

SAMSUNG

EHS

Technical Data Book

**EHS Mono for Europe
(R32, R290, 50Hz, HP)**



Model : Outdoor unit (AE**XYD**/EU)
Indoor unit (AE****DN*MPK/EU)**

History

Version	Modification	Date	Remark
Ver.1.0	Released 2024 EHS Mono including New Hydro Unit for Europe TDB	24. 03. 26	
Ver.1.1	Updated some data	24. 08. 22	
Ver.1.2	Updated some data	25. 05. 22	

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
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(5) Feature 1

Y	MONO
---	------

(2) Capacity

X 1/10 kW (3 digits)

(6) Feature 2

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

(3) Version

R	2019
B	2022
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)
K	Heat Pump (R290)

Nomenclature

Model Name

AE	200	D	N	W	M	P	K	/	EU
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		Buyer

(1) Classification

AE	EHS
----	-----

(2) Capacity

x Liter (3 digits)

(3) Version

D	2024
---	------

(4) Product Type

N	Indoor Unit
X	Outdoor Unit

(5) Product Notation

W	ClimateHub
X	ClimateHub, 2 zone
Y	Hydro Unit
Z	Hydro Unit, 2 zone

(6) Feature

M	Mono
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(7) Rating Voltage

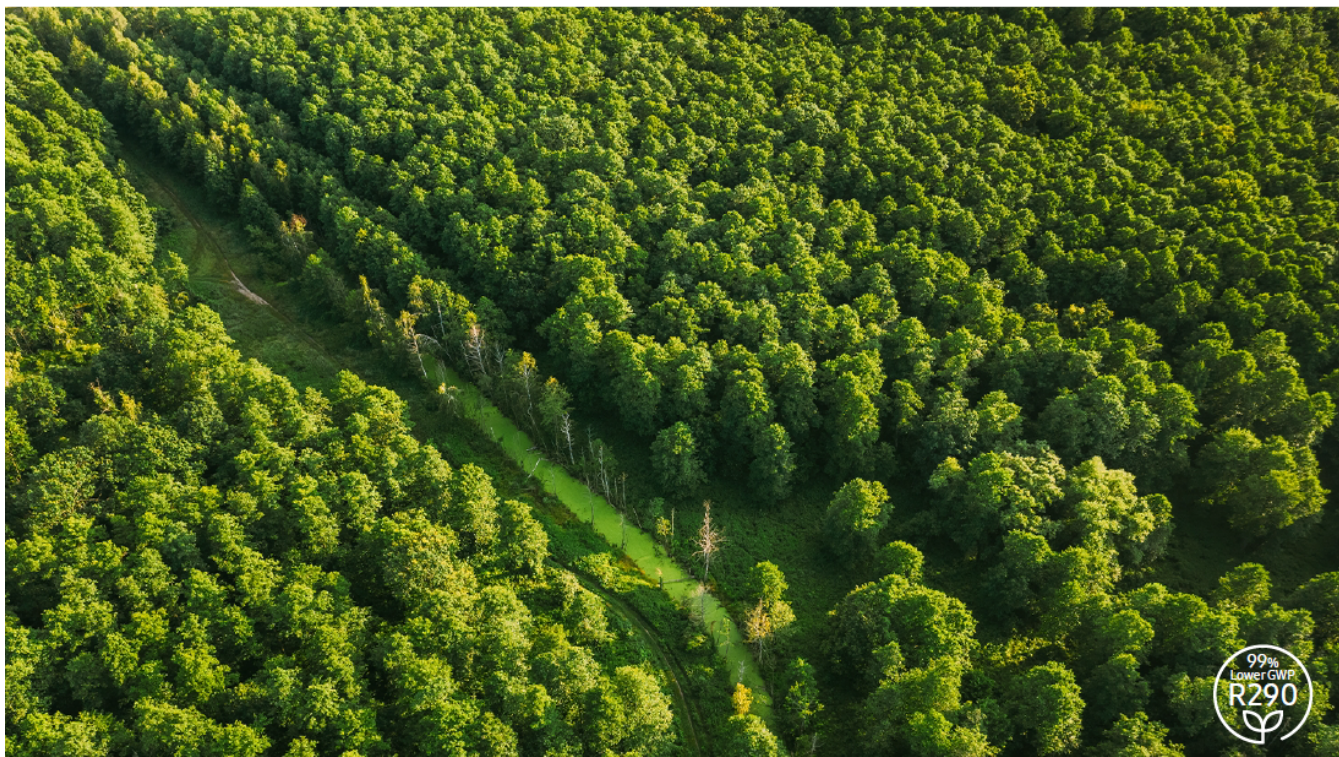
P	220~240V, 50/60Hz, 1Φ 380~415V, 50/60Hz, 3Φ
---	--

(8) Mode

K	Heat Pump
---	-----------

Features & Benefits

EHS Mono



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.



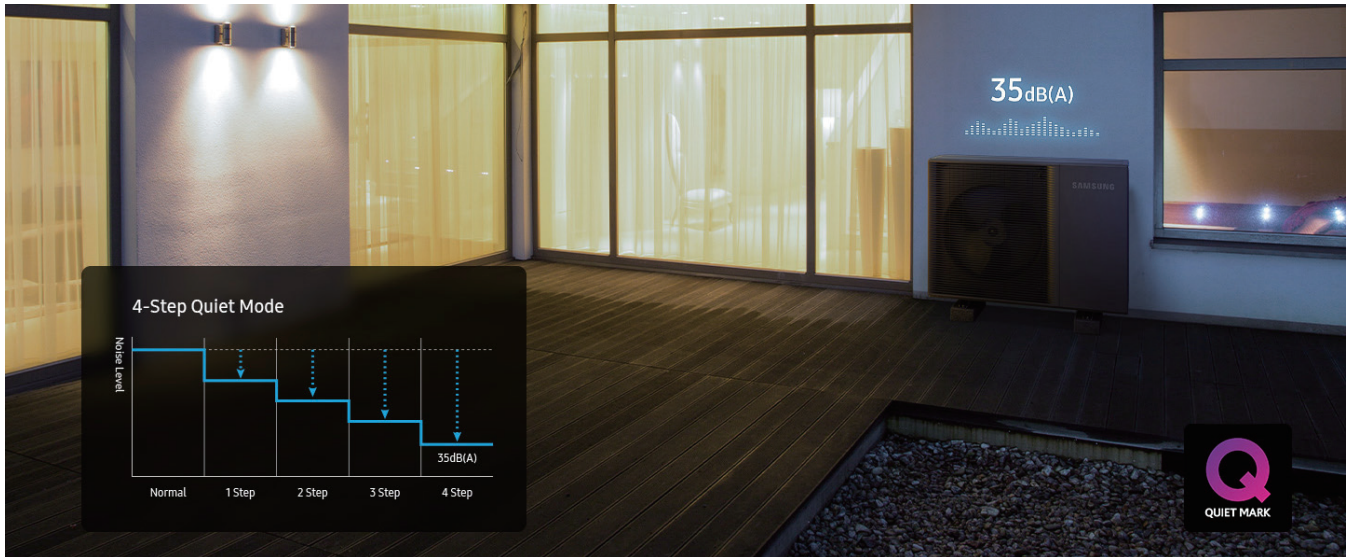
Features & Benefits

EHS Mono

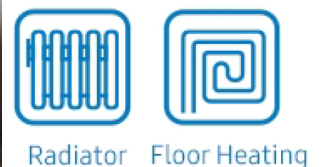
35dB(A) quiet operation

Low Sound Level

Works quietly using various advanced technologies for noise reduction. A 4-Step Quiet Mode lets you reduce the sound level in steps or keep it as low as 35dB(A)*. Its Multi-serration Fan is also significantly quieter. And various sound reduction technologies absorb noise and vibration.



* Based on internal testing of the EHS Mono HT Quiet outdoor units. The noise level is measured 3m away from the front of the outdoor unit, in an anechoic room with an outside temperature of 7°C. Results may vary depending on environmental factors and individual use.



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***RXD*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

Control anywhere

Smart Connectivity

Control your heating on the go. Smart Connectivity lets you monitor the temperature of indoor rooms and the leaving water, turn it on/off and adjust the settings anytime and anywhere using the SmartThings App*. You can also view your energy usage. Or you can simply tell Bixby what you want**.



* Available on Android and iOS devices. A Wi-Fi connection, Samsung account and an optional Wi-Fi Kit (MIM-H04N) are required.

** Bixby is Samsung's brand of artificial intelligence (AI) / Internet of Things (IoT) voice assistant. A Wi-Fi connection and a Samsung account are required. Bixby only recognizes certain accents and dialects of English (UK), English (US), French (France), German (Germany), Italian (Italy), Korean (South Korea), Mandarin Chinese (China), Spanish (Spain) and Portuguese (Brazil). Other languages to be supported.

* Amazon, Alexa and all related logos are trademarks of Amazon.com, Inc. or its affiliates. Google is a trademark of Google LLC.

Enhanced efficiency

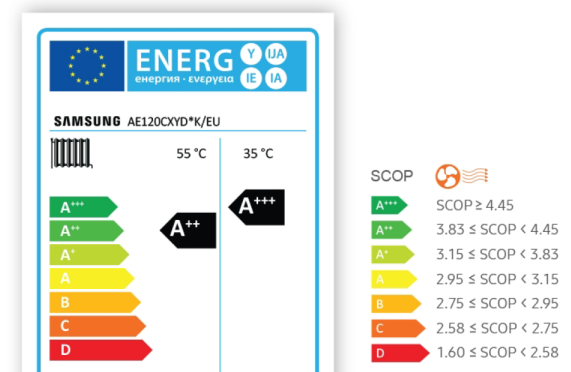
High Efficiency (SCOP A+++)

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.



Features & Benefits

Hydro Unit



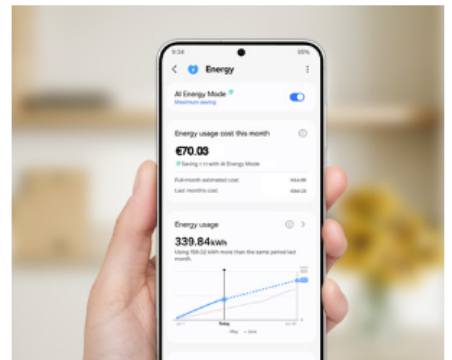
Slim Fit Design

Give your home a seamless look.



AI Home

Get smart about managing your heating and home.



Energy Saving

Save energy without impacting heating.

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3-4. Electrical wiring diagram

3-5. Sound data

3-6. Piping diagram

4. Installation

1.Line-up

1-1. Outdoor unit

EHS Mono R290

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

EHS Mono HT Quiet

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

EHS Mono R32

Capacity		5.0 kW	8.0 kW	12.0 / 16.0 kW
Image				
Model	1 phase	AE050RXYDEG/EU	AE080RXYDEG/EU	AE120RXYDEG/EU AE160RXYDEG/EU
	3 phase	-	AE080RXYDGG/EU	AE120RXYDGG/EU AE160RXYDGG/EU

1.Line-up

1-2. Indoor units

Type \ Capacity	200 L	200 L
Model	AE200DNXMPK/EU	AE200DNWMPK/EU
ClimateHub		
Type \ Capacity	5~16 kW	5~16 kW
Model	AE160DNZMPK/EU	AE160DNYMPK/EU
Hydro Unit		

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit				AE200DN*MPK/EU		AE200DN*MPK/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			
				A2W condition #2		Btu/h	17,100		27,300			
				A2W condition #3			5,000		8,000			
				A2/W35 ^{4)*}			5,000		8,000			
				A-7/W35 ^{4)*}		5,000		8,000				
			Cooling	A2W Condition #1. (A35/W18) ^{1)*}		W	5,000		8,000			
				A2W condition #2		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				
						4.63		7.70				
	Current Input	Heating			A2W Condition #1.		A	6.05		9.69		
		Cooling						6.24		10.21		
		Heating		A2W condition #2		A	7.61		12.62			
		Cooling					16.1		26.0			
	Current	MCA		A		17.6		28.6				
		MFA		A								
	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		23.1			
			Water Flow Rate		Min	LPM	7		7			
					Max	LPM	48		48			
			Water Pressure (Max)				bar		3			
	Water Pipe Type		threaded male	Inlet	Φ, mm	28		28				
				Outlet	Φ, mm	28		28				
	Leaving Water Temperature		Min.	Heating	°C	15		15				
					°C	75		75				
				Max.	Cooling	°C	5		5			
						°C	25		25			
Refrigerant	Type				-	R290		R290				
	Factory Charging				g	630		870				
					tCO ₂ e	0.00189		0.00261				
	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		AE200DN*MPK/EU	AE200DN*MPK/EU
		Outdoor Unit		AE050CXYDEK/EU	AE080CXYDEK/EU
Outdoor Unit	Heat exchanger	Length		mm	986/957
		Rows	Quantity	EA	2
		Fin pitch		mm	1.5
		Passes	Quantity	EA	6-6
		Face area		m ²	0.79
		Stages	Quantity	EA	38
		Empty tubeplate hole	Quantity	EA	-
		Tube type		-	Φ7
		Fin	Type	-	Corrugate
			Treatment	-	Anti Salt
	Fan	Type		-	Propeller Fan
		Discharge direction		-	Horizontal
		Air Flow Rate	Heating	m ³ /min	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.
 - A2W Condition #1 : (Heating) Water In/Out 30°C/35°C, Outdoor Air 7°C[DB]/6°C[WB];
(Cooling) Water In/Out 23°C/18°C, Outdoor Air 35°C[DB].
 - A2W Condition #2 : (Heating) Water In/Out 40°C/45°C, Outdoor Air 7°C[DB]/6°C[WB];
(Cooling) Water In/Out 12°C/7°C, Outdoor Air 35°C[DB].
 - A2W Condition #3 : (Heating) Water In/Out 47°C/55°C, Outdoor Air 7°C[DB]/6°C[WB].
 - A2W Condition : (A2W35) Water In/Out -/35°C, Outdoor Air 2°C[DB]/1°C[WB];
(A-7/W35) Water In/Out -/35°C, Outdoor Air -7°C[DB]/-(※ Peak Capacity)
- Select wire size based on the value of MCA
- Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dBA = A-weighted sound pressure level
 - Reference acoustic pressure 0 dB = 20uPa
- 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
- These products contain R290 (GWP=3) which is fluorinated greenhouse gas.
- The system is operated in (-25°C ≤ Outdoor temp. < -20°C) condition, but no guarantee of capacity.

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit				AE200DN*MPK/EU		AE200DN*MPK/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			
				A2W condition #2	W	40,900		54,600			
				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			
				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	
						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)				bar		3		
			Water Pipe Type	threaded male	Inlet	Φ, mm	28		28		
	Outlet				Φ, mm	28		28			
	Leaving Water Temperature		Min.	Heating	°C	15		15			
					°C	75		75			
			Max.	Cooling	°C	5		5			
		°C			25		25				
	Refrigerant	Type				-	R290		R290		
		Factory Charging				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	-		-				

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit			AE200DN*MPK/EU	AE200DN*MPK/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	90
		Quantity		EA	1	1
	Fan motor	Quantity		EA	1	1
		Model		-	SIC-88FWJ-F1122-1	SIC-88FWJ-F1122-1
		Output		W	122	122
		Drive		-	Direct drive	Direct drive
		Speed	Steps	-	-	-
			Heating	rpm	590	590
			Cooling	rpm	560	580
	Sound	Sound Pressure	Heating	dB(A)	47	51
			Cooling	dB(A)	47	51
			Night Mode(3m)	dB(A)	35	35
		Sound Power	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

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(Cooling) Water In/Out 23°C/18°C, Outdoor Air 35°C[DB].
 - A2W Condition #2 : (Heating) Water In/Out 40°C/45°C, Outdoor Air 7°C[DB]/6°C[WB];
(Cooling) Water In/Out 12°C/7°C, Outdoor Air 35°C[DB].
 - A2W Condition #3 : (Heating) Water In/Out 47°C/55°C, Outdoor Air 7°C[DB]/6°C[WB].
 - A2W Condition : (A2W35) Water In/Out -/35°C, Outdoor Air 2°C[DB]/1°C[WB];
(A-7/W35) Water In/Out -/35°C, Outdoor Air -7°C[DB]/-(× Peak Capacity)
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 - Reference power : 1pW
 - Measured according to ISO 3741
- These products contain R290 (GWP=3) which is fluorinated greenhouse gas.
- The system is operated in (-25°C ≤ Outdoor temp. < -20°C) condition, but no guarantee of capacity.

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit				AE200DN*MPK/EU	AE200DN*MPK/EU	AE200DN*MPK/EU		
		Outdoor Unit				AE080CXYDGK/EU	AE120CXYDGK/EU	AE160CXYDGK/EU		
Power Supply					Φ, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50		
System	Mode				-	Heat Pump (A2W)	Heat Pump (A2W)	Heat Pump (A2W)		
	Performance	Capacity	Heating	A2W Condition #1. (A7/W35) ^{1)*}	W	8,000	12,000	16,000		
				A2W condition #2	Btu/h	27,300	40,900	54,600		
						A2W condition #3	W	8,000	12,000	16,000
						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		
						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					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	23.1	34.6	40.4		
		Water Flow Rate		Min	LPM	7	7	7		
				Max	LPM	48	58	58		
		Water Pressure (Max)			bar	3	3	3		
		Water Pipe Type	threaded male	Inlet	Φ, mm	28	28	28		
				Outlet	Φ, mm	28	28	28		
		Leaving Water Temperature	Min.	Heating	°C	15	15	15		
					°C	75	75	75		
			Max.	Cooling	°C	5	5	5		
					°C	25	25	25		
		Refrigerant	Type				-	R290	R290	
	Factory Charging				g	870	1,250			
				tCO ₂ e	0.00261	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		AE200DN*MPK/EU	AE200DN*MPK/EU	AE200DN*MPK/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		-	FMD C531SSJ	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.
 - A2W Condition #1 : (Heating) Water In/Out 30°C/35°C, Outdoor Air 7°C[DB]/6°C[WB]; (Cooling) Water In/Out 23°C/18°C, Outdoor Air 35°C[DB].
 - A2W Condition #2 : (Heating) Water In/Out 40°C/45°C, Outdoor Air 7°C[DB]/6°C[WB]; (Cooling) Water In/Out 12°C/7°C, Outdoor Air 35°C[DB].
 - A2W Condition #3 : (Heating) Water In/Out 47°C/55°C, Outdoor Air 7°C[DB]/6°C[WB].
 - A2W Condition : (A2W35) Water In/Out -/35°C, Outdoor Air 2°C[DB]/1°C[WB]; (A-7/W35) Water In/Out -/35°C, Outdoor Air -7°C[DB]/-(※ Peak Capacity)
- Select wire size based on the value of MCA
- Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dB(A) = A-weighted sound pressure level
 - Reference acoustic pressure 0 dB = 20uPa
- Sound power level is an absolute value that a sound source generates.
 - dB(A) = A-weighted Sound power level
 - Reference power : 1pW
 - Measured according to ISO 3741
- These products contain R290 (GWP=3) which is fluorinated greenhouse gas.
- The system is operated in (-25°C ≤ Outdoor temp. < -20°C) condition, but no guarantee of capacity.

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit				AE200DN*MPK/EU		AE200DN*MPK/EU		AE200DN*MPK/EU			
		OutdoorUnit				AE080BXYDEG/EU		AE120BXYDEG/EU		AE140BXYDEG/EU			
Power Supply						Φ, #, V, Hz	1,2,220-240,50		1,2,220-240,50		1,2,220-240,50		
System	Mode					-	Heat Pump (A2W)		Heat Pump (A2W)		Heat Pump (A2W)		
	Performance	Capacity	Heating	A2W Condition #1. (A7/W30-35)		W	8,000		12,000		14,000		
A2W condition #2. (A7/W40-45)				W	27,300		40,900		47,800				
A2W condition #3. (A7/W47-55)					8,000		12,000		14,000				
A2/W35 4)*					8,000		12,000		14,000				
A-7/W35 4)*					8,000		12,000		14,000				
Cooling			A2W Condition #1. (A35/W23-18)		W	8,000		12,000		14,000			
			A2W condition #2. (A35/W12-7)		Btu/h	27,300		40,900		47,800			
					W	7,500		11,500		12,500			
Power			Power Input	Heating <td colspan="2">A2W Condition #1. (A7/W30-35)</td> <td rowspan="5">W</td> <td colspan="2">1,600</td> <td colspan="2">2,350</td> <td colspan="2">2,770</td>	A2W Condition #1. (A7/W30-35)		W	1,600		2,350		2,770	
					A2W condition #2. (A7/W40-45)			2,051		3,000		3,544	
	A2W condition #3. (A7/W47-55)				2,500			3,529		4,179			
	A2/W35 4)*				1,818			2,791		3,333			
	A-7/W35 4)*				2,462			3,810		4,516			
	Cooling	A2W Condition #1. (A35/W23-18)		W	1,700		2,640		3,140				
		A2W condition #2. (A35/W12-7)			2,273		3,594		3,968				
	Current Input	Heating <td colspan="2">A2W Condition #1.</td> <td rowspan="2">A</td> <td colspan="2">7.56</td> <td colspan="2">11.12</td> <td colspan="2">13.10</td>		A2W Condition #1.		A	7.56		11.12		13.10		
		Cooling					8.04		12.46		14.87		
		Heating		A2W condition #2		A	9.69		14.18		16.75		
		Cooling			10.74		16.98		18.75				
	Current	MCA				A	26.0		32.0		32.0		
		MFA				A	28.6		35.2		35.2		
	Efficiency	COP (Nominal Heating) A2W condition #1. (A7/W30-35)					5.00		5.11		5.05		
		EER (Nominal Cooling) A2W condition #1. (A35/W23-18)					4.71		4.55		4.46		
		EER (Nominal Cooling) A2W condition #2. (A35/W12-7)					3.30		3.20		3.15		
		COP		A2W condition #2. (A7/W40-45)		W/W	3.90		4.00		3.95		
A2W condition #3. (A7/W47-55)				3.20			3.40		3.35				
A2/W35 4)*				4.40			4.30		4.20				
A-7/W35 4)*				3.25			3.15		3.10				
PdesignH (LWT 35°C)					9,500		12,600		13,600				
PdesignH (LWT 55°C)					9,500		12,600		13,600				
SCOP (35°C)					4.64		4.90		4.83				
SCOP (55°C)					3.38		3.78		3.75				
SCOP Class (35°C)					A+++		A+++		A+++				
SCOP Class (55°C)					A++		A++		A++				
SEER					4.75		5.00		5.00				
Water Connections	Water Flow Rate (Nominal)		Heating	LPM	23.1		34.6		40.4				
			Cooling	LPM	23.1		34.6		40.4				
	Water Flow Rate		Min	LPM	7		7		7				
			Max	LPM	48		58		58				
	Water Pressure (Max)			bar	3		3		3				
	Water Pipe Type	threaded male	Inlet	Φ, mm	28		28		28				
			Outlet	Φ, mm	28		28		28				
	Leaving Water Temperature	Min.	Heating	°C	15		15		15				
				°C	70		70		70				
		Max.	Cooling	°C	5		5		5				
°C				25		25		25					
Refrigerant	Type			-	R32		R32		R32				
	Factory Charging			kg	2.7		3.3		3.3				
				tCO ₂ e	1.82		2.23		2.23				
	Control Method			-	EEV		EEV		EEV				
Outdoor Unit	Compressor	Type			-	Scroll		Scroll		Scroll			
		Model Name			-	DS2BB5033FVA		DS2BB5033FVA		DS2BB5033FVA			
		Oil		Type	-	POE(Kixx RF P85)		POE(Kixx RF P85)		POE(Kixx RF P85)			
					Initial Charge	cc	1,100		1,100		1,100		
		Quantity			EA	1		1		1			
		Output			W	3,622		3,622		3,622			
		Startingmethod			-	Inverter driven		Inverter driven		Inverter driven			
	Motor	Crankcase heater	Output	W	-		-		-				

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit			AE200DN*MPK/EU	AE200DN*MPK/EU	AE200DN*MPK/EU
		Outdoor Unit			AE080BXYDEG/EU	AE120BXYDEG/EU	AE140BXYDEG/EU
Outdoor Unit	Heat exchanger	Length		mm	1,224/1,195	1,216/1,187/1,159	1,216/1,187/1,159
		Rows	Quantity	EA	2	3	3
		Fin pitch		mm	1.5	1.5	1.5
		Passes	Quantity	EA	8	11	11
		Face area		m²	1.15	1.15	1.15
		Stages	Quantity	EA	46	46	46
		Empty tubeplate hole	Quantity	EA	-	-	-
		Tube type		Φ	7	7	7
		Fin	Type	-	Corrugate	Corrugate	Corrugate
			Treatment	-	Anti Salt	Anti Salt	Anti Salt
	Fan	Type		-	Propeller Fan	Propeller Fan	Propeller Fan
		Discharge direction			Horizontal	Horizontal	Horizontal
		Air Flow Rate	Heating	m³/min	92	95	95
			Cooling	m³/min	85	90	90
		Quantity		EA	1	1	1
		Quantity		EA	1	1	1
		Model		-	SIC-88FWJ-F1122-1	SIC-88FWJ-F1122-1	SIC-88FWJ-F1122-1
	Fan motor	Output		W	122	122	122
		Drive		-	Direct drive	Direct drive	Direct drive
		Speed	Steps	-	-	-	-
			Heating	rpm	550	590	590
			Cooling	rpm	510	560	580
	Sound	Sound Pressure	Heating	dB(A)	42	46	47
			Cooling	dB(A)	42	46	47
			Night Mode(3m)	dB(A)	35	35	35
		Sound Power	Heating	dB(A)	56	59	60
			Cooling	dB(A)	56	59	60
	Connections	Water pipe	inlet	Φ, inch	BSPP male 1	BSPP male 1	BSPP male 1
			outlet	Φ, inch	BSPP male 1	BSPP male 1	BSPP male 1
	Casing	Color		-	Shadow Gray	Shadow Gray	Shadow Gray
		Material		-	GI-SGCC	GI-SGCC	GI-SGCC
	Packing	Material		-	EPS/BOX	EPS/BOX	EPS/BOX
		Weight		kg	20.0	20.0	20.0
	External Dimension	Net Weight		kg	126.0	137.0	137.0
		Shipping Weight		kg	146.0	157.0	157.0
		Net Dimensions(WxHxD)		mm	1,270 x 1,018 x 530	1,270 x 1,018 x 530	1,270 x 1,018 x 530
Shipping Dimensions(WxHxD)		mm	1,330 x 1,226 x 630	1,330 x 1,226 x 630	1,330 x 1,226 x 630		
Operating Temp. Range	Heating		℃	-30 ~ 43	-30 ~ 43	-30 ~ 43	
	Cooling		℃	10 ~ 46	10 ~ 46	10 ~ 46	
	D.Hot Water		℃	-30 ~43	-30 ~43	-30 ~43	

NOTE

- Specifications may be subject to change without prior notice.
 - A2W Condition #1 : (Heating) Water In/Out 30°C/35°C, Outdoor Air 7°C[DB]/6°C[WB];
(Cooling) Water In/Out 23°C/18°C, Outdoor Air 35°C[DB].
 - A2W Condition #2 : (Heating) Water In/Out 40°C/45°C, Outdoor Air 7°C[DB]/6°C[WB];
(Cooling) Water In/Out 12°C/7°C, Outdoor Air 35°C[DB].
 - A2W Condition #3 : (Heating) Water In/Out 47°C/55°C, Outdoor Air 7°C[DB]/6°C[WB].
 - A2W Condition : (A2W35) Water In/Out -/35°C, Outdoor Air 2°C[DB]/1°C[WB];
(A-7/W35) Water In/Out -/35°C, Outdoor Air -7°C[DB]/-(※ Peak Capacity)
- Select wire size based on the value of MCA.
- Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dB(A) = A-weighted sound pressure level
 - Reference acoustic pressure 0 dB = 20uPa
- Sound power level is an absolute value that a sound source generates.
 - dB(A) = A-weighted Sound power level
 - Reference power : 1pW
 - Measured according to ISO 3741
- These products contain R32 (GWP=675) which is fluorinated greenhouse gas.

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit				AE200DN*MPK/EU		AE200DN*MPK/EU		AE200DN*MPK/EU					
		OutdoorUnit				AE080BXYDGG/EU		AE120BXYDGG/EU		AE140BXYDGG/EU					
Power Supply						Φ, #, V, Hz	3,4,380-415,50		3,4,380-415,50		3,4,380-415,50				
System	Mode					-	Heat Pump (A2W)		Heat Pump (A2W)		Heat Pump (A2W)				
	Performance	Capacity	Heating	A2W Condition #1. (A7/W30-35)		W	8,000		12,000		14,000				
				A2W condition #2. (A7/W40-45)		W	27,300		40,900		47,800				
				A2W condition #3. (A7/W47-55)			8,000		12,000		14,000				
				A2/W35 4)*			8,000		12,000		14,000				
				A-7/W35 4)*			8,000		12,000		14,000				
			Cooling	A2W Condition #1. (A35/W23-18)		W	8,000		12,000		14,000				
				A2W condition #2. (A35/W12-7)		Btu/h	27,300		40,900		47,800				
						W	7,500		11,500		12,500				
				Power	Power Input	Heating	A2W Condition #1. (A7/W30-35)		W	1,600		2,350		2,770	
							A2W condition #2. (A7/W40-45)			2,051		3,000		3,544	
	A2W condition #3. (A7/W47-55)		2,500				3,529			4,179					
	A2/W35 4)*		1,818				2,791			3,333					
	A-7/W35 4)*		2,462				3,810			4,516					
	Cooling	A2W Condition #1. (A35/W23-18)				W	1,700		2,640		3,140				
		A2W condition #2. (A35/W12-7)					2,273		3,594		3,968				
		Current Input	Heating				A2W Condition #1.		A	2.51		3.69		4.35	
										2.67		4.14		4.94	
			Cooling				A2W condition #2		A	3.22		4.71		5.56	
				3.92		5.54		6.56							
	Current	MCA		A		16.1		16.1		16.1					
		MFA		A		17.7		17.7		17.7					
	Efficiency	COP (Nominal Heating) A2W condition #1. (A7/W30-35)					5.00		5.11		5.05				
		EER (Nominal Cooling) A2W condition #1. (A35/W23-18)					4.71		4.55		4.46				
		EER (Nominal Cooling) A2W condition #2. (A35/W12-7)					3.30		3.20		3.15				
		COP		A2W condition #2. (A7/W40-45)		W/W	3.90		4.00		3.95				
				A2W condition #3. (A7/W47-55)			3.20		3.40		3.35				
				A2/W35 4)*			4.40		4.30		4.20				
				A-7/W35 4)*			3.25		3.15		3.10				
				PdesignH (LWT 35°C)					9,500		12,600		13,600		
		PdesignH (LWT 55°C)					9,500		12,600		13,600				
		SCOP (35°C)					4.64		4.90		4.83				
		SCOP (55°C)					3.38		3.78		3.75				
		SCOP Class (35°C)					A+++		A+++		A+++				
		SCOP Class (55°C)					A++		A++		A++				
		SEER					4.75		5.00		5.00				
		Water Connections	Water Flow Rate (Nominal)		Heating		LPM	23.1		34.6		40.4			
	Cooling				LPM	23.1		34.6		40.4					
	Water Flow Rate		Min		LPM	7		7		7					
			Max		LPM	48		58		58					
	Water Pressure (Max)					3		3		3					
	Water Pipe Type		threaded male	Inlet		Φ, mm	28		28		28				
				Outlet		Φ, mm	28		28		28				
	Leaving Water Temperature		Min.	Heating		°C	15		15		15				
						°C	70		70		70				
Max.			Cooling		°C	5		5		5					
					°C	25		25		25					
Refrigerant	Type					-	R32		R32		R32				
	Factory Charging					kg	2.7		3.3		3.3				
						tCO2e	1.82		2.23		2.23				
	Control Method					-	EEV		EEV		EEV				
	Outdoor Unit	Compressor	Type					-	Scroll		Scroll		Scroll		
Model Name					-	DS2BB5033FVA		DS2BB5033FVA		DS2BB5033FVA					
Oil			Type		-	POE(Kixx RF P85)		POE(Kixx RF P85)		POE(Kixx RF P85)					
			Initial Charge		cc	1,100		1,100		1,100					
Quantity					EA	1		1		1					
Output					W	3,622		3,622		3,622					
Startingmethod					-	Inverter driven		Inverter driven		Inverter driven					
Motor			Crankcase heater	Output		W	-		-		-				

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit		AE200DN*MPK/EU	AE200DN*MPK/EU	AE200DN*MPK/EU
		Outdoor Unit		AE080BXYDGG/EU	AE120BXYDGG/EU	AE140BXYDGG/EU
Outdoor Unit	Heat exchanger	Length		mm	1,224/1,195	1,216/1,187/1,159
		Rows	Quantity	EA	2	3
		Fin pitch		mm	1.5	1.5
		Passes	Quantity	EA	8	11
		Face area		m ²	1.15	1.15
		Stages	Quantity	EA	46	46
		Empty tubeplate hole	Quantity	EA	-	-
		Tube type		Φ	7	7
		Fin	Type	-	Corrugate	Corrugate
			Treatment	-	Anti Salt	Anti Salt
	Fan	Type		-	Propeller Fan	Propeller Fan
		Discharge direction			Horizontal	Horizontal
		Air Flow Rate	Heating	m ³ /min	92	95
			Cooling	m ³ /min	85	90
		Quantity		EA	1	1
	Fan motor	Quantity		EA	1	1
		Model		-	SIC-88FWJ-F1122-1	SIC-88FWJ-F1122-1
		Output		W	122	122
		Drive		-	Direct drive	Direct drive
		Speed	Steps	-	-	-
			Heating	rpm	550	590
			Cooling	rpm	510	580
	Sound	Sound Pressure	Heating	dB(A)	42	46
			Cooling	dB(A)	42	46
			Night Mode(3m)	dB(A)	35	35
		Sound Power	Heating	dB(A)	56	59
			Cooling	dB(A)	56	59
	Connections	Water pipe	inlet	Φ, inch	BSPP male 1	BSPP male 1
			outlet	Φ, inch	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	20.0	20.0
	External Dimension	Net Weight		kg	126.0	137.0
		Shipping Weight		kg	146.0	157.0
		Net Dimensions(WxHxD)		mm	1,270 x 1,018 x 530	1,270 x 1,018 x 530
		Shipping Dimensions(WxHxD)		mm	1,330 x 1,226 x 630	1,330 x 1,226 x 630
	Operating Temp. Range	Heating		°C	-30 ~ 43	-30 ~ 43
		Cooling		°C	10 ~ 46	10 ~ 46
		D.Hot Water		°C	-30 ~ 43	-30 ~ 43

NOTE

- Specifications may be subject to change without prior notice.
- 1) A2W Condition #1 : (Heating) Water In/Out 30°C/35°C, Outdoor Air 7°C[DB]/6°C[WB];
(Cooling) Water In/Out 23°C/18°C, Outdoor Air 35°C[DB].
- 2) A2W Condition #2 : (Heating) Water In/Out 40°C/45°C, Outdoor Air 7°C[DB]/6°C[WB];
(Cooling) Water In/Out 12°C/7°C, Outdoor Air 35°C[DB].
- 3) A2W Condition #3 : (Heating) Water In/Out 47°C/55°C, Outdoor Air 7°C[DB]/6°C[WB].
- 4) A2W Condition : (A2W35) Water In/Out -/35°C, Outdoor Air 2°C[DB]/1°C[WB];
(A-7/W35) Water In/Out -/35°C, Outdoor Air -7°C[DB]/-(※ Peak Capacity)
- Select wire size based on the value of MCA.
- Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dB(A) = A-weighted sound pressure level
 - Reference acoustic pressure 0 dB = 20uPa
- Sound power level is an absolute value that a sound source generates.
 - dB(A) = A-weighted Sound power level
 - Reference power : 1pW
 - Measured according to ISO 3741
- These products contain R32 (GWP=675) which is fluorinated greenhouse gas.

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit					AE200DN*MPK/EU	AE200DN*MPK/EU	AE200DN*MPK/EU	
		Outdoor Unit					AE050RXYDEG/EU	AE080RXYDEG/EU	AE120RXYDEG/EU	
Power Supply						Φ, #, V, Hz	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50	
Mode						-	Heat Pump (A2W)	Heat Pump (A2W)	Heat Pump (A2W)	
	Performance	Capacity	Cooling	A2W Condition #1. (A7/W35) ^{1)*}	W	5,000	7,500	12,000		
					Btu/h	17,100	25,600	40,900		
			Heating	A2W Condition #1. (A7/W35) ^{1)*}	W	5,000	8,000	12,000		
					Btu/h	17,100	27,300	40,900		
				A2W condition #2 A2W condition #3 A2/W35 ^{4)*} A-7/W35 ^{4)*}	W	4,800	7,400	11,700		
						4,300	7,100	11,300		
						4,800	7,000	10,800		
						5,100	7,350	12,000		
			Power	Power Input	Cooling	A2W, Condition #1. (A7/W35) ^{1)*}	W	1,140	1,900	2,770
								Heating	A2W, Condition #1. (A7/W35) ^{1)*}	1,030
	A2W condition #2 A2W condition #3 A2/W35 ^{4)*} A-7/W35 ^{4)*}	1,300			2,120	3,180				
		1,520			2,530	3,730				
		1,450			2,350	3,300				
		1,880			3,020	4,710				
	Current Input	Cooling			A2W, Condition #1. (A7/W35) ^{1)*}	A			5.4	9.1
								Heating	4.9	8.5
	Current	MCA			A	16.0		22.0	28.0	
						MFA		A	20.0	27.5
	System	Efficiency		EER (Nominal Cooling)				4.39	3.95	4.33
				COP (Nominal Heating) A2W condition #1				4.85	4.52	4.53
				COP	A2W condition #2 A2W condition #3 A2/W35 ^{4)*} A-7/W35 ^{4)*}	W/W	3.69	3.49	3.68	
							2.83	2.81	3.03	
			3.31				2.98	3.27		
			2.71				2.43	2.55		
PdesignH			LWT 35°C LWT 55°C				5,500	8,000	13,000	
				5,000	8,000	12,000				
SCOP			35°C 55°C	4.46	4.44	4.69				
				3.20	3.23	3.51				
SCOP Class			35°C 55°C	A+++	A+++	A+++				
				A++	A++	A++				
SEER					3.98	4.52	5.22			
Water Connections			Water Flow Rate (Nominal) [H/C]				LPM	14.4/14.4	23.1/21.6	34.6/34.6
		Water Flow Rate		Min Max	LPM	7.0	7.0	12.0		
					LPM	48.0	48.0	58.0		
		Water Pressure (Max)				bar	3	3	3	
		Water Pipe Type	threaded male	Inlet Outlet	Φ, mm	28	28	28		
					Φ, mm	28	28	28		
		Leaving Water Temperature	min/max	Heating Cooling	°C	15~65	15~65	15~65		
					°C	5~25	5~25	5~25		
		Refrigerant	Type				-	R32	R32	R32
			Factory Charging				kg	1.00	1.15	2.20
							tCO ₂ e	0.68	0.78	1.49
			Control Method				-	EEV	EEV	EEV
Outdoor Unit		Compressor	Type				-	BLDC Twin Rotary	BLDC Twin Rotary	BLDC Twin Rotary
	Model Name				-	UB4TN8200FE4SS	UB8TN8265FJWSG	UB5TN5450FJXSG		
	Oil		Type Initial Charge	-	POE	POE	POE			
				cc	650	700	1,700			
	Quantity				EA	1	1	1		
	Output				W	1623	2078	3613		
Starting method						-	Inverter driven	Inverter driven	Inverter driven	

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit			AE200DN*MPK/EU	AE200DN*MPK/EU	AE200DN*MPK/EU
		Outdoor Unit			AE050RXYDEG/EU	AE080RXYDEG/EU	AE120RXYDEG/EU
Outdoor Unit	Heat exchanger	Length		mm	730	850	950
		Rows	Quantity	EA	2	2	2
		Fin pitch		mm	1.5	1.5	1.5
		Passes	Quantity	EA	6	8	10
		Face area		m²	0.55	0.82	1.32
		Stages	Quantity	EA	36	46	66
		Tube type		-	Φ7	Φ7	Φ7.94
		Fin	Type	-	Corrugate	Wide Louver	G-Fin
			Treatment	-	NGS	Anti Salt	Anti Salt
	Fan	Type		-	Propeller Fan	Propeller Fan	Propeller Fan
		Discharge direction		-	Horizontal	Horizontal	Horizontal
		Air Flow Rate	Heating	m³/min	51	66	99
			Cooling	m³/min	51	66	99
	Fan motor	Quantity		EA	1	1	2
		Model		-	Brushless DC motor	Brushless DC motor	Brushless DC motor
		Output		W X EA	98	125	125 X 2
		Drive		-	Direct drive	Direct drive	Direct drive
		Speed	Heating	rpm	760	780	650
			Cooling	rpm	760	780	650
	Sound	Sound Pressure	Heating	dB(A)	45	48	50
			Cooling	dB(A)	45	48	50
		Sound Power	Heating	dB(A)	61	63	64
			Cooling	dB(A)	62	64	65
	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		-	Earth brown	Earth brown	Earth brown
		Material		-	Powder coated Galvanised steel	Powder coated Electro galvanized steel	Powder coated Electro galvanized steel
	Packing	Material		-	EPS/BOX	EPS/BOX	EPS/BOX
		Weight		kg	4.0	8.5	9.0
	External Dimension	Net Weight		kg	58.5	76.0	110.0
		Shipping Weight		kg	62.5	84.5	119.0
		Net Dimensions (WxHxD)		mm	880 x 798 x 310	940 x 998 x 330	940 x 1,420 x 330
		Shipping Dimensions (WxHxD)		mm	1,023 x 904 x 413	995 x 1,178 x 426	995 x 1,598 x 426
	Operating Temp. Range	Heating		°C	-25~35	-25~35	-25~35
		Cooling		°C	10~46	10~46	10~46
		D.Hot Water		°C	-25~43	-25~43	-25~43

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)
- Select wire size based on the value of MCA
- Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dBA = A-weighted sound pressure level
 - Reference acoustic pressure 0 dB = 20uPa
- 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
- These products contain R32 (GWP=675) which is fluorinated greenhouse gas.
- The system is operated in (-25°C ≤ Outdoor temp. < -20°C) condition, but no guarantee of capacity.
- The system is operated by only Booster Heater in special condition (35 °C < Outdoor temp. ≤ 43°C).

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit				AE200DN*MPK/EU	AE200DN*MPK/EU	AE200DN*MPK/EU	AE200DN*MPK/EU			
		Outdoor Unit				AE160RXYDEG/EU	AE080RXYDGG/EU	AE120RXYDGG/EU	AE160RXYDGG/EU			
Power Supply					Φ, #, V, Hz	1,2,220-240,50	3,4,380-415,50	3,4,380-415,50	3,4,380-415,50			
Mode					-	Heat Pump (A2W)	Heat Pump (A2W)	Heat Pump (A2W)	Heat Pump (A2W)			
	Performance	Capacity	Cooling	A2W Condition #1. (A7/W35) ¹⁾²⁾	W	14,000	7,500	12,000	14,000			
					Btu/h	47,800	25,600	40,900	47,800			
			Heating	A2W Condition #1. (A7/W35) ¹⁾²⁾ A2W condition #2 A2W condition #3 A2/W35 ⁴⁾⁵⁾ A-7/W35 ⁴⁾⁵⁾	W	16,000	8,000	12,000	16,000			
					W	Btu/h	54,600	27,300	40,900	54,600		
							15,400	7,400	11,700	15,400		
							15,000	7,100	11,300	15,000		
							13,200	7,000	10,800	13,200		
						14,600	7,350	12,000	14,600			
			Power	Power Input	Cooling	A2W Condition #1. (A7/W35) ¹⁾²⁾	W		3,280	1,900	2,770	3,280
								Heating	A2W Condition #1. (A7/W35) ¹⁾²⁾ A2W condition #2 A2W condition #3 A2/W35 ⁴⁾⁵⁾ A-7/W35 ⁴⁾⁵⁾		3,620	1,770
		4,490			2,120	3,180				4,490		
		5,180			2,530	3,730				5,180		
		4,400			2,350	3,300				4,400		
		6,000			3,020	4,710				6,000		
	Current Input	Cooling			A2W Condition #1. (A7/W35) ¹⁾²⁾	A					15.7	3.0
								Heating		17.0	2.8	4.1
	Current	MCA						A	32.0	10.0	10.0	12.0
								MFA	A	40.0	16.1	16.1
	System	Efficiency	EER (Nominal Cooling)					4.27	3.95	4.33	4.27	
			COP (Nominal Heating) A2W condition #1					4.42	4.52	4.53	4.42	
COP				A2W condition #2 A2W condition #3 A2/W35 ⁴⁾⁵⁾ A-7/W35 ⁴⁾⁵⁾	W/W		3.43	3.49	3.68	3.43		
							2.90	2.81	3.03	2.90		
							3.00	2.98	3.27	3.00		
							2.43	2.43	2.55	2.43		
PdesignH				LWT 35°C			16,000	8,000	13,000	16,000		
				LWT 55°C			16,000	8,000	12,000	16,000		
SCOP				35°C			4.48	4.44	4.69	4.48		
				55°C			3.53	3.23	3.51	3.53		
SCOP Class				35°C			A+++	A+++	A+++	A+++		
				55°C			A++	A++	A++	A++		
SEER						5.31	4.52	5.22	5.31			
Water Connections		Water Flow Rate (Nominal) [H/C]				LPM	46.2/40.4	23.1/21.6	34.6/34.6	46.2/40.4		
		Water Flow Rate		Min		LPM	12.0	7.0	12.0	12.0		
						Max	LPM	58.0	48.0	58.0	58.0	
		Water Pressure (Max)				bar	3	3	3	3		
		Water Pipe Type	threaded male	Inlet		Φ, mm	28	28	28	28		
						Outlet	Φ, mm	28	28	28	28	
		Leaving Water Temperature	min/max	Heating	°C	15~65	15~65	15~65	15~65	15~65		
				Cooling	°C	5~25	5~25	5~25	5~25	5~25		
		Refrigerant	Type				-	R32	R32	R32	R32	
			Factory Charging				kg	2.20	1.15	2.20	2.20	
							tCO ₂ e	1.49	0.78	1.49	1.49	
			Control Method				-	EEV	EEV	EEV	EEV	
Outdoor Unit	Compressor	Type			-	BLDC Twin Rotary	BLDC Twin Rotary	BLDC Twin Rotary	BLDC Twin Rotary			
		Model Name			-	UB5TN5450FJXSG	UB8TN8265FJWSG	UB5TN5450FJXSG	UB5TN5450FJXSG			
		Oil	Type	Initial Charge	-	POE	POE	POE	POE			
					cc	1,700	700	1,700	1,700			
		Quantity			EA	1	1	1	1			
		Output			W	3613	2078	3613	3613			
Starting method					-	Inverter driven	Inverter driven	Inverter driven	Inverter driven			

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit			AE200DN*MPK/EU	AE200DN*MPK/EU	AE200DN*MPK/EU	AE200DN*MPK/EU
		Outdoor Unit			AE160RXYDEG/EU	AE080RXYDGG/EU	AE120RXYDGG/EU	AE160RXYDGG/EU
Outdoor Unit	Heat exchanger	Length		mm	950	850	950	950
		Rows	Quantity	EA	2	2	2	2
		Fin pitch		mm	1.5	1.5	1.5	1.5
		Passes	Quantity	EA	10	8	10	10
		Face area		m²	1.32	0.82	1.32	1.32
		Stages	Quantity	EA	66	46	66	66
		Tube type		-	Ø7.94	Ø7	Ø7.94	Ø7.94
		Fin	Type	-	G-Fin	Wide Louver	G-Fin	G-Fin
			Treatment	-	Anti Salt	Anti Salt	Anti Salt	Anti Salt
	Fan	Type	-		Propeller Fan	Propeller Fan	Propeller Fan	Propeller Fan
		Discharge direction		-	Horizontal	Horizontal	Horizontal	Horizontal
		Air Flow Rate	Heating	m³/min	118	66	99	118
			Cooling	m³/min	118	66	99	118
	Fan motor	Quantity		EA	2	1	2	2
		Model		-	Brushless DC motor	Brushless DC motor	Brushless DC motor	Brushless DC motor
		Output		W X EA	125 X 2	125	125 X 2	125 X 2
		Drive		-	Direct drive	Direct drive	Direct drive	Direct drive
		Speed	Heating	rpm	750	780	650	750
			Cooling	rpm	750	780	650	750
	Sound	Sound Pressure	Heating	dB(A)	52	48	50	52
			Cooling	dB(A)	54	48	50	54
		Sound Power	Heating	dB(A)	66	63	64	66
			Cooling	dB(A)	68	64	65	68
	Connections	Water pipe	inlet	-	BSPP male 1"	BSPP male 1"	BSPP male 1"	BSPP male 1"
			outlet	-	BSPP male 1"	BSPP male 1"	BSPP male 1"	BSPP male 1"
	Casing	Color		-	Earth brown	Earth brown	Earth brown	Earth brown
		Material		-	Powder coated Electro galvanized steel	Powder coated Electro galvanized steel	Powder coated Electro galvanized steel	Powder coated Electro galvanized steel
	Packing	Material		-	EPS/BOX	EPS/BOX	EPS/BOX	EPS/BOX
		Weight		kg	9.0	8.5	9.0	9.0
	External Dimension	Net Weight		kg	110.0	75.0	111.0	111.0
		Shipping Weight		kg	119.0	83.5	120.0	120.0
		Net Dimensions (WxHxD)		mm	940 x 1,420 x 330	940 x 998 x 330	940 x 1,420 x 330	940 x 1,420 x 330
		Shipping Dimensions (WxHxD)		mm	995 x 1,598 x 426	995 x 1,178 x 426	995 x 1,598 x 426	995 x 1,598 x 426
	Operating Temp. Range	Heating		°C	-25~35	-25~35	-25~35	-25~35
		Cooling		°C	10~46	10~46	10~46	10~46
		D.Hot Water		°C	-25~43	-25~43	-25~43	-25~43

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)
- Select wire size based on the value of MCA
- Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dBA = A-weighted sound pressure level
 - Reference acoustic pressure 0 dB = 20uPa
- 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
- These products contain R32 (GWP=675) which is fluorinated greenhouse gas.
- The system is operated in (-25°C ≤ Outdoor temp. < -20°C) condition, but no guarantee of capacity.
- The system is operated by only Booster Heater in special condition (35 °C < Outdoor temp. ≤ 43°C).

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit			AE160DN*MPK/EU		AE160DN*MPK/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		
				W	Btu/h	17,100		27,300		
					A2W condition #2	W	5,000		8,000	
					A2W condition #3		5,000		8,000	
					A2/W35 ^{4)*} *		5,000		8,000	
			A-7/W35 ^{4)*} *	5,000			8,000			
			Cooling	A2W Condition #1. (A35/W18) ^{1)*} *	W	5,000		8,000		
				W	Btu/h	17,100		27,300		
					A2W condition #2	W	3,900		5,700	
			Power	Power Input	Heating	A2W Condition #1. (A7/W35) ^{1)*} *	W	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	
	Cooling					6.05			9.69	
	Heating				A2W condition #2	A	6.24		10.21	
	Cooling			7.61			12.62			
	Current	MCA			A	16.1		26.0		
		MFA			A	17.6		28.6		
	Efficiency	COP (Nominal Heating) A2W condition #1				5.10		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		23.1	
			Water Flow Rate		Min	LPM	7		7	
					Max	LPM	48		48	
			Water Pressure (Max)			bar	3		3	
			Water Pipe Type	threaded male	Inlet	Φ, mm	28		28	
	Outlet				Φ, mm	28		28		
	Leaving Water Temperature		Min.	Heating	°C	15		15		
					°C	75		75		
			Max.	Cooling	°C	5		5		
		°C			25		25			
	Refrigerant	Type				-	R290		R290	
Factory Charging				g	630		870			
				tCO ₂ e	0.00189		0.00261			
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		AE160DN*MPK/EU	AE160DN*MPK/EU
		Outdoor Unit		AE050CXYDEK/EU	AE080CXYDEK/EU
Outdoor Unit	Heat exchanger	Length		mm	986/957
		Rows	Quantity	EA	2
		Fin pitch		mm	1.5
		Passes	Quantity	EA	6-6
		Face area		m ²	0.79
		Stages	Quantity	EA	38
		Empty tubeplate hole	Quantity	EA	-
		Tube type		-	Φ7
		Fin	Type	-	Corrugate
			Treatment	-	Anti Salt
	Fan	Type		-	Propeller Fan
		Discharge direction		-	Horizontal
		Air Flow Rate	Heating	m ³ /min	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.
 - A2W Condition #1 : (Heating) Water In/Out 30°C/35°C, Outdoor Air 7°C[DB]/6°C[WB];
(Cooling) Water In/Out 23°C/18°C, Outdoor Air 35°C[DB].
 - A2W Condition #2 : (Heating) Water In/Out 40°C/45°C, Outdoor Air 7°C[DB]/6°C[WB];
(Cooling) Water In/Out 12°C/7°C, Outdoor Air 35°C[DB].
 - A2W Condition #3 : (Heating) Water In/Out 47°C/55°C, Outdoor Air 7°C[DB]/6°C[WB].
 - A2W Condition : (A2W35) Water In/Out -/35°C, Outdoor Air 2°C[DB]/1°C[WB];
(A-7/W35) Water In/Out -/35°C, Outdoor Air -7°C[DB]/-(× Peak Capacity)
- Select wire size based on the value of MCA
- Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dBA = A-weighted sound pressure level
 - Reference acoustic pressure 0 dB = 20uPa
- 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
- These products contain R290 (GWP=3) which is fluorinated greenhouse gas.
- The system is operated in (-25°C ≤ Outdoor temp. < -20°C) condition, but no guarantee of capacity.

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit				AE160DN*MPK/EU		AE160DN*MPK/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	
	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			
						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		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	
						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)				bar		3			
		Water Pipe Type		threaded male	Inlet	Φ, mm	28		28		
					Outlet	Φ, mm	28		28		
		Leaving Water Temperature		Min.	Heating	°C	15		15		
						°C	75		75		
Max.					Cooling	°C	5		5		
						°C	25		25		
Refrigerant		Type				-	R290		R290		
		Factory Charging				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	-		-				

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit			AE160DN*MPK/EU	AE160DN*MPK/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	90
		Quantity		EA	1	1
	Fan motor	Quantity		EA	1	1
		Model		-	SIC-88FWJ-F1122-1	SIC-88FWJ-F1122-1
		Output		W	122	122
		Drive		-	Direct drive	Direct drive
		Speed	Steps	-	-	-
			Heating	rpm	590	590
	Sound	Sound Pressure	Heating	dB(A)	47	51
			Cooling	dB(A)	47	51
			Night Mode(3m)	dB(A)	35	35
		Sound Power	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.
 - A2W Condition #1 : (Heating) Water In/Out 30°C/35°C, Outdoor Air 7°C[DB]/6°C[WB]; (Cooling) Water In/Out 23°C/18°C, Outdoor Air 35°C[DB].
 - A2W Condition #2 : (Heating) Water In/Out 40°C/45°C, Outdoor Air 7°C[DB]/6°C[WB]; (Cooling) Water In/Out 12°C/7°C, Outdoor Air 35°C[DB].
 - A2W Condition #3 : (Heating) Water In/Out 47°C/55°C, Outdoor Air 7°C[DB]/6°C[WB].
 - A2W Condition : (A2W35) Water In/Out -/35°C, Outdoor Air 2°C[DB]/1°C[WB]; (A-7/W35) Water In/Out -/35°C, Outdoor Air -7°C[DB]/-(× Peak Capacity)
- Select wire size based on the value of MCA
- Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dBA = A-weighted sound pressure level
 - Reference acoustic pressure 0 dB = 20uPa
- 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
- These products contain R290 (GWP=3) which is fluorinated greenhouse gas.
- The system is operated in (-25°C ≤ Outdoor temp. < -20°C) condition, but no guarantee of capacity.

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit			AE160DN*MPK/EU		AE160DN*MPK/EU		AE160DN*MPK/EU					
		Outdoor Unit			AE080CXYDGK/EU		AE120CXYDGK/EU		AE160CXYDGK/EU					
Power Supply					Φ, #, V, Hz	3, 4, 380~415, 50		3, 4, 380~415, 50		3, 4, 380~415, 50				
System	Mode				-	Heat Pump (A2W)		Heat Pump (A2W)		Heat Pump (A2W)				
	Performance	Capacity	Heating	A2W Condition #1. (A7/W35) ^{1)*}	W	8,000		12,000		16,000				
				A2W condition #2	Btu/h	27,300		40,900		54,600				
						A2W condition #3	W	8,000		12,000		16,000		
								8,000		12,000		16,000		
								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						
		2,670				4,000		5,520						
		1,900				2,790		4,100						
		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				
						Heating	A	2.56		3.92		5.57		
								Cooling	3.22		4.71		5.77	
									3.39		5.08		7.17	
	Current Input	Cooling		A2W condition #2	A	4.19		6.28		8.66				
						MCA	16.1		16.1		16.1			
							17.7		17.7		17.7			
	Current	MFA					A	17.7		17.7				
							A	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				
						3.00		3.00		2.90				
						4.20		4.30		3.90				
						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	23.1		34.6		40.4			
			Water Flow Rate		Min	LPM	7		7		7			
					Max	LPM	48		58		58			
	Water Pressure (Max)			bar	3		3		3					
	Water Pipe Type		threaded male	Inlet	Φ, mm	28		28		28				
				Outlet	Φ, mm	28		28		28				
	Leaving Water Temperature		Min.	Heating	°C	15		15		15				
					°C	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	0.00261		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		AE160DN*MPK/EU	AE160DN*MPK/EU	AE160DN*MPK/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.
 - A2W Condition #1 : (Heating) Water In/Out 30°C/35°C, Outdoor Air 7°C[DB]/6°C[WB]; (Cooling) Water In/Out 23°C/18°C, Outdoor Air 35°C[DB].
 - A2W Condition #2 : (Heating) Water In/Out 40°C/45°C, Outdoor Air 7°C[DB]/6°C[WB]; (Cooling) Water In/Out 12°C/7°C, Outdoor Air 35°C[DB].
 - A2W Condition #3 : (Heating) Water In/Out 47°C/55°C, Outdoor Air 7°C[DB]/6°C[WB].
 - A2W Condition : (A2W35) Water In/Out -/35°C, Outdoor Air 2°C[DB]/1°C[WB]; (A-7/W35) Water In/Out -/35°C, Outdoor Air -7°C[DB]/-(※ Peak Capacity)
- Select wire size based on the value of MCA
- Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dBA = A-weighted sound pressure level
 - Reference acoustic pressure 0 dB = 20uPa
- 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
- These products contain R290 (GWP=3) which is fluorinated greenhouse gas.
- The system is operated in (-25°C ≤ Outdoor temp. < -20°C) condition, but no guarantee of capacity.

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit				AE160DN*MPK/EU	AE160DN*MPK/EU	AE160DN*MPK/EU		
		OutdoorUnit				AE080BXYDEG/EU	AE120BXYDEG/EU	AE140BXYDEG/EU		
Power Supply					Φ, #, V, Hz	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50		
System	Mode				-	Heat Pump (A2W)	Heat Pump (A2W)	Heat Pump (A2W)		
	Performance	Capacity	Heating	A2W Condition #1. (A7/W30-35)	W	8,000	12,000	14,000		
					Btu/h	27,300	40,900	47,800		
				A2W condition #2. (A7/W40-45)	W	8,000	12,000	14,000		
				A2W condition #3. (A7/W47-55)		8,000	12,000	14,000		
				A2/W35 4)*		8,000	12,000	14,000		
				A-7/W35 4)*		8,000	12,000	14,000		
			Cooling	A2W Condition #1. (A35/W23-18)	W	8,000	12,000	14,000		
					Btu/h	27,300	40,900	47,800		
				A2W condition #2. (A35/W12-7)	W	7,500	11,500	12,500		
	Power	Power Input	Heating <td>A2W Condition #1. (A7/W30-35)</td> <th rowspan="6">W</th> <td>1,600</td> <td>2,350</td> <td>2,770</td>	A2W Condition #1. (A7/W30-35)	W	1,600	2,350	2,770		
				A2W condition #2. (A7/W40-45)		2,051	3,000	3,544		
				A2W condition #3. (A7/W47-55)		2,500	3,529	4,179		
				A2/W35 4)*		1,818	2,791	3,333		
				A-7/W35 4)*		2,462	3,810	4,516		
				Cooling		A2W Condition #1. (A35/W23-18)	W	1,700	2,640	3,140
			A2W condition #2. (A35/W12-7)		2,273	3,594		3,968		
			Current Input	Heating <td>A2W Condition #1.</td> <th rowspan="2">A</th> <td>7.56</td> <td>11.12</td> <td>13.10</td>	A2W Condition #1.	A	7.56	11.12	13.10	
		Cooling			8.04		12.46	14.87		
		Heating <td rowspan="2">A2W condition #2</td> <th rowspan="2">A</th> <td>9.69</td> <td>14.18</td> <td>16.75</td>		A2W condition #2	A	9.69	14.18	16.75		
		Cooling				10.74	16.98	18.75		
		Current		MCA	A	26.0	32.0	32.0		
				MFA	A	28.6	35.2	35.2		
		Efficiency	COP (Nominal Heating) A2W condition #1. (A7/W30-35)				5.00	5.11	5.05	
			EER (Nominal Cooling) A2W condition #1. (A35/W23-18)				4.71	4.55	4.46	
			EER (Nominal Cooling) A2W condition #2. (A35/W12-7)				3.30	3.20	3.15	
			COP	A2W condition #2. (A7/W40-45)	W/W	3.90	4.00	3.95		
						3.20	3.40	3.35		
						4.40	4.30	4.20		
						3.25	3.15	3.10		
	PdesignH (LWT 35°C)				9,500	12,600	13,600			
	PdesignH (LWT 55°C)				9,500	12,600	13,600			
	SCOP (35°C)				4.64	4.90	4.83			
	SCOP (55°C)				3.38	3.78	3.75			
	SCOP Class (35°C)				A+++	A+++	A+++			
	SCOP Class (55°C)				A++	A++	A++			
	SEER				4.75	5.00	5.00			
	Water Connections		Water Flow Rate (Nominal)		Heating	LPM	23.1	34.6	40.4	
		Cooling			LPM	23.1	34.6	40.4		
		Water Flow Rate		Min	LPM	7	7	7		
				Max	LPM	48	58	58		
		Water Pressure (Max)			bar	3	3	3		
		Water Pipe Type	threaded male	Inlet	Φ, mm	28	28	28		
				Outlet	Φ, mm	28	28	28		
		Leaving Water Temperature	Min.	Heating	°C	15	15	15		
					°C	70	70	70		
			Max.	Cooling	°C	5	5	5		
					°C	25	25	25		
		Refrigerant	Type			-	R32	R32	R32	
			Factory Charging			kg	2.7	3.3	3.3	
						tCO2e	1.82	2.23	2.23	
	Control Method			-	EEV	EEV	EEV			
	Outdoor Unit		Compressor	Type			-	Scroll	Scroll	Scroll
				Model Name			-	DS2BB5033FVA	DS2BB5033FVA	DS2BB5033FVA
		Oil		Type	-	POE(Kixx RF P85)	POE(Kixx RF P85)	POE(Kixx RF P85)		
Initial Charge					cc	1,100	1,100	1,100		
Quantity				EA	1	1	1			
Output				W	3,622	3,622	3,622			
Startingmethod				-	Inverter driven	Inverter driven	Inverter driven			
Motor		Crankcase heater		Output	W	-	-	-		

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit			AE160DN*MPK/EU	AE160DN*MPK/EU	AE160DN*MPK/EU	
		Outdoor Unit			AE080BXYDEG/EU	AE120BXYDEG/EU	AE140BXYDEG/EU	
Outdoor Unit	Heat exchanger	Length		mm	1,224/1,195	1,216/1,187/1,159	1,216/1,187/1,159	
		Rows	Quantity	EA	2	3	3	
		Fin pitch		mm	1.5	1.5	1.5	
		Passes	Quantity	EA	8	11	11	
		Face area		m²	1.15	1.15	1.15	
		Stages	Quantity	EA	46	46	46	
		Empty tubeplate hole	Quantity	EA	-	-	-	
		Tube type		Φ	7	7	7	
		Fin	Type	-	Corrugate	Corrugate	Corrugate	
			Treatment	-	Anti Salt	Anti Salt	Anti Salt	
	Fan	Type		-	Propeller Fan	Propeller Fan	Propeller Fan	
		Discharge direction			Horizontal	Horizontal	Horizontal	
		Air Flow Rate	Heating	m³/min	92	95	95	
			Cooling	m³/min	85	90	90	
		Quantity		EA	1	1	1	
		Fan motor	Quantity		EA	1	1	1
			Model		-	SIC-88FWJ-F1122-1	SIC-88FWJ-F1122-1	SIC-88FWJ-F1122-1
	Output		W	122	122	122		
	Drive		-	Direct drive	Direct drive	Direct drive		
	Speed		Steps	-	-	-	-	
			Heating	rpm	550	590	590	
			Cooling	rpm	510	560	580	
	Sound	Sound Pressure	Heating	dB(A)	42	46	47	
			Cooling	dB(A)	42	46	47	
			Night Mode(3m)	dB(A)	35	35	35	
		Sound Power	Heating	dB(A)	56	59	60	
			Cooling	dB(A)	56	59	60	
	Connections	Water pipe	inlet	Φ, inch	BSPP male 1	BSPP male 1	BSPP male 1	
			outlet	Φ, inch	BSPP male 1	BSPP male 1	BSPP male 1	
	Casing	Color		-	Shadow Gray	Shadow Gray	Shadow Gray	
		Material		-	GI-SGCC	GI-SGCC	GI-SGCC	
	Packing	Material		-	EPS/BOX	EPS/BOX	EPS/BOX	
		Weight		kg	20.0	20.0	20.0	
	External Dimension	Net Weight		kg	126.0	137.0	137.0	
		Shipping Weight		kg	146.0	157.0	157.0	
		Net Dimensions(WxHxD)		mm	1,270 x 1,018 x 530	1,270 x 1,018 x 530	1,270 x 1,018 x 530	
		Shipping Dimensions(WxHxD)		mm	1,330 x 1,226 x 630	1,330 x 1,226 x 630	1,330 x 1,226 x 630	
	Operating Temp. Range	Heating		℃	-30 ~ 43	-30 ~ 43	-30 ~ 43	
		Cooling		℃	10 ~ 46	10 ~ 46	10 ~ 46	
		D.Hot Water		℃	-30 ~43	-30 ~43	-30 ~43	

NOTE

- Specifications may be subject to change without prior notice.
- 1) A2W Condition #1 : (Heating) Water In/Out 30°C/35°C, Outdoor Air 7°C[DB]/6°C[WB];
(Cooling) Water In/Out 23°C/18°C, Outdoor Air 35°C[DB].
- 2) A2W Condition #2 : (Heating) Water In/Out 40°C/45°C, Outdoor Air 7°C[DB]/6°C[WB];
(Cooling) Water In/Out 12°C/7°C, Outdoor Air 35°C[DB].
- 3) A2W Condition #3 : (Heating) Water In/Out 47°C/55°C, Outdoor Air 7°C[DB]/6°C[WB].
- 4) A2W Condition : (A2W35) Water In/Out -/35°C, Outdoor Air 2°C[DB]/1°C[WB];
(A-7/W35) Water In/Out -/35°C, Outdoor Air -7°C[DB]/-(※ Peak Capacity)
- Select wire size based on the value of MCA.
- Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dB(A) = A-weighted sound pressure level
 - Reference acoustic pressure 0 dB = 20uPa
- Sound power level is an absolute value that a sound source generates.
 - dB(A) = A-weighted Sound power level
 - Reference power : 1pW
 - Measured according to ISO 3741
- These products contain R32 (GWP=675) which is fluorinated greenhouse gas.

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit				AE160DN*MPK/EU AE080BXYDGG/EU		AE160DN*MPK/EU AE120BXYDGG/EU		AE160DN*MPK/EU AE140BXYDGG/EU		
Power Supply						Φ, #, V, Hz		3,4,380-415,50 Heat Pump (A2W)		3,4,380-415,50 Heat Pump (A2W)		
System	Mode					-						
	Performance	Capacity	Heating	A2W Condition #1. (A7/W30-35)		W		8,000		12,000		
A2W condition #2. (A7/W40-45)				Btu/h		27,300		40,900				
A2W condition #3. (A7/W47-55)				W		8,000		12,000				
A2/W35 4)*						8,000		12,000				
A-7/W35 4)*						8,000		12,000				
A2W Condition #1. (A35/W23-18)				W		8,000		12,000				
Cooling			A2W condition #2. (A35/W12-7)		Btu/h		27,300		40,900			
					W		7,500		11,500			
Power			Power Input	Heating	A2W Condition #1. (A7/W30-35)		W		1,600		2,350	
					A2W condition #2. (A7/W40-45)				2,051		3,000	
	A2W condition #3. (A7/W47-55)						2,500		3,529			
	A2/W35 4)*						1,818		2,791			
	A-7/W35 4)*						2,462		3,810			
	Cooling	A2W Condition #1. (A35/W23-18)			W		1,700		2,640			
		A2W condition #2. (A35/W12-7)					2,273		3,594			
		Current Input			Heating	A2W Condition #1.		A		2.51		
					Cooling					2.67		
		Heating			A2W condition #2		A		3.22			
		Cooling						3.92				
	Current	MCA				A		16.1				
				MFA		A		17.7				
	Efficiency	COP (Nominal Heating) A2W condition #1. (A7/W30-35)					5.00		5.11			
		EER (Nominal Cooling) A2W condition #1. (A35/W23-18)					4.71		4.55			
		EER (Nominal Cooling) A2W condition #2. (A35/W12-7)					3.30		3.20			
		COP		A2W condition #2. (A7/W40-45)		W/W		3.90		4.00		
				A2W condition #3. (A7/W47-55)				3.20		3.40		
				A2/W35 4)*				4.40		4.30		
				A-7/W35 4)*				3.25		3.15		
PdesignH(LWT 35°C)					9,500		12,600					
PdesignH(LWT 55°C)					9,500		12,600					
SCOP (35°C)					4.64		4.90					
SCOP (55°C)					3.38		3.78					
SCOP Class (35°C)					A+++		A+++					
SCOP Class (55°C)					A++		A++					
SEER					4.75		5.00					
Water Connections		Water Flow Rate (Nominal)		Heating	LPM		23.1		34.6			
				Cooling	LPM		23.1		34.6			
		Water Flow Rate		Min	LPM		7		7			
	Max			LPM		48		58				
	Water Pressure (Max)				bar		3		3			
							28		28			
	Water Pipe Type	threaded male	Inlet	Φ, mm		28		28				
			Outlet	Φ, mm		28		28				
	Leaving Water Temperature	Min.	Heating	°C		15		15				
				°C		70		70				
		Max.	Cooling	°C		5		5				
				°C		25		25				
Refrigerant	Type				-		R32					
	Factory Charging				kg		2.7					
					tCO2e		1.82					
	Control Method				-		EEV					
Outdoor Unit	Compressor	Type				-		Scroll				
		Model Name				-		DS2BB5033FVA				
		Oil		Type	-		POE(Kixx RF P85)					
				Initial Charge	cc		1,100					
		Quantity				EA		1				
		Output				W		3,622				
		Starting method				-		Inverter driven				
		Motor	Crankcase heater	Output		W		-				

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit		AE160DN*MPK/EU	AE160DN*MPK/EU	AE160DN*MPK/EU	
		Outdoor Unit		AE080BXYDGG/EU	AE120BXYDGG/EU	AE140BXYDGG/EU	
Outdoor Unit	Heat exchanger	Length		mm	1,224/1,195	1,216/1,187/1,159	1,216/1,187/1,159
		Rows	Quantity	EA	2	3	3
		Fin pitch		mm	1.5	1.5	1.5
		Passes	Quantity	EA	8	11	11
		Face area		m²	1.15	1.15	1.15
		Stages	Quantity	EA	46	46	46
		Empty tubeplate hole	Quantity	EA	-	-	-
		Tube type		Φ	7	7	7
		Fin	Type	-	Corrugate	Corrugate	Corrugate
			Treatment	-	Anti Salt	Anti Salt	Anti Salt
	Fan	Type		-	Propeller Fan	Propeller Fan	Propeller Fan
		Discharge direction			Horizontal	Horizontal	Horizontal
		Air Flow Rate	Heating	m³/min	92	95	95
			Cooling	m³/min	85	90	90
		Quantity		EA	1	1	1
	Fan motor	Quantity		EA	1	1	1
		Model		-	SIC-88FWJ-F1122-1	SIC-88FWJ-F1122-1	SIC-88FWJ-F1122-1
		Output		W	122	122	122
		Drive		-	Direct drive	Direct drive	Direct drive
		Speed	Steps	-	-	-	-
			Heating	rpm	550	590	590
			Cooling	rpm	510	560	580
	Sound	Sound Pressure	Heating	dB(A)	42	46	47
			Cooling	dB(A)	42	46	47
			Night Mode(3m)	dB(A)	35	35	35
		Sound Power	Heating	dB(A)	56	59	60
			Cooling	dB(A)	56	59	60
	Connections	Water pipe	inlet	Φ, inch	BSPP male 1	BSPP male 1	BSPP male 1
			outlet	Φ, inch	BSPP male 1	BSPP male 1	BSPP male 1
	Casing	Color		-	Shadow Gray	Shadow Gray	Shadow Gray
		Material		-	GI-SGCC	GI-SGCC	GI-SGCC
	Packing	Material		-	EPS/BOX	EPS/BOX	EPS/BOX
		Weight		kg	20.0	20.0	20.0
	External Dimension	Net Weight		kg	126.0	137.0	137.0
		Shipping Weight		kg	146.0	157.0	157.0
		Net Dimensions(WxHxD)		mm	1,270 x 1,018 x 530	1,270 x 1,018 x 530	1,270 x 1,018 x 530
Shipping Dimensions(WxHxD)		mm	1,330 x 1,226 x 630	1,330 x 1,226 x 630	1,330 x 1,226 x 630		
Operating Temp. Range	Heating		℃	-30 ~ 43	-30 ~ 43	-30 ~ 43	
	Cooling		℃	10 ~ 46	10 ~ 46	10 ~ 46	
	D.Hot Water		℃	-30 ~ 43	-30 ~ 43	-30 ~ 43	

NOTE

- Specifications may be subject to change without prior notice.
- 1) A2W Condition #1 : (Heating) Water In/Out 30°C/35°C, Outdoor Air 7°C[DB]/6°C[WB];
(Cooling) Water In/Out 23°C/18°C, Outdoor Air 35°C[DB].
- 2) A2W Condition #2 : (Heating) Water In/Out 40°C/45°C, Outdoor Air 7°C[DB]/6°C[WB];
(Cooling) Water In/Out 12°C/7°C, Outdoor Air 35°C[DB].
- 3) A2W Condition #3 : (Heating) Water In/Out 47°C/55°C, Outdoor Air 7°C[DB]/6°C[WB].
- 4) A2W Condition : (A2W35) Water In/Out -/35°C, Outdoor Air 2°C[DB]/1°C[WB];
(A-7/W35) Water In/Out -/35°C, Outdoor Air -7°C[DB]/-(※ Peak Capacity)
- Select wire size based on the value of MCA.
- Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dB(A) = A-weighted sound pressure level
 - Reference acoustic pressure 0 dB = 20uPa
- Sound power level is an absolute value that a sound source generates.
 - dB(A) = A-weighted Sound power level
 - Reference power : 1pW
 - Measured according to ISO 3741
- These products contain R32 (GWP=675) which is fluorinated greenhouse gas.

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit				AE160DN*MPK/EU	AE160DN*MPK/EU	AE160DN*MPK/EU		
		Outdoor Unit				AE050RXYDEG/EU	AE080RXYDEG/EU	AE120RXYDEG/EU		
Power Supply					Φ, #, V, Hz	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50		
Mode					-	Heat Pump (A2W)	Heat Pump (A2W)	Heat Pump (A2W)		
	Performance	Capacity	Cooling	A2W Condition #1. (A7/W35) ^{1)*}	W	5,000	7,500	12,000		
					Btu/h	17,100	25,600	40,900		
			Heating	A2W Condition #1. (A7/W35) ^{1)*}	W	5,000	8,000	12,000		
					Btu/h	17,100	27,300	40,900		
					A2W condition #2	4,800	7,400	11,700		
						A2W condition #3	4,300	7,100	11,300	
						A2/W35 ^{4)*}	4,800	7,000	10,800	
						A-7/W35 ^{4)*}	5,100	7,350	12,000	
	Power	Power Input	Cooling	A2W Condition #1. (A7/W35) ^{1)*}	W	1,140	1,900	2,770		
						1,030	1,770	2,650		
			Heating	A2W Condition #1. (A7/W35) ^{1)*}		1,300	2,120	3,180		
						1,520	2,530	3,730		
						A2W condition #2	1,450	2,350	3,300	
						A2W condition #3	1,880	3,020	4,710	
						A2/W35 ^{4)*}	1,880	3,020	4,710	
			A-7/W35 ^{4)*}	1,880		3,020	4,710			
		Current Input	Cooling	A2W Condition #1. (A7/W35) ^{1)*}	A	5.4	9.1	13.2		
						Heating	4.9	8.5	12.2	
		Current	MCA			A	16.0	22.0	28.0	
				MFA			A	20.0	27.5	35.0
System	Efficiency	EER (Nominal Cooling)				4.39	3.95	4.33		
		COP (Nominal Heating) A2W condition #1				4.85	4.52	4.53		
		COP		A2W condition #2	W/W	3.69	3.49	3.68		
						A2W condition #3	2.83	2.81	3.03	
						A2/W35 ^{4)*}	3.31	2.98	3.27	
						A-7/W35 ^{4)*}	2.71	2.43	2.55	
						PdesignH	LWT 35°C	5,500	8,000	13,000
			LWT 55°C	5,000	8,000	12,000				
		SCOP		35°C	4.46	4.44	4.69			
				55°C	3.20	3.23	3.51			
		SCOP Class		35°C	A+++	A+++	A+++			
				55°C	A++	A++	A++			
		SEER					3.98	4.52	5.22	
		Water Connections	Water Flow Rate (Nominal) [H/C]				LPM	14.4/14.4	23.1/21.6	34.6/34.6
	Water Flow Rate		Min	LPM	7.0	7.0	12.0			
					Max	LPM	48.0	48.0	58.0	
	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/max	Heating	°C	15~65	15~65	15~65		
				Cooling	°C	5~25	5~25	5~25		
	Refrigerant		Type				-	R32	R32	R32
			Factory Charging				kg	1.00	1.15	2.20
							tCO ₂ e	0.68	0.78	1.49
			Control Method				-	EEV	EEV	EEV
	Outdoor Unit	Compressor	Type				-	BLDC Twin Rotary	BLDC Twin Rotary	BLDC Twin Rotary
Model Name				-	UB4TN8200FE4SS	UB8TN8265FJWSG	UB5TN5450FJXSG			
Oil			Type	-	POE	POE	POE			
				Initial Charge	cc	650	700	1,700		
Quantity				EA	1	1	1			
Output				W	1623	2078	3613			
Starting method					-	Inverter driven	Inverter driven	Inverter driven		

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit			AE160DN*MPK/EU	AE160DN*MPK/EU	AE160DN*MPK/EU
		Outdoor Unit			AE050RXYDEG/EU	AE080RXYDEG/EU	AE120RXYDEG/EU
Outdoor Unit	Heat exchanger	Length		mm	730	850	950
		Rows	Quantity	EA	2	2	2
		Fin pitch		mm	1.5	1.5	1.5
		Passes	Quantity	EA	6	8	10
		Face area		m²	0.55	0.82	1.32
		Stages	Quantity	EA	36	46	66
		Tube type		-	Φ7	Φ7	Φ7.94
		Fin	Type	-	Corrugate	Wide Louver	G-Fin
			Treatment	-	NGS	Anti Salt	Anti Salt
	Fan	Type		-	Propeller Fan	Propeller Fan	Propeller Fan
		Discharge direction		-	Horizontal	Horizontal	Horizontal
		Air Flow Rate	Heating	m³/min	51	66	99
			Cooling	m³/min	51	66	99
	Fan motor	Quantity		EA	1	1	2
		Model		-	Brushless DC motor	Brushless DC motor	Brushless DC motor
		Output		W X EA	98	125	125 X 2
		Drive		-	Direct drive	Direct drive	Direct drive
		Speed	Heating	rpm	760	780	650
			Cooling	rpm	760	780	650
	Sound	Sound Pressure	Heating	dB(A)	45	48	50
			Cooling	dB(A)	45	48	50
		Sound Power	Heating	dB(A)	61	63	64
			Cooling	dB(A)	62	64	65
	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		-	Earth brown	Earth brown	Earth brown
		Material		-	Powder coated Galvanised steel	Powder coated Electro galvanized steel	Powder coated Electro galvanized steel
	Packing	Material		-	EPS/BOX	EPS/BOX	EPS/BOX
		Weight		kg	4.0	8.5	9.0
	External Dimension	Net Weight		kg	58.5	76.0	110.0
		Shipping Weight		kg	62.5	84.5	119.0
		Net Dimensions (WxHxD)		mm	880 x 798 x 310	940 x 998 x 330	940 x 1,420 x 330
		Shipping Dimensions (WxHxD)		mm	1,023 x 904 x 413	995 x 1,178 x 426	995 x 1,598 x 426
	Operating Temp. Range	Heating		℃	-25~35	-25~35	-25~35
		Cooling		℃	10~46	10~46	10~46
		D.Hot Water		℃	-25~43	-25~43	-25~43

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)
- Select wire size based on the value of MCA
- Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dBA = A-weighted sound pressure level
 - Reference acoustic pressure 0 dB = 20uPa
- 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
- These products contain R32 (GWP=675) which is fluorinated greenhouse gas.
- The system is operated in (-25°C ≤ Outdoor temp. < -20°C) condition, but no guarantee of capacity.
- The system is operated by only Booster Heater in special condition (35 °C < Outdoor temp. ≤ 43°C).

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit				AE160DN*MPK/EU	AE160DN*MPK/EU	AE160DN*MPK/EU	AE160DN*MPK/EU		
		Outdoor Unit				AE160RXYDEG/EU	AE080RXYDGG/EU	AE120RXYDGG/EU	AE160RXYDGG/EU		
Power Supply					Φ, #, V, Hz	1,2,220-240,50	3,4,380-415,50	3,4,380-415,50	3,4,380-415,50		
Mode					-	Heat Pump (A2W)	Heat Pump (A2W)	Heat Pump (A2W)	Heat Pump (A2W)		
	Performance	Capacity	Cooling	A2W Condition #1. (A7/W35) ¹⁾²⁾	W	14,000	7,500	12,000	14,000		
				Btu/h	47,800	25,600	40,900	47,800			
			Heating	A2W Condition #1. (A7/W35) ¹⁾²⁾	W	16,000	8,000	12,000	16,000		
				A2W condition #2 A2W condition #3 A2/W35 ⁴⁾⁵⁾ A-7/W35 ⁴⁾⁵⁾	W	Btu/h	54,600	27,300	40,900	54,600	
							15,400	7,400	11,700	15,400	
							15,000	7,100	11,300	15,000	
							13,200	7,000	10,800	13,200	
					14,600	7,350	12,000	14,600			
	Power	Power Input	Cooling	A2W Condition #1. (A7/W35) ¹⁾²⁾	W		3,280	1,900	2,770	3,280	
				A2W Condition #1. (A7/W35) ¹⁾²⁾ A2W condition #2 A2W condition #3 A2/W35 ⁴⁾⁵⁾ A-7/W35 ⁴⁾⁵⁾			3,620	1,770	2,650	3,620	
						4,490	2,120	3,180	4,490		
						5,180	2,530	3,730	5,180		
						4,400	2,350	3,300	4,400		
						6,000	3,020	4,710	6,000		
			Current Input			Cooling	A2W Condition #1. (A7/W35) ¹⁾²⁾	A	15.7	3.0	4.4
				Heating			17.0		2.8	4.1	5.7
		Current	MCA	MFA	A	32.0	10.0	10.0	12.0		
					A	40.0	16.1	16.1	16.1		
		System	Efficiency	EER (Nominal Cooling)				4.27	3.95	4.33	4.27
				COP (Nominal Heating) A2W condition #1				4.42	4.52	4.53	4.42
COP	A2W condition #2 A2W condition #3 A2/W35 ⁴⁾⁵⁾ A-7/W35 ⁴⁾⁵⁾			W/W		3.43	3.49	3.68	3.43		
						2.90	2.81	3.03	2.90		
						3.00	2.98	3.27	3.00		
						2.43	2.43	2.55	2.43		
PdesignH	LWT 35°C				16,000	8,000	13,000	16,000			
	LWT 55°C				16,000	8,000	12,000	16,000			
SCOP	35°C				4.48	4.44	4.69	4.48			
	55°C				3.53	3.23	3.51	3.53			
SCOP Class	35°C				A+++	A+++	A+++	A+++			
	55°C				A++	A++	A++	A++			
SEER					5.31	4.52	5.22	5.31			
Water Connections	Water Flow Rate (Nominal) [H/C]			LPM	46.2/40.4	23.1/21.6	34.6/34.6	46.2/40.4			
	Water Flow Rate		Min		LPM	12.0	7.0	12.0	12.0		
			Max		LPM	58.0	48.0	58.0	58.0		
	Water Pressure (Max)			bar	3	3	3	3			
	Water Pipe Type		threaded male	Inlet	Φ, mm	28	28	28	28		
				Outlet	Φ, mm	28	28	28	28		
	Leaving Water Temperature		min/max	Heating	°C	15~65	15~65	15~65	15~65		
		Cooling		°C	5~25	5~25	5~25	5~25			
Refrigerant	Type			-	R32	R32	R32	R32			
	Factory Charging			kg	2.20	1.15	2.20	2.20			
				tCO ₂ e	1.49	0.78	1.49	1.49			
	Control Method			-	EEV	EEV	EEV	EEV			
Outdoor Unit	Compressor	Type			-	BLDC Twin Rotary	BLDC Twin Rotary	BLDC Twin Rotary	BLDC Twin Rotary		
		Model Name			-	UB5TN5450FJXSG	UB8TN8265FJWSG	UB5TN5450FJXSG	UB5TN5450FJXSG		
		Oil	Type	-	POE	POE	POE	POE			
				Initial Charge	cc	1,700	700	1,700	1,700		
		Quantity			EA	1	1	1	1		
		Output			W	3613	2078	3613	3613		
Starting method			-	Inverter driven	Inverter driven	Inverter driven	Inverter driven				

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit			AE160DN*MPK/EU	AE160DN*MPK/EU	AE160DN*MPK/EU	AE160DN*MPK/EU
		Outdoor Unit			AE160RXYDEG/EU	AE080RXYDGG/EU	AE120RXYDGG/EU	AE160RXYDGG/EU
Outdoor Unit	Heat exchanger	Length		mm	950	850	950	950
		Rows	Quantity	EA	2	2	2	2
		Fin pitch		mm	1.5	1.5	1.5	1.5
		Passes	Quantity	EA	10	8	10	10
		Face area		m²	1.32	0.82	1.32	1.32
		Stages	Quantity	EA	66	46	66	66
		Tube type		-	Φ7.94	Φ7	Φ7.94	Φ7.94
		Fin	Type	-	G-Fin	Wide Louver	G-Fin	G-Fin
			Treatment	-	Anti Salt	Anti Salt	Anti Salt	Anti Salt
	Fan	Type		-	Propeller Fan	Propeller Fan	Propeller Fan	Propeller Fan
		Discharge direction		-	Horizontal	Horizontal	Horizontal	Horizontal
		Air Flow Rate	Heating	m³/min	118	66	99	118
			Cooling	m³/min	118	66	99	118
	Fan motor	Quantity		EA	2	1	2	2
		Model		-	Brushless DC motor	Brushless DC motor	Brushless DC motor	Brushless DC motor
		Output		W X EA	125 X 2	125	125 X 2	125 X 2
		Drive		-	Direct drive	Direct drive	Direct drive	Direct drive
		Speed	Heating	rpm	750	780	650	750
			Cooling	rpm	750	780	650	750
	Sound	Sound Pressure	Heating	dB(A)	52	48	50	52
			Cooling	dB(A)	54	48	50	54
		Sound Power	Heating	dB(A)	66	63	64	66
			Cooling	dB(A)	68	64	65	68
	Connections	Water pipe	inlet	-	BSPP male 1"	BSPP male 1"	BSPP male 1"	BSPP male 1"
			outlet	-	BSPP male 1"	BSPP male 1"	BSPP male 1"	BSPP male 1"
	Casing	Color		-	Earth brown	Earth brown	Earth brown	Earth brown
		Material		-	Powder coated Electro galvanized steel	Powder coated Electro galvanized steel	Powder coated Electro galvanized steel	Powder coated Electro galvanized steel
	Packing	Material		-	EPS/BOX	EPS/BOX	EPS/BOX	EPS/BOX
		Weight		kg	9.0	8.5	9.0	9.0
	External Dimension	Net Weight		kg	110.0	75.0	111.0	111.0
		Shipping Weight		kg	119.0	83.5	120.0	120.0
		Net Dimensions (WxHxD)		mm	940 x 1,420 x 330	940 x 998 x 330	940 x 1,420 x 330	940 x 1,420 x 330
		Shipping Dimensions (WxHxD)		mm	995 x 1,598 x 426	995 x 1,178 x 426	995 x 1,598 x 426	995 x 1,598 x 426
	Operating Temp. Range	Heating		°C	-25~35	-25~35	-25~35	-25~35
		Cooling		°C	10~46	10~46	10~46	10~46
		D.Hot Water		°C	-25~43	-25~43	-25~43	-25~43

NOTE

- Specifications may be subject to change without prior notice.
 - * A2W Condition #1 : (Heating) Water In/Out 30°C/35°C,
Outdoor Air 7°C[DB]/6°C[WB]; (Cooling) Water In/Out 23°C/18°C, Outdoor Air 35°C[DB].
 - * A2W Condition #2 : (Heating) Water In/Out 40°C/45°C,
Outdoor Air 7°C[DB]/6°C[WB]; (Cooling) Water In/Out 12°C/7°C, Outdoor Air 35°C[DB].
 - * A2W Condition #3 : (Heating) Water In/Out 47°C/55°C, Outdoor Air 7°C[DB]/6°C[WB].
 - * A2W Condition : (A2W35) Water In/Out -/35°C,
Outdoor Air 2°C[DB]/1°C[WB]; (A-7/W35) Water In/Out -/35°C, Outdoor Air -7°C[DB]/-(※ Peak Capacity)
- Select wire size based on the value of MCA
- Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.
 - dBA = A-weighted sound pressure level
 - Reference acoustic pressure 0 dB = 20uPa
- 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
- These products contain R32 (GWP=675) which is fluorinated greenhouse gas.
- The system is operated in (-25°C ≤ Outdoor temp. < -20°C) condition, but no guarantee of capacity.
- The system is operated by only Booster Heater in special condition (35 °C < Outdoor temp. ≤ 43°C).

2. Outdoor Units

2-2. Electrical characteristics

Capacity [kW]	Model	Power Supply				Voltage Range [V]		Nominal Running Current [A]		Current [A]	
		Φ	#	Hz	Voltage	Min. (-10%)	Max. (+10%)	Cooling	Heating	MCA	MFA
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
8.0	AE080BXYDEG/EU	1	2	50	220-240	198	264	7.56	8.04	26.0	28.6
12.0	AE120BXYDEG/EU	1	2	50	220-240	198	264	11.12	12.46	32.0	35.2
14.0	AE140BXYDEG/EU	1	2	50	220-240	198	264	13.10	14.87	32.0	35.2
8.0	AE080BXYDGG/EU	3	4	50	380-415	342	457	2.51	2.67	16.1	17.7
12.0	AE120BXYDGG/EU	3	4	50	380-415	342	457	3.69	4.14	16.1	17.7
14.0	AE140BXYDGG/EU	3	4	50	380-415	342	457	4.35	4.94	16.1	17.7
5.0	AE050RXYDEG/EU	1	2	50	220-240	198	264	5.4	4.9	16.0	20.0
8.0	AE080RXYDEG/EU	1	2	50	220-240	198	264	9.1	8.5	22.0	27.5
12.0	AE120RXYDEG/EU	1	2	50	220-240	198	264	13.2	12.2	28.0	35.0
16.0	AE160RXYDEG/EU	1	2	50	220-240	198	264	15.7	17.0	32.0	40.0
8.0	AE080RXYDGG/EU	3	4	50	380-415	342	456	3.0	2.8	16.1	17.7
12.0	AE120RXYDGG/EU	3	4	50	380-415	342	456	4.4	4.1	16.1	17.7
16.0	AE160RXYDGG/EU	3	4	50	380-415	342	456	5.3	5.7	16.1	17.7

NOTE

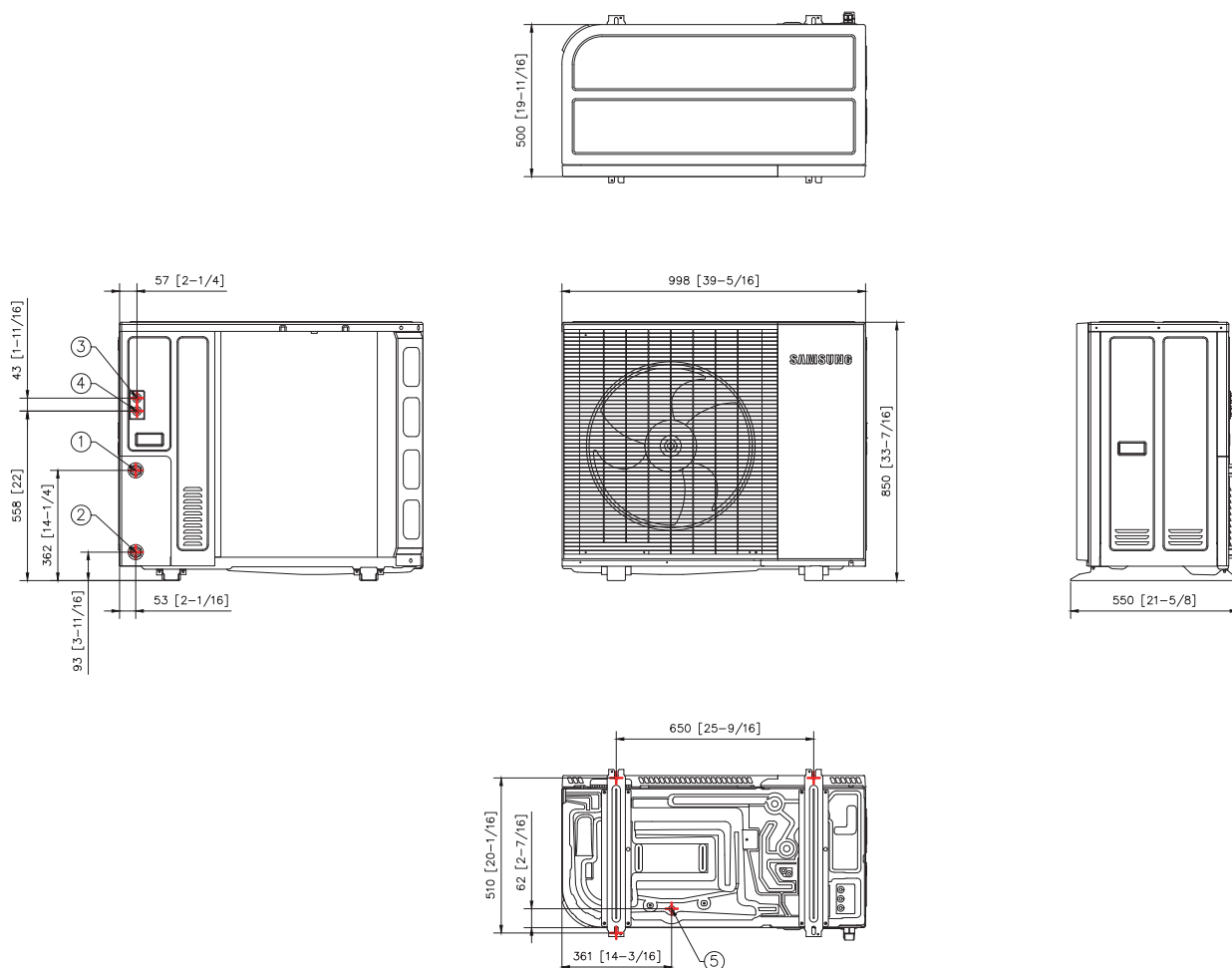
- MCA : Minimum circuit amperes
- MFA : Maximum fuse amperes
- Select wire size based on the value of MCA

2. Outdoor Units

2-3. Dimensional drawing

AE050CXYDEK/EU, 080CXYD*K/EU

Units : mm [inches]



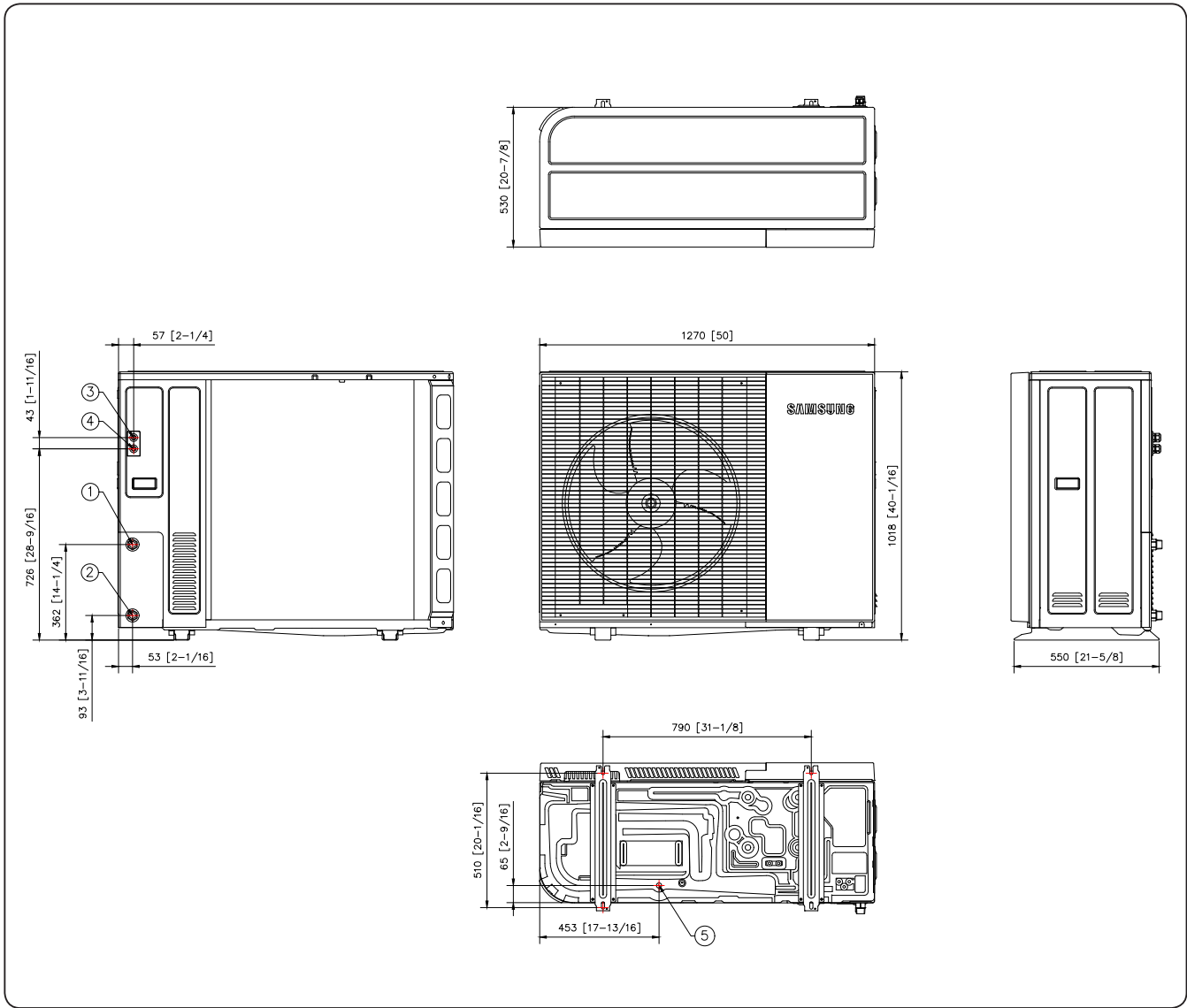
NO	Name	Description
1	Water Pipe(Out)	25A
2	Water Pipe(In)	25A
3	Power wiring conduit	M25x1.5 (Cable gland)
4	Communication wiring conduit	M25x1.5 (Cable gland)
5	Drain holes	Ø20 (connect with the provided drain plug)

2. Outdoor Units

2-3. Dimensional drawing

AE120/160CXVD*K/EU

Units : mm [inches]



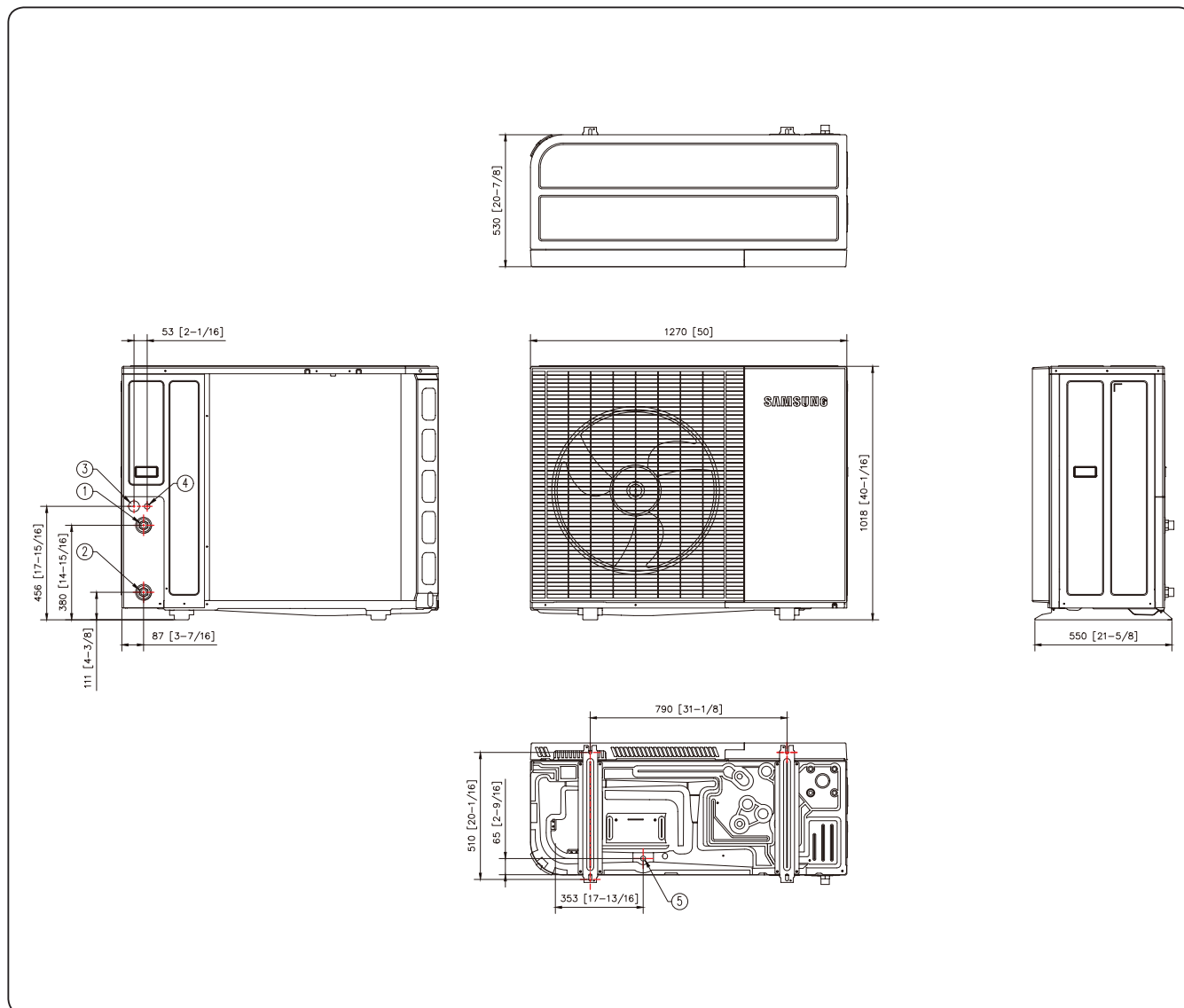
NO	Name	Description
1	Water Pipe(Out)	25A
2	Water Pipe(In)	25A
3	Power wiring conduit	M25x1.5 (Cable gland)
4	Communication wiring conduit	M25x1.5 (Cable gland)
5	Drain holes	Ø20 (connect with the provided drain plug)

2. Outdoor Units

2-3. Dimensional drawing

AE080/120/140BXYD*G/EU

Units : mm [inches]



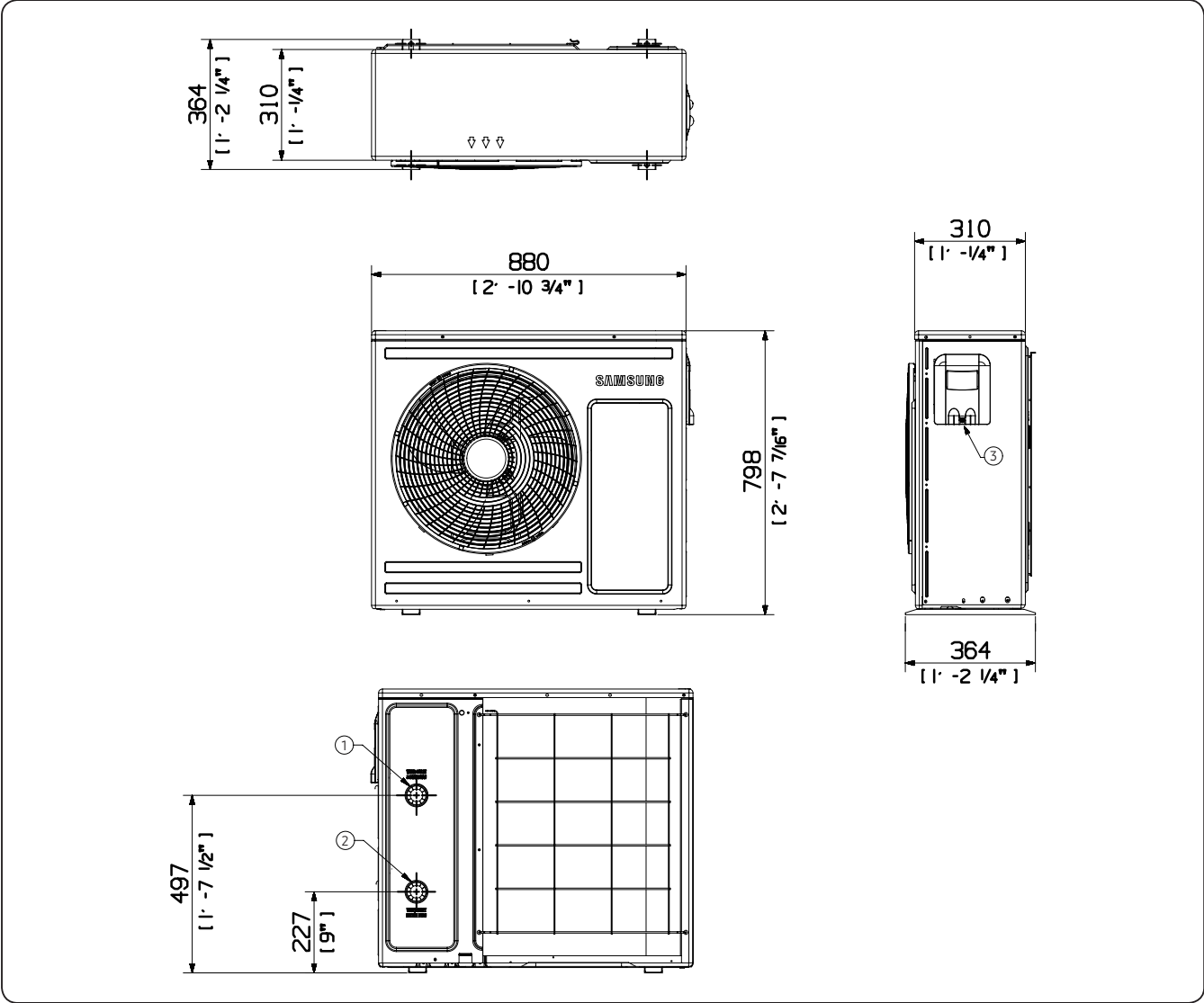
NO	Name	Description
1	Water Pipe(Out)	Φ28
2	Water Pipe(In)	Φ28
3	Power wiring conduit	Φ44
4	communication wiring conduit	Φ22
5	Drain holes	connect with the provided drain plug

2. Outdoor Units

2-3. Dimensional drawing

AE050RXYDEG/EU

Units : mm [inches]



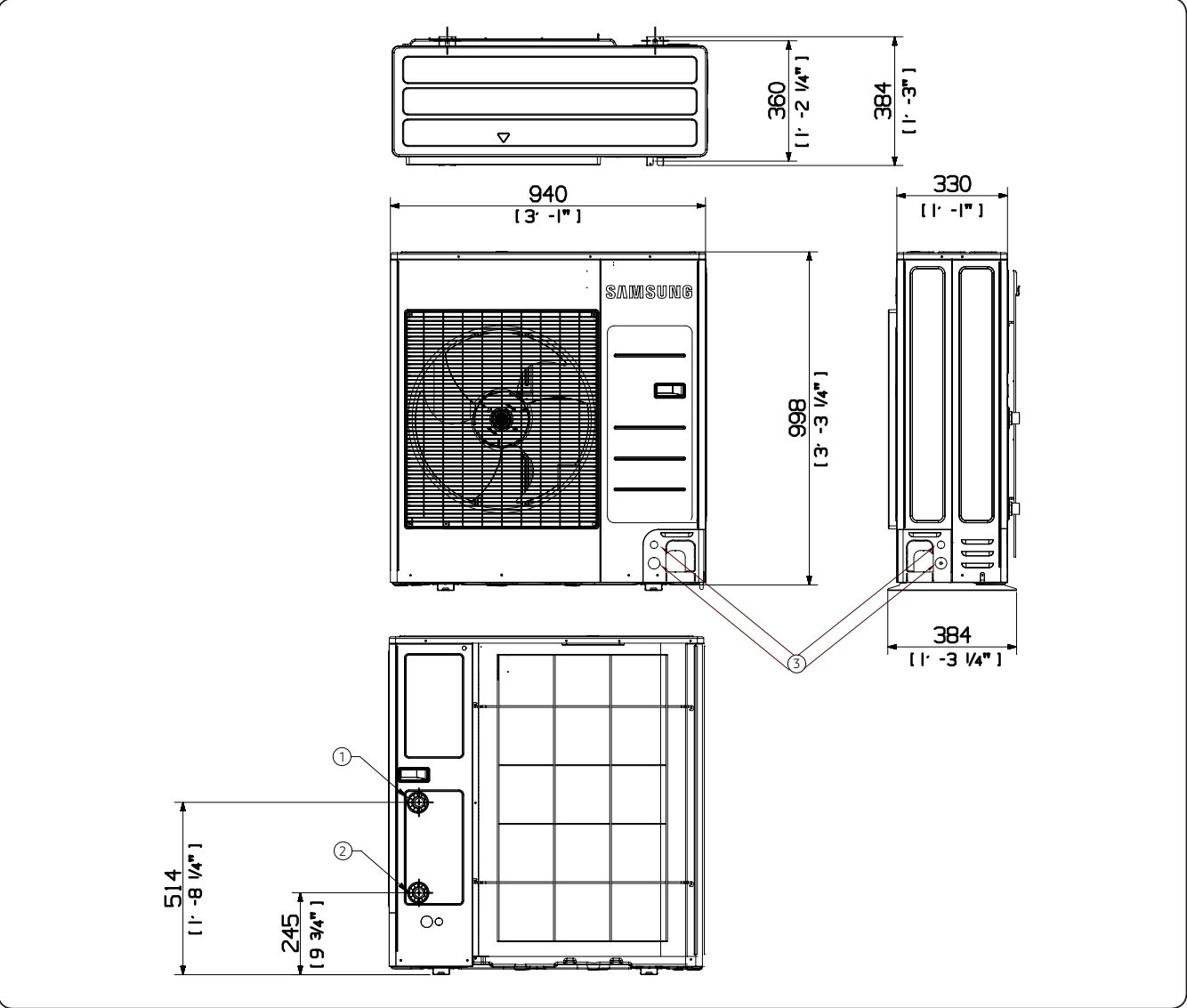
NO	Descriptioin
1	Water Pipe(Out)
2	Water Pipe(In)
3	Power & Communication Wiring Conduit Holes

2. Outdoor Units

2-3. Dimensional drawing

AE080RXYD*G/EU

Units : mm [inches]



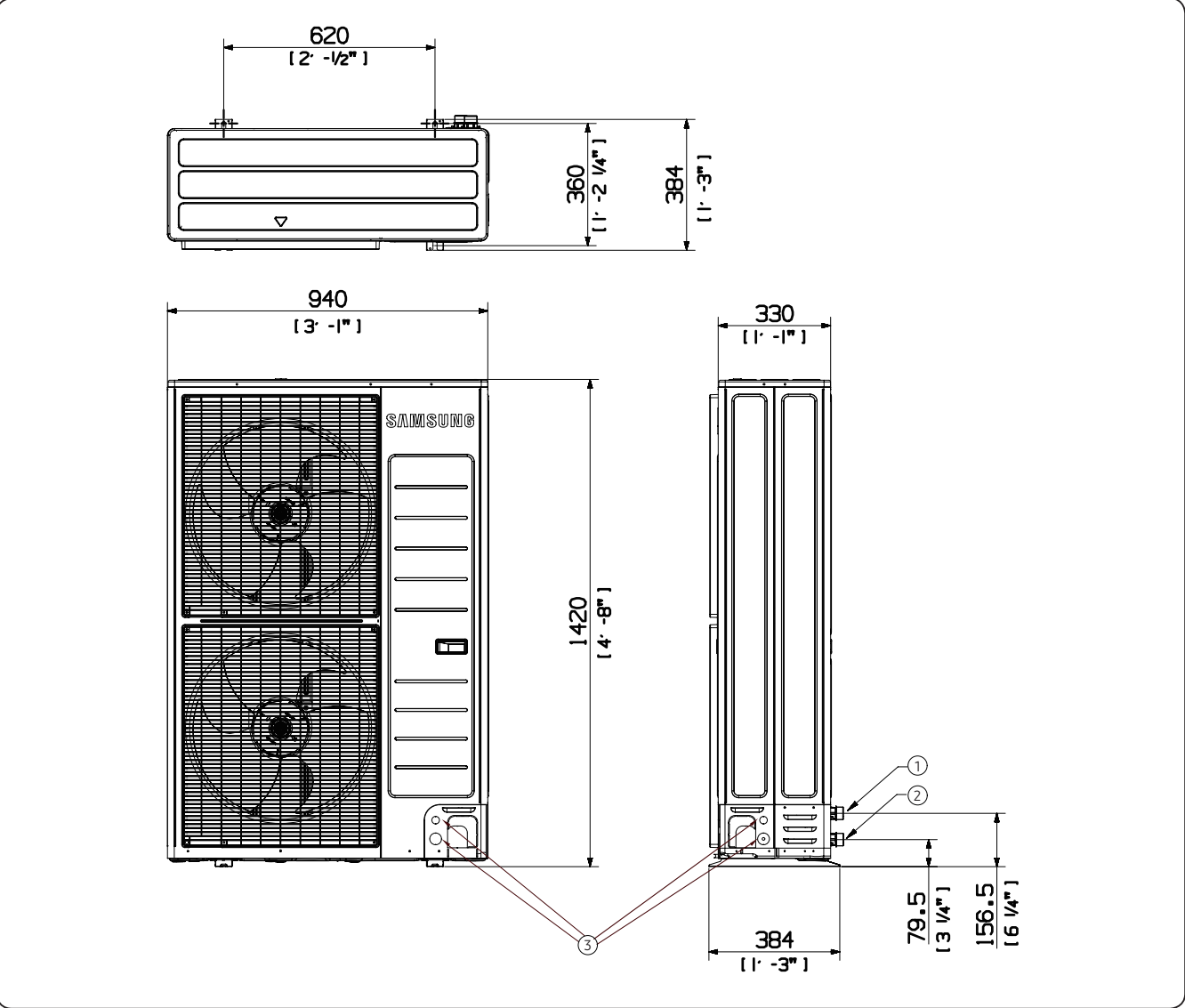
NO	Description
1	Water Pipe(Out)
2	Water Pipe(In)
3	Power & Communication Wiring Conduit Holes

2. Outdoor Units

2-3. Dimensional drawing

AE120/160RXYD*G/EU

Units : mm [inches]



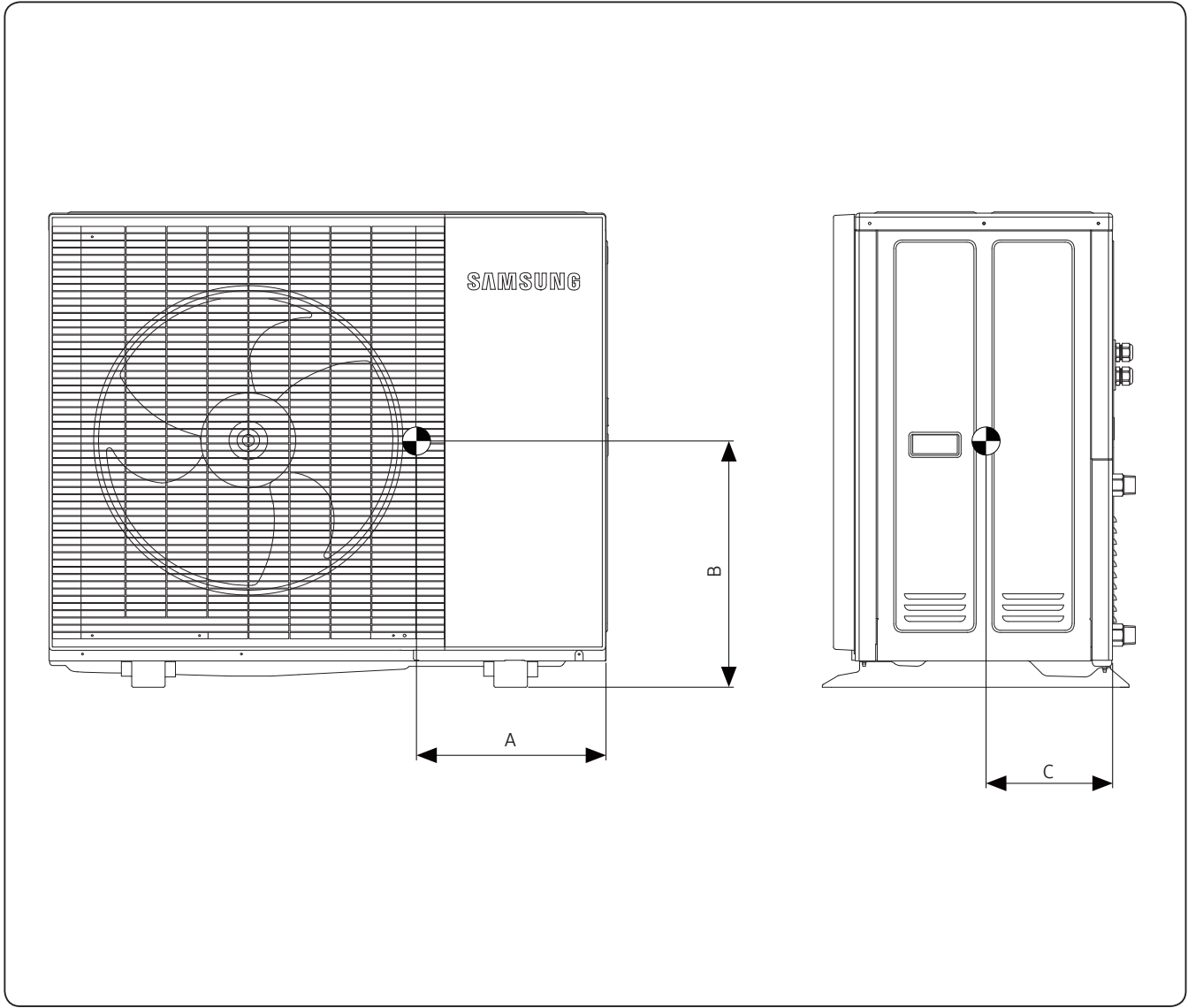
NO	Description
1	Water Pipe(Out)
2	Water Pipe(In)
3	Power & Communication Wiring Conduit Holes

2. Outdoor Units

2-4. Center of Gravity

AE050CXYDEK/EU, 080CXYD*K/EU

Units : mm [inches]



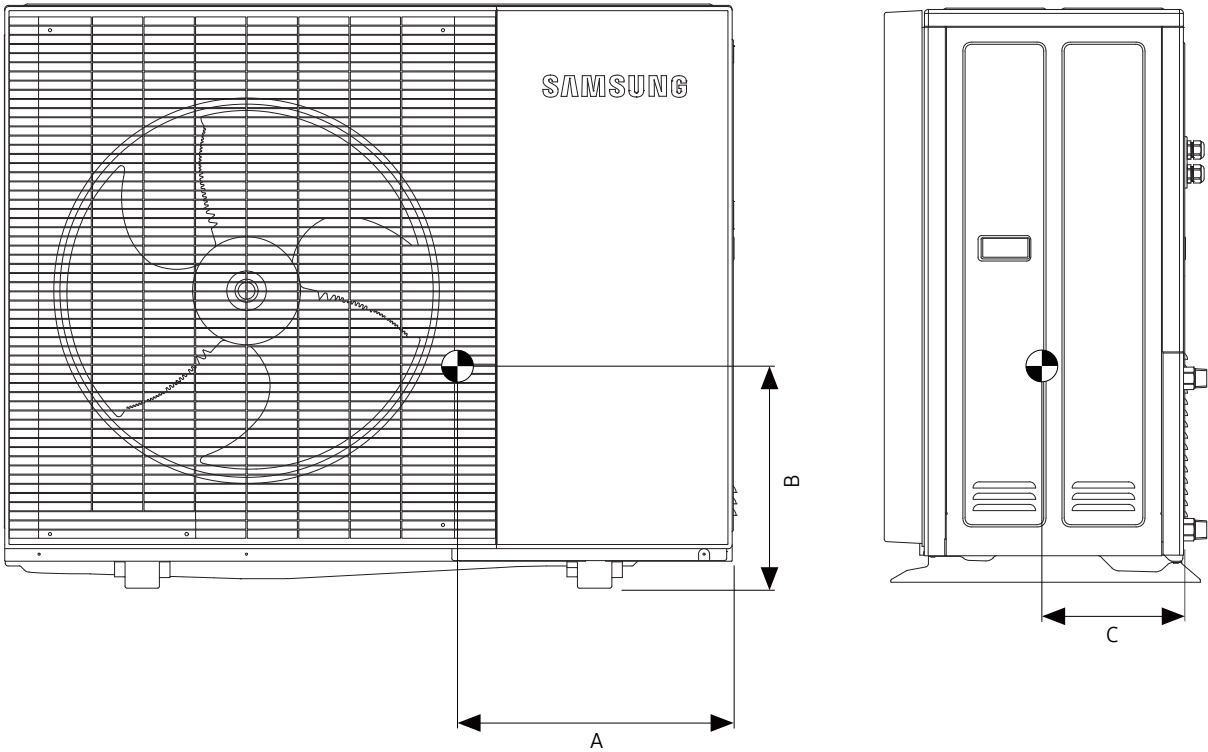
Model	A	B	C
AE050CXYDEK/EU AE080CXYDEK/EU AE080CXYDGK/EU	340 [13 3/8]	396 [15 9/16]	227 [8 15/16]

2. Outdoor Units

2-4. Center of Gravity

AE120/160CXYD*K/EU

Units : mm [inches]



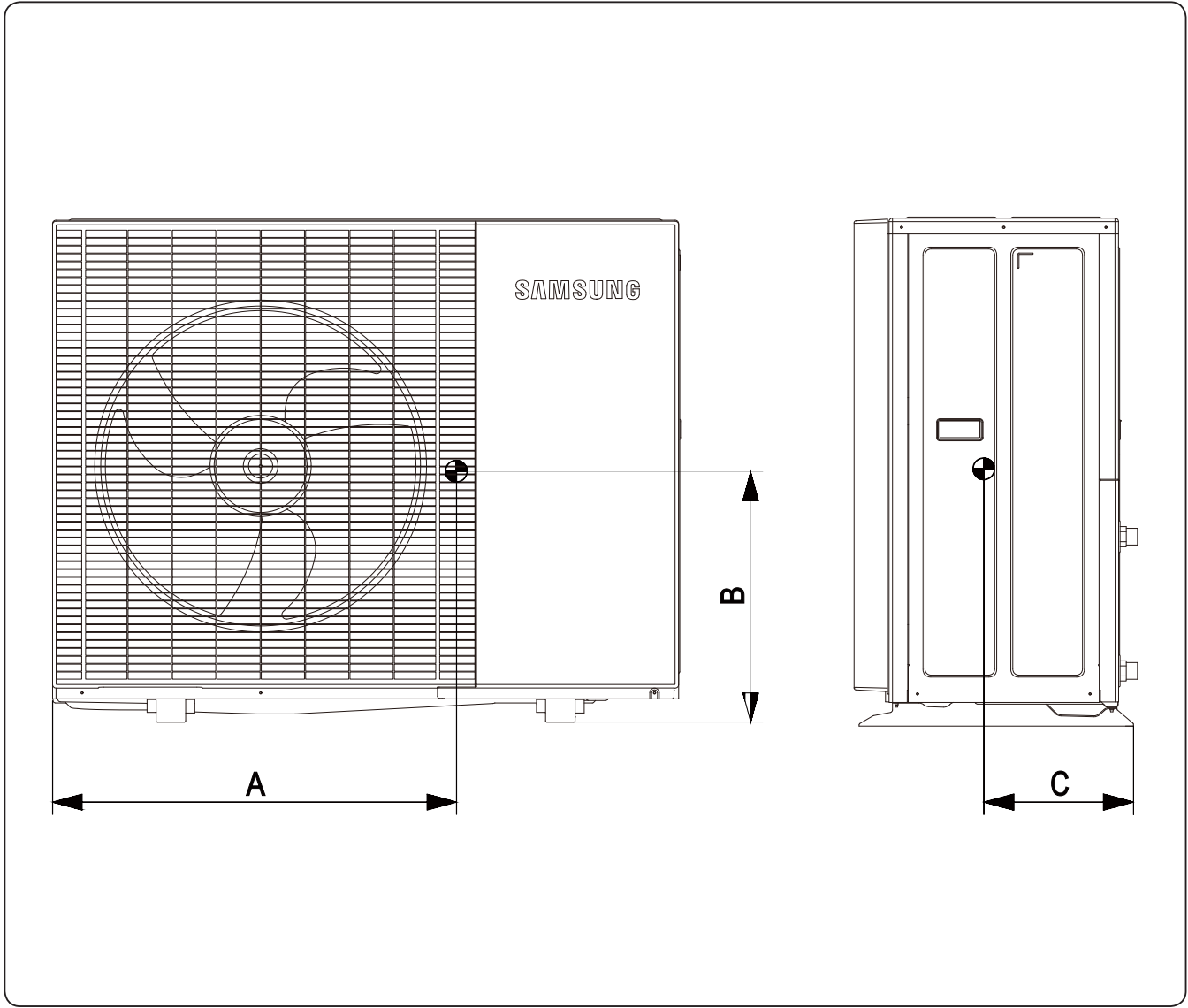
Model	A	B	C
AE120CXYD*K/EU AE160CXYD*K/EU	472 [18 9/16]	408 [16 1/16]	239 [9 7/16]

2. Outdoor Units

2-4. Center of Gravity

AE***BXYD*G/EU

Units : mm [inches]



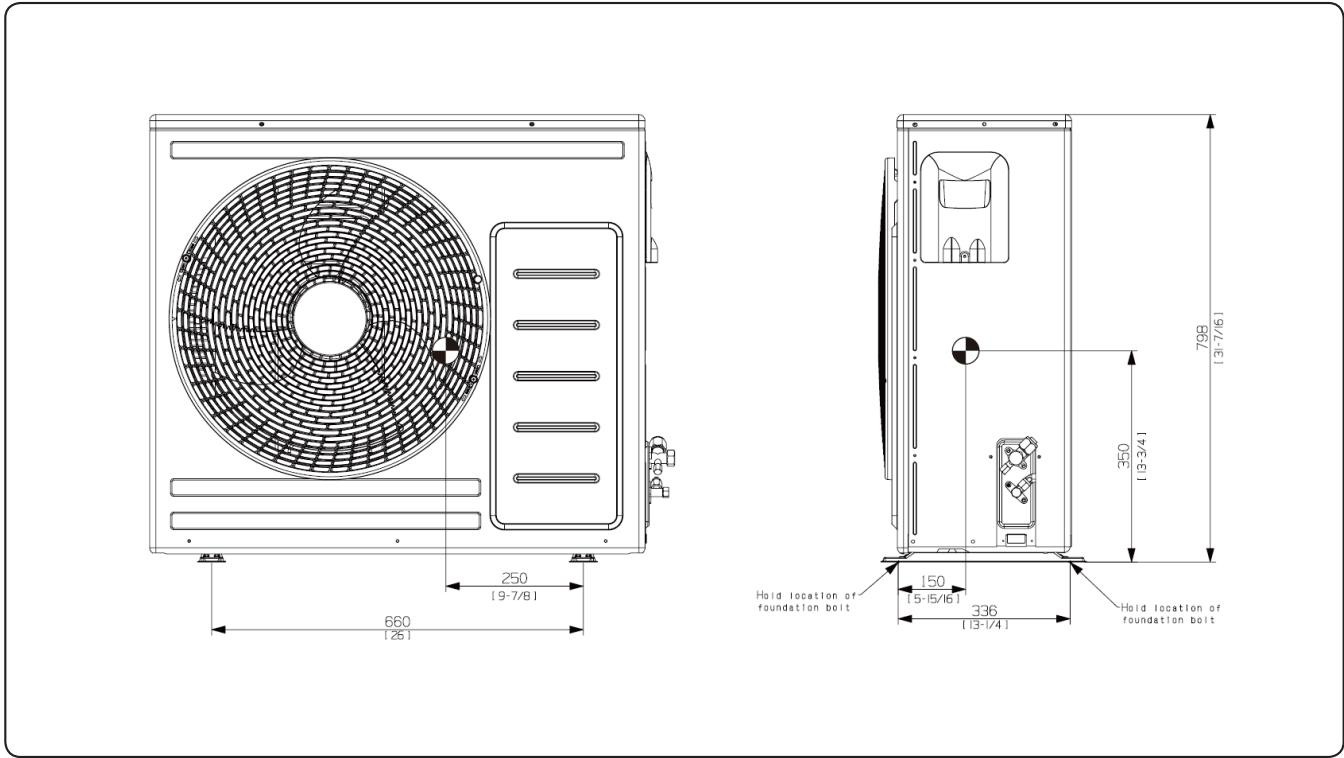
Model	A	B	C
AE***BXYD*G/EU	800 [31-1/2]	214 [8-7/16]	361 [14-3/16]

2. Outdoor Units

2-4. Center of Gravity

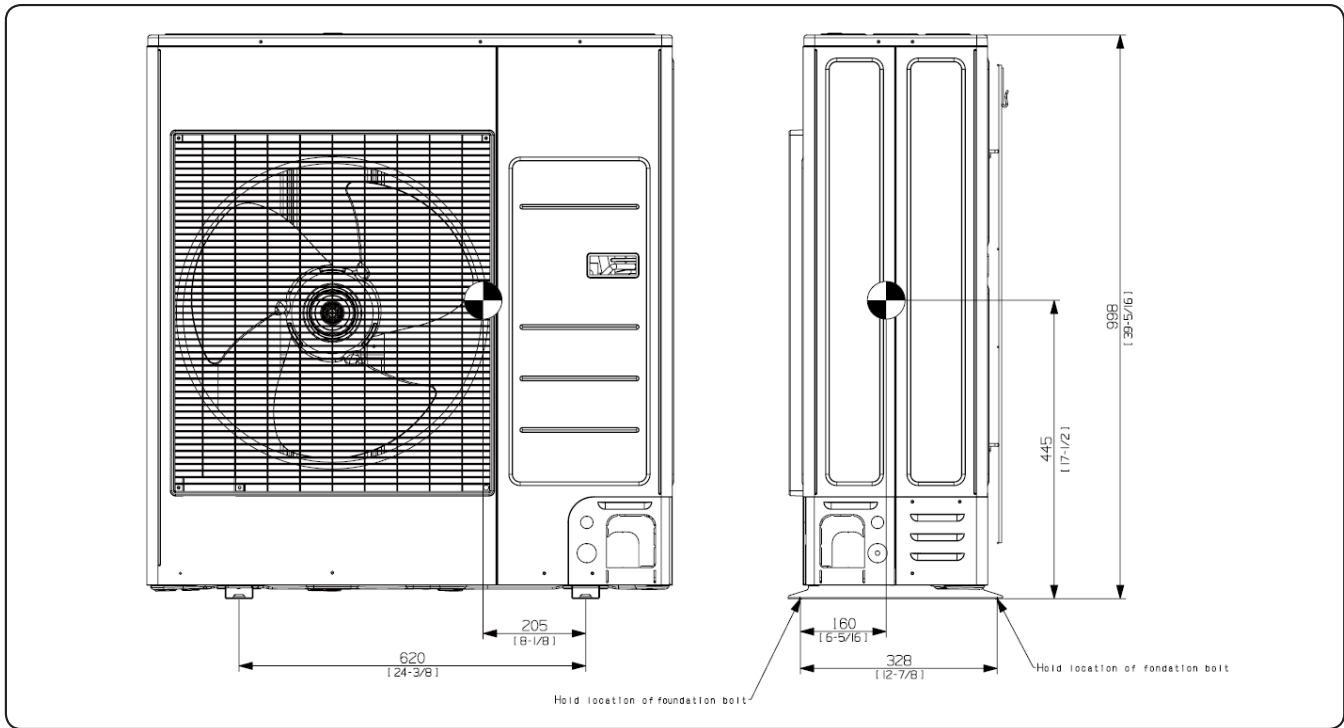
AE050RXYDEG/EU

Units : mm [inches]



AE080RXYD*G/EU

Units : mm [inches]

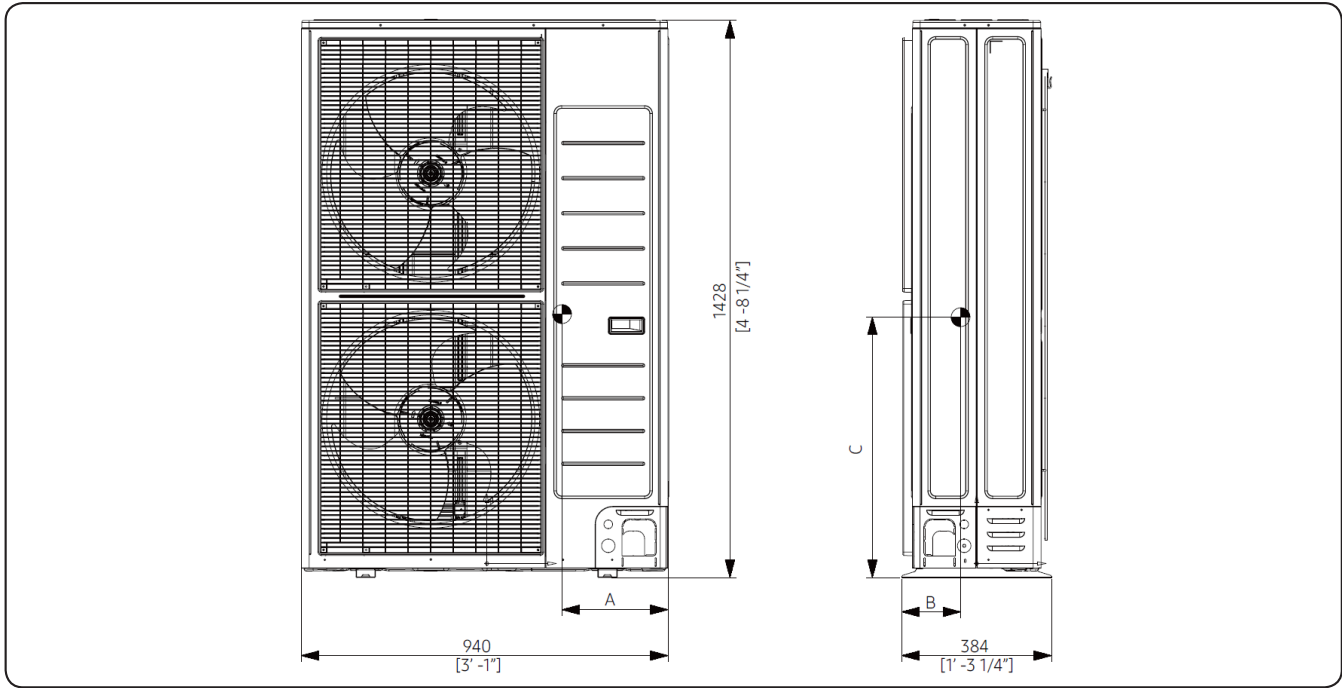


2. Outdoor Units

2-4. Center of Gravity

AE120/160RXYD*G/EU

Units : mm [inches]

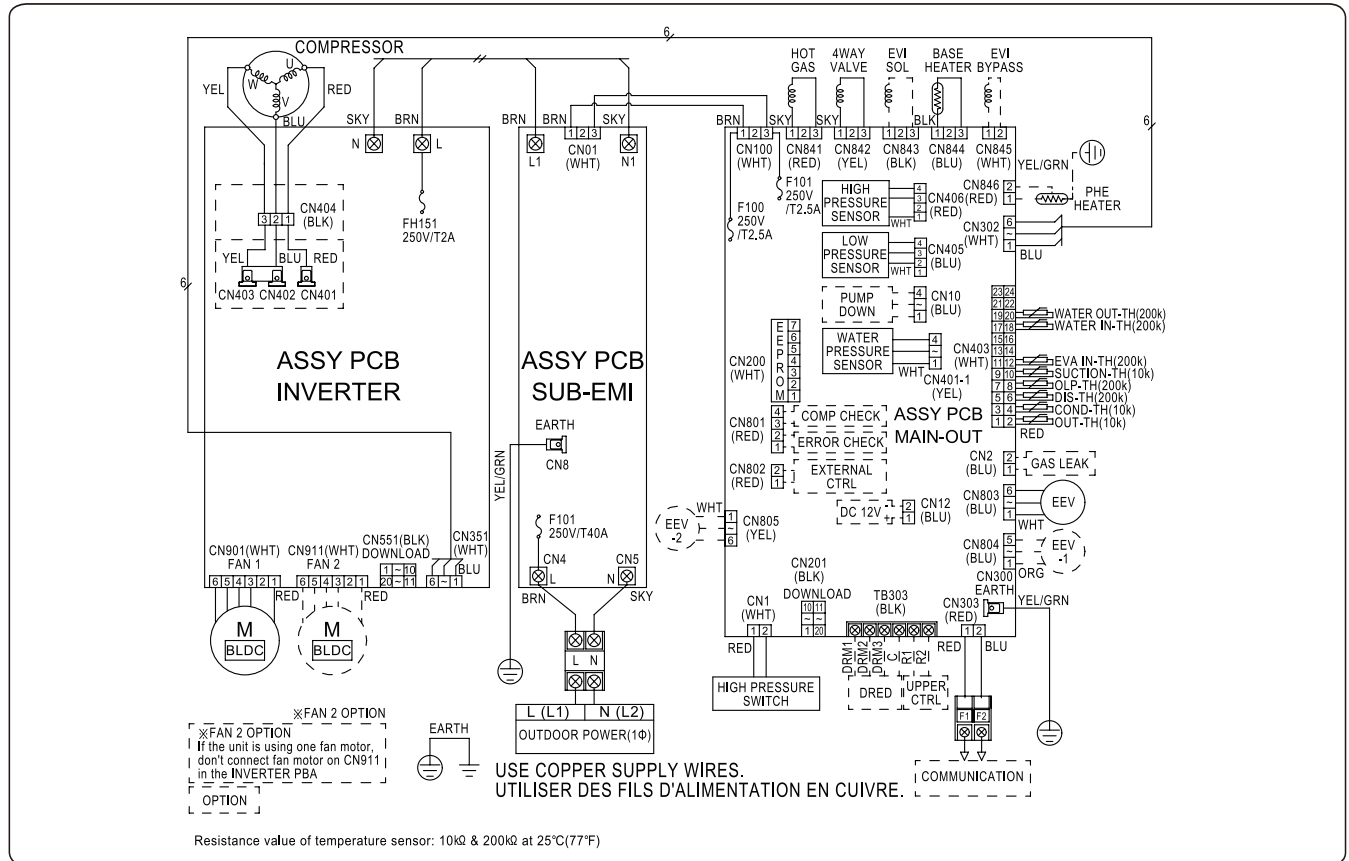


Model	A	B	C
AE120/160RXYD*G/EU	363 [14-5/16]	168 [6-5/8]	653 [25-11/16]

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
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)		

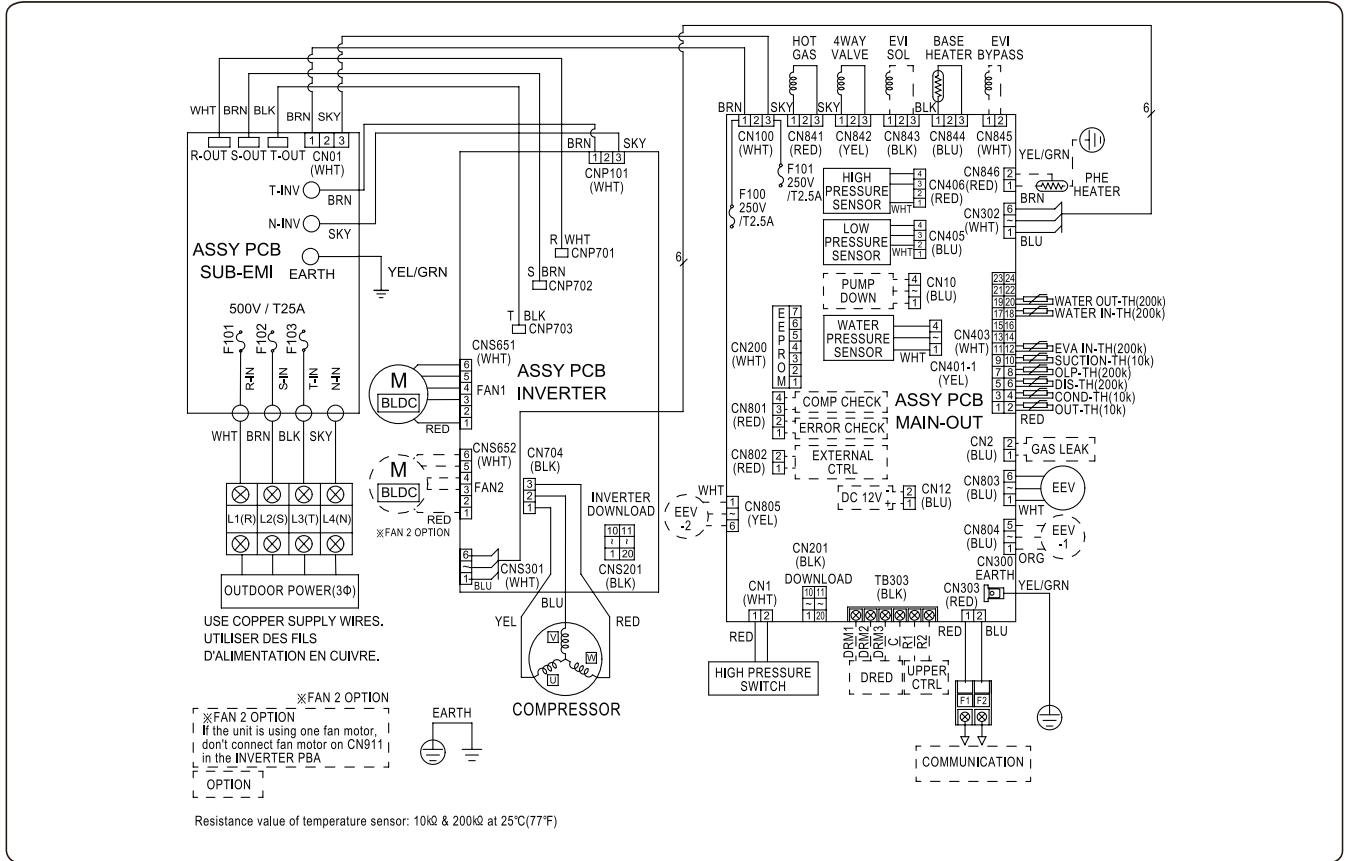
NOTES

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

2. Outdoor Units

2-5. Electrical wiring diagram

AE120/160CX*YD*K/EU



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

NOTES

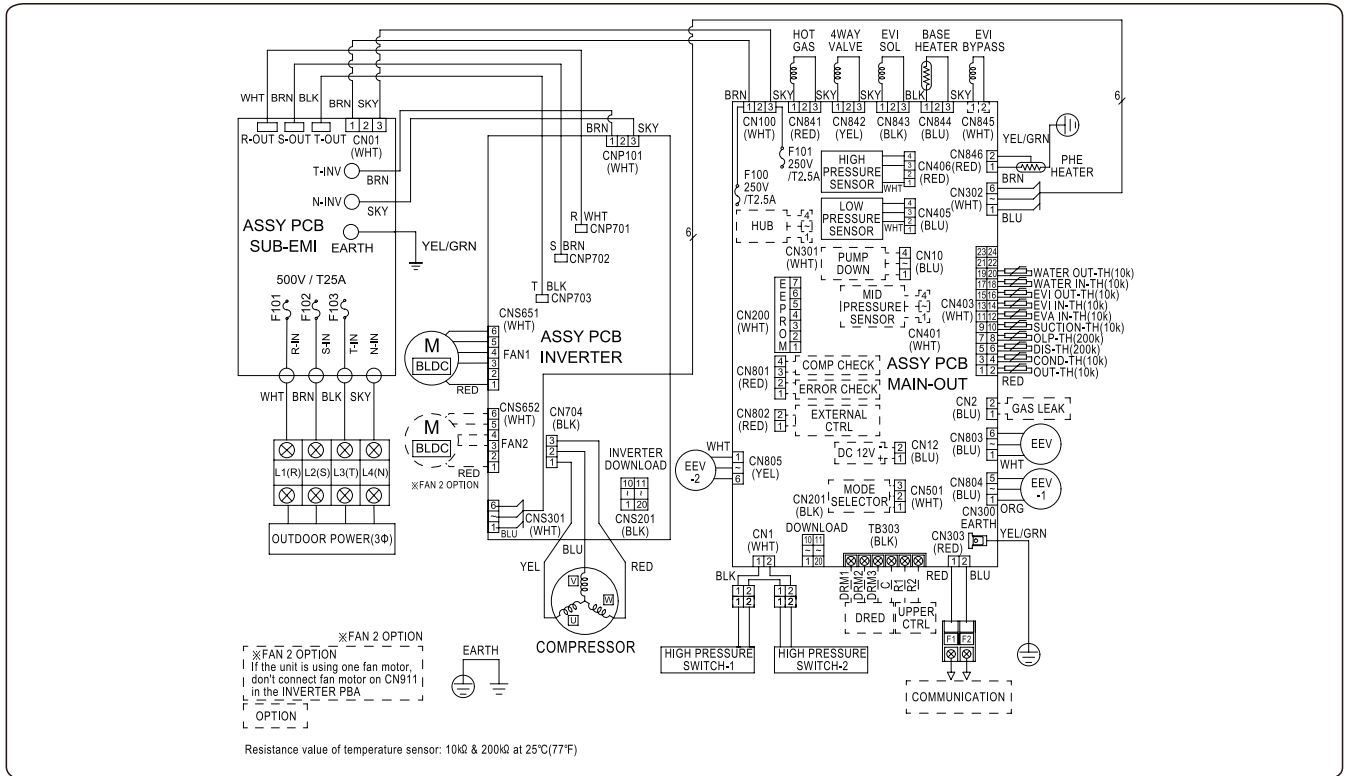
- This wiring diagram applies only to the Outdoor unit.
- Symbols show as follow :
BLK: black, RED: red, BLU: blue, WHT: white, YEL: yellow, BRN: brown, SKY: skyblue, GRN: green
- For connection wiring indoor-outdoor transmission F1-F2.
- ⊕ Protective earth(SCREW)

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

2. Outdoor Units

2-5. Electrical wiring diagram

AE080/120/140BXYDGG/EU



ASSY PCB MAIN-OUT	Printed circuit board(MAIN)	ASSY PCB INVERTER	Printed circuit board(INVERTER)	ASSY PCB SUB-EMI	Printed circuit board(EMI)
250V T40A	FUSE	250V T2.5A	FUSE		
M(BLDC)	Outdoor Fan	EEV	Electronic Expansion Valve - Main	EEV-1	Electronic Expansion Valve - EVI
EEV-2	Electronic Expansion Valve - Shut off	OUT-TH	Thermistor - Ambient	COND-TH	Thermistor - COND. Out
DIS-TH	Thermistor - Discharge pipe	OLP-TH	Thermistor - Compressor Top	SUCTON-TH	Thermistor - Suction pipe
EVA IN-TH	Thermistor - HEAT Exchanger In	EVI IN-TH	Thermistor - EVI In	EVI OUT-TH	Thermistor - EVI Out
WATER IN-TH	Thermistor - Water In	WATER OUT-TH	Thermistor - Water Out	4WAY VALVE	Solenoid valve - 4Way
EVI BYPASS	Solenoid valve - EVI Bypass	HOT GAS	Solenoid valve - Hot Gas Bypass	EVI SOL	Solenoid valve - Liquid Bypass

NOTES

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

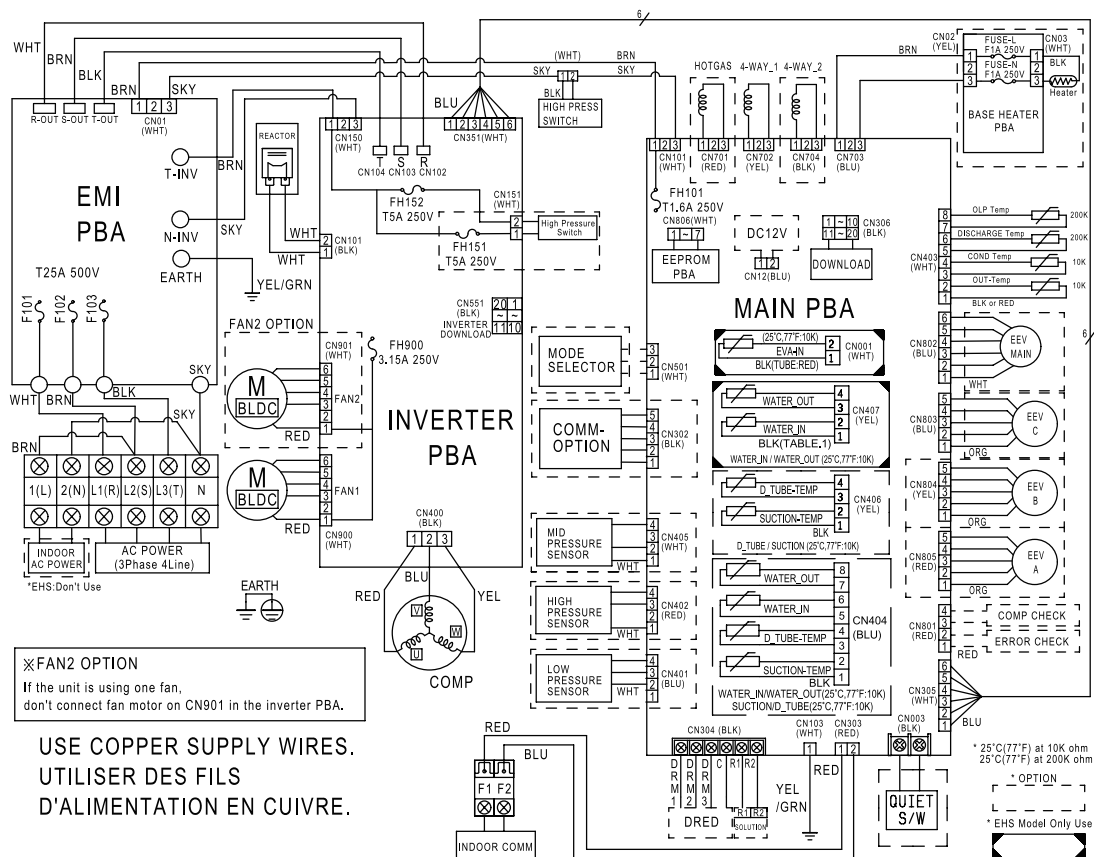
1. This wiring diagram applies only to the Outdoor unit.
2. Symbols show as follow :
 blk: black, red: red, blu: blue, wht: white, yel: yellow, brn: brown, sky: skyblue, grn: green
3. For connection wiring indoor-outdoor transmission F1-F2, indoor-wired remote controller transmission F3-F4.
4.  Protective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

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

2. Outdoor Units

2-5. Electrical wiring diagram

AE080/120/160RXYDGG/EU



M BLDC	BLDC FAN MOTOR	COMP	COMPRESSOR
Comm	Communication	OUT-Temp	Thermistor OUT(10K)
COND-Temp	Thermistor COND(10K)	DISCHARGE-Temp	Thermistor DISCHARGE(200K)
OLP-Temp	Thermistor OLP(200K)	SUCTION-TEMP	Thermistor SUCTION(10K)

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, indoor-wired remote controller transmission F3-F4.
- ⊕ 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
8.0	AE080BXYDEG/EU	42	42	56	56
12.0	AE120BXYDEG/EU	46	46	59	59
14.0	AE140BXYDEG/EU	47	47	60	60
8.0	AE080BXYDGG/EU	42	42	56	56
12.0	AE120BXYDGG/EU	46	46	59	59
14.0	AE140BXYDGG/EU	47	47	60	60
5.0	AE050RXYDEG/EU	45	45	61	62
8.0	AE080RXYDEG/EU	48	48	63	64
12.0	AE120RXYDEG/EU	50	50	64	65
16.0	AE160RXYDEG/EU	52	54	66	68
8.0	AE080RXYDGG/EU	48	48	63	64
12.0	AE120RXYDGG/EU	50	50	64	65
16.0	AE160RXYDGG/EU	52	54	66	68

NOTE

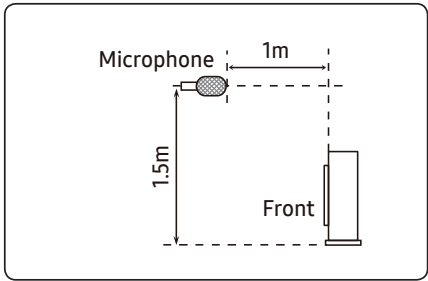
- Specifications may be subject to change without prior notice.
- Sound Pressure Level
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.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

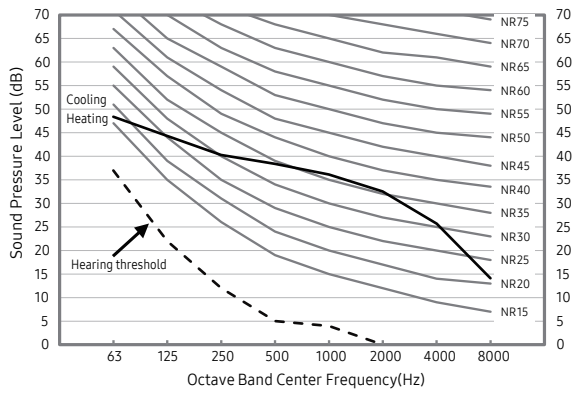
Unit: dB(A)



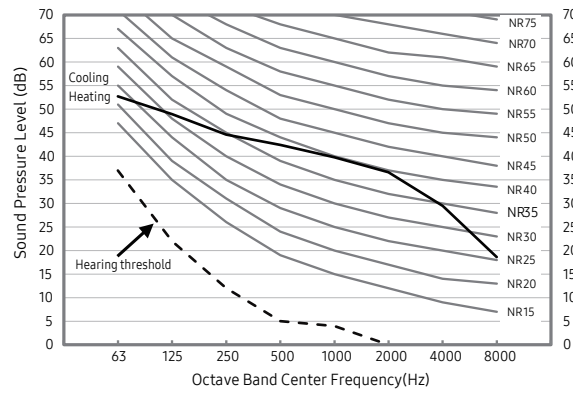
Model	Heating	Cooling
AE050CXYDEK/EU	41	41
AE080CXYDEK/EU	45	45
AE120CXYDEK/EU	47	47
AE160CXYDEK/EU	51	51

- NR Curve

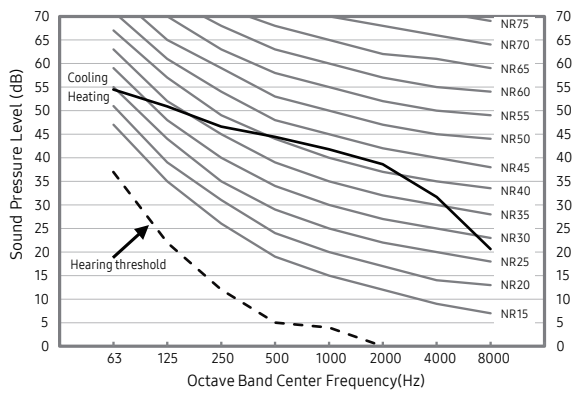
1) AE050CXYDEK/EU



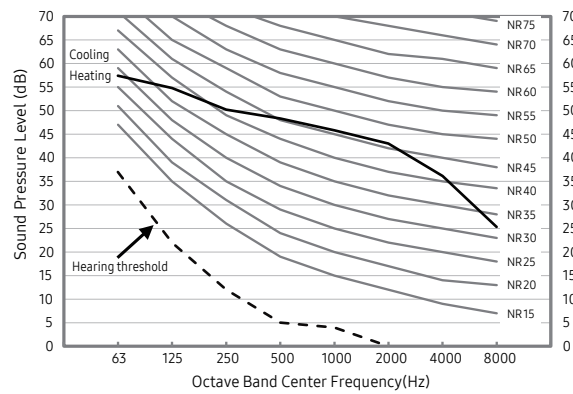
2) AE080CXYDEK/EU



3) AE120CXYDEK/EU



4) AE160CXYDEK/EU

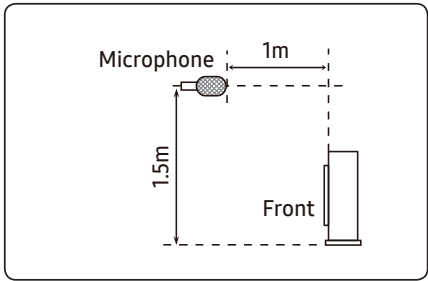


2. Outdoor Units

2-6. Sound data

Sound Pressure level

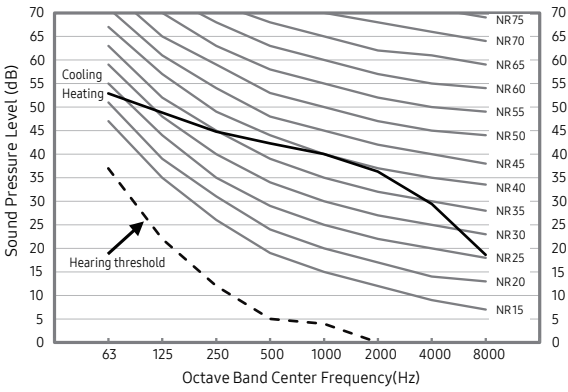
Unit: dB(A)



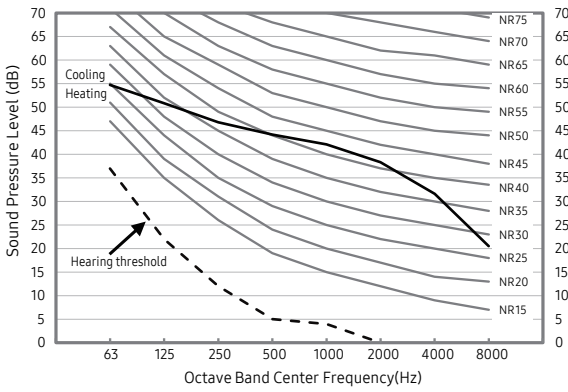
Model	Heating	Cooling
AE080CXYDGK/EU	45	45
AE120CXYDGK/EU	47	47
AE160CXYDGK/EU	51	51

- NR Curve

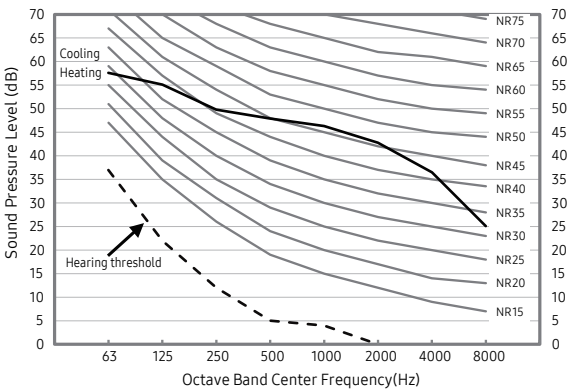
5) AE080CXYDGK/EU



6) AE120CXYDGK/EU



7) AE160CXYDGK/EU

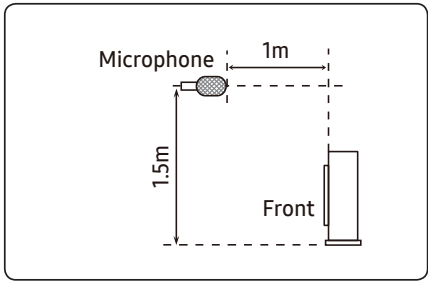


2. Outdoor Units

2-6. Sound data

Sound Pressure level

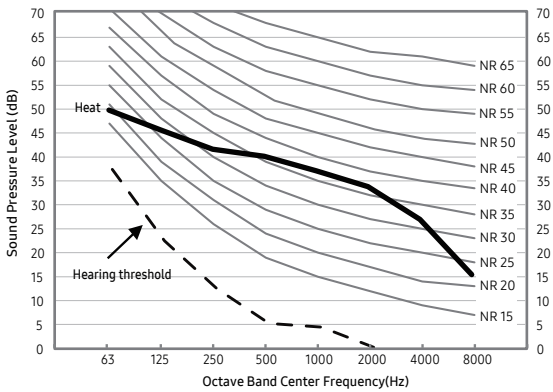
Unit: dB(A)



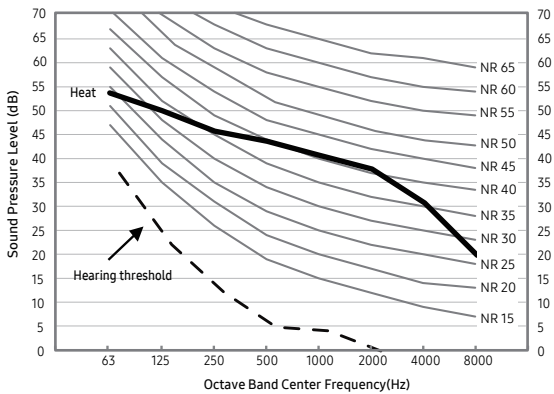
Model	Cooling	Heating
AE080BXYDEG/EU	42	42
AE120BXYDEG/EU	46	46
AE140BXYDEG/EU	47	47

- NR Curve

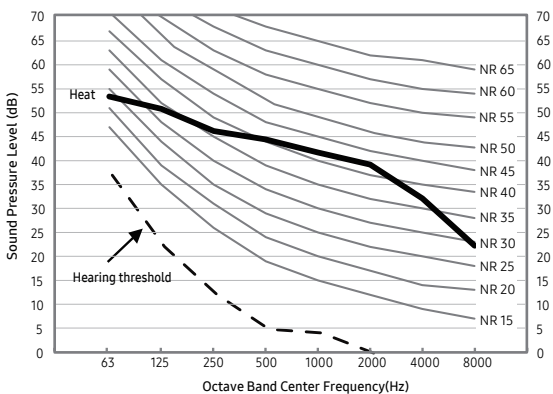
1) AE080BXYDEG/EU



2) AE120BXYDEG/EU



3) AE140BXYDEG/EU

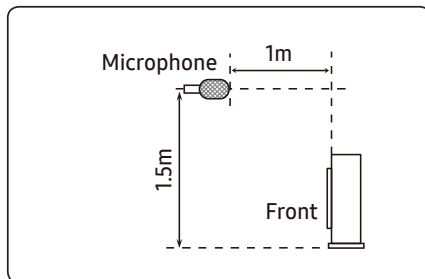


2. Outdoor Units

2-6. Sound data

Sound Pressure level

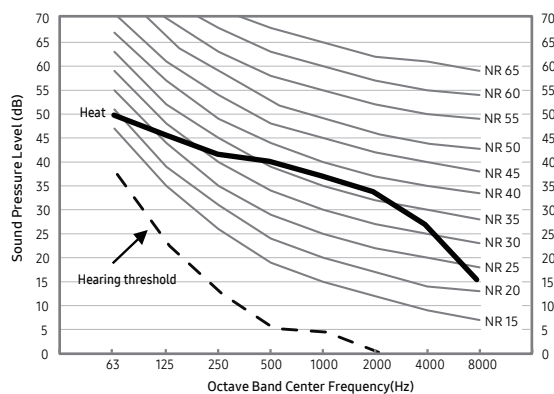
Unit: dB(A)



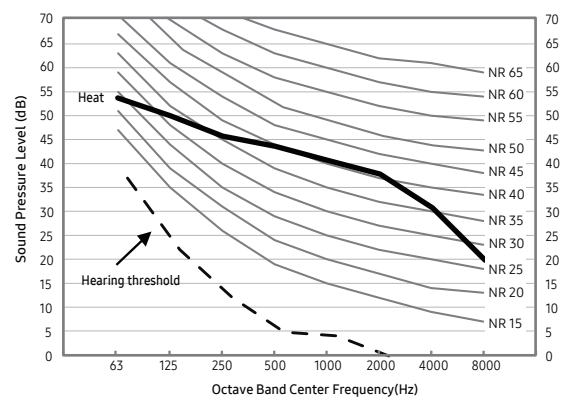
Model	Cooling	Heating
AE080BXYDGG/EU	42	42
AE120BXYDGG/EU	46	46
AE140BXYDGG/EU	47	47

- NR Curve

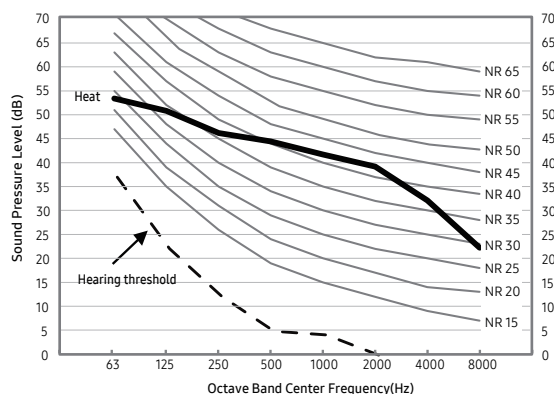
4) AE080BXYDGG/EU



5) AE120BXYDGG/EU



6) AE140BXYDGG/EU

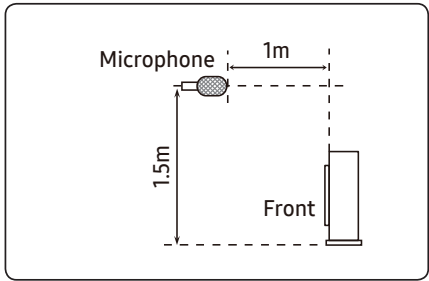


2. Outdoor Units

2-6. Sound data

Sound Pressure level

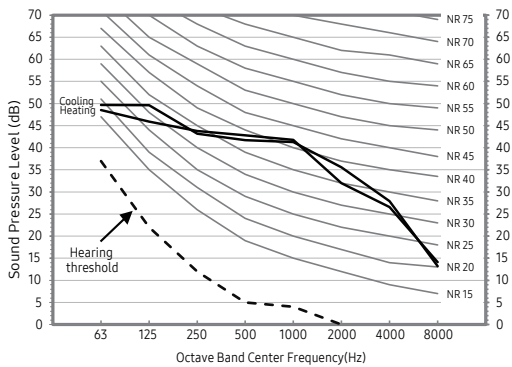
Unit: dB(A)



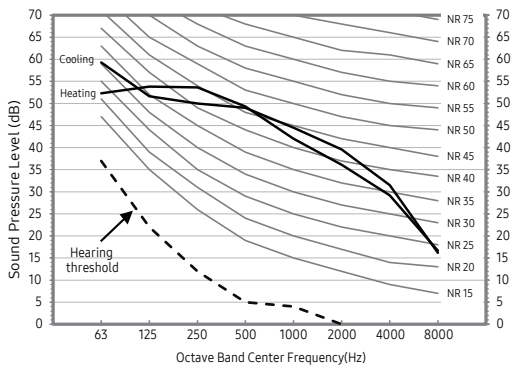
Model	Cooling	Heating
AE050RXYDEG/EU	45	45
AE080RXYDEG/EU	48	48
AE120RXYDEG/EU	50	50
AE160RXYDEG/EU	54	52

- NR Curve

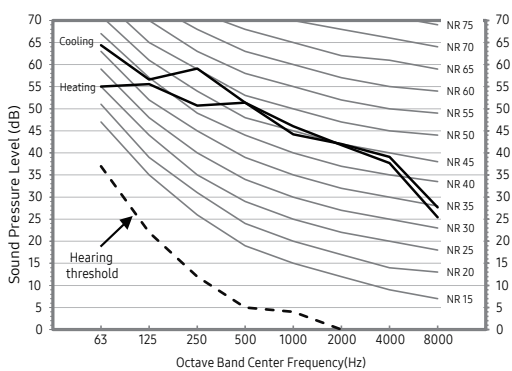
1) AE050RXYDEG/EU



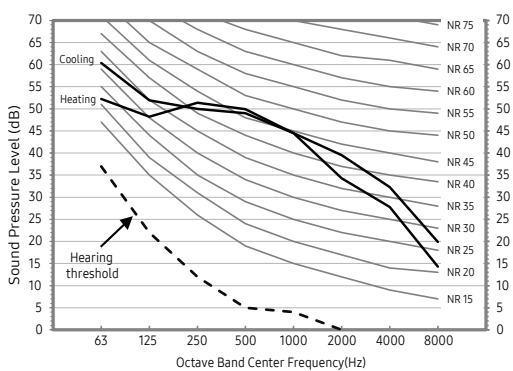
2) AE080RXYDEG/EU



3) AE120RXYDEG/EU



4) AE160RXYDEG/EU

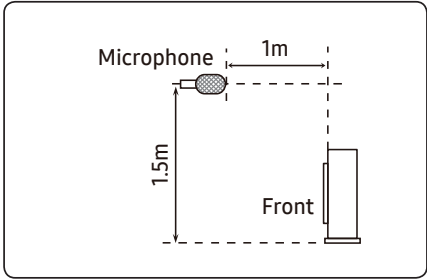


2. Outdoor Units

2-6. Sound data

Sound Pressure level

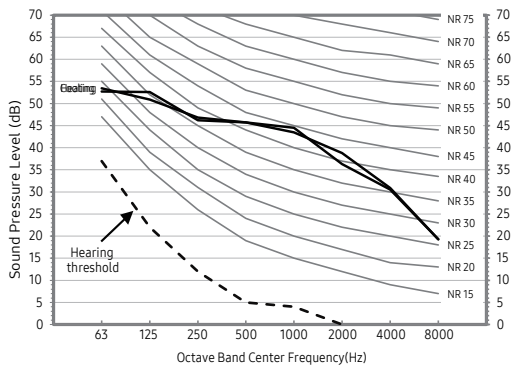
Unit: dB(A)



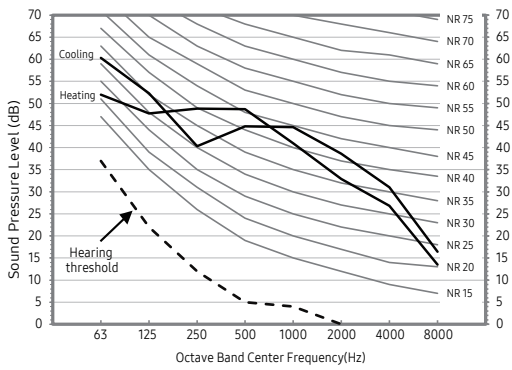
Model	Cooling	Heating
AE080RXYDGG/EU	48	48
AE120RXYDGG/EU	50	50
AE160RXYDGG/EU	54	52

- NR Curve

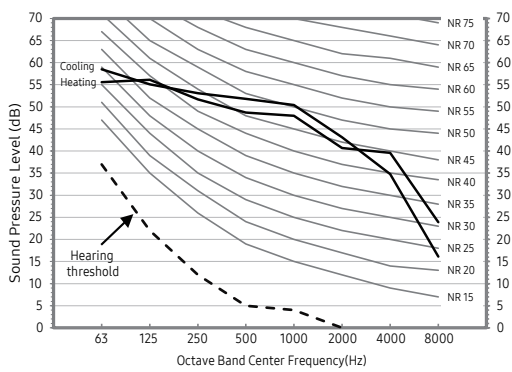
5) AE080RXYDGG/EU



6) AE120RXYDGG/EU



7) AE160RXYDGG/EU



2. Outdoor Units

2-6. Sound data

Sound Power level

Unit: dB(A)

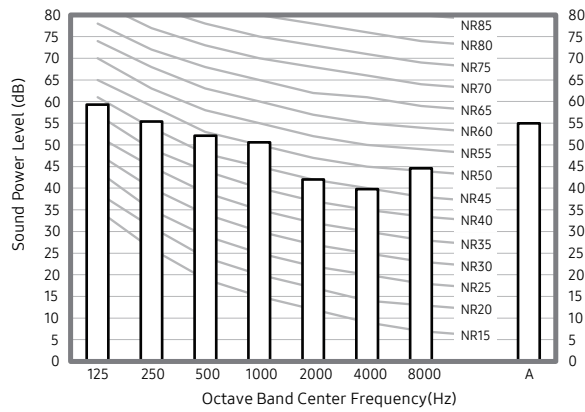
NOTE

- 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.

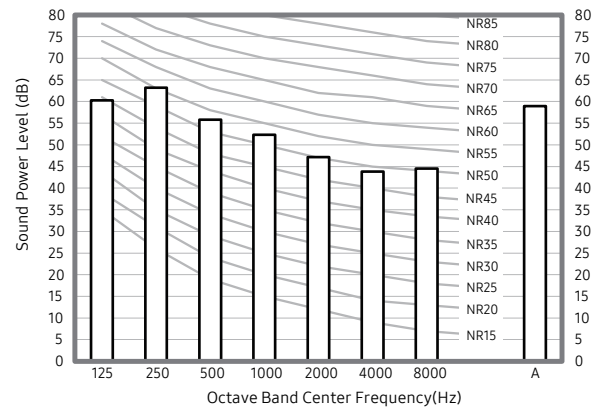
Model	Heating	Cooling
AE050CXYDEK/EU	55	55
AE080CXYDEK/EU	59	59
AE120CXYDEK/EU	60	60
AE160CXYDEK/EU	65	65

- NR Curve

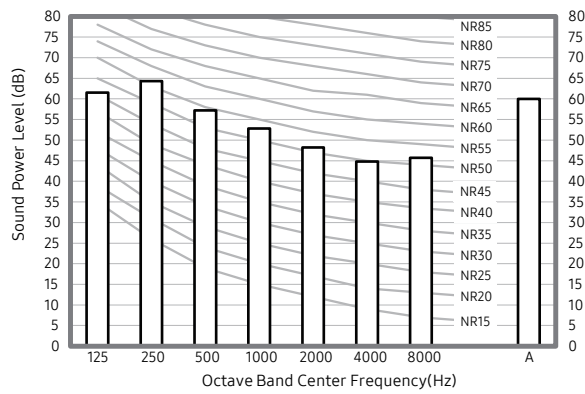
1) AE050CXYDEK/EU



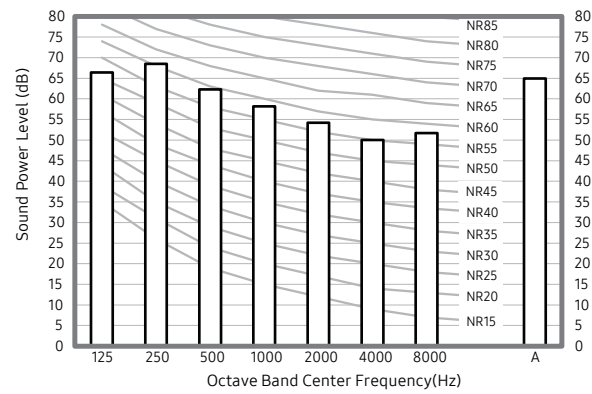
2) AE080CXYDEK/EU



3) AE120CXYDEK/EU



4) AE160CXYDEK/EU



2. Outdoor Units

2-6. Sound data

Sound Power level

Unit: dB(A)

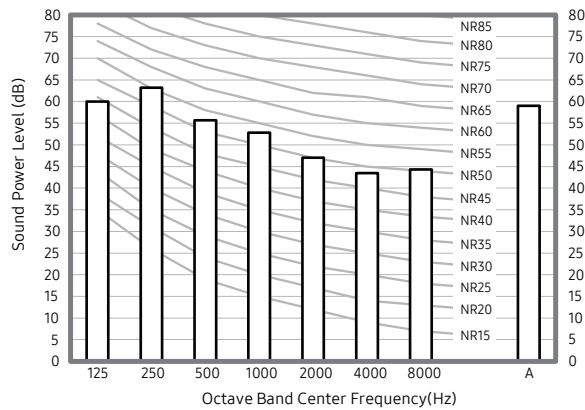
NOTE

- 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.

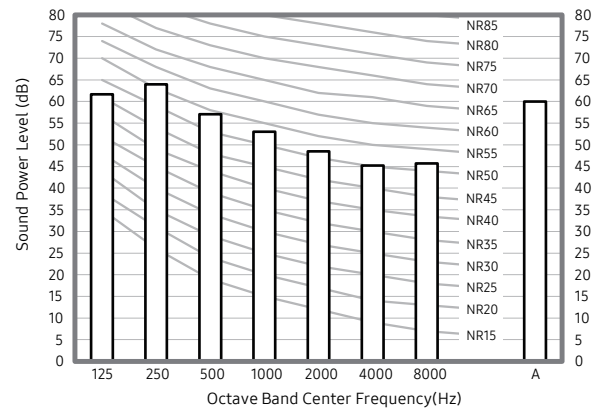
Model	Heating	Cooling
AE080CXDYGK/EU	59	59
AE120CXDYGK/EU	60	60
AE160CXDYGK/EU	65	65

- NR Curve

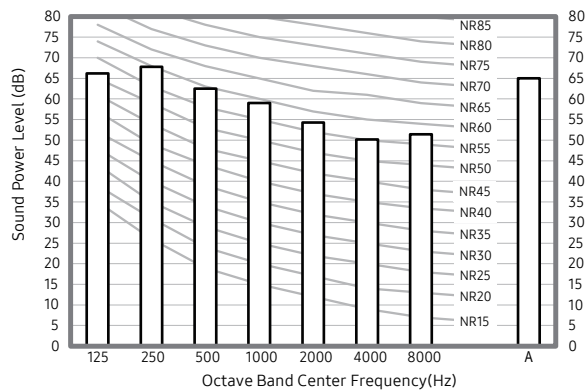
5) AE080CXDYGK/EU



6) AE120CXDYGK/EU



7) AE160CXDYGK/EU



2. Outdoor Units

2-6. Sound data

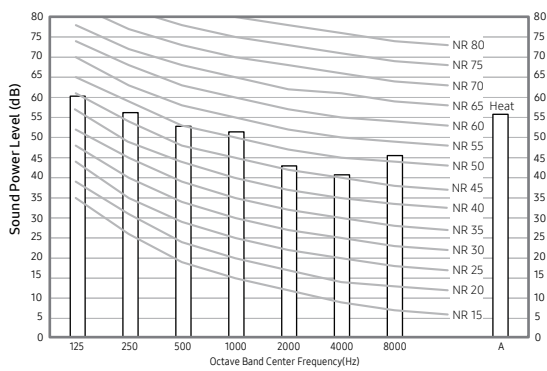
Sound Power level

 NOTE

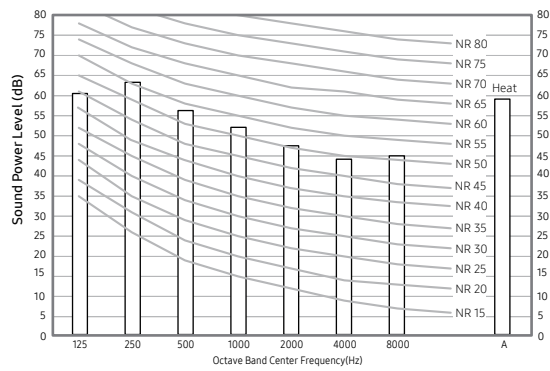
- Specifications may be subject to change without prior notice
 - Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

Model	Power (dBA)
AE080BXYDEG/EU	56
AE120BXYDEG/EU	59
AE140BXYDEG/EU	60

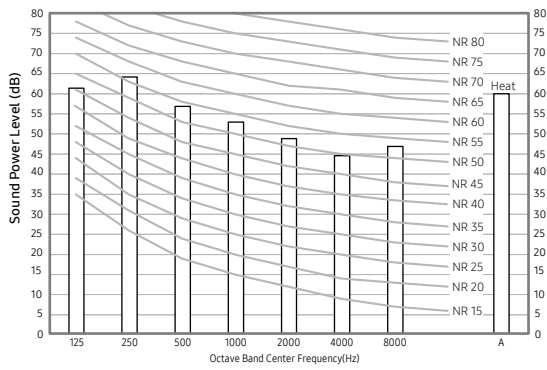
1) AE080BXYDEG/EU



2) AE120BXYDEG/EU



3) AE140BXYDEG/EU



2. Outdoor Units

2-6. Sound data

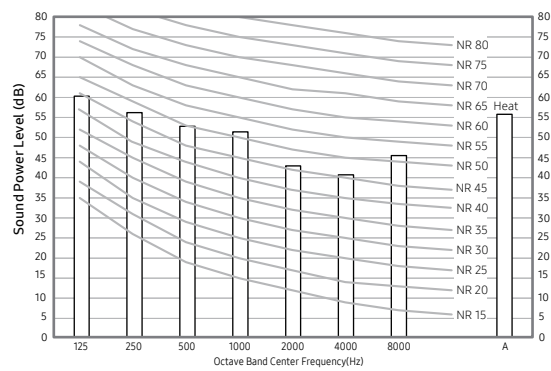
Sound Power level

 NOTE

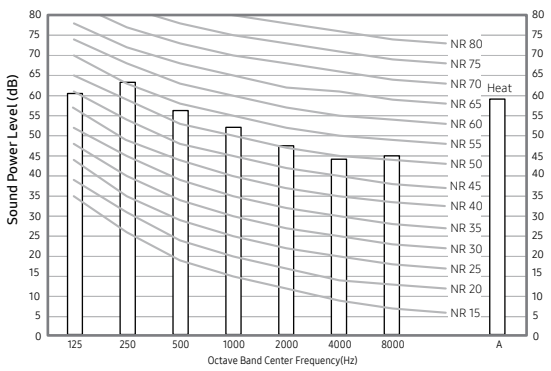
- Specifications may be subject to change without prior notice
 - Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

Model	Power (dBA)
AE080BXYDGG/EU	56
AE120BXYDGG/EU	59
AE140BXYDGG/EU	60

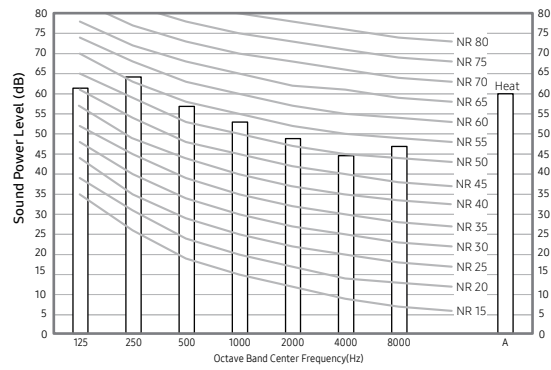
4) AE080BXYDGG/EU



5) AE120BXYDGG/EU



6) AE140BXYDGG/EU



2. Outdoor Units

2-6. Sound data

Sound Power level

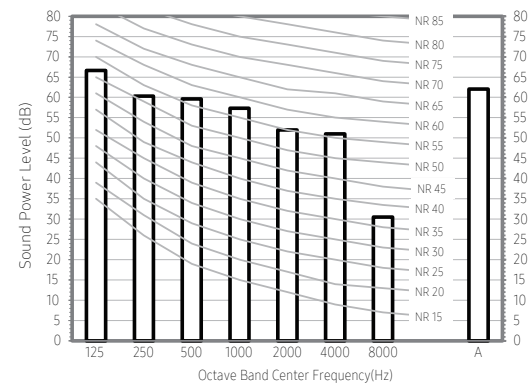
 NOTE

- 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.

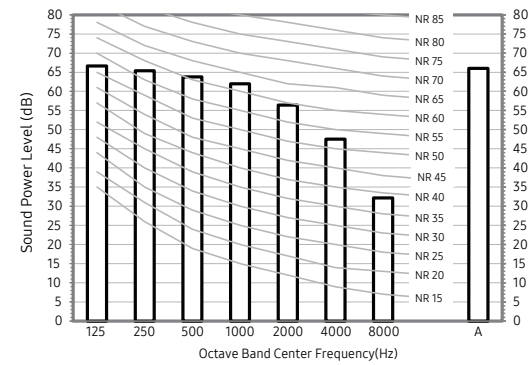
Model	Power (dBA)
AE050RXYDEG/EU	61
AE080RXYDEG/EU	63
AE120RXYDEG/EU	64
AE160RXYDEG/EU	66

• NR Curve

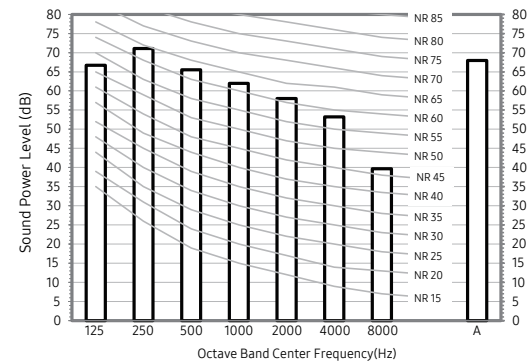
1) AE050RXYDEG/EU



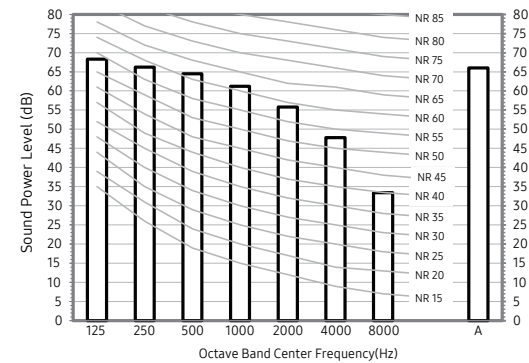
2) AE080RXYDEG/EU



3) AE120RXYDEG/EU



4) AE160RXYDEG/EU



2. Outdoor Units

2-6. Sound data

Sound Power level

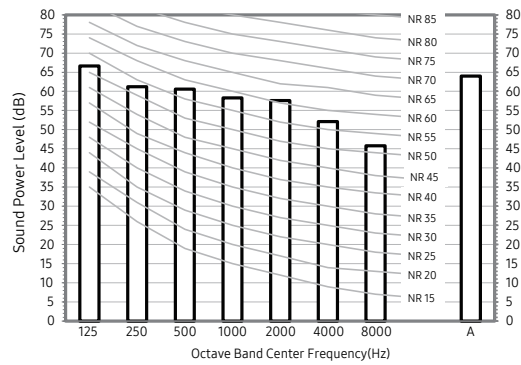
 NOTE

- 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.

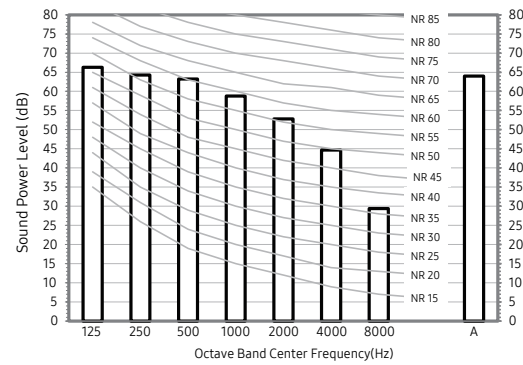
Model	Power (dBA)
AE080RXYDGG/EU	63
AE120RXYDGG/EU	64
AE160RXYDGG/EU	66

- NR Curve

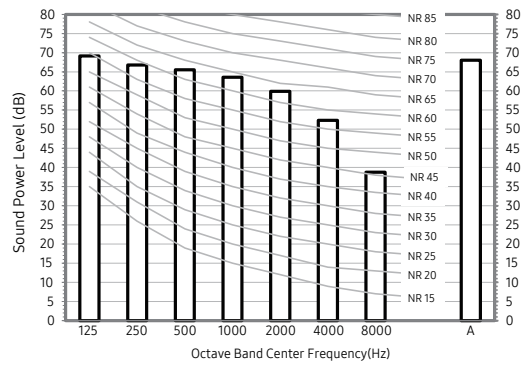
5) AE080RXYDGG/EU



6) AE120RXYDGG/EU



7) AE160RXYDGG/EU

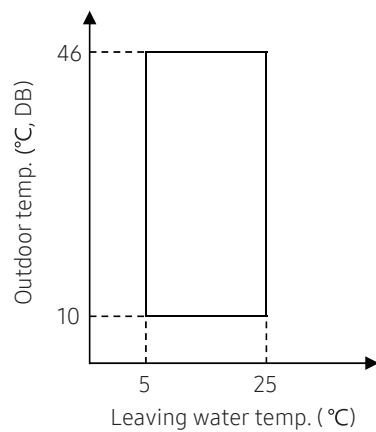


2. Outdoor Units

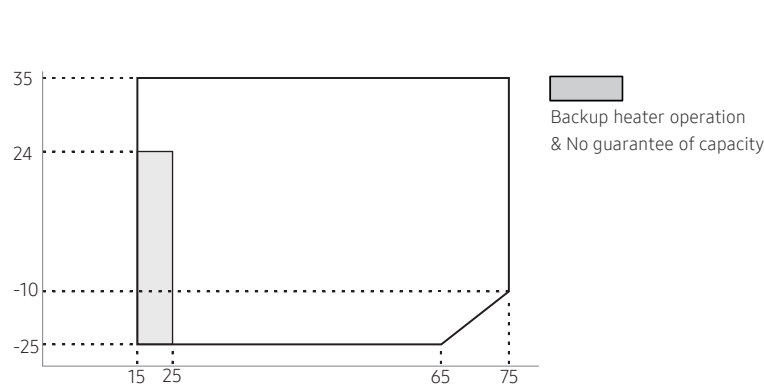
2-7. Operation range

EHS Mono R290

1) Cooling



2) Heating



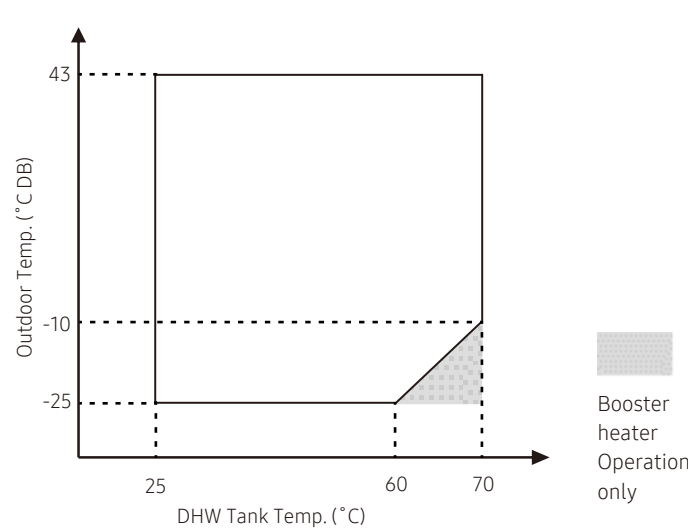
MONO Outdoor Unit		Water Temp. (°C)			Water Flow Rates (LPM)			Air Temp. (°C, DB/WB)					
		Min	Std	Max	Min	Std	Max	Min	Std	Max			
Controller	Cooling	5	-	25									
	Heating	15	-	75									
Cooling	Inlet	-	23 (12 ^{*2})	30	7	Δ 5°C	58 (48 ^{*1})	10/-	35/24	46/28			
	Outlet	5	18 (7 ^{*2})	25								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

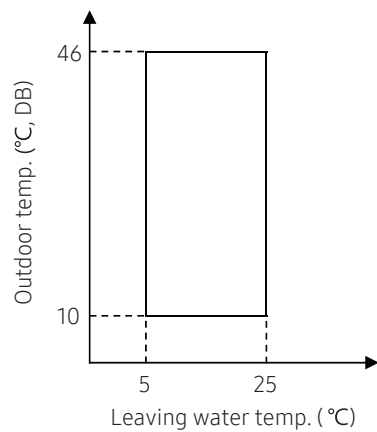


2. Outdoor Units

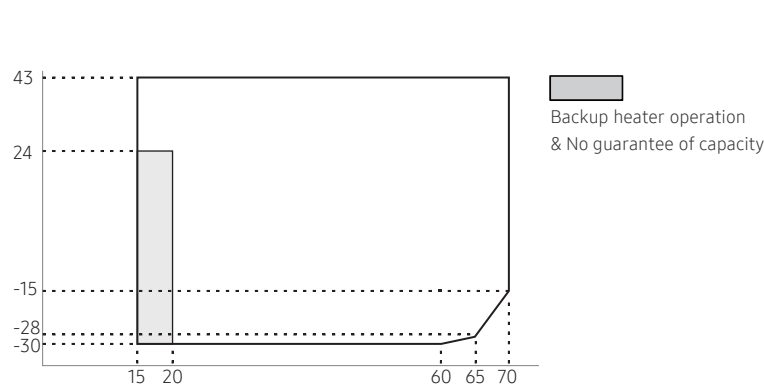
2-7. Operation range

EHS Mono HT Quiet

1) Cooling



2) Heating



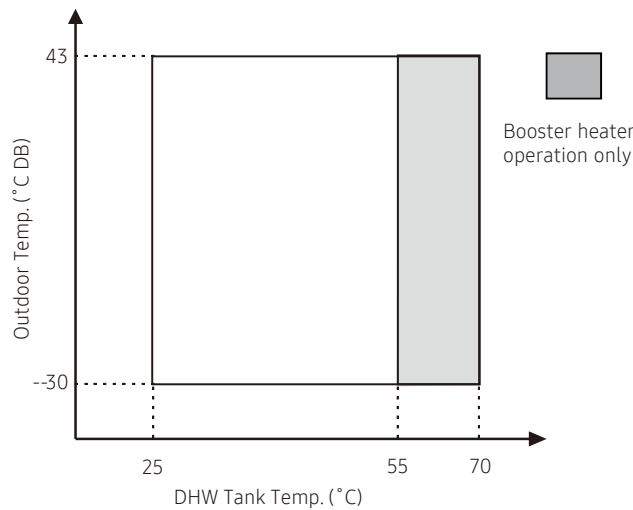
MONO Outdoor Unit		Water Temp. (°C)			Water Flow Rates (LPM)			Air Temp. (°C, DB/WB)		
		Min	Std	Max	Min	Std	Max	Min	Std	Max
Controller	Cooling	5	-	25						
	Heating	15	-	70						
Cooling	Inlet	-	23 (12 ^{*2})	30	7	Δ 5°C	58 (48 ^{*1})	10/-	35/24	46/28
	Outlet	5	18 (7 ^{*2})	25						
Heating	Inlet	5	30 (40 ^{*2})	-				-30/-	7/6	43/34.5
	Outlet	25 (15 ^{*3})	35 (45 ^{*2})	70						

*1) Model : AE080BXYDEG/EU
AE080BXYDGG/EU

*2) Eurovent Test Condition #2

*3) Back up heater operation.

3) DHW (Domestic Hot Water Tank)

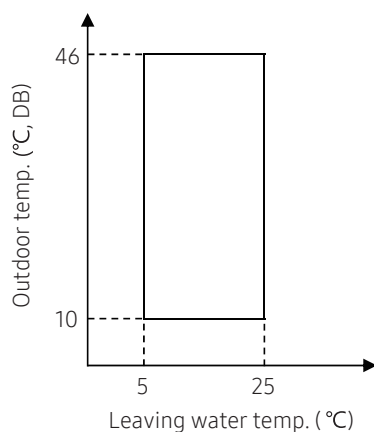


2. Outdoor Units

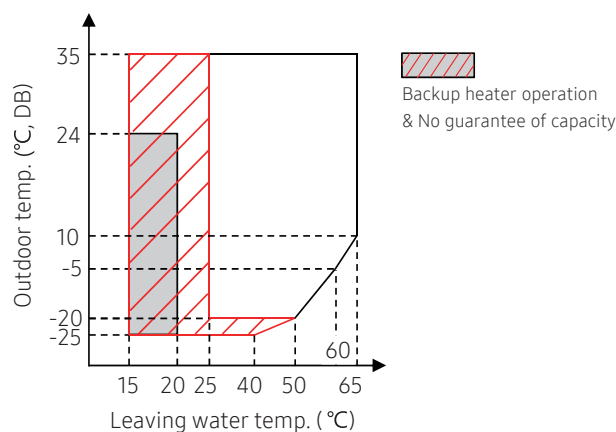
2-7. Operation range

EHS Mono R32

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	-	65						
Cooling	Inlet	-	23 (12 ^{*2})	30	12 (7 ^{*1})	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})	65						

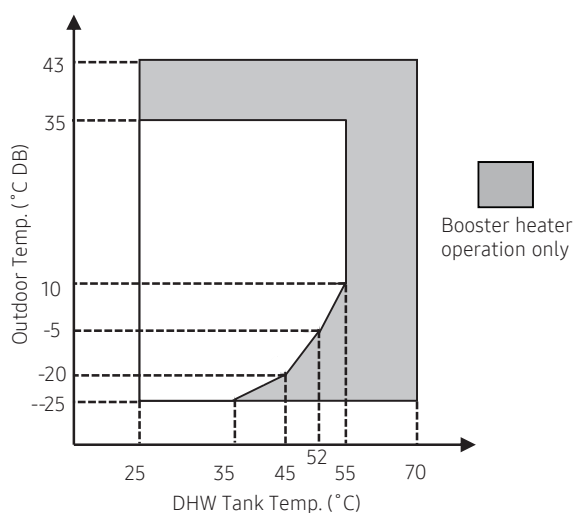
*1) Model : AE050RXYDEG
AE080RXYDEG
AE080RXYDGG

*2) Eurovent Test Condition #2

*3) Back up heater operation.

※ Operation of outdoor unit possible, but no guarantee of capacity in this condition.
(25°C ≤ Outdoor temp < -20°C))

3) DHW (Domestic Hot Water Tank)

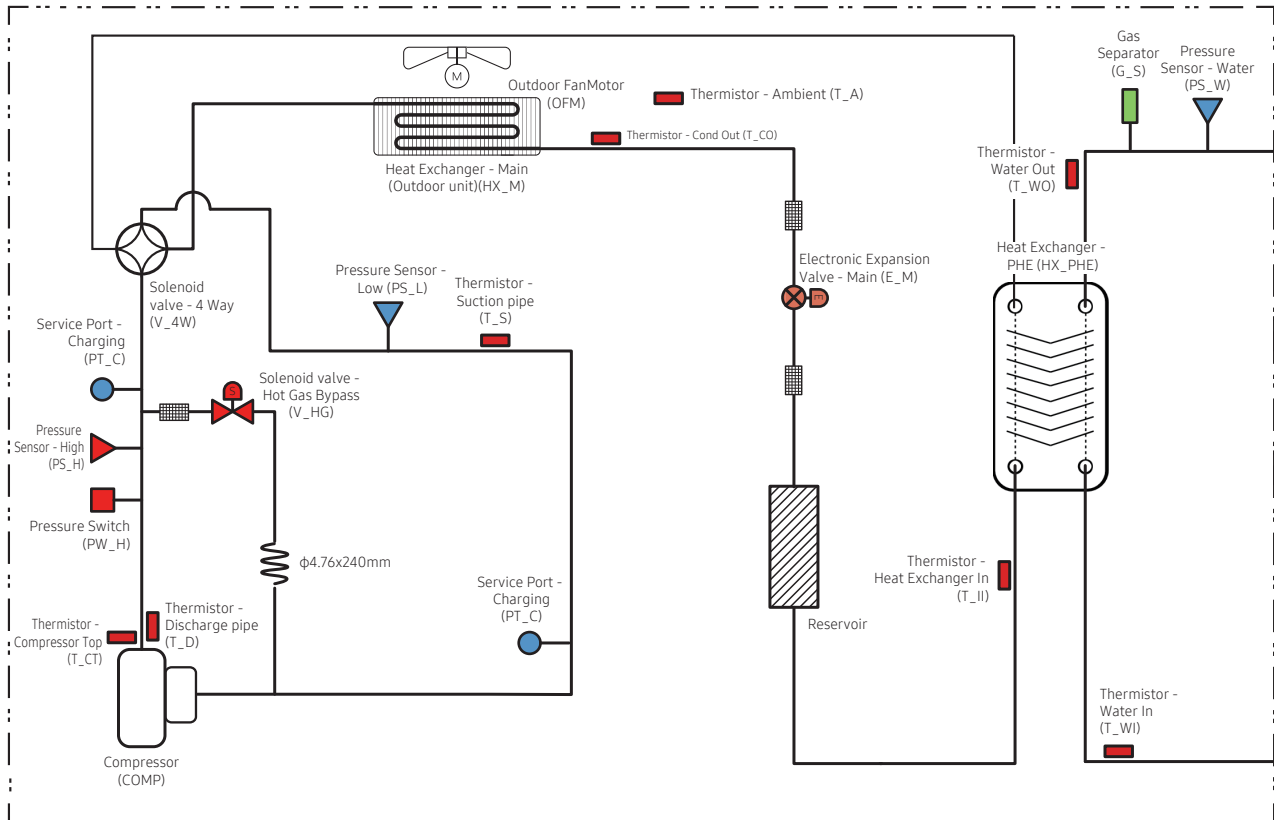


※ Special condition(35°C < Outdoor temp. ≤ 43°C) is operated by only Booster Heater.
SAMSUNG doesn't supply DHW for EHS Split.
Since it is a reference data, you have to check DHW operation range for yours.

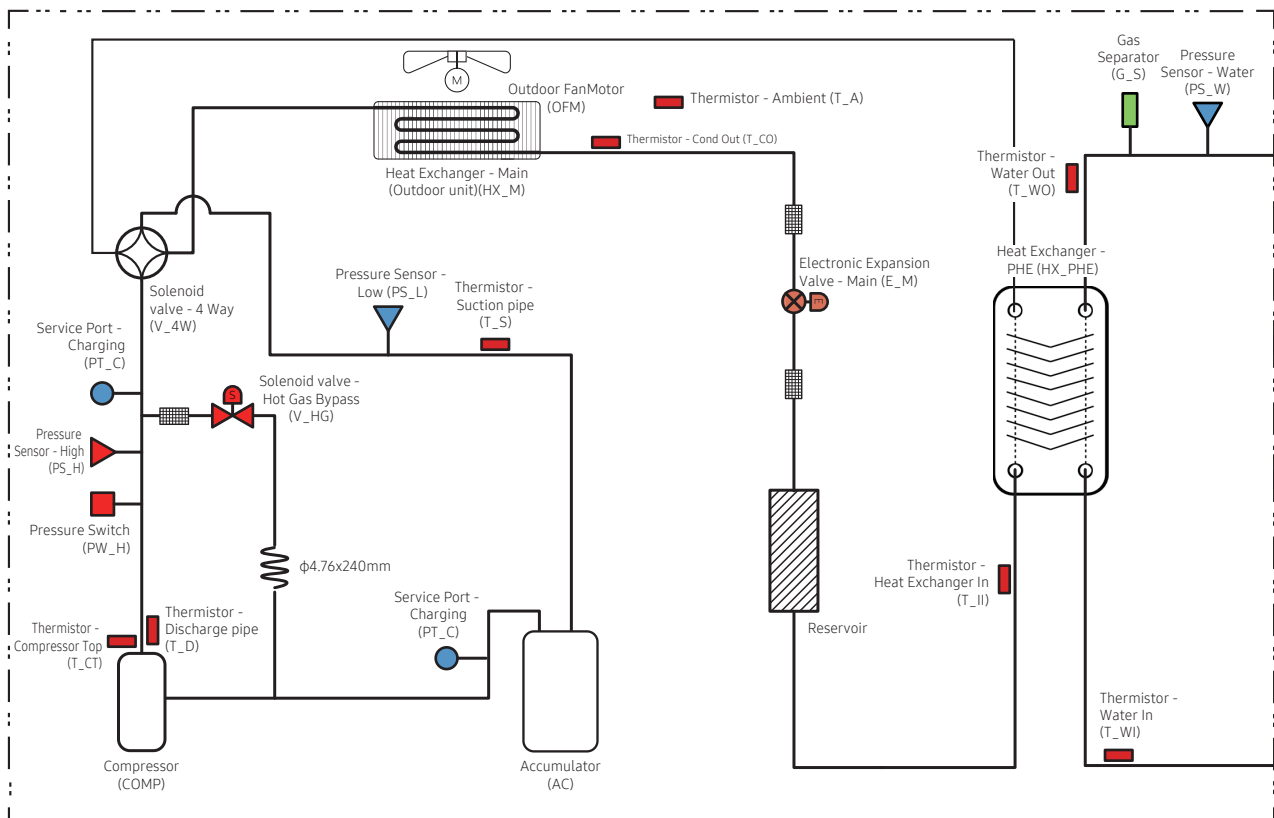
2. Outdoor Units

2-8 Piping diagram

AE050CXYDEK/EU, 080CXYD*K/EU



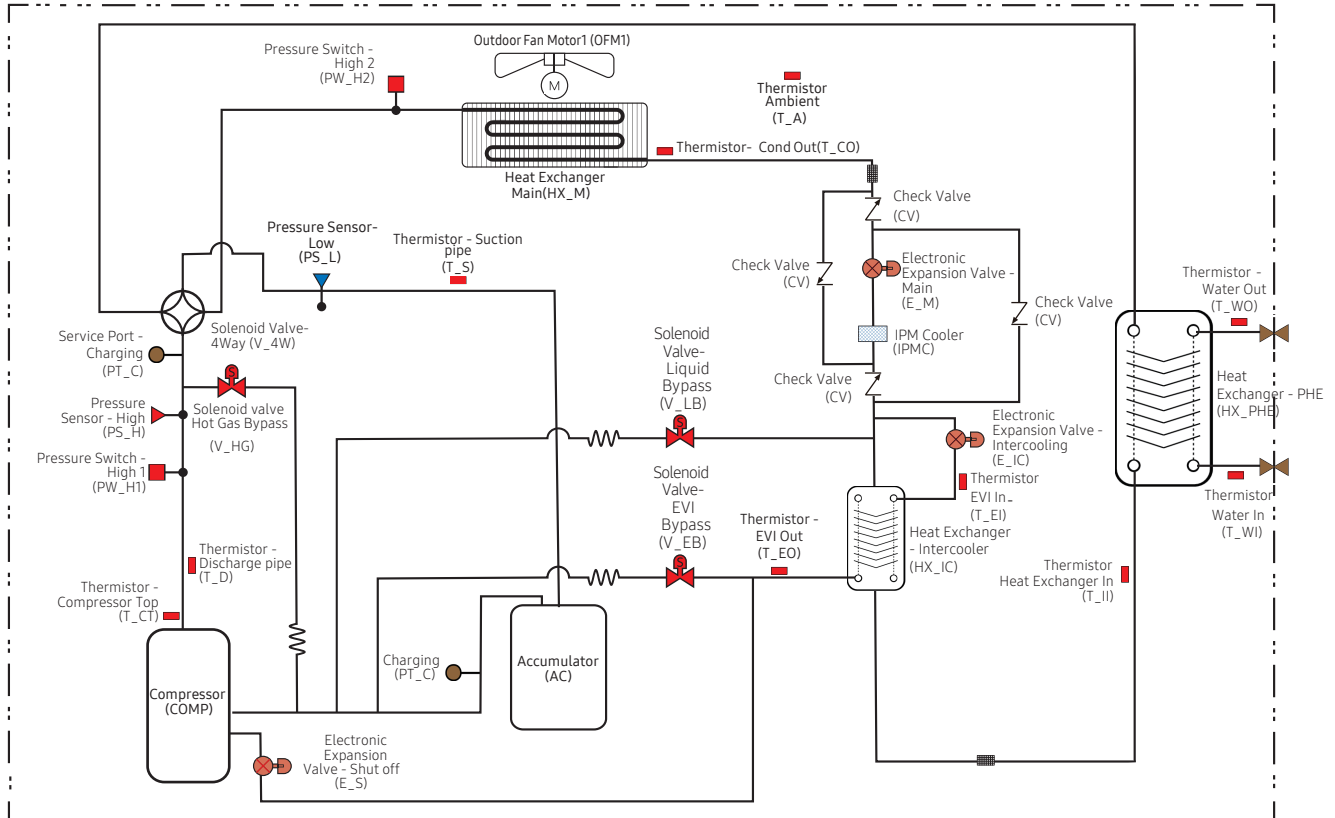
AE120/160CXYD*K/EU



2. Outdoor Units

2-8. Piping diagram

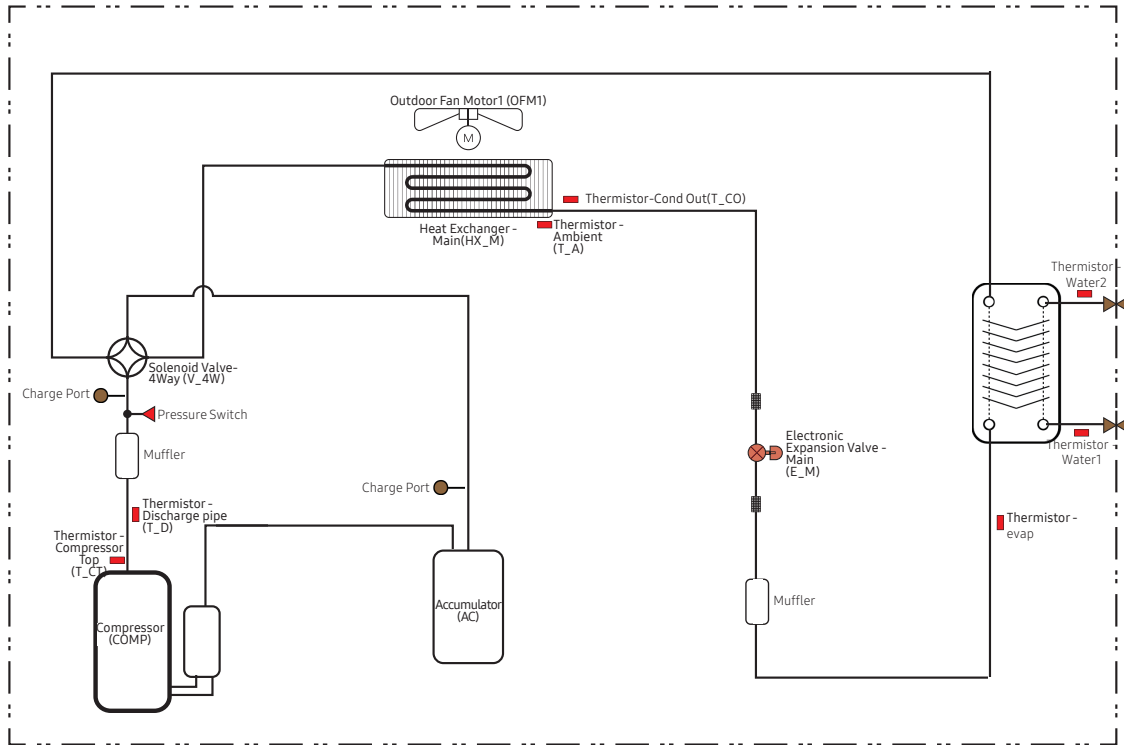
AE080/120/140BXD*G/EU



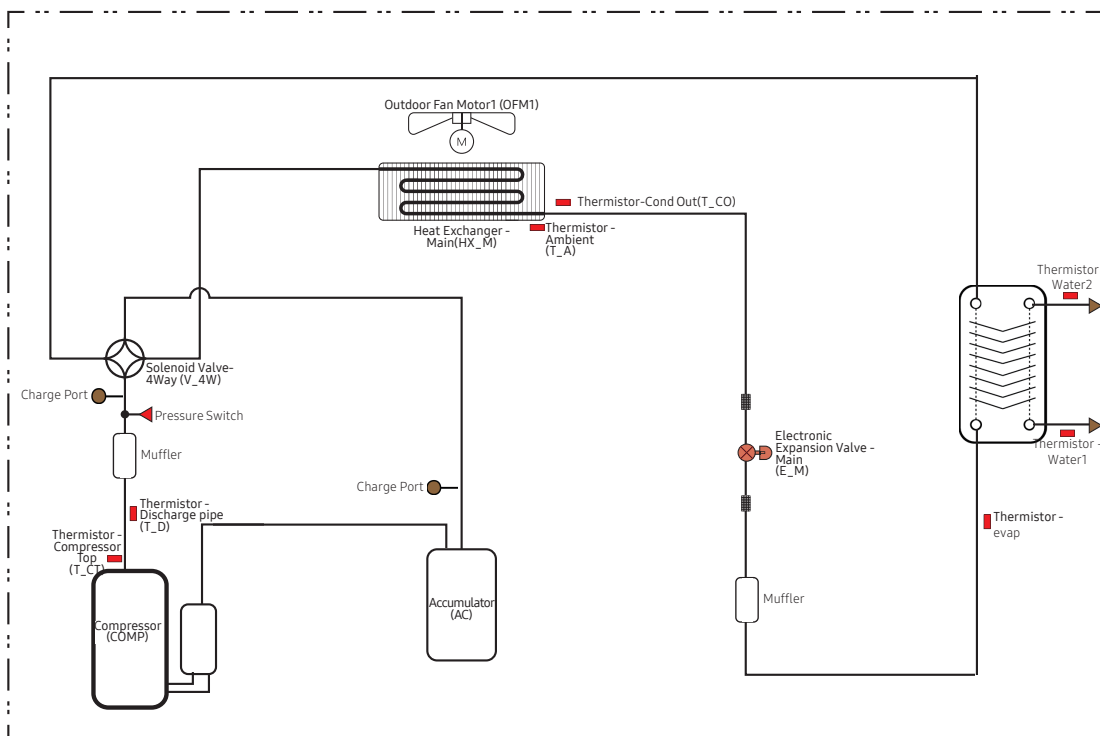
2. Outdoor Units

2-8. Piping diagram

AE050/080RXD*G/EU



AE120/160RXD*G/EU



2. Outdoor Units

2-9. Capacity table

EHS Mono R290

1) Maximum Heating Capacity (Peak Value)

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

Model	Temp. °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									
	-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	7,620	1,880	14.0	7,520	2,120	11.7	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	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	4,600	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	8,45																													

2. Outdoor Units

2-9. Capacity table

EHS Mono R290

1) Maximum Heating Capacity (Peak Value)

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

Model	Tamb	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
AE160CKYDGK/EU	-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						
	-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

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

EHS Mono R290

2) Maximum Heating Capacity (Integrated Value)

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

Model	Temp (°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	22.2	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	11,100	3,200	16.2			
AE080CXDGK/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	22.2	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	4,580	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																														

2. Outdoor Units

2-9. Capacity table

EHS Mono R290

2) Maximum Heating Capacity (Integrated 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)
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	11,400	7,000	32.9	11,300	7,480	32.7	11,200	7,800	32.5	11,000	8,270	19.9	10,800	8,570	19.6	10,600	8,880	15.4						
	-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

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

EHS Mono R290

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
	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
AE080CXYDEK/EU	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
	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
AE080CXYDGK/EU	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
	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
AE120CXYDEK/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
	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
AE120CXYDGK/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
	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
AE160CXYDEK/EU	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
	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
AE160CXYDGK/EU	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
	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 $LWT \leq 50^{\circ}\text{C}$, $\Delta T = 5^{\circ}\text{C}$ or $50^{\circ}\text{C} < LWT \leq 60^{\circ}\text{C}$, $\Delta T = 8^{\circ}\text{C}$ or $LWT > 60^{\circ}\text{C}$, $\Delta T = 10^{\circ}\text{C}$, 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)

: $\Delta T = 5^{\circ}\text{C}$, 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

EHS Mono HT Quiet

1) Maximum Heating Capacity (Peak Value)

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

	LWT (°C)	25			30			35			40			45			50			55			60			65			70		
		Tamb (°C)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)		
		-30	5.82	2.53	16.7	5.89	2.80	17.0	5.96	3.14	17.2	6.22	3.48	18.0	6.48	3.88	18.7	6.74	4.19	19.5	6.92	4.43	12.5	6.94	4.69	12.6					
AE080BXYDEG/EU	-25	8.00	3.47	23.0	8.00	3.63	23.0	8.00	3.79	23.1	8.00	4.03	23.1	8.00	4.28	23.1	8.00	4.49	23.2	8.00	4.85	14.5	8.40	5.17	15.3	7.95	5.28	11.6			
	-20	8.00	3.05	23.0	8.00	3.20	23.0	8.00	3.39	23.1	8.00	3.59	23.1	8.00	3.84	23.1	8.00	4.09	23.2	8.00	4.31	14.5	9.11	5.13	16.6	8.75	5.26	12.7			
	-15	8.00	2.61	23.0	8.00	2.86	23.0	8.00	3.14	23.1	8.00	3.36	23.1	8.00	3.61	23.1	8.00	3.84	23.2	8.00	4.01	14.5	9.35	4.87	17.0	9.54	5.24	13.9	8.00	4.85	11.7
	-10	8.00	2.28	23.0	8.00	2.47	23.0	8.00	2.72	23.1	8.00	2.88	23.1	8.00	3.06	23.1	8.00	3.33	23.2	8.00	3.56	14.5	9.65	4.48	17.5	10.01	4.96	14.6	10.21	5.27	14.9
	-7	8.00	2.10	23.0	8.00	2.34	23.0	8.00	2.46	23.1	8.00	2.64	23.1	8.00	2.87	23.1	8.00	3.10	23.2	8.00	3.26	14.5	10.19	4.39	18.5	10.43	4.81	15.2	10.79	5.18	15.7
	-2	8.00	1.95	23.0	8.00	2.05	23.0	8.00	2.10	23.1	8.00	2.32	23.1	8.00	2.57	23.1	8.00	2.69	23.2	8.00	2.79	14.5	10.36	3.92	18.8	10.80	4.62	15.7	11.04	4.86	16.1
	2	8.00	1.62	23.0	8.00	1.72	23.0	8.00	1.82	23.1	8.00	2.01	23.1	8.00	2.26	23.1	8.00	2.44	23.2	8.00	2.58	14.5	10.11	3.57	18.4	10.63	4.21	15.5	11.01	4.75	16.1
	7	8.00	1.29	23.0	8.00	1.43	23.0	8.00	1.60	23.1	8.00	1.80	23.1	8.00	2.05	23.1	8.00	2.23	23.2	8.00	2.50	14.5	9.11	3.16	16.6	9.66	3.79	14.1	10.03	4.29	14.6
	12	8.92	1.18	25.7	8.95	1.35	25.8	8.98	1.57	25.9	9.02	1.80	26.1	9.05	2.11	26.2	9.08	2.38	26.3	9.11	2.71	16.5	9.57	3.11	17.4	10.08	3.72	14.7	10.43	4.25	15.2
	15	9.10	1.09	26.2	9.14	1.26	26.3	9.20	1.49	26.5	9.26	1.71	26.7	9.30	2.01	26.9	9.36	2.29	27.1	9.42	2.62	17.1	9.85	3.01	17.9	10.33	3.59	15.0	10.67	4.10	15.6
	20	9.39	0.99	27.0	9.48	1.14	27.3	9.57	1.34	27.6	9.66	1.50	27.9	9.74	1.77	28.2	9.83	2.08	28.5	9.91	2.46	18.0	10.31	2.82	18.7	10.76	3.38	15.7	11.08	4.04	16.2
	25	9.69	0.93	27.9	9.82	1.07	28.3	9.93	1.24	28.6	10.06	1.42	29.1	10.17	1.66	29.4	10.30	1.96	29.9	10.41	2.32	18.9	10.78	2.67	19.6	11.18	3.20	16.3	11.48	3.99	16.8
	30	9.99	0.93	28.7	10.15	1.06	29.2	10.30	1.23	29.7	10.45	1.37	30.2	10.60	1.55	30.7	10.76	1.83	31.2	10.91	2.17	19.8	11.24	2.49	20.4	11.59	3.01	16.9	11.88	3.79	17.3
	35	10.29	0.92	29.6	10.48	1.03	30.2	10.66	1.17	30.7	10.75	1.29	31.0	10.99	1.46	31.8	11.22	1.73	32.5	11.41	2.04	20.7	11.70	2.35	21.3	12.02	2.85	17.5	12.28	3.62	17.9
	43	10.8	0.92	31.0	11	1.01	31.7	11.3	1.11	32.4	11.5	1.24	33.2	11.7	1.41	33.9	12	1.65	34.7	12.2	1.93	22.1	12.5	2.23	22.6	12.7	2.72	18.5	12.9	3.33	18.9
AE120BXYDEG/EU	LWT (°C)	25			30			35			40			45			50			55			60			65			70		
	Tamb (°C)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)
	-30	7.76	3.45	22.3	7.85	3.83	22.6	7.95	4.30	22.9	8.29	4.78	23.9	8.64	5.30	25.0	8.99	5.74	26.1	9.23	6.07	16.7	9.26	6.41	16.8						
	-25	11.23	5.00	32.3	11.62	5.43	33.5	12.00	5.83	34.6	12.00	6.20	34.7	12.00	6.58	34.7	11.56	6.65	33.5	11.00	6.67	19.9	10.54	6.67	19.2	9.77	6.67	14.2			
	-20	11.88	4.62	34.2	11.95	4.90	34.4	12.00	5.23	34.6	12.00	5.55	34.7	12.00	5.90	34.7	12.00	6.29	34.8	12.00	6.61	21.8	11.47	6.67	20.8	10.76	6.66	15.7			
	-15	12.00	4.02	34.5	12.00	4.38	34.6	12.00	4.53	34.6	12.00	5.16	34.7	12.00	5.55	34.7	12.00	5.89	34.8	12.00	6.17	21.8	12.00	6.42	21.8	11.81	6.66	17.2	11.00	6.67	16.1
	-10	12.00	3.82	34.5	12.00	4.04	34.6	12.00	4.29	34.6	12.00	4.54	34.7	12.00	4.81	34.7	12.00	5.25	34.8	12.00	5.58	21.8	12.86	6.28	23.4	12.84	6.66	18.7	12.30	6.67	18.0
	-7	12.00	3.42	34.5	12.00	3.60	34.6	12.00	3.81	34.6	12.00	4.14	34.7	12.00	4.51	34.7	12.00	4.87	34.8	12.00	5.16	21.8	13.59	6.13	24.7	13.77	6.67	20.1	13.29	6.67	19.4
	-2	12.00	3.01	34.5	12.00	3.11	34.6	12.00	3.29	34.6	12.00	3.64	34.7	12.00	4.03	34.7	12.00	4.23	34.8	12.00	4.38	21.8	13.81	5.47	25.1	14.40	6.46	21.0	14.48	6.67	21.1
	2	12.00	2.45	34.5	12.00	2.62	34.6	12.00	2.79	34.6	12.00	3.15	34.7	12.00	3.55	34.7	12.00	3.83	34.8	12.00	4.06	21.8	13.48	4.98	24.5	14.18	5.87	20.6	14.68	6.27	21.4
	7	12.00	1.90	34.5	12.00	2.10	34.6	12.00	2.35	34.6	12.00	2.64	34.7	12.00	3.00	34.7	12.00	3.26	34.8	12.00	3.53	21.8	13.66	4.46	24.8	14.49	5.35	21.1	15.05	6.17	22.0
	12	13.38	1.73	38.5	13.42	1.98	38.6	13.47	2.30	38.8	13.52	2.64	39.0	13.57	3.08	39.3	13.62	3.48	39.5	13.67	3.83	24.8	14.35	4.40	26.1	15.12	5.25	22.0	15.65	6.01	22.8
	15	13.64	1.61	39.2	13.72	1.85	39.5	13.80	2.18	39.8	13.88	2.51	40.1	13.96	2.94	40.4	14.04	3.35	40.7	14.12	3.70	25.6	14.78	4.25	26.9	15.50	5.07	22.6	16.01	5.78	23.4
	20	14.09	1.45	40.5	14.22	1.67	40.9	14.35	1.96	41.4	14.48	2.21	41.8	14.61	2.59	42.3	14.74	3.04	42.7	14.87	3.47	27.0	15.47	3.98	28.1	16.14	4.77	23.5	16.62	5.71	24.3
	25	14.54	1.37	41.8	14.72	1.56	42.4	14.90	1.82	43.0	15.08	2.08	43.6	15.26	2.43	44.2	15.44	2.87	44.8	15.62	3.28	28.3	16.17	3.76	29.4	16.76	4.52	24.4	17.22	5.63	25.1
	30	14.99	1.36	43.1	15.22	1.55	43.8	15.44	1.80	44.5	15.67	2.01	45.3	15.90	2.27	46.0	16.14	2.68	46.8	16.37	3.06	29.7	16.86	3.52	30.6	17.39	4.24	25.3	17.82	5.35	26.0
	35	15.43	1.35	44.4	15.72	1.51	45.3	16.00	1.71	46.1	16.27	1.91	47.0	16.53	2.14	47.8	16.84	2.53	48.8	17.11	2.89	31.0	17.56	3.32	31.9	18.03	4.02	26.3	18.42	5.11	26.9
	43	16.2	1.35	46.4	16.5	1.48	47.5	16.9	1.63	48.6	17.2	1.83	49.8	17.6	2.06	50.9	18	2.41	52.0	18.3	2.72	33.2	18.7	3.14	33.9	19	3.83	27.7	19.4	4.7	28.3
AE140BXYDEG/EU	LWT (°C)	25			30			35			40			45			50			55			60			65			70		
	Tamb (°C)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)
	-30	8.46	3.82	24.3	8.57	4.24	24.7	8.67	4.75	25.0	9.05	5.27	26.1	9.42	5.87	27.3	9.80	6.35	28.4	10.07	6.71	18.3	10.10	7.09	18.4						
	-25	12.25	5.53	35.2	12.68	5.99	36.5	13.11	6.48	37.8	12.96	6.79	37.4	12.18	6.78	35.2	11.60	6.78	33.6	11.20	6.79	20.3	10.57	6.78	19.2	9.78	6.77	14.2			
	-20	12.96	5.13	37.3	13.42	5.59	38.6	13.87	6.11	40.0	13.94	6.52	40.2	13.60	6.78	39.3	12.74	6.79	36.9	12.12	6.79	22.0	11.54	6.78	21.0	10.88	6.79	15.8			
	-15	13.86	4.72	39.9	13.78	5.12	39.7	13.70	5.59	39.5	13.85	6.05	40.0	14.00	6.58	40.5	13.60	6.78	39.4	13.03	6.79	23.6	12.49	6.78	22.7	11.87	6.77	17.3	11.20	6.79	16.3
	-10	13.91	4.49	40.0	13.94	4.75	40.1	13.97	5.05	40.3	13.99	5.35	40.4	14.00	5.69	40.5	14.00	6.20	40.6	14.00	6.61	25.4	13.69	6.77	24.9	13.02					

2. Outdoor Units

2-9. Capacity table

EHS Mono HT Quiet

1) Maximum Heating Capacity (Peak Value)

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

	LWT (°C)	25			30			35			40			45			50			55			60			65			70		
		Tamb (°C)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)		
		-30	5.82	2.53	16.7	5.89	2.80	17.0	5.96	3.14	17.2	6.22	3.48	18.0	6.48	3.88	18.7	6.74	4.19	19.5	6.92	4.43	12.5	6.94	4.69	12.6					
AE080BXYDGG/EU	-25	8.00	3.47	23.0	8.00	3.63	23.0	8.00	3.79	23.1	8.00	4.03	23.1	8.00	4.28	23.1	8.00	4.49	23.2	8.00	4.85	14.5	8.40	5.17	15.3	8.80	5.85	12.8			
	-20	8.00	3.05	23.0	8.00	3.20	23.0	8.00	3.39	23.1	8.00	3.59	23.1	8.00	3.84	23.1	8.00	4.09	23.2	8.00	4.31	14.5	9.11	5.13	16.6	9.12	5.48	13.3			
	-15	8.00	2.61	23.0	8.00	2.86	23.0	8.00	3.14	23.1	8.00	3.36	23.1	8.00	3.61	23.1	8.00	3.84	23.2	8.00	4.01	14.5	9.35	4.87	17.0	9.54	5.24	13.9	8.00	4.85	11.7
	-10	8.00	2.28	23.0	8.00	2.47	23.0	8.00	2.72	23.1	8.00	2.88	23.1	8.00	3.06	23.1	8.00	3.33	23.2	8.00	3.56	14.5	9.65	4.48	17.5	10.01	4.96	14.6	10.46	5.40	15.3
	-7	8.00	2.10	23.0	8.00	2.34	23.0	8.00	2.46	23.1	8.00	2.64	23.1	8.00	2.87	23.1	8.00	3.10	23.2	8.00	3.26	14.5	10.19	4.39	18.5	10.43	4.81	15.2	10.79	5.18	15.7
	-2	8.00	1.95	23.0	8.00	2.05	23.0	8.00	2.10	23.1	8.00	2.32	23.1	8.00	2.57	23.1	8.00	2.69	23.2	8.00	2.79	14.5	10.36	3.92	18.8	10.80	4.62	15.7	11.04	4.86	16.1
	2	8.00	1.62	23.0	8.00	1.72	23.0	8.00	1.82	23.1	8.00	2.01	23.1	8.00	2.26	23.1	8.00	2.44	23.2	8.00	2.58	14.5	10.11	3.57	18.4	10.63	4.21	15.5	11.01	4.75	16.1
	7	8.00	1.29	23.0	8.00	1.43	23.0	8.00	1.60	23.1	8.00	1.80	23.1	8.00	2.05	23.1	8.00	2.23	23.2	8.00	2.50	14.5	9.11	3.16	16.6	9.66	3.79	14.1	10.03	4.29	14.6
	12	8.92	1.18	25.7	8.95	1.35	25.8	8.98	1.57	25.9	9.02	1.80	26.1	9.05	2.11	26.2	9.08	2.38	26.3	9.11	2.71	16.5	9.57	3.11	17.4	10.08	3.72	14.7	10.43	4.25	15.2
	15	9.10	1.09	26.2	9.14	1.26	26.3	9.20	1.49	26.5	9.26	1.71	26.7	9.30	2.01	26.9	9.36	2.29	27.1	9.42	2.62	17.1	9.85	3.01	17.9	10.33	3.59	15.0	10.67	4.10	15.6
	20	9.39	0.99	27.0	9.48	1.14	27.3	9.57	1.34	27.6	9.66	1.50	27.9	9.74	1.77	28.2	9.83	2.08	28.5	9.91	2.46	18.0	10.31	2.82	18.7	10.76	3.38	15.7	11.08	4.04	16.2
	25	9.69	0.93	27.9	9.82	1.07	28.3	9.93	1.24	28.6	10.06	1.42	29.1	10.17	1.66	29.4	10.30	1.96	29.9	10.41	2.32	18.9	10.78	2.67	19.6	11.18	3.20	16.3	11.48	3.99	16.8
	30	9.99	0.93	28.7	10.15	1.06	29.2	10.30	1.23	29.7	10.45	1.37	30.2	10.60	1.55	30.7	10.76	1.83	31.2	10.91	2.17	19.8	11.24	2.49	20.4	11.59	3.01	16.9	11.88	3.79	17.3
	35	10.29	0.92	29.6	10.48	1.03	30.2	10.66	1.17	30.7	10.75	1.29	31.0	10.99	1.46	31.8	11.22	1.73	32.5	11.41	2.04	20.7	11.70	2.35	21.3	12.02	2.85	17.5	12.28	3.62	17.9
	43	10.8	0.92	31.0	11	1.01	31.7	11.3	1.11	32.4	11.5	1.24	33.2	11.7	1.41	33.9	12	1.65	34.7	12.2	1.93	22.1	12.5	2.32	22.6	12.7	2.72	18.5	12.9	3.33	18.9
	AE120BXYDGG/EU	LWT (°C)	25			30			35			40			45			50			55			60			65			70	
Tamb (°C)		HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)
-30		7.76	3.45	22.3	7.85	3.83	22.6	7.95	4.30	22.9	8.29	4.78	23.9	8.64	5.30	25.0	8.99	5.74	26.1	9.23	6.07	16.7	9.26	6.41	16.8						
-25		11.23	5.00	32.3	11.62	5.43	33.5	12.00	5.83	34.6	12.00	6.20	34.7	12.00	6.58	34.7	12.00	6.90	34.8	12.00	7.27	21.8	12.00	7.59	21.8	12.00	8.19	17.5			
-20		11.88	4.62	34.2	11.95	4.90	34.4	12.00	5.23	34.6	12.00	5.55	34.7	12.00	5.90	34.7	12.00	6.29	34.8	12.00	6.61	21.8	12.00	6.98	21.8	12.00	7.43	17.5			
-15		12.00	4.02	34.5	12.00	4.38	34.6	12.00	4.53	34.6	12.00	5.16	34.7	12.00	5.55	34.7	12.00	5.89	34.8	12.00	6.17	21.8	12.00	6.42	21.8	12.00	6.77	17.5	12.00	7.27	17.5
-10		12.00	3.82	34.5	12.00	4.04	34.6	12.00	4.29	34.6	12.00	4.54	34.7	12.00	4.81	34.7	12.00	5.25	34.8	12.00	5.58	21.8	12.86	6.28	23.4	13.34	6.92	19.4	13.95	7.57	20.4
-7		12.00	3.42	34.5	12.00	3.60	34.6	12.00	3.81	34.6	12.00	4.14	34.7	12.00	4.51	34.7	12.00	4.87	34.8	12.00	5.16	21.8	13.59	6.13	24.7	13.90	6.73	20.2	14.38	7.21	21.0
-2		12.00	3.01	34.5	12.00	3.11	34.6	12.00	3.29	34.6	12.00	3.64	34.7	12.00	4.03	34.7	12.00	4.23	34.8	12.00	4.38	21.8	13.81	5.47	25.1	14.40	6.46	21.0	14.72	6.78	21.5
2		12.00	2.45	34.5	12.00	2.62	34.6	12.00	2.79	34.6	12.00	3.15	34.7	12.00	3.55	34.7	12.00	3.83	34.8	12.00	4.06	21.8	13.48	4.98	24.5	14.18	5.87	20.6	14.68	6.27	21.4
7		12.00	1.90	34.5	12.00	2.10	34.6	12.00	2.35	34.6	12.00	2.64	34.7	12.00	3.00	34.7	12.00	3.26	34.8	12.00	3.53	21.8	13.66	4.46	24.8	14.49	5.35	21.1	15.05	6.17	22.0
12		13.38	1.73	38.5	13.42	1.98	38.6	13.47	2.30	38.8	13.52	2.64	39.0	13.57	3.08	39.3	13.62	3.48	39.5	13.67	3.83	24.8	14.35	4.40	26.1	15.12	5.25	22.0	15.65	6.01	22.8
15		13.64	1.61	39.2	13.72	1.85	39.5	13.80	2.18	39.8	13.88	2.51	40.1	13.96	2.94	40.4	14.04	3.35	40.7	14.12	3.70	25.6	14.78	4.25	26.9	15.50	5.07	22.6	16.01	5.78	23.4
20		14.09	1.45	40.5	14.22	1.67	40.9	14.35	1.96	41.4	14.48	2.21	41.8	14.61	2.59	42.3	14.74	3.04	42.7	14.87	3.47	27.0	15.47	3.98	28.1	16.14	4.77	23.5	16.62	5.71	24.3
25		14.54	1.37	41.8	14.72	1.56	42.4	14.90	1.82	43.0	15.08	2.08	43.6	15.26	2.43	44.2	15.44	2.87	44.8	15.62	3.28	28.3	16.17	3.76	29.4	16.76	4.52	24.4	17.22	5.63	25.1
30		14.99	1.36	43.1	15.22	1.55	43.8	15.44	1.80	44.5	15.67	2.01	45.3	15.90	2.27	46.0	16.14	2.68	46.8	16.37	3.06	29.7	16.86	3.52	30.6	17.39	4.24	25.3	17.82	5.35	26.0
35		15.43	1.35	44.4	15.72	1.51	45.3	16.00	1.71	46.1	16.27	1.91	47.0	16.53	2.14	47.8	16.84	2.53	48.8	17.11	2.89	31.0	17.56	3.32	31.9	18.03	4.02	26.3	18.42	5.11	26.9
43		16.2	1.35	46.4	16.5	1.48	47.5	16.9	1.63	48.6	17.2	1.83	49.8	17.6	2.06	50.9	18	2.41	52.0	18.3	2.72	33.2	18.7	3.14	33.9	19	3.83	27.7	19.4	4.7	28.3
AE140BXYDGG/EU	LWT (°C)	25			30			35			40			45			50			55			60			65			70		
	Tamb (°C)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)
	-30	8.46	3.82	24.3	8.57	4.24	24.7	8.67	4.75	25.0	9.05	5.27	26.1	9.42	5.87	27.3	9.80	6.35	28.4	10.07	6.71	18.3	10.10	7.09	18.4						
	-25	12.25	5.53	35.2	12.68	5.99	36.5	13.11	6.48	37.8	13.26	6.94	38.3	13.41	7.47	38.8	13.75	8.05	39.9	14.00	8.48	25.4	13.68	8.78	24.9	13.29	9.20	19.4			
	-20	12.96	5.13	37.3	13.42	5.59	38.6	13.87	6.11	40.0	13.94	6.52	40.3	14.00	6.98	40.5	14.00	7.46	40.6	14.00	7.84	25.4	14.00	8.23	25.4	14.00	8.77	20.4			
	-15	13.86	4.72	39.9	13.78	5.12	39.7	13.70	5.59	39.5	13.85	6.05	40.0	14.00	6.58	40.5	14.00	6.98	40.6	14.00	7.34	25.4	14.00	7.60	25.4	14.00	8.01	20.4	14.00	8.48	20.4
	-10	13.91	4.49	40.0	13.94	4.75	40.1	13.97	5.05	40.3	13.99	5.35	40.4	14.00	5.69	40.5	14.00	6.20	40.6	14.00	6.61	25.4	14.00	6.93	25.4	14.00	7.37	20.4	14.65		

2. Outdoor Units

2-9. Capacity table

EHS Mono HT Quiet

2) Maximum Heating Capacity (Integrated Value)

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

	LWT (°C)	25			30			35			40			45			50			55			60			65			70		
		HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)			
		Tamb (°C)																													
AE080BXYDEG/EU	-30	5.82	2.53	16.7	5.89	2.80	17.0	5.96	3.14	17.2	6.22	3.48	18.0	6.48	3.88	18.7	6.74	4.19	19.5	6.92	4.43	12.5	6.94	4.69	12.6						
	-25	8.00	3.47	23.0	8.00	3.63	23.0	8.00	3.79	23.1	8.00	4.03	23.1	8.00	4.28	23.1	8.00	4.49	23.2	8.00	4.85	14.5	8.40	5.17	15.3	7.95	5.28	11.6			
	-20	8.00	3.05	23.0	8.00	3.20	23.0	8.00	3.39	23.1	8.00	3.59	23.1	8.00	3.84	23.1	8.00	4.09	23.2	8.00	4.31	14.5	9.11	5.13	16.6	8.75	5.26	12.7			
	-15	8.00	2.61	23.0	8.00	2.86	23.0	8.00	3.14	23.1	8.00	3.36	23.1	8.00	3.61	23.1	8.00	3.84	23.2	8.00	4.01	14.5	9.35	4.87	17.0	9.54	5.24	13.9	8.00	4.85	11.7
	-10	7.95	2.34	22.9	7.95	2.50	22.9	8.00	2.72	23.1	8.00	2.88	23.1	8.00	3.06	23.1	8.00	3.33	23.2	8.00	3.56	14.5	9.56	4.44	17.4	9.95	4.93	14.5	9.57	4.94	14.0
	-7	7.96	2.18	22.9	7.96	2.33	22.9	7.96	2.54	23.0	7.96	2.77	23.0	7.96	2.95	23.0	7.96	3.18	23.1	8.00	3.26	14.5	9.98	4.29	18.1	9.98	4.60	14.5	9.68	4.65	14.1
	-2	7.97	2.07	22.9	7.97	2.22	22.9	7.97	2.41	23.0	7.97	2.63	23.0	7.97	2.79	23.1	7.97	2.94	23.1	7.98	3.06	14.5	9.90	4.20	18.0	9.79	4.48	14.3	9.64	4.55	14.1
	2	7.98	1.59	23.0	7.98	1.77	23.0	7.98	2.01	23.0	7.98	2.22	23.0	7.98	2.49	23.1	7.98	2.64	23.1	7.98	2.76	14.5	9.41	3.60	17.1	9.49	4.10	13.8	9.35	4.23	13.6
	7	8.00	1.29	23.0	8.00	1.43	23.0	8.00	1.60	23.1	8.00	1.80	23.1	8.00	2.05	23.1	8.00	2.23	23.2	8.00	2.50	14.5	9.11	3.16	16.6	9.66	3.79	14.1	10.03	4.37	14.6
	12	8.92	1.18	25.7	8.95	1.35	25.8	8.98	1.57	25.9	9.02	1.80	26.1	9.05	2.11	26.2	9.08	2.38	26.3	9.11	2.71	16.5	9.57	3.11	17.4	10.08	3.72	14.7	10.43	4.26	15.2
	15	9.10	1.09	26.2	9.14	1.26	26.3	9.20	1.49	26.5	9.26	1.71	26.7	9.30	2.01	26.9	9.36	2.29	27.1	9.42	2.62	17.1	9.85	3.01	17.9	10.33	3.59	15.0	10.67	4.10	15.6
	20	9.39	0.99	27.0	9.48	1.14	27.3	9.57	1.34	27.6	9.66	1.50	27.9	9.74	1.77	28.2	9.83	2.08	28.5	9.91	2.46	18.0	10.31	2.82	18.7	10.76	3.38	15.7	11.08	4.04	16.2
	25	9.69	0.93	27.9	9.82	1.07	28.3	9.93	1.24	28.6	10.06	1.42	29.1	10.17	1.66	29.4	10.30	1.96	29.9	10.41	2.32	18.9	10.78	2.67	19.6	11.18	3.20	16.3	11.48	3.99	16.8
	30	9.99	0.93	28.7	10.15	1.06	29.2	10.30	1.23	29.7	10.45	1.37	30.2	10.60	1.55	30.7	10.76	1.83	31.2	10.91	2.17	19.8	11.24	2.49	20.4	11.59	3.01	16.9	11.88	3.79	17.3
	35	10.29	0.92	29.6	10.48	1.03	30.2	10.66	1.17	30.7	10.75	1.29	31.0	10.99	1.46	31.8	11.22	1.73	32.5	11.41	2.04	20.7	11.70	2.35	21.3	12.02	2.85	17.5	12.28	3.62	17.9
	43	10.8	0.92	31.0	11	1.01	31.7	11.3	1.11	32.4	11.5	1.24	33.2	11.7	1.41	33.9	12	1.65	34.7	12.2	1.93	22.1	12.5	2.23	22.6	12.7	2.72	18.5	12.9	3.33	18.9
AE120BXYDEG/EU	LWT (°C)	25			30			35			40			45			50			55			60			65			70		
	Tamb (°C)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)
	-30	7.76	3.45	22.3	7.85	3.83	22.6	7.95	4.30	22.9	8.29	4.78	23.9	8.64	5.30	25.0	8.99	5.74	26.1	9.23	6.07	16.7	9.26	6.41	16.8						
	-25	11.23	5.00	32.3	11.62	5.43	33.5	12.00	5.83	34.6	12.00	6.20	34.7	12.00	6.58	34.7	11.56	6.65	33.5	11.00	6.67	19.9	10.54	6.67	19.2	9.77	6.67	14.2			
	-20	11.88	4.62	34.2	11.95	4.90	34.4	12.00	5.23	34.6	12.00	5.55	34.7	12.00	5.90	34.7	12.00	6.29	34.8	12.00	6.61	21.8	11.47	6.67	20.8	10.76	6.66	15.7			
	-15	12.00	4.23	34.5	12.00	4.53	34.6	12.00	4.83	34.6	12.00	5.23	34.7	12.00	5.63	34.7	12.00	5.93	34.8	12.00	6.28	21.8	12.00	6.57	21.8	11.53	6.66	16.8	11.00	6.67	16.1
	-10	11.43	3.96	32.9	11.96	4.43	34.4	11.94	4.77	34.4	11.94	5.14	34.5	11.94	5.57	34.5	11.94	5.90	34.6	11.94	6.15	21.7	11.72	6.33	21.3	10.94	6.26	15.9	10.71	6.42	15.6
	-7	11.93	3.85	34.3	11.85	4.10	34.1	11.95	4.47	34.5	11.95	4.86	34.5	11.95	5.32	34.6	11.95	5.75	34.6	11.95	6.07	21.7	11.65	6.13	21.2	11.18	6.16	16.3	11.06	6.40	16.1
	-2	11.26	3.45	32.4	11.53	3.79	33.2	11.97	4.23	34.5	11.97	4.62	34.6	11.97	5.10	34.6	11.97	5.26	34.7	11.97	5.37	21.7	12.62	6.10	22.9	11.54	6.17	16.8	11.45	6.40	16.7
	2	10.63	2.50	30.6	10.81	2.83	31.1	11.96	3.53	34.5	11.96	3.90	34.5	11.96	4.36	34.6	11.96	4.62	34.7	11.96	4.84	21.7	12.55	5.47	22.8	12.37	5.99	18.0	11.92	6.02	17.4
	7	12.00	1.90	34.5	12.00	2.10	34.6	12.00	2.35	34.6	12.00	2.64	34.7	12.00	3.00	34.7	12.00	3.26	34.8	12.00	3.53	21.8	13.66	4.46	24.8	14.49	5.35	21.1	15.05	6.17	22.0
	12	13.58	1.73	38.5	13.42	1.98	38.6	13.47	2.30	38.8	13.52	2.64	39.0	13.57	3.08	39.3	13.62	3.48	39.5	13.67	3.83	24.8	14.35	4.40	26.1	15.12	5.25	22.0	15.65	6.01	22.8
	15	13.64	1.61	39.2	13.72	1.85	39.5	13.80	2.18	39.8	13.88	2.51	40.1	13.96	2.94	40.4	14.04	3.35	40.7	14.12	3.70	25.6	14.78	4.25	26.9	15.50	5.07	22.6	16.01	5.78	23.4
	20	14.09	1.45	40.5	14.22	1.67	40.9	14.35	1.96	41.4	14.48	2.21	41.8	14.61	2.59	42.3	14.74	3.04	42.7	14.87	3.47	27.0	15.47	3.98	28.1	16.14	4.77	23.5	16.62	5.71	24.3
	25	14.54	1.37	41.8	14.72	1.56	42.4	14.90	1.82	43.0	15.08	2.08	43.6	15.26	2.43	44.2	15.44	2.87	44.8	15.62	3.28	28.3	16.17	3.76	29.4	16.76	4.52	24.4	17.22	5.63	25.1
	30	14.99	1.36	43.1	15.22	1.55	43.8	15.44	1.80	44.5	15.67	2.01	45.3	15.90	2.27	46.0	16.14	2.68	46.8	16.37	3.06	29.7	16.86	3.52	30.6	17.39	4.24	25.3	17.82	5.35	26.0
35	15.43	1.35	44.4	15.72	1.51	45.3	16.00	1.71	46.1	16.27	1.91	47.0	16.53	2.14	47.8	16.84	2.53	48.8	17.11	2.89	31.0	17.56	3.32	31.9	18.03	4.02	26.3	18.42	5.11	26.9	
43	16.2	1.35	46.4	16.5	1.48	47.5	16.9	1.63	48.6	17.2	1.83	49.8	17.6	2.06	50.9	18	2.41	52.0	18.3	2.72	33.2	18.7	3.14	33.9	19	3.83	27.7	19.4	4.7	28.3	
AE140BXYDEG/EU	LWT (°C)	25			30			35			40			45			50			55			60			65			70		
	Tamb (°C)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)
	-30	8.46	3.82	24.3	8.57	4.24	24.7	8.67	4.75	25.0	9.05	5.27	26.1	9.42	5.87	27.3	9.80	6.35	28.4	10.07	6.71	18.3	9.62	6.75	17.5						
	-25	12.25	5.53	35.2	12.68	5.99	36.5	13.11	6.48	37.8	12.96	6.79	37.4	12.18	6.78	35.2	11.60	6.78	33.6	11.20	6.79	20.3	10.57	6.78	19.2	9.78	6.77	14.2			
	-20	12.96	5.13	37.3	13.42	5.59	38.6	13.87	6.11	40.0	13.94	6.52	40.2	13.60	6.78	39.3	12.74	6.79	36.9	12.12	6.79	22.0	11.54	6.78	21.0	10.88	6.79	15.8			
	-15	13.86	4.91	39.9	13.78	5.23	39.7	13.70	5.59	39.5	13.85	6.10	40.0	14.00	6.67	40.5	13.45	6.78	39.0	12.95	6.79	23.5	12.49	6.79	22.7	11.64	6.77	16.9	11.20	6.79	16.3
	-10	12.00	4.20	34.5	12.56	4.70	36.1	13.11	5.29	37.8	13.45	5.88	38.8	13.79	6.51	39.9	12.95	4.67	37.5.												

2. Outdoor Units

2-9. Capacity table

EHS Mono HT Quiet

2) Maximum Heating Capacity (Integrated Value)

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

	LWT (°C)	25			30			35			40			45			50			55			60			65			70		
		HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)			
		Tamb (°C)																													
AE080BXYDGG/EU	-30	5.82	2.53	16.7	5.89	2.80	17.0	5.96	3.14	17.2	6.22	3.48	18.0	6.48	3.88	18.7	6.74	4.19	19.5	6.92	4.43	12.5	6.94	4.69	12.6						
	-25	8.00	3.47	23.0	8.00	3.63	23.0	8.00	3.79	23.1	8.00	4.03	23.1	8.00	4.28	23.1	8.00	4.49	23.2	8.00	4.85	14.5	8.40	5.17	15.3	8.80	5.85	12.8			
	-20	8.00	3.05	23.0	8.00	3.20	23.0	8.00	3.39	23.1	8.00	3.59	23.1	8.00	3.84	23.1	8.00	4.09	23.2	8.00	4.31	14.5	9.11	5.13	16.6	9.12	5.48	13.3			
	-15	8.00	2.61	23.0	8.00	2.86	23.0	8.00	3.14	23.1	8.00	3.36	23.1	8.00	3.61	23.1	8.00	3.84	23.2	8.00	4.01	14.5	9.35	4.87	17.0	9.54	5.24	13.9	8.00	4.85	11.7
	-10	7.95	2.34	22.9	7.95	2.50	22.9	8.00	2.72	23.1	8.00	2.88	23.1	8.00	3.06	23.1	8.00	3.33	23.2	8.00	3.56	14.5	9.56	4.44	17.4	9.95	4.93	14.5	9.57	4.94	14.0
	-7	7.96	2.18	22.9	7.96	2.33	22.9	7.96	2.54	23.0	7.96	2.77	23.0	7.96	3.03	23.0	7.96	3.15	23.1	8.00	3.26	14.5	9.98	4.29	18.1	9.98	4.60	14.5	9.68	4.65	14.1
	-2	7.97	2.07	22.9	7.97	2.22	22.9	7.97	2.41	23.0	7.97	2.63	23.0	7.97	2.82	23.1	7.97	2.95	23.1	7.98	3.06	14.5	9.90	4.20	18.0	9.79	4.49	14.3	9.64	4.86	14.1
	2	7.98	1.59	23.0	7.98	1.77	23.0	7.98	2.01	23.0	7.98	2.22	23.0	7.98	2.49	23.1	7.98	2.64	23.1	7.98	2.76	14.5	9.41	3.60	17.1	9.49	4.10	13.8	9.35	4.32	13.6
	7	8.00	1.29	23.0	8.00	1.43	23.0	8.00	1.60	23.1	8.00	1.80	23.1	8.00	2.05	23.1	8.00	2.23	23.2	8.00	2.50	14.5	9.11	3.16	16.6	9.66	3.79	14.1	10.03	4.37	14.6
	12	8.92	1.18	25.7	8.95	1.35	25.8	8.98	1.57	25.9	9.02	1.80	26.1	9.05	2.11	26.2	9.08	2.38	26.3	9.11	2.71	16.5	9.57	3.11	17.4	10.08	3.72	14.7	10.43	4.26	15.2
	15	9.10	1.09	26.2	9.14	1.26	26.3	9.20	1.49	26.5	9.26	1.71	26.7	9.30	2.01	26.9	9.36	2.29	27.1	9.42	2.62	17.1	9.85	3.01	17.9	10.33	3.59	15.0	10.67	4.10	15.6
	20	9.39	0.99	27.0	9.48	1.14	27.3	9.57	1.34	27.6	9.66	1.50	27.9	9.74	1.77	28.2	9.83	2.08	28.5	9.91	2.46	18.0	10.31	2.82	18.7	10.76	3.38	15.7	11.08	4.04	16.2
	25	9.69	0.93	27.9	9.82	1.07	28.3	9.93	1.24	28.6	10.06	1.42	29.1	10.17	1.66	29.4	10.30	1.96	29.9	10.41	2.32	18.9	10.78	2.67	19.6	11.18	3.20	16.3	11.48	3.99	16.8
	30	9.99	0.93	28.7	10.15	1.06	29.2	10.30	1.23	29.7	10.45	1.37	30.2	10.60	1.55	30.7	10.76	1.83	31.2	10.91	2.17	19.8	11.24	2.49	20.4	11.59	3.01	16.9	11.88	3.79	17.3
	35	10.29	0.92	29.6	10.48	1.03	30.2	10.66	1.17	30.7	10.75	1.29	31.0	10.82	1.44	31.3	11.22	1.73	32.5	11.41	2.04	20.7	11.70	2.35	21.3	12.02	2.85	17.5	12.28	3.62	17.9
	43	10.8	0.92	31.0	11	1.01	31.7	11.3	1.11	32.4	11.5	1.24	33.2	11.7	1.41	33.9	12	1.65	34.7	12.2	1.93	22.1	12.5	2.23	22.6	12.7	2.72	18.5	12.9	3.33	18.9
AE120BXYDGG/EU	LWT (°C)	25			30			35			40			45			50			55			60			65			70		
	Tamb (°C)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)
	-30	7.76	3.45	22.3	7.85	3.83	22.6	7.95	4.30	22.9	8.29	4.78	23.9	8.64	5.30	25.0	8.99	5.74	26.1	9.23	6.07	16.7	9.26	6.41	16.8						
	-25	11.23	5.00	32.3	11.62	5.43	33.5	12.00	5.83	34.6	12.00	6.20	34.7	12.00	6.58	34.7	12.00	6.90	34.8	12.00	7.27	21.8	12.00	7.59	21.8	12.00	8.19	17.5			
	-20	11.88	4.62	34.2	11.95	4.90	34.4	12.00	5.23	34.6	12.00	5.55	34.7	12.00	5.90	34.7	12.00	6.29	34.8	12.00	6.61	21.8	12.00	6.98	21.8	12.00	7.43	17.5			
	-15	12.00	4.23	34.5	12.00	4.53	34.6	12.00	4.83	34.6	12.00	5.23	34.7	12.00	5.63	34.7	12.00	5.93	34.8	12.00	6.28	21.8	12.00	6.65	21.8	12.00	7.00	17.5	12.00	7.28	17.5
	-10	11.43	3.96	32.9	11.96	4.43	34.4	11.94	4.77	34.4	11.94	5.14	34.5	11.94	5.57	34.5	11.94	5.90	34.6	11.94	6.15	21.7	12.75	6.88	23.2	13.27	7.59	19.3	12.76	7.65	18.6
	-7	11.93	3.85	34.3	11.85	4.10	34.1	11.95	4.47	34.5	11.95	4.86	34.5	11.95	5.32	34.6	11.95	5.75	34.6	11.95	6.07	21.7	13.30	7.00	24.2	13.30	7.33	19.4	12.67	7.29	18.5
	-2	11.26	3.45	32.4	11.53	3.79	33.2	11.97	4.23	34.5	11.97	4.62	34.6	11.97	5.10	34.6	11.97	5.26	34.7	11.97	5.37	21.7	13.20	6.38	24.0	13.05	6.97	19.0	12.86	7.18	18.8
	2	10.63	2.50	30.6	10.81	2.83	31.1	11.96	3.53	34.5	11.96	3.90	34.5	11.96	4.36	34.6	11.96	4.62	34.7	11.96	4.84	21.7	12.55	5.47	22.8	12.66	6.13	18.4	12.46	6.29	18.2
	7	12.00	1.90	34.5	12.00	2.10	34.6	12.00	2.35	34.6	12.00	2.64	34.7	12.00	3.00	34.7	12.00	3.26	34.8	12.00	3.53	21.8	13.66	4.46	24.8	14.49	5.35	21.1	15.05	6.17	22.0
	12	13.38	1.73	38.5	13.42	1.98	38.6	13.47	2.30	38.8	13.52	2.64	39.0	13.57	3.08	39.3	13.62	3.48	39.5	13.67	3.83	24.8	14.35	4.40	26.1	15.12	5.25	22.0	15.65	6.01	22.8
	15	13.64	1.61	39.2	13.72	1.85	39.5	13.80	2.18	39.8	13.88	2.51	40.1	13.96	2.94	40.4	14.04	3.35	40.7	14.12	3.70	25.6	14.78	4.25	26.9	15.50	5.07	22.6	16.01	5.78	23.4
	20	14.09	1.45	40.5	14.22	1.67	40.9	14.35	1.96	41.4	14.48	2.21	41.8	14.61	2.59	42.3	14.74	3.04	42.7	14.87	3.47	27.0	15.47	3.98	28.1	16.14	4.77	23.5	16.62	5.71	24.3
	25	14.54	1.37	41.8	14.72	1.56	42.4	14.90	1.82	43.0	15.08	2.08	43.6	15.26	2.43	44.2	15.44	2.87	44.8	15.62	3.28	28.3	16.17	3.76	29.4	16.76	4.52	24.4	17.22	5.63	25.1
	30	14.99	1.36	43.1	15.22	1.55	43.8	15.44	1.80	44.5	15.67	2.01	45.3	15.90	2.27	46.0	16.14	2.68	46.8	16.37	3.06	29.7	16.86	3.52	30.6	17.39	4.24	25.3	17.82	5.35	26.0
35	15.43	1.35	44.4	15.72	1.51	45.3	16.00	1.71	46.1	16.27	1.91	47.0	16.53	2.14	47.8	16.84	2.53	48.8	17.11	2.89	31.0	17.56	3.32	31.9	18.03	4.02	26.3	18.42	5.11	26.9	
43	16.2	1.35	46.4	16.5	1.48	47.5	16.9	1.63	48.6	17.2	1.83	49.8	17.6	2.06	50.9	18	2.41	52.0	18.3	2.72	33.2	18.7	3.14	33.9	19	3.83	27.7	19.4	4.7	28.3	
AE140BXYDGG/EU	LWT (°C)	25			30			35			40			45			50			55			60			65			70		
	Tamb (°C)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)	HC (kW)	PI (kW)	WF (LPM)
	-30	8.46	3.82	24.3	8.57	4.24	24.7	8.67	4.75	25.0	9.05	5.27	26.1	9.42	5.87	27.3	9.80	6.35	28.4	10.07	6.71	18.3	10.10	7.09	18.4						
	-25	12.25	5.53	35.2	12.68	5.99	36.5	13.11	6.48	37.8	13.26	6.94	38.3	13.41	7.47	38.8	13.76	8.05	39.9	14.00	8.48	25.4	13.68	8.78	24.9	13.29	9.20	19.4			
	-20	12.96	5.13	37.3	13.42	5.59	38.6	13.87	6.11	40.0	13.94	6.52	40.3	14.00	6.98	40.5	14.00	7.46	40.6	14.00	7.84	25.4	14.00	8.23	25.4	14.00	8.77	20.4			
	-15	13.86	4.91	39.9	13.78	5.23	39.7	13.70	5.59	39.5	13.85	6.10	40.0	14.00	6.67	40.5	14.00	7.08	40.6	14.00	7.35	25.4	14.00	7.71	25.4	14.00	8.17	20.4	14.00	8.49	20.4
	-10	12.00	4.20	34.5	12.56	4.70	36.1	13.11	5.29	37.8	13.45	5.85	38.8	13.79	6.51	39.9	13.89	6.94	40.												

2. Outdoor Units

2-9. Capacity table

EHS Mono HT Quiet

3) Cooling Capacity

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

	LWT(°C)	7			10			13			15			18			25		
	Tamb(°C)	CC (kW)	PI (kW)	WF(LPM)	CC (kW)	PI (kW)	WF(LPM)	CC (kW)	PI (kW)	WF(LPM)	CC (kW)	PI (kW)	WF(LPM)	CC (kW)	PI (kW)	WF(LPM)	CC (kW)	PI (kW)	WF(LPM)
AE080BXYD*G/EU	10	8.30	1.09	23.8	8.52	1.09	24.5	8.75	0.99	25.2	8.88	0.98	25.5	9.33	0.96	26.8	10.26	1.01	29.6
	20	7.99	1.34	22.9	8.20	1.20	23.6	8.42	1.19	24.2	8.54	1.09	24.6	8.97	1.06	25.8	9.87	1.04	28.5
	30	7.67	1.91	22.0	7.87	1.78	22.6	8.08	1.65	23.2	8.20	1.58	23.6	8.61	1.48	24.8	9.47	1.41	27.3
	35	7.50	2.27	21.5	7.62	2.10	21.9	7.75	2.01	22.3	7.86	1.82	22.6	8.00	1.70	23.1	9.18	1.59	26.5
	46	7.00	3.00	20.1	7.12	2.78	20.5	7.31	2.61	21.0	7.33	2.49	21.1	7.79	2.43	22.4	8.66	2.07	25.0
AE120BXYD*G/EU	10	12.73	1.67	36.6	13.00	1.66	37.4	13.27	1.55	38.2	13.40	1.44	38.5	13.99	1.42	40.3	15.39	1.51	44.4
	20	12.25	2.07	35.2	12.51	1.83	35.9	12.77	1.80	36.7	12.89	1.64	37.1	13.46	1.56	38.7	14.81	1.56	42.7
	30	11.75	3.19	33.8	12.01	2.93	34.5	12.25	2.71	35.2	12.37	2.64	35.6	12.91	2.48	37.2	14.21	2.27	41.0
	35	11.50	3.59	33.0	11.63	3.42	33.4	11.75	3.26	33.8	11.86	2.96	34.1	12.00	2.64	34.6	13.76	2.59	39.7
	46	10.73	4.60	30.8	10.87	4.34	31.2	11.08	4.13	31.9	11.06	4.01	31.8	11.69	3.90	33.6	12.98	3.51	37.4
AE140BXYD*G/EU	10	13.84	1.94	39.7	14.31	1.85	41.1	14.91	1.76	42.9	15.36	1.71	44.2	16.32	1.68	47.0	17.96	1.76	51.8
	20	13.31	2.24	38.2	13.77	2.01	39.6	14.34	2.03	41.2	14.78	1.88	42.5	15.71	1.85	45.2	17.28	1.81	49.8
	30	12.78	3.86	36.7	13.21	3.43	38.0	13.77	3.13	39.6	14.18	3.03	40.8	15.06	2.79	43.4	16.58	2.83	47.8
	35	12.50	3.97	35.9	12.80	3.83	36.8	13.20	3.74	37.9	13.60	3.44	39.1	14.00	3.14	40.4	16.06	3.10	46.3
	46	11.67	5.10	33.5	11.96	4.82	34.4	12.45	4.66	35.8	12.69	4.60	36.5	13.63	4.52	39.2	15.15	4.03	43.7

1. Heating capacity : Capacity is according to Eurovent rating standard OM-3-2015 and valid for heated water range $\Delta t = 3\sim 8^{\circ}\text{C}$ (However, if the LWT is over 60°C , $\Delta t = 10^{\circ}\text{C}$.)
 2. Cooling capacity : Capacity is according to Eurovent rating standard OM-3-2015 and valid for chilled water range $\Delta t = 3\sim 8^{\circ}\text{C}$
 3. Power input : Power input is according to Eurovent rating standard OM-3-2015.
 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

EHS Mono R32

1) Maximum Heating Capacity (Peak Value)

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

	LWT(°C)	25			30			35			40			45			50			55			60			65		
	Tamb(°C)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)			
	-25	2.80	1.35	8.1	2.75	1.42	7.9	2.62	1.56	7.6	2.69	1.60	7.8															
AE050RXYDEG/EU	-20	3.64	1.43	10.5	3.57	1.50	10.3	3.40	1.66	9.8	3.41	1.71	9.8	3.43	1.98	9.9												
	-15	4.56	1.63	13.1	4.47	1.71	12.9	4.26	1.90	12.3	4.12	1.94	11.9	3.99	2.00	11.5	3.87	2.10	11.2									
	-10	5.35	1.67	15.4	5.25	1.73	15.1	5.00	1.94	14.4	4.85	2.00	14.0	4.70	2.08	13.6	4.56	2.20	13.2	4.23	2.44	7.7						
	-7	5.68	1.69	16.3	5.58	1.74	16.1	5.31	1.96	15.3	5.20	2.17	15.0	5.08	2.40	14.7	4.97	2.68	14.4	4.86	2.91	8.8						
	-2	6.01	1.62	17.3	5.91	1.68	17.0	5.63	1.89	16.2	5.41	2.08	15.6	5.20	2.26	15.0	4.94	2.54	14.3	4.68	2.77	8.5	4.43	3.05	8.1			
	2	5.96	1.41	17.1	5.86	1.50	16.9	5.58	1.69	16.1	5.27	1.78	15.2	4.97	1.83	14.4	4.72	2.02	13.7	4.47	2.15	8.1	4.23	2.35	7.7			
	7	5.36	0.89	15.4	5.25	0.92	15.1	5.00	1.03	14.4	4.90	1.22	14.2	4.80	1.30	13.9	4.55	1.55	13.2	4.30	1.52	7.8	4.08	1.79	7.4	3.85	1.84	7.0
	10	5.73	0.92	16.5	5.62	0.95	16.2	5.35	1.07	15.4	5.27	1.21	15.2	5.24	1.38	15.2	4.98	1.55	14.4	4.72	1.80	8.6	4.48	1.86	8.1	4.29	1.97	7.0
	15	6.34	0.96	18.2	6.22	0.99	17.9	5.92	1.11	17.1	5.87	1.23	17.0	5.93	1.42	17.2	5.64	1.60	16.4	5.45	1.81	9.9	5.18	1.87	9.4	4.95	1.94	7.2
	20	6.90	0.99	19.8	6.76	1.02	19.5	6.58	1.16	19.0	6.69	1.31	19.3	6.80	1.49	19.7	6.46	1.66	18.7	6.18	1.82	11.2	5.93	1.86	10.8	5.62	1.88	8.2
	25	7.13	1.02	20.5	6.99	1.07	20.1	6.81	1.22	19.6	6.95	1.34	20.1	7.15	1.57	20.7	6.80	1.70	19.7	6.56	1.96	11.9	6.29	1.90	11.4	5.99	1.92	8.7
	30	7.29	1.04	21.0	7.15	1.09	20.6	6.99	1.24	20.2	7.20	1.34	20.8	7.46	1.61	21.6	7.09	1.71	20.6	6.86	2.02	12.4	6.60	1.88	12.0	6.28	1.88	9.1
	35	7.82	1.11	22.5	7.67	1.17	22.1	7.54	1.33	21.7	7.81	1.42	22.6	8.14	1.73	23.6	7.75	1.81	22.5	7.52	2.18	13.6	7.24	1.97	13.2	6.89	1.95	10.0
AE080RXYD*G/EU	LWT(°C)	25			30			35			40			45			50			55			60			65		
	Tamb(°C)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)			
	-25	4.39	2.03	12.6	4.31	2.14	12.4	4.10	2.37	11.8	4.14	2.55	11.9															
	-20	5.71	2.22	16.4	5.60	2.32	16.1	5.33	2.57	15.4	5.27	2.74	15.2	5.20	3.13	15.0												
	-15	6.69	2.43	19.2	6.56	2.54	18.9	6.25	2.82	18.0	6.15	2.98	17.8	6.06	3.16	17.5	5.88	3.32	17.0									
	-10	8.12	2.61	23.4	8.02	2.71	23.1	7.64	3.01	22.0	7.41	3.15	21.4	7.18	3.31	20.8	7.11	3.52	20.6	6.75	4.15	12.2						
	-7	8.15	2.69	23.4	8.04	2.80	23.1	7.80	2.95	22.5	7.43	3.25	21.5	7.27	3.40	21.0	7.15	3.73	20.7	6.80	4.01	12.3						
	-2	8.7	2.54	25.0	8.56	2.72	24.6	8.15	2.90	23.5	7.89	3.21	22.8	7.62	3.38	22.0	7.24	3.80	21.0	6.86	4.10	12.4	6.50	4.45	11.8			
	2	8.82	2.25	25.4	8.55	2.43	24.6	8.14	2.73	23.5	7.85	2.89	22.7	7.56	2.98	21.9	7.18	3.28	20.8	6.80	3.58	12.3	6.44	3.95	11.7			
	7	8.57	1.53	24.6	8.40	1.58	24.2	8.00	1.77	23.1	7.70	2.04	22.2	7.40	2.12	21.4	7.25	2.56	21.0	7.10	2.53	12.9	6.96	3.02	12.7	6.81	3.12	9.9
	10	9.22	1.58	26.5	9.04	1.62	26.0	8.61	1.82	24.8	8.36	2.02	24.1	8.19	2.27	23.7	7.78	2.56	22.6	7.37	2.98	13.4	7.01	3.07	12.7	6.70	3.25	9.8
	15	10.27	1.60	29.5	10.07	1.64	29.0	9.59	1.85	27.7	9.42	2.07	27.2	9.45	2.40	27.3	8.97	2.70	26.0	8.68	3.06	15.7	8.24	3.15	15.0	7.89	3.28	11.5
	20	11.24	1.64	32.3	11.02	1.67	31.7	10.73	1.89	30.9	10.85	2.20	31.3	10.98	2.55	31.8	10.43	2.84	30.2	9.98	3.13	18.1	9.58	3.20	17.4	9.07	3.24	13.2
	25	11.68	1.66	33.6	19.43	2.61	55.9	18.02	2.78	52.0	17.65	2.98	51.0	16.94	3.16	49.0	16.09	3.53	46.7	15.21	3.92	27.6	14.37	4.00	26.1	13.92	4.07	20.3
	30	11.99	1.68	34.5	20.37	2.65	58.6	18.84	2.82	54.3	18.43	3.02	53.2	17.59	3.19	50.9	16.66	3.57	48.3	15.68	3.96	28.4	14.71	4.04	26.7	14.33	4.11	20.9
	35	12.91	1.75	37.1	22.33	2.67	64.3	20.60	2.86	59.4	20.14	3.06	58.2	19.13	3.24	55.4	18.07	3.62	52.4	16.95	4.01	30.7	15.80	4.09	28.7	15.47	4.16	22.5
AE120RXYD*G/EU	LWT(°C)	25			30			35			40			45			50			55			60			65		
	Tamb(°C)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)			
	-25	8.60	4.19	24.7	8.31	2.14	12.4	4.10	2.37	11.8	4.14	2.55	11.9															
	-20	10.02	4.17	28.8	9.82	4.36	28.3	9.35	4.81	27.0	9.04	4.91	26.1	8.72	4.88	25.2												
	-15	11.02	4.19	31.7	10.80	4.38	31.1	10.49	4.87	30.2	10.33	4.98	29.8	10.16	4.98	29.4	9.85	5.23	28.6									
	-10	12.59	4.14	36.2	12.39	4.32	35.7	12.20	4.88	35.2	11.65	5.04	33.6	11.46	5.23	33.2	11.39	5.49	33.0	11.37	5.72	20.6						
	-7	13.35	4.2	38.4	13.13	4.37	37.8	12.56	4.61	36.2	11.95	5.39	34.5	11.40	5.88	33.0	11.04	6.31	32.0	10.28	6.65	18.6						
	-2	13.81	3.95	39.7	13.60	4.05	39.2	12.95	4.55	37.3	12.72	5.09	36.7	12.48	5.62	36.1	12.25	6.32	35.5	11.83	7.02	21.5	11.14	7.80	20.2			
	2	13.38	3.24	38.5	13.19	3.42	38.0	12.75	3.84	36.8	12.41	4.39	35.8	12.21	4.94	35.3	12.07	5.56	35.0	11.53	6.18	20.9	10.93	6.56	19.9			
	7	12.85	2.48	37.0	12.60	2.57	36.3	12.00	2.65	34.6	11.85	3.06	34.2	11.70	3.18	33.9	11.50	3.46	33.3	11.30	3.73	20.5	11.11	4.06	20.2	10.48	4.53	15.3
	10	14.19	2.47	40.8	13.91	2.55	40.1	12.98	2.76	37.4	12.79	3.03	36.9	12.61	3.26	36.5	11.98	3.67	34.7	11.35	4.16	20.6	11.00	4.45	20.0	10.42	4.71	15.2
	15	16.41	2.45	47.2	16.09	2.51	46.3	15.02	2.72	43.3	14.76	2.93	42.6	14.51	3.19	42.0	13.79	3.59	40.0	13.06	4.03	23.7	12.66	4.19	23.0	11.99	4.48	17.5
	20	18.64	2.45	53.6	18.27	2.50	52.6	17.05	2.68	49.2	16.73	2.88	48.3	16.08	3.06	46.5	15.44	3.44	44.8	14.77	3.83	26.8	14.03	3.91	25.5	13.57	3.98	19.8
	25	19.82	2.49	57.0	19.43	2.61	55.9	18.02	2.78	52.0	17.65	2.98	51.0	16.94	3.16	49.0	16.09	3.53	46.7	15.21	3.92	27.6	14.37	4.00	26.1	13.92	4.07	20.3
	30	20.78	2.52	59.8	20.37	2.65	58.6	18.84	2.82	54.3	18.43	3.02	53.2	17.59	3.19	50.9	16.66	3.57	48.3	15.68	3.96	28.4	14.71	4.04	26.7	14.33	4.11	20.9
	35	22.78	2.54	65.5	22.33	2.67	64.3	20.60	2.86	59.4	20.14	3.06	58.2	19.13	3.24	55.4	18.07	3.62	52.4	16.95	4.01	30.7	15.80	4.09	28.7	15.47	4.16	22.5
AE160RXYD*G/EU	LWT(°C)	25			30			35			40			45			50			55			60			65		
	Tamb(°C)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)			
	-25	10.36	5.14	29.8	10.16	5.41	29.2	9.49	5.86	27.4	9.22	6.23	26.6															
	-20	12.11	5.17	34.8	11.87	5.40	34.2	11.30	5.95	32.6	10.99	6.34	31.7	10.68	6.61	30.9												
	-15	13.50	5.27	38.8	13.24	5.50	38.1	12.87	6.12	37.1	12.66	6.50	36.6	12.44	6.74	36.0	12.07											

2. Outdoor Units

2-9. Capacity table

EHS Mono R32

2) Maximum Heating Capacity (Integrated Value)

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

	LWT(°C)	25			30			35			40			45			50			55			60			65		
	Tamb(°C)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)			
	-25	2.80	1.35	8.1	2.75	1.42	7.9	2.62	1.56	7.6	2.69	1.60	7.8															
AE050RXYDEG/EU	-20	3.64	1.43	10.5	3.57	1.50	10.3	3.40	1.66	9.8	3.41	1.71	9.8	3.43	1.98	9.9												
	-15	4.56	1.63	13.1	4.47	1.71	12.9	4.26	1.90	12.3	4.12	1.94	11.9	3.99	2.00	11.5	3.87	2.10	11.2									
	-10	4.99	1.62	14.3	4.89	1.69	14.1	4.66	1.90	13.4	4.80	1.99	13.9	4.65	2.08	13.5	4.47	2.18	13.0	4.15	2.39	7.5						
	-7	5.19	1.60	14.9	5.09	1.67	14.7	4.90	1.69	14.1	5.04	2.12	14.6	4.93	2.36	14.3	4.78	2.58	13.9	4.67	2.79	8.5						
	-2	5.04	1.39	14.5	4.94	1.45	14.2	4.75	1.63	13.7	4.67	1.83	13.5	4.44	1.95	12.8	4.26	2.19	12.4	4.08	2.44	7.4	3.86	2.71	7.0			
	2	4.89	1.18	14.1	4.79	1.23	13.8	4.56	1.38	13.1	4.35	1.50	12.6	4.12	1.54	11.9	3.98	1.73	11.5	3.80	1.92	6.9	3.64	2.14	6.6			
	7	5.36	0.89	15.4	5.25	0.92	15.1	5.00	1.03	14.4	4.90	1.22	14.2	4.80	1.30	13.9	4.55	1.55	13.2	4.30	1.52	7.8	4.08	1.79	7.4			
	10	5.73	0.92	16.5	5.62	0.95	16.2	5.35	1.07	15.4	5.27	1.21	15.2	5.24	1.38	15.2	4.98	1.55	14.4	4.72	1.80	8.6	4.48	1.86	8.1			
	15	6.34	0.96	18.2	6.22	0.99	17.9	5.92	1.11	17.1	5.87	1.23	17.0	5.93	1.42	17.2	5.64	1.60	16.4	5.45	1.81	9.9	5.18	1.87	9.4			
	20	6.90	0.99	19.8	6.76	1.02	19.5	6.58	1.16	19.0	6.69	1.31	19.3	6.80	1.49	19.7	6.46	1.66	18.7	6.18	1.82	11.2	5.93	1.86	10.8			
	25	7.13	1.02	20.5	6.99	1.07	20.1	6.81	1.22	19.6	6.95	1.34	20.1	7.15	1.57	20.7	6.80	1.70	19.7	6.56	1.96	11.9	6.29	1.90	11.4			
	30	7.29	1.04	21.0	7.15	1.09	20.6	6.99	1.24	20.2	7.20	1.34	20.8	7.46	1.61	21.6	7.09	1.71	20.6	6.86	2.02	12.4	6.60	1.88	12.0			
	35	7.82	1.11	22.5	7.67	1.17	22.1	7.54	1.33	21.7	7.81	1.42	22.6	8.14	1.73	23.6	7.75	1.81	22.5	7.52	2.18	13.6	7.24	1.97	13.2			
AE080RXYD*G/EU	LWT(°C)	25			30			35			40			45			50			55			60			65		
	Tamb(°C)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)			
	-25	4.39	2.03	12.6	4.31	2.14	12.4	4.10	2.37	11.8	4.14	2.55	11.9															
	-20	5.71	2.22	16.4	5.60	2.32	16.1	5.33	2.57	15.4	5.27	2.74	15.2	5.20	3.13	15.0												
	-15	6.69	2.43	19.2	6.56	2.54	18.9	6.25	2.82	18.0	6.15	2.98	17.8	6.06	3.16	17.5	5.88	3.32	17.0									
	-10	7.62	2.55	21.9	7.47	2.66	21.5	7.11	2.99	20.5	7.34	3.14	21.2	7.11	3.28	20.6	6.69	3.45	19.4	6.65	4.10	12.1						
	-7	7.48	2.58	21.5	7.33	2.69	21.1	7.06	2.72	20.4	7.20	3.17	20.8	6.98	3.32	20.2	6.93	3.73	20.1	6.00	3.97	10.9						
	-2	7.30	2.25	21.0	7.16	2.34	20.6	6.89	2.63	19.9	6.80	2.83	19.6	6.50	2.91	18.8	6.24	3.27	18.1	5.97	3.64	10.8	5.66	4.04	10.3			
	2	7.12	1.91	20.5	6.98	1.99	20.1	6.65	2.23	19.2	6.48	2.44	18.7	6.27	2.49	18.1	6.05	2.80	17.5	5.79	3.11	10.5	5.54	3.46	10.1			
	7	8.57	1.53	24.6	8.40	1.58	24.2	8.00	1.77	23.1	7.70	2.04	22.2	7.40	2.12	21.4	7.25	2.56	21.0	7.10	2.53	12.9	6.96	3.02	12.7			
	10	9.22	1.58	26.5	9.04	1.62	26.0	8.61	1.82	24.8	8.36	2.02	24.1	8.19	2.27	23.7	7.78	2.56	22.6	7.37	2.98	13.4	7.01	3.07	12.7			
	15	10.27	1.60	29.5	10.07	1.64	29.0	9.59	1.85	27.7	9.42	2.07	27.2	9.45	2.40	27.3	8.97	2.70	26.0	8.68	3.06	15.7	8.24	3.15	15.0			
	20	11.24	1.64	32.3	11.02	1.67	31.7	10.73	1.89	30.9	10.85	2.20	31.3	10.98	2.55	31.8	10.43	2.84	30.2	9.98	3.13	18.1	9.58	3.20	17.4			
	25	11.68	1.66	33.6	11.45	1.74	33.0	11.15	1.97	32.2	11.36	2.27	32.8	11.67	2.75	33.8	10.98	2.96	31.8	10.49	3.42	19.0	9.96	3.29	18.1			
	30	11.99	1.68	34.5	11.75	1.76	33.8	11.50	2.00	33.2	11.84	2.31	34.2	12.29	2.88	35.6	11.51	3.05	33.4	10.97	3.58	19.9	10.39	3.33	18.9			
	35	12.91	1.75	37.1	12.66	1.83	36.5	12.44	2.09	35.9	12.92	2.43	37.3	13.52	3.11	39.1	12.62	3.23	36.6	12.00	3.86	21.8	11.35	3.47	20.6			
AE120RXYD*G/EU	LWT(°C)	25			30			35			40			45			50			55			60			65		
	Tamb(°C)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)			
	-25	8.60	4.19	24.7	8.31	2.14	12.4	4.10	2.37	11.8	4.14	2.55	11.9															
	-20	10.02	4.17	28.8	9.82	4.36	28.3	9.35	4.81	27.0	9.04	4.91	26.1	8.72	4.88	25.2												
	-15	11.02	4.19	31.7	10.80	4.38	31.1	10.49	4.87	30.2	10.33	4.98	29.8	10.16	4.98	29.4	9.85	5.23	28.6									
	-10	12.02	4.05	34.6	11.78	4.23	33.9	11.80	4.85	34.0	11.44	4.99	33.0	11.30	5.23	32.7	11.28	5.49	32.7	11.25	5.72	20.4						
	-7	12.21	4.02	35.1	11.97	4.19	34.5	11.64	4.33	33.6	11.07	5.18	32.0	10.50	5.64	30.4	10.61	6.11	30.8	10.07	6.57	18.3						
	-2	11.72	3.42	33.7	11.49	3.56	33.1	11.06	4.01	31.9	10.97	4.48	31.7	10.76	4.95	31.1	10.43	5.62	30.2	9.88	6.24	17.9	9.36	7.01	17.0			
	2	11.33	2.82	32.6	11.11	2.94	32.0	10.58	3.30	30.5	10.80	3.78	31.2	10.91	4.25	31.6	10.47	4.83	30.4	9.92	5.31	18.0	9.40	6.02	17.1			
	7	12.85	2.48	37.0	12.60	2.57	36.3	12.00	2.65	34.6	11.85	3.06	34.2	11.70	3.18	33.9	11.50	3.46	33.3	11.30	3.73	20.5	11.11	4.06	20.2			
	10	14.19	2.47	40.8	13.91	2.55	40.1	12.98	2.76	37.4	12.79	3.03	36.9	12.61	3.26	36.5	11.98	3.67	34.7	11.35	4.16	20.6	11.00	4.45	20.0			
	15	16.41	2.45	47.2	16.09	2.51	46.3	15.02	2.72	43.3	14.76	2.93	42.6	14.51	3.19	42.0	13.79	3.59	40.0	13.06	4.03	23.7	12.66	4.19	23.0			
	20	18.64	2.45	53.6	18.27	2.50	52.6	17.05	2.68	49.2	16.73	2.88	48.3	16.08	3.06	46.5	15.44	3.44	44.8	14.77	3.83	26.8	14.03	3.91	25.5			
	25	19.82	2.49	57.0	19.43	2.61	55.9	18.02	2.78	52.0	17.65	2.98	51.0	16.94	3.16	49.0	16.09	3.53	46.7	15.21	3.92	27.6	14.37	4.00	26.1			
	30	20.78	2.52	59.8	20.37	2.65	58.6	18.84	2.82	54.3	18.43	3.02	53.2	17.59	3.19	50.9	16.66	3.57	48.3	15.68	3.96	28.4	14.71	4.04	26.7			
	35	22.78	2.54	65.5	22.33	2.67	64.3	20.60	2.86	59.4	20.14	3.06	58.2	19.13	3.24	55.4	18.07	3.62	52.4	16.95	4.01	30.7	15.80	4.09	28.7			
AE160RXYD*G/EU	LWT(°C)	25			30			35			40			45			50			55			60			65		
	Tamb(°C)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)	HC(kW)	PI(kW)	WFLPM)			
	-25	10.36	5.14	29.8	10.16	5.41	29.2	9.49	5.86	27.4	9.22	6.23	26.6															
	-20	12.11	5.17	34.8	11.87	5.40	34.2	11.30	5.95	32.6	10.99	6.34	31.7	10.68	6.61	30.9												
	-15	13.50	5.27	38.8	13.24	5.50	38.1	12.87	6.12	37.1	12.66	6.50	36.6	12.44	6.74	36.0	12.07	7.08	35.0									
	-10	15.42	5.25	44.4	14.37	5.36	41.4	14.39	6.15	41.5	13.96	6.55	40.3	13.80	7.07	39.9	13.77	7.43	39.9	13.73	7.74	24.9						
	-7	14.85	5.12	42.7	14.56	5.34	41.9	14.16	5.52	40.8	14.14	6.77	40.8	14.12	7.53	40.9	14.06	7.64	40.8	13.12	7.75	23.8						
	-2	14.29	4.45	41.1																								

2. Outdoor Units

2-9. Capacity table

EHS Mono R32

3) Cooling Capacity

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

	LWT(°C)	7			10			13			15			18			25		
	Tamb(°C)	HC(kW)	PI(kW)	WF(LPM)	HC(kW)	PI(kW)	WF(LPM)	HC(kW)	PI(kW)	WF(LPM)	HC(kW)	PI(kW)	WF(LPM)	HC(kW)	PI(kW)	WF(LPM)	HC(kW)	PI(kW)	WF(LPM)
AE050RXYDEG/EU	10	4.32	0.86	12.4	4.62	0.86	13.3	4.93	0.86	14.2	5.23	0.86	15.0	5.54	0.86	15.9	6.09	0.88	17.6
	20	4.15	0.98	11.9	4.45	0.98	12.8	4.74	0.98	13.6	5.03	0.98	14.5	5.33	0.98	15.3	5.86	1.00	16.9
	30	3.99	1.09	11.4	4.27	1.09	12.3	4.55	1.09	13.1	4.83	1.11	13.9	5.11	1.12	14.7	5.62	1.16	16.2
	35	3.90	1.15	11.2	4.05	1.18	11.6	4.32	1.24	12.4	4.58	1.24	13.2	5.00	1.14	14.4	5.33	1.20	15.4
	46	3.60	1.57	10.4	3.86	1.56	11.1	4.11	1.64	11.8	4.37	1.64	12.6	4.62	1.56	13.3	5.08	1.59	14.6
AE080RXYD*G/EU	10	6.31	1.42	18.1	6.92	1.35	19.9	7.53	1.29	21.6	8.14	1.22	23.4	8.75	1.15	25.2	9.62	1.18	27.7
	20	6.07	1.61	17.4	6.66	1.53	19.1	7.24	1.45	20.8	7.83	1.38	22.5	8.41	1.30	24.2	9.25	1.33	26.7
	30	5.83	1.79	16.7	6.39	1.71	18.4	6.95	1.62	20.0	7.51	1.57	21.6	8.07	1.49	23.2	8.88	1.55	25.6
	35	5.70	1.88	16.4	6.19	1.88	17.8	6.66	1.85	19.2	7.20	1.88	20.7	7.50	1.90	21.6	8.60	1.62	24.8
	46	5.32	2.36	15.3	5.78	2.42	16.6	6.29	2.47	18.1	6.72	2.48	19.3	7.30	2.40	21.0	8.11	2.48	23.4
AE120RXYD*G/EU	10	9.96	2.05	28.6	10.79	2.07	31.0	11.62	2.08	33.4	12.45	2.10	35.8	13.28	2.10	38.2	14.61	2.15	42.1
	20	9.59	2.33	27.5	10.38	2.35	29.8	11.18	2.35	32.1	11.98	2.37	34.5	12.78	2.38	36.8	14.06	2.44	40.5
	30	9.20	2.60	26.4	9.96	2.61	28.6	10.73	2.63	30.8	11.50	2.69	33.1	12.26	2.79	35.3	13.49	2.81	38.9
	35	9.00	2.73	25.9	9.46	2.83	27.2	10.18	3.00	29.3	10.91	3.00	31.4	12.00	2.77	34.6	12.80	2.91	36.9
	46	8.32	3.73	23.9	9.01	3.74	25.9	9.71	3.94	27.9	10.39	3.96	29.9	11.09	3.79	31.9	12.19	3.87	35.2
AE160RXYD*G/EU	10	11.51	2.48	33.1	12.51	2.49	35.9	13.51	2.49	38.8	14.50	2.50	41.7	15.50	2.50	44.6	17.05	2.56	49.2
	20	11.08	2.81	31.8	12.03	2.82	34.6	12.99	2.82	37.3	13.95	2.82	40.1	14.91	2.82	42.9	16.40	2.89	47.3
	30	10.63	3.14	30.5	11.55	3.14	33.2	12.47	3.14	35.8	13.39	3.20	38.5	14.31	3.24	41.2	15.74	3.34	45.4
	35	10.40	3.29	29.9	10.96	3.40	31.5	11.83	3.58	34.0	12.70	3.58	36.5	14.00	3.28	40.4	14.93	3.45	43.0
	46	9.61	4.49	27.6	10.44	4.49	30.0	11.28	4.71	32.4	12.10	4.72	34.8	12.93	4.49	37.2	14.23	4.60	41.0

1. Heating capacity : Capacity is according to Eurovent rating standard OM-3-2015 and valid for heated water range $\Delta t = 3 \sim 8^{\circ}\text{C}$
 2. Cooling capacity : Capacity is according to Eurovent rating standard OM-3-2015 and valid for chilled water range $\Delta t = 3 \sim 8^{\circ}\text{C}$
 3. Power input : Power input is according to Eurovent rating standard OM-3-2015.
- ※ The real capacity would be changed according to the install environment.

2. Outdoor Units

2-10. Silent mode corrections

EHS Mono R290

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

EHS Mono HT Quiet

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

2. Outdoor Units

2-10. Silent mode corrections

EHS Mono R32

Heating

Silent Function	Outdoor Air Temperature(°C DB)			
	-15	2	7	15
Level 1	0.92	0.87	0.94	0.94
Level 2	0.82	0.78	0.84	0.84
Level 3	0.68	0.64	0.69	0.69
Low-noise	0.7	0.6	0.69	0.69

Cooling

Silent Function	Outdoor Air Temperature(°C DB)			
	10	20	35	45
Level 1	1	1	0.92	0.92
Level 2	0.98	0.89	0.83	0.83
Level 3	0.81	0.74	0.68	0.68

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. Indoor units

3-1. Specifications

ClimateHub, 2 Zone

Model Name		Indoor Unit	AE200DNXMPK/EU	AE200DNXMPK/EU
		Outdoor Unit	AE050CXYDEK/EU	AE080CXYDEK/EU
Mode		-	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50
Power input	Cooling (Nominal)	kW	0.3	0.3
	Heating (Nominal)	kW	0.3	0.3
	Cooling (Max)	kW	0.3	0.3
	Heating (Max)	kW	4.3	4.3
Current Input	Cooling (Nominal)	A	1.3	1.3
	Heating (Nominal)	A	1.3	1.3
	Cooling (Max)	A	1.3	1.3
	Heating (Max)	A	18.7	18.7
Field Wiring	MCA	A	18.7	18.7
	MFA	A	23.4	23.4
Heating up time		hh:mm	02:25	01:26
Water Heating	Declared load profile	-	L	L
	Energy efficiency Class	-	A+	A+
Connections	Water Flow Rate (Std)	Heating	LPM	23.1
		Cooling	LPM	23.1
	Water Flow Rate	Min	LPM	7
		Max	LPM	48
	Water Pressure (Max)		bar	3.0
	Water pipe (To outdoor unit)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Space heating) (Zone 1)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Space heating) (Zone 2)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (DHW)	Type	-	Straight pipe
		Inlet	Φ, mm	22
		Outlet	Φ, mm	22
	Water pipe (Secondary water)	Type	-	Straight pipe
		Inlet	Φ, mm	22
	Leaving Water Temperature	Heating Min.	°C	15
		Heating Max.	°C	75
		Cooling Min.	°C	5
		Cooling Max.	°C	25
DHW Tank	Nominal Water Volume		liter	200
	Net Water Volume		liter	194
	Material		-	SUS 316L
	Max. water pressure		bar	10
	Max. water temperature		°C	70
	Insulation		-	Inner EPP+VIP+Outer EPS

3. Indoor units

3-1. Specifications

ClimateHub, 2 Zone

Model Name			Indoor Unit		AE200DNXMPPK/EU	AE200DNXMPPK/EU
			Outdoor Unit		AE050CXYDEK/EU	AE080CXYDEK/EU
Water Pump	Type		-	BLDC Inv	BLDC Inv	
	Motor Input		W	95	95	
	Number of Unit		EA	2	2	
	Max static pressure		mAq	9.0	9.0	
Backup Heater	Power		kW	1Φ 2/4kW	1Φ 2/4kW	
	Thermostat (Thermal Fuse)		°C	98 +0 -5	98 +0 -5	
Safety device	Pressure relief valve		bar	2.9	2.9	
	Flow Sensor		LPM	5~60	5~60	
	Temperature & Pressure relief valve		bar, °C	10bar, 90°C	10bar, 90°C	
Expansion vessel	Internal water volume		liter	10	10	
	Max. Working pressure		Mpa	0.3	0.3	
	Initial Charging pressure		Mpa	0.12	0.12	
IP Class			-	IPX1	IPX1	
Air Purge Valve			Φ, inch	BSPP male 3/8"	BSPP male 3/8"	
Sound Level	Sound Pressure Level	Heating	dB(A)	28	28	
		Cooling	dB(A)	28	28	
	Sound Power Level	Heating	dB(A)	42	42	
Casing	Color		-	GREIGE	GREIGE	
	Material		-	PCM	PCM	
Packing	Material		-	EPS/BOX/Pallet	EPS/BOX/Pallet	
	Packing Weight		kg	9.6	9.6	
External Dimension	Net Weight		kg	139.0	139.0	
	Shipping Weight		kg	150.5	150.5	
	Net Dimensions	Width	mm	598	598	
		Height	mm	1,850	1,850	
		Depth	mm	600	600	
	Shipping Dimensions	Width	mm	676	676	
		Height	mm	2,050	2,050	
		Depth	mm	740	740	

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

ClimateHub, 2 Zone

Model Name		Indoor Unit		AE200DNXMPK/EU	AE200DNXMPK/EU
		Outdoor Unit		AE120CXYDEK/EU	AE160CXYDEK/EU
Mode		-		Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz		1, 2, 220-240, 50	1, 2, 220-240, 50
Power input	Cooling (Nominal)	kW		0.3	0.3
	Heating (Nominal)	kW		0.3	0.3
	Cooling (Max)	kW		0.3	0.3
	Heating (Max)	kW		4.3	4.3
Current Input	Cooling (Nominal)	A		1.3	1.3
	Heating (Nominal)	A		1.3	1.3
	Cooling (Max)	A		1.3	1.3
	Heating (Max)	A		18.7	18.7
Field Wiring	MCA	A		18.7	18.7
	MFA	A		23.4	23.4
Heating up time		hh:mm		00:53	00:53
Water Heating	Declared load profile	-		L	L
	Energy efficiency Class	-		A+	A+
Connections	Water Flow Rate (Std)	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	3.0	3.0
	Water pipe (To outdoor unit)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 1)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 2)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (DHW)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	22	22
		Outlet	Φ, mm	22	22
	Water pipe (Secondary water)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	22	22
	Leaving Water Temperature	Heating Min.	°C	15	15
		Heating Max.	°C	75	75
		Cooling Min.	°C	5	5
		Cooling Max.	°C	25	25
DHW Tank	Nominal Water Volume		liter	200	200
	Net Water Volume		liter	194	194
	Material		-	SUS 316L	SUS 316L
	Max. water pressure		bar	10	10
	Max. water temperature		°C	70	70
	Insulation		-	Inner EPP+VIP+Outer EPS	Inner EPP+VIP+Outer EPS

3. Indoor units

3-1. Specifications

ClimateHub, 2 Zone

Model Name		Indoor Unit		AE200DNXMPK/EU	AE200DNXMPK/EU
		Outdoor Unit		AE120CXYDEK/EU	AE160CXYDEK/EU
Water Pump	Type	-		BLDC Inv	BLDC Inv
	Motor Input	W		95	95
	Number of Unit	EA		2	2
	Max static pressure	mAq		9.0	9.0
Backup Heater	Power	kW		1Φ 2/4kW	1Φ 2/4kW
	Thermostat (Thermal Fuse)	°C		98 +0 -5	98 +0 -5
Safety device	Pressure relief valve	bar		2.9	2.9
	Flow Sensor	LPM		5~60	5~60
	Temperature & Pressure relief valve	bar, °C		10bar, 90°C	10bar, 90°C
Expansion vessel	Internal water volume	liter		10	10
	Max. Working pressure	Mpa		0.3	0.3
	Initial Charging pressure	Mpa		0.12	0.12
IP Class		-		IPX1	IPX1
Air Purge Valve		Φ, inch		BSP male 3/8"	BSP male 3/8"
Sound Level	Sound Pressure Level	Heating	dB(A)	30	30
		Cooling	dB(A)	30	30
	Sound Power Level	Heating	dB(A)	44	44
Casing	Color	-		GREIGE	GREIGE
	Material	-		PCM	PCM
Packing	Material	-		EPS/BOX/Pallet	EPS/BOX/Pallet
	Packing Weight	kg		9.6	9.6
External Dimension	Net Weight		kg	139.0	139.0
	Shipping Weight		kg	150.5	150.5
	Net Dimensions	Width	mm	598	598
		Height	mm	1,850	1,850
		Depth	mm	600	600
	Shipping Dimensions	Width	mm	676	676
		Height	mm	2,050	2,050
		Depth	mm	740	740

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

ClimateHub, 2 Zone

Model Name		Indoor Unit	AE200DNXMPK/EU	AE200DNXMPK/EU
		Outdoor Unit	AE080CXYDGK/EU	AE120CXYDGK/EU
Mode		-	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz	3, 4, 380-415, 50	3, 4, 380-415, 50
Power input	Cooling (Nominal)	kW	3Φ - / 1Φ 0.3	3Φ - / 1Φ 0.3
	Heating (Nominal)	kW	3Φ - / 1Φ 0.3	3Φ - / 1Φ 0.3
	Cooling (Max)	kW	3Φ - / 1Φ 0.3	3Φ - / 1Φ 0.3
	Heating (Max)	kW	3Φ 6.0 / 1Φ 0.3	3Φ 6.0 / 1Φ 0.3
Current Input	Cooling (Nominal)	A	3Φ - / 1Φ 1.3	3Φ - / 1Φ 1.3
	Heating (Nominal)	A	3Φ - / 1Φ 1.3	3Φ - / 1Φ 1.3
	Cooling (Max)	A	3Φ - / 1Φ 1.3	3Φ - / 1Φ 1.3
	Heating (Max)	A	3Φ 8.7 / 1Φ 1.3	3Φ 8.7 / 1Φ 1.3
Field Wiring	MCA	A	3Φ 8.7 / 1Φ 1.3	3Φ 8.7 / 1Φ 1.3
	MFA	A	3Φ 10.9 / 1Φ 1.6	3Φ 10.9 / 1Φ 1.6
Heating up time		hh:mm	01:26	00:53
Water Heating	Declared load profile	-	L	L
	Energy efficiency Class	-	A+	A+
Connections	Water Flow Rate (Std)	Heating	LPM	23.1
		Cooling	LPM	23.1
	Water Flow Rate	Min	LPM	7
		Max	LPM	48
	Water Pressure (Max)		bar	3.0
	Water pipe (To outdoor unit)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Space heating) (Zone 1)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Space heating) (Zone 2)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (DHW)	Type	-	Straight pipe
		Inlet	Φ, mm	22
		Outlet	Φ, mm	22
	Water pipe (Secondary water)	Type	-	Straight pipe
		Inlet	Φ, mm	22
	Leaving Water Temperature	Heating Min.	°C	15
		Heating Max.	°C	75
		Cooling Min.	°C	5
		Cooling Max.	°C	25
DHW Tank	Nominal Water Volume		liter	200
	Net Water Volume		liter	194
	Material		-	SUS 316L
	Max. water pressure		bar	10
	Max. water temperature		°C	70
	Insulation		-	Inner EPP+VIP+Outer EPS

3. Indoor units

3-1. Specifications

ClimateHub, 2 Zone

Model Name		Indoor Unit		AE200DNXMPK/EU	AE200DNXMPK/EU
		Outdoor Unit		AE080CXYDGK/EU	AE120CXYDGK/EU
Water Pump	Type	-		BLDC Inv	BLDC Inv
	Motor Input	W		95	95
	Number of Unit	EA		2	2
	Max static pressure	mAq		9.0	9.0
Backup Heater	Power	kW		3Φ 6kW	3Φ 6kW
	Thermostat (Thermal Fuse)	°C		98 +0 -5	98 +0 -5
Safety device	Pressure relief valve	bar		2.9	2.9
	Flow Sensor	LPM		5~60	5~60
	Temperature & Pressure relief valve	bar, °C		10bar, 90°C	10bar, 90°C
Expansion vessel	Internal water volume	liter		10	10
	Max. Working pressure	MPa		0.3	0.3
	Initial Charging pressure	MPa		0.12	0.12
IP Class		-		IPX1	IPX1
Air Purge Valve		Φ, inch		BSPP male 3/8"	BSPP male 3/8"
Sound Level	Sound Pressure Level	Heating	dB(A)	28	30
		Cooling	dB(A)	28	30
	Sound Power Level	Heating	dB(A)	42	44
Casing	Color	-		GREIGE	GREIGE
	Material	-		PCM	PCM
Packing	Material	-		EPS/BOX/Pallet	EPS/BOX/Pallet
	Packing Weight	kg		9.6	9.6
External Dimension	Net Weight		kg	139.0	139.0
	Shipping Weight		kg	150.5	150.5
	Net Dimensions	Width	mm	598	598
		Height	mm	1,850	1,850
		Depth	mm	600	600
	Shipping Dimensions	Width	mm	676	676
		Height	mm	2,050	2,050
		Depth	mm	740	740

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

ClimateHub, 2 Zone

Model Name		Indoor Unit	AE200DNXMPK/EU	AE200DNXMPK/EU
		Outdoor Unit	AE160CXYDGK/EU	AE080BXYDEG/EU
Mode		-	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz	3, 4, 380-415, 50	1, 2, 220-240, 50
Power input	Cooling (Nominal)	kW	3Φ - / 1Φ 0.3	0.3
	Heating (Nominal)	kW	3Φ - / 1Φ 0.3	0.3
	Cooling (Max)	kW	3Φ - / 1Φ 0.3	0.3
	Heating (Max)	kW	3Φ 6.0 / 1Φ 0.3	4.3
Current Input	Cooling (Nominal)	A	3Φ - / 1Φ 1.3	1.3
	Heating (Nominal)	A	3Φ - / 1Φ 1.3	1.3
	Cooling (Max)	A	3Φ - / 1Φ 1.3	1.3
	Heating (Max)	A	3Φ 8.7 / 1Φ 1.3	18.7
Field Wiring	MCA	A	3Φ 8.7 / 1Φ 1.3	18.7
	MFA	A	3Φ 10.9 / 1Φ 1.6	23.4
Heating up time		hh:mm	00:53	01:32
Water Heating	Declared load profile	-	L	L
	Energy efficiency Class	-	A+	A+
Connections	Water Flow Rate (Std)	Heating	LPM	46.2
		Cooling	LPM	40.4
	Water Flow Rate	Min	LPM	7
		Max	LPM	58
	Water Pressure (Max)		bar	3.0
	Water pipe (To outdoor unit)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Space heating) (Zone 1)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Space heating) (Zone 2)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (DHW)	Type	-	Straight pipe
		Inlet	Φ, mm	22
		Outlet	Φ, mm	22
	Water pipe (Secondary water)	Type	-	Straight pipe
		Inlet	Φ, mm	22
	Leaving Water Temperature	Heating Min.	°C	15
		Heating Max.	°C	75
		Cooling Min.	°C	5
		Cooling Max.	°C	25
DHW Tank	Nominal Water Volume		liter	200
	Net Water Volume		liter	194
	Material		-	SUS 316L
	Max. water pressure		bar	10
	Max. water temperature		°C	70
	Insulation		-	Inner EPP+VIP+Outer EPS

3. Indoor units

3-1. Specifications

ClimateHub, 2 Zone

Model Name		Indoor Unit		AE200DNXMPPK/EU	AE200DNXMPPK/EU
		Outdoor Unit		AE160CXYDGK/EU	AE080BXYDEG/EU
Water Pump	Type	-		BLDC Inv	BLDC Inv
	Motor Input	W		95	95
	Number of Unit	EA		2	2
	Max static pressure	mAq		9.0	9.0
Backup Heater	Power	kW		3Φ 6kW	1Φ 2/4kW
	Thermostat (Thermal Fuse)	°C		98 +0 -5	98 +0 -5
Safety device	Pressure relief valve	bar		2.9	2.9
	Flow Sensor	LPM		5~60	5~60
	Temperature & Pressure relief valve	bar, °C		10bar, 90°C	10bar, 90°C
Expansion vessel	Internal water volume	liter		10	10
	Max. Working pressure	MPa		0.3	0.3
	Initial Charging pressure	MPa		0.12	0.12
IP Class		-		IPX1	IPX1
Air Purge Valve		Φ, inch		BSPP male 3/8"	BSPP male 3/8"
Sound Level	Sound Pressure Level	Heating	dB(A)	30	28
		Cooling	dB(A)	30	28
	Sound Power Level	Heating	dB(A)	44	42
Casing	Color	-		GREIGE	GREIGE
	Material	-		PCM	PCM
Packing	Material	-		EPS/BOX/Pallet	EPS/BOX/Pallet
	Packing Weight	kg		9.6	9.6
External Dimension	Net Weight		kg	139.0	139.0
	Shipping Weight		kg	150.5	150.5
	Net Dimensions	Width	mm	598	598
		Height	mm	1,850	1,850
		Depth	mm	600	600
	Shipping Dimensions	Width	mm	676	676
		Height	mm	2,050	2,050
		Depth	mm	740	740

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

ClimateHub, 2 Zone

Model Name		Indoor Unit		AE200DNXMPK/EU	AE200DNXMPK/EU
		Outdoor Unit		AE120BXYDEG/EU	AE140BXYDEG/EU
Mode		-		Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz		1, 2, 220-240, 50	1, 2, 220-240, 50
Power input	Cooling (Nominal)	kW		0.3	0.3
	Heating (Nominal)	kW		0.3	0.3
	Cooling (Max)	kW		0.3	0.3
	Heating (Max)	kW		4.3	4.3
Current Input	Cooling (Nominal)	A		1.3	1.3
	Heating (Nominal)	A		1.3	1.3
	Cooling (Max)	A		1.3	1.3
	Heating (Max)	A		18.7	18.7
Field Wiring	MCA	A		18.7	18.7
	MFA	A		23.4	23.4
Heating up time		hh:mm		01:03	01:03
Water Heating	Declared load profile	-		L	L
	Energy efficiency Class	-		A+	A+
Connections	Water Flow Rate (Std)	Heating	LPM	34.6	34.6
		Cooling	LPM	34.6	34.6
	Water Flow Rate	Min	LPM	7	7
		Max	LPM	58	58
	Water Pressure (Max)		bar	3.0	3.0
	Water pipe (To outdoor unit)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 1)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 2)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (DHW)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	22	22
		Outlet	Φ, mm	22	22
	Water pipe (Secondary water)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	22	22
	Leaving Water Temperature	Heating Min.	°C	15	15
		Heating Max.	°C	70	70
		Cooling Min.	°C	5	5
		Cooling Max.	°C	25	25
DHW Tank	Nominal Water Volume		liter	200	200
	Net Water Volume		liter	194	194
	Material		-	SUS 316L	SUS 316L
	Max. water pressure		bar	10	10
	Max. water temperature		°C	70	70
	Insulation		-	Inner EPP+VIP+Outer EPS	Inner EPP+VIP+Outer EPS

3. Indoor units

3-1. Specifications

ClimateHub, 2 Zone

Model Name		Indoor Unit		AE200DNXMPK/EU	AE200DNXMPK/EU
		Outdoor Unit		AE120BXYDEG/EU	AE140BXYDEG/EU
Water Pump	Type	-		BLDC Inv	BLDC Inv
	Motor Input	W		95	95
	Number of Unit	EA		2	2
	Max static pressure	mAq		9.0	9.0
Backup Heater	Power	kW		1Φ 2/4kW	1Φ 2/4kW
	Thermostat (Thermal Fuse)	°C		98 +0 -5	98 +0 -5
Safety device	Pressure relief valve	bar		2.9	2.9
	Flow Sensor	LPM		5~60	5~60
	Temperature & Pressure relief valve	bar, °C		10bar, 90°C	10bar, 90°C
Expansion vessel	Internal water volume	liter		10	10
	Max. Working pressure	MPa		0.3	0.3
	Initial Charging pressure	MPa		0.12	0.12
IP Class		-		IPX1	IPX1
Air Purge Valve		Φ, inch		BSPP male 3/8"	BSPP male 3/8"
Sound Level	Sound Pressure Level	Heating	dB(A)	30	30
		Cooling	dB(A)	30	30
	Sound Power Level	Heating	dB(A)	44	44
Casing	Color	-		GREIGE	GREIGE
	Material	-		PCM	PCM
Packing	Material	-		EPS/BOX/Pallet	EPS/BOX/Pallet
	Packing Weight	kg		9.6	9.6
External Dimension	Net Weight		kg	139.0	139.0
	Shipping Weight		kg	150.5	150.5
	Net Dimensions	Width	mm	598	598
		Height	mm	1,850	1,850
		Depth	mm	600	600
	Shipping Dimensions	Width	mm	676	676
		Height	mm	2,050	2,050
		Depth	mm	740	740

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

ClimateHub, 2 Zone

Model Name		Indoor Unit	AE200DNXMPK/EU	AE200DNXMPK/EU
		Outdoor Unit	AE080BXYDGG/EU	AE120BXYDGG/EU
Mode		-	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz	3, 4, 380-415, 50	3, 4, 380-415, 50
Power input	Cooling (Nominal)	kW	3Φ - / 1Φ 0.3	3Φ - / 1Φ 0.3
	Heating (Nominal)	kW	3Φ - / 1Φ 0.3	3Φ - / 1Φ 0.3
	Cooling (Max)	kW	3Φ - / 1Φ 0.3	3Φ - / 1Φ 0.3
	Heating (Max)	kW	3Φ 6.0 / 1Φ 0.3	3Φ 6.0 / 1Φ 0.3
Current Input	Cooling (Nominal)	A	3Φ - / 1Φ 1.3	3Φ - / 1Φ 1.3
	Heating (Nominal)	A	3Φ - / 1Φ 1.3	3Φ - / 1Φ 1.3
	Cooling (Max)	A	3Φ - / 1Φ 1.3	3Φ - / 1Φ 1.3
	Heating (Max)	A	3Φ 8.7 / 1Φ 1.3	3Φ 8.7 / 1Φ 1.3
Field Wiring	MCA	A	3Φ 8.7 / 1Φ 1.3	3Φ 8.7 / 1Φ 1.3
	MFA	A	3Φ 10.9 / 1Φ 1.6	3Φ 10.9 / 1Φ 1.6
Heating up time		hh:mm	01:32	01:03
Water Heating	Declared load profile	-	L	L
	Energy efficiency Class	-	A+	A+
Connections	Water Flow Rate (Std)	Heating	LPM	23.1
		Cooling	LPM	23.1
	Water Flow Rate	Min	LPM	7
		Max	LPM	48
	Water Pressure (Max)		bar	3.0
	Water pipe (To outdoor unit)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Space heating) (Zone 1)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Space heating) (Zone 2)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (DHW)	Type	-	Straight pipe
		Inlet	Φ, mm	22
		Outlet	Φ, mm	22
	Water pipe (Secondary water)	Type	-	Straight pipe
		Inlet	Φ, mm	22
		Outlet	Φ, mm	22
	Leaving Water Temperature	Heating Min.	°C	15
		Heating Max.	°C	70
		Cooling Min.	°C	5
		Cooling Max.	°C	25
DHW Tank	Nominal Water Volume		liter	200
	Net Water Volume		liter	194
	Material		-	SUS 316L
	Max. water pressure		bar	10
	Max. water temperature		°C	70
	Insulation		-	Inner EPP+VIP+Outer EPS

3. Indoor units

3-1. Specifications

ClimateHub, 2 Zone

Model Name		Indoor Unit		AE200DNXMPK/EU	AE200DNXMPK/EU
		Outdoor Unit		AE080BXYDGG/EU	AE120BXYDGG/EU
Water Pump	Type	-		BLDC Inv	BLDC Inv
	Motor Input	W		95	95
	Number of Unit	EA		2	2
	Max static pressure	mAq		9.0	9.0
Backup Heater	Power	kW		3Φ 6kW	3Φ 6kW
	Thermostat (Thermal Fuse)	°C		98 +0 -5	98 +0 -5
Safety device	Pressure relief valve	bar		2.9	2.9
	Flow Sensor	LPM		5~60	5~60
	Temperature & Pressure relief valve	bar, °C		10bar, 90°C	10bar, 90°C
Expansion vessel	Internal water volume	liter		10	10
	Max. Working pressure	MPa		0.3	0.3
	Initial Charging pressure	MPa		0.12	0.12
IP Class		-		IPX1	IPX1
Air Purge Valve		Φ, inch		BSPP male 3/8"	BSPP male 3/8"
Sound Level	Sound Pressure Level	Heating	dB(A)	28	30
		Cooling	dB(A)	28	30
	Sound Power Level	Heating	dB(A)	42	44
Casing	Color	-		GREIGE	GREIGE
	Material	-		PCM	PCM
Packing	Material	-		EPS/BOX/Pallet	EPS/BOX/Pallet
	Packing Weight	kg		9.6	9.6
External Dimension	Net Weight		kg	139.0	139.0
	Shipping Weight		kg	150.5	150.5
	Net Dimensions	Width	mm	598	598
		Height	mm	1,850	1,850
		Depth	mm	600	600
	Shipping Dimensions	Width	mm	676	676
		Height	mm	2,050	2,050
		Depth	mm	740	740

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

ClimateHub, 2 Zone

Model Name		Indoor Unit	AE200DNXMPK/EU	AE200DNXMPK/EU
		Outdoor Unit	AE140BXYDGG/EU	AE050RXYDEG/EU
Mode		-	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz	3, 4, 380-415, 50	1, 2, 220-240, 50
Power input	Cooling (Nominal)	kW	3Φ - / 1Φ 0.3	0.3
	Heating (Nominal)	kW	3Φ - / 1Φ 0.3	0.3
	Cooling (Max)	kW	3Φ - / 1Φ 0.3	0.3
	Heating (Max)	kW	3Φ 6.0 / 1Φ 0.3	4.3
Current Input	Cooling (Nominal)	A	3Φ - / 1Φ 1.3	1.3
	Heating (Nominal)	A	3Φ - / 1Φ 1.3	1.3
	Cooling (Max)	A	3Φ - / 1Φ 1.3	1.3
	Heating (Max)	A	3Φ 8.7 / 1Φ 1.3	18.7
Field Wiring	MCA	A	3Φ 8.7 / 1Φ 1.3	18.7
	MFA	A	3Φ 10.9 / 1Φ 1.6	23.4
Heating up time		hh:mm	01:03	02:12
Water Heating	Declared load profile	-	L	L
	Energy efficiency Class	-	A+	A+
Connections	Water Flow Rate (Std)	Heating	LPM	34.6
		Cooling	LPM	34.6
	Water Flow Rate	Min	LPM	7
		Max	LPM	58
	Water Pressure (Max)		bar	3.0
	Water pipe (To outdoor unit)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Space heating) (Zone 1)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Space heating) (Zone 2)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (DHW)	Type	-	Straight pipe
		Inlet	Φ, mm	22
		Outlet	Φ, mm	22
	Water pipe (Secondary water)	Type	-	Straight pipe
		Inlet	Φ, mm	22
	Leaving Water Temperature	Heating Min.	°C	15
		Heating Max.	°C	70
		Cooling Min.	°C	5
		Cooling Max.	°C	25
DHW Tank	Nominal Water Volume		liter	200
	Net Water Volume		liter	194
	Material		-	SUS 316L
	Max. water pressure		bar	10
	Max. water temperature		°C	70
	Insulation		-	Inner EPP+VIP+Outer EPS

3. Indoor units

3-1. Specifications

ClimateHub, 2 Zone

Model Name		Indoor Unit		AE200DNXMPPK/EU	AE200DNXMPPK/EU
		Outdoor Unit		AE140BXYDGG/EU	AE050RXYDEG/EU
Water Pump	Type	-		BLDC Inv	BLDC Inv
	Motor Input	W		95	95
	Number of Unit	EA		2	2
	Max static pressure	mEq		9.0	9.0
Backup Heater	Power	kW		3Φ 6kW	1Φ 2/4kW
	Thermostat (Thermal Fuse)	°C		98 +0 -5	98 +0 -5
Safety device	Pressure relief valve	bar		2.9	2.9
	Flow Sensor	LPM		5~60	5~60
	Temperature & Pressure relief valve	bar, °C		10bar, 90°C	10bar, 90°C
Expansion vessel	Internal water volume	liter		10	10
	Max. Working pressure	MPa		0.3	0.3
	Initial Charging pressure	MPa		0.12	0.12
IP Class		-		IPX1	IPX1
Air Purge Valve		Φ, inch		BSPP male 3/8"	BSPP male 3/8"
Sound Level	Sound Pressure Level	Heating	dB(A)	30	28
		Cooling	dB(A)	30	28
	Sound Power Level	Heating	dB(A)	44	42
Casing	Color	-		GREIGE	GREIGE
	Material	-		PCM	PCM
Packing	Material	-		EPS/BOX/Pallet	EPS/BOX/Pallet
	Packing Weight	kg		9.6	9.6
External Dimension	Net Weight		kg	139.0	139.0
	Shipping Weight		kg	150.5	150.5
	Net Dimensions	Width	mm	598	598
		Height	mm	1,850	1,850
		Depth	mm	600	600
	Shipping Dimensions	Width	mm	676	676
		Height	mm	2,050	2,050
		Depth	mm	740	740

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

ClimateHub, 2 Zone

Model Name		Indoor Unit		AE200DNXMPK/EU	AE200DNXMPK/EU
		Outdoor Unit		AE080RXYDEG/EU	AE120RXYDEG/EU
Mode		-		Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz		1, 2, 220-240, 50	1, 2, 220-240, 50
Power input	Cooling (Nominal)	kW		0.3	0.3
	Heating (Nominal)	kW		0.3	0.3
	Cooling (Max)	kW		0.3	0.3
	Heating (Max)	kW		4.3	4.3
Current Input	Cooling (Nominal)	A		1.3	1.3
	Heating (Nominal)	A		1.3	1.3
	Cooling (Max)	A		1.3	1.3
	Heating (Max)	A		18.7	18.7
Field Wiring	MCA	A		18.7	18.7
	MFA	A		23.4	23.4
Heating up time		hh:mm		01:22	00:42
Water Heating	Declared load profile	-		L	L
	Energy efficiency Class	-		A+	A+
Connections	Water Flow Rate (Std)	Heating	LPM	23.1	34.6
		Cooling	LPM	21.6	34.6
	Water Flow Rate	Min	LPM	7	12
		Max	LPM	48	58
	Water Pressure (Max)		bar	3.0	3.0
	Water pipe (To outdoor unit)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 1)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 2)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (DHW)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	22	22
		Outlet	Φ, mm	22	22
	Water pipe (Secondary water)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	22	22
	Leaving Water Temperature	Heating Min.	°C	15	15
		Heating Max.	°C	65	65
		Cooling Min.	°C	5	5
		Cooling Max.	°C	25	25
DHW Tank	Nominal Water Volume		liter	200	200
	Net Water Volume		liter	194	194
	Material		-	SUS 316L	SUS 316L
	Max. water pressure		bar	10	10
	Max. water temperature		°C	70	70
	Insulation		-	Inner EPP+VIP+Outer EPS	Inner EPP+VIP+Outer EPS

3. Indoor units

3-1. Specifications

ClimateHub, 2 Zone

Model Name		Indoor Unit		AE200DNXMPPK/EU	AE200DNXMPPK/EU
		Outdoor Unit		AE080RXYDEG/EU	AE120RXYDEG/EU
Water Pump	Type	-		BLDC Inv	BLDC Inv
	Motor Input	W		95	95
	Number of Unit	EA		2	2
	Max static pressure	mEq		9.0	9.0
Backup Heater	Power	kW		1Φ 2/4kW	1Φ 2/4kW
	Thermostat (Thermal Fuse)	°C		98 +0 -5	98 +0 -5
Safety device	Pressure relief valve	bar		2.9	2.9
	Flow Sensor	LPM		5~60	5~60
	Temperature & Pressure relief valve	bar, °C		10bar, 90°C	10bar, 90°C
Expansion vessel	Internal water volume	liter		10	10
	Max. Working pressure	MPa		0.3	0.3
	Initial Charging pressure	MPa		0.12	0.12
IP Class		-		IPX1	IPX1
Air Purge Valve		Φ, inch		BSPP male 3/8"	BSPP male 3/8"
Sound Level	Sound Pressure Level	Heating	dB(A)	28	30
		Cooling	dB(A)	28	30
	Sound Power Level	Heating	dB(A)	42	44
Casing	Color	-		GREIGE	GREIGE
	Material	-		PCM	PCM
Packing	Material	-		EPS/BOX/Pallet	EPS/BOX/Pallet
	Packing Weight	kg		9.6	9.6
External Dimension	Net Weight		kg	139.0	139.0
	Shipping Weight		kg	150.5	150.5
	Net Dimensions	Width	mm	598	598
		Height	mm	1,850	1,850
		Depth	mm	600	600
	Shipping Dimensions	Width	mm	676	676
		Height	mm	2,050	2,050
		Depth	mm	740	740

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

ClimateHub, 2 Zone

Model Name		Indoor Unit	AE200DNXMPK/EU	AE200DNXMPK/EU
		Outdoor Unit	AE160RXYDEG/EU	AE080RXYDGG/EU
Mode		-	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz	1, 2, 220-240, 50	3, 4, 380-415, 50
Power input	Cooling (Nominal)	kW	0.3	3Φ - / 1Φ 0.3
	Heating (Nominal)	kW	0.3	3Φ - / 1Φ 0.3
	Cooling (Max)	kW	0.3	3Φ - / 1Φ 0.3
	Heating (Max)	kW	4.3	3Φ 6.0 / 1Φ 0.3
Current Input	Cooling (Nominal)	A	1.3	3Φ - / 1Φ 1.3
	Heating (Nominal)	A	1.3	3Φ - / 1Φ 1.3
	Cooling (Max)	A	1.3	3Φ - / 1Φ 1.3
	Heating (Max)	A	18.7	3Φ 8.7 / 1Φ 1.3
Field Wiring	MCA	A	18.7	3Φ 8.7 / 1Φ 1.3
	MFA	A	23.4	3Φ 10.9 / 1Φ 1.6
Heating up time		hh:mm	00:42	01:22
Water Heating	Declared load profile	-	L	L
	Energy efficiency Class	-	A+	A+
Connections	Water Flow Rate (Std)	Heating	LPM	46.2
		Cooling	LPM	40.4
	Water Flow Rate	Min	LPM	12
		Max	LPM	58
	Water Pressure (Max)		bar	3.0
	Water pipe (To outdoor unit)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Space heating) (Zone 1)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Space heating) (Zone 2)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (DHW)	Type	-	Straight pipe
		Inlet	Φ, mm	22
		Outlet	Φ, mm	22
	Water pipe (Secondary water)	Type	-	Straight pipe
		Inlet	Φ, mm	22
	Leaving Water Temperature	Heating Min.	°C	15
		Heating Max.	°C	65
		Cooling Min.	°C	5
		Cooling Max.	°C	25
DHW Tank	Nominal Water Volume		liter	200
	Net Water Volume		liter	194
	Material		-	SUS 316L
	Max. water pressure		bar	10
	Max. water temperature		°C	70
	Insulation		-	Inner EPP+VIP+Outer EPS

3. Indoor units

3-1. Specifications

ClimateHub, 2 Zone

Model Name		Indoor Unit		AE200DNXMPK/EU	AE200DNXMPK/EU
		Outdoor Unit		AE160RXYDEG/EU	AE080RXYDGG/EU
Water Pump	Type	-		BLDC Inv	BLDC Inv
	Motor Input	W		95	95
	Number of Unit	EA		2	2
	Max static pressure	mAq		9.0	9.0
Backup Heater	Power	kW		1Φ 2/4kW	3Φ 6kW
	Thermostat (Thermal Fuse)	°C		98 +0 -5	98 +0 -5
Safety device	Pressure relief valve	bar		2.9	2.9
	Flow Sensor	LPM		5~60	5~60
	Temperature & Pressure relief valve	bar, °C		10bar, 90°C	10bar, 90°C
Expansion vessel	Internal water volume	liter		10	10
	Max. Working pressure	MPa		0.3	0.3
	Initial Charging pressure	MPa		0.12	0.12
IP Class		-		IPX1	IPX1
Air Purge Valve		Φ, inch		BSPP male 3/8"	BSPP male 3/8"
Sound Level	Sound Pressure Level	Heating	dB(A)	30	28
		Cooling	dB(A)	30	28
	Sound Power Level	Heating	dB(A)	44	42
Casing	Color	-		GREIGE	GREIGE
	Material	-		PCM	PCM
Packing	Material	-		EPS/BOX/Pallet	EPS/BOX/Pallet
	Packing Weight	kg		9.6	9.6
External Dimension	Net Weight		kg	139.0	139.0
	Shipping Weight		kg	150.5	150.5
	Net Dimensions	Width	mm	598	598
		Height	mm	1,850	1,850
		Depth	mm	600	600
	Shipping Dimensions	Width	mm	676	676
		Height	mm	2,050	2,050
		Depth	mm	740	740

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

ClimateHub, 2 Zone

Model Name		Indoor Unit	AE200DNXMPK/EU	AE200DNXMPK/EU
		Outdoor Unit	AE120RXYDGG/EU	AE160RXYDGG/EU
Mode		-	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz	3, 4, 380-415, 50	3, 4, 380-415, 50
Power input	Cooling (Nominal)	kW	3Φ - / 1Φ 0.3	3Φ - / 1Φ 0.3
	Heating (Nominal)	kW	3Φ - / 1Φ 0.3	3Φ - / 1Φ 0.3
	Cooling (Max)	kW	3Φ - / 1Φ 0.3	3Φ - / 1Φ 0.3
	Heating (Max)	kW	3Φ 6.0 / 1Φ 0.3	3Φ 6.0 / 1Φ 0.3
Current Input	Cooling (Nominal)	A	3Φ - / 1Φ 1.3	3Φ - / 1Φ 1.3
	Heating (Nominal)	A	3Φ - / 1Φ 1.3	3Φ - / 1Φ 1.3
	Cooling (Max)	A	3Φ - / 1Φ 1.3	3Φ - / 1Φ 1.3
	Heating (Max)	A	3Φ 8.7 / 1Φ 1.3	3Φ 8.7 / 1Φ 1.3
Field Wiring	MCA	A	3Φ 8.7 / 1Φ 1.3	3Φ 8.7 / 1Φ 1.3
	MFA	A	3Φ 10.9 / 1Φ 1.6	3Φ 10.9 / 1Φ 1.6
Heating up time		hh:mm	00:42	00:42
Water Heating	Declared load profile	-	L	L
	Energy efficiency Class	-	A+	A+
Connections	Water Flow Rate (Std)	Heating	LPM	34.6
		Cooling	LPM	40.4
	Water Flow Rate	Min	LPM	12
		Max	LPM	58
	Water Pressure (Max)		bar	3.0
	Water pipe (To outdoor unit)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Space heating) (Zone 1)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Space heating) (Zone 2)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (DHW)	Type	-	Straight pipe
		Inlet	Φ, mm	22
		Outlet	Φ, mm	22
	Water pipe (Secondary water)	Type	-	Straight pipe
		Inlet	Φ, mm	22
	Leaving Water Temperature	Heating Min.	°C	15
		Heating Max.	°C	65
		Cooling Min.	°C	5
		Cooling Max.	°C	25
DHW Tank	Nominal Water Volume		liter	200
	Net Water Volume		liter	194
	Material		-	SUS 316L
	Max. water pressure		bar	10
	Max. water temperature		°C	70
	Insulation		-	Inner EPP+VIP+Outer EPS

3. Indoor units

3-1. Specifications

ClimateHub, 2 Zone

Model Name		Indoor Unit		AE200DNXMPK/EU	AE200DNXMPK/EU
		Outdoor Unit		AE120RXYDGG/EU	AE160RXYDGG/EU
Water Pump	Type	-		BLDC Inv	BLDC Inv
	Motor Input	W		95	95
	Number of Unit	EA		2	2
	Max static pressure	mAq		9.0	9.0
Backup Heater	Power	kW		3Φ 6kW	3Φ 6kW
	Thermostat (Thermal Fuse)	°C		98 +0 -5	98 +0 -5
Safety device	Pressure relief valve	bar		2.9	2.9
	Flow Sensor	LPM		5~60	5~60
	Temperature & Pressure relief valve	bar, °C		10bar, 90°C	10bar, 90°C
Expansion vessel	Internal water volume	liter		10	10
	Max. Working pressure	MPa		0.3	0.3
	Initial Charging pressure	MPa		0.12	0.12
IP Class		-		IPX1	IPX1
Air Purge Valve		Φ, inch		BSPP male 3/8"	BSPP male 3/8"
Sound Level	Sound Pressure Level	Heating	dB(A)	30	30
		Cooling	dB(A)	30	30
	Sound Power Level	Heating	dB(A)	44	44
Casing	Color	-		GREIGE	GREIGE
	Material	-		PCM	PCM
Packing	Material	-		EPS/BOX/Pallet	EPS/BOX/Pallet
	Packing Weight	kg		9.6	9.6
External Dimension	Net Weight		kg	139.0	139.0
	Shipping Weight		kg	150.5	150.5
	Net Dimensions	Width	mm	598	598
		Height	mm	1,850	1,850
		Depth	mm	600	600
	Shipping Dimensions	Width	mm	676	676
		Height	mm	2,050	2,050
		Depth	mm	740	740

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

ClimateHub

Model Name		Indoor Unit	AE200DNWMPK/EU	AE200DNWMPK/EU
		Outdoor Unit	AE050CXYDEK/EU	AE080CXYDEK/EU
Mode		-	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50
Power input	Cooling (Nominal)	kW	0.2	0.2
	Heating (Nominal)	kW	0.2	0.2
	Cooling (Max)	kW	0.2	0.2
	Heating (Max)	kW	4.2	4.2
Current Input	Cooling (Nominal)	A	0.9	0.9
	Heating (Nominal)	A	0.9	0.9
	Cooling (Max)	A	0.9	0.9
	Heating (Max)	A	18.3	18.3
Field Wiring	MCA	A	18.3	18.3
	MFA	A	22.9	22.9
Heating up time		hh:mm	02:25	01:26
Water Heating	Declared load profile	-	L	L
	Energy efficiency Class	-	A+	A+
Connections	Water Flow Rate (Std)	Heating	LPM	23.1
		Cooling	LPM	23.1
	Water Flow Rate	Min	LPM	7
		Max	LPM	48
	Water Pressure (Max)		bar	3.0
	Water pipe (To outdoor unit)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Space heating) (Zone 1)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (DHW)	Type	-	Straight pipe
		Inlet	Φ, mm	22
		Outlet	Φ, mm	22
	Water pipe (Secondary water)	Type	-	Straight pipe
		Inlet	Φ, mm	22
		Outlet	Φ, mm	22
	Leaving Water Temperature	Heating Min.	°C	15
		Heating Max.	°C	75
		Cooling Min.	°C	5
		Cooling Max.	°C	25
DHW Tank	Nominal Water Volume		liter	200
	Net Water Volume		liter	194
	Material		-	SUS 316L
	Max. water pressure		bar	10
	Max. water temperature		°C	70
	Insulation		-	Inner EPP+VIP+Outer EPS
Water Pump	Type		-	BLDC Inv
	Motor Input		W	95
	Number of Unit		EA	1
	Max static pressure		mAq	9.0
Backup Heater	Power		kW	1Φ 2/4kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5

3. Indoor units

3-1. Specifications

ClimateHub

Model Name			Indoor Unit		AE200DNWMPK/EU		AE200DNWMPK/EU	
			Outdoor Unit		AE050CXYDEK/EU		AE080CXYDEK/EU	
Safety device	Pressure relief valve			bar	2.9		2.9	
	Flow Sensor			LPM	5~60		5~60	
	Temperature & Pressure relief valve			bar, °C	10bar, 90°C		10bar, 90°C	
Expansion vessel	Internal water volume			liter	10		10	
	Max. Working pressure			MPa	0.3		0.3	
	Initial Charging pressure			MPa	0.12		0.12	
IP Class				-	IPX1		IPX1	
Air Purge Valve				Φ, inch	BSPP male 3/8"		BSPP male 3/8"	
Sound Level	Sound Pressure Level	Heating	dB(A)	26		26		
		Cooling	dB(A)	26		26		
	Sound Power Level	Heating	dB(A)	40		40		
Casing	Color			-	GREIGE		GREIGE	
	Material			-	PCM		PCM	
Packing	Material			-	EPS/BOX/Pallet		EPS/BOX/Pallet	
	Packing Weight			kg	9.6		9.6	
External Dimension	Net Weight			kg	132.0		132.0	
	Shipping Weight			kg	144.0		144.0	
	Net Dimensions	Width	mm	598		598		
		Height	mm	1,850		1,850		
		Depth	mm	600		600		
	Shipping Dimensions	Width	mm	676		676		
		Height	mm	2,050		2,050		
		Depth	mm	740		740		

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

ClimateHub

Model Name		Indoor Unit	AE200DNWMPK/EU	AE200DNWMPK/EU
		Outdoor Unit	AE120CXYDEK/EU	AE160CXYDEK/EU
Mode		-	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50
Power input	Cooling (Nominal)	kW	0.2	0.2
	Heating (Nominal)	kW	0.2	0.2
	Cooling (Max)	kW	0.2	0.2
	Heating (Max)	kW	4.2	4.2
Current Input	Cooling (Nominal)	A	0.9	0.9
	Heating (Nominal)	A	0.9	0.9
	Cooling (Max)	A	0.9	0.9
	Heating (Max)	A	18.3	18.3
Field	MCA	A	18.3	18.3
Wiring	MFA	A	22.9	22.9
Heating up time		hh:mm	00:53	00:53
Water Heating	Declared load profile	-	L	L
	Energy efficiency Class	-	A+	A+
Connections	Water Flow Rate (Std)	Heating	LPM	34.6
		Cooling	LPM	40.4
	Water Flow Rate	Min	LPM	7
		Max	LPM	58
	Water Pressure (Max)		bar	3.0
	Water pipe (To outdoor unit)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Space heating) (Zone 1)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (DHW)	Type	-	Straight pipe
		Inlet	Φ, mm	22
		Outlet	Φ, mm	22
	Water pipe (Secondary water)	Type	-	Straight pipe
		Inlet	Φ, mm	22
		Outlet	Φ, mm	22
	Leaving Water Temperature	Heating Min.	°C	15
		Heating Max.	°C	75
		Cooling Min.	°C	5
		Cooling Max.	°C	25
DHW Tank	Nominal Water Volume		liter	200
	Net Water Volume		liter	194
	Material		-	SUS 316L
	Max. water pressure		bar	10
	Max. water temperature		°C	70
	Insulation		-	Inner EPP+VIP+Outer EPS
Water Pump	Type		-	BLDC Inv
	Motor Input		W	95
	Number of Unit		EA	1
	Max static pressure		mAq	9.0
Backup Heater	Power		kW	1Φ 2/4kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5

3. Indoor units

3-1. Specifications

ClimateHub

Model Name			Indoor Unit		AE200DNWMPK/EU		AE200DNWMPK/EU	
			Outdoor Unit		AE120CXYDEK/EU		AE160CXYDEK/EU	
Safety device	Pressure relief valve			bar	2.9		2.9	
	Flow Sensor			LPM	5~60		5~60	
	Temperature & Pressure relief valve			bar, °C	10bar, 90°C		10bar, 90°C	
Expansion vessel	Internal water volume			liter	10		10	
	Max. Working pressure			MPa	0.3		0.3	
	Initial Charging pressure			MPa	0.12		0.12	
IP Class				-	IPX1		IPX1	
Air Purge Valve				Φ, inch	BSPP male 3/8"		BSPP male 3/8"	
Sound Level	Sound Pressure Level	Heating	dB(A)	28		28		
		Cooling	dB(A)	28		28		
	Sound Power Level	Heating	dB(A)	42		42		
Casing	Color			-	GREIGE		GREIGE	
	Material			-	PCM		PCM	
Packing	Material			-	EPS/BOX/Pallet		EPS/BOX/Pallet	
	Packing Weight			kg	9.6		9.6	
External Dimension	Net Weight			kg	132.0		132.0	
	Shipping Weight			kg	144.0		144.0	
	Net Dimensions	Width	mm	598		598		
		Height	mm	1,850		1,850		
		Depth	mm	600		600		
	Shipping Dimensions	Width	mm	676		676		
		Height	mm	2,050		2,050		
		Depth	mm	740		740		

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

ClimateHub

Model Name		Indoor Unit	AE200DNWMPK/EU	AE200DNWMPK/EU
		Outdoor Unit	AE080CXYDGK/EU	AE120CXYDGK/EU
Mode		-	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz	3, 4, 380-415, 50	3, 4, 380-415, 50
Power input	Cooling (Nominal)	kW	3Φ - / 1Φ 0.2	3Φ - / 1Φ 0.2
	Heating (Nominal)	kW	3Φ - / 1Φ 0.2	3Φ - / 1Φ 0.2
	Cooling (Max)	kW	3Φ - / 1Φ 0.2	3Φ - / 1Φ 0.2
	Heating (Max)	kW	3Φ 6.0 / 1Φ 0.2	3Φ 6.0 / 1Φ 0.2
Current Input	Cooling (Nominal)	A	3Φ - / 1Φ 0.9	3Φ - / 1Φ 0.9
	Heating (Nominal)	A	3Φ - / 1Φ 0.9	3Φ - / 1Φ 0.9
	Cooling (Max)	A	3Φ - / 1Φ 0.9	3Φ - / 1Φ 0.9
	Heating (Max)	A	3Φ 8.7 / 1Φ 0.9	3Φ 8.7 / 1Φ 0.9
Field Wiring	MCA	A	3Φ 8.7 / 1Φ 0.9	3Φ 8.7 / 1Φ 0.9
	MFA	A	3Φ 10.9 / 1Φ 1.2	3Φ 10.9 / 1Φ 1.2
Heating up time		hh:mm	01:26	00:53
Water Heating	Declared load profile	-	L	L
	Energy efficiency Class	-	A+	A+
Connections	Water Flow Rate (Std)	Heating	LPM	23.1
		Cooling	LPM	23.1
	Water Flow Rate	Min	LPM	7
		Max	LPM	48
	Water Pressure (Max)		bar	3.0
	Water pipe (To outdoor unit)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Space heating) (Zone 1)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (DHW)	Type	-	Straight pipe
		Inlet	Φ, mm	22
		Outlet	Φ, mm	22
	Water pipe (Secondary water)	Type	-	Straight pipe
		Inlet	Φ, mm	22
		Outlet	Φ, mm	22
	Leaving Water Temperature	Heating Min.	°C	15
		Heating Max.	°C	75
		Cooling Min.	°C	5
		Cooling Max.	°C	25
DHW Tank	Nominal Water Volume		liter	200
	Net Water Volume		liter	194
	Material		-	SUS 316L
	Max. water pressure		bar	10
	Max. water temperature		°C	70
	Insulation		-	Inner EPP+VIP+Outer EPS
Water Pump	Type		-	BLDC Inv
	Motor Input		W	95
	Number of Unit		EA	1
	Max static pressure		mAq	9.0
Backup Heater	Power		kW	3Φ 6kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5

3. Indoor units

3-1. Specifications

ClimateHub

Model Name			Indoor Unit		AE200DNWMPK/EU		AE200DNWMPK/EU	
			Outdoor Unit		AE080CXYDGK/EU		AE120CXYDGK/EU	
Safety device	Pressure relief valve			bar	2.9		2.9	
	Flow Sensor			LPM	5~60		5~60	
	Temperature & Pressure relief valve			bar, °C	10bar, 90°C		10bar, 90°C	
Expansion vessel	Internal water volume			liter	10		10	
	Max. Working pressure			MPa	0.3		0.3	
	Initial Charging pressure			MPa	0.12		0.12	
IP Class				-	IPX1		IPX1	
Air Purge Valve				Φ, inch	BSPP male 3/8"		BSPP male 3/8"	
Sound Level	Sound Pressure Level	Heating	dB(A)	26		28		
		Cooling	dB(A)	26		28		
	Sound Power Level	Heating	dB(A)	40		42		
Casing	Color			-	GREIGE		GREIGE	
	Material			-	PCM		PCM	
Packing	Material			-	EPS/BOX/Pallet		EPS/BOX/Pallet	
	Packing Weight			kg	9.6		9.6	
External Dimension	Net Weight			kg	132.0		132.0	
	Shipping Weight			kg	144.0		144.0	
	Net Dimensions	Width	mm	598		598		
		Height	mm	1,850		1,850		
		Depth	mm	600		600		
	Shipping Dimensions	Width	mm	676		676		
		Height	mm	2,050		2,050		
		Depth	mm	740		740		

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

ClimateHub

Model Name		Indoor Unit	AE200DNWMPK/EU	AE200DNWMPK/EU
		Outdoor Unit	AE160CXYDGK/EU	AE080BXYDEG/EU
Mode		-	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz	3, 4, 380-415, 50	1, 2, 220-240, 50
Power input	Cooling (Nominal)	kW	3Φ - / 1Φ 0.2	0.2
	Heating (Nominal)	kW	3Φ - / 1Φ 0.2	0.2
	Cooling (Max)	kW	3Φ - / 1Φ 0.2	0.2
	Heating (Max)	kW	3Φ 6.0 / 1Φ 0.2	4.2
Current Input	Cooling (Nominal)	A	3Φ - / 1Φ 0.9	0.9
	Heating (Nominal)	A	3Φ - / 1Φ 0.9	0.9
	Cooling (Max)	A	3Φ - / 1Φ 0.9	0.9
	Heating (Max)	A	3Φ 8.7 / 1Φ 0.9	18.3
Field Wiring	MCA	A	3Φ 8.7 / 1Φ 0.9	18.3
	MFA	A	3Φ 10.9 / 1Φ 1.2	22.9
Heating up time		hh:mm	00:53	01:32
Water Heating	Declared load profile	-	L	L
	Energy efficiency Class	-	A+	A+
Connections	Water Flow Rate (Std)	Heating	LPM	46.2
		Cooling	LPM	40.4
	Water Flow Rate	Min	LPM	7
		Max	LPM	58
	Water Pressure (Max)		bar	3.0
	Water pipe (To outdoor unit)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Space heating) (Zone 1)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (DHW)	Type	-	Straight pipe
		Inlet	Φ, mm	22
		Outlet	Φ, mm	22
	Water pipe (Secondary water)	Type	-	Straight pipe
		Inlet	Φ, mm	22
		Outlet	Φ, mm	22
	Leaving Water Temperature	Heating Min.	°C	15
		Heating Max.	°C	75
		Cooling Min.	°C	5
		Cooling Max.	°C	25
DHW Tank	Nominal Water Volume		liter	200
	Net Water Volume		liter	194
	Material		-	SUS 316L
	Max. water pressure		bar	10
	Max. water temperature		°C	70
	Insulation		-	Inner EPP+VIP+Outer EPS
Water Pump	Type		-	BLDC Inv
	Motor Input		W	95
	Number of Unit		EA	1
	Max static pressure		mAq	9.0
Backup Heater	Power		kW	3Φ 6kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5

3. Indoor units

3-1. Specifications

ClimateHub

Model Name			Indoor Unit		AE200DNWMPK/EU		AE200DNWMPK/EU	
			Outdoor Unit		AE160CXYDGK/EU		AE080BXYDEG/EU	
Safety device	Pressure relief valve			bar	2.9		2.9	
	Flow Sensor			LPM	5~60		5~60	
	Temperature & Pressure relief valve			bar, °C	10bar, 90°C		10bar, 90°C	
Expansion vessel	Internal water volume			liter	10		10	
	Max. Working pressure			MPa	0.3		0.3	
	Initial Charging pressure			MPa	0.12		0.12	
IP Class				-	IPX1		IPX1	
Air Purge Valve				Φ, inch	BSPP male 3/8"		BSPP male 3/8"	
Sound Level	Sound Pressure Level	Heating	dB(A)	28		26		
		Cooling	dB(A)	28		26		
	Sound Power Level	Heating	dB(A)	42		40		
Casing	Color			-	GREIGE		GREIGE	
	Material			-	PCM		PCM	
Packing	Material			-	EPS/BOX/Pallet		EPS/BOX/Pallet	
	Packing Weight			kg	9.6		9.6	
External Dimension	Net Weight			kg	132.0		132.0	
	Shipping Weight			kg	144.0		144.0	
	Net Dimensions	Width	mm	598		598		
		Height	mm	1,850		1,850		
		Depth	mm	600		600		
	Shipping Dimensions	Width	mm	676		676		
		Height	mm	2,050		2,050		
		Depth	mm	740		740		

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

ClimateHub

Model Name		Indoor Unit	AE200DNWMPK/EU	AE200DNWMPK/EU
		Outdoor Unit	AE120BXYDEG/EU	AE140BXYDEG/EU
Mode		-	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50
Power input	Cooling (Nominal)	kW	0.2	0.2
	Heating (Nominal)	kW	0.2	0.2
	Cooling (Max)	kW	0.2	0.2
	Heating (Max)	kW	4.2	4.2
Current Input	Cooling (Nominal)	A	0.9	0.9
	Heating (Nominal)	A	0.9	0.9
	Cooling (Max)	A	0.9	0.9
	Heating (Max)	A	18.3	18.3
Field	MCA	A	18.3	18.3
Wiring	MFA	A	22.9	22.9
Heating up time		hh:mm	01:03	01:03
Water Heating	Declared load profile	-	L	L
	Energy efficiency Class	-	A+	A+
Connections	Water Flow Rate (Std)	Heating	LPM	34.6
		Cooling	LPM	34.6
	Water Flow Rate	Min	LPM	7
		Max	LPM	58
	Water Pressure (Max)		bar	3.0
	Water pipe (To outdoor unit)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Space heating) (Zone 1)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (DHW)	Type	-	Straight pipe
		Inlet	Φ, mm	22
		Outlet	Φ, mm	22
	Water pipe (Secondary water)	Type	-	Straight pipe
		Inlet	Φ, mm	22
		Outlet	Φ, mm	22
	Leaving Water Temperature	Heating Min.	°C	15
		Heating Max.	°C	70
		Cooling Min.	°C	5
		Cooling Max.	°C	25
DHW Tank	Nominal Water Volume		liter	200
	Net Water Volume		liter	194
	Material		-	SUS 316L
	Max. water pressure		bar	10
	Max. water temperature		°C	70
	Insulation		-	Inner EPP+VIP+Outer EPS
Water Pump	Type		-	BLDC Inv
	Motor Input		W	95
	Number of Unit		EA	1
	Max static pressure		mAq	9.0
Backup Heater	Power		kW	1Φ 2/4kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5

3. Indoor units

3-1. Specifications

ClimateHub

Model Name			Indoor Unit		AE200DNWMPK/EU	AE200DNWMPK/EU
			Outdoor Unit		AE120BXYDEG/EU	AE140BXYDEG/EU
Safety device	Pressure relief valve		bar	2.9	2.9	
	Flow Sensor		LPM	5~60	5~60	
	Temperature & Pressure relief valve		bar, °C	10bar, 90°C	10bar, 90°C	
Expansion vessel	Internal water volume		liter	10	10	
	Max. Working pressure		MPa	0.3	0.3	
	Initial Charging pressure		MPa	0.12	0.12	
IP Class			-	IPX1	IPX1	
Air Purge Valve			Φ, inch	BSPP male 3/8"	BSPP male 3/8"	
Sound Level	Sound Pressure Level	Heating	dB(A)	28	28	
		Cooling	dB(A)	28	28	
	Sound Power Level	Heating	dB(A)	42	42	
Casing	Color		-	GREIGE	GREIGE	
	Material		-	PCM	PCM	
Packing	Material		-	EPS/BOX/Pallet	EPS/BOX/Pallet	
	Packing Weight		kg	9.6	9.6	
External Dimension	Net Weight		kg	132.0	132.0	
	Shipping Weight		kg	144.0	144.0	
	Net Dimensions	Width	mm	598	598	
		Height	mm	1,850	1,850	
		Depth	mm	600	600	
	Shipping Dimensions	Width	mm	676	676	
		Height	mm	2,050	2,050	
		Depth	mm	740	740	

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

ClimateHub

Model Name		Indoor Unit	AE200DNWMPK/EU	AE200DNWMPK/EU
		Outdoor Unit	AE080BXYDGG/EU	AE120BXYDGG/EU
Mode		-	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz	3, 4, 380-415, 50	3, 4, 380-415, 50
Power input	Cooling (Nominal)	kW	3Φ - / 1Φ 0.2	3Φ - / 1Φ 0.2
	Heating (Nominal)	kW	3Φ - / 1Φ 0.2	3Φ - / 1Φ 0.2
	Cooling (Max)	kW	3Φ - / 1Φ 0.2	3Φ - / 1Φ 0.2
	Heating (Max)	kW	3Φ 6.0 / 1Φ 0.2	3Φ 6.0 / 1Φ 0.2
Current Input	Cooling (Nominal)	A	3Φ - / 1Φ 0.9	3Φ - / 1Φ 0.9
	Heating (Nominal)	A	3Φ - / 1Φ 0.9	3Φ - / 1Φ 0.9
	Cooling (Max)	A	3Φ - / 1Φ 0.9	3Φ - / 1Φ 0.9
	Heating (Max)	A	3Φ 8.7 / 1Φ 0.9	3Φ 8.7 / 1Φ 0.9
Field Wiring	MCA	A	3Φ 8.7 / 1Φ 0.9	3Φ 8.7 / 1Φ 0.9
	MFA	A	3Φ 10.9 / 1Φ 1.2	3Φ 10.9 / 1Φ 1.2
Heating up time		hh:mm	01:32	01:03
Water Heating	Declared load profile	-	L	L
	Energy efficiency Class	-	A+	A+
Connections	Water Flow Rate (Std)	Heating	LPM	23.1
		Cooling	LPM	23.1
	Water Flow Rate	Min	LPM	7
		Max	LPM	48
	Water Pressure (Max)		bar	3.0
	Water pipe (To outdoor unit)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Space heating) (Zone 1)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (DHW)	Type	-	Straight pipe
		Inlet	Φ, mm	22
		Outlet	Φ, mm	22
	Water pipe (Secondary water)	Type	-	Straight pipe
		Inlet	Φ, mm	22
		Outlet	Φ, mm	22
	Leaving Water Temperature	Heating Min.	°C	15
		Heating Max.	°C	70
		Cooling Min.	°C	5
		Cooling Max.	°C	25
DHW Tank	Nominal Water Volume		liter	200
	Net Water Volume		liter	194
	Material		-	SUS 316L
	Max. water pressure		bar	10
	Max. water temperature		°C	70
	Insulation		-	Inner EPP+VIP+Outer EPS
Water Pump	Type		-	BLDC Inv
	Motor Input		W	95
	Number of Unit		EA	1
	Max static pressure		mAq	9.0
Backup Heater	Power		kW	3Φ 6kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5

3. Indoor units

3-1. Specifications

ClimateHub

Model Name			Indoor Unit		AE200DNWMPK/EU		AE200DNWMPK/EU	
			Outdoor Unit		AE080BXYDGG/EU		AE120BXYDGG/EU	
Safety device	Pressure relief valve			bar	2.9		2.9	
	Flow Sensor			LPM	5~60		5~60	
	Temperature & Pressure relief valve			bar, °C	10bar, 90°C		10bar, 90°C	
Expansion vessel	Internal water volume			liter	10		10	
	Max. Working pressure			MPa	0.3		0.3	
	Initial Charging pressure			MPa	0.12		0.12	
IP Class				-	IPX1		IPX1	
Air Purge Valve				Φ, inch	BSPP male 3/8"		BSPP male 3/8"	
Sound Level	Sound Pressure Level	Heating	dB(A)	26		28		
		Cooling	dB(A)	26		28		
	Sound Power Level	Heating	dB(A)	40		42		
Casing	Color			-	GREIGE		GREIGE	
	Material			-	PCM		PCM	
Packing	Material			-	EPS/BOX/Pallet		EPS/BOX/Pallet	
	Packing Weight			kg	9.6		9.6	
External Dimension	Net Weight			kg	132.0		132.0	
	Shipping Weight			kg	144.0		144.0	
	Net Dimensions	Width	mm	598		598		
		Height	mm	1,850		1,850		
		Depth	mm	600		600		
	Shipping Dimensions	Width	mm	676		676		
		Height	mm	2,050		2,050		
		Depth	mm	740		740		

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

ClimateHub

Model Name		Indoor Unit	AE200DNWMPK/EU	AE200DNWMPK/EU
		Outdoor Unit	AE140BXYDGG/EU	AE050RXYDEG/EU
Mode		-	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz	3, 4, 380-415, 50	1, 2, 220-240, 50
Power input	Cooling (Nominal)	kW	3Φ - / 1Φ 0.2	0.2
	Heating (Nominal)	kW	3Φ - / 1Φ 0.2	0.2
	Cooling (Max)	kW	3Φ - / 1Φ 0.2	0.2
	Heating (Max)	kW	3Φ 6.0 / 1Φ 0.2	4.2
Current Input	Cooling (Nominal)	A	3Φ - / 1Φ 0.9	0.9
	Heating (Nominal)	A	3Φ - / 1Φ 0.9	0.9
	Cooling (Max)	A	3Φ - / 1Φ 0.9	0.9
	Heating (Max)	A	3Φ 8.7 / 1Φ 0.9	18.3
Field Wiring	MCA	A	3Φ 8.7 / 1Φ 0.9	18.3
	MFA	A	3Φ 10.9 / 1Φ 1.2	22.9
Heating up time		hh:mm	01:03	02:12
Water Heating	Declared load profile	-	L	L
	Energy efficiency Class	-	A+	A+
Connections	Water Flow Rate (Std)	Heating	LPM	34.6
		Cooling	LPM	34.6
	Water Flow Rate	Min	LPM	7
		Max	LPM	58
	Water Pressure (Max)		bar	3.0
	Water pipe (To outdoor unit)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Space heating) (Zone 1)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (DHW)	Type	-	Straight pipe
		Inlet	Φ, mm	22
		Outlet	Φ, mm	22
	Water pipe (Secondary water)	Type	-	Straight pipe
		Inlet	Φ, mm	22
		Outlet	Φ, mm	22
	Leaving Water Temperature	Heating Min.	°C	15
		Heating Max.	°C	70
		Cooling Min.	°C	5
		Cooling Max.	°C	25
DHW Tank	Nominal Water Volume		liter	200
	Net Water Volume		liter	194
	Material		-	SUS 316L
	Max. water pressure		bar	10
	Max. water temperature		°C	70
	Insulation		-	Inner EPP+VIP+Outer EPS
Water Pump	Type		-	BLDC Inv
	Motor Input		W	95
	Number of Unit		EA	1
	Max static pressure		mAq	9.0
Backup Heater	Power		kW	3Φ 6kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5

3. Indoor units

3-1. Specifications

ClimateHub

Model Name		Indoor Unit		AE200DNWMPK/EU	AE200DNWMPK/EU
		Outdoor Unit		AE140BXYDGG/EU	AE050RXYDEG/EU
Safety device	Pressure relief valve		bar	2.9	2.9
	Flow Sensor		LPM	5~60	5~60
	Temperature & Pressure relief valve		bar, °C	10bar, 90°C	10bar, 90°C
Expansion vessel	Internal water volume		liter	10	10
	Max. Working pressure		MPa	0.3	0.3
	Initial Charging pressure		MPa	0.12	0.12
IP Class			-	IPX1	IPX1
Air Purge Valve			Φ, inch	BSPP male 3/8"	BSPP male 3/8"
Sound Level	Sound Pressure Level	Heating	dB(A)	28	26
		Cooling	dB(A)	28	26
	Sound Power Level	Heating	dB(A)	42	40
Casing	Color		-	GREIGE	GREIGE
	Material		-	PCM	PCM
Packing	Material		-	EPS/BOX/Pallet	EPS/BOX/Pallet
	Packing Weight		kg	9.6	9.6
External Dimension	Net Weight		kg	132.0	132.0
	Shipping Weight		kg	144.0	144.0
	Net Dimensions	Width	mm	598	598
		Height	mm	1,850	1,850
		Depth	mm	600	600
	Shipping Dimensions	Width	mm	676	676
		Height	mm	2,050	2,050
		Depth	mm	740	740

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

ClimateHub

Model Name		Indoor Unit	AE200DNWMPK/EU	AE200DNWMPK/EU
		Outdoor Unit	AE080RXYDEG/EU	AE120RXYDEG/EU
Mode		-	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50
Power input	Cooling (Nominal)	kW	0.2	0.2
	Heating (Nominal)	kW	0.2	0.2
	Cooling (Max)	kW	0.2	0.2
	Heating (Max)	kW	4.2	4.2
Current Input	Cooling (Nominal)	A	0.9	0.9
	Heating (Nominal)	A	0.9	0.9
	Cooling (Max)	A	0.9	0.9
	Heating (Max)	A	18.3	18.3
Field Wiring	MCA	A	18.3	18.3
	MFA	A	22.9	22.9
Heating up time		hh:mm	01:22	00:42
Water Heating	Declared load profile	-	L	L
	Energy efficiency Class	-	A+	A+
Connections	Water Flow Rate (Std)	Heating	LPM	23.1
		Cooling	LPM	21.6
	Water Flow Rate	Min	LPM	7
		Max	LPM	48
	Water Pressure (Max)		bar	3.0
	Water pipe (To outdoor unit)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Space heating) (Zone 1)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (DHW)	Type	-	Straight pipe
		Inlet	Φ, mm	22
		Outlet	Φ, mm	22
	Water pipe (Secondary water)	Type	-	Straight pipe
		Inlet	Φ, mm	22
		Outlet	Φ, mm	22
	Leaving Water Temperature	Heating Min.	°C	15
		Heating Max.	°C	65
		Cooling Min.	°C	5
		Cooling Max.	°C	25
DHW Tank	Nominal Water Volume		liter	200
	Net Water Volume		liter	194
	Material		-	SUS 316L
	Max. water pressure		bar	10
	Max. water temperature		°C	70
	Insulation		-	Inner EPP+VIP+Outer EPS
Water Pump	Type		-	BLDC Inv
	Motor Input		W	95
	Number of Unit		EA	1
	Max static pressure		mAq	9.0
Backup Heater	Power		kW	1Φ 2/4kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5

3. Indoor units

3-1. Specifications

ClimateHub

Model Name			Indoor Unit	AE200DNWMPK/EU	AE200DNWMPK/EU
			Outdoor Unit	AE080RXYDEG/EU	AE120RXYDEG/EU
Safety device	Pressure relief valve		bar	2.9	2.9
	Flow Sensor		LPM	5~60	5~60
	Temperature & Pressure relief valve		bar, °C	10bar, 90°C	10bar, 90°C
Expansion vessel	Internal water volume		liter	10	10
	Max. Working pressure		MPa	0.3	0.3
	Initial Charging pressure		MPa	0.12	0.12
IP Class			-	IPX1	IPX1
Air Purge Valve			Φ, inch	BSPP male 3/8"	BSPP male 3/8"
Sound Level	Sound Pressure Level	Heating	dB(A)	26	28
		Cooling	dB(A)	26	28
	Sound Power Level	Heating	dB(A)	40	42
Casing	Color		-	GREIGE	GREIGE
	Material		-	PCM	PCM
Packing	Material		-	EPS/BOX/Pallet	EPS/BOX/Pallet
	Packing Weight		kg	9.6	9.6
External Dimension	Net Weight		kg	132.0	132.0
	Shipping Weight		kg	144.0	144.0
	Net Dimensions	Width	mm	598	598
		Height	mm	1,850	1,850
		Depth	mm	600	600
	Shipping Dimensions	Width	mm	676	676
		Height	mm	2,050	2,050
		Depth	mm	740	740

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

ClimateHub

Model Name		Indoor Unit	AE200DNWMPK/EU	AE200DNWMPK/EU
		Outdoor Unit	AE160RXYDEG/EU	AE080RXYDGG/EU
Mode		-	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz	1, 2, 220-240, 50	3, 4, 380-415, 50
Power input	Cooling (Nominal)	kW	0.2	3Φ - / 1Φ 0.2
	Heating (Nominal)	kW	0.2	3Φ - / 1Φ 0.2
	Cooling (Max)	kW	0.2	3Φ - / 1Φ 0.2
	Heating (Max)	kW	4.2	3Φ 6.0 / 1Φ 0.2
Current Input	Cooling (Nominal)	A	0.9	3Φ - / 1Φ 0.9
	Heating (Nominal)	A	0.9	3Φ - / 1Φ 0.9
	Cooling (Max)	A	0.9	3Φ - / 1Φ 0.9
	Heating (Max)	A	18.3	3Φ 8.7 / 1Φ 0.9
Field Wiring	MCA	A	18.3	3Φ 8.7 / 1Φ 0.9
	MFA	A	22.9	3Φ 10.9 / 1Φ 1.2
Heating up time		hh:mm	00:42	01:22
Water Heating	Declared load profile	-	L	L
	Energy efficiency Class	-	A+	A+
Connections	Water Flow Rate (Std)	Heating	LPM	46.2
		Cooling	LPM	40.4
	Water Flow Rate	Min	LPM	12
		Max	LPM	58
	Water Pressure (Max)		bar	3.0
	Water pipe (To outdoor unit)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Space heating) (Zone 1)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (DHW)	Type	-	Straight pipe
		Inlet	Φ, mm	22
		Outlet	Φ, mm	22
	Water pipe (Secondary water)	Type	-	Straight pipe
		Inlet	Φ, mm	22
		Outlet	Φ, mm	22
	Leaving Water Temperature	Heating Min.	°C	15
		Heating Max.	°C	65
		Cooling Min.	°C	5
		Cooling Max.	°C	25
DHW Tank	Nominal Water Volume		liter	200
	Net Water Volume		liter	194
	Material		-	SUS 316L
	Max. water pressure		bar	10
	Max. water temperature		°C	70
	Insulation		-	Inner EPP+VIP+Outer EPS
Water Pump	Type		-	BLDC Inv
	Motor Input		W	95
	Number of Unit		EA	1
	Max static pressure		mAq	9.0
Backup Heater	Power		kW	1Φ 2/4kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5

3. Indoor units

3-1. Specifications

ClimateHub

Model Name			Indoor Unit		AE200DNWMPK/EU		AE200DNWMPK/EU	
			Outdoor Unit		AE160RXYDEG/EU		AE080RXYDGG/EU	
Safety device	Pressure relief valve			bar	2.9		2.9	
	Flow Sensor			LPM	5~60		5~60	
	Temperature & Pressure relief valve			bar, °C	10bar, 90°C		10bar, 90°C	
Expansion vessel	Internal water volume			liter	10		10	
	Max. Working pressure			MPa	0.3		0.3	
	Initial Charging pressure			MPa	0.12		0.12	
IP Class				-	IPX1		IPX1	
Air Purge Valve				Φ, inch	BSPP male 3/8"		BSPP male 3/8"	
Sound Level	Sound Pressure Level	Heating	dB(A)	28		26		
		Cooling	dB(A)	28		26		
	Sound Power Level	Heating	dB(A)	42		40		
Casing	Color			-	GREIGE		GREIGE	
	Material			-	PCM		PCM	
Packing	Material			-	EPS/BOX/Pallet		EPS/BOX/Pallet	
	Packing Weight			kg	9.6		9.6	
External Dimension	Net Weight			kg	132.0		132.0	
	Shipping Weight			kg	144.0		144.0	
	Net Dimensions	Width	mm	598		598		
		Height	mm	1,850		1,850		
		Depth	mm	600		600		
	Shipping Dimensions	Width	mm	676		676		
		Height	mm	2,050		2,050		
		Depth	mm	740		740		

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

ClimateHub

Model Name		Indoor Unit	AE200DNWMPK/EU	AE200DNWMPK/EU
		Outdoor Unit	AE120RXYDGG/EU	AE160RXYDGG/EU
Mode		-	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz	3, 4, 380-415, 50	3, 4, 380-415, 50
Power input	Cooling (Nominal)	kW	3Φ - / 1Φ 0.2	3Φ - / 1Φ 0.2
	Heating (Nominal)	kW	3Φ - / 1Φ 0.2	3Φ - / 1Φ 0.2
	Cooling (Max)	kW	3Φ - / 1Φ 0.2	3Φ - / 1Φ 0.2
	Heating (Max)	kW	3Φ 6.0 / 1Φ 0.2	3Φ 6.0 / 1Φ 0.2
Current Input	Cooling (Nominal)	A	3Φ - / 1Φ 0.9	3Φ - / 1Φ 0.9
	Heating (Nominal)	A	3Φ - / 1Φ 0.9	3Φ - / 1Φ 0.9
	Cooling (Max)	A	3Φ - / 1Φ 0.9	3Φ - / 1Φ 0.9
	Heating (Max)	A	3Φ 8.7 / 1Φ 0.9	3Φ 8.7 / 1Φ 0.9
Field Wiring	MCA	A	3Φ 8.7 / 1Φ 0.9	3Φ 8.7 / 1Φ 0.9
	MFA	A	3Φ 10.9 / 1Φ 1.2	3Φ 10.9 / 1Φ 1.2
Heating up time		hh:mm	00:42	00:42
Water Heating	Declared load profile	-	L	L
	Energy efficiency Class	-	A+	A+
Connections	Water Flow Rate (Std)	Heating	LPM	34.6
		Cooling	LPM	40.4
	Water Flow Rate	Min	LPM	12
		Max	LPM	58
	Water Pressure (Max)		bar	3.0
	Water pipe (To outdoor unit)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Space heating) (Zone 1)	Type	-	Straight pipe
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (DHW)	Type	-	Straight pipe
		Inlet	Φ, mm	22
		Outlet	Φ, mm	22
	Water pipe (Secondary water)	Type	-	Straight pipe
		Inlet	Φ, mm	22
		Outlet	Φ, mm	22
	Leaving Water Temperature	Heating Min.	°C	15
		Heating Max.	°C	65
		Cooling Min.	°C	5
		Cooling Max.	°C	25
DHW Tank	Nominal Water Volume		liter	200
	Net Water Volume		liter	194
	Material		-	SUS 316L
	Max. water pressure		bar	10
	Max. water temperature		°C	70
	Insulation		-	Inner EPP+VIP+Outer EPS
Water Pump	Type		-	BLDC Inv
	Motor Input		W	95
	Number of Unit		EA	1
	Max static pressure		mAq	9.0
Backup Heater	Power		kW	3Φ 6kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5

3. Indoor units

3-1. Specifications

ClimateHub

Model Name		Indoor Unit		AE200DNWMPK/EU	AE200DNWMPK/EU
		Outdoor Unit		AE120RXYDGG/EU	AE160RXYDGG/EU
Safety device	Pressure relief valve		bar	2.9	2.9
	Flow Sensor		LPM	5~60	5~60
	Temperature & Pressure relief valve		bar, °C	10bar, 90°C	10bar, 90°C
Expansion vessel	Internal water volume		liter	10	10
	Max. Working pressure		MPa	0.3	0.3
	Initial Charging pressure		MPa	0.12	0.12
IP Class			-	IPX1	IPX1
Air Purge Valve			Φ, inch	BSPP male 3/8"	BSPP male 3/8"
Sound Level	Sound Pressure Level	Heating	dB(A)	28	28
		Cooling	dB(A)	28	28
	Sound Power Level	Heating	dB(A)	42	42
Casing	Color		-	GREIGE	GREIGE
	Material		-	PCM	PCM
Packing	Material		-	EPS/BOX/Pallet	EPS/BOX/Pallet
	Packing Weight		kg	9.6	9.6
External Dimension	Net Weight		kg	132.0	132.0
	Shipping Weight		kg	144.0	144.0
	Net Dimensions	Width	mm	598	598
		Height	mm	1,850	1,850
		Depth	mm	600	600
	Shipping Dimensions	Width	mm	676	676
		Height	mm	2,050	2,050
		Depth	mm	740	740

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

Hydro Unit, 2 zone

Model Name		Indoor Unit		AE160DNZMPK/EU	AE160DNZMPK/EU
		Outdoor Unit		AE050CXYDEK/EU	AE080CXYDEK/EU
Mode		-		Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz		1, 2, 220-240, 50	1, 2, 220-240, 50
Power input	Cooling (Nominal)	kW		0.3	0.3
	Heating (Nominal)	kW		0.3	0.3
	Cooling (Max)	kW		0.3	0.3
	Heating (Max)	kW		4.3	4.3
Current Input	Cooling (Nominal)	A		1.3	1.3
	Heating (Nominal)	A		1.3	1.3
	Cooling (Max)	A		1.3	1.3
	Heating (Max)	A		18.7	18.7
Field Wiring	MCA	A		18.7	18.7
	MFA	A		23.4	23.4
Connections	Water Flow Rate (Std)	Heating	LPM	14.4	23.1
		Cooling	LPM	14.4	23.1
	Water Flow Rate	Min	LPM	7	7
		Max	LPM	48	48
	Water Pressure (Max)		bar	3.0	3.0
	Water pipe (To outdoor unit)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 1)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 2)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Tank)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Leaving Water Temperature	Heating Min.	°C	15	15
		Heating Max.	°C	75	75
		Cooling Min.	°C	5	5
		Cooling Max.	°C	25	25
Water Pump	Type		-	BLDC Inv	BLDC Inv
	Motor Input		W	95	95
	Number of Unit		EA	2	2
	Max static pressure		mAq	9	9
Backup Heater	Power		kW	1Φ 2/4kW	1Φ 2/4kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5	98 +0 -5
Safety device	Pressure relief valve		bar	2.9	2.9
	Flow Sensor		LPM	5~60	5~60
Expansion vessel	Internal water volume		liter	10	10
	Max. Working pressure		MPa	0.3	0.3
	Initial Charging pressure		MPa	0.12	0.12
Air Purge Valve		Φ, inch		BSPP male 3/8"	BSPP male 3/8"
Service Valve		Φ, inch		BSPP male 1 1/4	BSPP male 1 1/4

3. Indoor units

3-1. Specifications

Hydro Unit, 2 zone

Model Name		Indoor Unit		AE160DNZMPK/EU	AE160DNZMPK/EU
		Outdoor Unit		AE050CXYDEK/EU	AE080CXYDEK/EU
Sound Level	Sound Pressure Level	Heating	dB(A)	28	28
		Cooling	dB(A)	28	28
	Sound Power Level	Heating	dB(A)	42	42
Casing	Color		-	GREIGE	GREIGE
	Material		-	PCM	PCM
Packing	Material		-	EPS/BOX	EPS/BOX
	Packing Weight		kg	3.7	3.7
External Dimension	Net Weight		kg	54.0	54.0
	Shipping Weight		kg	61.0	61.0
	Net Dimensions	Width	mm	530	530
		Height	mm	840	840
		Depth	mm	350	350
	Shipping Dimensions	Width	mm	602	602
		Height	mm	1,032	1,032
		Depth	mm	435	435

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

Hydro Unit, 2 zone

Model Name		Indoor Unit		AE160DNZMPK/EU	AE160DNZMPK/EU
		Outdoor Unit		AE120CXYDEK/EU	AE160CXYDEK/EU
Mode		-		Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz		1, 2, 220-240, 50	1, 2, 220-240, 50
Power input	Cooling (Nominal)	kW		0.3	0.3
	Heating (Nominal)	kW		0.3	0.3
	Cooling (Max)	kW		0.3	0.3
	Heating (Max)	kW		4.3	4.3
Current Input	Cooling (Nominal)	A		1.3	1.3
	Heating (Nominal)	A		1.3	1.3
	Cooling (Max)	A		1.3	1.3
	Heating (Max)	A		18.7	18.7
Field Wiring	MCA	A		18.7	18.7
	MFA	A		23.4	23.4
Connections	Water Flow Rate (Std)	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	3.0	3.0
	Water pipe (To outdoor unit)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 1)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 2)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Tank)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Leaving Water Temperature	Heating Min.	°C	15	15
		Heating Max.	°C	75	75
		Cooling Min.	°C	5	5
		Cooling Max.	°C	25	25
Water Pump	Type		-	BLDC Inv	BLDC Inv
	Motor Input		W	95	95
	Number of Unit		EA	2	2
	Max static pressure		mAq	9	9
Backup Heater	Power		kW	1Φ 2/4kW	1Φ 2/4kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5	98 +0 -5
Safety device	Pressure relief valve		bar	2.9	2.9
	Flow Sensor		LPM	5~60	5~60
Expansion vessel	Internal water volume		liter	10	10
	Max. Working pressure		MPa	0.3	0.3
	Initial Charging pressure		MPa	0.12	0.12
Air Purge Valve		Φ, inch		BSPP male 3/8"	BSPP male 3/8"
Service Valve		Φ, inch		BSPP male 1 1/4	BSPP male 1 1/4

3. Indoor units

3-1. Specifications

Hydro Unit, 2 zone

Model Name		Indoor Unit		AE160DNZMPK/EU	AE160DNZMPK/EU
		Outdoor Unit		AE120CXYDEK/EU	AE160CXYDEK/EU
Sound Level	Sound Pressure Level	Heating	dB(A)	30	30
		Cooling	dB(A)	30	30
	Sound Power Level	Heating	dB(A)	44	44
Casing	Color	-		GREIGE	GREIGE
	Material	-		PCM	PCM
Packing	Material	-		EPS/BOX	EPS/BOX
	Packing Weight	kg		3.7	3.7
External Dimension	Net Weight		kg	54.0	54.0
	Shipping Weight		kg	61.0	61.0
	Net Dimensions	Width	mm	530	530
		Height	mm	840	840
		Depth	mm	350	350
	Shipping Dimensions	Width	mm	602	602
		Height	mm	1,032	1,032
		Depth	mm	435	435

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

Hydro Unit, 2 zone

Model Name			Indoor Unit	AE160DNZMPK/EU	AE160DNZMPK/EU
			Outdoor Unit	AE080CXYDGK/EU	AE120CXYDGK/EU
Mode			-	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply			Φ, #, V, Hz	3, 4, 380-415, 50	3, 4, 380-415, 50
Power input	Cooling (Nominal)		kW	3Φ - / 1Φ 0.3	3Φ - / 1Φ 0.3
	Heating (Nominal)		kW	3Φ - / 1Φ 0.3	3Φ - / 1Φ 0.3
	Cooling (Max)		kW	3Φ - / 1Φ 0.3	3Φ - / 1Φ 0.3
	Heating (Max)		kW	3Φ 6.0 / 1Φ 0.3	3Φ 6.0 / 1Φ 0.3
Current Input	Cooling (Nominal)		A	3Φ - / 1Φ 1.3	3Φ - / 1Φ 1.3
	Heating (Nominal)		A	3Φ - / 1Φ 1.3	3Φ - / 1Φ 1.3
	Cooling (Max)		A	3Φ - / 1Φ 1.3	3Φ - / 1Φ 1.3
	Heating (Max)		A	3Φ 8.7 / 1Φ 1.3	3Φ 8.7 / 1Φ 1.3
Field Wiring	MCA		A	3Φ 8.7 / 1Φ 1.3	3Φ 8.7 / 1Φ 1.3
	MFA		A	3Φ 10.9 / 1Φ 1.6	3Φ 10.9 / 1Φ 1.6
Connections	Water Flow Rate (Std)	Heating	LPM	23.1	34.6
		Cooling	LPM	23.1	34.6
	Water Flow Rate	Min	LPM	7	7
		Max	LPM	48	58
	Water Pressure (Max)		bar	3.0	3.0
	Water pipe (To outdoor unit)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 1)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 2)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Tank)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Leaving Water Temperature	Heating Min.	°C	15	15
		Heating Max.	°C	75	75
		Cooling Min.	°C	5	5
		Cooling Max.	°C	25	25
Water Pump	Type		-	BLDC Inv	BLDC Inv
	Motor Input		W	95	95
	Number of Unit		EA	2	2
	Max static pressure		mAq	9	9
Backup Heater	Power		kW	3Φ 6kW	3Φ 6kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5	98 +0 -5
Safety device	Pressure relief valve		bar	2.9	2.9
	Flow Sensor		LPM	5~60	5~60
Expansion vessel	Internal water volume		liter	10	10
	Max. Working pressure		MPa	0.3	0.3
	Initial Charging pressure		MPa	0.12	0.12
Air Purge Valve			Φ, inch	BSPP male 3/8"	BSPP male 3/8"
Service Valve			Φ, inch	BSPP male 1 1/4	BSPP male 1 1/4

3. Indoor units

3-1. Specifications

Hydro Unit, 2 zone

Model Name		Indoor Unit		AE160DNZMPK/EU	AE160DNZMPK/EU
		Outdoor Unit		AE080CXYDGK/EU	AE120CXYDGK/EU
Sound Level	Sound Pressure Level	Heating	dB(A)	28	30
		Cooling	dB(A)	28	30
	Sound Power Level	Heating	dB(A)	42	44
Casing	Color	-		GREIGE	GREIGE
	Material	-		PCM	PCM
Packing	Material	-		EPS/BOX	EPS/BOX
	Packing Weight	kg		3.7	3.7
External Dimension	Net Weight		kg	54.0	54.0
	Shipping Weight		kg	61.0	61.0
	Net Dimensions	Width	mm	530	530
		Height	mm	840	840
		Depth	mm	350	350
	Shipping Dimensions	Width	mm	602	602
		Height	mm	1,032	1,032
		Depth	mm	435	435

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

Hydro Unit, 2 zone

Model Name		Indoor Unit		AE160DNZMPK/EU	AE160DNZMPK/EU
		Outdoor Unit		AE160CXYDGK/EU	AE080BXYDEG/EU
Mode		-		Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ , #, V, Hz		3, 4, 380-415, 50	1, 2, 220-240, 50
Power input	Cooling (Nominal)	kW		3 Φ - / 1 Φ 0.3	0.3
	Heating (Nominal)	kW		3 Φ - / 1 Φ 0.3	0.3
	Cooling (Max)	kW		3 Φ - / 1 Φ 0.3	0.3
	Heating (Max)	kW		3 Φ 6.0 / 1 Φ 0.3	4.3
Current Input	Cooling (Nominal)	A		3 Φ - / 1 Φ 1.3	1.3
	Heating (Nominal)	A		3 Φ - / 1 Φ 1.3	1.3
	Cooling (Max)	A		3 Φ - / 1 Φ 1.3	1.3
	Heating (Max)	A		3 Φ 8.7 / 1 Φ 1.3	18.7
Field Wiring	MCA	A		3 Φ 8.7 / 1 Φ 1.3	18.7
	MFA	A		3 Φ 10.9 / 1 Φ 1.6	23.4
Connections	Water Flow Rate (Std)	Heating	LPM	46.2	23.1
		Cooling	LPM	40.4	23.1
	Water Flow Rate	Min	LPM	7	7
		Max	LPM	58	48
	Water Pressure (Max)		bar	3.0	3.0
	Water pipe (To outdoor unit)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ , mm	28	28
		Outlet	Φ , mm	28	28
	Water pipe (Space heating) (Zone 1)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ , mm	28	28
		Outlet	Φ , mm	28	28
	Water pipe (Space heating) (Zone 2)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ , mm	28	28
		Outlet	Φ , mm	28	28
	Water pipe (Tank)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ , mm	28	28
		Outlet	Φ , mm	28	28
	Leaving Water Temperature	Heating Min.	°C	15	15
		Heating Max.	°C	75	70
		Cooling Min.	°C	5	5
		Cooling Max.	°C	25	25
Water Pump	Type		-	BLDC Inv	BLDC Inv
	Motor Input		W	95	95
	Number of Unit		EA	2	2
	Max static pressure		mAq	9	9
Backup Heater	Power		kW	3 Φ 6kW	1 Φ 2/4kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5	98 +0 -5
Safety device	Pressure relief valve		bar	2.9	2.9
	Flow Sensor		LPM	5~60	5~60
Expansion vessel	Internal water volume		liter	10	10
	Max. Working pressure		MPa	0.3	0.3
	Initial Charging pressure		MPa	0.12	0.12
Air Purge Valve		Φ , inch		BSPP male 3/8"	BSPP male 3/8"
Service Valve		Φ , inch		BSPP male 1 1/4	BSPP male 1 1/4

3. Indoor units

3-1. Specifications

Hydro Unit, 2 zone

Model Name		Indoor Unit		AE160DNZMPK/EU	AE160DNZMPK/EU
		Outdoor Unit		AE160CXYDGK/EU	AE080BXYDEG/EU
Sound Level	Sound Pressure Level	Heating	dB(A)	30	28
		Cooling	dB(A)	30	28
	Sound Power Level	Heating	dB(A)	44	42
Casing	Color	-		GREIGE	GREIGE
	Material	-		PCM	PCM
Packing	Material	-		EPS/BOX	EPS/BOX
	Packing Weight	kg		3.7	3.7
External Dimension	Net Weight		kg	54.0	54.0
	Shipping Weight		kg	61.0	61.0
	Net Dimensions	Width	mm	530	530
		Height	mm	840	840
		Depth	mm	350	350
	Shipping Dimensions	Width	mm	602	602
		Height	mm	1,032	1,032
		Depth	mm	435	435

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

Hydro Unit, 2 zone

Model Name		Indoor Unit		AE160DNZMPK/EU	AE160DNZMPK/EU
		Outdoor Unit		AE120BXYDEG/EU	AE140BXYDEG/EU
Mode		-		Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz		1, 2, 220-240, 50	1, 2, 220-240, 50
Power input	Cooling (Nominal)	kW		0.3	0.3
	Heating (Nominal)	kW		0.3	0.3
	Cooling (Max)	kW		0.3	0.3
	Heating (Max)	kW		4.3	4.3
Current Input	Cooling (Nominal)	A		1.3	1.3
	Heating (Nominal)	A		1.3	1.3
	Cooling (Max)	A		1.3	1.3
	Heating (Max)	A		18.7	18.7
Field Wiring	MCA	A		18.7	18.7
	MFA	A		23.4	23.4
Connections	Water Flow Rate (Std)	Heating	LPM	34.6	34.6
		Cooling	LPM	34.6	34.6
	Water Flow Rate	Min	LPM	7	7
		Max	LPM	58	58
	Water Pressure (Max)		bar	3.0	3.0
	Water pipe (To outdoor unit)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 1)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 2)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Tank)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Leaving Water Temperature	Heating Min.	°C	15	15
		Heating Max.	°C	70	70
		Cooling Min.	°C	5	5
		Cooling Max.	°C	25	25
Water Pump	Type		-	BLDC Inv	BLDC Inv
	Motor Input		W	95	95
	Number of Unit		EA	2	2
	Max static pressure		mAq	9	9
Backup Heater	Power		kW	1Φ 2/4kW	1Φ 2/4kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5	98 +0 -5
Safety device	Pressure relief valve		bar	2.9	2.9
	Flow Sensor		LPM	5~60	5~60
Expansion vessel	Internal water volume		liter	10	10
	Max. Working pressure		MPa	0.3	0.3
	Initial Charging pressure		MPa	0.12	0.12
Air Purge Valve		Φ, inch		BSPP male 3/8"	BSPP male 3/8"
Service Valve		Φ, inch		BSPP male 1 1/4	BSPP male 1 1/4

3. Indoor units

3-1. Specifications

Hydro Unit, 2 zone

Model Name		Indoor Unit		AE160DNZMPK/EU	AE160DNZMPK/EU
		Outdoor Unit		AE120BXYDEG/EU	AE140BXYDEG/EU
Sound Level	Sound Pressure Level	Heating	dB(A)	30	30
		Cooling	dB(A)	30	30
	Sound Power Level	Heating	dB(A)	44	44
Casing	Color	-		GREIGE	GREIGE
	Material	-		PCM	PCM
Packing	Material	-		EPS/BOX	EPS/BOX
	Packing Weight	kg		3.7	3.7
External Dimension	Net Weight		kg	54.0	54.0
	Shipping Weight		kg	61.0	61.0
	Net Dimensions	Width	mm	530	530
		Height	mm	840	840
		Depth	mm	350	350
	Shipping Dimensions	Width	mm	602	602
		Height	mm	1,032	1,032
		Depth	mm	435	435

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

Hydro Unit, 2 zone

Model Name		Indoor Unit		AE160DNZMPK/EU	AE160DNZMPK/EU
		Outdoor Unit		AE080BXYDGG/EU	AE120BXYDGG/EU
Mode		-		Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz		3, 4, 380-415, 50	3, 4, 380-415, 50
Power input	Cooling (Nominal)	kW		3Φ - / 1Φ 0.3	3Φ - / 1Φ 0.3
	Heating (Nominal)	kW		3Φ - / 1Φ 0.3	3Φ - / 1Φ 0.3
	Cooling (Max)	kW		3Φ - / 1Φ 0.3	3Φ - / 1Φ 0.3
	Heating (Max)	kW		3Φ 6.0 / 1Φ 0.3	3Φ 6.0 / 1Φ 0.3
Current Input	Cooling (Nominal)	A		3Φ - / 1Φ 1.3	3Φ - / 1Φ 1.3
	Heating (Nominal)	A		3Φ - / 1Φ 1.3	3Φ - / 1Φ 1.3
	Cooling (Max)	A		3Φ - / 1Φ 1.3	3Φ - / 1Φ 1.3
	Heating (Max)	A		3Φ 8.7 / 1Φ 1.3	3Φ 8.7 / 1Φ 1.3
Field Wiring	MCA	A		3Φ 8.7 / 1Φ 1.3	3Φ 8.7 / 1Φ 1.3
	MFA	A		3Φ 10.9 / 1Φ 1.6	3Φ 10.9 / 1Φ 1.6
Connections	Water Flow Rate (Std)	Heating	LPM	23.1	34.6
		Cooling	LPM	23.1	34.6
	Water Flow Rate	Min	LPM	7	7
		Max	LPM	48	58
	Water Pressure (Max)		bar	3.0	3.0
	Water pipe (To outdoor unit)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 1)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 2)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Tank)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Leaving Water Temperature	Heating Min.	°C	15	15
		Heating Max.	°C	70	70
		Cooling Min.	°C	5	5
		Cooling Max.	°C	25	25
Water Pump	Type		-	BLDC Inv	BLDC Inv
	Motor Input		W	95	95
	Number of Unit		EA	2	2
	Max static pressure		mAq	9	9
Backup Heater	Power		kW	3Φ 6kW	3Φ 6kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5	98 +0 -5
Safety device	Pressure relief valve		bar	2.9	2.9
	Flow Sensor		LPM	5~60	5~60
Expansion vessel	Internal water volume		liter	10	10
	Max. Working pressure		MPa	0.3	0.3
	Initial Charging pressure		MPa	0.12	0.12
Air Purge Valve		Φ, inch		BSPP male 3/8"	BSPP male 3/8"
Service Valve		Φ, inch		BSPP male 1 1/4	BSPP male 1 1/4

3. Indoor units

3-1. Specifications

Hydro Unit, 2 zone

Model Name		Indoor Unit		AE160DNZMPK/EU	AE160DNZMPK/EU
		Outdoor Unit		AE080BXYDGG/EU	AE120BXYDGG/EU
Sound Level	Sound Pressure Level	Heating	dB(A)	28	30
		Cooling	dB(A)	28	30
	Sound Power Level	Heating	dB(A)	42	44
Casing	Color	-		GREIGE	GREIGE
	Material	-		PCM	PCM
Packing	Material	-		EPS/BOX	EPS/BOX
	Packing Weight	kg		3.7	3.7
External Dimension	Net Weight		kg	54.0	54.0
	Shipping Weight		kg	61.0	61.0
	Net Dimensions	Width	mm	530	530
		Height	mm	840	840
		Depth	mm	350	350
	Shipping Dimensions	Width	mm	602	602
		Height	mm	1,032	1,032
		Depth	mm	435	435

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

Hydro Unit, 2 zone

Model Name		Indoor Unit		AE160DNZMPK/EU	AE160DNZMPK/EU
		Outdoor Unit		AE140BXYDGG/EU	AE050RXYDEG/EU
Mode		-		Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz		3, 4, 380-415, 50	1, 2, 220-240, 50
Power input	Cooling (Nominal)	kW		3Φ - / 1Φ 0.3	0.3
	Heating (Nominal)	kW		3Φ - / 1Φ 0.3	0.3
	Cooling (Max)	kW		3Φ - / 1Φ 0.3	0.3
	Heating (Max)	kW		3Φ 6.0 / 1Φ 0.3	4.3
Current Input	Cooling (Nominal)	A		3Φ - / 1Φ 1.3	1.3
	Heating (Nominal)	A		3Φ - / 1Φ 1.3	1.3
	Cooling (Max)	A		3Φ - / 1Φ 1.3	1.3
	Heating (Max)	A		3Φ 8.7 / 1Φ 1.3	18.7
Field Wiring	MCA	A		3Φ 8.7 / 1Φ 1.3	18.7
	MFA	A		3Φ 10.9 / 1Φ 1.6	23.4
Connections	Water Flow Rate (Std)	Heating	LPM	34.6	14.4
		Cooling	LPM	34.6	14.4
	Water Flow Rate	Min	LPM	7	7
		Max	LPM	58	48
	Water Pressure (Max)		bar	3.0	3.0
	Water pipe (To outdoor unit)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 1)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 2)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Tank)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Leaving Water Temperature	Heating Min.	°C	15	15
		Heating Max.	°C	70	65
		Cooling Min.	°C	5	5
		Cooling Max.	°C	25	25
Water Pump	Type		-	BLDC Inv	BLDC Inv
	Motor Input		W	95	95
	Number of Unit		EA	2	2
	Max static pressure		mAq	9	9
Backup Heater	Power		kW	3Φ 6kW	1Φ 2/4kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5	98 +0 -5
Safety device	Pressure relief valve		bar	2.9	2.9
	Flow Sensor		LPM	5~60	5~60
Expansion vessel	Internal water volume		liter	10	10
	Max. Working pressure		MPa	0.3	0.3
	Initial Charging pressure		MPa	0.12	0.12
Air Purge Valve		Φ, inch		BSPP male 3/8"	BSPP male 3/8"
Service Valve		Φ, inch		BSPP male 1 1/4	BSPP male 1 1/4

3. Indoor units

3-1. Specifications

Hydro Unit, 2 zone

Model Name		Indoor Unit		AE160DNZMPK/EU	AE160DNZMPK/EU
		Outdoor Unit		AE140BXYDGG/EU	AE050RXYDEG/EU
Sound Level	Sound Pressure Level	Heating	dB(A)	30	28
		Cooling	dB(A)	30	28
	Sound Power Level	Heating	dB(A)	44	42
Casing	Color	-		GREIGE	GREIGE
	Material	-		PCM	PCM
Packing	Material	-		EPS/BOX	EPS/BOX
	Packing Weight	kg		3.7	3.7
External Dimension	Net Weight		kg	54.0	54.0
	Shipping Weight		kg	61.0	61.0
	Net Dimensions	Width	mm	530	530
		Height	mm	840	840
		Depth	mm	350	350
	Shipping Dimensions	Width	mm	602	602
		Height	mm	1,032	1,032
		Depth	mm	435	435

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

Hydro Unit, 2 zone

Model Name		Indoor Unit	AE160DNZMPK/EU	AE160DNZMPK/EU
		Outdoor Unit	AE080RXYDEG/EU	AE120RXYDEG/EU
Mode		-	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50
Power input	Cooling (Nominal)	kW	0.3	0.3
	Heating (Nominal)	kW	0.3	0.3
	Cooling (Max)	kW	0.3	0.3
	Heating (Max)	kW	4.3	4.3
Current Input	Cooling (Nominal)	A	1.3	1.3
	Heating (Nominal)	A	1.3	1.3
	Cooling (Max)	A	1.3	1.3
	Heating (Max)	A	18.7	18.7
Field Wiring	MCA	A	18.7	18.7
	MFA	A	23.4	23.4
Connections	Water Flow Rate (Std)	Heating	LPM	23.1
		Cooling	LPM	21.6
	Water Flow Rate	Min	LPM	7
		Max	LPM	48
	Water Pressure (Max)		bar	3.0
	Water pipe (To outdoor unit)	Type	-	BSPP Female 1 1/4
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Space heating) (Zone 1)	Type	-	BSPP Female 1 1/4
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Space heating) (Zone 2)	Type	-	BSPP Female 1 1/4
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Tank)	Type	-	BSPP Female 1 1/4
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Leaving Water Temperature	Heating Min.	°C	15
		Heating Max.	°C	65
		Cooling Min.	°C	5
		Cooling Max.	°C	25
Water Pump	Type		-	BLDC Inv
	Motor Input		W	95
	Number of Unit		EA	2
	Max static pressure		mAq	9
Backup Heater	Power		kW	1Φ 2/4kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5
Safety device	Pressure relief valve		bar	2.9
	Flow Sensor		LPM	5~60
Expansion vessel	Internal water volume		liter	10
	Max. Working pressure		MPa	0.3
	Initial Charging pressure		MPa	0.12
Air Purge Valve		Φ, inch	BSPP male 3/8"	BSPP male 3/8"
Service Valve		Φ, inch	BSPP male 1 1/4	BSPP male 1 1/4

3. Indoor units

3-1. Specifications

Hydro Unit, 2 zone

Model Name		Indoor Unit		AE160DNZMPK/EU	AE160DNZMPK/EU
		Outdoor Unit		AE080RXYDEG/EU	AE120RXYDEG/EU
Sound Level	Sound Pressure Level	Heating	dB(A)	28	30
		Cooling	dB(A)	28	30
	Sound Power Level	Heating	dB(A)	42	44
Casing	Color	-		GREIGE	GREIGE
	Material	-		PCM	PCM
Packing	Material	-		EPS/BOX	EPS/BOX
	Packing Weight	kg		3.7	3.7
External Dimension	Net Weight		kg	54.0	54.0
	Shipping Weight		kg	61.0	61.0
	Net Dimensions	Width	mm	530	530
		Height	mm	840	840
		Depth	mm	350	350
	Shipping Dimensions	Width	mm	602	602
		Height	mm	1,032	1,032
		Depth	mm	435	435

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

Hydro Unit, 2 zone

Model Name		Indoor Unit		AE160DNZMPK/EU	AE160DNZMPK/EU
		Outdoor Unit		AE160RXYDEG/EU	AE080RXYDGG/EU
Mode		-		Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz		1, 2, 220-240, 50	3, 4, 380-415, 50
Power input	Cooling (Nominal)	kW		0.3	3Φ - / 1Φ 0.3
	Heating (Nominal)	kW		0.3	3Φ - / 1Φ 0.3
	Cooling (Max)	kW		0.3	3Φ - / 1Φ 0.3
	Heating (Max)	kW		4.3	3Φ 6.0 / 1Φ 0.3
Current Input	Cooling (Nominal)	A		1.3	3Φ - / 1Φ 1.3
	Heating (Nominal)	A		1.3	3Φ - / 1Φ 1.3
	Cooling (Max)	A		1.3	3Φ - / 1Φ 1.3
	Heating (Max)	A		18.7	3Φ 8.7 / 1Φ 1.3
Field Wiring	MCA	A		18.7	3Φ 8.7 / 1Φ 1.3
	MFA	A		23.4	3Φ 10.9 / 1Φ 1.6
Connections	Water Flow Rate (Std)	Heating	LPM	46.2	23.1
		Cooling	LPM	40.4	21.6
	Water Flow Rate	Min	LPM	12	7
		Max	LPM	58	48
	Water Pressure (Max)		bar	3.0	3.0
	Water pipe (To outdoor unit)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 1)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 2)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Tank)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Leaving Water Temperature	Heating Min.	°C	15	15
		Heating Max.	°C	65	65
		Cooling Min.	°C	5	5
		Cooling Max.	°C	25	25
Water Pump	Type		-	BLDC Inv	BLDC Inv
	Motor Input		W	95	95
	Number of Unit		EA	2	2
	Max static pressure		mAq	9	9
Backup Heater	Power		kW	1Φ 2/4kW	3Φ 6kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5	98 +0 -5
Safety device	Pressure relief valve		bar	2.9	2.9
	Flow Sensor		LPM	5~60	5~60
Expansion vessel	Internal water volume		liter	10	10
	Max. Working pressure		MPa	0.3	0.3
	Initial Charging pressure		MPa	0.12	0.12
Air Purge Valve		Φ, inch		BSPP male 3/8"	BSPP male 3/8"
Service Valve		Φ, inch		BSPP male 1 1/4	BSPP male 1 1/4

3. Indoor units

3-1. Specifications

Hydro Unit, 2 zone

Model Name		Indoor Unit		AE160DNZMPK/EU	AE160DNZMPK/EU
		Outdoor Unit		AE160RXYDEG/EU	AE080RXYDGG/EU
Sound Level	Sound Pressure Level	Heating	dB(A)	30	28
		Cooling	dB(A)	30	28
	Sound Power Level	Heating	dB(A)	44	42
Casing	Color		-	GREIGE	GREIGE
	Material		-	PCM	PCM
Packing	Material		-	EPS/BOX	EPS/BOX
	Packing Weight		kg	3.7	3.7
External Dimension	Net Weight		kg	54.0	54.0
	Shipping Weight		kg	61.0	61.0
	Net Dimensions	Width	mm	530	530
		Height	mm	840	840
		Depth	mm	350	350
	Shipping Dimensions	Width	mm	602	602
		Height	mm	1,032	1,032
		Depth	mm	435	435

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

Hydro Unit, 2 zone

Model Name		Indoor Unit		AE160DNZMPK/EU	AE160DNZMPK/EU
		Outdoor Unit		AE120RXYDGG/EU	AE160RXYDGG/EU
Mode		-		Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz		3, 4, 380-415, 50	3, 4, 380-415, 50
Power input	Cooling (Nominal)	kW		3Φ - / 1Φ 0.3	3Φ - / 1Φ 0.3
	Heating (Nominal)	kW		3Φ - / 1Φ 0.3	3Φ - / 1Φ 0.3
	Cooling (Max)	kW		3Φ - / 1Φ 0.3	3Φ - / 1Φ 0.3
	Heating (Max)	kW		3Φ 6.0 / 1Φ 0.3	3Φ 6.0 / 1Φ 0.3
Current Input	Cooling (Nominal)	A		3Φ - / 1Φ 1.3	3Φ - / 1Φ 1.3
	Heating (Nominal)	A		3Φ - / 1Φ 1.3	3Φ - / 1Φ 1.3
	Cooling (Max)	A		3Φ - / 1Φ 1.3	3Φ - / 1Φ 1.3
	Heating (Max)	A		3Φ 8.7 / 1Φ 1.3	3Φ 8.7 / 1Φ 1.3
Field Wiring	MCA	A		3Φ 8.7 / 1Φ 1.3	3Φ 8.7 / 1Φ 1.3
	MFA	A		3Φ 10.9 / 1Φ 1.6	3Φ 10.9 / 1Φ 1.6
Connections	Water Flow Rate (Std)	Heating	LPM	34.6	46.2
		Cooling	LPM	34.6	40.4
	Water Flow Rate	Min	LPM	12	12
		Max	LPM	58	58
	Water Pressure (Max)		bar	3.0	3.0
	Water pipe (To outdoor unit)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 1)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 2)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Tank)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Leaving Water Temperature	Heating Min.	°C	15	15
		Heating Max.	°C	65	65
		Cooling Min.	°C	5	5
		Cooling Max.	°C	25	25
Water Pump	Type		-	BLDC Inv	BLDC Inv
	Motor Input		W	95	95
	Number of Unit		EA	2	2
	Max static pressure		mAq	9	9
Backup Heater	Power		kW	3Φ 6kW	3Φ 6kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5	98 +0 -5
Safety device	Pressure relief valve		bar	2.9	2.9
	Flow Sensor		LPM	5~60	5~60
Expansion vessel	Internal water volume		liter	10	10
	Max. Working pressure		MPa	0.3	0.3
	Initial Charging pressure		MPa	0.12	0.12
Air Purge Valve		Φ, inch		BSPP male 3/8"	BSPP male 3/8"
Service Valve		Φ, inch		BSPP male 1 1/4	BSPP male 1 1/4

3. Indoor units

3-1. Specifications

Hydro Unit, 2 zone

Model Name		Indoor Unit		AE160DNZMPK/EU	AE160DNZMPK/EU
		Outdoor Unit		AE120RXYDGG/EU	AE160RXYDGG/EU
Sound Level	Sound Pressure Level	Heating	dB(A)	30	30
		Cooling	dB(A)	30	30
	Sound Power Level	Heating	dB(A)	44	44
Casing	Color	-		GREIGE	GREIGE
	Material	-		PCM	PCM
Packing	Material	-		EPS/BOX	EPS/BOX
	Packing Weight	kg		3.7	3.7
External Dimension	Net Weight		kg	54.0	54.0
	Shipping Weight		kg	61.0	61.0
	Net Dimensions	Width	mm	530	530
		Height	mm	840	840
		Depth	mm	350	350
	Shipping Dimensions	Width	mm	602	602
		Height	mm	1,032	1,032
		Depth	mm	435	435

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

Hydro Unit

Model Name		Indoor Unit	AE160DNYMPK/EU	AE160DNYMPK/EU
		Outdoor Unit	AE050CXYDEK/EU	AE080CXYDEK/EU
Mode		-	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50
Power input	Cooling (Nominal)	kW	0.2	0.2
	Heating (Nominal)	kW	0.2	0.2
	Cooling (Max)	kW	0.2	0.2
	Heating (Max)	kW	4.2	4.2
Current Input	Cooling (Nominal)	A	0.9	0.9
	Heating (Nominal)	A	0.9	0.9
	Cooling (Max)	A	0.9	0.9
	Heating (Max)	A	18.3	18.3
Field Wiring	MCA	A	18.3	18.3
	MFA	A	22.9	22.9
Connections	Water Flow Rate (Std)	Heating	LPM	14.4
		Cooling	LPM	14.4
	Water Flow Rate	Min	LPM	7
		Max	LPM	48
	Water Pressure (Max)		bar	3.0
	Water pipe (To outdoor unit)	Type	-	BSPP Female 1 1/4
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Space heating) (Zone 1)	Type	-	BSPP Female 1 1/4
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Tank)	Type	-	BSPP Female 1 1/4
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Leaving Water Temperature	Heating Min.	°C	15
		Heating Max.	°C	75
		Cooling Min.	°C	5
		Cooling Max.	°C	25
Water Pump	Type		-	BLDC Inv
	Motor Input		W	95
	Number of Unit		EA	1
	Max static pressure		mAq	9
Backup Heater	Power		kW	1Φ 2/4kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5
Safety device	Pressure relief valve		bar	2.9
	Flow Sensor		LPM	5~60
Expansion vessel	Internal water volume		liter	10
	Max. Working pressure		MPa	0.3
	Initial Charging pressure		MPa	0.12
Air Purge Valve		Φ, inch	BSPP male 3/8"	BSPP male 3/8"
Service Valve		Φ, inch	BSPP male 1 1/4	BSPP male 1 1/4

3. Indoor units

3-1. Specifications

Hydro Unit

Model Name		Indoor Unit		AE160DNYMPK/EU	AE160DNYMPK/EU
		Outdoor Unit		AE050CXYDEK/EU	AE080CXYDEK/EU
Sound Level	Sound Pressure Level	Heating	dB(A)	26	26
		Cooling	dB(A)	26	26
	Sound Power Level	Heating	dB(A)	40	40
Casing	Color		-	GREIGE	GREIGE
	Material		-	PCM	PCM
Packing	Material		-	EPS/BOX	EPS/BOX
	Packing Weight		kg	3.7	3.7
External Dimension	Net Weight		kg	43.0	43.0
	Shipping Weight		kg	50.0	50.0
	Net Dimensions	Width	mm	530	530
		Height	mm	840	840
		Depth	mm	350	350
	Shipping Dimensions	Width	mm	602	602
		Height	mm	1,032	1,032
		Depth	mm	435	435

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

Hydro Unit

Model Name		Indoor Unit	AE160DNYMPK/EU	AE160DNYMPK/EU
		Outdoor Unit	AE120CXYDEK/EU	AE160CXYDEK/EU
Mode		-	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50
Power input	Cooling (Nominal)	kW	0.2	0.2
	Heating (Nominal)	kW	0.2	0.2
	Cooling (Max)	kW	0.2	0.2
	Heating (Max)	kW	4.2	4.2
Current Input	Cooling (Nominal)	A	0.9	0.9
	Heating (Nominal)	A	0.9	0.9
	Cooling (Max)	A	0.9	0.9
	Heating (Max)	A	18.3	18.3
Field Wiring	MCA	A	18.3	18.3
	MFA	A	22.9	22.9
Connections	Water Flow Rate (Std)	Heating	LPM	34.6
		Cooling	LPM	40.4
	Water Flow Rate	Min	LPM	7
		Max	LPM	58
	Water Pressure (Max)		bar	3.0
	Water pipe (To outdoor unit)	Type	-	BSPP Female 1 1/4
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Space heating) (Zone 1)	Type	-	BSPP Female 1 1/4
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Tank)	Type	-	BSPP Female 1 1/4
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Leaving Water Temperature	Heating Min.	°C	15
		Heating Max.	°C	75
		Cooling Min.	°C	5
		Cooling Max.	°C	25
Water Pump	Type		-	BLDC Inv
	Motor Input		W	95
	Number of Unit		EA	1
	Max static pressure		mAq	9
Backup Heater	Power		kW	1Φ 2/4kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5
Safety device	Pressure relief valve		bar	2.9
	Flow Sensor		LPM	5~60
Expansion vessel	Internal water volume		liter	10
	Max. Working pressure		MPa	0.3
	Initial Charging pressure		MPa	0.12
Air Purge Valve		Φ, inch	BSPP male 3/8"	BSPP male 3/8"
Service Valve		Φ, inch	BSPP male 1 1/4	BSPP male 1 1/4

3. Indoor units

3-1. Specifications

Hydro Unit

Model Name		Indoor Unit		AE160DNYMPK/EU	AE160DNYMPK/EU
		Outdoor Unit		AE120CXYDEK/EU	AE160CXYDEK/EU
Sound Level	Sound Pressure Level	Heating	dB(A)	28	28
		Cooling	dB(A)	28	28
	Sound Power Level	Heating	dB(A)	42	42
Casing	Color	-		GREIGE	GREIGE
	Material	-		PCM	PCM
Packing	Material	-		EPS/BOX	EPS/BOX
	Packing Weight	kg		3.7	3.7
External Dimension	Net Weight		kg	43.0	43.0
	Shipping Weight		kg	50.0	50.0
	Net Dimensions	Width	mm	530	530
		Height	mm	840	840
		Depth	mm	350	350
	Shipping Dimensions	Width	mm	602	602
		Height	mm	1,032	1,032
		Depth	mm	435	435

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

Hydro Unit

Model Name		Indoor Unit		AE160DNYMPK/EU	AE160DNYMPK/EU
		Outdoor Unit		AE080CXYDGK/EU	AE120CXYDGK/EU
Mode		-		Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz		3, 4, 380-415, 50	3, 4, 380-415, 50
Power input	Cooling (Nominal)	kW		3Φ - / 1Φ 0.2	3Φ - / 1Φ 0.2
	Heating (Nominal)	kW		3Φ - / 1Φ 0.2	3Φ - / 1Φ 0.2
	Cooling (Max)	kW		3Φ - / 1Φ 0.2	3Φ - / 1Φ 0.2
	Heating (Max)	kW		3Φ 6.0 / 1Φ 0.2	3Φ 6.0 / 1Φ 0.2
Current Input	Cooling (Nominal)	A		3Φ - / 1Φ 0.9	3Φ - / 1Φ 0.9
	Heating (Nominal)	A		3Φ - / 1Φ 0.9	3Φ - / 1Φ 0.9
	Cooling (Max)	A		3Φ - / 1Φ 0.9	3Φ - / 1Φ 0.9
	Heating (Max)	A		3Φ 8.7 / 1Φ 0.9	3Φ 8.7 / 1Φ 0.9
Field Wiring	MCA	A		3Φ 8.7 / 1Φ 0.9	3Φ 8.7 / 1Φ 0.9
	MFA	A		3Φ 10.9 / 1Φ 1.2	3Φ 10.9 / 1Φ 1.2
Connections	Water Flow Rate (Std)	Heating	LPM	23.1	34.6
		Cooling	LPM	23.1	34.6
	Water Flow Rate	Min	LPM	7	7
		Max	LPM	48	58
	Water Pressure (Max)		bar	3.0	3.0
	Water pipe (To outdoor unit)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 1)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Tank)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Leaving Water Temperature	Heating Min.	°C	15	15
		Heating Max.	°C	75	75
		Cooling Min.	°C	5	5
		Cooling Max.	°C	25	25
Water Pump	Type		-	BLDC Inv	BLDC Inv
	Motor Input		W	95	95
	Number of Unit		EA	1	1
	Max static pressure		mAq	9	9
Backup Heater	Power		kW	3Φ 6kW	3Φ 6kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5	98 +0 -5
Safety device	Pressure relief valve		bar	2.9	2.9
	Flow Sensor		LPM	5~60	5~60
Expansion vessel	Internal water volume		liter	10	10
	Max. Working pressure		MPa	0.3	0.3
	Initial Charging pressure		MPa	0.12	0.12
Air Purge Valve		Φ, inch		BSPP male 3/8"	BSPP male 3/8"
Service Valve		Φ, inch		BSPP male 1 1/4	BSPP male 1 1/4

3. Indoor units

3-1. Specifications

Hydro Unit

Model Name		Indoor Unit		AE160DNYMPK/EU	AE160DNYMPK/EU
		Outdoor Unit		AE080CXYDGK/EU	AE120CXYDGK/EU
Sound Level	Sound Pressure Level	Heating	dB(A)	26	28
		Cooling	dB(A)	26	28
	Sound Power Level	Heating	dB(A)	40	42
Casing	Color		-	GREIGE	GREIGE
	Material		-	PCM	PCM
Packing	Material		-	EPS/BOX	EPS/BOX
	Packing Weight		kg	3.7	3.7
External Dimension	Net Weight		kg	43.0	43.0
	Shipping Weight		kg	50.0	50.0
	Net Dimensions	Width	mm	530	530
		Height	mm	840	840
		Depth	mm	350	350
	Shipping Dimensions	Width	mm	602	602
		Height	mm	1,032	1,032
		Depth	mm	435	435

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

Hydro Unit

Model Name		Indoor Unit		AE160DNYMPK/EU	AE160DNYMPK/EU
		Outdoor Unit		AE160CXYDGK/EU	AE080BXYDEG/EU
Mode		-		Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz		3, 4, 380-415, 50	1, 2, 220-240, 50
Power input	Cooling (Nominal)	kW		3Φ - / 1Φ 0.2	0.2
	Heating (Nominal)	kW		3Φ - / 1Φ 0.2	0.2
	Cooling (Max)	kW		3Φ - / 1Φ 0.2	0.2
	Heating (Max)	kW		3Φ 6.0 / 1Φ 0.2	4.2
Current Input	Cooling (Nominal)	A		3Φ - / 1Φ 0.9	0.9
	Heating (Nominal)	A		3Φ - / 1Φ 0.9	0.9
	Cooling (Max)	A		3Φ - / 1Φ 0.9	0.9
	Heating (Max)	A		3Φ 8.7 / 1Φ 0.9	18.3
Field Wiring	MCA	A		3Φ 8.7 / 1Φ 0.9	18.3
	MFA	A		3Φ 10.9 / 1Φ 1.2	22.9
Connections	Water Flow Rate (Std)	Heating	LPM	46.2	23.1
		Cooling	LPM	40.4	23.1
	Water Flow Rate	Min	LPM	7	7
		Max	LPM	58	48
	Water Pressure (Max)		bar	3.0	3.0
	Water pipe (To outdoor unit)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 1)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Tank)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Leaving Water Temperature	Heating Min.	°C	15	15
		Heating Max.	°C	75	70
		Cooling Min.	°C	5	5
		Cooling Max.	°C	25	25
Water Pump	Type		-	BLDC Inv	BLDC Inv
	Motor Input		W	95	95
	Number of Unit		EA	1	1
	Max static pressure		mAq	9	9
Backup Heater	Power		kW	3Φ 6kW	1Φ 2/4kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5	98 +0 -5
Safety device	Pressure relief valve		bar	2.9	2.9
	Flow Sensor		LPM	5~60	5~60
Expansion vessel	Internal water volume		liter	10	10
	Max. Working pressure		MPa	0.3	0.3
	Initial Charging pressure		MPa	0.12	0.12
Air Purge Valve		Φ, inch		BSPP male 3/8"	BSPP male 3/8"
Service Valve		Φ, inch		BSPP male 1 1/4	BSPP male 1 1/4

3. Indoor units

3-1. Specifications

Hydro Unit

Model Name		Indoor Unit		AE160DNYMPK/EU	AE160DNYMPK/EU
		Outdoor Unit		AE160CXYDGK/EU	AE080BXYDEG/EU
Sound Level	Sound Pressure Level	Heating	dB(A)	28	26
		Cooling	dB(A)	28	26
	Sound Power Level	Heating	dB(A)	42	40
Casing	Color		-	GREIGE	GREIGE
	Material		-	PCM	PCM
Packing	Material		-	EPS/BOX	EPS/BOX
	Packing Weight		kg	3.7	3.7
External Dimension	Net Weight		kg	43.0	43.0
	Shipping Weight		kg	50.0	50.0
	Net Dimensions	Width	mm	530	530
		Height	mm	840	840
		Depth	mm	350	350
	Shipping Dimensions	Width	mm	602	602
		Height	mm	1,032	1,032
		Depth	mm	435	435

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

Hydro Unit

Model Name		Indoor Unit		AE160DNYMPK/EU	AE160DNYMPK/EU
		Outdoor Unit		AE120BXYDEG/EU	AE140BXYDEG/EU
Mode		-		Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz		1, 2, 220-240, 50	1, 2, 220-240, 50
Power input	Cooling (Nominal)	kW		0.2	0.2
	Heating (Nominal)	kW		0.2	0.2
	Cooling (Max)	kW		0.2	0.2
	Heating (Max)	kW		4.2	4.2
Current Input	Cooling (Nominal)	A		0.9	0.9
	Heating (Nominal)	A		0.9	0.9
	Cooling (Max)	A		0.9	0.9
	Heating (Max)	A		18.3	18.3
Field Wiring	MCA	A		18.3	18.3
	MFA	A		22.9	22.9
Connections	Water Flow Rate (Std)	Heating	LPM	34.6	34.6
		Cooling	LPM	34.6	34.6
	Water Flow Rate	Min	LPM	7	7
		Max	LPM	58	58
	Water Pressure (Max)		bar	3.0	3.0
	Water pipe (To outdoor unit)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 1)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Tank)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Leaving Water Temperature	Heating Min.	°C	15	15
		Heating Max.	°C	70	70
		Cooling Min.	°C	5	5
		Cooling Max.	°C	25	25
Water Pump	Type		-	BLDC Inv	BLDC Inv
	Motor Input		W	95	95
	Number of Unit		EA	1	1
	Max static pressure		mAq	9	9
Backup Heater	Power		kW	1Φ 2/4kW	1Φ 2/4kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5	98 +0 -5
Safety device	Pressure relief valve		bar	2.9	2.9
	Flow Sensor		LPM	5~60	5~60
Expansion vessel	Internal water volume		liter	10	10
	Max. Working pressure		MPa	0.3	0.3
	Initial Charging pressure		MPa	0.12	0.12
Air Purge Valve		Φ, inch		BSPP male 3/8"	BSPP male 3/8"
Service Valve		Φ, inch		BSPP male 1 1/4	BSPP male 1 1/4

3. Indoor units

3-1. Specifications

Hydro Unit

Model Name		Indoor Unit		AE160DNYMPK/EU	AE160DNYMPK/EU
		Outdoor Unit		AE120BXYDEG/EU	AE140BXYDEG/EU
Sound Level	Sound Pressure Level	Heating	dB(A)	28	28
		Cooling	dB(A)	28	28
	Sound Power Level	Heating	dB(A)	42	42
Casing	Color		-	GREIGE	GREIGE
	Material		-	PCM	PCM
Packing	Material		-	EPS/BOX	EPS/BOX
	Packing Weight		kg	3.7	3.7
External Dimension	Net Weight		kg	43.0	43.0
	Shipping Weight		kg	50.0	50.0
	Net Dimensions	Width	mm	530	530
		Height	mm	840	840
		Depth	mm	350	350
	Shipping Dimensions	Width	mm	602	602
		Height	mm	1,032	1,032
		Depth	mm	435	435

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

Hydro Unit

Model Name		Indoor Unit		AE160DNYMPK/EU	AE160DNYMPK/EU
		Outdoor Unit		AE080BXYDGG/EU	AE120BXYDGG/EU
Mode		-		Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz		3, 4, 380-415, 50	3, 4, 380-415, 50
Power input	Cooling (Nominal)	kW		3Φ - / 1Φ 0.2	3Φ - / 1Φ 0.2
	Heating (Nominal)	kW		3Φ - / 1Φ 0.2	3Φ - / 1Φ 0.2
	Cooling (Max)	kW		3Φ - / 1Φ 0.2	3Φ - / 1Φ 0.2
	Heating (Max)	kW		3Φ 6.0 / 1Φ 0.2	3Φ 6.0 / 1Φ 0.2
Current Input	Cooling (Nominal)	A		3Φ - / 1Φ 0.9	3Φ - / 1Φ 0.9
	Heating (Nominal)	A		3Φ - / 1Φ 0.9	3Φ - / 1Φ 0.9
	Cooling (Max)	A		3Φ - / 1Φ 0.9	3Φ - / 1Φ 0.9
	Heating (Max)	A		3Φ 8.7 / 1Φ 0.9	3Φ 8.7 / 1Φ 0.9
Field Wiring	MCA	A		3Φ 8.7 / 1Φ 0.9	3Φ 8.7 / 1Φ 0.9
	MFA	A		3Φ 10.9 / 1Φ 1.2	3Φ 10.9 / 1Φ 1.2
Connections	Water Flow Rate (Std)	Heating	LPM	23.1	34.6
		Cooling	LPM	23.1	34.6
	Water Flow Rate	Min	LPM	7	7
		Max	LPM	48	58
	Water Pressure (Max)		bar	3.0	3.0
	Water pipe (To outdoor unit)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 1)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Tank)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Leaving Water Temperature	Heating Min.	°C	15	15
		Heating Max.	°C	70	70
		Cooling Min.	°C	5	5
		Cooling Max.	°C	25	25
Water Pump	Type		-	BLDC Inv	BLDC Inv
	Motor Input		W	95	95
	Number of Unit		EA	1	1
	Max static pressure		mAq	9	9
Backup Heater	Power		kW	3Φ 6kW	3Φ 6kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5	98 +0 -5
Safety device	Pressure relief valve		bar	2.9	2.9
	Flow Sensor		LPM	5~60	5~60
Expansion vessel	Internal water volume		liter	10	10
	Max. Working pressure		MPa	0.3	0.3
	Initial Charging pressure		MPa	0.12	0.12
Air Purge Valve		Φ, inch		BSPP male 3/8"	BSPP male 3/8"
Service Valve		Φ, inch		BSPP male 1 1/4	BSPP male 1 1/4

3. Indoor units

3-1. Specifications

Hydro Unit

Model Name		Indoor Unit		AE160DNYMPK/EU	AE160DNYMPK/EU
		Outdoor Unit		AE080BXYDGG/EU	AE120BXYDGG/EU
Sound Level	Sound Pressure Level	Heating	dB(A)	26	28
		Cooling	dB(A)	26	28
	Sound Power Level	Heating	dB(A)	40	42
Casing	Color		-	GREIGE	GREIGE
	Material		-	PCM	PCM
Packing	Material		-	EPS/BOX	EPS/BOX
	Packing Weight		kg	3.7	3.7
External Dimension	Net Weight		kg	43.0	43.0
	Shipping Weight		kg	50.0	50.0
	Net Dimensions	Width	mm	530	530
		Height	mm	840	840
		Depth	mm	350	350
	Shipping Dimensions	Width	mm	602	602
		Height	mm	1,032	1,032
		Depth	mm	435	435

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

Hydro Unit

Model Name		Indoor Unit		AE160DNYMPK/EU	AE160DNYMPK/EU
		Outdoor Unit		AE140BXYDGG/EU	AE050RXYDEG/EU
Mode		-		Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz		3, 4, 380-415, 50	1, 2, 220-240, 50
Power input	Cooling (Nominal)	kW		3Φ - / 1Φ 0.2	0.2
	Heating (Nominal)	kW		3Φ - / 1Φ 0.2	0.2
	Cooling (Max)	kW		3Φ - / 1Φ 0.2	0.2
	Heating (Max)	kW		3Φ 6.0 / 1Φ 0.2	4.2
Current Input	Cooling (Nominal)	A		3Φ - / 1Φ 0.9	0.9
	Heating (Nominal)	A		3Φ - / 1Φ 0.9	0.9
	Cooling (Max)	A		3Φ - / 1Φ 0.9	0.9
	Heating (Max)	A		3Φ 8.7 / 1Φ 0.9	18.3
Field Wiring	MCA	A		3Φ 8.7 / 1Φ 0.9	18.3
	MFA	A		3Φ 10.9 / 1Φ 1.2	22.9
Connections	Water Flow Rate (Std)	Heating	LPM	34.6	14.4
		Cooling	LPM	34.6	14.4
	Water Flow Rate	Min	LPM	7	7
		Max	LPM	58	48
	Water Pressure (Max)		bar	3.0	3.0
	Water pipe (To outdoor unit)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 1)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Tank)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Leaving Water Temperature	Heating Min.	°C	15	15
		Heating Max.	°C	70	65
		Cooling Min.	°C	5	5
		Cooling Max.	°C	25	25
Water Pump	Type		-	BLDC Inv	BLDC Inv
	Motor Input		W	95	95
	Number of Unit		EA	1	1
	Max static pressure		mAq	9	9
Backup Heater	Power		kW	3Φ 6kW	1Φ 2/4kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5	98 +0 -5
Safety device	Pressure relief valve		bar	2.9	2.9
	Flow Sensor		LPM	5~60	5~60
Expansion vessel	Internal water volume		liter	10	10
	Max. Working pressure		MPa	0.3	0.3
	Initial Charging pressure		MPa	0.12	0.12
Air Purge Valve		Φ, inch		BSPP male 3/8"	BSPP male 3/8"
Service Valve		Φ, inch		BSPP male 1 1/4	BSPP male 1 1/4

3. Indoor units

3-1. Specifications

Hydro Unit

Model Name		Indoor Unit		AE160DNYMPK/EU	AE160DNYMPK/EU
		Outdoor Unit		AE140BXYDGG/EU	AE050RXYDEG/EU
Sound Level	Sound Pressure Level	Heating	dB(A)	28	26
		Cooling	dB(A)	28	26
	Sound Power Level	Heating	dB(A)	42	40
Casing	Color		-	GREIGE	GREIGE
	Material		-	PCM	PCM
Packing	Material		-	EPS/BOX	EPS/BOX
	Packing Weight		kg	3.7	3.7
External Dimension	Net Weight		kg	43.0	43.0
	Shipping Weight		kg	50.0	50.0
	Net Dimensions	Width	mm	530	530
		Height	mm	840	840
		Depth	mm	350	350
	Shipping Dimensions	Width	mm	602	602
		Height	mm	1,032	1,032
		Depth	mm	435	435

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

Hydro Unit

Model Name		Indoor Unit	AE160DNYMPK/EU	AE160DNYMPK/EU
		Outdoor Unit	AE080RXYDEG/EU	AE120RXYDEG/EU
Mode		-	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50
Power input	Cooling (Nominal)	kW	0.2	0.2
	Heating (Nominal)	kW	0.2	0.2
	Cooling (Max)	kW	0.2	0.2
	Heating (Max)	kW	4.2	4.2
Current Input	Cooling (Nominal)	A	0.9	0.9
	Heating (Nominal)	A	0.9	0.9
	Cooling (Max)	A	0.9	0.9
	Heating (Max)	A	18.3	18.3
Field Wiring	MCA	A	18.3	18.3
	MFA	A	22.9	22.9
Connections	Water Flow Rate (Std)	Heating	LPM	23.1
		Cooling	LPM	21.6
	Water Flow Rate	Min	LPM	7
		Max	LPM	48
	Water Pressure (Max)		bar	3.0
	Water pipe (To outdoor unit)	Type	-	BSPP Female 1 1/4
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Space heating) (Zone 1)	Type	-	BSPP Female 1 1/4
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Water pipe (Tank)	Type	-	BSPP Female 1 1/4
		Inlet	Φ, mm	28
		Outlet	Φ, mm	28
	Leaving Water Temperature	Heating Min.	°C	15
		Heating Max.	°C	65
		Cooling Min.	°C	5
		Cooling Max.	°C	25
Water Pump	Type		-	BLDC Inv
	Motor Input		W	95
	Number of Unit		EA	1
	Max static pressure		mAq	9
Backup Heater	Power		kW	1Φ 2/4kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5
Safety device	Pressure relief valve		bar	2.9
	Flow Sensor		LPM	5~60
Expansion vessel	Internal water volume		liter	10
	Max. Working pressure		MPa	0.3
	Initial Charging pressure		MPa	0.12
Air Purge Valve		Φ, inch	BSPP male 3/8"	BSPP male 3/8"
Service Valve		Φ, inch	BSPP male 1 1/4	BSPP male 1 1/4

3. Indoor units

3-1. Specifications

Hydro Unit

Model Name		Indoor Unit		AE160DNYMPK/EU	AE160DNYMPK/EU
		Outdoor Unit		AE080RXYDEG/EU	AE120RXYDEG/EU
Sound Level	Sound Pressure Level	Heating	dB(A)	26	28
		Cooling	dB(A)	26	28
	Sound Power Level	Heating	dB(A)	40	42
Casing	Color		-	GREIGE	GREIGE
	Material		-	PCM	PCM
Packing	Material		-	EPS/BOX	EPS/BOX
	Packing Weight		kg	3.7	3.7
External Dimension	Net Weight		kg	43.0	43.0
	Shipping Weight		kg	50.0	50.0
	Net Dimensions	Width	mm	530	530
		Height	mm	840	840
		Depth	mm	350	350
	Shipping Dimensions	Width	mm	602	602
		Height	mm	1,032	1,032
		Depth	mm	435	435

NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

Hydro Unit

Model Name		Indoor Unit		AE160DNYMPK/EU	AE160DNYMPK/EU
		Outdoor Unit		AE160RXYDEG/EU	AE080RXYDGG/EU
Mode			-	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply			Φ, #, V, Hz	1, 2, 220-240, 50	3, 4, 380-415, 50
Power input	Cooling (Nominal)		kW	0.2	3Φ - / 1Φ 0.2
	Heating (Nominal)		kW	0.2	3Φ - / 1Φ 0.2
	Cooling (Max)		kW	0.2	3Φ - / 1Φ 0.2
	Heating (Max)		kW	4.2	3Φ 6.0 / 1Φ 0.2
Current Input	Cooling (Nominal)		A	0.9	3Φ - / 1Φ 0.9
	Heating (Nominal)		A	0.9	3Φ - / 1Φ 0.9
	Cooling (Max)		A	0.9	3Φ - / 1Φ 0.9
	Heating (Max)		A	18.3	3Φ 8.7 / 1Φ 0.9
Field Wiring	MCA		A	18.3	3Φ 8.7 / 1Φ 0.9
	MFA		A	22.9	3Φ 10.9 / 1Φ 1.2
Connections	Water Flow Rate (Std)	Heating	LPM	46.2	23.1
		Cooling	LPM	40.4	21.6
	Water Flow Rate	Min	LPM	12	7
		Max	LPM	58	48
	Water Pressure (Max)		bar	3.0	3.0
	Water pipe (To outdoor unit)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 1)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Tank)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Leaving Water Temperature	Heating Min.	°C	15	15
		Heating Max.	°C	65	65
		Cooling Min.	°C	5	5
		Cooling Max.	°C	25	25
Water Pump	Type		-	BLDC Inv	BLDC Inv
	Motor Input		W	95	95
	Number of Unit		EA	1	1
	Max static pressure		mAq	9	9
Backup Heater	Power		kW	1Φ 2/4kW	3Φ 6kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5	98 +0 -5
Safety device	Pressure relief valve		bar	2.9	2.9
	Flow Sensor		LPM	5~60	5~60
Expansion vessel	Internal water volume		liter	10	10
	Max. Working pressure		MPa	0.3	0.3
	Initial Charging pressure		MPa	0.12	0.12
Air Purge Valve			Φ, inch	BSPP male 3/8"	BSPP male 3/8"
Service Valve			Φ, inch	BSPP male 1 1/4	BSPP male 1 1/4

3. Indoor units

3-1. Specifications

Hydro Unit

Model Name		Indoor Unit		AE160DNYMPK/EU	AE160DNYMPK/EU
		Outdoor Unit		AE160RXYDEG/EU	AE080RXYDGG/EU
Sound Level	Sound Pressure Level	Heating	dB(A)	28	26
		Cooling	dB(A)	28	26
	Sound Power Level	Heating	dB(A)	42	40
Casing	Color		-	GREIGE	GREIGE
	Material		-	PCM	PCM
Packing	Material		-	EPS/BOX	EPS/BOX
	Packing Weight		kg	3.7	3.7
External Dimension	Net Weight		kg	43.0	43.0
	Shipping Weight		kg	50.0	50.0
	Net Dimensions	Width	mm	530	530
		Height	mm	840	840
		Depth	mm	350	350
	Shipping Dimensions	Width	mm	602	602
		Height	mm	1,032	1,032
		Depth	mm	435	435

 NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Indoor units

3-1. Specifications

Hydro Unit

Model Name		Indoor Unit		AE160DNYMPK/EU	AE160DNYMPK/EU
		Outdoor Unit		AE120RXYDGG/EU	AE160RXYDGG/EU
Mode		-		Heat Pump (A2W)	Heat Pump (A2W)
Power Supply		Φ, #, V, Hz		3, 4, 380-415, 50	3, 4, 380-415, 50
Power input	Cooling (Nominal)	kW		3Φ - / 1Φ 0.2	3Φ - / 1Φ 0.2
	Heating (Nominal)	kW		3Φ - / 1Φ 0.2	3Φ - / 1Φ 0.2
	Cooling (Max)	kW		3Φ - / 1Φ 0.2	3Φ - / 1Φ 0.2
	Heating (Max)	kW		3Φ 6.0 / 1Φ 0.2	3Φ 6.0 / 1Φ 0.2
Current Input	Cooling (Nominal)	A		3Φ - / 1Φ 0.9	3Φ - / 1Φ 0.9
	Heating (Nominal)	A		3Φ - / 1Φ 0.9	3Φ - / 1Φ 0.9
	Cooling (Max)	A		3Φ - / 1Φ 0.9	3Φ - / 1Φ 0.9
	Heating (Max)	A		3Φ 8.7 / 1Φ 0.9	3Φ 8.7 / 1Φ 0.9
Field Wiring	MCA	A		3Φ 8.7 / 1Φ 0.9	3Φ 8.7 / 1Φ 0.9
	MFA	A		3Φ 10.9 / 1Φ 1.2	3Φ 10.9 / 1Φ 1.2
Connections	Water Flow Rate (Std)	Heating	LPM	34.6	46.2
		Cooling	LPM	34.6	40.4
	Water Flow Rate	Min	LPM	12	12
		Max	LPM	58	58
	Water Pressure (Max)		bar	3.0	3.0
	Water pipe (To outdoor unit)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 1)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Tank)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Leaving Water Temperature	Heating Min.	°C	15	15
		Heating Max.	°C	65	65
		Cooling Min.	°C	5	5
		Cooling Max.	°C	25	25
Water Pump	Type		-	BLDC Inv	BLDC Inv
	Motor Input		W	95	95
	Number of Unit		EA	1	1
	Max static pressure		mAq	9	9
Backup Heater	Power		kW	3Φ 6kW	3Φ 6kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5	98 +0 -5
Safety device	Pressure relief valve		bar	2.9	2.9
	Flow Sensor		LPM	5~60	5~60
Expansion vessel	Internal water volume		liter	10	10
	Max. Working pressure		MPa	0.3	0.3
	Initial Charging pressure		MPa	0.12	0.12
Air Purge Valve		Φ, inch		BSPP male 3/8"	BSPP male 3/8"
Service Valve		Φ, inch		BSPP male 1 1/4	BSPP male 1 1/4

3. Indoor units

3-1. Specifications

Hydro Unit

Model Name		Indoor Unit		AE160DNYMPK/EU	AE160DNYMPK/EU
		Outdoor Unit		AE120RXYDGG/EU	AE160RXYDGG/EU
Sound Level	Sound Pressure Level	Heating	dB(A)	28	28
		Cooling	dB(A)	28	28
	Sound Power Level	Heating	dB(A)	42	42
Casing	Color	-		GREIGE	GREIGE
	Material	-		PCM	PCM
Packing	Material	-		EPS/BOX	EPS/BOX
	Packing Weight	kg		3.7	3.7
External Dimension	Net Weight		kg	43.0	43.0
	Shipping Weight		kg	50.0	50.0
	Net Dimensions	Width	mm	530	530
		Height	mm	840	840
		Depth	mm	350	350
	Shipping Dimensions	Width	mm	602	602
		Height	mm	1,032	1,032
		Depth	mm	435	435

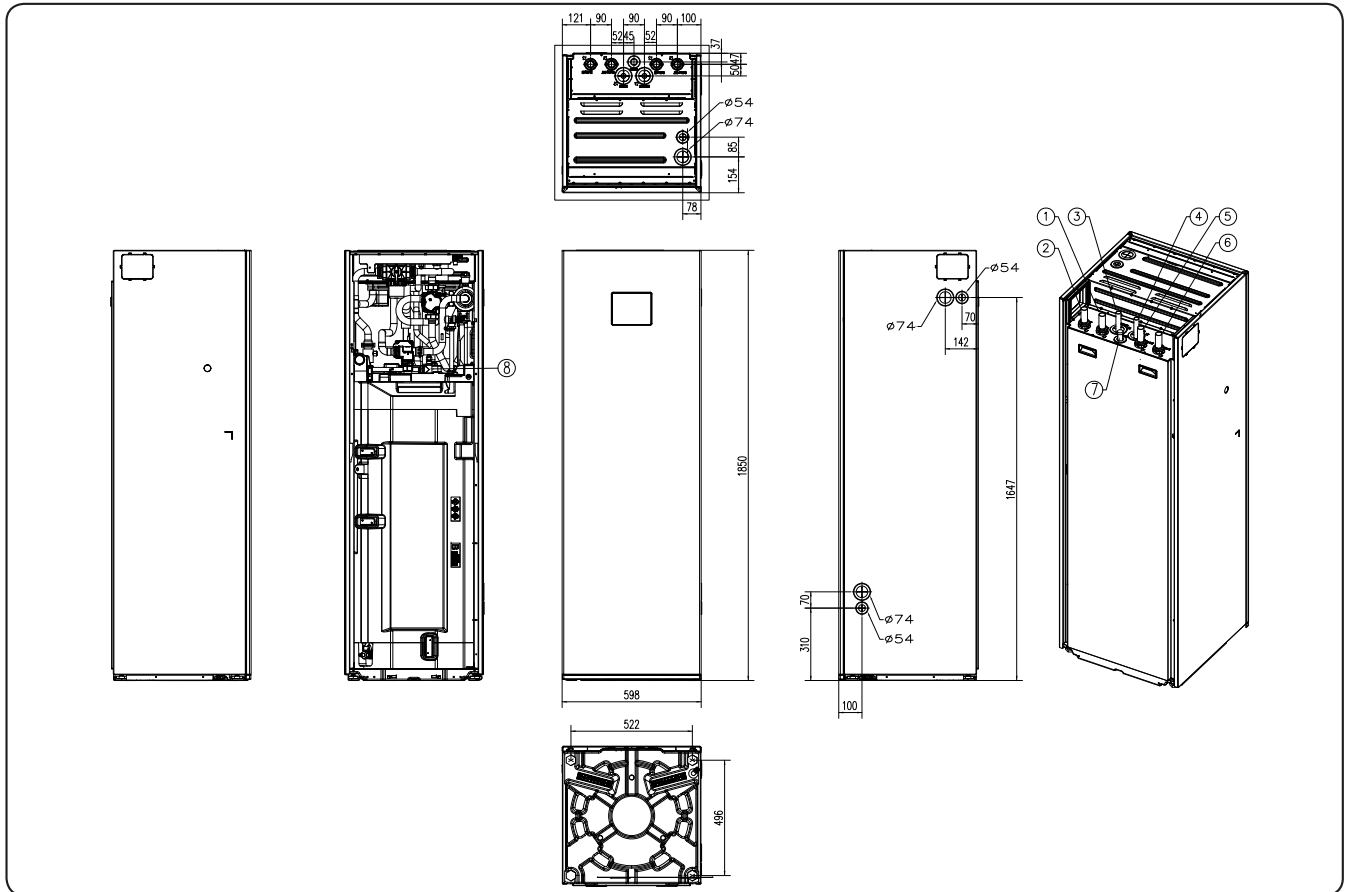
NOTE

- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3-2. Dimensional drawing

AE200DNWMPK/EU

Unit : mm



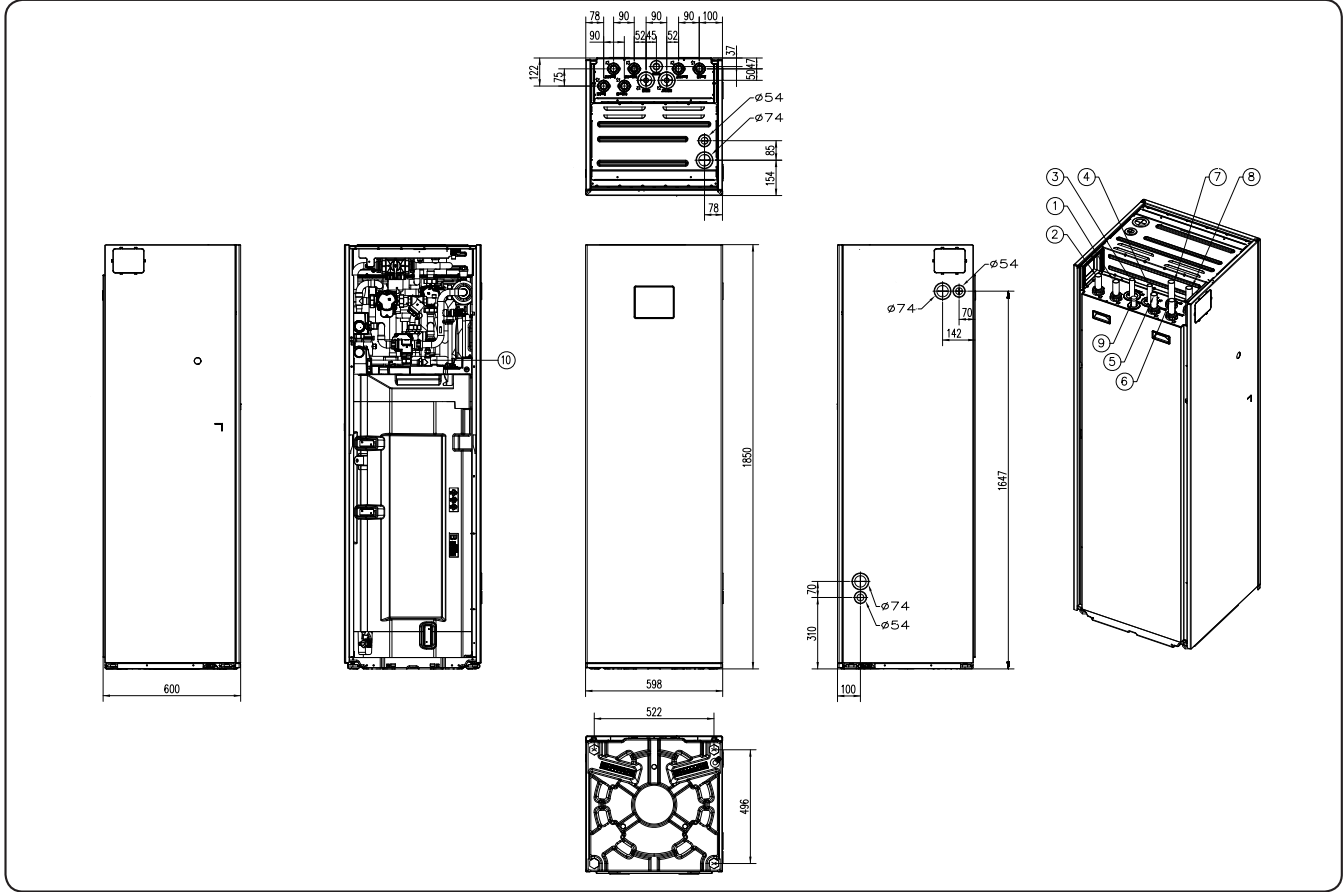
NO	Name	Description
01	Outdoor inlet (From Outdoor Unit)	ø28, Straight pipe
02	Outdoor outlet (To Outdoor Unit)	ø28, Straight pipe
03	DHW outlet (Hot Water)	ø22, Straight pipe
04	DHW inlet (Cold Water)	ø22, Straight pipe
05	Heating Outlet (To Zone)	ø28, Straight pipe
06	Heating inlet (From Zone)	ø28, Straight pipe
07	DHW Return (Recirculation)	ø22, Straight pipe
08	T/P Valve	10bar, 90 °C

3. Indoor units

3-2. Dimensional drawing

AE200DNXMPK/EU

Unit : mm



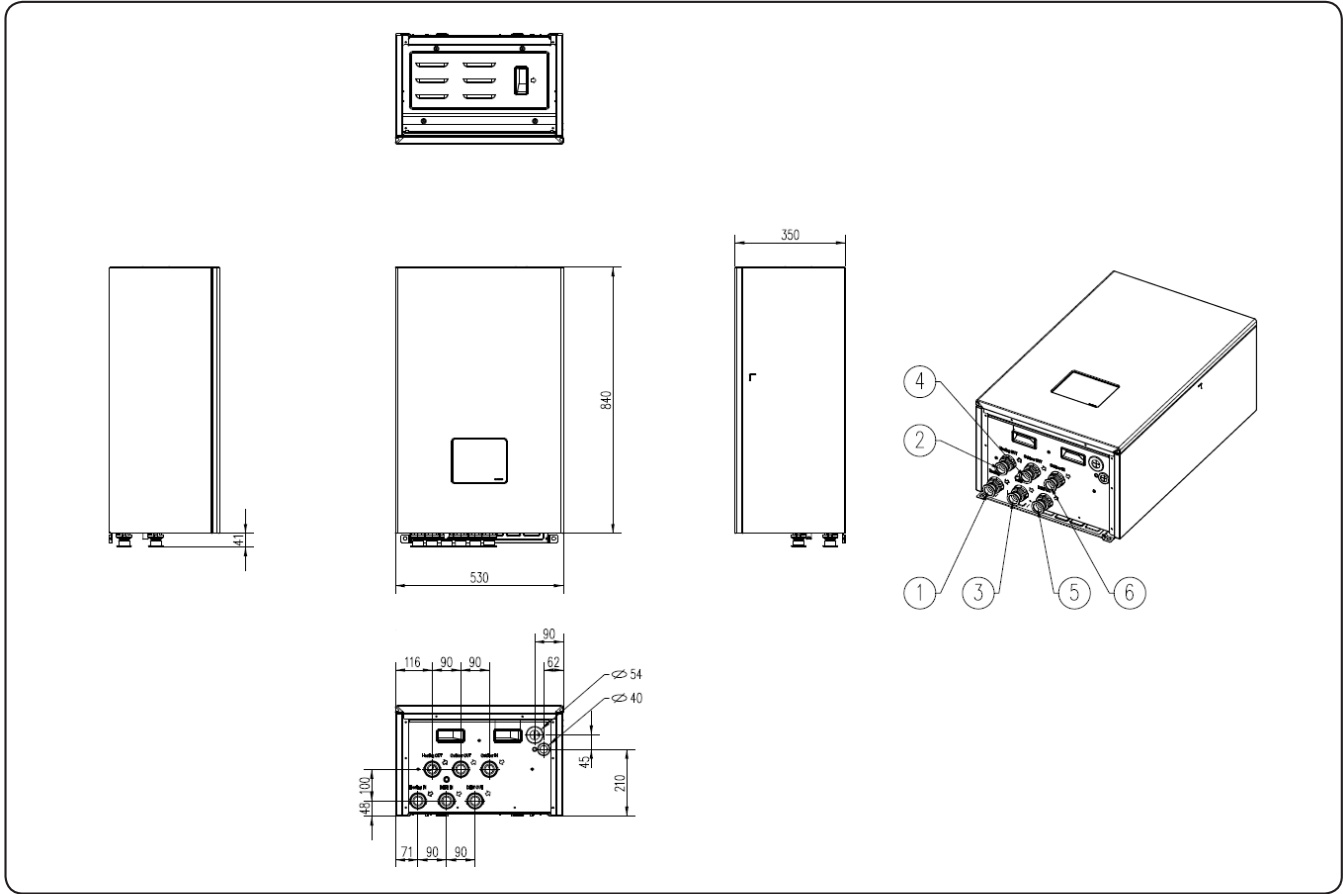
NO	Name	Description
01	Heating Outlet (Zone 1) (To Zone 1)	ø28, Straight pipe
02	Heating inlet (Zone 1) (From Zone 1)	ø28, Straight pipe
03	DHW outlet (Hot Water)	ø22, Straight pipe
04	DHW inlet (Cold Water)	ø22, Straight pipe
05	Outdoor outlet (To Outdoor Unit)	ø28, Straight pipe
06	Heating Outlet (Zone 2) (To Zone 2)	ø28, Straight pipe
07	Outdoor inlet (From Outdoor Unit)	ø28, Straight pipe
08	Heating inlet (Zone 2) (From Zone 2)	ø28, Straight pipe
09	DHW Return (Recirculation)	ø22, Straight pipe
10	T/P Valve	10bar, 90 °C

3. Indoor units

3-2. Dimensional drawing

AE160DNYMPK/EU

Unit : mm



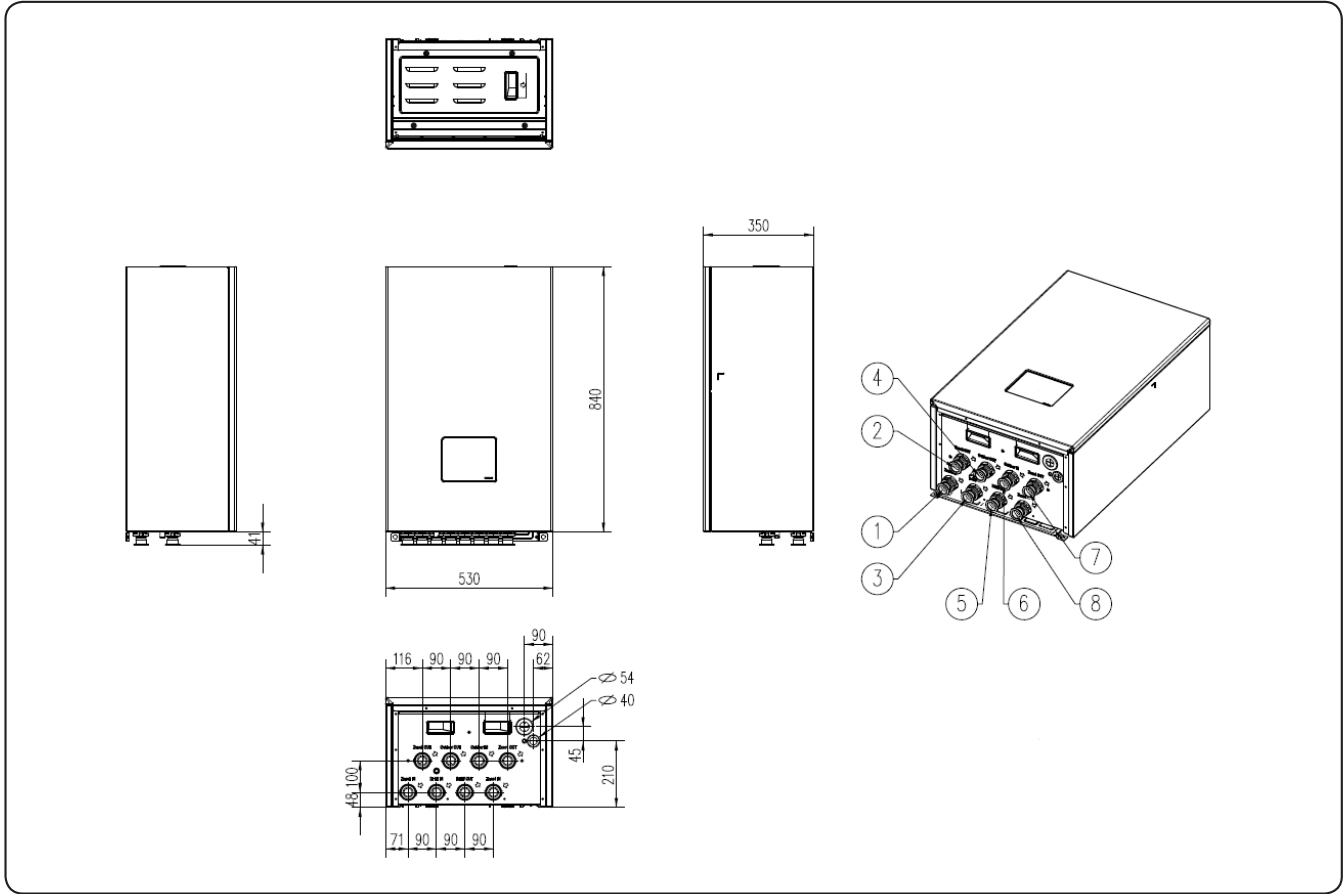
NO	Name	Description
01	Heating inlet (From zone)	BSPP female, 1-1/4"
02	Heating outlet (To zone)	BSPP female, 1-1/4"
03	DHW inlet (Cold water)	BSPP female, 1-1/4"
04	Outdoor outlet (To outdoor unit)	BSPP female, 1-1/4"
05	DHW outlet (Hot water)	BSPP female, 1-1/4"
06	Outdoor inlet (From outdoor unit)	BSPP female, 1-1/4"

3. Indoor units

3-2. Dimensional drawing

AE160DNZMPK/EU

Unit : mm



NO	Name	Description
01	Heating inlet(Zone 2) (From zone 2)	BSPP female, 1-1/4"
02	Heating outlet(Zone 2) (To zone 2)	BSPP female, 1-1/4"
03	DHW inlet (Cold water)	BSPP female, 1-1/4"
04	Outdoor outlet (To outdoor unit)	BSPP female, 1-1/4"
05	DHW outlet (Hot water)	BSPP female, 1-1/4"
06	Outdoor inlet (From outdoor unit)	BSPP female, 1-1/4"
07	Heating outlet(Zone 1) (To zone 1)	BSPP female, 1-1/4"
08	Heating inlet(Zone 1) (From zone 1)	BSPP female, 1-1/4"

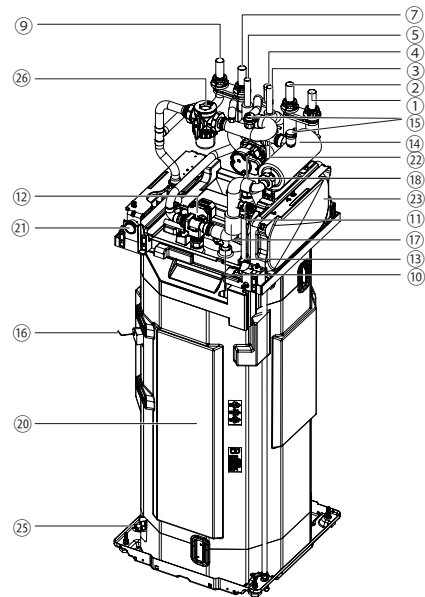
3. Indoor units

3-2. Dimensional drawing

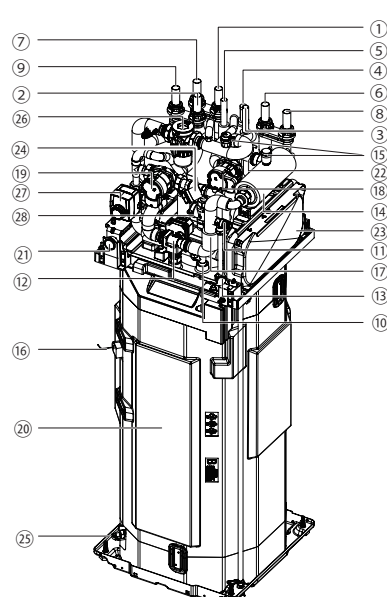
ClimateHub

Main components

* AE200DNWMPK



* AE200DNXMPK



No.	Part name	Note
①	Outdoor outlet	ø28, Straight pipe
②	Outdoor inlet	ø28, Straight pipe
③	DHW outlet	ø22, Straight pipe
④	DHW return	ø22, Straight pipe
⑤	DHW inlet	ø22, Straight pipe
⑥	Heating outlet (Zone 1)	ø28, Straight pipe
⑦	Heating outlet (Zone 2)	ø28, Straight pipe
⑧	Heating inlet (Zone 1)	ø28, Straight pipe
⑨	Heating inlet (Zone 2)	ø28, Straight pipe
⑩	T/P valve	10bar, 90 °C
⑪	Pressure relief valve	3bar, BSPP 1/2"
⑫	3way valve	
⑬	Anode bar	BSPP 1"
⑭	Back-up heater	
⑮	Air vent	BSPP 3/8"

No.	Part name	Note
⑮	Tank thermistor	
⑰	Heater thermistor	
⑱	Water Pump (Zone 2)	
⑲	Water pump (Zone 1)	
⑳	Water tank	200L
㉑	Manometer	0~4bar
㉒	Flow sensor	
㉓	Expansion vessel	10L, Pre-charge gas: 1.2 bar 90 °C, N2, BSPP 3/8"
㉔	Strainer	
㉕	Tank drain valve	
㉖	Magnetic filter	
㉗	Mixing valve	
㉘	Check valve	

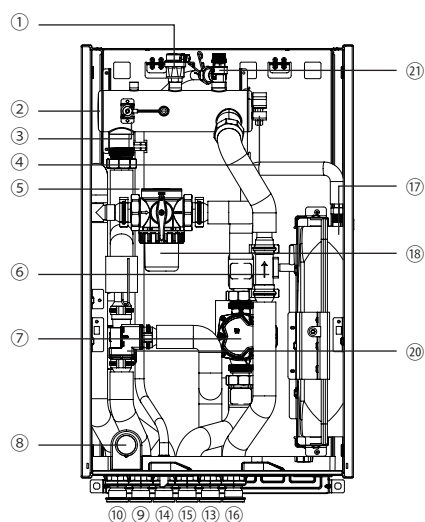
3. Indoor units

3-2. Dimensional drawing

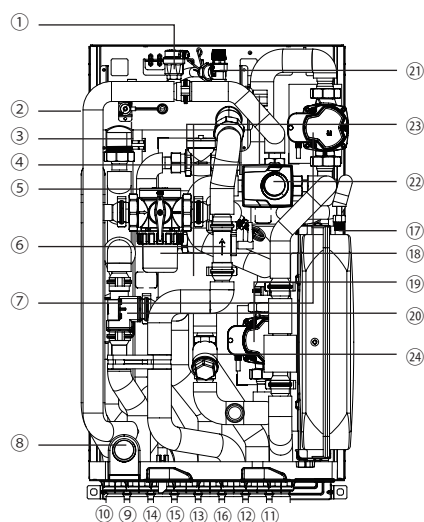
Hydro Unit

Main components

* AE160DNYMPK



* AE160DNZMPK



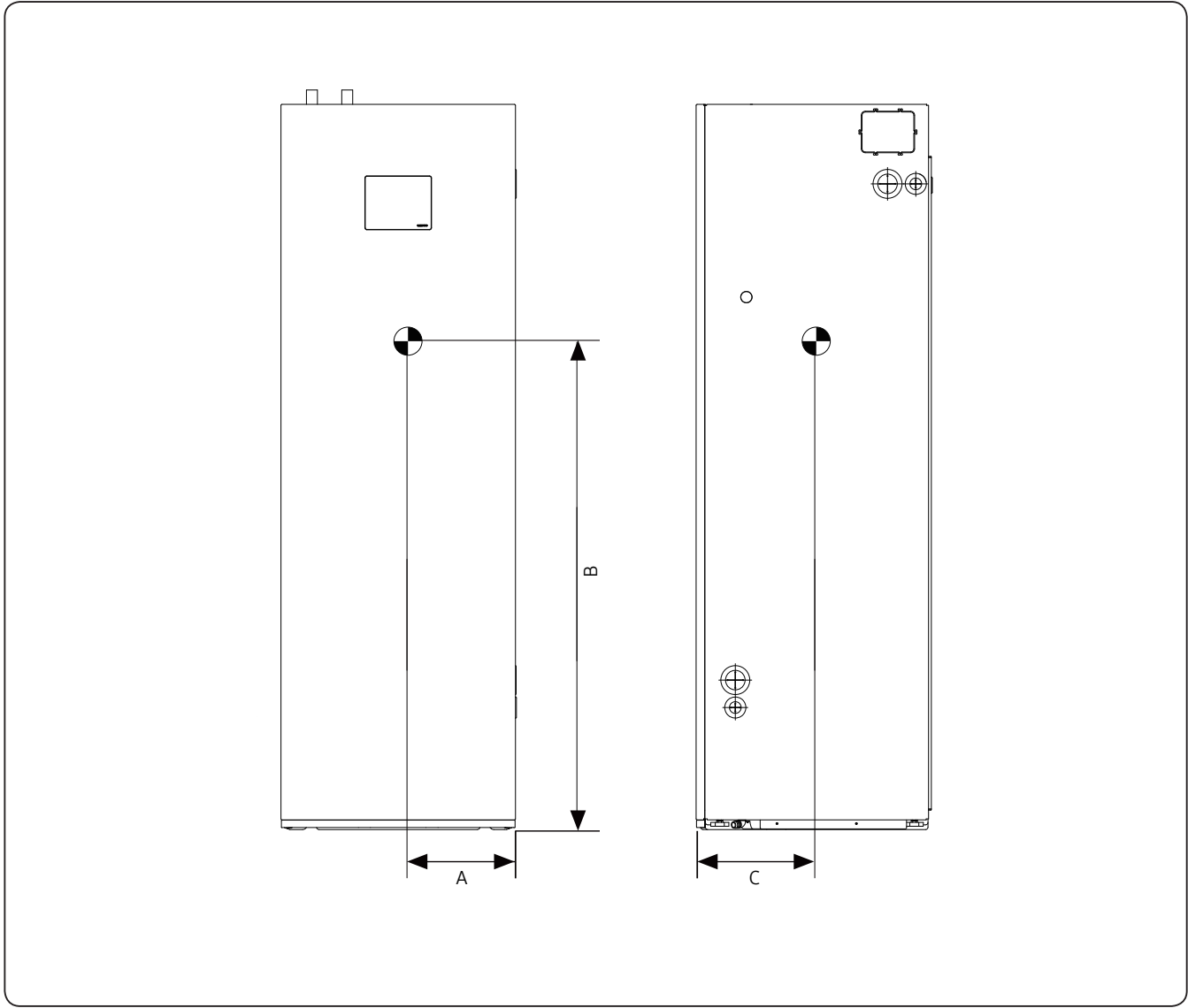
No.	Name	Note
①	Air vent 3/8"	BSPP male 3/8"
②	Backup heater thermal fuse	Thermal cut out 98 °C (+0,-5 °C)
③	Backup heater thermostat	Disc. 65 °C ±4 °C
④	Backup heater element	2, 4 kW: 1Φ AC 230V 50Hz / 6 kW: 3Φ AC 400V 50Hz
⑤	Drain hose	
⑥	Flow sensor	5~80L/min
⑦	Water pump	1P-230 V-50 Hz, 46 LPM x 54 kPa
⑧	Manometer	ø48, 0~4bar
⑨	Heating outlet(To zone) for AE160DNYMPK Heating outlet(Zone 2) (To zone 2) for AE160DNZMPK	BSPP female, 1-1/4"
⑩	Heating inlet(From zone) for AE160DNYMPK Heating inlet(Zone 2) (From zone 2) for AE160DNZMPK	BSPP female, 1-1/4"
⑪	Heating outlet(Zone 1) (To zone 1) for AE160DNZMPK	BSPP female, 1-1/4"
⑫	Heating inlet(Zone 1) (From zone 1) for AE160DNZMPK	BSPP female, 1-1/4"
⑬	DHW outlet (Hot water)	BSPP female, 1-1/4"
⑭	DHW inlet (Cold water)	BSPP female, 1-1/4"
⑮	Outdoor outlet (To outdoor unit)	BSPP female, 1-1/4"
⑯	Outdoor inlet (From outdoor unit)	BSPP female, 1-1/4"
⑰	Expansion vessel	10L, Pre-charge gas: 1.2 bar 90 °C, N ₂ , BSPP 3/8"
⑱	Magnetic filter	
⑲	Water pump (Zone 1)	
⑳	3way valve	
㉑	Pressure relief valve	2.9 bar, BSPP 1/2"
㉒	Mixing valve	
㉓	Check valve	
㉔	Strainer	

3. Indoor units

3-3. Center of Gravity

ClimateHub

Units : mm [inches]



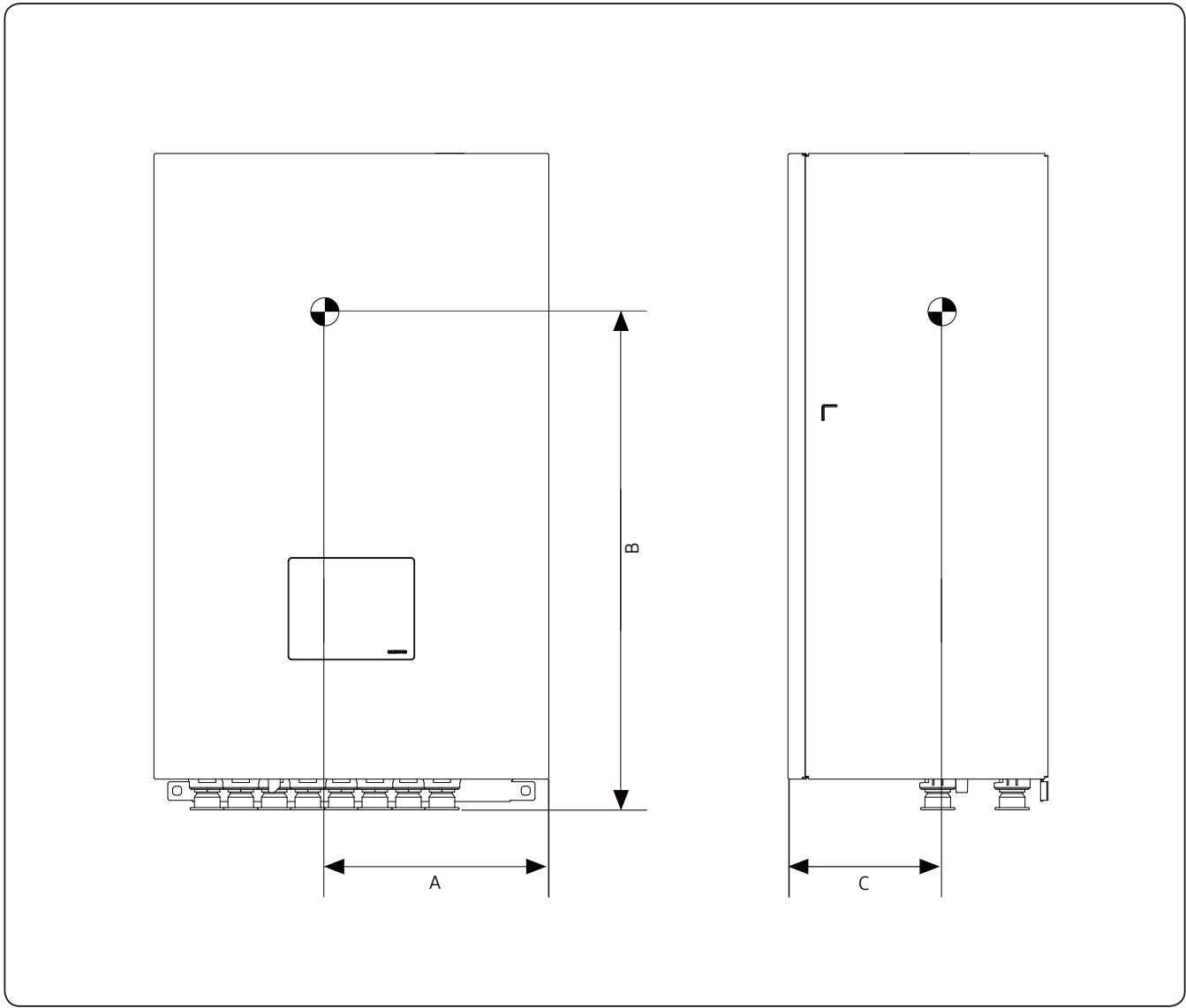
Model	A	B	C
AE200DN*MPK/EU	268 [10-9/16]	1,210 [47-5/8]	367 [14-7/16]

3. Indoor units

3-3. Center of Gravity

Hydro Unit

Units : mm [inches]

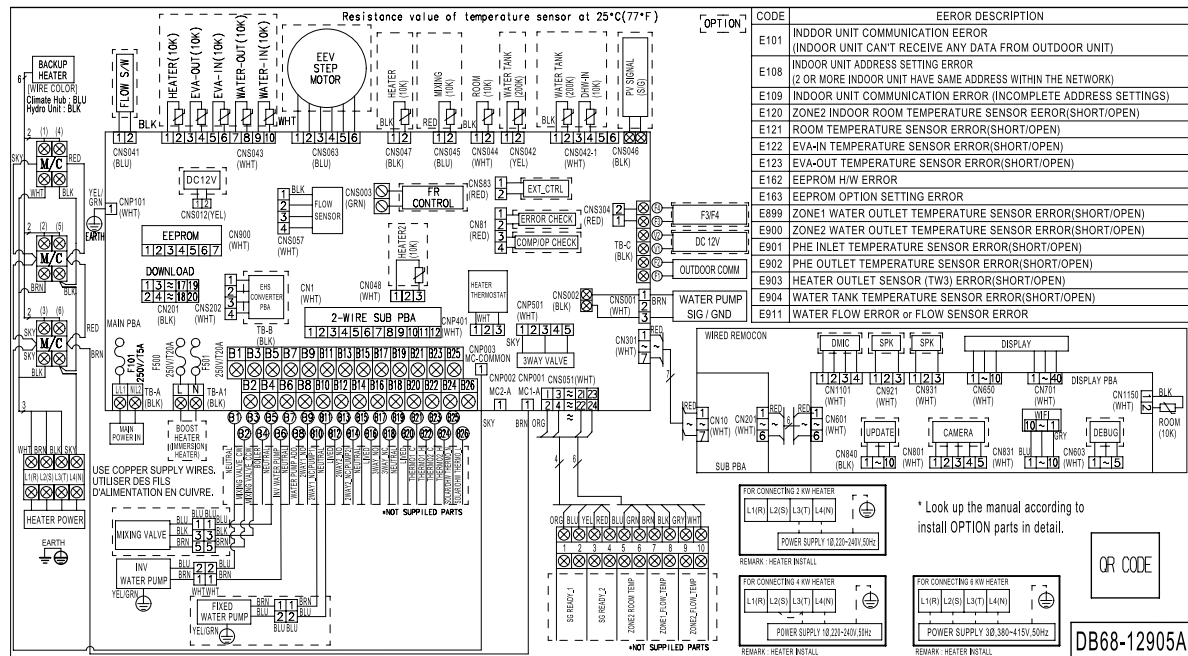


Model	A	B	C
AE160DN*MPK/EU	339 [13-3/8]	605 [23-13/16]	130 [5-1/8]

3. Indoor units

3-4. Electrical wiring diagram

ClimateHub/Hydro Unit



MAIN PBA	Printed Circuit Board(MAIN)	PV SIGNAL (S/G)	Photo Voltaic Signal
SUB PBA	Printed circuit board(SUB)	HEATER(10K)	Thermistor (Heater_10Kohm)
M/C	Magnetic Contactor	EVA-OUT(10K)	Thermistor (Eva out_10Kohm)
MIXING VALVE_CW	Mixing Valve_Clockwise	EVA-IN(10K)	Thermistor (Eva in_10Kohm)
MIXING VALVE_CCW	Mixing Valve_Counter-clockwise	WATER-OUT(10K)	Thermistor (Water-Out_10Kohm)
INV WATER PUMP	Inverter Water Pump	WATER-IN(10K)	Thermistor (Water-In_10Kohm)
2WAY1_NO	2way Valve1_Normal Open	MIXING(10K)	Thermistor (Mixing_10Kohm)
2WAY1_NC	2way Valve1_Normal Close	ROOM(10K)	Thermistor (Room_10Kohm)
2WAY2_NO	2way Valve2_Normal Open	WATER TANK(200K)	Thermistor (Water Tank_200Kohm)
2WAY2_NC	2way Valve2_Normal Close	DHW-IN(10K)	Thermistor (Domestic Hot Water_10Kohm)
3WAY_NO	3way Valve_Normal Open	EEV STEP MOTOR	Electronic Expansion Valve Step Motor
3WAY_NC	3way Valve_Normal Close	FLOW S/W	Flow Switch
THERMO1_C	Thermostat1_Cooling	SG READY	Smartgrid Ready
THERMO1_H	Thermostat1_Heating	ZONE1_FLOW_TEMP	Zone1_Flow_Temperature
THERMO2_C	Thermostat2_Cooling	ZONE2_FLOW_TEMP	Zone2_Flow_Temperature
THERMO2_H	Thermostat2_Heating	ZONE2_ROOM_TEMP	Zone2_Room_Temperature
WATER PUMP SIG / GND	Water Pump Signal / Ground	SOLAR/DHW THERMO_N	Solar/Domestic Hot Water Thermostat_Neutral
OUTDOOR COMM	Outdoor Communication	SOLAR/DHW THERMO_L	Solar/Domestic Hot Water Thermostat_Live
COMP/OP CHECK	Compressor/Operation Check	DMIC	Digital Microphone
EXT_CTRL	External Control	SPK	Speaker

NOTES

- This wiring diagram applies only to the Indoor 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, indoor-wired remote controller transmission F3-F4.
- ⚡ Protective earth(SCREW)

3. Indoor units

3-5. Sound data

Indoor Unit	Model		Sound Pressure dB(A) (Heating)	Sound Power dB(A) (Heating)
Climate Hub	AE050*XYD**/EU	AE200DNXMPK/EU	28	42
	AE080*XYD**/EU	AE200DNXMPK/EU	28	42
	AE120*XYD**/EU	AE200DNXMPK/EU	30	44
	AE140*XYD**/EU	AE200DNXMPK/EU	30	44
	AE160*XYD**/EU	AE200DNXMPK/EU	30	44
	AE050*XYD**/EU	AE200DNWMPK/EU	26	40
	AE080*XYD**/EU	AE200DNWMPK/EU	26	40
	AE120*XYD**/EU	AE200DNWMPK/EU	28	42
	AE140*XYD**/EU	AE200DNWMPK/EU	28	42
	AE160*XYD**/EU	AE200DNWMPK/EU	28	42
Hydro Unit	AE050*XYD**/EU	AE160DNZMPK/EU	28	42
	AE080*XYD**/EU	AE160DNZMPK/EU	28	42
	AE120*XYD**/EU	AE160DNZMPK/EU	30	44
	AE140*XYD**/EU	AE160DNZMPK/EU	30	44
	AE160*XYD**/EU	AE160DNZMPK/EU	30	44
	AE050*XYD**/EU	AE160DNYMPK/EU	26	40
	AE080*XYD**/EU	AE160DNYMPK/EU	26	40
	AE120*XYD**/EU	AE160DNYMPK/EU	28	42
	AE140*XYD**/EU	AE160DNYMPK/EU	28	42
	AE160*XYD**/EU	AE160DNYMPK/EU	28	42

NOTE

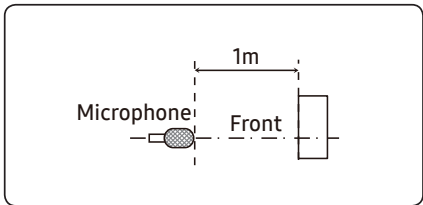
- Specifications may be subject to change without prior notice.
- Sound Pressure Level
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.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

3-5. Sound data

Sound Pressure level

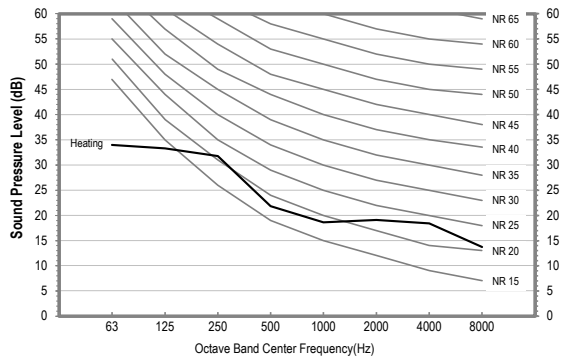
Unit: dB(A)



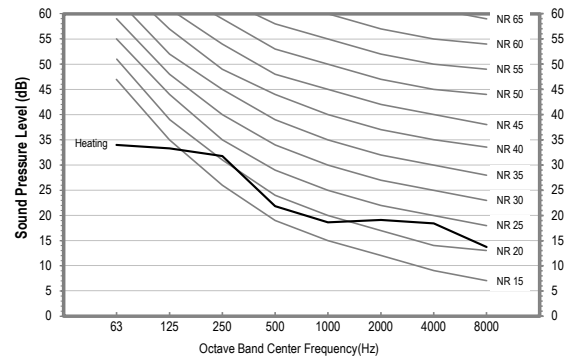
Model	Heating
AE050*XYD**/EU + AE200DNXMPK/EU	28
AE080*XYD**/EU + AE200DNXMPK/EU	28
AE120*XYD**/EU + AE200DNXMPK/EU	30
AE140*XYD**/EU + AE200DNXMPK/EU	30

- NR Curve

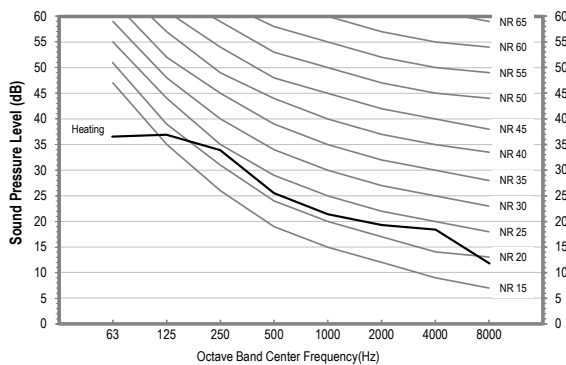
1) AE050*XYD**/EU + AE200DNXMPK/EU



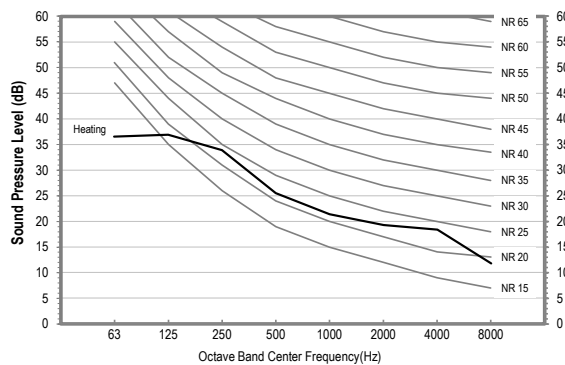
2) AE080*XYD**/EU + AE200DNXMPK/EU



3) AE120*XYD**/EU + AE200DNXMPK/EU



4) AE140*XYD**/EU + AE200DNXMPK/EU



NOTE

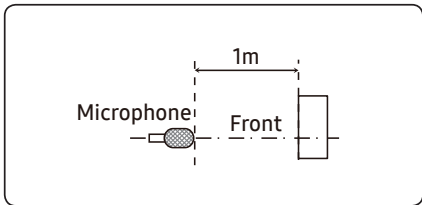
- Specifications may be subject to change without prior notice.
- Sound Pressure Level
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.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

3. Indoor units

3-5. Sound data

Sound Pressure level

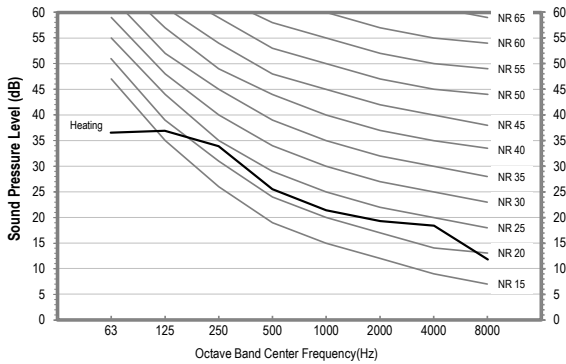
Unit: dB(A)



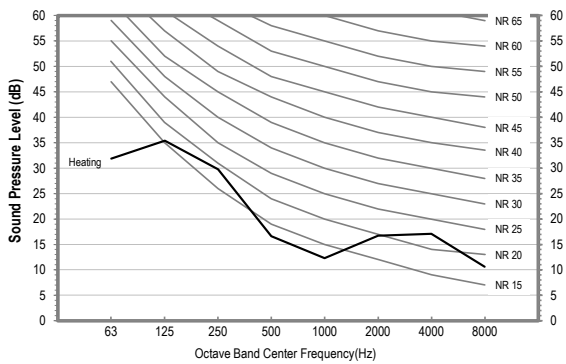
Model	Heating
AE160*XYD**/EU + AE200DNXMPK/EU	30
AE050*XYD**/EU + AE200DNWMPK/EU	26
AE080*XYD**/EU + AE200DNWMPK/EU	26
AE120*XYD**/EU + AE200DNWMPK/EU	28

• NR Curve

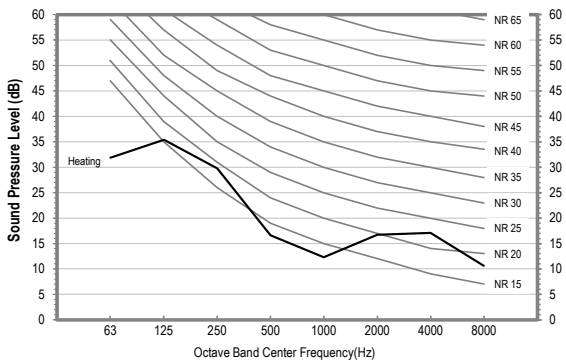
1) AE160*XYD**/EU + AE200DNXMPK/EU



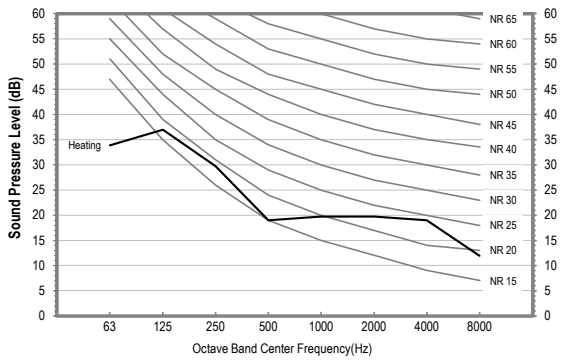
2) AE050*XYD**/EU + AE200DNWMPK/EU



3) AE080*XYD**/EU + AE200DNWMPK/EU



4) AE120*XYD**/EU + AE200DNWMPK/EU



NOTE

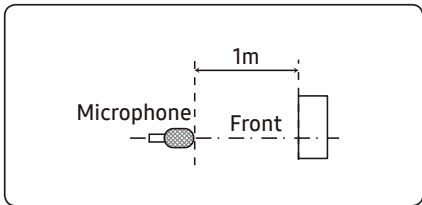
- Specifications may be subject to change without prior notice.
- Sound Pressure Level
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.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

3. Indoor units

3-5. Sound data

Sound Pressure level

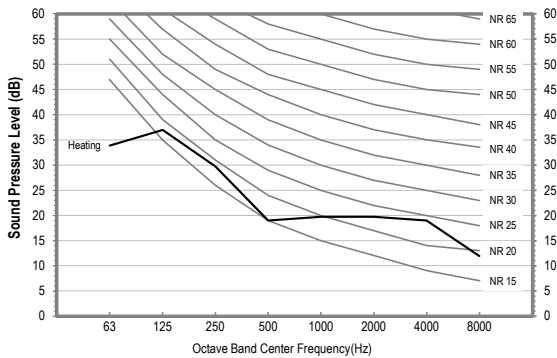
Unit: dB(A)



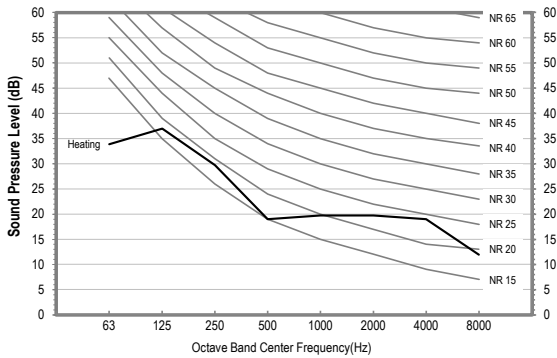
Model	Heating
AE140*XYD**/EU + AE200DNWMPK/EU	28
AE160*XYD**/EU + AE200DNWMPK/EU	28
AE050*XYD**/EU + AE160DNZMPK/EU	28
AE080*XYD**/EU + AE160DNZMPK/EU	28

• NR Curve

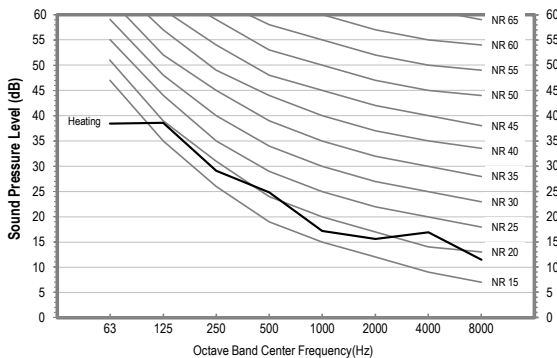
1) AE140*XYD**/EU + AE200DNWMPK/EU



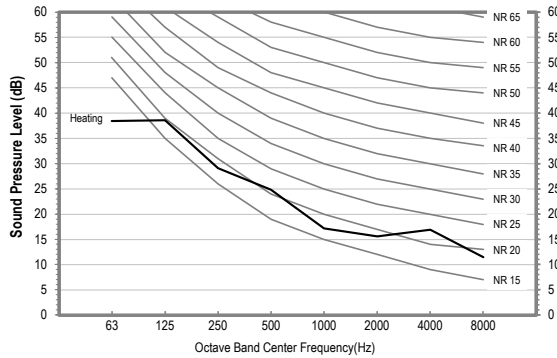
2) AE160*XYD**/EU + AE200DNWMPK/EU



3) AE050*XYD**/EU + AE160DNZMPK/EU



4) AE080*XYD**/EU + AE160DNZMPK/EU



NOTE

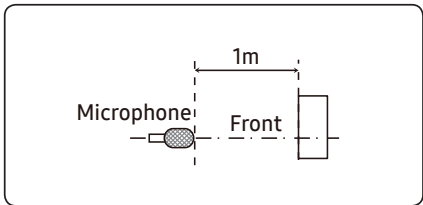
- Specifications may be subject to change without prior notice.
- Sound Pressure Level
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.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

3. Indoor units

3-5. Sound data

Sound Pressure level

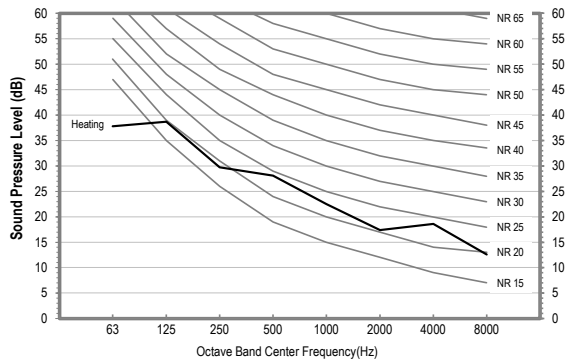
Unit: dB(A)



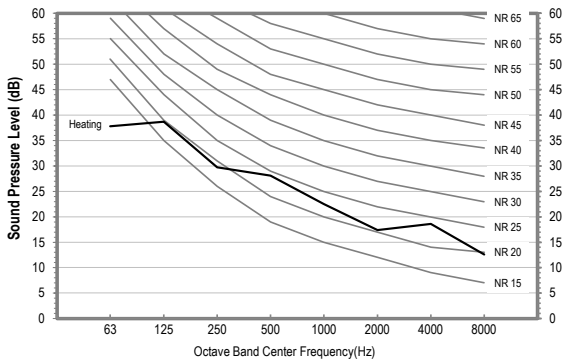
Model	Heating
AE120*XYD**/EU + AE160DNZMPK/EU	30
AE140*XYD**/EU + AE160DNZMPK/EU	30
AE160*XYD**/EU + AE160DNZMPK/EU	30
AE050*XYD**/EU + AE160DNZMPK/EU	26

• NR Curve

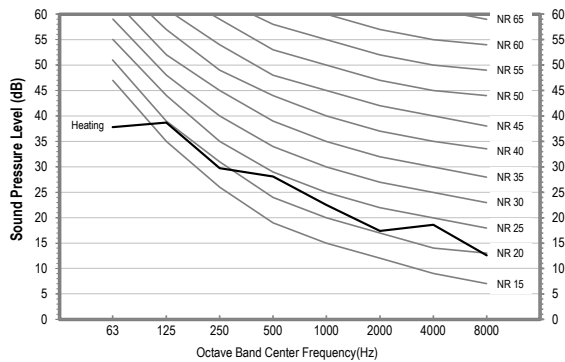
1) AE120*XYD**/EU + AE160DNZMPK/EU



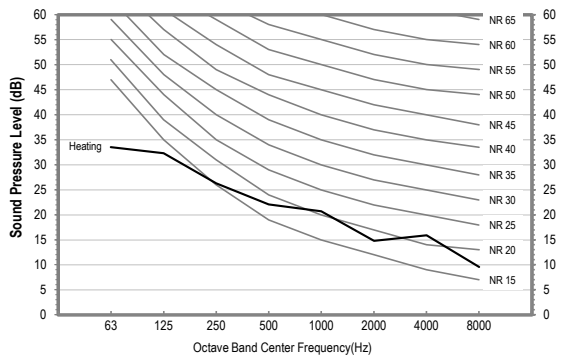
2) AE140*XYD**/EU + AE160DNZMPK/EU



3) AE160*XYD**/EU + AE160DNZMPK/EU



4) AE050*XYD**/EU + AE160DNZMPK/EU



NOTE

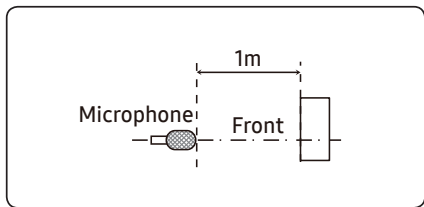
- Specifications may be subject to change without prior notice.
- Sound Pressure Level
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.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

3. Indoor units

3-5. Sound data

Sound Pressure level

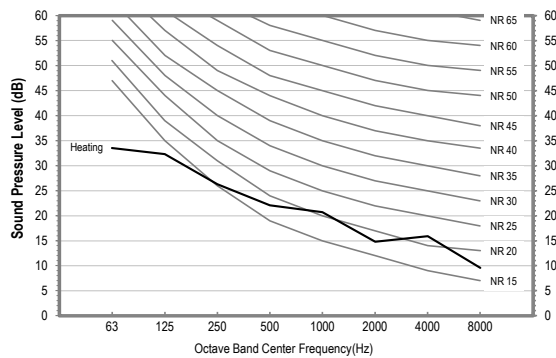
Unit: dB(A)



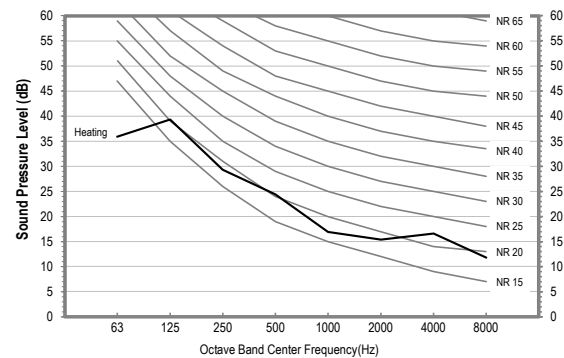
Model	Heating
AE080*XYD**/EU + AE160DNYMPK/EU	26
AE120*XYD**/EU + AE160DNYMPK/EU	28
AE140*XYD**/EU + AE160DNYMPK/EU	28
AE160*XYD**/EU + AE160DNYMPK/EU	28

- NR Curve

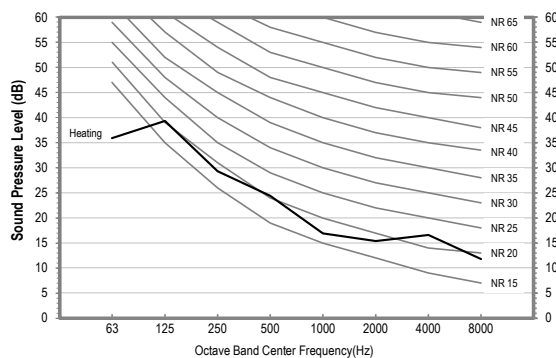
1) AE080*XYD**/EU + AE160DNYMPK/EU



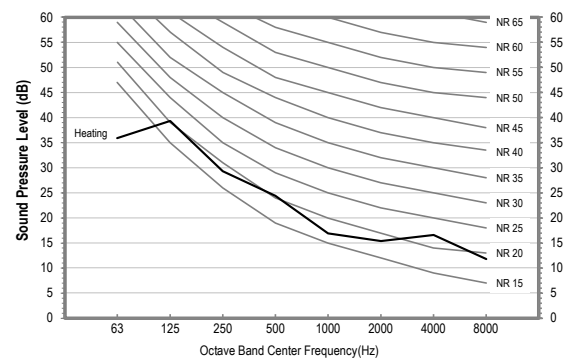
2) AE120*XYD**/EU + AE160DNYMPK/EU



3) AE140*XYD**/EU + AE160DNYMPK/EU



4) AE160*XYD**/EU + AE160DNYMPK/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. Indoor units

3-5. Sound data

Sound Power level

NOTE

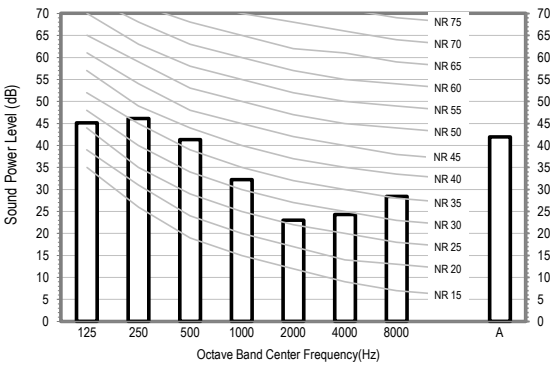
Unit: dB(A)

- 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.

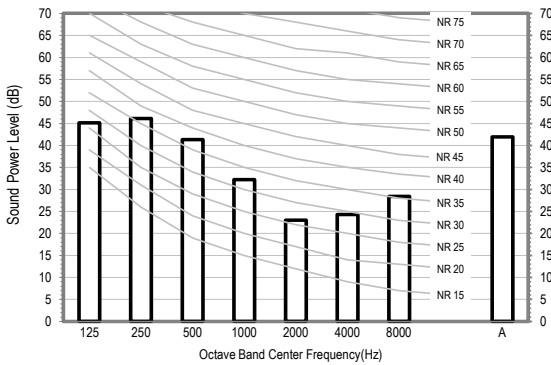
Model	Heating
AE050*XYD**/EU + AE200DNXMPK/EU	42
AE080*XYD**/EU + AE200DNXMPK/EU	42
AE120*XYD**/EU + AE200DNXMPK/EU	44
AE140*XYD**/EU + AE200DNXMPK/EU	44

• NR Curve

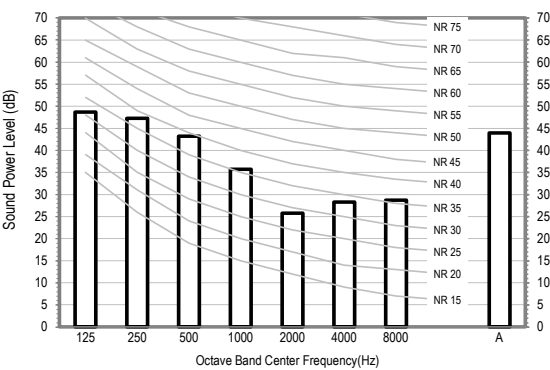
1) AE050*XYD**/EU + AE200DNXMPK/EU



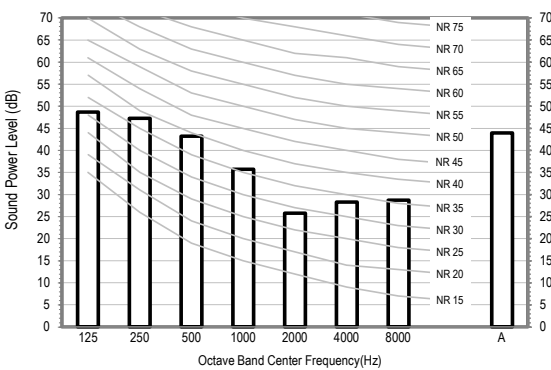
2) AE080*XYD**/EU + AE200DNXMPK/EU



3) AE120*XYD**/EU + AE200DNXMPK/EU



4) AE140*XYD**/EU + AE200DNXMPK/EU



3. Indoor units

3-5. Sound data

Sound Power level

NOTE

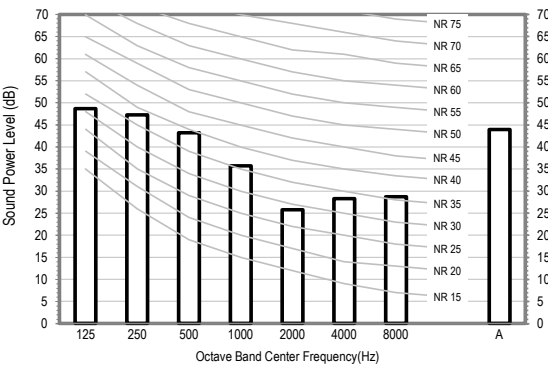
Unit: dB(A)

- 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.

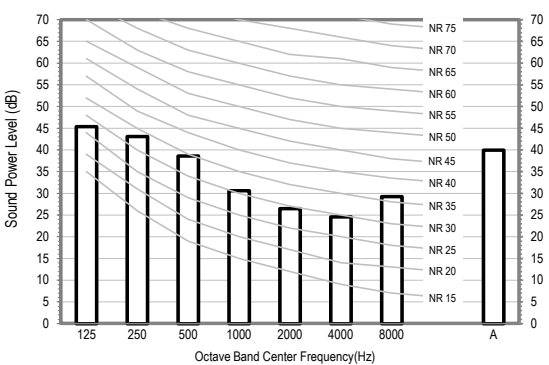
Model	Heating
AE160*XYD**/EU + AE200DNXMPK/EU	44
AE050*XYD**/EU + AE200DNWMPK/EU	40
AE080*XYD**/EU + AE200DNWMPK/EU	40
AE120*XYD**/EU + AE200DNWMPK/EU	42

NR Curve

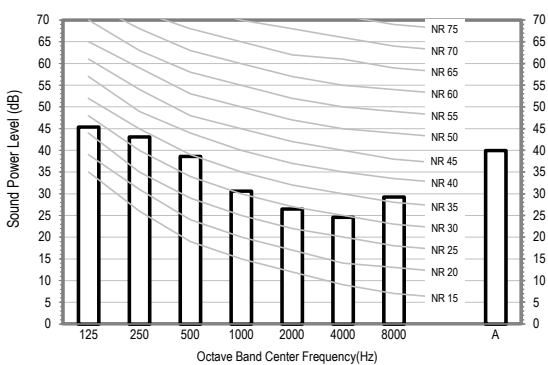
1) AE160*XYD**/EU + AE200DNXMPK/EU



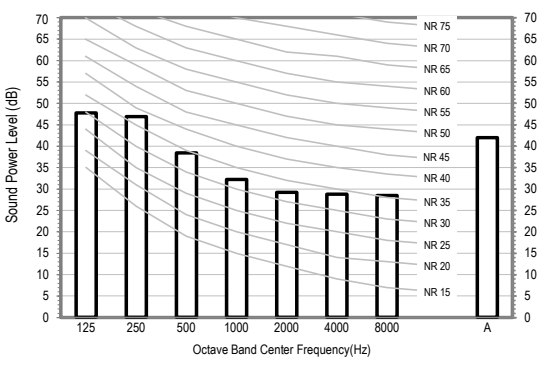
2) AE050*XYD**/EU + AE200DNWMPK/EU



3) AE080*XYD**/EU + AE200DNWMPK/EU



4) AE120*XYD**/EU + AE200DNWMPK/EU



3. Indoor units

3-5. Sound data

Sound Power level

NOTE

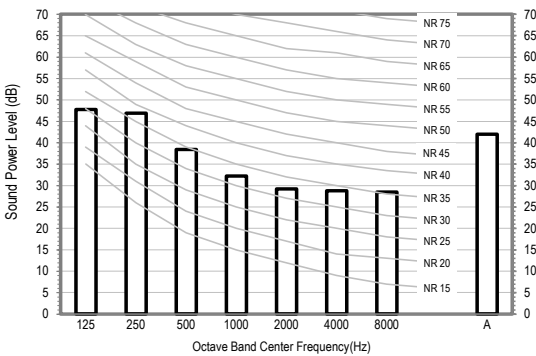
Unit: dB(A)

- 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.

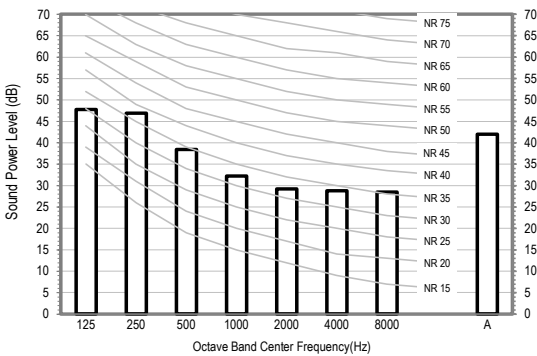
Model	Heating
AE140*XYD**/EU + AE200DNWMPK/EU	42
AE160*XYD**/EU + AE200DNWMPK/EU	42
AE050*XYD**/EU + AE160DNZMPK/EU	42
AE080*XYD**/EU + AE160DNZMPK/EU	42

NR Curve

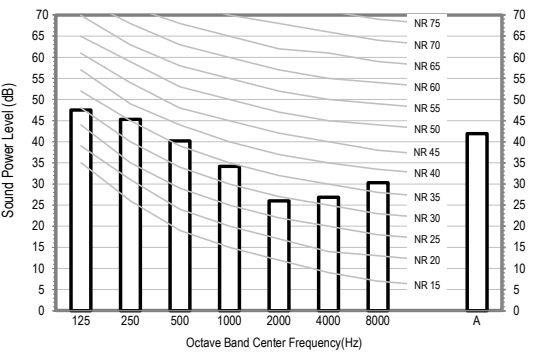
1) AE050*XYD**/EU + AE200DNWMPK/EU



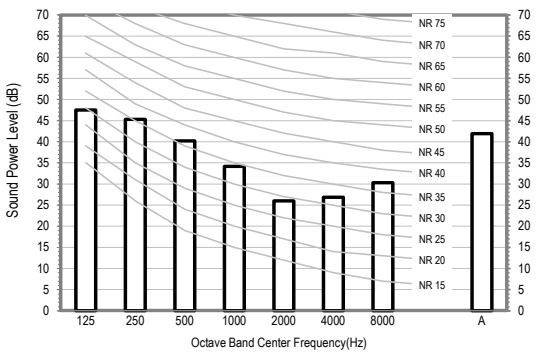
2) AE080*XYD**/EU + AE200DNWMPK/EU



3) AE120*XYD**/EU + AE200DNWMPK/EU



4) AE160*XYD**/EU + AE200DNWMPK/EU



3. Indoor units

3-5. Sound data

Sound Power level

NOTE

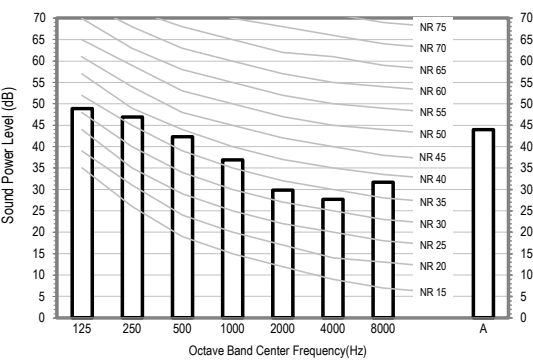
Unit: dB(A)

- 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.

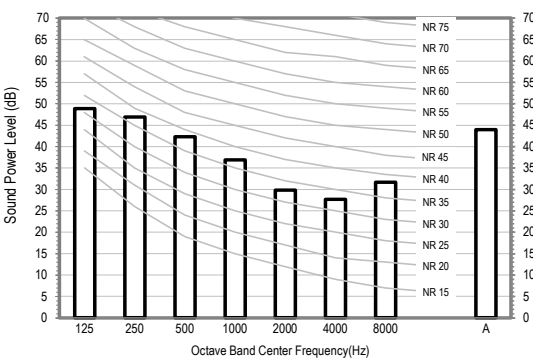
Model	Heating
AE120*XYD**/EU + AE160DNZMPK/EU	44
AE140*XYD**/EU + AE160DNZMPK/EU	44
AE160*XYD**/EU + AE160DNZMPK/EU	44
AE050*XYD**/EU + AE160DNYMPK/EU	40

• NR Curve

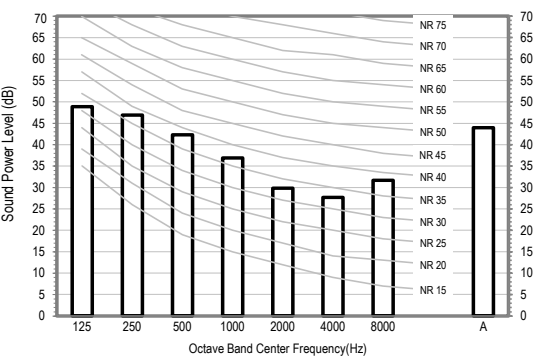
1) AE120*XYD**/EU + AE160DNZMPK/EU



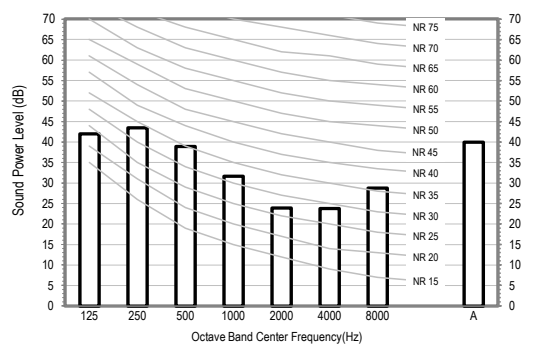
2) AE140*XYD**/EU + AE160DNZMPK/EU



3) AE160*XYD**/EU + AE160DNZMPK/EU



4) AE050*XYD**/EU + AE160DNYMPK/EU



3. Indoor units

3-5. Sound data

Sound Power level

NOTE

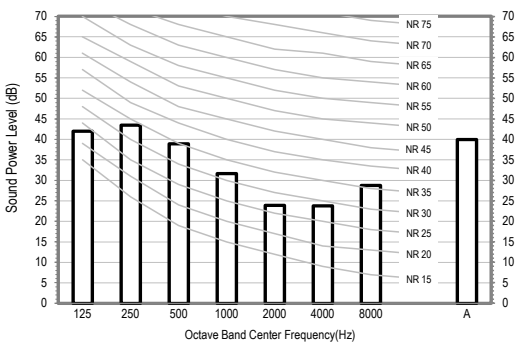
Unit: dB(A)

- 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.

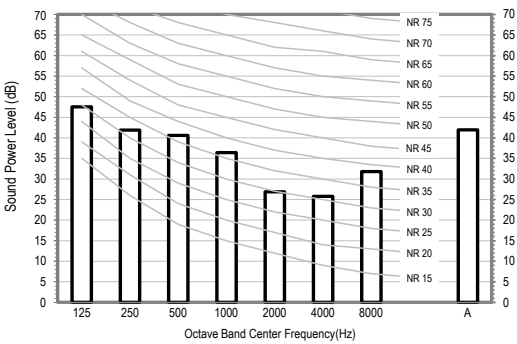
Model	Heating
AE080*XYD**/EU + AE160DNYMPK/EU	40
AE120*XYD**/EU + AE160DNYMPK/EU	42
AE140*XYD**/EU + AE160DNYMPK/EU	42
AE160*XYD**/EU + AE160DNYMPK/EU	42

• NR Curve

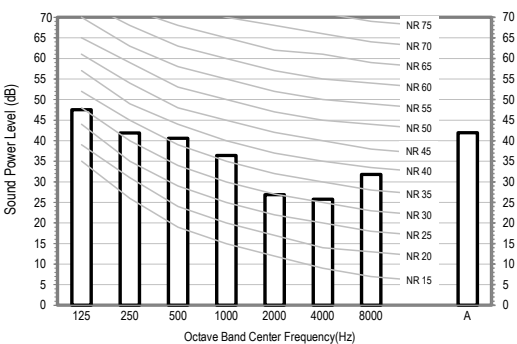
1) AE080*XYD**/EU + AE160DNYMPK/EU



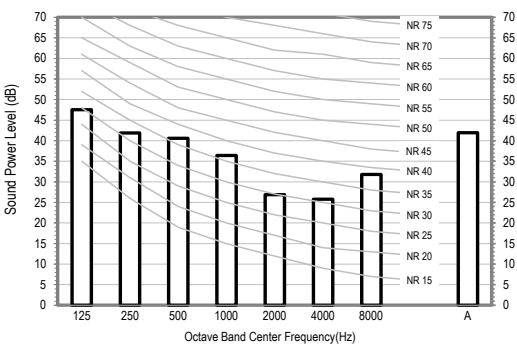
2) AE120*XYD**/EU + AE160DNYMPK/EU



3) AE140*XYD**/EU + AE160DNYMPK/EU



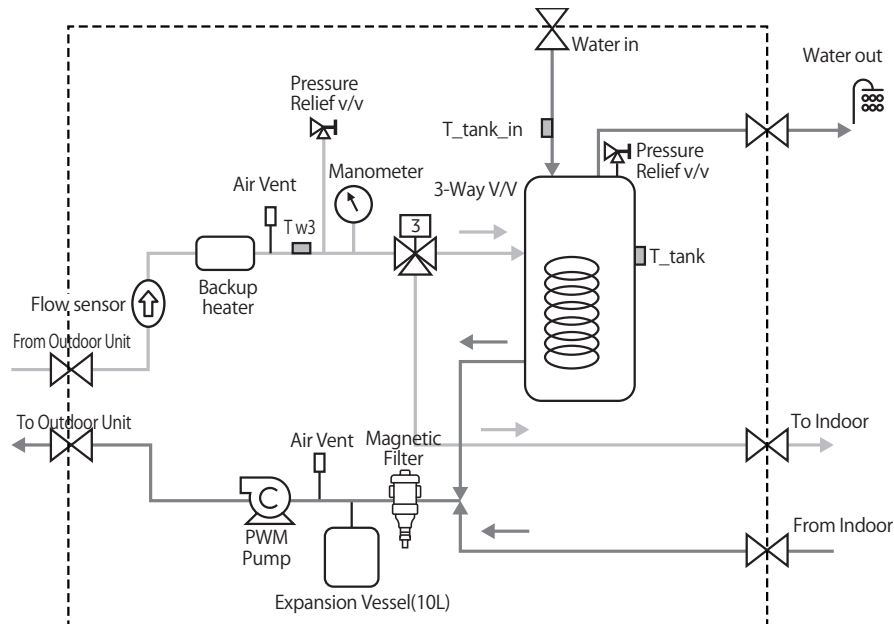
4) AE160*XYD**/EU + AE160DNYMPK/EU



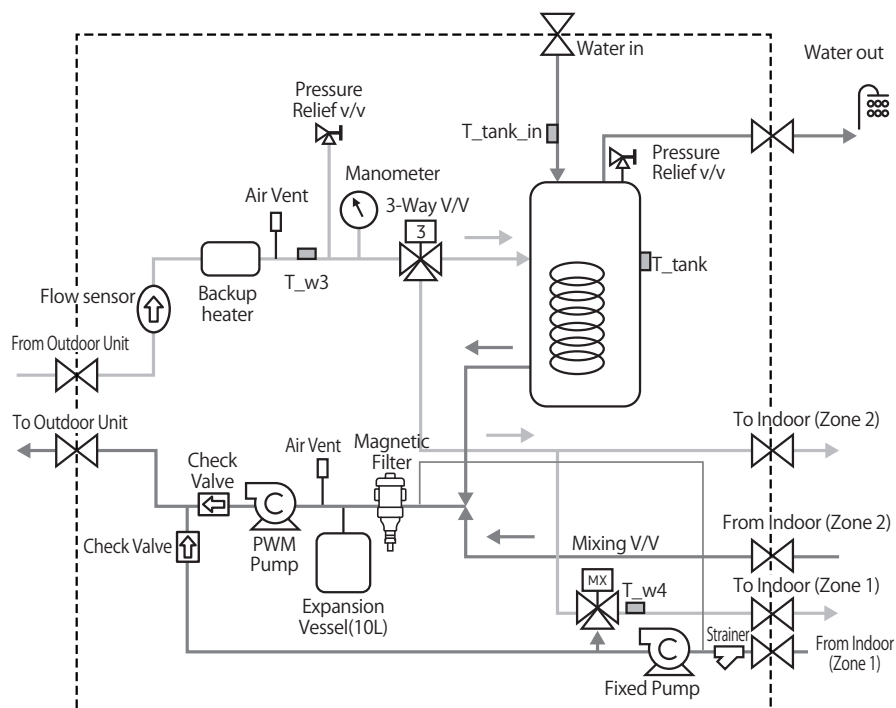
3. Indoor units

3-6. Piping diagram

AE200DNWMPK/EU (Standard)



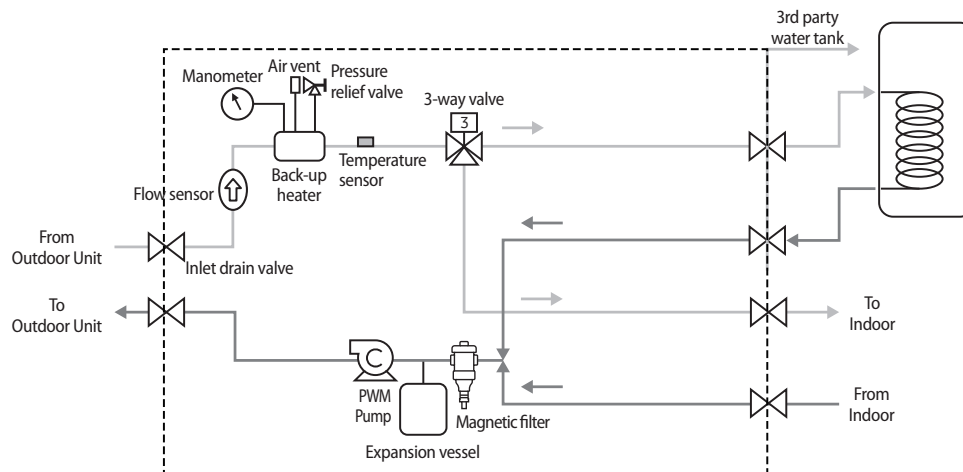
AE200DNXMPK/EU (Standard + 2 Zone kit)



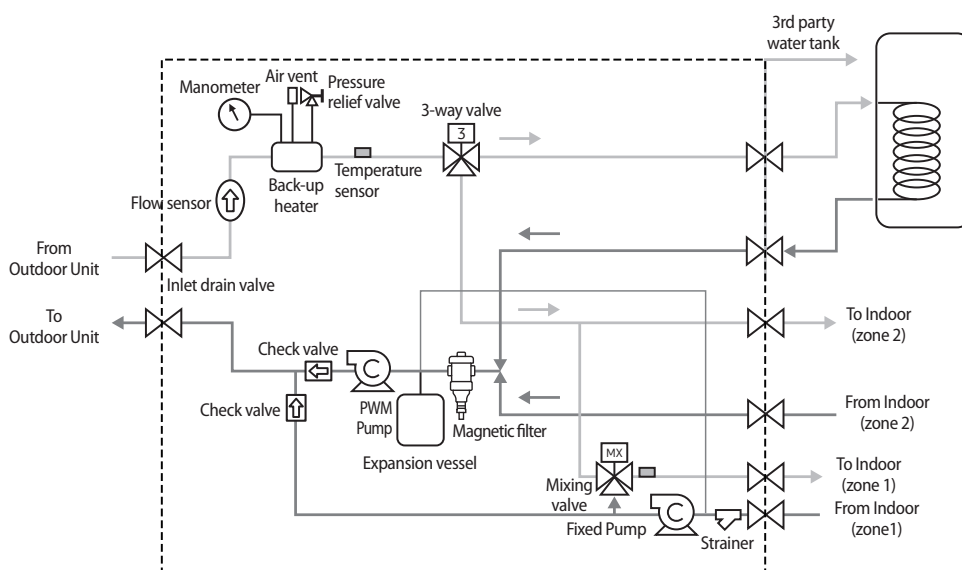
3. Indoor units

3-6. Piping diagram

AE016DNYMPK/EU (Standard)



AE016DNZMPK/EU (Standard + 2 Zone kit)

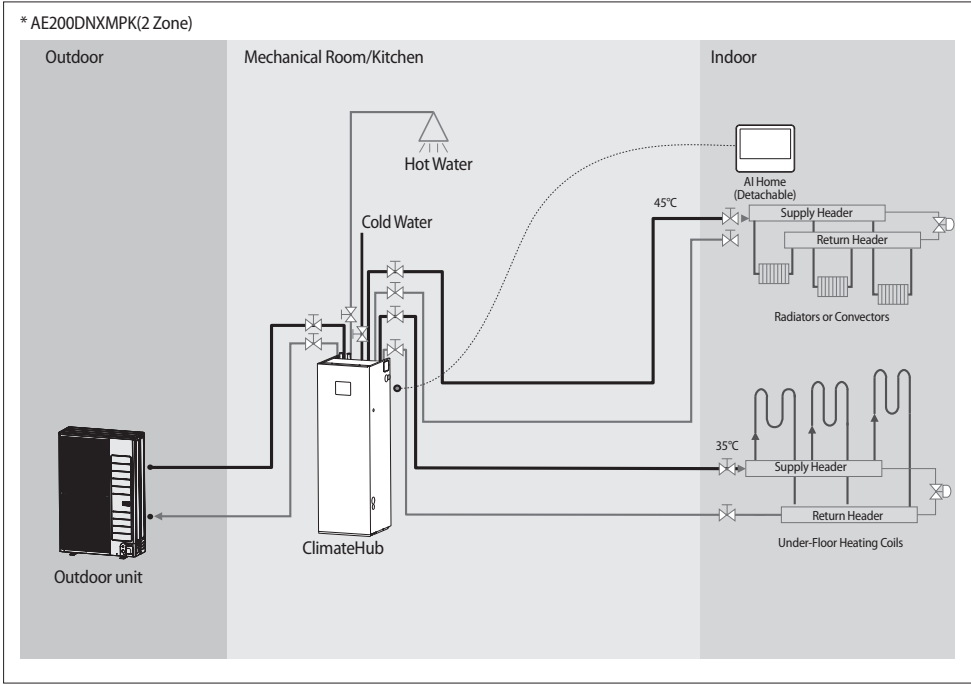
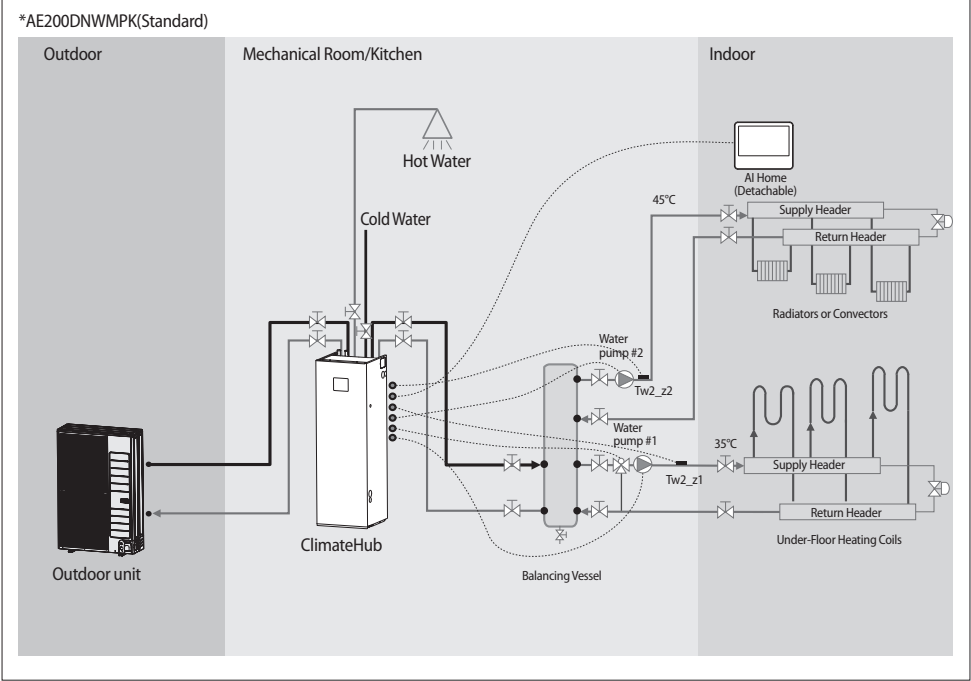


4. Installation

Indoor unit

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Application 1: Space heating + water heating

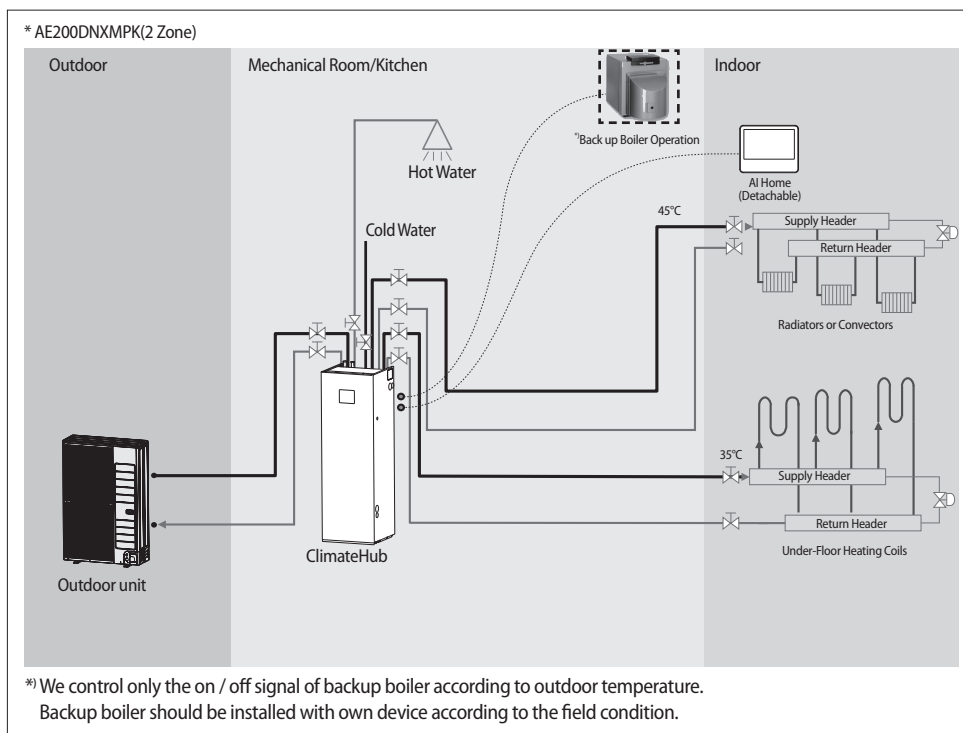
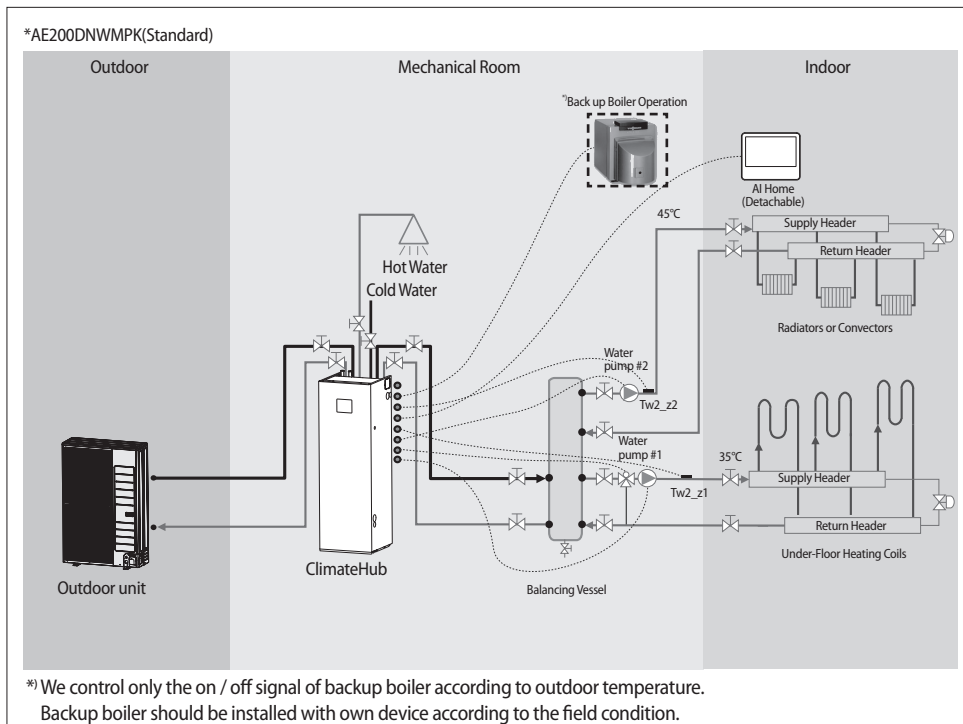


4. Installation

Indoor unit

ClimateHub

Application 2: Hybrid application(backup boiler)



- Samsung has not responsible for performance and stability of backup boiler.
- Water quality must be according to Directive (EU) 2020/2184.

4. Installation

Indoor unit

ClimateHub

Pipe work

Water pipe work

The hydro unit is equipped with components listed on the table below.

All entering, leaving water direction is embossed right next to the pipe. Please connect the pipe with attention to the direction of the arrow.

Whole water plumbing system including Hydro unit shall be installed by a qualified technician and must comply with all relevant European and national regulations.

- ▶ Allowable water pressure of hydro unit is maximum 3.0 bar.
- ▶ An air-vent valve is integrated on the hydro unit. Please check that air-vent valve is not overtightened so the air-vent valve can release any air out of the system during system operation.
- ▶ AE200DNX*** (2zone built-in type) is designed to supply water at 2 different temperatures.
 - For heating operations, please connect the Zone 1 supply line to a room that requires a lower water temperature (ex,underfloor heating) and the Zone 2 supply line to a room that requires a higher water temperature (ex,radiators).



NOTE

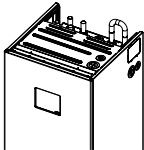
If you install AE200DNX*** (2zone built-in type) as a single-zone application, then:

- Install a bypass line between the water inlet and outlet for Zone 1 and use Zone 2 for space heating.
- Change FSV Setting #4061=0(Zone control= No), #4041=0 (Mixing V/v control= No)

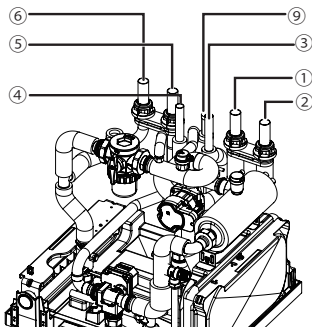


CAUTION

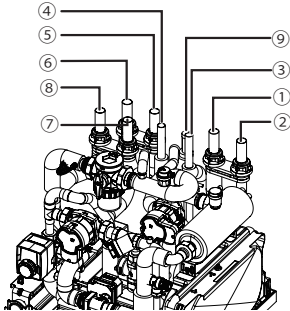
- In case of the zone 1 is not used, in/out pipe should not be blocked separately, and it must be connected to the Bypass line.



* AE200DNWMPK



* AE200DNXMPK



No	Size	Name		Type
		AE200DNWMPK	AE200DNXMPK	
①	Φ28, T1.2, Copper	Outdoor inlet (From Outdoor Unit)	Heating Outlet (Zone 1) (To Zone 1)	Straight pipe
②	Φ28, T1.2, Copper	Outdoor outlet (To Outdoor Unit)	Heating inlet (Zone 1) (From Zone 1)	
③	Φ22, T1.0, Copper	DHW outlet (Hot Water)	DHW outlet (Hot Water)	
④	Φ22, T1.0, Copper	DHW inlet (Cold Water)	DHW inlet (Cold Water)	
⑤	Φ28, T1.2, Copper	Heating Outlet (To Zone)	Outdoor outlet (To Outdoor Unit)	
⑥	Φ28, T1.2, Copper	Heating inlet (From Zone)	Heating Outlet (Zone 2) (To Zone 2)	
⑦	Φ28, T1.2, Copper	N/A	Outdoor inlet (From Outdoor Unit)	
⑧	Φ28, T1.2, Copper	N/A	Heating inlet (Zone 2) (From Zone 2)	straight pipe with cap
⑨	Φ22, T1 .0, Copper	DHW Return (Recirculation)	DHW Return (Recirculation)	

4. Installation

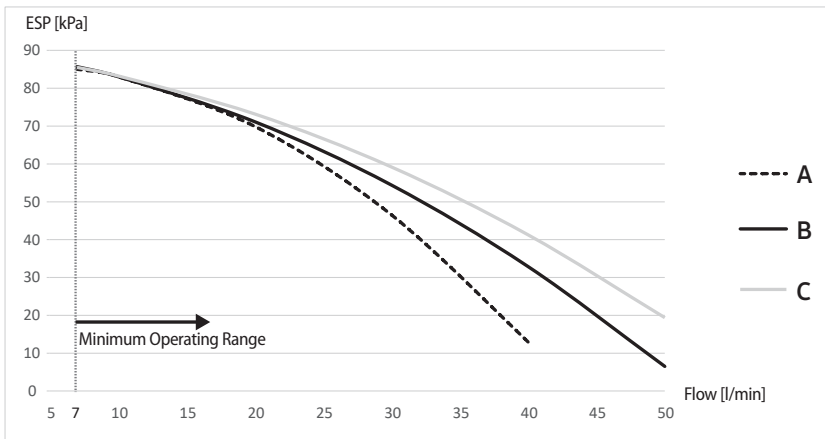
Indoor unit

ClimateHub

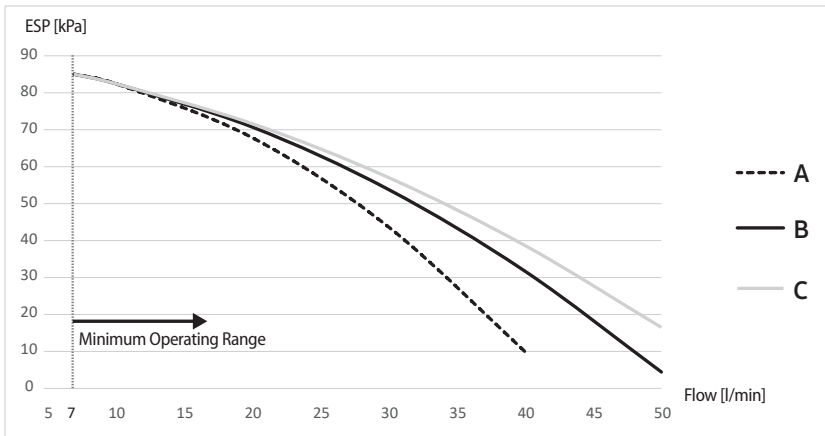
ESP(External Static Pressure) Diagram

The illustration below shows the external static pressure of the unit depending on the water flow and the pump setting.

AE200DNW***



AE200DNX***



When ESP is not enough, additional pump should be installed. In this case, install the PWM control external type pump (Heating type) additionally.

*A: AE050(080)RXYP*G, AE050(080)CXYP*K

*B: AE120(160)RXYP*G, AE080BXP*G, AE120(160)CXYP*K

*C: AE120(140)BXP*G

Connection guide of additional pump

Ensuring proper water flow is an important factor for performance and efficiency.

If the water flow is not adequate, consider installing additional pumps.

When installing an additional pump, the system's maximum allowable water flow rate and maximum water pressure should not be exceeded.



- Each terminal set (Live+Neutral) for additional pumps can supply ampere up to Max 1.0A.
- If an additional pump is needed, the additional pump should be installed in a designated location according to the installation case below
 - [Case I] AE200DNX***: additional pump should be installed in the Zone2 piping line
 - [Case II] AE200DNW***: additional pump should be installed in the Zone piping line
- For the above installation cases, refer to wire works cases 1 and 2.
- If an additional pump is needed for Zone1 in AE200DNX***, refer to wire works case 3.
- The maximum number of pumps that can be powered by the terminal block of the hydro unit is two. Therefore, if necessary, be sure to connect pumps other than the two to a separate power source.
- Ex) AE200DNX*** already has 2 pumps (Inverter and fixed pump). In this case, all additional pumps should be connected to a separate power source. For AE200DNW*** including only one main pump, one additional pumps can be driven by the terminal block of the hydro unit without using a separate power source.

4. Installation

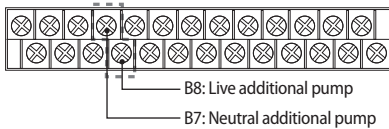
Indoor unit

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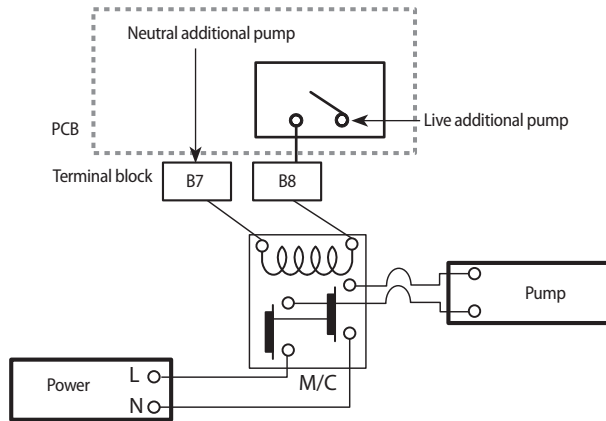
Case 1) AC pump

The terminal set (B8+B7) can supply ampere up to Max 1.0A.

1. Power supply (Pump)



2. If the maximum output of the pump exceeds 1A, please connect it to a separate power source.

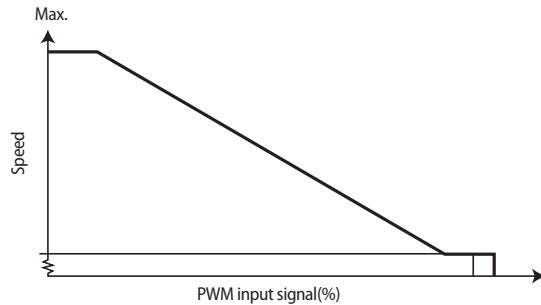


- The maximum allowable current that this terminal block can supply for the additional water pump is 1.0A.

Case 2) Inverter pump

Power supply connection is the same as the case1) AC pump

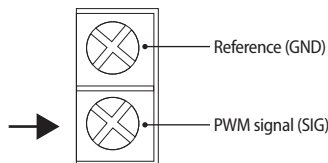
PWM characteristic curve



The additional pump should be the same type of product as the above graph.

Recommendation

Connect the PWM control line to the main control PBA output(CNS002) signal function for PWM control. (Note: Wiring diagram)



GRUNDFOS UPMM 25-95 (Heating Type), SHINHOO GPA25-9H (Heating Type)



- If there is wrong wiring between PWM and reference, INV. Water Pump may not work or wrong operation.

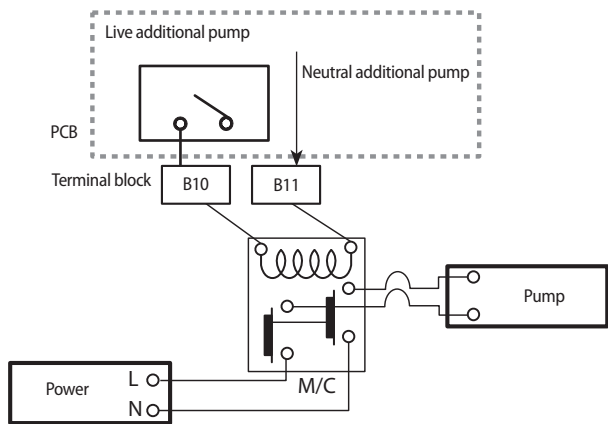
4. Installation

Indoor unit

ClimateHub

Case 3) Additional pump for Zone 1 in AE200DNX***

Only AC pump can be used as an additional pump for Zone 1 in AE200DNX***.
The pump should be installed in piping line of Zone1 and connected to a separate power source as figure shown below.

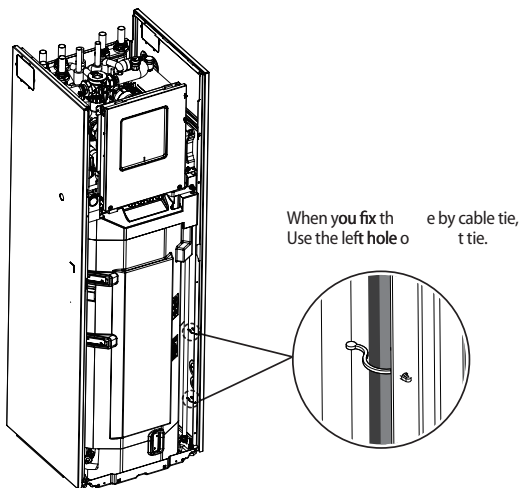


Wiring work

Connection of the power supply and communication cable

Model	Description		No. of Wires	Max. A	Thickness	Supply Scope
AE200DN***	Main power (1Phase)		2 + ground	5 A	1.5mm ² ↑ H05RN-F or H07RN-F	Field Supply (220-240Vac, Input)
	Heater power	3 Phase heater (6 kW)	4 + ground	9.1 A	2.5mm ² ↑ H05RN-F or H07RN-F	Field Supply (380-415Vac, Input)
		1 Phase Heater (4 kW)	2+ ground	18.2A	4.0mm ² ↑ H05RN-F or H07RN-F	Field Supply (220-240Vac, Input)
		1 Phase Heater (2 kW)	2+ ground	9.1A	2.5mm ² ↑ H05RN-F or H07RN-F	Field Supply (220-240Vac, Input)
	Communication		2	0.1 A	0.75mm ² ↑ H05RN-F or H07RN-F	Field Supply (~Vdc, Data)

* When you use inlet hole through the cabinet top positions for power/communication wires, please fix the wire by using holder of the cabinet right.

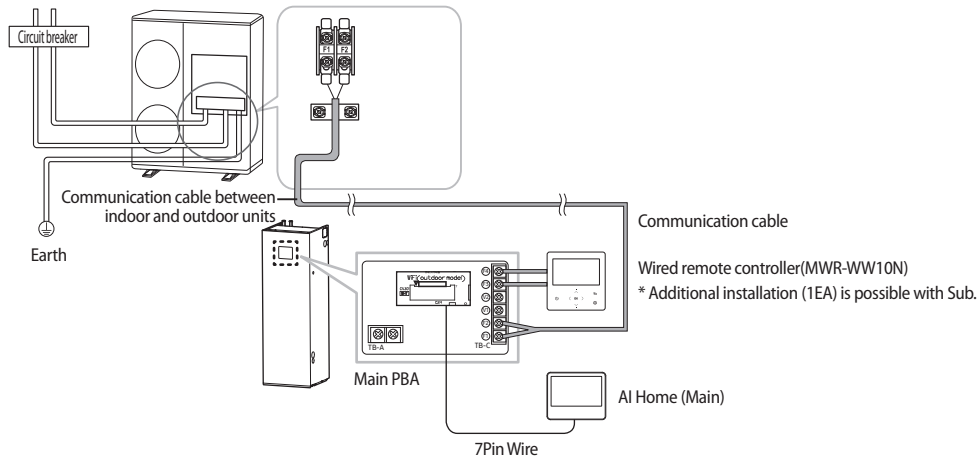


4. Installation

Indoor unit

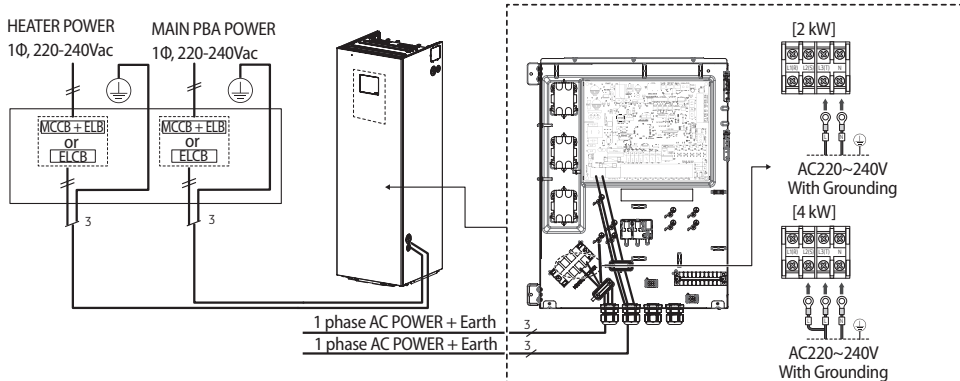
ClimateHub

Communication cable connection

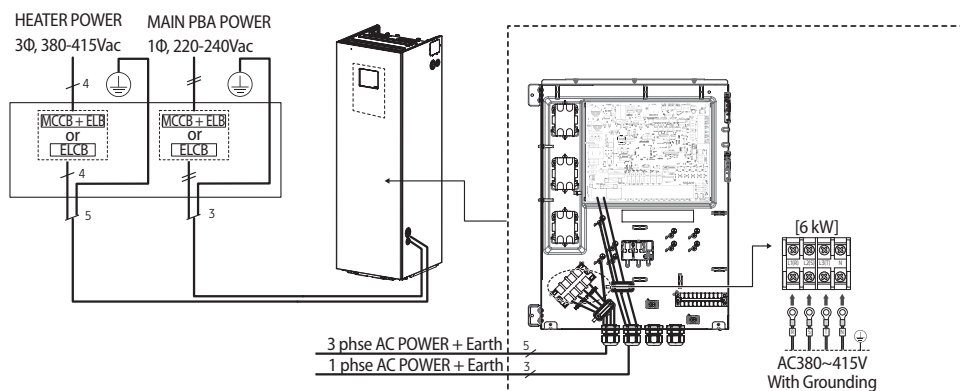


- CAUTION**
- Main and heater power must be configured through each ELCB or MCCB + ELB.
 - Backup heater should use the right power according to the power of the outdoor unit.

1. 1 phase product



2. 3 phase product



- CAUTION**
- Circuit Breaker (ELCB or MCCB + ELB) for outdoor and indoor units shall be installed by installers because they are not sub-parts in the units.
 - If the supply cable is damaged, it must be replaced by a special cable or assembly available from the manufacturer or installer.
 - It cause damage to chassis, PCB parts if the main power is not connected correctly. You should make certain that R, S, T is connected correctly before turning on the main power. (3 phase models only)

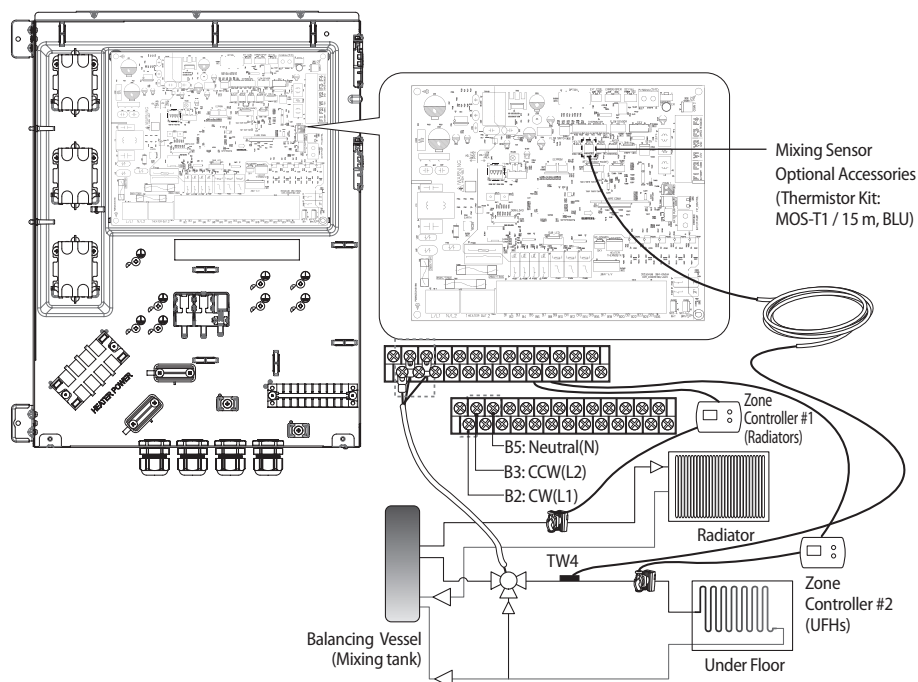
* ELCB: Earth leakage circuit breaker
ELB: Earth leakage breaker
MCCB: Molded case circuit breaker

4. Installation

Indoor unit

ClimateHub

Two thermostat control



1. Before the installation, hydro unit should be turned off.
2. Using the appropriate equipment to correct position of terminal block as shown on the diagram.
3. Install the supplied Mixing temperature sensor (TW4) on the mixed water side within 1 m from the Mixing Valve, as shown in the figure above.
4. Set the FSV value #4041~ #4046. Please refer to the controller manual for this setting.



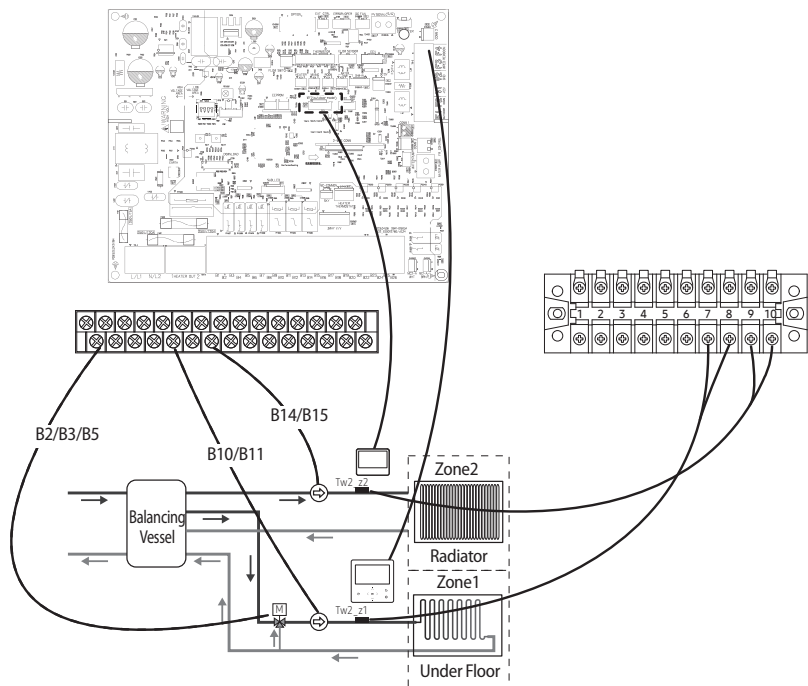
- When using Zone control (FSV 4061 = 1), ignore Thermostat signal.

4. Installation

Indoor unit

ClimateHub

2 Zone Control [FSV #4061 =1]



You can operate the 2 Zone control using a mixing valve, water-out temperature sensors, and built-in or external room temperature sensors installed in a wired remote controller.

When both zones are simultaneously Thermo on, the operation is performed based on Zone2. Therefore, set the zone that you want to have the higher set temperature to Zone2.

(The mixing valve must be installed in the zone that you want to have the lower set temperature.)

1. Install the mixing valve. (See "Installation of mixing valve.")
2. Install the water-out temperature sensors (Tw2_z1, Tw2_z2) for all zones.
3. Unlike the zone control with a thermostat, connect the water pump signal lines to the product.
 - Zone1 water pump connection: B10 (L1) + B11 (N)
 - Zone2 water pump connection: B14 (L1) + B15 (N)
4. FSV 4061 = 1: Enable the 2 Zone control using the wired remote controller.

* If you want to operate the 2 Zone control by using water-out temperatures, you have only to complete steps 1 to 4 above.

* If you want to operate the 2 Zone control by using room temperatures and built-in temperature sensors in wired remote controllers, you must install two wired remote controllers in each room.

(If you use external room temperature sensors, you can control each room temperature with only one wired remote controller.)

Select a mixing valve from the manufacturers as below (recommended)

Maker		BELIMO	SIEMENS	HONEYWELL
Model code	3 Way Valve	R3020-6P3-S2	VXP45.20-4 (kvs 4)	V5011E1213
	Actuator	LR230A(-S)	SSB31	ML6420A3015
Running time		90 sec.	150 sec.	60 sec.
FSV(#4046) setting		9	15	6

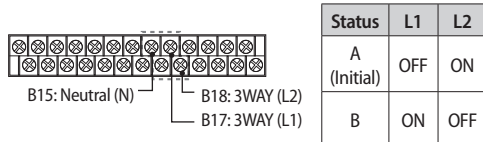
4. Installation

Indoor unit

ClimateHub

Connection of the 3-way valve

Description	No. of wires	Max. current	Thickness	Supply Scope
Diverting type 3way valve	4	50 mA	> 0.75 mm ² , H05RN-F or H07RN-F	Field supply (220-240V~, Output)

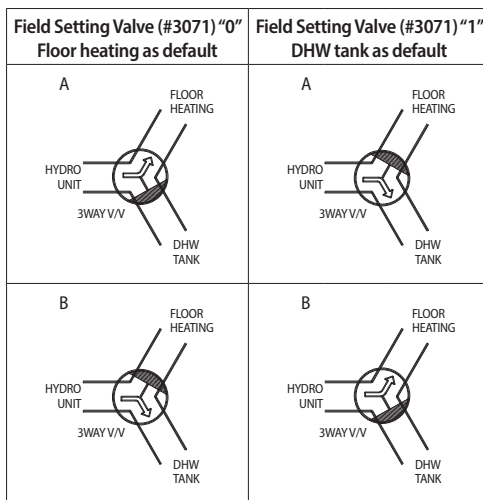


3-way diverting valve for water tank

► When cooling operating mode, floor heating loops will be closed.

► 220-240V~

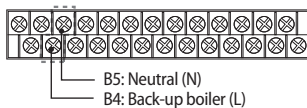
1. Before the installation, hydro unit should be turned off.
2. Using the appropriate equipment to correct position of terminal block as shown on the diagram.
3. Make sure what type of 3 way V/V you use.



Connection of the back-up boiler

- This function is to determine which heating source can/will provide the space heating, either the heat pump system or the back-up boiler.
- To control the back-up boiler, configure FSV #4031~ #4033. Please refer to the controller manual for this setting.

Description	No. of wires	Max. current	Thickness	Supply Scope
Back-up Boiler	2+ground	50 mA	0.75mm ² H05RN-F or H07RN-F	Field supply (220-240V~, Output)



When it set back up
boiler on the hydro unit
(relay off)

When it order to back up
boiler operates (relay on)

1. Before the installation, hydro unit should be turned off.
 2. Using the appropriate equipment to correct position of terminal block as shown on the diagram.
- * Heat pump does not work when the Back-up boiler operates.

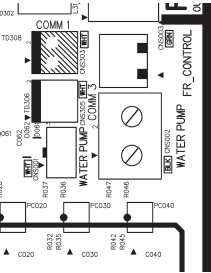
4. Installation

Indoor unit

ClimateHub

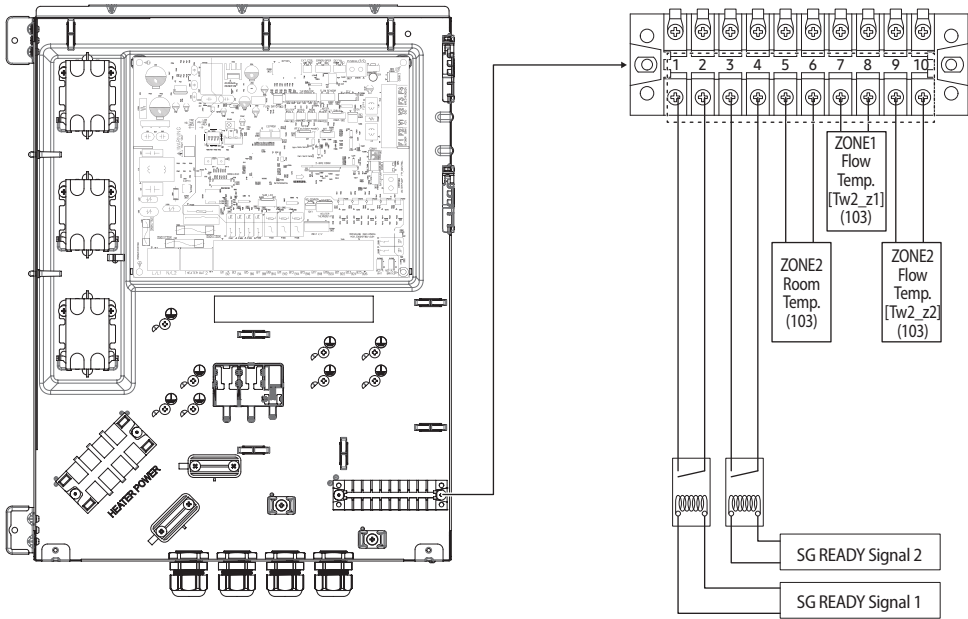
Connection of the FR Control(Frequency ratio control)

Description	No. of wires	Max. current	Thickness	Supply Scope
FR Control	2	-	-	Field supply



- ▶ This is to limit the maximum frequency of the outdoor unit compressor. (if FSV #5051 = 1 “use”)
- ▶ Method 1: External DC signal Control uses a DC voltage of 0 ~ 10V (0v = 50%, ~ 10v = 150%)
- ▶ Method 2: Demand ratio (DR) control through Modbus communication

Connecting for smart grid ready control



SG READY Signal 1	SG READY Signal 2	Product operation
Short	Open	Forced thermo off operation
Open	Open	Normal operation
Open	Short	Heating / DHW setting temperature 1step-up operation
Short	Short	Heating / DHW setting temperature 2step-up operation

- CAUTION**
- These parts are optional and not included with the product.
 - Maker sure to connect to non-power on/off contacts.

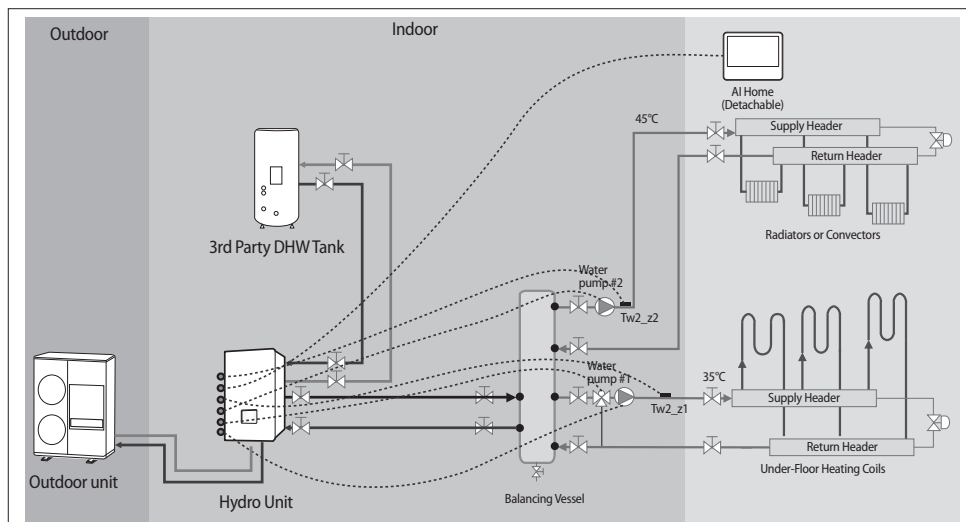
4. Installation

Indoor unit

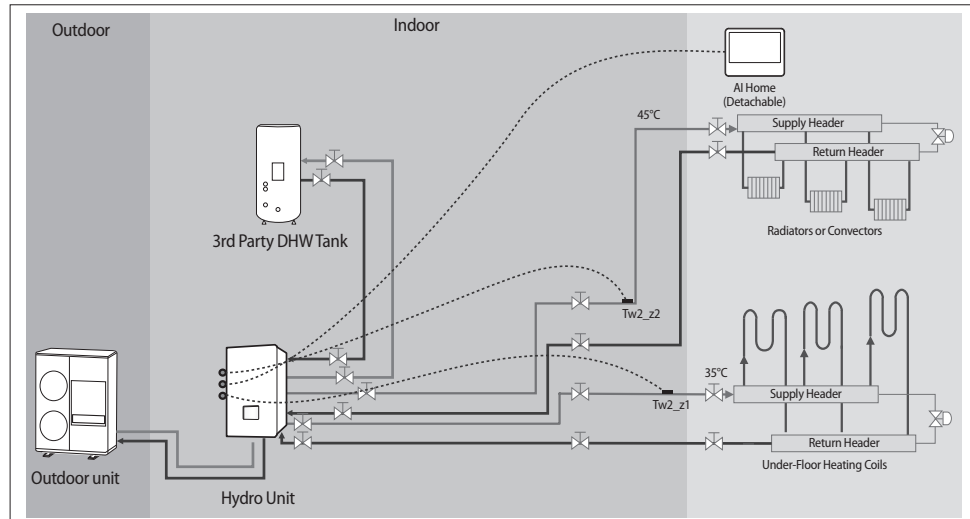
Hydro Unit

Application 1: Space heating + water heating

* AE160DNYMPK(Standard)



* AE160DNZMPK(2 Zone)



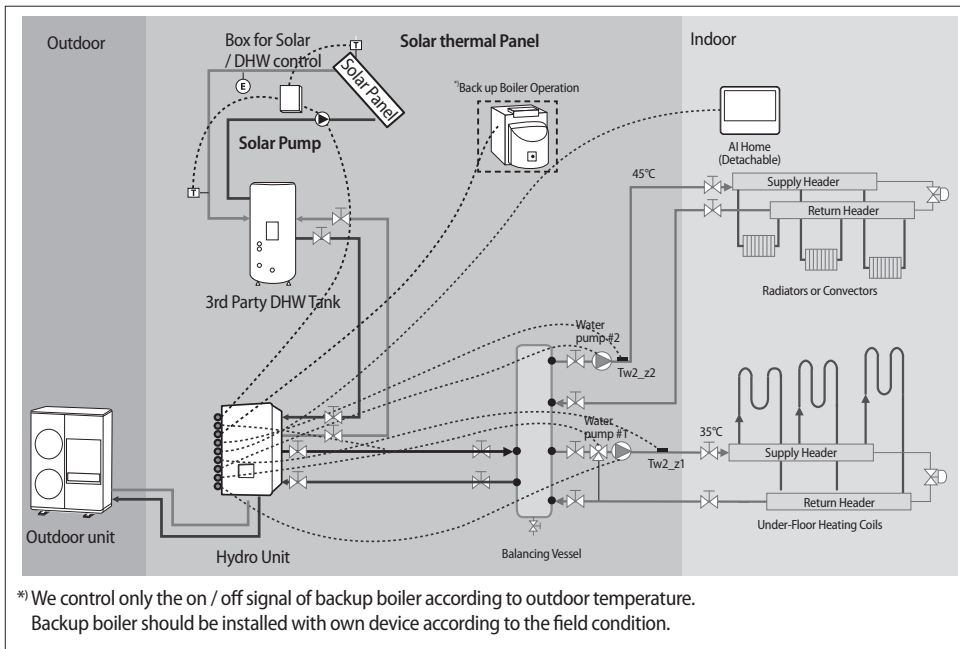
4. Installation

Indoor unit

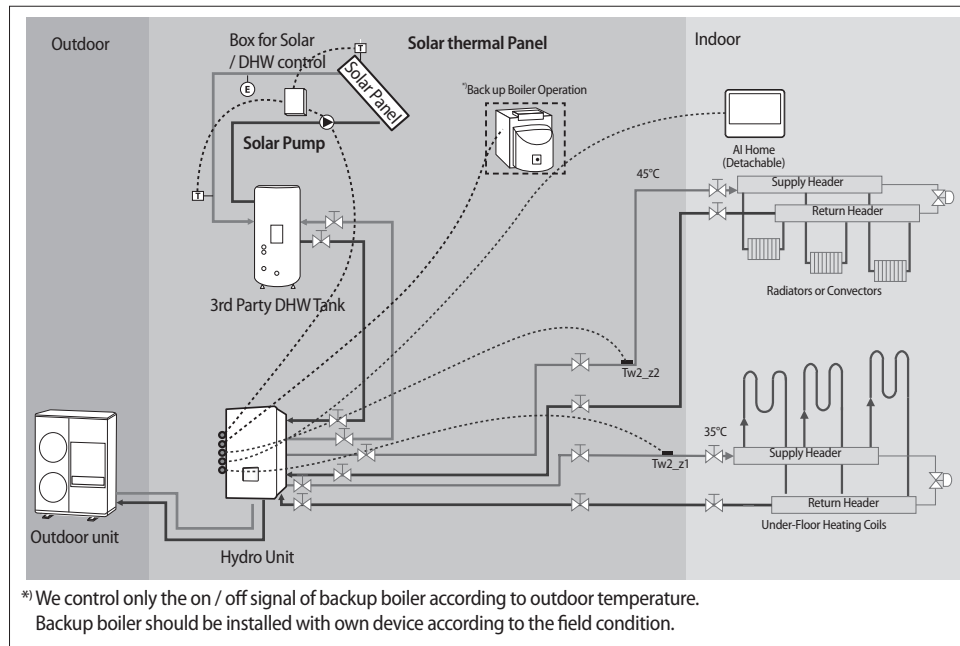
Hydro Unit

Application 2: Hybrid application(backup boiler and solar panel connected)

* AE160DNYMPK(Standard)



* AE160DNZMPK(2 Zone)



- Samsung has not responsible for performance and stability of backup boiler.
- Water quality must be according to Directive (EU) 2020/2184.

4. Installation

Indoor unit

Hydro Unit

Pipe work

Water pipe work

The hydro unit is equipped with components listed on the table below.

All entering, leaving water direction is embossed right next to the pipe. Please connect the pipe with attention to the direction of the arrow

Whole water plumbing system including Hydro unit shall be installed by a qualified technician and must comply with all relevant European and national regulations.

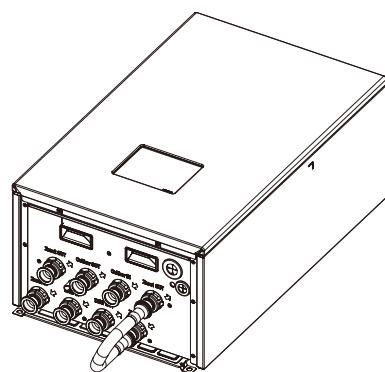
- ▶ Allowable water pressure of hydro unit is maximum 3.0bar.
- ▶ An air-vent valve is integrated on the hydro unit. Please check that air-vent valve is not overtightened so the air-vent valve can release any air out of the system during system operation.
- ▶ AE160DNZ*** (2zone built-in type) is designed to supply water at 2 different temperatures
 - For heating operations, please connect the Zone1 supply line to a room that requires a lower water temperature (ex,underfloor heating) and the Zone2 supply line to a room that requires a higher water temperature (ex,radiators).



NOTE

If you install AE160DNZ*** (2zone built-in type) as a single-zone application, then:

- Install a bypass pipe between the water inlet and outlet for Zone 1 and use Zone 2 for space heating.
- Change FSV Setting #4061=0(Zone control= No), #4041=0 (Mixing V/Vcontrol= No)

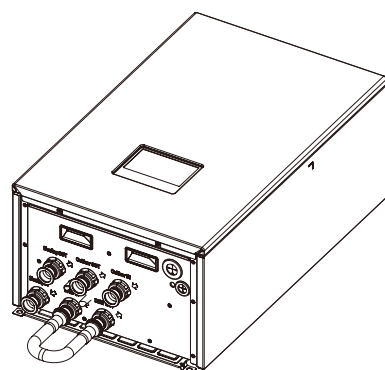


NOTE

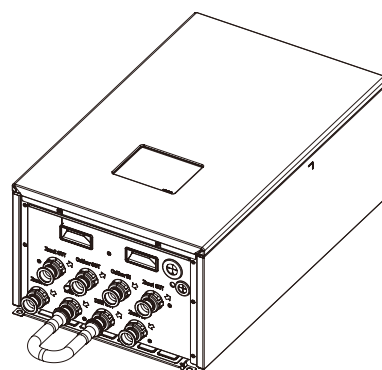
If you install AE160DN**** with no 3rd party tank then:

- Install a bypass pipe between the water inlet and outlet for DHW.
- Please check FSV Setting #3011=0(DHW= No)

* AE160DNYMPK



* AE160DNZMPK



4. Installation

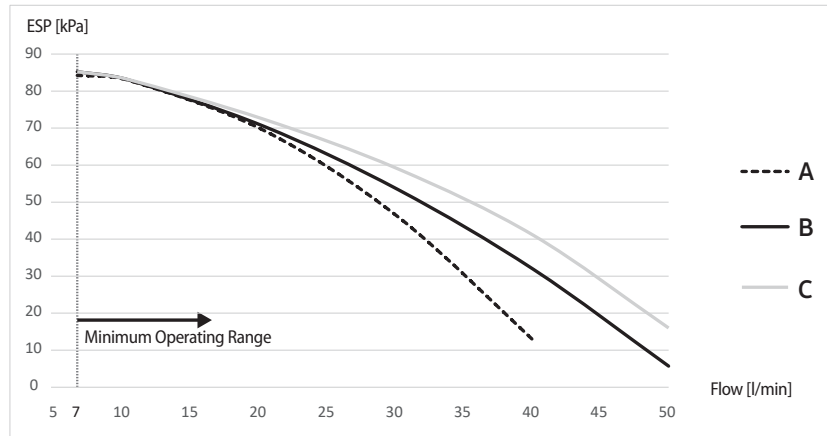
Indoor unit

Hydro Unit

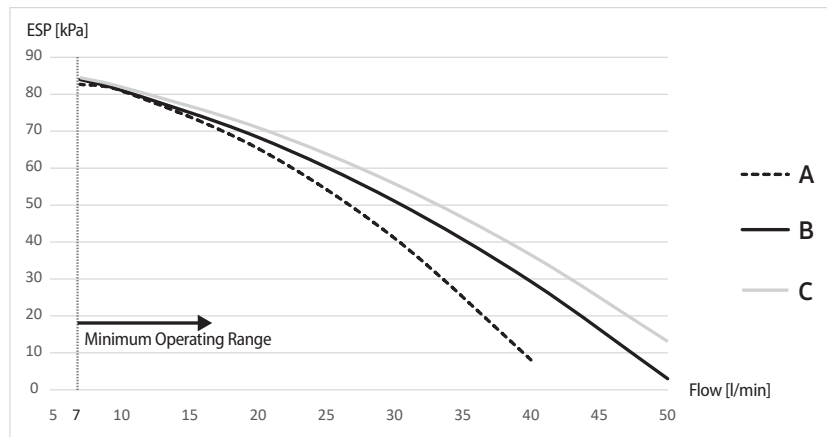
ESP(External Static Pressure) Diagram

The illustration below shows the external static pressure of the unit depending on the water flow and the pump setting.

AE160DNY***



AE160DNZ***



When ESP is not enough, additional pump should be installed. In this case, install the PWM control external type pump (Heating type) additionally.

*A: AE050(080)RXYD*G, AE050(080)CXYD*K

*B: AE120(160)RXYD*G, AE080BXYD*G, AE120(160)CXYD*K

*C: AE120(140)BXYD*G

Connection guide of additional pump

Ensuring proper water flow is an important factor for performance and efficiency.

If the water flow is not adequate, consider installing additional pumps.

When installing an additional pump, the system's maximum allowable water flow rate and maximum water pressure should not be exceeded.



- Each terminal set (Live+Neutral) for additional pumps can supply ampere up to Max 1.0A.
- If an additional pump is needed, the additional pump should be installed in a designated location according to the installation case below
 - [Case I] AE160DNZ*** without connection to DHW tank : additional pump should be installed in the Zone2 piping line
 - [Case II] AE160DNZ*** with connection to DHW tank : additional pump should be installed in the Zone2 piping line
 - [Case III] AE160DNY*** without connection to DHW tank : additional pump should be installed in the piping lines of Zone or outdoor unit
 - [Case IV] AE160DNY*** with connection to DHW tank : additional pump should be installed in the Zone piping line
- For installation cases I to IV, refer to wire works cases 1 and 2.
- If an additional pump is needed for Zone1 in AE160DNZ***, refer to wire works case 3.
- The maximum number of pumps that can be powered by the terminal block of the hydro unit is two. Therefore, if necessary, be sure to connect pumps other than the two to a separate power source.
- Ex) AE160DNZ*** already has 2 pumps (Inverter and fixed pump). In this case, all additional pumps should be connected to a separate power source. For AE160DNY*** including only one main pump, one additional pumps can be driven by the terminal block of the hydro unit without using a separate power source.

4. Installation

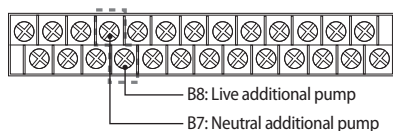
Indoor unit

Hydro Unit

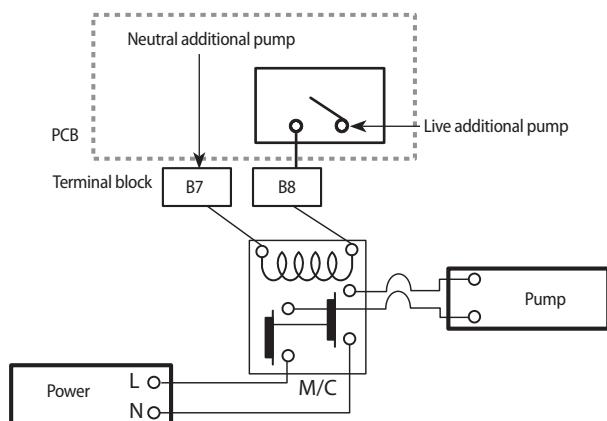
Case 1) AC pump

The terminal set (B8+B7) can supply ampere up to Max 1.0A.

1. Power supply (Pump)



2. If the maximum output of the pump exceeds 1A, please connect it to a separate power source.

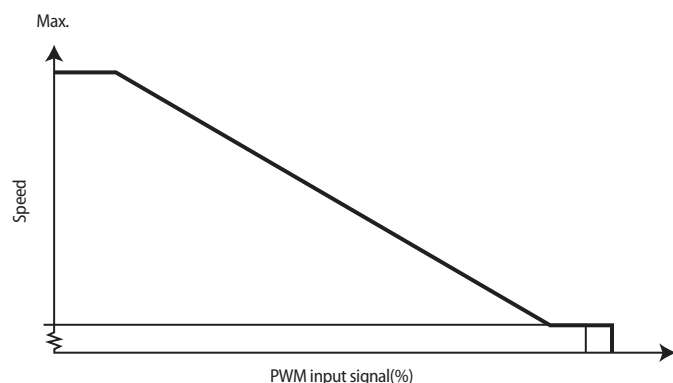


• The maximum allowable current that this terminal block can supply for the additional water pump is 1.0A.

Case 2) Inverter pump

Power supply connection is the same as the case1) AC pump

PWM characteristic curve

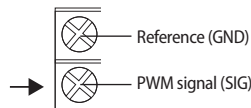


The additional pump should be the same type of product as the above graph.

Recommendation

Connect the PWM control line to the main control PBA output(CNS002) signal function for PWM control.

(Note: Wiring diagram)



GRUNDFOS UPMM 25-95 (Heating Type), SHINHOO GPA25-9H (Heating Type)



• If there is wrong wiring between PWM and reference, INV. Water Pump may not work or wrong operation.

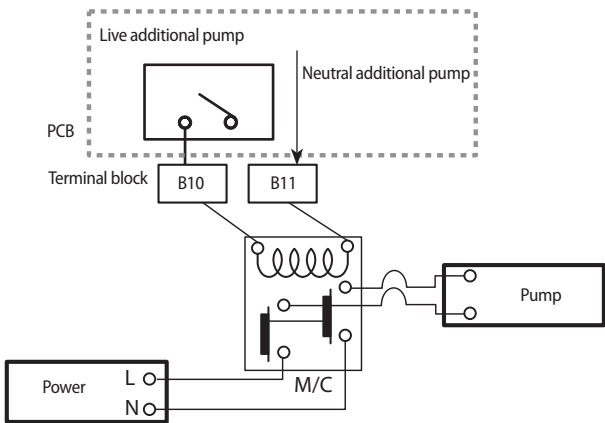
4. Installation

Indoor unit

Hydro Unit

Case3) Additional pump for Zone 1 in AE160DNZ***

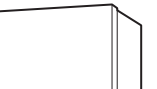
Only AC pump can be used as an additional pump for Zone 1 in AE160DNZ***. The pump should be installed in piping line of Zone1 and connected to a separate power source as figure shown below.



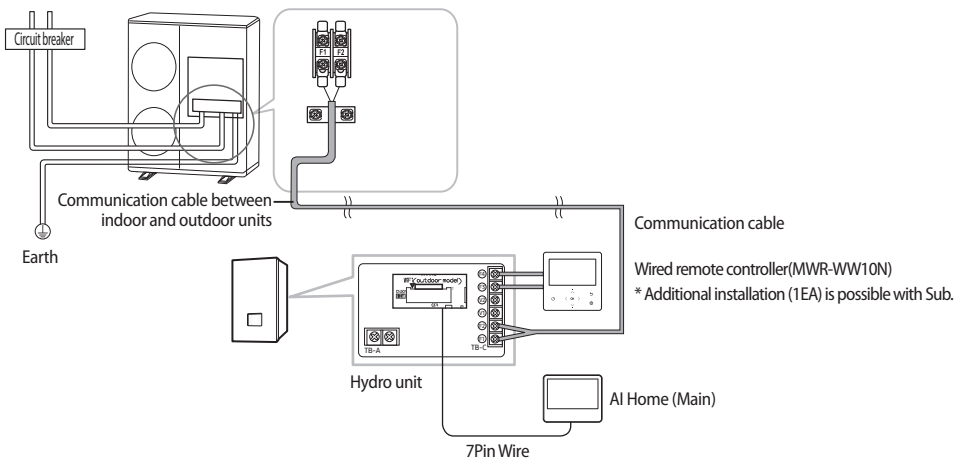
Wiring work

Connection of the power supply and communication cable

Model	Description		No. of Wires	Max. A	Thickness	Supply Scope
AE160DN*MPK	Main Power (1phase)		2 + ground	5 A	1.5mm ² ↑ H05RN-F or H07RN-F	Field Supply (220-240Vac, Input)
	Heater Power	3phase Heater	4 + ground	8.7 A	2.5mm ² ↑ H05RN-F or H07RN-F	Field Supply (380-415Vac, Input)
		1phase Heater	2 + ground	18.4 A	4.0mm ² ↑ H05RN-F or H07RN-F	Field Supply (220-240Vac, Input)
	Communication		2	0.1 A	0.75mm ² ↑ H05RN-F or H07RN-F	Field Wiring (~12Vdc, Data)



Communication cable connection



4. Installation

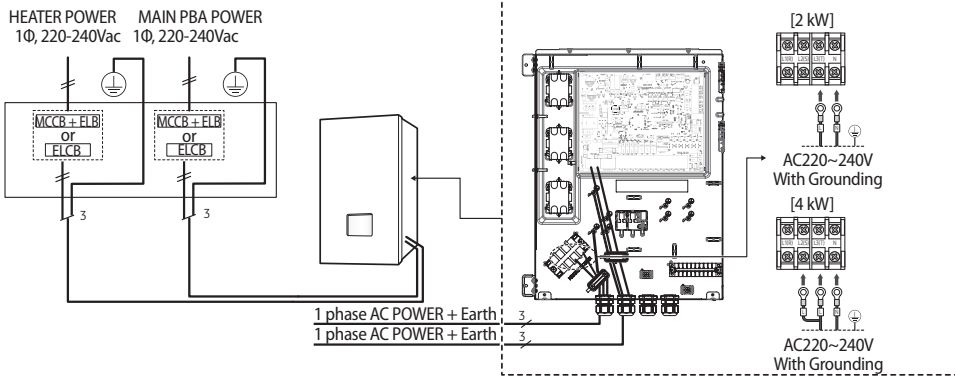
Indoor unit

Hydro Unit

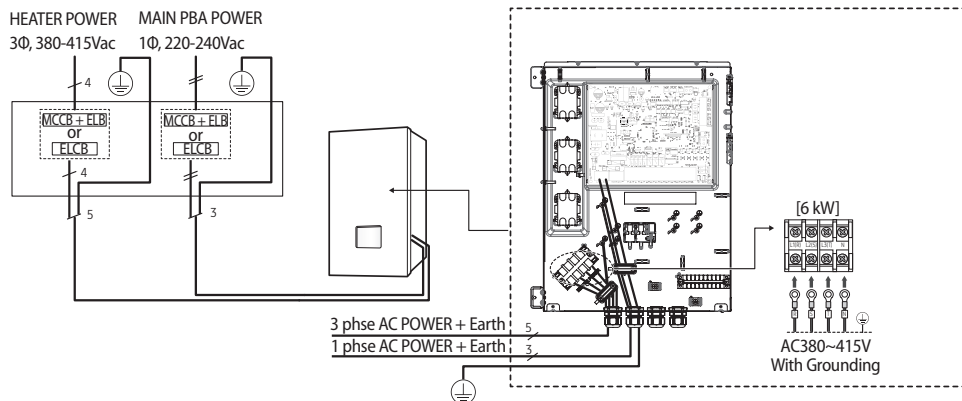


- Main and heater power must be configured through each ELCB or MCCB + ELB.
- Backup heater should use the right power according to the power of the outdoor unit.

1. 1 phase product



2. 3 phase product



- **Circuit Breaker (ELCB or MCCB + ELB) for outdoor and indoor units shall be installed by installers because they are not sub-parts in the units.**
- If the supply cable is damaged, it must be replaced by a special cable or assembly available from the manufacturer or installer.
- It cause damage to chassis, PCB parts if the main power is not connected correctly. You should make certain that R, S, T is connected correctly before turning on the main power. (3 phase models only)

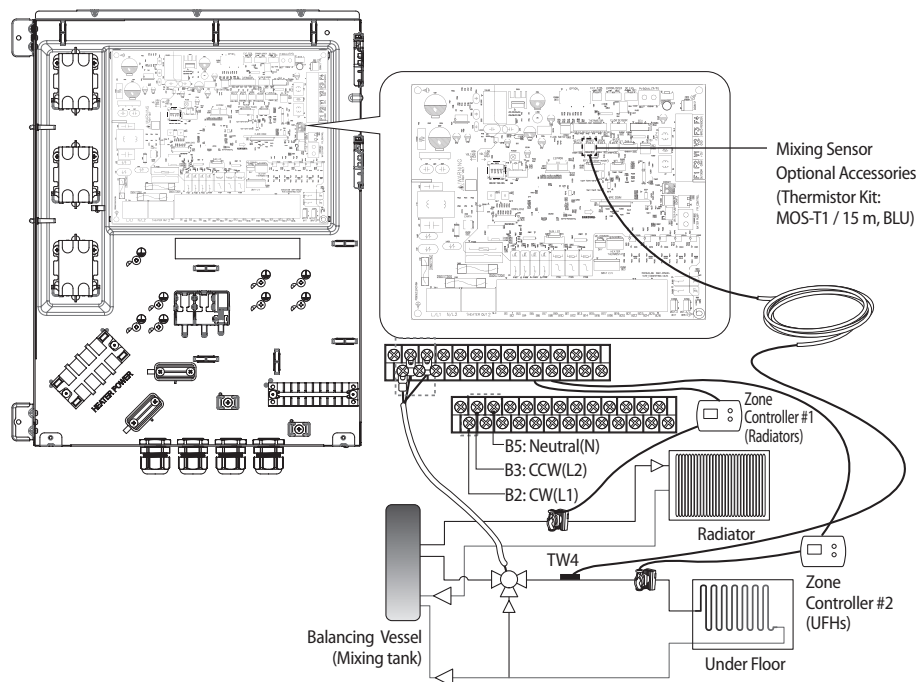
- * ELCB : Earth leakage circuit breaker
- ELB : Earth leakage breaker
- MCCB : Molded case circuit breaker

4. Installation

Indoor unit

Hydro Unit

Two thermostat control



1. Before the installation, hydro unit should be turned off.
2. Using the appropriate equipment to correct position on the terminal block as shown on the diagram.
3. Install the supplied Mixing temperature sensor (TW4) on the mixed water side within 1 m from the Mixing Valve, as shown in the figure above.
4. Set the FSV value #4041 ~ #4046. Please refer to the controller manual for this setting.



CAUTION

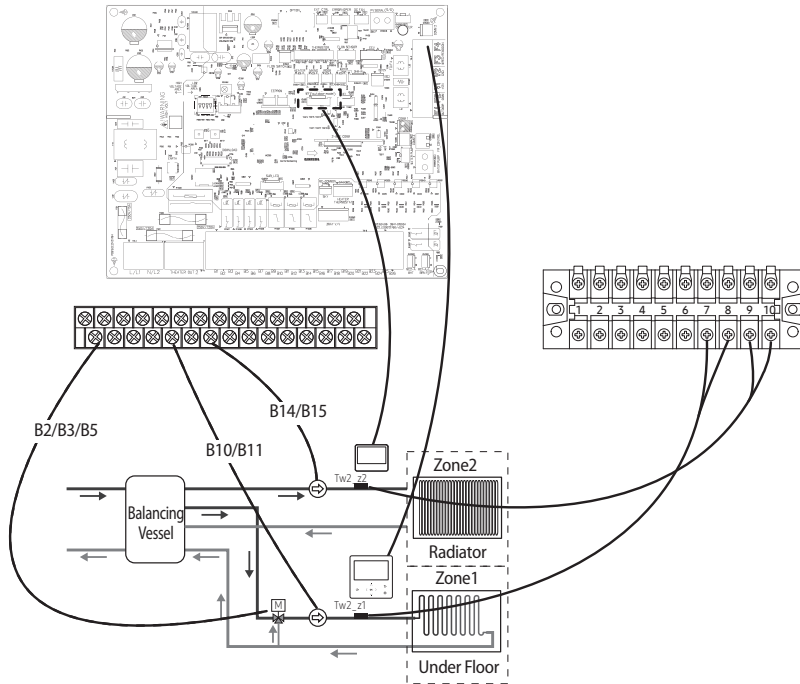
- When using Zone control (FSV 4061 = 1), Ignore Thermostat signal.

4. Installation

Indoor unit

Hydro Unit

2 Zone Control [FSV #4061 =1]



You can operate the 2 Zone control using a mixing valve, water-out temperature sensors, and built-in or external room temperature sensors installed in a wired remote controller.

When both zones are simultaneously Thermo on, the operation is performed based on Zone2. Therefore, set the zone that you want to have the higher set temperature to Zone2.

(The mixing valve must be installed in the zone that you want to have the lower set temperature.)

1. Install the mixing valve. (See "Installation of mixing valve.")
2. Install the water-out temperature sensors (Tw2_z1, Tw2_z2) for all zones.
3. Unlike the zone control with a thermostat, connect the water pump signal lines to the product.
 - Zone1 water pump connection: B10 (L1) + B11 (N)
 - Zone2 water pump connection: B14 (L1) + B15 (N)
4. FSV 4061 = 1: Enable the 2 Zone control using the wired remote controller.

* If you want to operate the 2 Zone control by using water-out temperatures, you have only to complete steps 1 to 4 above.

* If you want to operate the 2 Zone control by using room temperatures and built-in temperature sensors in wired remote controllers, you must install two wired remote controllers in each room.

(If you use external room temperature sensors, you can control each room temperature with only one wired remote controller.)

Select a mixing valve from the manufacturers as below (recommended)

Maker		BELIMO	SIEMENS	HONEYWELL
Model code	3 Way Valve	R3020-6P3-S2	VXP45.20-4 (kvs 4)	V5011E1213
	Actuator	LR230A(-S)	SSB31	ML6420A3015
Running time		90 sec.	150 sec.	60 sec.
FSV(#4046) setting		9	15	6

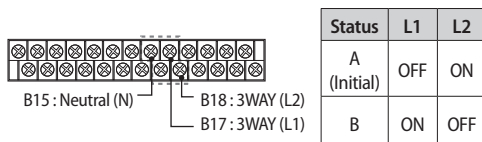
4. Installation

Indoor unit

Hydro Unit

Connection of the 3-way valve

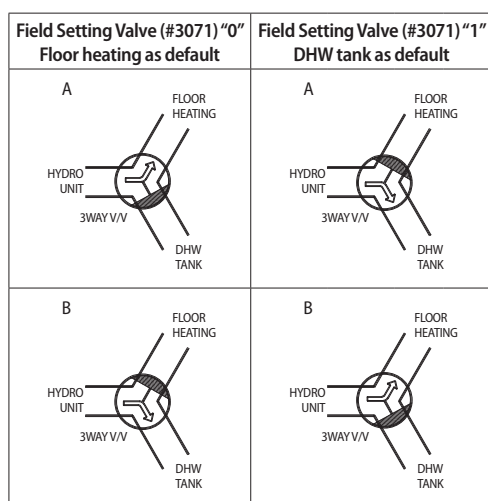
Description	No. of wires	Max. current	Thickness	Supply Scope
Diverting type 3way valve	4	50 mA	> 0.75 mm ² , H05RN-F or H07RN-F	Field supply (220-240V~, Output)



3-way diverting valve for water tank

- ▶ When cooling operating mode, floor heating loops will be closed.
- ▶ 220-240V~

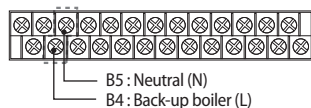
1. Before the installation, hydro unit should be turned off.
2. Using the appropriate equipment to correct position of terminal block as shown on the diagram.
3. Make sure what type of 3 way V/V you use.



Connection of the back-up boiler

- ▶ This function is to determine which heating source can/will provide the space heating, either the heat pump system or the back-up boiler.
- ▶ To control the back-up boiler, configure FSV #4031~ #4033. Please refer to the controller manual for this setting.

Description	No. of wires	Max. current	Thickness	Supply Scope
Back-up Boiler	2+ground	50 mA	0.75mm ² H05RN-F or H07RN-F	Field supply (220-240V~, Output)



When it set back up
boiler on the hydro unit
(relay off)

When it order to back up
boiler operates (relay on)

1. Before the installation, hydro unit should be turned off.
 2. Using the appropriate equipment to correct position of terminal block as shown on the diagram.
- * Heat pump does not work when the Back-up boiler operates.

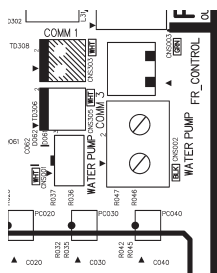
4. Installation

Indoor unit

Hydro Unit

Connection of the FR Control(Frequency ratio control)

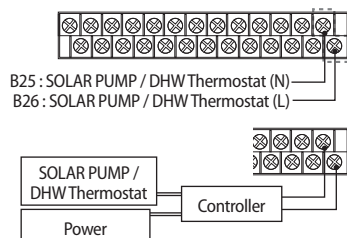
Description	No. of wires	Max. current	Thickness	Supply Scope
FR Control	2	-	-	Field supply



- ▶ This is to limit the maximum frequency of the outdoor unit compressor. (if FSV #5051 = 1 “use”)
- ▶ Method 1 : External DC signal Control uses a DC voltage of 0 ~ 10V (0v = 50%, ~ 10v = 150%)
- ▶ Method 2 : Demand ratio (DR) control through Modbus communication

Connection of the Solar Pump / DHW thermostat

Description	No. of wires	Max. current	Thickness	Supply Scope
Solar pump / DHW Thermostat	2+ground	22mA	0.75mm ² H05RN-F or H07RN-F	Field supply (220-240V~, Input)



1. Before connecting the external control kit, make sure it is turned off.
2. Using the appropriate equipment to correct position of terminal block as shown on the diagram.
3. The external control kit must provide an output signal when Solar pump/ DHW Thermostat is operating.
4. It is the installers responsibility to connect the output of the control kit to the Solar Pump/ DHW Thermostat input terminal (B25-26). In operating mode, signal shall be around 230VAC (N-L). In non-operating mode, signal shall be around 0VAC (N-L).

When solar pump signal is On, Hydro unit DHW mode will be turned off.

If a solar pump for DHW is used, the signal input line from the solar pump can be connected as shown above

- ▶ if a solar pump is used, FSV#3061 should be set to 1

If DHW thermostat is used, the signal input line from the DHW thermostat can be connected as shown above

- ▶ if DHW thermostat is used, FSV#3061 should be set to 2



NOTE

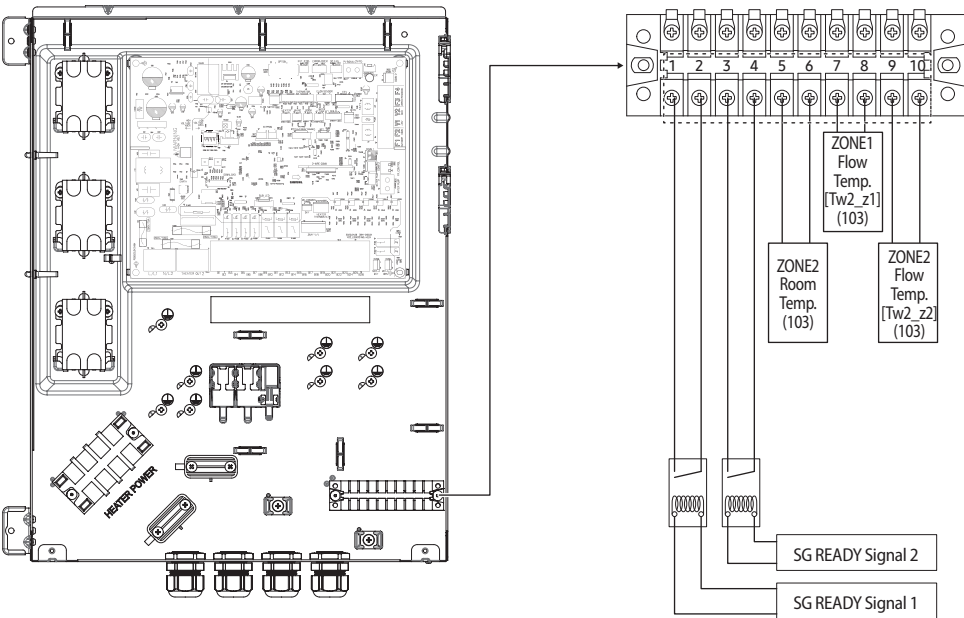
- Solar pump and DHW thermostat cannot be used simultaneously

4. Installation

Indoor unit

Hydro Unit

Connecting for smart grid ready control



SG READY Signal 1	SG READY Signal 2	Product operation
Short	Open	Forced thermo off operation
Open	Open	Normal operation
Open	Short	Heating / DHW setting temperature 1step-up operation
Short	Short	Heating / DHW setting temperature 2step-up operation

- 

CAUTION
- These parts are optional and not included with the product.
 - Make sure to connect to non-power on/off contacts.



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Ver.12

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