. Capacity table

1) Maximum Heating Capacity (Peak Value)

LWT (Leaving Water Temp.), Tamb (Ambient Temp.), HC (Heating Capacity), PI (Power input), WF (Water Flow)

Model	WLT (°C)	25			30			35			40			45			50			55			60			65			70			75		
		HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)			
AE050CXYDEK/EU	-25	3,850	1,980	11.1	3,695	1,970	10.6	3,540	1,950	10.2	3,470	1,990	10.0	3,390	2,020	9.8	3,350	2,110	9.7	3,310	2,220	7.0	3,250	2,290	7.0	3,190	2,380	7.0						
	-20	4,410	1,930	12.7	4,295	2,010	12.4	4,180	2,100	12.1	4,100	2,130	11.8	4,020	2,160	11.6	3,900	2,220	11.3	3,780	2,290	7.0	3,710	2,380	7.0	3,640	2,480	7.0						
	-15	4,900	1,850	14.1	4,815	2,000	13.9	4,730	2,180	13.6	4,620	2,190	13.3	4,520	2,210	13.1	4,410	2,290	12.8	4,300	2,390	7.8	4,220	2,480	7.7	4,140	2,590	7.0	4,040	2,610	7.0			
	-10	5,470	1,680	15.7	5,235	1,760	15.1	5,000	1,850	14.4	5,000	2,020	14.4	5,000	2,210	14.5	5,000	2,350	14.5	5,000	2,500	9.1	4,940	2,650	9.0	4,850	2,800	7.1	4,710	2,920	7.0			
	-7	5,710	1,580	16.4	5,355	1,600	15.4	5,000	1,670	14.4	5,000	1,800	14.4	5,000	2,020	14.5	5,000	2,190	14.5	5,000	2,380	9.1	5,000	2,520	9.1	5,000	2,680	7.3	5,000	2,940	7.3			
	-2	5,840	1,340	16.8	5,420	1,310	15.6	5,000	1,280	14.4	5,000	1,460	14.4	5,000	1,700	14.5	5,000	1,870	14.5	5,000	2,070	9.1	5,000	2,200	9.1	5,000	2,360	7.3	5,000	2,600	7.3			
	2	5,900	1,170	17.0	5,450	1,160	15.7	5,000	1,160	14.4	5,000	1,310	14.4	5,000	1,520	14.5	5,000	1,650	14.5	5,000	1,810	9.1	5,000	1,990	9.1	5,000	2,200	7.3	5,000	2,390	7.3			
	7	6,090	980	17.5	5,545	980	16.0	5,000	980	14.4	5,000	1,130	14.4	5,000	1,320	14.5	5,000	1,450	14.5	5,000	1,610	9.1	5,000	1,740	9.1	5,000	1,890	7.3	5,000	2,100	7.3			
	12	6,400	920	18.4	6,270	1,010	18.1	6,140	1,110	17.7	6,080	1,220	17.6	6,010	1,340	17.4	5,980	1,510	17.3	5,950	1,730	10.8	5,920	1,820	10.8	5,880	2,070	8.6	5,850	2,290	8.5			
	15	6,890	900	19.8	6,675	980	19.2	6,460	1,080	18.6	6,390	1,200	18.5	6,330	1,360	18.3	6,250	1,510	18.1	6,180	1,710	11.2	6,100	1,790	11.1	6,080	2,010	8.9	6,060	2,220	8.8			
	20	7,490	850	21.5	7,225	950	20.8	6,960	1,080	20.1	6,880	1,220	19.9	6,790	1,400	19.6	6,700	1,520	19.4	6,610	1,670	12.0	6,530	1,770	11.9	6,480	2,020	9.4	6,470	2,270	9.4			
	25	8,020	810	23.1	7,800	920	22.5	7,580	1,070	21.9	7,490	1,210	21.6	7,390	1,410	21.4	7,270	1,530	21.1	7,160	1,690	13.0	7,020	1,840	12.8	6,920	2,070	10.1	6,840	2,250	10.0			
	30	8,510	770	24.5	8,305	880	23.9	8,100	1,030	23.4	7,990	1,190	23.1	7,880	1,400	22.8	7,820	1,530	22.7	7,750	1,700	14.1	7,690	1,880	14.0	7,620	2,120	11.1	7,550	2,280	11.0			
	35	9,080	730	26.1	8,840	840	25.5	8,600	1,010	24.8	8,410	1,150	24.3	8,220	1,360	23.8	8,150	1,490	23.6	8,080	1,660	14.7	8,020	1,840	14.6	7,950	2,050	11.6	7,850	2,200	11.5			
AE080CXYDEK/EU	-25	5,700	3,020	16.4	5,475	3,000	15.8	5,250	2,980	15.1	5,135	3,030	14.8	5,020	3,080	14.5	4,960	3,220	14.4	4,900	3,380	8.9	4,810	3,500	8.7	4,720	3,630	7.0						
	-20	6,600	2,970	19.0	6,425	3,090	18.5	6,250	3,230	18.0	6,130	3,270	17.7	6,010	3,320	17.4	5,830	3,420	16.9	5,650	3,530	10.2	5,550	3,670	10.1	5,450	3,820	7.9						
	-15	7,400	2,880	21.3	7,270	3,110	20.9	7,140	3,380	20.6	6,980	3,400	20.2	6,820	3,430	19.7	6,655	3,560	19.3	6,490	3,710	11.8	6,370	3,860	11.6	6,250	4,030	9.1	6,100	4,070	8.9			
	-10	8,250	2,610	23.7	8,125	2,820	23.4	8,000	3,080	23.1	7,940	3,310	22.9	7,880	3,580	22.8	7,730	3,730	22.4	7,580	3,910	13.7	7,450	4,120	13.5	7,320	4,360	10.7	7,105	4,530	10.4			
	-7	8,620	2,460	24.8	8,310	2,560	23.9	8,000	2,670	23.1	8,000	2,960	23.1	8,000	3,330	23.1	8,000	3,600	23.2	8,000	3,920	14.5	8,000	4,160	14.5	8,000	4,420	11.6	7,775	4,710	11.3			
	-2	8,810	2,080	25.3	8,405	2,090	24.2	8,000	2,110	23.1	8,000	2,410	23.1	8,000	2,810	23.1	8,000	3,080	23.2	8,000	3,400	14.5	8,000	3,630	14.5	8,000	3,880	11.6	8,000	4,280	11.7			
	2	8,910	1,820	25.6	8,455	1,860	24.3	8,000	1,900	23.1	8,000	2,160	23.1	8,000	2,500	23.1	8,000	2,720	23.2	8,000	2,990	14.5	8,000	3,270	14.5	8,000	3,620	11.6	8,000	3,930	11.7			
	7	9,190	1,520	26.4	8,595	1,570	24.7	8,000	1,630	23.1	8,000	1,860	23.1	8,000	2,160	23.1	8,000	2,390	23.2	8,000	2,670	14.5	8,000	2,870	14.5	8,000	3,110	11.6	8,000	3,460	11.7			
	12	9,850	1,470	28.3	9,650	1,600	27.8	9,450	1,770	27.2	9,350	1,930	27.0	9,250	2,130	26.8	9,200	2,390	26.7	9,150	2,730	16.6	9,100	2,890	16.5	9,050	3,280	13.2	9,000	3,630	13.1			
	15	10,400	1,390	29.9	10,075	1,520	29.0	9,750	1,680	28.1	9,650	1,870	27.9	9,550	2,110	27.6	9,440	2,350	27.4	9,330	2,670	16.9	9,210	2,780	16.7	9,180	3,120	13.4	9,150	3,450	13.4			
	20	11,300	1,320	32.5	10,905	1,480	31.4	10,510	1,680	30.3	10,380	1,900	30.0	10,250	2,180	29.7	10,115	2,370	29.3	9,980	2,600	18.1	9,860	2,760	17.9	9,780	3,140	14.2	9,760	3,530	14.2			
	25	12,110	1,270	34.8	11,775	1,430	33.9	11,440	1,660	33.0	11,300	1,880	32.6	11,160	2,190	32.3	10,980	2,390	31.8	10,800	2,620	19.6	10,600	2,860	19.3	10,450	3,210	15.2	10,320	3,490	15.1			
	30	12,850	1,200	37.0	12,535	1,370	36.1	12,220	1,610	35.2	12,060	1,840	34.8	11,900	2,180	34.4	11,800	2,380	34.2	11,700	2,640	21.2	11,600	2,930	21.1	11,500	3,290	16.7	11,400	3,540	16.6			
	35	13,700	1,140	39.4	13,340	1,310	38.4	12,980	1,570	37.4	12,690	1,790	36.6	12,400	2,110	35.9	12,300	2,320	35.7	12,200	2,580	22.1	12,100	2,850	22.0	12,000	3,190	17.5	11,100	3,200	16.2			
AE080CXYDGK/EU	-25	9,800	4,830	28.2	9,650	4,990	27.8	9,500	5,160	27.4	9,400	5,450	27.1	9,300	5,780	26.9	9,150	5,950	26.5	9,000	6,200	16.3	8,850	6,420	16.1	8,800	6,720	12.8						
	-20	10,500	4,550	30.2	10,400	4,790	29.9	10,300	5,070	29.7	10,250	5,360	29.6	10,150	5,660	29.4	10,100	5,940	29.3	10,000	6,250	18.1	9,850	6,510	17.9	9,760	6,920	14.2						
	-15	11,700	4,460	33.6	11,420	4,780	32.9	11,150	5,180	34.6	11,125	5,400	32.1	11,075	5,620	32.0	11,050	5,900	32.0	11,000	6,220	19.9	10,930	6,580	19.9	10,680	6,960	15.6	9,800	6,710	14.3			
	-10	12,890	3,710	37.1	12,445	4,100	35.8	12,000	4,620	34.6	12,000	5,050	34.7	12,000	5,500	34.7	12,000	5,760	34.8	12,000	6,140	21.8	12,000	6,700	21.8	12,000	7,500	17.5	11,100	7,450	16.2			
	-7	12,930	3,360	37.2	12,470	3,640	35.9	12,000	4,000	34.6	12,000	4,430	34.7	12,000	5,010	34.7	12,000	5,460	34.8	12,000	5,860	21.8	12,000	6,230	21.8	12,000	6,770	17.5	11,270	6,970	16.5			
	-2	13,220	3,100	38.0	12,610	3,160	36.3	12,000	3,140	34.6	12,000	3,630	34.7	12,000	4,190	34.7	12,000	4,600	34.8	12,000	5,070	21.8	12,000	5,390	21.8									

2. Outdoor Units

2-9. Capacity table

1) Maximum Heating Capacity (Peak Value)

LWT (Leaving Water Temp.), Tamb (Ambient Temp.), HC (Heating Capacity), PI (Power input), WF (Water Flow)

Model	Tamb (°C)	25			30			35			40			45			50			55			60			65			70			75		
		HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)
AE160CKYDEK/EU	-25	9800	4830	28.2	10650	5630	30.7	11500	6570	33.2	11050	6680	31.9	10600	6790	30.7	10370	6950	30.1	9800	6950	17.8	9390	6950	17.1	8800	6720	12.8						
	-20	13300	6240	38.3	13135	6570	37.8	12970	6940	37.4	12400	6940	35.8	11830	6950	34.2	11460	6950	33.2	11100	6940	20.1	10190	6940	18.5	9760	6920	14.2						
	-15	14980	6350	43.1	14370	6620	41.4	13760	6950	39.7	13390	6950	38.7	13010	6950	37.6	12630	6950	36.6	11880	6950	21.5	11070	6950	20.1	10680	6960	15.6	9800	6710	14.3			
	-10	16200	5180	46.6	16100	5930	46.4	16000	6960	46.2	15195	6950	43.9	14390	6950	41.6	13890	6950	40.3	13320	6950	24.2	12230	6950	22.2	11500	6970	16.7	10660	6940	15.6	9940	6900	14.5
	-7	16250	4690	46.7	16125	5150	46.4	16000	5710	46.2	15600	6170	45.1	15200	6740	44.0	14430	6770	41.8	13810	6950	25.0	12720	6950	23.1	11820	6940	17.2	11270	6970	16.5	10200	6900	14.9
	-2	16300	4250	46.9	16150	4410	46.5	16000	4590	46.2	15800	5140	45.6	15600	5860	45.1	15500	6190	44.9	15400	6850	27.9	14700	6950	26.7	13450	6940	19.6	12050	6920	17.6	11680	6880	17.1
	2	16400	3480	47.2	16200	3760	46.6	16000	4100	46.2	16000	4640	46.2	16000	5330	46.3	16000	5710	46.4	16000	6300	29.0	15500	6720	28.2	14420	6940	21.0	13110	6920	19.1	12600	6920	18.4
	7	17500	3110	50.3	16750	3310	48.2	16000	3550	46.2	16000	4000	46.2	16000	4570	46.3	16000	4940	46.4	16000	5520	29.0	16000	5930	29.1	16000	6540	23.3	14890	6910	21.7	13400	6910	19.6
	12	18520	3050	53.3	18150	3290	52.3	17770	3580	51.2	17585	3940	50.8	17400	4390	50.3	17300	4660	50.2	17210	5340	31.2	17110	5600	31.1	17020	6370	24.8	15900	6680	23.2	15400	6700	22.5
	15	19970	2990	57.4	19285	3190	55.5	18600	3430	53.6	18500	3860	53.4	18400	4420	53.2	18120	4720	52.5	17920	5320	32.5	17760	5480	32.3	17500	6360	25.5	15900	6360	23.2	15400	6360	22.5
	20	20400	2660	58.0	19770	2930	56.9	19140	3280	55.2	18975	3730	54.8	18810	4340	54.4	18610	4580	54.0	18400	4960	33.4	18210	5260	33.1	17600	6050	25.6	15900	6050	23.2	15100	6040	22.1
	25	20830	2420	58.0	20255	2690	58.0	19680	3060	56.7	19450	3420	56.2	19220	3880	55.6	19100	4280	55.4	19050	4800	34.5	18800	5110	34.2	17600	5480	25.6	15900	5480	23.2	15000	5470	21.9
	30	22110	2280	58.0	21565	2560	58.0	21020	2960	58.0	20745	3390	58.0	20470	3990	58.0	20300	4250	58.0	20010	4750	36.3	19600	5050	35.6	17600	5050	25.6	15900	5050	23.2	14900	5050	21.8
	35	23560	2190	58.0	22945	2490	58.0	22330	2900	58.0	21830	3300	58.0	21330	3860	58.0	21160	4150	58.0	20500	4540	37.2	19600	4600	35.6	17600	4600	25.6	15900	4600	23.2	14750	4600	21.6
	-25	9800	4830	28.2	10650	5630	30.7	11500	6570	33.2	11400	7000	32.9	11300	7480	32.7	11200	7800	32.5	11000	8270	19.9	10800	8570	19.6	10600	8880	15.4						
AE160CKYDGK/EU	-20	13300	6240	38.3	13135	6570	37.8	12970	6940	37.4	12500	7030	36.1	12400	7460	35.9	12300	7730	35.7	12100	7900	21.9	11700	8540	21.3	11500	8850	16.7						
	-15	14980	6350	43.1	14370	6620	41.4	13760	6950	39.7	13450	7000	38.8	13100	7020	37.9	12850	7130	37.3	12560	7550	22.8	12260	8100	22.3	11860	8140	17.3	10800	7990				
	-10	16200	5180	46.6	16100	5930	46.4	16000	6960	46.2	15195	6950	43.9	14390	6950	41.6	13890	6950	40.3	13320	6950	24.2	12860	7490	23.4	12250	7660	17.8	11000	7490	16.1	10500	7760	15.4
	-7	16250	4690	46.7	16125	5150	46.4	16000	5710	46.2	15600	6170	45.1	15200	6740	44.0	14430	6770	41.8	13810	6950	25.0	13520	7550	24.6	13210	8010	19.2	11850	7500	17.3	11450	8010	16.8
	-2	16300	4250	46.9	16150	4410	46.5	16000	4590	46.2	15800	5140	45.6	15600	5860	45.1	15500	6190	44.9	15400	6850	27.9	14700	6950	26.7	13450	6940	19.6	12050	6920	17.6	11680	6880	17.1
	2	16400	3480	47.2	16200	3760	46.6	16000	4100	46.2	16000	4640	46.2	16000	5330	46.3	16000	5710	46.4	16000	6300	29.0	15500	6720	28.2	14420	6940	21.0	13110	6920	19.1	12600	6920	18.4
	7	17500	3110	50.3	16750	3310	48.2	16000	3550	46.2	16000	4000	46.2	16000	4570	46.3	16000	4940	46.4	16000	5520	29.0	16000	5930	29.1	16000	6540	23.3	16000	7550	23.4	16000	8510	23.4
	12	18520	3050	53.3	18150	3290	52.3	17770	3580	51.2	17585	3940	50.8	17400	4390	50.3	17300	4660	50.2	17210	5340	31.2	17110	5600	31.1	17020	6370	24.8	16920	7170	24.7	16780	7360	24.6
	15	19970	2990	57.4	19285	3190	55.5	18600	3430	53.6	18500	3860	53.4	18400	4420	53.2	18120	4720	52.5	17920	5320	32.5	17760	5480	32.3	17600	6420	25.6	17400	7020	25.4	17000	7110	24.9
	20	20400	2660	58.0	19770	2930	56.9	19140	3280	55.2	18975	3730	54.8	18810	4340	54.4	18610	4580	54.0	18400	4960	33.4	18210	5260	33.1	18050	6220	26.3	17750	6830	25.9	17420	7050	25.5
	25	20830	2420	58.0	20255	2690	58.0	19680	3060	56.7	19450	3420	56.2	19220	3880	55.6	19100	4280	55.4	19050	4800	34.5	18800	5110	34.2	18600	5810	27.1	18300	6350	26.7	17900	6680	26.2
	30	22110	2280	58.0	21565	2560	58.0	21020	2960	58.0	20745	3390	58.0	20470	3990	58.0	20300	4250	58.0	20010	4750	36.3	19750	5100	35.9	19520	5660	28.4	19090	6120	27.9	18650	6390	27.3
	35	23560	2190	58.0	22945	2490	58.0	22330	2900	58.0	21830	3300	58.0	21330	3860	58.0	21160	4150	58.0	20750	4620	37.6	20430	4840	37.1	20260	5350	29.5	19960	5870	29.1	19590	6220	28.7

1. Heating Capacity
- Capacity is according to EN14511.

- Valid for heated water range (ΔT = Leaving water temperature - Entering water temperature)
: If $LWT \leq 50^{\circ}C$, $\Delta T = 5^{\circ}C$ or $50^{\circ}C < LWT \leq 60^{\circ}C$, $\Delta T = 8^{\circ}C$ or $LWT > 60^{\circ}C$, $\Delta T = 10^{\circ}C$, within the minimum ~ maximum water flow rate.
2. Cooling Capacity
- Capacity is according to EN14511.

- Valid for Cooling water range (ΔT = Entering water temperature - Leaving water temperature)
: $\Delta T = 5^{\circ}C$, within the minimum ~ maximum water flow rate.
3. Power input : Power input is according to EN14511.
4. Peak value : Tested without defrost operation in accordance with EN14511.
- ※ The real capacity would be changed according to the install environment.

2. Outdoor Units

2-9. Capacity table

2) Maximum Heating Capacity (Integrated Value)

LWT (Leaving Water Temp.), Tamb (Ambient Temp.), HC (Heating Capacity), PI (Power input), WF (Water Flow)

Model	LWT (°C)	25			30			35			40			45			50			55			60			65			70			75		
		HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)			
AE050CXDEK/EU	-25	3,850	1,980	11.1	3,695	1,970	10.6	3,540	1,950	10.2	3,470	1,990	10.0	3,390	2,020	9.8	3,350	2,110	9.7	3,310	2,220	7.0	3,250	2,290	7.0	3,190	2,380	7.0						
	-20	4,410	1,930	12.7	4,295	2,010	12.4	4,180	2,100	12.1	4,100	2,130	11.8	4,020	2,160	11.6	3,900	2,220	11.3	3,780	2,290	7.0	3,710	2,380	7.0	3,640	2,480	7.0						
	-15	4,900	1,850	14.1	4,815	2,000	13.9	4,730	2,180	13.6	4,620	2,190	13.3	4,520	2,210	13.1	4,410	2,290	12.8	4,300	2,390	7.8	4,220	2,480	7.7	4,140	2,590	7.0	4,040	2,610	7.0			
	-10	5,310	1,730	15.3	5,110	1,840	14.7	4,910	1,980	14.2	4,880	2,090	14.1	4,850	2,220	14.0	4,840	2,320	14.0	4,830	2,420	8.8	4,820	2,590	8.8	4,800	2,770	7.0	4,680	2,900	7.0			
	-7	5,380	1,550	15.5	5,165	1,650	14.9	4,950	1,770	14.3	4,950	1,900	14.3	4,950	2,040	14.3	4,950	2,210	14.4	4,940	2,410	9.0	4,920	2,590	8.9	4,900	2,800	7.1	4,900	2,980	7.2			
	-2	5,460	1,390	15.7	5,205	1,440	15.0	4,950	1,500	14.3	4,950	1,700	14.3	4,950	1,960	14.3	4,950	2,100	14.4	4,950	2,270	9.0	4,950	2,410	9.0	4,950	2,570	7.2	4,870	2,760	7.1			
	2	5,540	1,230	15.9	5,245	1,260	15.1	4,950	1,300	14.3	4,950	1,470	14.3	4,950	1,710	14.3	4,950	1,890	14.4	4,950	2,150	9.0	4,950	2,220	9.0	4,950	2,290	7.2	4,950	2,510	7.2			
	7	6,090	980	17.5	5,545	980	16.0	5,000	980	14.4	5,000	1,130	14.4	5,000	1,320	14.5	5,000	1,450	14.5	5,000	1,610	9.1	5,000	1,740	9.1	5,000	1,890	7.3	5,000	2,100	7.3			
	12	6,400	920	18.4	6,270	1,010	18.1	6,140	1,110	17.7	6,080	1,220	17.6	6,010	1,340	17.4	5,980	1,510	17.3	5,950	1,730	10.8	5,920	1,820	10.8	5,880	2,070	8.6	5,850	2,290	8.5			
	15	6,890	900	19.8	6,675	980	19.2	6,460	1,080	18.6	6,390	1,200	18.5	6,330	1,360	18.3	6,250	1,510	18.1	6,180	1,710	11.2	6,100	1,790	11.1	6,080	2,010	8.9	6,060	2,220	8.8			
	20	7,490	850	21.5	7,225	950	20.8	6,960	1,080	20.1	6,880	1,220	19.9	6,790	1,400	19.6	6,700	1,520	19.4	6,610	1,670	12.0	6,530	1,770	11.9	6,480	2,020	9.4	6,470	2,270	9.4			
	25	8,020	810	23.1	7,800	920	22.5	7,580	1,070	21.9	7,490	1,210	21.6	7,390	1,410	21.4	7,270	1,530	21.1	7,160	1,690	13.0	7,020	1,840	12.8	6,920	2,070	10.1	6,840	2,250	10.0			
	30	8,510	770	24.5	8,305	880	23.9	8,100	1,030	23.4	7,990	1,190	23.1	7,880	1,400	22.8	7,820	1,530	22.7	7,750	1,700	14.1	7,690	1,880	14.0	7,620	2,120	11.1	7,550	2,280	11.0			
	35	9,080	730	26.1	8,840	840	25.5	8,600	1,010	24.8	8,410	1,150	24.3	8,220	1,360	23.8	8,150	1,490	23.6	8,080	1,660	14.7	8,020	1,840	14.6	7,950	2,050	11.6	7,850	2,200	11.5			
AE080CXDEK/EU	-25	5,700	3,020	16.4	5,475	3,000	15.8	5,250	2,980	15.1	5,135	3,030	14.8	5,020	3,080	14.5	4,960	3,220	14.4	4,900	3,380	8.9	4,810	3,500	8.7	4,720	3,630	7.0						
	-20	6,600	2,970	19.0	6,425	3,090	18.5	6,250	3,230	18.0	6,130	3,270	17.7	6,010	3,320	17.4	5,830	3,420	16.9	5,650	3,530	10.2	5,550	3,670	10.1	5,450	3,820	7.9						
	-15	7,400	2,880	21.3	7,270	3,110	20.9	7,140	3,380	20.6	6,980	3,400	20.2	6,820	3,430	19.7	6,655	3,560	19.3	6,490	3,710	11.8	6,370	3,860	11.6	6,250	4,030	9.1	6,100	4,070	8.9			
	-10	8,020	2,690	23.1	7,715	2,860	22.9	7,410	3,070	21.4	7,365	3,250	21.3	7,320	3,460	21.2	7,310	3,600	21.2	7,300	3,760	13.2	7,275	4,020	13.2	7,250	4,320	10.6	7,070	4,510	10.3			
	-7	8,120	2,410	23.4	7,810	2,570	22.5	7,500	2,780	21.6	7,490	2,970	21.6	7,480	3,180	21.6	7,465	3,440	21.6	7,450	3,740	13.5	7,425	4,020	13.5	7,400	4,350	10.8	7,390	4,630	10.8			
	-2	8,240	2,170	23.7	8,020	2,290	23.1	7,800	2,430	22.5	7,825	2,760	22.6	7,850	3,200	22.7	7,775	3,400	22.5	7,700	3,630	14.0	7,600	3,810	13.8	7,500	4,010	10.9	7,350	4,290	10.7			
	2	8,360	1,910	24.0	8,155	2,020	23.5	7,950	2,150	22.9	7,950	2,430	23.0	7,950	2,790	23.0	7,950	3,120	23.0	7,950	3,550	14.4	7,800	3,600	14.2	7,650	3,650	11.1	7,475	3,900	10.9			
	7	9,190	1,520	26.4	8,595	1,570	24.7	8,000	1,630	23.1	8,000	1,860	23.1	8,000	2,160	23.1	8,000	2,390	23.2	8,000	2,670	14.5	8,000	2,870	14.5	8,000	3,110	11.6	8,000	3,460	11.7			
	12	9,850	1,470	28.3	9,650	1,600	27.8	9,450	1,770	27.2	9,350	1,930	27.0	9,250	2,130	26.8	9,200	2,390	26.7	9,150	2,730	16.6	9,100	2,890	16.5	9,050	3,280	13.2	9,000	3,630	13.1			
	15	10,400	1,390	29.9	10,075	1,520	29.0	9,750	1,680	28.1	9,650	1,870	27.9	9,550	2,110	27.6	9,440	2,350	27.4	9,330	2,670	16.9	9,210	2,780	16.7	9,180	3,120	13.4	9,150	3,450	13.4			
	20	11,300	1,320	32.5	10,905	1,480	31.4	10,510	1,680	30.3	10,380	1,900	30.0	10,250	2,180	29.7	10,115	2,370	29.3	9,980	2,600	18.1	9,860	2,760	17.9	9,780	3,140	14.2	9,760	3,530	14.2			
	25	12,110	1,270	34.8	11,775	1,430	33.9	11,440	1,660	33.0	11,300	1,880	32.6	11,160	2,190	32.3	10,980	2,390	31.8	10,800	2,620	19.6	10,600	2,860	19.3	10,450	3,210	15.2	10,320	3,490	15.1			
	30	12,850	1,200	37.0	12,535	1,370	36.1	12,220	1,610	35.2	12,060	1,840	34.8	11,900	2,180	34.4	11,800	2,380	34.2	11,700	2,640	21.2	11,600	2,930	21.1	11,500	3,290	16.7	11,400	3,540	16.6			
	35	13,700	1,140	39.4	13,340	1,310	38.4	12,980	1,570	37.4	12,690	1,790	36.6	12,400	2,110	35.9	12,300	2,320	35.7	12,200	2,580	22.1	12,100	2,850	22.0	12,000	3,190	17.5	11,900	3,200	16.2			
AE120CXDEK/EU	-25	9,800	4,830	28.2	9,650	4,990	27.8	9,500	5,160	27.4	9,400	5,450	27.1	9,300	5,780	26.9	9,150	5,950	26.5	9,000	6,200	16.3	8,850	6,420	16.1	8,800	6,720	12.8						
	-20	10,500	4,450	30.2	10,400	4,790	29.9	10,300	5,070	29.7	10,250	5,360	29.6	10,150	5,660	29.4	10,100	5,940	29.3	10,000	6,250	18.1	9,850	6,510	17.9	9,760	6,920	14.2						
	-15	11,700	4,660	33.6	11,420	4,780	32.9	11,150	5,180	32.1	11,125	5,490	32.1	11,075	5,620	32.0	11,050	5,900	32.0	11,000	6,220	19.9	10,930	6,580	19.9	10,680	6,960	15.6	9,800	6,710	14.3			
	-10	12,030	4,130	34.6	11,570	4,380	33.3	11,120	4,540	32.1	11,050	5,030	31.9	10,980	5,290	31.8	10,970	5,460	31.8	10,950	5,760	19.9	10,910	6,150	19.8	10,870	6,590	15.8	10,660	6,940	15.6			
	-7	12,180	3,730	35.0	11,720	3,860	33.7	11,450	4,160	33.0	11,420	4,590	32.5	11,220	4,820	32.5	11,200	4,980	32.5	11,180	5,670	20.3	11,140	6,160	20.2	11,100	6,660	16.2	10,900	6,900	15.9			
	-2	12,360	3,350	35.5	12,030	3,430	34.6	11,900	3,710	34.3	11,820	4,310	34.1	11,780	4,900	34.1	11,660	5,000	33.8	11,550	5,340	20.9	11,400	5,710	20.7									

2. Outdoor Units

2-9. Capacity table

2) Maximum Heating Capacity (Integrated Value)

LWT (Leaving Water Temp.), Tamb (Ambient Temp.), HC (Heating Capacity), PI (Power input), WF (Water Flow)

Model	WWT (°C)	25			30			35			40			45			50			55			60			65			70			75		
		HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)	HC (W)	PI (W)	WF (LPM)
AE160CXYDEK/EU	-25	9,800	4,830	28.2	10,650	5,630	30.7	11,500	6,570	33.2	11,050	6,680	31.9	10,600	6,790	30.7	10,370	6,950	30.1	9,800	6,950	17.8	9,390	6,950	17.1	8,800	6,720	12.8						
	-20	13,300	6,240	38.3	13,135	6,570	37.8	12,970	6,940	37.4	12,400	6,940	35.8	11,830	6,950	34.2	11,460	6,950	33.2	11,100	6,940	20.1	10,190	6,940	18.5	9,760	6,920	14.2						
	-15	14,980	6,350	43.1	14,370	6,620	41.4	13,760	6,950	39.7	13,390	6,950	38.7	13,010	6,950	37.6	12,630	6,950	36.6	11,880	6,950	21.5	11,070	6,950	20.1	10,680	6,960	15.6	9,800	6,710	14.3			
	-10	15,000	5,880	43.1	14,380	6,030	41.4	13,750	6,190	39.6	13,400	6,490	38.7	13,050	6,830	37.8	12,650	6,840	36.7	12,200	6,850	22.1	11,770	6,770	21.4	11,100	6,770	16.2	10,660	6,940	15.6	9,940	6,900	14.5
	-7	14,800	5,150	42.6	14,400	5,360	41.5	14,000	5,600	40.4	13,960	6,080	40.3	13,910	6,640	40.2	13,800	6,830	40.0	12,820	6,850	23.2	12,000	6,770	21.8	11,140	6,750	16.2	10,900	6,900	15.9	10,050	6,930	14.7
	-2	14,500	4,460	41.7	14,630	4,740	42.1	14,760	5,050	42.6	14,690	5,730	42.4	14,610	6,610	42.3	14,300	6,590	41.5	13,400	6,450	24.3	12,840	6,770	23.3	12,140	6,750	17.7	11,300	6,770	16.5	10,300	6,780	15.1
	2	14,200	3,790	40.8	14,850	4,210	42.8	15,500	4,700	44.7	15,250	5,210	44.0	15,000	5,880	43.4	14,600	6,120	42.3	14,000	6,060	25.4	13,930	6,770	25.3	13,450	6,750	19.6	12,300	6,760	18.0	11,500	6,760	16.8
	7	17,500	3,110	50.3	16,750	3,310	48.2	16,000	3,550	46.2	16,000	4,000	46.2	16,000	4,570	46.3	16,000	4,940	46.4	16,000	5,520	29.0	16,000	5,930	29.1	16,000	6,540	23.3	14,890	6,910	21.7	13,400	6,910	19.6
	12	18,520	3,050	53.3	18,150	3,290	52.3	17,770	3,580	51.2	17,585	3,940	50.8	17,400	4,390	50.3	17,300	4,660	50.2	17,210	5,340	31.2	17,110	5,600	31.1	17,020	6,370	24.8	15,900	6,680	23.2	15,400	6,700	22.5
	15	19,970	2,990	57.4	19,285	3,190	55.5	18,600	3,430	53.6	18,500	3,860	53.4	18,400	4,420	53.2	18,120	4,720	52.5	17,920	5,320	32.5	17,760	5,480	32.3	17,500	6,360	25.5	15,900	6,360	23.2	15,400	6,360	22.5
	20	20,400	2,660	58.0	19,770	2,930	56.9	19,140	3,280	55.2	18,975	3,730	54.8	18,810	4,340	54.4	18,610	4,580	54.0	18,400	4,960	33.4	18,210	5,260	33.1	17,600	6,050	25.6	15,900	6,050	23.2	15,100	6,040	22.1
	25	20,830	2,420	58.0	20,255	2,690	58.0	19,680	3,060	56.7	19,450	3,420	56.2	19,220	3,880	55.6	19,100	4,280	55.4	19,050	4,800	34.5	18,800	5,110	34.2	17,600	5,480	25.6	15,900	5,480	23.2	15,000	5,470	21.9
	30	22,110	2,280	58.0	21,565	2,560	58.0	21,020	2,960	58.0	20,745	3,390	58.0	20,470	3,990	58.0	20,300	4,250	58.0	20,010	4,750	36.3	19,600	5,050	35.6	17,600	5,050	25.6	15,900	5,050	23.2	14,900	5,050	21.8
	35	23,560	2,190	58.0	22,945	2,490	58.0	22,330	2,900	58.0	21,830	3,300	58.0	21,330	3,860	58.0	21,160	4,150	58.0	20,500	4,540	37.2	19,600	4,600	35.6	17,600	4,600	25.6	15,900	4,600	23.2	14,750	4,600	21.6
AE160CXYDGK/EU	-25	9,800	4,830	28.2	10,650	5,630	30.7	11,500	6,570	33.2	11,050	6,680	31.9	10,600	6,790	30.7	10,370	6,950	30.1	9,800	6,950	17.8	9,390	6,950	17.1	8,800	6,720	12.8						
	-20	13,300	6,240	38.3	13,135	6,570	37.8	12,970	6,940	37.4	12,500	7,030	36.1	12,400	7,460	35.9	12,300	7,730	35.7	12,100	7,900	21.9	11,700	8,540	21.3	11,500	8,850	16.7						
	-15	14,980	6,350	43.1	14,370	6,620	41.4	13,760	6,950	39.7	13,450	7,000	38.8	13,100	7,020	37.9	12,850	7,130	37.3	12,560	7,550	22.8	12,260	8,100	22.3	11,860	8,140	17.3	10,800	7,990	15.8			
	-10	15,000	5,880	43.1	14,380	6,030	41.4	13,750	6,190	39.6	13,400	6,490	38.7	13,050	6,830	37.8	12,650	6,840	36.7	12,200	6,850	22.1	11,820	7,250	21.5	11,720	7,560	17.1	11,000	7,490	16.1	10,500	7,760	15.4
	-7	14,800	5,150	42.6	14,400	5,360	41.5	14,000	5,600	40.4	13,960	6,080	40.3	13,910	6,640	40.2	13,800	6,830	40.0	12,820	6,850	23.2	12,030	7,120	21.9	11,800	7,420	17.2	11,030	7,500	16.1	10,340	7,600	15.1
	-2	14,500	4,460	41.7	14,630	4,740	42.1	14,760	5,050	42.6	14,690	5,730	42.4	14,610	6,610	42.3	14,300	6,590	41.5	13,400	6,450	24.3	12,650	6,800	23.0	12,060	6,850	17.6	11,330	6,950	16.5	10,500	7,050	15.4
	2	14,200	3,790	40.8	14,850	4,210	42.8	15,500	4,700	44.7	15,250	5,210	44.0	15,000	5,880	43.4	14,600	6,120	42.3	14,000	6,060	25.4	13,610	6,770	24.7	13,290	6,780	19.4	12,240	6,800	17.9	11,510	6,850	16.8
	7	17,500	3,110	50.3	16,750	3,310	48.2	16,000	3,550	46.2	16,000	4,000	46.2	16,000	4,570	46.3	16,000	4,940	46.4	16,000	5,520	29.0	16,000	5,930	29.1	16,000	6,540	23.3	16,000	7,550	23.4	16,000	8,510	23.4
	12	18,520	3,050	53.3	18,150	3,290	52.3	17,770	3,580	51.2	17,585	3,940	50.8	17,400	4,390	50.3	17,300	4,660	50.2	17,210	5,340	31.2	17,110	5,600	31.1	17,020	6,370	24.8	16,920	7,170	24.7	16,780	7,360	24.6
	15	19,970	2,990	57.4	19,285	3,190	55.5	18,600	3,430	53.6	18,500	3,860	53.4	18,400	4,420	53.2	18,120	4,720	52.5	17,920	5,320	32.5	17,760	5,480	32.3	17,600	6,420	25.6	17,400	7,020	25.4	17,000	7,110	24.9
	20	20,400	2,660	58.0	19,770	2,930	56.9	19,140	3,280	55.2	18,975	3,730	54.8	18,810	4,340	54.4	18,610	4,580	54.0	18,400	4,960	33.4	18,210	5,260	33.1	18,050	6,220	26.3	17,750	6,830	25.9	17,420	7,050	25.5
	25	20,830	2,420	58.0	20,255	2,690	58.0	19,680	3,060	56.7	19,450	3,420	56.2	19,220	3,880	55.6	19,100	4,280	55.4	19,050	4,800	34.5	18,800	5,110	34.2	18,600	5,810	27.1	18,300	6,350	26.7	17,900	6,680	26.2
	30	22,110	2,280	58.0	21,565	2,560	58.0	21,020	2,960	58.0	20,745	3,390	58.0	20,470	3,990	58.0	20,300	4,250	58.0	20,010	4,750	36.3	19,750	5,100	35.9	19,520	5,660	28.4	19,090	6,120	27.9	18,650	6,390	27.3
	35	23,560	2,190	58.0	22,945	2,490	58.0	22,330	2,900	58.0	21,830	3,300	58.0	21,330	3,860	58.0	21,160	4,150	58.0	20,750	4,620	37.6	20,430	4,840	37.1	20,260	5,350	29.5	19,960	5,870	29.1	19,590	6,220	28.7

1. Heating capacity
- Capacity is according to EN14511.

- Valid for heated water range (ΔT = Leaving water temperature - Entering water temperature)
: If LWT≤50°C, ΔT=5°C or 50°C<LWT≤60°C, ΔT=8°C or LWT>60°C, ΔT=10°C, within the minimum ~ maximum water flow rate.
2. Cooling capacity
- Capacity is according to EN14511.

- Valid for Cooling water range (ΔT =Entering water temperature - Leaving water temperature)
: ΔT=5°C, within the minimum ~ maximum water flow rate.
3. Power input : Power input is according to EN14511.
4. Peak value : Tested without defrost operation in accordance with EN14511.
- ※ The real capacity would be changed according to the install environment.

2. Outdoor Units

2-9. Capacity table

3) Cooling Capacity

LWT (Leaving Water Temp.), Tamb (Ambient Temp.), CC (Cooling Capacity), PI (Power input), WF (Water Flow)

Model	LWT(°C)	7			10			13			15			18			25		
	Tamb(°C)	CC (W)	PI (W)	WF(LPM)	CC (W)	PI (W)	WF(LPM)	CC (W)	PI (W)	WF(LPM)	CC (W)	PI (W)	WF(LPM)	CC (W)	PI (W)	WF(LPM)	CC (W)	PI (W)	WF(LPM)
AE050CXYDEK/EU	10	4,485	670	12.9	4,577	670	13.2	4,959	720	14.3	5,244	730	15.1	5,750	730	16.5	6,327	690	18.2
	20	4,290	790	12.3	4,415	800	12.7	4,785	750	13.8	5,060	780	14.6	5,550	830	16.0	6,105	860	17.6
	30	4,095	1,040	11.8	4,253	1,030	12.2	4,611	1,090	13.3	4,876	1,100	14.0	5,350	1,020	15.4	5,883	1,020	17.0
	35	3,900	1,280	11.2	4,050	1,300	11.6	4,350	1,200	12.5	4,600	1,220	13.2	5,000	1,280	14.4	5,550	1,080	16.0
AE080CXYDEK/EU	46	3,650	1,870	10.5	3,850	1,860	11.1	4,120	1,830	11.8	4,420	1,870	12.7	4,800	1,930	13.8	5,246	1,900	15.1
	10	6,560	990	18.8	7,010	1,030	20.1	7,870	1,140	22.6	8,440	1,170	24.3	9,200	1,160	26.5	10,260	1,120	29.6
	20	6,270	1,150	18.0	6,760	1,220	19.4	7,590	1,220	21.8	8,140	1,250	23.4	8,880	1,320	25.6	9,900	1,390	28.5
	30	5,990	1,520	17.2	6,510	1,580	18.7	7,310	1,730	21.0	7,840	1,780	22.5	8,560	1,640	24.6	9,540	1,650	27.5
AE080CXYDGK/EU	35	5,700	1,900	16.4	6,200	1,990	17.8	6,900	1,900	19.8	7,400	1,970	21.3	8,000	2,050	23.1	9,000	1,750	26.0
	46	5,250	2,690	15.1	5,820	2,810	16.7	6,390	2,840	18.4	6,900	2,920	19.8	7,750	3,110	22.3	8,320	3,020	24.0
	10	6,560	990	18.8	7,010	1,030	20.1	7,870	1,140	22.6	8,440	1,170	24.3	9,200	1,160	26.5	10,260	1,120	29.6
	20	6,270	1,150	18.0	6,760	1,220	19.4	7,590	1,220	21.8	8,140	1,250	23.4	8,880	1,320	25.6	9,900	1,390	28.5
AE120CXYDEK/EU	30	5,990	1,520	17.2	6,510	1,580	18.7	7,310	1,730	21.0	7,840	1,780	22.5	8,560	1,640	24.6	9,540	1,650	27.5
	35	5,700	1,900	16.4	6,200	1,990	17.8	6,900	1,900	19.8	7,400	1,970	21.3	8,000	2,050	23.1	9,000	1,750	26.0
	46	5,250	2,690	15.1	5,820	2,810	16.7	6,390	2,840	18.4	6,900	2,920	19.8	7,750	3,110	22.3	8,320	3,020	24.0
	10	10,350	1,590	29.7	10,740	1,600	30.9	11,630	1,650	33.4	12,430	1,690	35.7	13,800	1,700	39.7	15,050	1,470	43.4
AE120CXYDGK/EU	20	9,900	1,850	28.4	10,360	1,890	29.8	11,220	1,780	32.3	11,990	1,800	34.5	13,320	1,930	38.3	14,520	1,770	41.9
	30	9,450	2,440	27.1	9,980	2,450	28.7	10,810	2,490	31.1	11,550	2,550	33.2	12,840	2,400	37.0	13,990	2,030	40.3
	35	9,000	3,100	25.9	9,500	3,070	27.3	10,200	2,700	29.3	10,900	2,830	31.3	12,000	3,000	34.6	13,200	2,230	38.1
	46	7,500	3,920	21.5	8,150	3,970	23.4	9,050	3,920	26.0	9,650	3,970	27.8	10,050	3,940	28.9	12,200	3,970	35.2
AE160CXYDEK/EU	10	10,350	1,590	29.7	10,740	1,600	30.9	11,630	1,650	33.4	12,430	1,690	35.7	13,800	1,700	39.7	15,050	1,470	43.4
	20	9,900	1,850	28.4	10,360	1,890	29.8	11,220	1,780	32.3	11,990	1,800	34.5	13,320	1,930	38.3	14,520	1,770	41.9
	30	9,450	2,440	27.1	9,980	2,450	28.7	10,810	2,490	31.1	11,550	2,550	33.2	12,840	2,400	37.0	13,990	2,030	40.3
	35	9,000	3,100	25.9	9,500	3,070	27.3	10,200	2,700	29.3	10,900	2,830	31.3	12,000	3,000	34.6	13,200	2,230	38.1
AE160CXYDGK/EU	46	8,550	4,620	24.6	9,030	4,400	25.9	9,690	4,200	27.9	10,360	4,260	29.8	11,400	4,470	32.8	12,540	4,080	36.2
	10	11,960	1,910	34.4	12,430	1,930	35.7	13,510	2,060	38.8	14,480	1,990	41.6	16,100	2,090	46.3	17,670	1,820	50.9
	20	11,440	2,190	32.9	11,990	2,220	34.5	13,040	2,210	37.5	13,970	2,200	40.2	15,540	2,370	44.7	17,050	2,190	49.2
	30	10,920	2,880	31.4	11,550	3,000	33.2	12,560	3,110	36.1	13,460	2,960	38.7	14,980	2,940	43.1	16,430	2,510	47.4
AE160CXYDGK/EU	35	10,400	3,590	29.9	11,000	3,590	31.6	11,850	3,350	34.1	12,700	3,480	36.5	14,000	3,680	40.4	15,500	2,750	44.7
	46	7,520	3,940	21.6	8,170	3,990	23.5	9,080	3,940	26.1	9,680	3,970	27.8	10,100	3,960	29.1	12,270	3,980	35.4
	10	11,960	1,910	34.4	12,430	1,930	35.7	13,510	2,060	38.8	14,480	1,990	41.6	16,100	2,090	46.3	17,670	1,820	50.9
	20	11,440	2,190	32.9	11,990	2,220	34.5	13,040	2,210	37.5	13,970	2,200	40.2	15,540	2,370	44.7	17,050	2,190	49.2
AE160CXYDGK/EU	30	10,920	2,880	31.4	11,550	3,000	33.2	12,560	3,110	36.1	13,460	2,960	38.7	14,980	2,940	43.1	16,430	2,510	47.4
	35	10,400	3,590	29.9	11,000	3,590	31.6	11,850	3,350	34.1	12,700	3,480	36.5	14,000	3,680	40.4	15,500	2,750	44.7
	46	9,880	5,340	28.4	10,450	5,150	30.0	11,260	5,000	32.4	12,070	5,070	34.7	13,300	5,340	38.3	14,730	4,990	42.5

1. Heating capacity

- Capacity is according to EN14511.
- Valid for heated water range (ΔT = Leaving water temperature - Entering water temperature)
: If $LWT \leq 50^\circ C$, $\Delta T = 5^\circ C$ or $50^\circ C < LWT \leq 60^\circ C$, $\Delta T = 8^\circ C$ or $LWT > 60^\circ C$, $\Delta T = 10^\circ C$, within the minimum ~ maximum water flow rate.

2. Cooling capacity

- Capacity is according to EN14511.
- Valid for Cooling water range (ΔT = Entering water temperature - Leaving water temperature)
: $\Delta T = 5^\circ C$, within the minimum ~ maximum water flow rate.

3. Power input : Power input is according to EN14511.

4. Peak value : Tested without defrost operation in accordance with EN14511.

※ The real capacity would be changed according to the install environment.

2. Outdoor Units

2-10. Silent mode corrections

Heating

Silent Function	Outdoor Air Temperature(°C DB)			
	-15	2	7	15
Level 1	0.92	0.90	0.95	0.95
Level 2	0.82	0.80	0.86	0.86
Level 3	0.68	0.67	0.72	0.72
Low-noise	0.54	0.60	0.65	0.65

Cooling

Silent Function	Outdoor Air Temperature(°C DB)			
	10	20	35	45
Level 1	1.00	1.00	0.95	0.95
Level 2	0.98	0.98	0.86	0.86
Level 3	0.78	0.78	0.65	0.65
Low-noise	0.70	0.70	0.65	0.65

Correction factor by % glycol

Anti-freeze	Propylene glycol	
%wt	Correction factor	
	Capacity	Power Input
0%	1.000	1.000
10%	0.988	0.994
20%	0.973	0.988
30%	0.955	0.982
40%	0.933	0.976
50%	0.910	0.970

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	2 / 20	1 / 25	1 / 0	1 / 0	
Water Heating	Declared load profile	-	L	L	L	L	
	Energy efficiency Class	-	A+	A+	A+	A+	
Water Connections	Water Flow Rate (Std)[H/C]		LPM	14.4	23.1	34.6	46.2 / 40.4
	Water Pressure (Max)		bar	3	3	3	3
	Water pipe (To outdoor unit)	Type	-	Straight pipe	Straight pipe	Straight pipe	Straight pipe
		Inlet	Φ, mm	28	28	28	28
		Outlet	Φ, mm	28	28	28	28
	Water pipe (Space heating)	Type	-	Straight pipe	Straight pipe	Straight pipe	Straight pipe
		Inlet	Φ, mm	28	28	28	28
		Outlet	Φ, mm	28	28	28	28
	Water pipe (DHW)	Type	-	Straight pipe	Straight pipe	Straight pipe	Straight pipe
		Inlet	Φ, mm	22	22	22	22
		Outlet	Φ, mm	22	22	22	22
	Water pipe (Secondary water return, Only 260L)	Type	-	-	-	-	-
		Inlet	Φ, mm	-	-	-	-
	Leaving Water Temperature	Heating	℃	15~75	15~75	15~75	15~75
		Cooling	℃	5~25	5~25	5~25	5~25
DHW Tank	Nominal Water Volume		liter	200	200	200	200
	Net Water Volume		liter	194	194	194	194
	Material		-	SUS 316L	SUS 316L	SUS 316L	SUS 316L
	Max. water pressure		bar	10	10	10	10
	Max. water temperature		℃	70	70	70	70
	Immersion heater (= booster heater)		kW	3 (230V)	3 (230V)	3 (230V)	3 (230V)
	Insulation		-	PU Foam	PU Foam	PU Foam	PU Foam
Water Pump	Type		-	Centrifurugal (GPA 25-9H)	Centrifurugal (GPA 25-9H)	Centrifurugal (GPA 25-9H)	Centrifurugal (GPA 25-9H)
	Motor Input		W	100	100	100	100
	Number of Unit		EA	1	1	1	1
Backup Heater	Power		kW	2 (230V)	2 (230V)	2 (230V)	2 (230V)
	Thermostat		℃	85±4	85±4	85±4	85±4
	Thermostat (Thermal Fuse)		℃	98 +0 -5	98 +0 -5	98 +0 -5	98 +0 -5
Safety device	Pressure relief valve		bar	2.9	2.9	2.9	2.9
	Flow Sensor		LPM	5~60	5~60	5~60	5~60
	Temperature & Pressure relief valve(Tank)		bar, ℃	7, 90	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)	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	7	7
		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	1 / 50	1 / 20	1 / 20	
Water Heating	Declared load profile	-	XL	XL	XL	
	Energy efficiency Class	-	A	A	A	
Water Connections	Water Flow Rate (Std)[H/C]		LPM	23.1	34.6	46.2 / 40.4
	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
		Inlet	Φ, mm	-	22	22
	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	260	260
	Net Water Volume		liter	194	254	254
	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	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	7	7	7
		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	1 / 50	1 / 20	1 / 20
Water Heating	Declared load profile		-	XL	XL	XL
	Energy efficiency Class		-	A	A	A
Water Connections	Water Flow Rate (Std)[H/C]		LPM	23.1	34.6	46.2 / 40.4
	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	7	7
		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

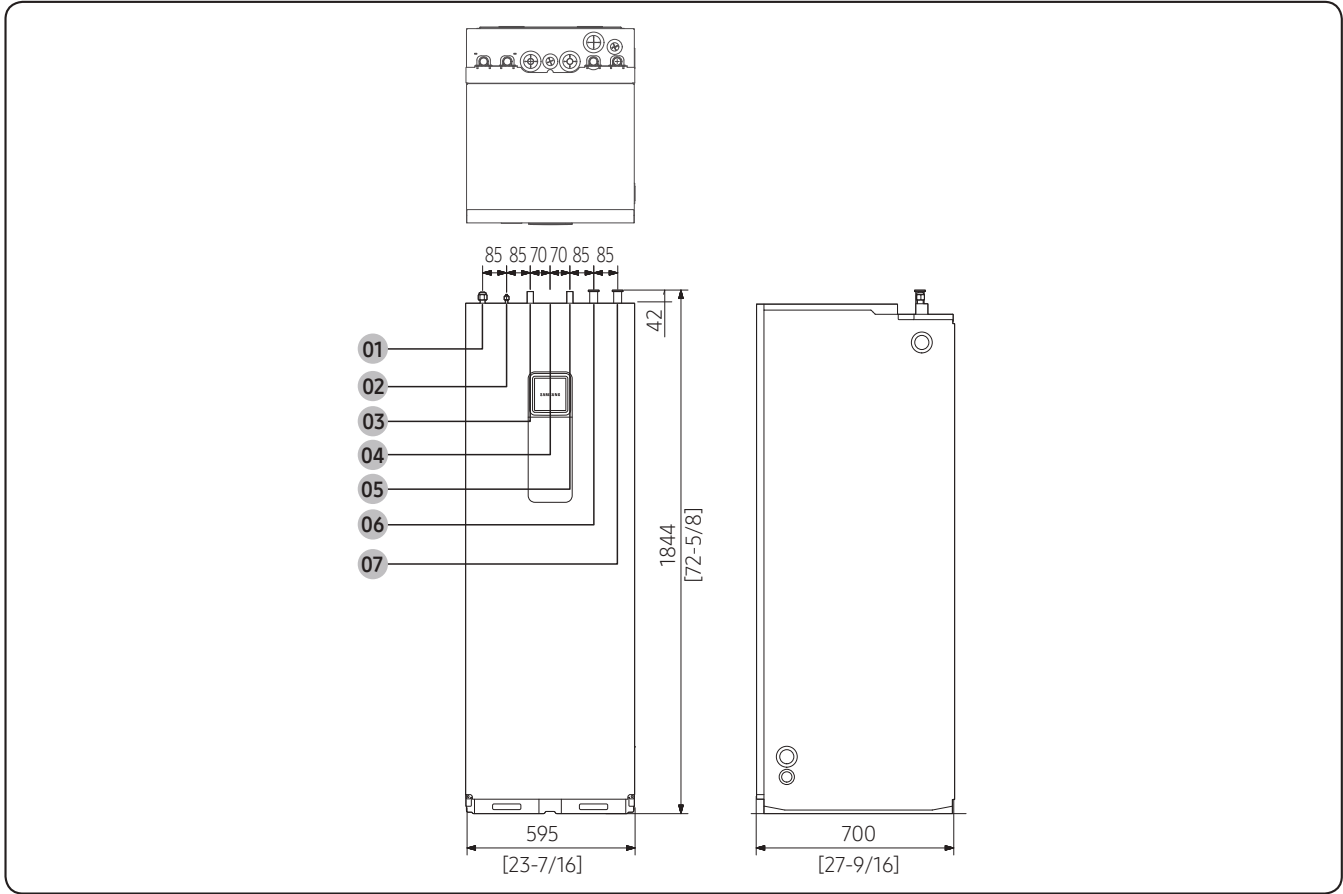
- Specifications may be subject to change without prior notice.

3. Tank integrated hydro unit

3-2. Dimensional drawing

AE200/260CNWM*G/EU

Unit : mm

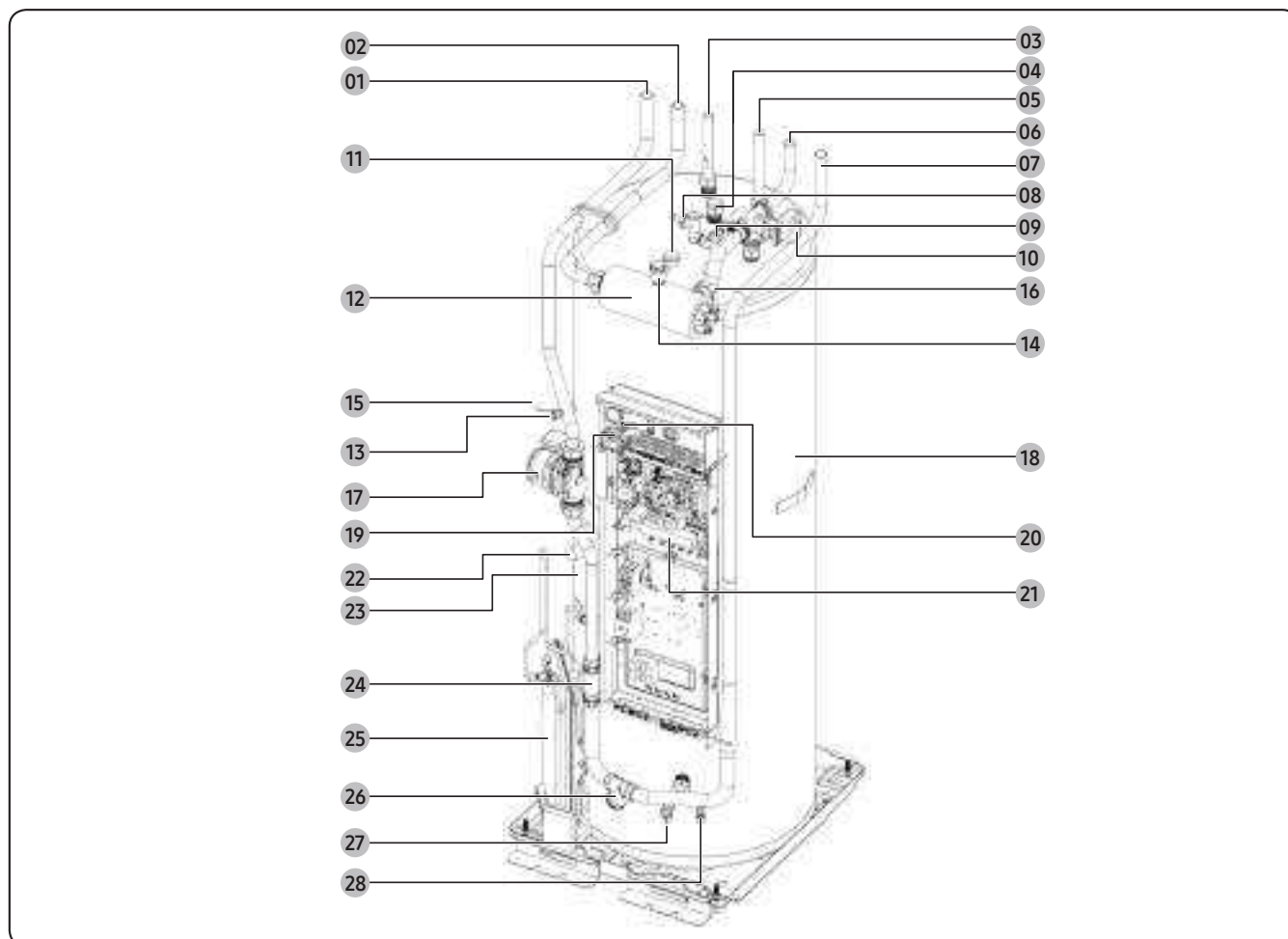


NO	Name	Description
01	Mono outdoor outlet	Ø28, T1.2
02	Mono outdoor inlet	Ø28, T1.2
03	Hot water outlet	Ø22, T1.0
04	Secondary return (260L option)	Ø22, T1.0
05	Cold water inlet	Ø22, T1.0
06	Space heating outlet	Ø28, T1.2
07	Space heating inlet	Ø28, T1.2

3. Tank integrated hydro unit

3-2. Dimensional drawing

Main components

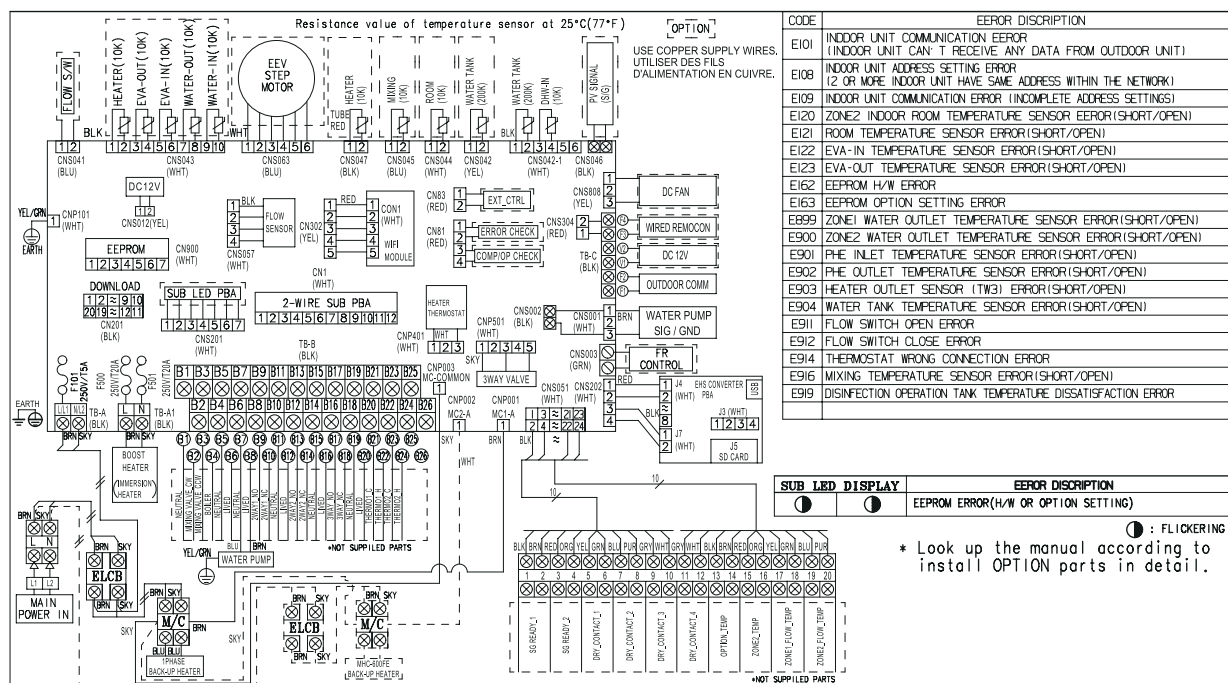


NO	Part name	Note	NO	Part name	Note
01	Water pipe (Return to heat pump)	ø28, Straight pipe	15	Tank thermistor	
02	Water pipe (Flow from heat pump)	ø28, Straight pipe	16	Heater thermistor	
03	Hot water outlet	ø22, Straight pipe	17	Water pump	
04	Secondary return	ø22, Straight pipe (260 L option)	18	Water 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

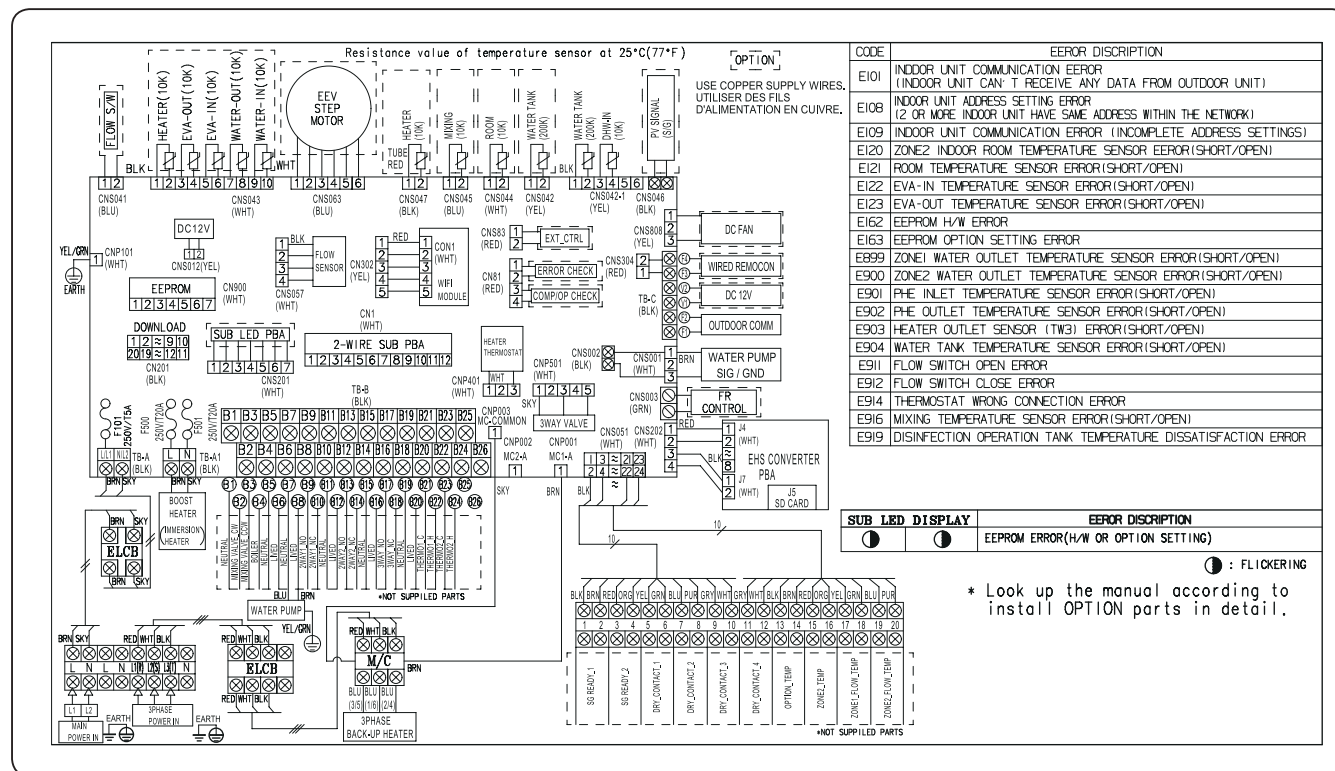
NOTES

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

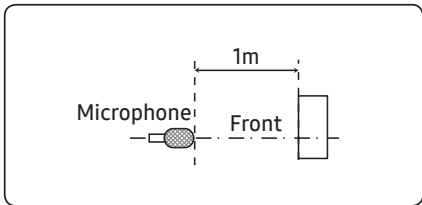
- Specifications may be subject to change without prior notice.
- Sound Pressure Level
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - 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

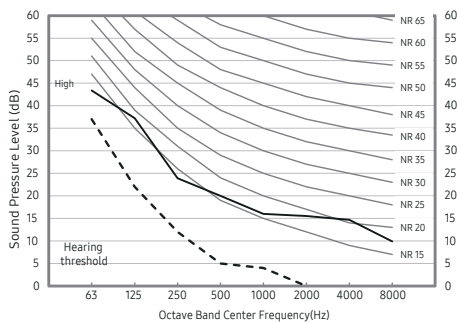
Unit: dB(A)



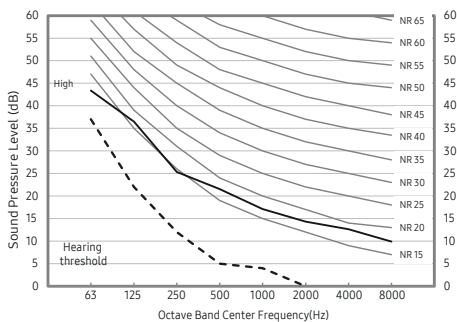
Model	Heating
AE200*NWMEG/EU+AE050CXYDEK/EU	26
AE200*NWMEG/EU+AE080CXYDEK/EU	26
AE200*NWMEG/EU+AE120CXYDEK/EU	30
AE200*NWMEG/EU+AE160CXYDEK/EU	30

- NR Curve

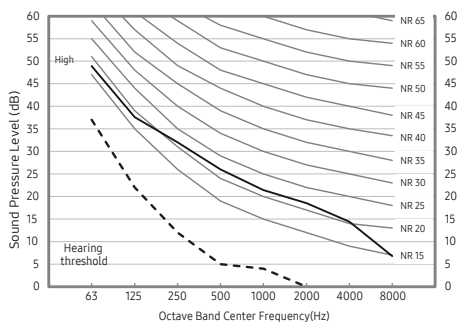
1) AE200*NWMEG/EU+AE050CXYDEK/EU



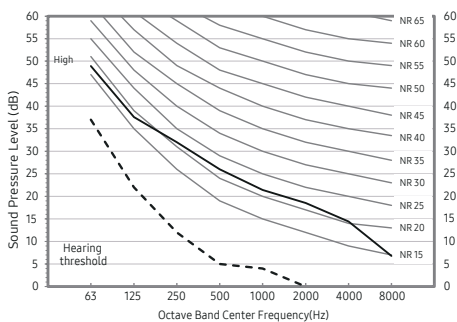
2) AE200*NWMEG/EU+AE080CXYDEK/EU



3) AE200*NWMEG/EU+AE120CXYDEK/EU



4) AE200*NWMEG/EU+AE160CXYDEK/EU



NOTE

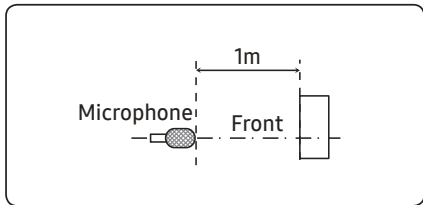
- Specifications may be subject to change without prior notice.
- Sound Pressure Level
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.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

3. Tank integrated hydro unit

3-4. Sound data

Sound Pressure level

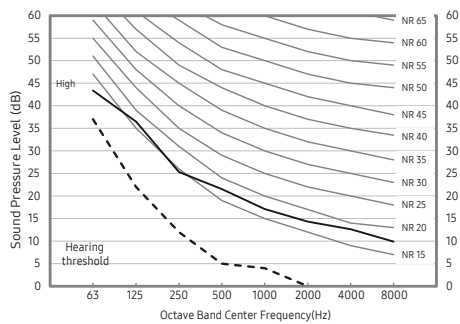
Unit: dB(A)



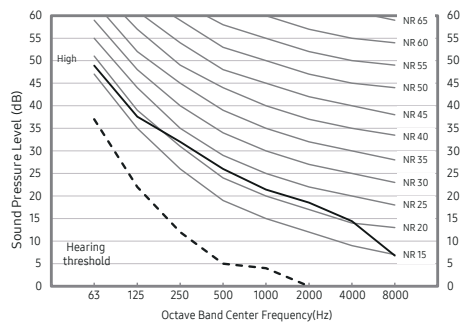
Model	Heating
AE260*NWMEG/EU+AE080CXYDEK/EU	26
AE260*NWMEG/EU+AE120CXYDEK/EU	30
AE260*NWMEG/EU+AE160CXYDEK/EU	30

- NR Curve

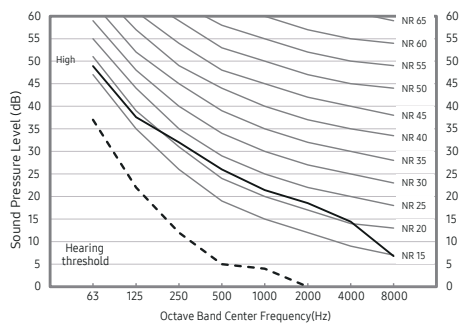
1) AE260*NWMEG/EU+AE080CXYDEK/EU



2) AE260*NWMEG/EU+AE120CXYDEK/EU



3) AE260*NWMEG/EU+AE160CXYDEK/EU



NOTE

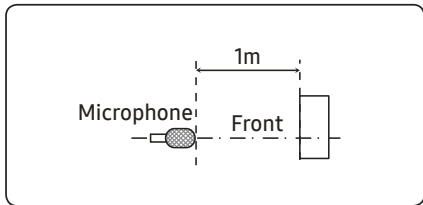
- Specifications may be subject to change without prior notice.
- Sound Pressure Level
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.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

3. Tank integrated hydro unit

3-4. Sound data

Sound Pressure level

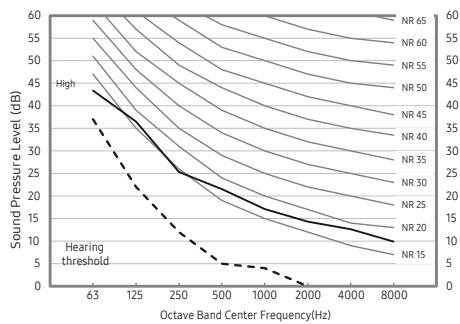
Unit: dB(A)



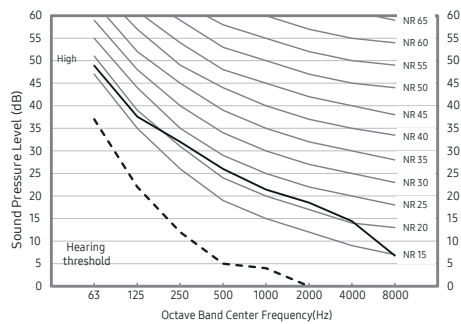
Model	Heating
AE260*NWMGG/EU+AE080CXYDGK/EU	26
AE260*NWMGG/EU+AE120CXYDGK/EU	30
AE260*NWMGG/EU+AE160CXYDGK/EU	30

- NR Curve

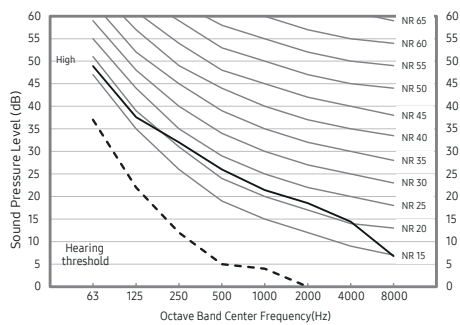
1) AE260*NWMGG/EU+AE080CXYDGK/EU



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

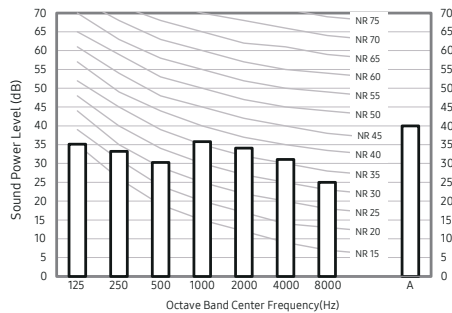
Sound Power level

NOTE

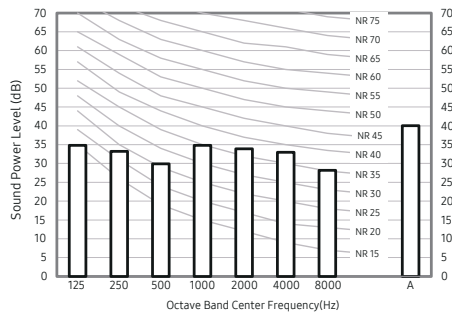
- Specifications may be subject to change without prior notice
 - Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

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

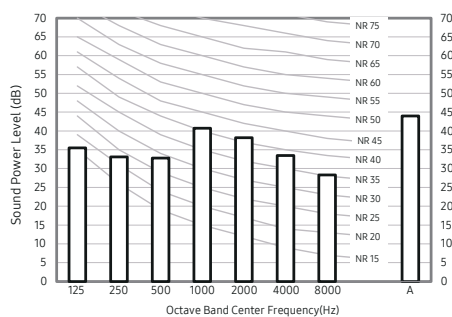
1) AE200*NWMEG/EU+AE050CXYDEK/EU



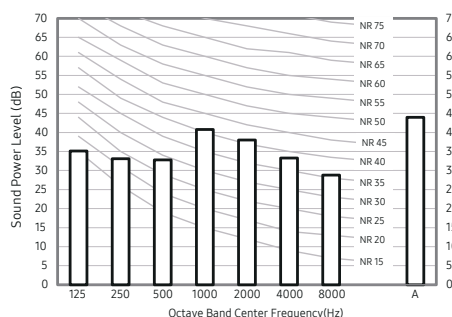
2) AE200*NWMEG/EU+AE080CXYDEK/EU



3) AE200*NWMEG/EU+AE120CXYDEK/EU



4) AE200*NWMEG/EU+AE160CXYDEK/EU



3. Tank integrated hydro unit

3-4. Sound data

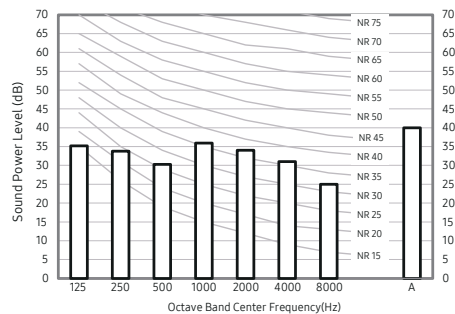
Sound Power level

NOTE

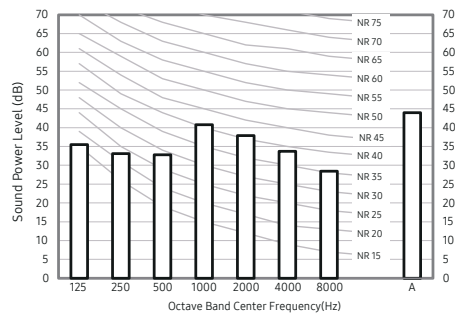
- Specifications may be subject to change without prior notice
 - Sound power level is an absolute value that a sound source generates.
 - dB(A) = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

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

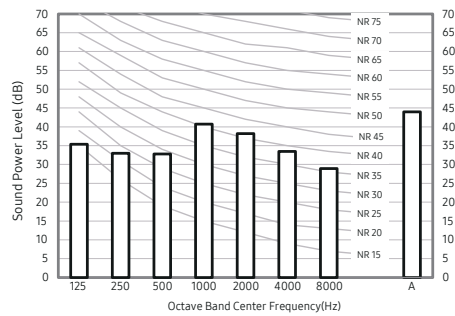
1) AE260*NWMEG/EU+AE080CXYDEK/EU



2) AE260*NWMEG/EU+AE120CXYDEK/EU



3) AE260*NWMEG/EU+AE160CXYDEK/EU



3. Tank integrated hydro unit

3-4. Sound data

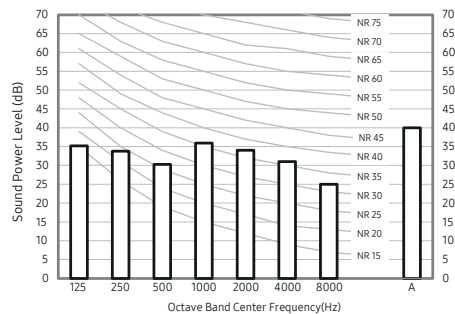
Sound Power level

NOTE

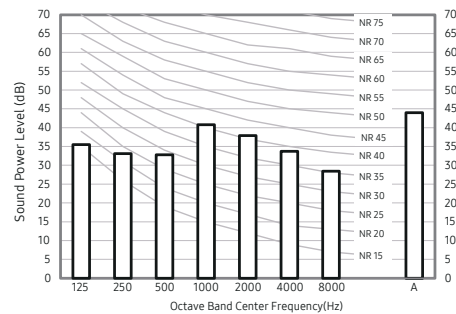
- Specifications may be subject to change without prior notice
 - Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

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

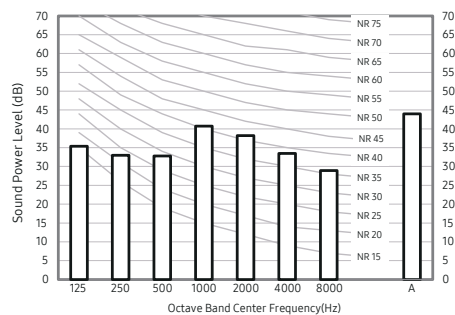
1) AE260*NWMGG/EU+AE080CXYDGK/EU



2) AE260*NWMGG/EU+AE120CXYDGK/EU



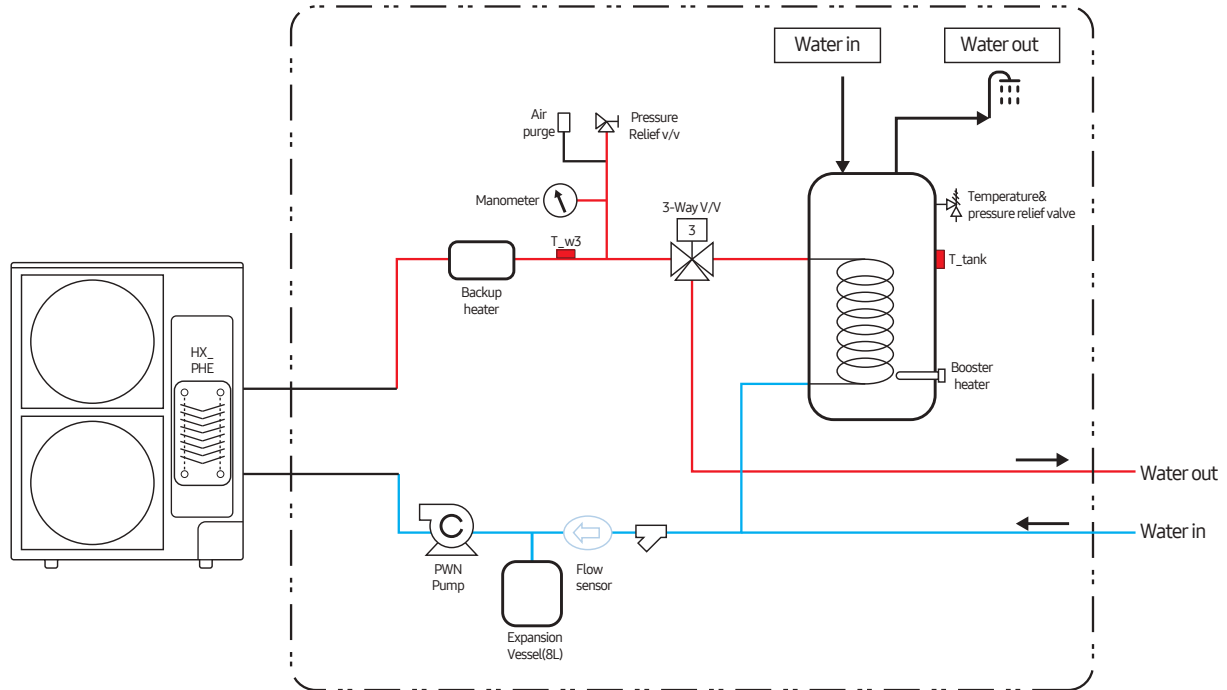
3) AE260*NWMGG/EU+AE160CXYDGK/EU



3. Tank integrated hydro unit

3-5. Piping diagram

AE200/260CNWM*G/EU



4. Control Kit

4-1. Specifications

Model Name			MIM-E03CN	MIM-E03EN
Compatible with		-	EHS Mono (Standard, HT)	EHS Mono (Standard, HT)
Power Supply		Ø, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50
External Dimension	Net Weight	kg	3.50	3.50
	Shipping Weight	kg	6.90	6.90
	Shipping Dimensions (WxHxD)	mm	329 x 439 x 168	329 x 439 x 168
External Control	Booster Heater	-	AC 230V (Max 20A)	AC 230V (Max 20A)
	Back up Heater (/Boiler)	-	AC 230V (Max 10mA)	AC 230V (Max 10mA)
	Water Pump	-	AC 230V (Max 0.5A)	AC 230V (Max 0.5A)
	2way(or 3way) Valve	-	AC 230V (Max 22mA)	AC 230V (Max 22mA)
	Room Thermostat	-	AC 230V (Max 22mA)	AC 230V (Max 22mA)
	Solar Pump	-	AC 230V (Max 10mA)	AC 230V (Max 10mA)
	Inverter Pump	-	AC 230V (Max 0.5A)	AC 230V (Max 0.5A)
	3way Mixing Valve	-	AC 230V (Max 22mA)	AC 230V (Max 22mA)
Fuction	SG Ready (Smart Grid Ready)	-	X	○
	Multi zone (2 zone)	-	X	○

4. Control Kit

4-1. Specifications

Model Name		Indoor Unit				MIM-E03CN / MIM-E03EN		MIM-E03CN / MIM-E03EN					
		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)		Heat Pump (A2W)					
	Performance	Capacity	Heating	A2W Condition #1. (A7/W35) ^{1)*}	W	5,000		8,000					
				A2W condition #2	Btu/h	17,100		27,300					
						W	5,000		8,000				
							5,000		8,000				
							5,000		8,000				
			A-7/W35 ^{4)*}	5,000			8,000						
				Cooling	A2W Condition #1. (A35/W18) ^{1)*}	W	5,000		8,000				
					Btu/h	17,100		27,300					
						W	3,900		5,700				
							Power	Power Input	Heating	A2W Condition #1. (A7/W35) ^{1)*}	W	980	
	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. (A35/W18) ^{1)*}	W			1,280		2,050		
		A2W condition #2			1,279				1,900				
			Current Input		Heating				A2W Condition #1.	A	4.63		7.70
				Cooling	A2W condition #2				A		6.05		9.69
				Heating						A	6.24		10.21
	Cooling	7.61		12.62									
	Current	MCA	MFA	A	16.1		26.0						
				A	17.6		28.6						
	Efficiency	COP (Nominal Heating) A2W condition #1				5.10		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	A2W condition #3	A2/W35 ^{4)*}	A-7/W35 ^{4)*}	W/W	3.80		3.70			
								3.10		3.00			
								4.30		4.20			
								3.00		3.00			
		PdesignH (LWT 35°C)				5,500		8,000					
		PdesignH (LWT 55°C)				5,500		8,000					
		SCOP (35°C)				5.10		4.85					
		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		3				
		Leaving Water Temperature	Min.	Heating	°C	15		15					
					°C	75		75					
			Min.	Cooling	°C	5		5					
°C	25				25								
Refrigerant	Type				-	R290		R290					
	Factory Charging				g	630		870					
	Control Method				tCO ₂ e	0.00189		0.00255					
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	-		-					

4. Control Kit

4-1. Specifications

Model Name		Indoor Unit		MIM-E03CN / MIM-E03EN	MIM-E03CN / MIM-E03EN
		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	52
			Cooling	m ³ /min	55
		Quantity		EA	1
	Fan motor	Quantity		EA	1
		Model		-	FMDC531SSJ
		Output		W	125
		Drive		-	Direct drive
		Speed	Steps	-	-
			Heating	rpm	550
			Cooling	rpm	580
	Sound Level	Sound Pressure Level	Heating	dB(A)	41
			Cooling	dB(A)	41
			Night Mode(3m)	dB(A)	35
		Sound Power Level	Heating	dB(A)	55
			Cooling	dB(A)	55
	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	96
		Net Dimensions (WxHxD)		mm	998x850x500
		Shipping Dimensions (WxHxD)		mm	1,070x1,018x630
	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).

4. Control Kit

4-1. Specifications

Model Name		Indoor Unit				MIM-E03CN / MIM-E03EN		MIM-E03CN / MIM-E03EN				
		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				
				A2W condition #2	Btu/h	40,900		54,600				
						A2W condition #3	W	12,000		16,000		
								A2/W35 ^{4)*}	12,000		16,000	
									12,000		16,000	
			A-7/W35 ^{4)*}	12,000					14,000			
				Cooling	A2W Condition #1. (A35/W18) ^{1)*}	W	12,000		14,000			
					A2W condition #2	Btu/h	40,900		47,800			
			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		4,100		
								A-7/W35 ^{4)*}	4,000		5,710	
	Cooling	A2W Condition #1. (A35/W18) ^{1)*}			W	3,000		3,680				
		A2W condition #2				3,103		3,586				
						Current Input	Heating	A2W Condition #1.	A	11.81		16.78
	Cooling	14.18			17.39							
		Heating			A2W condition #2		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				
						3.00		2.90				
						4.30		3.90				
			3.00			2.80						
		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		3.55				
		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			
		Leaving Water Temperature	Min.	Heating	°C	15		15				
					°C	75		75				
			Min.	Cooling	°C	5		5				
°C					25		25					
Refrigerant	Type			-	R290		R290					
	Factory Charging			g	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	-		-					

4. Control Kit

4-1. Specifications

Model Name		Indoor Unit		MIM-E03CN / MIM-E03EN	MIM-E03CN / MIM-E03EN
		Outdoor Unit		AE120CXYDEK/EU	AE160CXYDEK/EU
Outdoor Unit	Heat exchanger	Length		mm	1,239/1,210/1,182
		Rows	Quantity	EA	3
		Fin pitch		mm	1.5
		Passes	Quantity	EA	22-12
		Face area		m ²	1.17
		Stages	Quantity	EA	46
		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	95
			Cooling	m ³ /min	90
		Quantity		EA	1
	Fan motor	Quantity		EA	1
		Model		-	SIC-88FWJ-F1122-1
		Output		W	122
		Drive		-	Direct drive
		Speed	Steps	-	-
			Heating	rpm	590
			Cooling	rpm	580
	Sound	Sound Pressure	Heating	dB(A)	47
			Cooling	dB(A)	51
			Night Mode(3m)	dB(A)	35
		Sound Power	Heating	dB(A)	60
			Cooling	dB(A)	65
	Connections	Water pipe	inlet	-	BSP male 1"
			outlet	-	BSP male 1"
	Casing	Color		-	Shadow Gray
		Material		-	GI-SGCC
	Packing	Material		-	EPS/BOX
		Weight		kg	20
	External Dimension	Net Weight		kg	140
		Shipping Weight		kg	154
		Net Dimensions (WxHxD)		mm	1,270x1,018x530
		Shipping Dimensions (WxHxD)		mm	1,330x1,226x630
	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).

4. Control Kit

4-1. Specifications

Model Name		Indoor Unit			MIM-E03CN/MIM-E03EN	MIM-E03CN/MIM-E03EN	MIM-E03CN/MIM-E03EN						
		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			
								A2/W35 ^{4)*}	8,000	12,000	16,000		
								A-7/W35 ^{4)*}	8,000	12,000	16,000		
			Cooling	A2W Condition #1. (A35/W18) ^{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	4,100									
	A-7/W35 ^{4)*}	2,670	4,000	5,710									
	Cooling	A2W Condition #1. (A35/W18) ^{1)*}	W	2,050	3,000	3,680							
		A2W condition #2		1,900	3,103	3,714							
				Current Input	Heating	A2W Condition #1.		A	2.56	3.92	5.57		
					Cooling	A2W condition #1.			3.22	4.71	5.77		
					Heating	A2W condition #2			A	3.39	5.08	7.17	
	Cooling	4.19	6.28		8.66								
	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	3.80					
		EER (Nominal Cooling) A2W condition #2				3.00	2.90	2.90					
		COP	A2W condition #2	W/W	3.70	3.70	3.50						
					A2W condition #3	3.00	3.00	2.90					
					A2/W35 ^{4)*}	4.20	4.30	3.90					
					A-7/W35 ^{4)*}	3.00	3.00	2.80					
					PdesignH (LWT 35°C)	8,000	12,000	15,500					
		PdesignH (LWT 55°C)				8,000	12,000	15,500					
		SCOP (35°C)				4.85	4.90	4.70					
		SCOP (55°C)				3.55	3.65	3.55					
		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					
	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				g	870	1,250	1,250				
						tCO ₂ e	0.00255	0.00375	0.00375				
		Control Method				-	EEV	EEV	EEV				
	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	-	-	-							

4. Control Kit

4-1. Specifications

Model Name		Indoor Unit		MIM-E03CN/MIM-E03EN	MIM-E03CN/MIM-E03EN	MIM-E03CN/MIM-E03EN
		Outdoor Unit		AE080CXYDGK/EU	AE120CXYDGK/EU	AE160CXYDGK/EU
Outdoor Unit	Heat exchanger	Length		mm	986/957/928	1,239/1,210/1,182
		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	65	95
			Cooling	m ³ /min	69	94
		Quantity		EA	1	1
	Fan motor	Quantity		EA	1	1
		Model		-	FMD531SSJ	SIC-88FWJ-F1122-1
		Output		W	125	122
		Drive		-	Direct drive	Direct drive
		Speed	Steps	-	-	-
			Heating	rpm	720	590
			Cooling	rpm	760	580
	Sound Level	Sound Pressure Level	Heating	dB(A)	45	51
			Cooling	dB(A)	45	51
			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	108	154
		Net Dimensions (WxHxD)		mm	998x850x500	1,270x1,018x530
		Shipping Dimensions (WxHxD)		mm	1,070x1,018x630	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

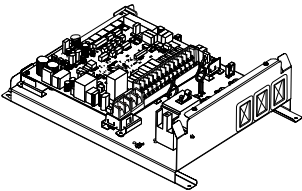
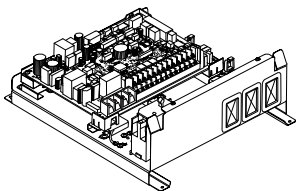
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- 4) A2W Condition : (A2W35) Water In/Out -/35°C, Outdoor Air 2°C[DB]/1°C[WB];
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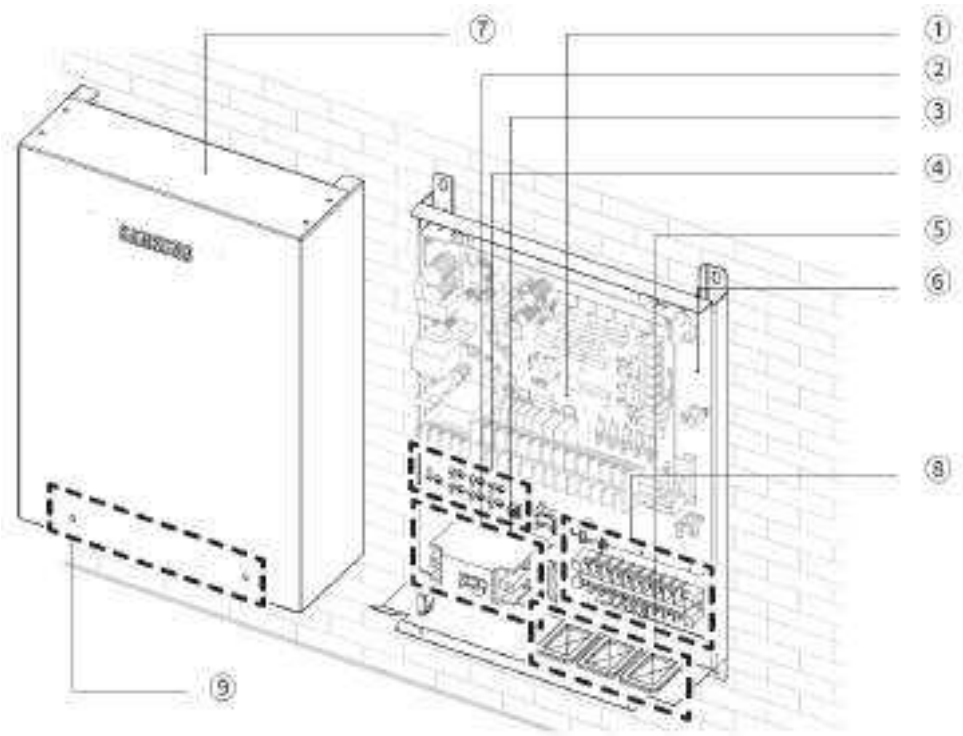
4. Control Kit

4-2. Dimensional drawing

Product line-up and accessories

Control kit		
Chassis		
Model name	MIM-E03CN	MIM-E03EN

Main component

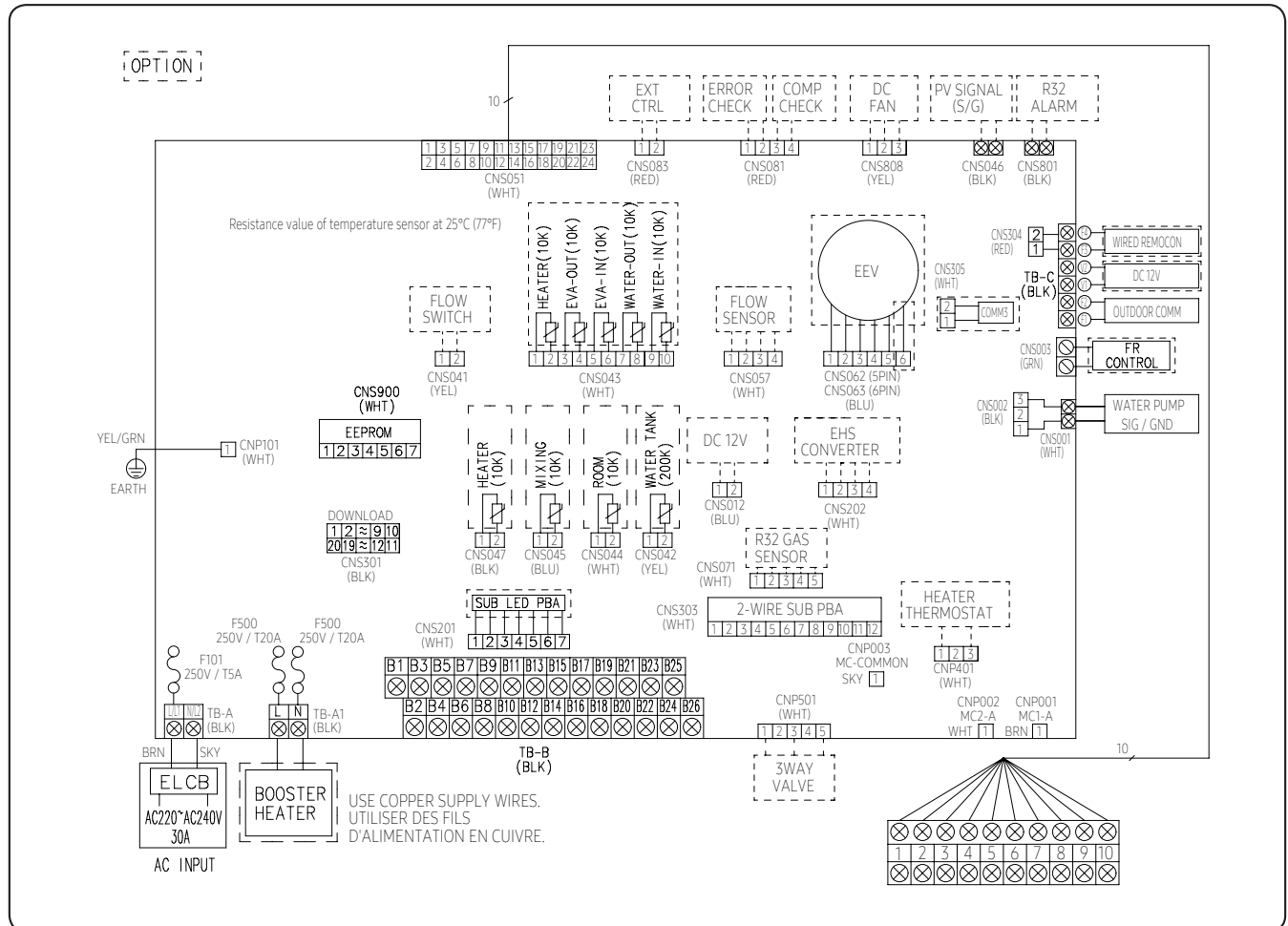


(Unit : EA)

No.	Part	Description	
		MIM-E03CN	MIM-E03EN
①	Main PBA	1	1
②	ELCB - Rated current : 30A	1	1
③	ELCB - Leakage current : 30mA	1	1
④	Grounding screw	7	7
⑤	Rubber	3	3
⑥	Base plate	1	1
⑦	Top cover plate	1	1
⑧	Terminal Block (10p)	-	1
⑨	Case screw	2	2

4. Control Kit

4-3. Electrical wiring diagram



NOTES

1. It does not support external input(CNS083)/output(CNS081) signal function.
2. MIM-E03CN model does not support CNS051 function. Therefore there is no zone control via wired remote controller or SmartGrid ready functions available.