

SAMSUNG

EHS

Technical Data Book

**EHS tank integrated Hydro Unit for Europe
(Mono, R32, 50Hz, HP)**



Model : Outdoor unit (AE***RXVD*G/EU, AE***BXVD*G/EU)
Hydro unit (AE***RNWM*G/EU, AE***CNWM*G/EU)

Features & Benefits

Tank integrated hydro unit

Eco-friendly heating – zero ozone impact

Eco-friendly Refrigerant R32

Reduce the impact on climate change with a Samsung EHS (Eco Heating System). The R32 refrigerant has an Ozone Depletion Potential (ODP) of zero and a lower Global Warming Potential (GWP) than conventional refrigerants*. It also reduces the amount of refrigerant needed and cuts CO2 emissions**.



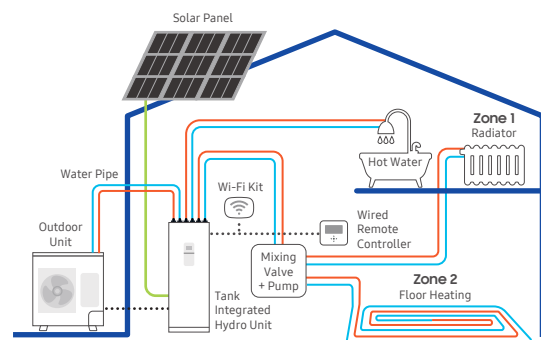
* GWP rating: R32 refrigerant = 675 vs. R410A refrigerant = 2088.
** The Samsung EHS MONO, SPLIT (R32) only requires 83% of the refrigerant used in a conventional heating system (R410A) of the same capacity.
So the level of CO2 emissions of the EHS is 560 (675 x 0.83), which is 73% less than the 2088 produced by a conventional heating system.

Mono

The Samsung EHS Mono’s outdoor unit includes the hydraulic parts that provide hot water. It uses water pipes to connect it to an indoor unit. So, it can be easily installed instead of a conventional boiler system.

ClimateHub Mono

Outdoor Unit + Tank Integrated Hydro Unit



Radiator Floor heating Hot water



- Seasonal space heating efficiency: A+++ ~ A++ (on average)
- Leaving water temperature: Up to 65°C
- Capacities: 5, 8, 12, 16kW
- Refrigerant: R32
- Water piping from an outdoor unit
- Power supply: 1Φ 220~240V, 3Φ 380~415V

Features & Benefits

A+++ energy efficiency saves even more

Top Class Energy Efficiency - SCOP A+++

Worry less about the cost of your heating. It has the top class SCOP A+++ energy efficiency rating across the entire range of capacities*. So it is proven to operate with a high level of efficiency, achieving a good heating performance using R32 refrigerant, which has a high PdesignH (kW)**.

* Based on testing defined in EN14825.
** PdesignH is over 100% of the rated capacity, which ensures sufficient heating performance at low temperatures. Based on a standard of -10°C (rating: standard 7°C conditions).



Easy remote control with a smartphone



Smart Connectivity

Control your Samsung EHS on the go. Smart Connectivity lets you turn it on/off anytime and anywhere using the SmartThings App*. And, with the touch controller, you can control the mode and settings, schedule it to start/stop, monitor energy use, adjust summer time settings and identify errors.

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

Features & Benefits

Reduce energy usage and save money

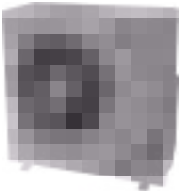
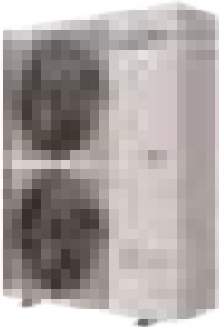
Various Functions for Energy Saving

Save energy with advanced functions. The 2-Zone Control optimizes the temperature in two separate zones. The Photovoltaic Enabled feature checks the status of solar panels and reduces network electricity usage. And Smart Grid Ready helps you utilize economical and sustainable power options.



1. Line-up

1-1. Outdoor Units

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

1-2. Tank integrated hydro unit

Type	Capacity	200 L	260 L
Model		AE200RNWMEG/EU AE200CNWMEG/EU	AE260RNWM*G/EU AE260CNWM*G/EU
Hydro unit			

2. Outdoor Units

2-1. Specifications

Model Name		Indoor Unit				AE200RNWMEG/EU		AE200RNWMEG/EU		AE200RNWMEG/EU		
		Outdoor Unit					AE050RXYDEG/EU		AE080RXYDEG/EU		AE120RXYDEG/EU	
Power Supply						Φ, #, V, Hz	1,220-240,50		1,220-240,50		1,220-240,50	
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				
						1,030	1,770	2,650				
			Heating	A2W Condition #1. (A7/W35) ^{1)*} 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	13.2
										Heating	4.9	8.5
		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 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			5.5	8.0	13.0
LWT 55°C					5.0		8.0	12.0				
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		AE200RNWMEG/EU		AE200RNWMEG/EU		AE200RNWMEG/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.
 - * 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

2-1. Specifications

Model Name		Indoor Unit				AE200RNWMEG/EU	AE260RNWMGG/EU	AE260RNWMGG/EU	AE260RNWMGG/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)*}	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)*}	W	16,000	8,000	12,000	16,000		
					Btu/h	54,600	27,300	40,900	54,600		
				A2W condition #2	W	15,400	7,400	11,700	15,400		
						A2W condition #3	15,000	7,100	11,300	15,000	
						A2/W35 ^{4)*}	13,200	7,000	10,800	13,200	
						A-7/W35 ^{4)*}	14,600	7,350	12,000	14,600	
		Power	Power Input	Cooling	A2W Condition #1. (A7/W35) ^{1)*}	W	3,280	1,900	2,770	3,280	
							Heating	A2W Condition #1. (A7/W35) ^{1)*}	3,620	1,770	2,650
	A2W condition #2			4,490	2,120			3,180	4,490		
	A2W condition #3			5,180	2,530			3,730	5,180		
	A2/W35 ^{4)*}			4,400	2,350			3,300	4,400		
	A-7/W35 ^{4)*}			6,000	3,020			4,710	6,000		
	Current Input			Cooling	A2W Condition #1. (A7/W35) ^{1)*}			A	15.7	3.0	4.4
				Heating	17.0		2.8		4.1	5.7	
	Current		MCA			A	32.0	10.0	10.0	12.0	
			MFA			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	W/W	3.43	3.49	3.68	3.43	
							A2W condition #3	2.90	2.81	3.03	2.90
		A2/W35 ^{4)*}					3.00	2.98	3.27	3.00	
		A-7/W35 ^{4)*}					2.43	2.43	2.55	2.43	
PdesignH		LWT 35°C		16.0	8.0	13.0	16.0				
		LWT 55°C		16.0	8.0	12.0	16.0				
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			AE200RNWMGG/EU	AE260RNWMGG/EU	AE260RNWMGG/EU	AE260RNWMGG/EU
		Outdoor Unit			AE160RXYDGG/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		℃	-25~35	-25~35	-25~35	-25~35
		Cooling		℃	10~46	10~46	10~46	10~46
		D.Hot Water		℃	-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

2-1. Specifications

Model Name		Indoor Unit				AE200CNWMEG/EU		AE200CNWMEG/EU		AE200CNWMEG/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		
								1,030		1,770		2,650		
	Heating	A2W Condition #1. (A7/W35) ^{1)*} 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		13.2			
							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 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			5.5		8.0		13.0				
			LWT 55°C			5.0		8.0		12.0				
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			AE200CNWMEG/EU	AE200CNWMEG/EU	AE200CNWMEG/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.
 - * 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

2-1. Specifications

Model Name		Indoor Unit				AE200CNWMEG/EU	AE260CNWMGG/EU	AE260CNWMEG/EU	AE260CNWMGG/EU		
		Outdoor Unit				AE160RXYDEG/EU	AE080RXYDGG/EU	AE120RXYDGG/EU	AE160RXYDGG/EU		
Power Supply					Φ, #, V, Hz	1,220-240,50	3,4380-415,50	3,4380-415,50	3,4380-415,50		
Mode					-	Heat Pump (A2W)	Heat Pump (A2W)	Heat Pump (A2W)	Heat Pump (A2W)		
	Performance	Capacity	Cooling	A2W Condition #1. (A7/W35) ¹⁾	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⁾	W	16,000	8,000	12,000	16,000		
				Btu/h	54,600	27,300	40,900	54,600			
				A2W condition #2	W	15,400	7,400	11,700	15,400		
				A2W condition #3		15,000	7,100	11,300	15,000		
				A2/W35 ⁴⁾		13,200	7,000	10,800	13,200		
				A-7/W35 ⁴⁾		14,600	7,350	12,000	14,600		
	Power	Power Input	Cooling	A2W Condition #1. (A7/W35) ¹⁾	W	3,280	1,900	2,770	3,280		
				Btu/h		3,620	1,770	2,650	3,620		
			Heating	A2W Condition #1. (A7/W35) ¹⁾		4,490	2,120	3,180	4,490		
				A2W condition #2		5,180	2,530	3,730	5,180		
				A2W condition #3		4,400	2,350	3,300	4,400		
				A2/W35 ⁴⁾		6,000	3,020	4,710	6,000		
				A-7/W35 ⁴⁾							
			Current Input	Cooling		A2W Condition #1. (A7/W35) ¹⁾	A	15.7	3.0	4.4	5.3
		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⁾ A-7/W35 ⁴⁾	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			16.0	8.0	13.0	16.0				
	LWT 55°C			16.0	8.0	12.0	16.0				
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			
	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	
			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		AE200CNWMEG/EU	AE260CNWMGG/EU	AE260CNWMEG/EU	AE260CNWMGG/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	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	10.0	16.1
12.0	AE120RXYDGG/EU	3	4	50	380~415	342	456	4.4	4.1	10.0	16.1
16.0	AE160RXYDGG/EU	3	4	50	380~415	342	456	5.3	5.7	12.0	16.1

 NOTE

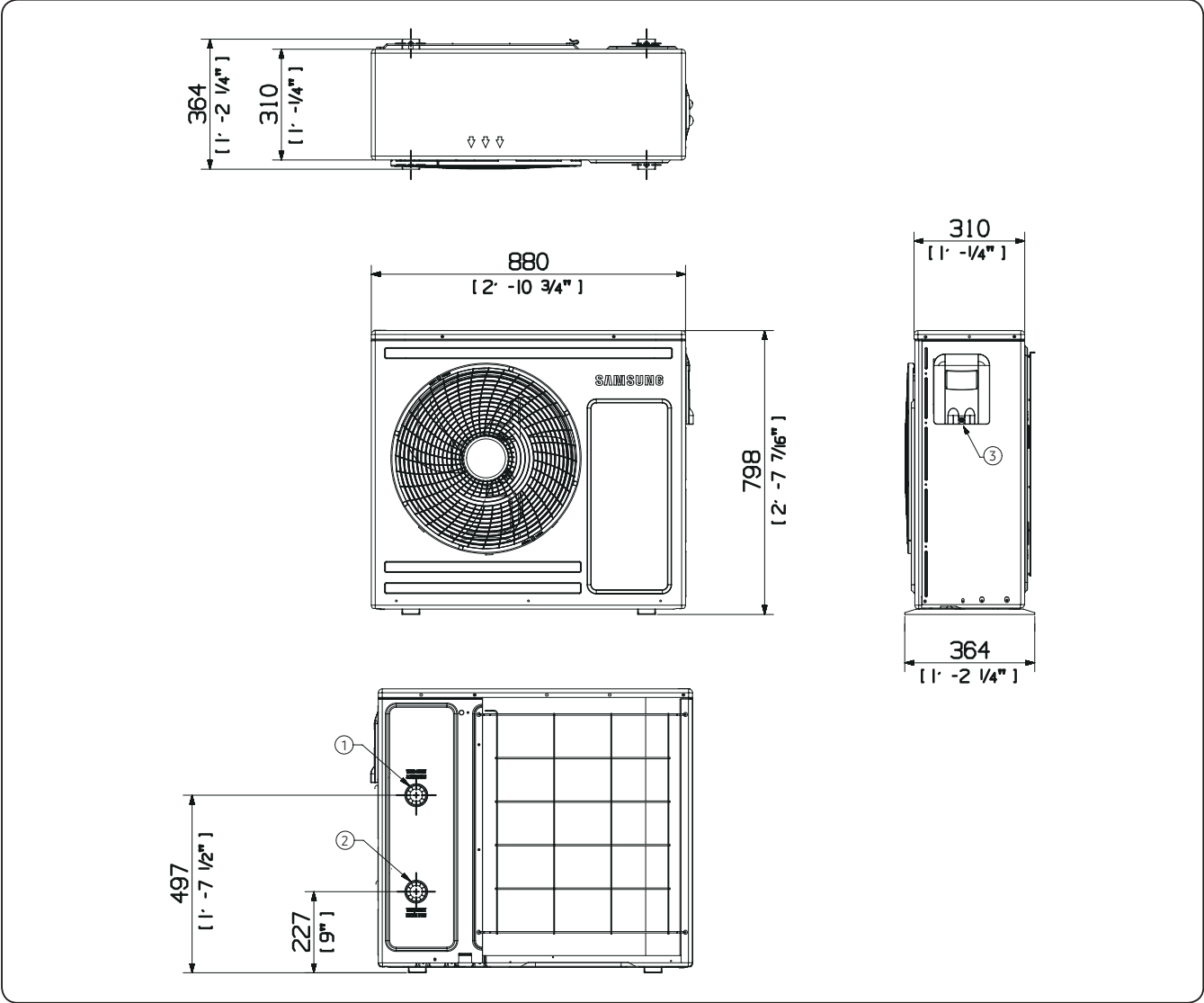
- MCA : Mimium circuit amperes
- MFA : Maximum fuse amperes
- Select wire size based on the value of MCA

2. Outdoor Units

2-3. Dimensional drawing

AE050RXYDEG/EU

Units : mm [inches]



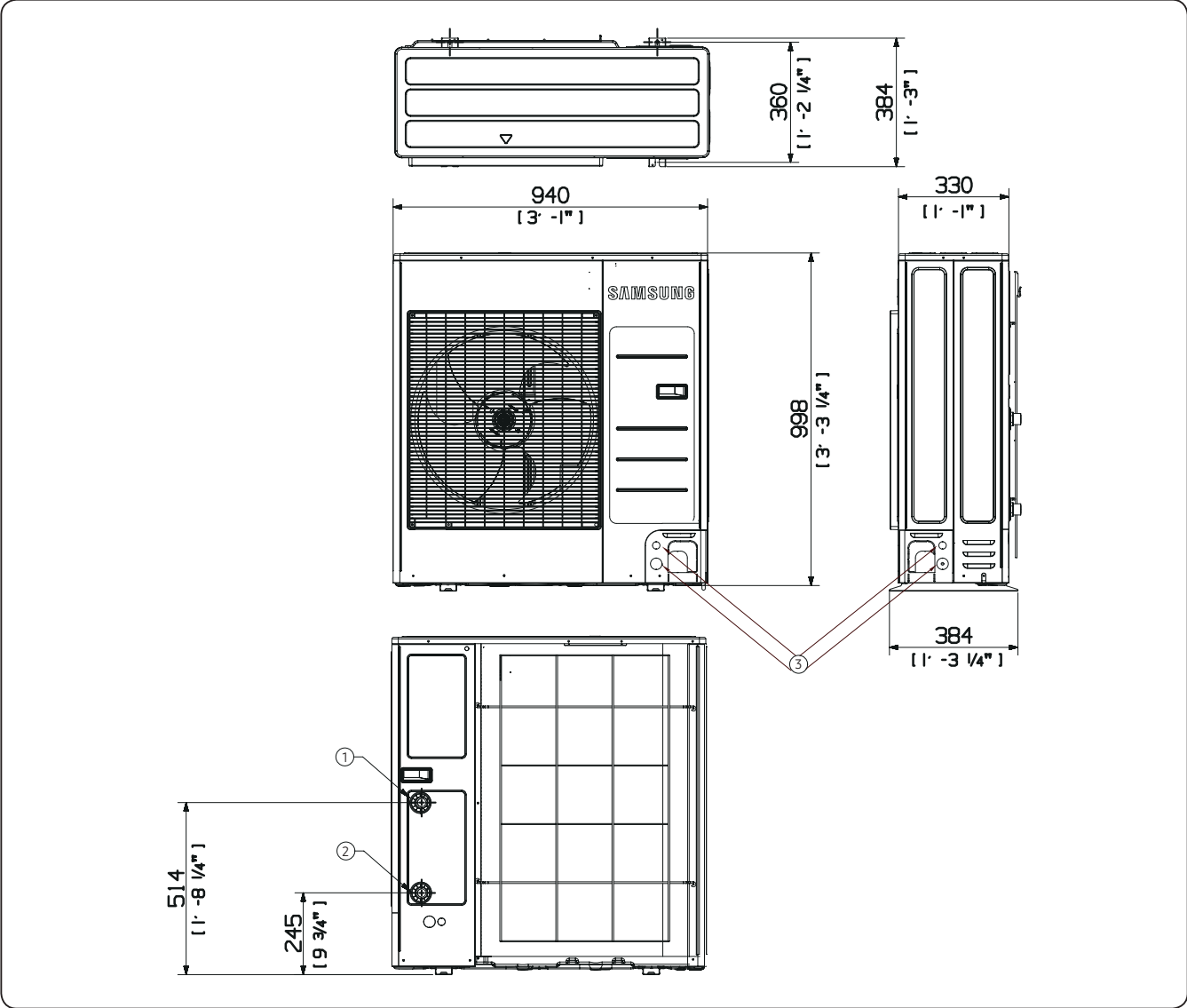
NO	Descriptioin
1	Water Pipe(Out)
2	Water Pipe(In)
3	Power & Communication Wiring Conduit Holes

2. Outdoor Units

2-3. Dimensional drawing

AE080RXYD*G/EU

Units : mm [inches]



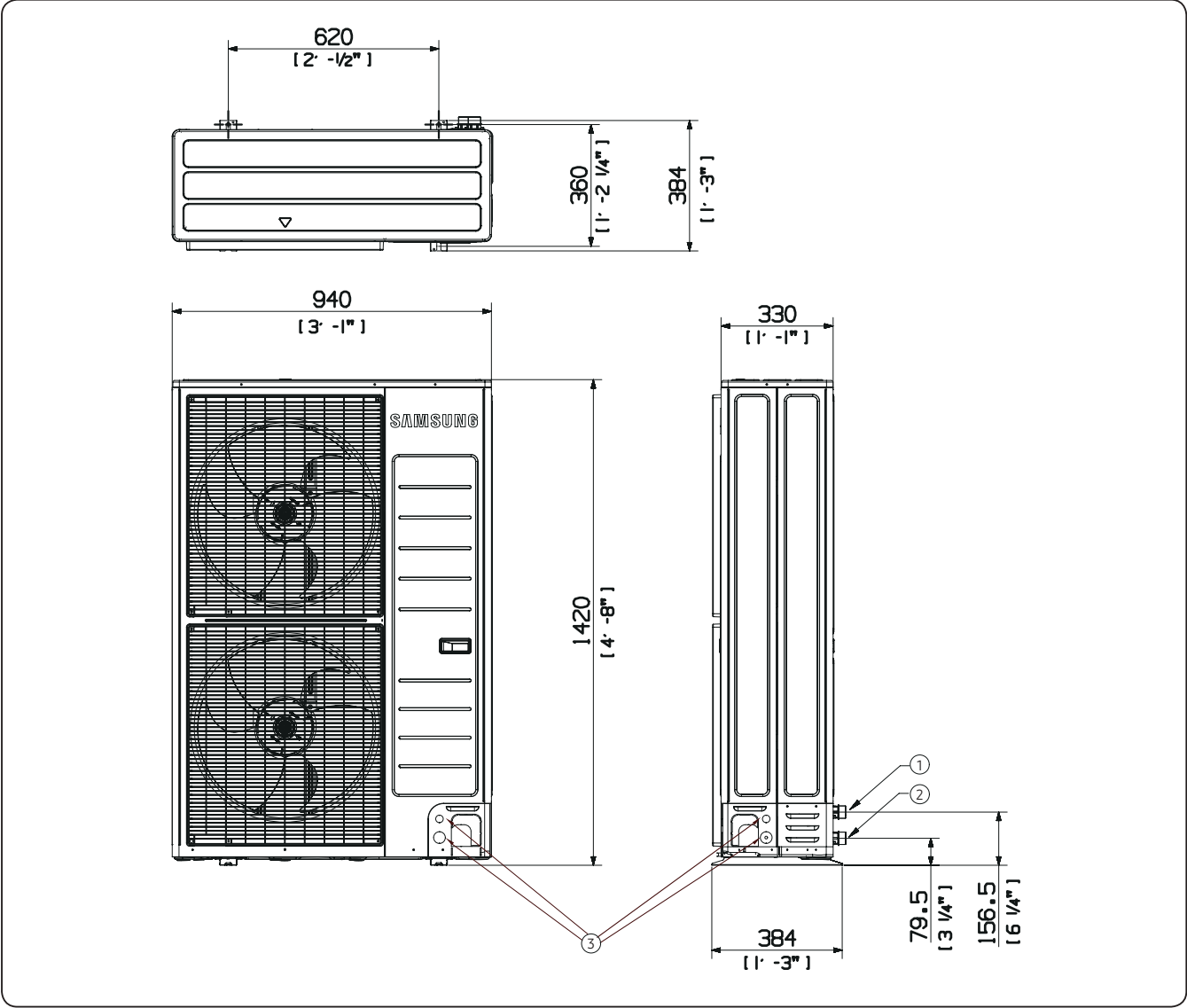
NO	Description
1	Water Pipe(Out)
2	Water Pipe(In)
3	Power & Communication Wiring Conduit Holes

2. Outdoor Units

2-3. Dimensional drawing

AE120/160RXYD*G/EU

Units : mm [inches]

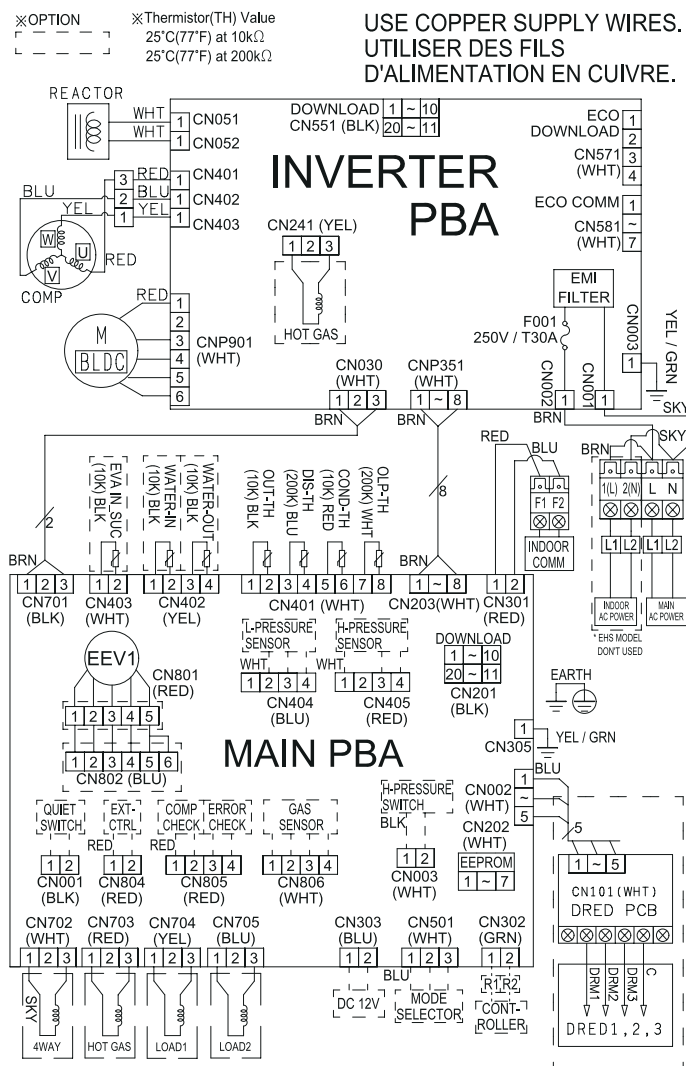


NO	Description
1	Water Pipe(Out)
2	Water Pipe(In)
3	Power & Communication Wiring Conduit Holes

2. Outdoor Units

2-4. Electrical wiring diagram

AE050RXYDEG/EU



M BLDC	BLDC FAN MOTOR	COMP	COMPRESSOR
OUT-TH	Thermistor OUT(10K)	DIS-TH	Thermistor DISCHARGE(200K)
COND-TH	Thermistor COND(10K)	OLP-TH	Thermistor OLP(200K)

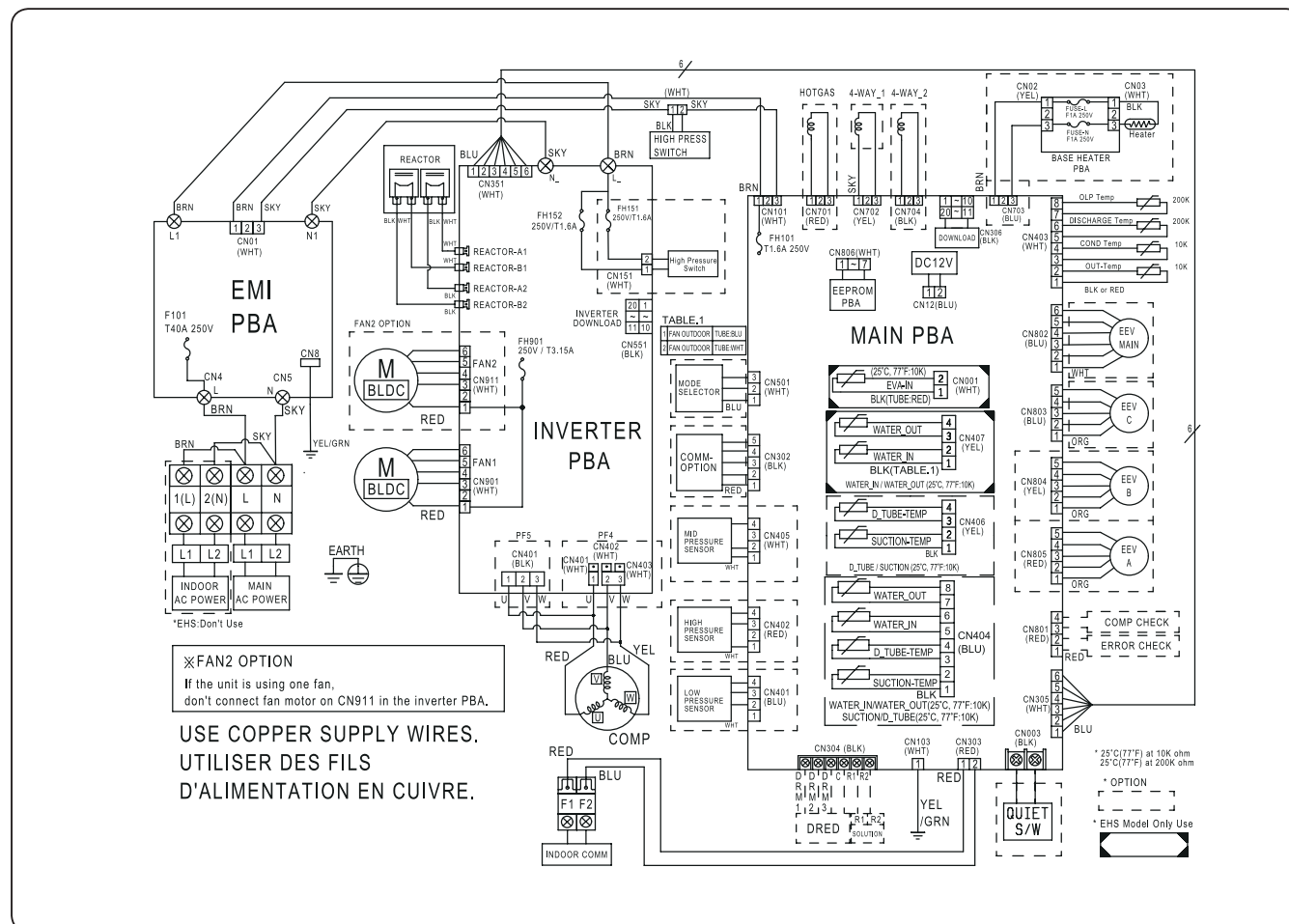
 NOTES

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, indoor-wired remote controller transmission F3-F4.
4.  Protective earth(SCREW)

2. Outdoor Units

2-4. Electrical wiring diagram

AE080/120/160RXYDEG/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)

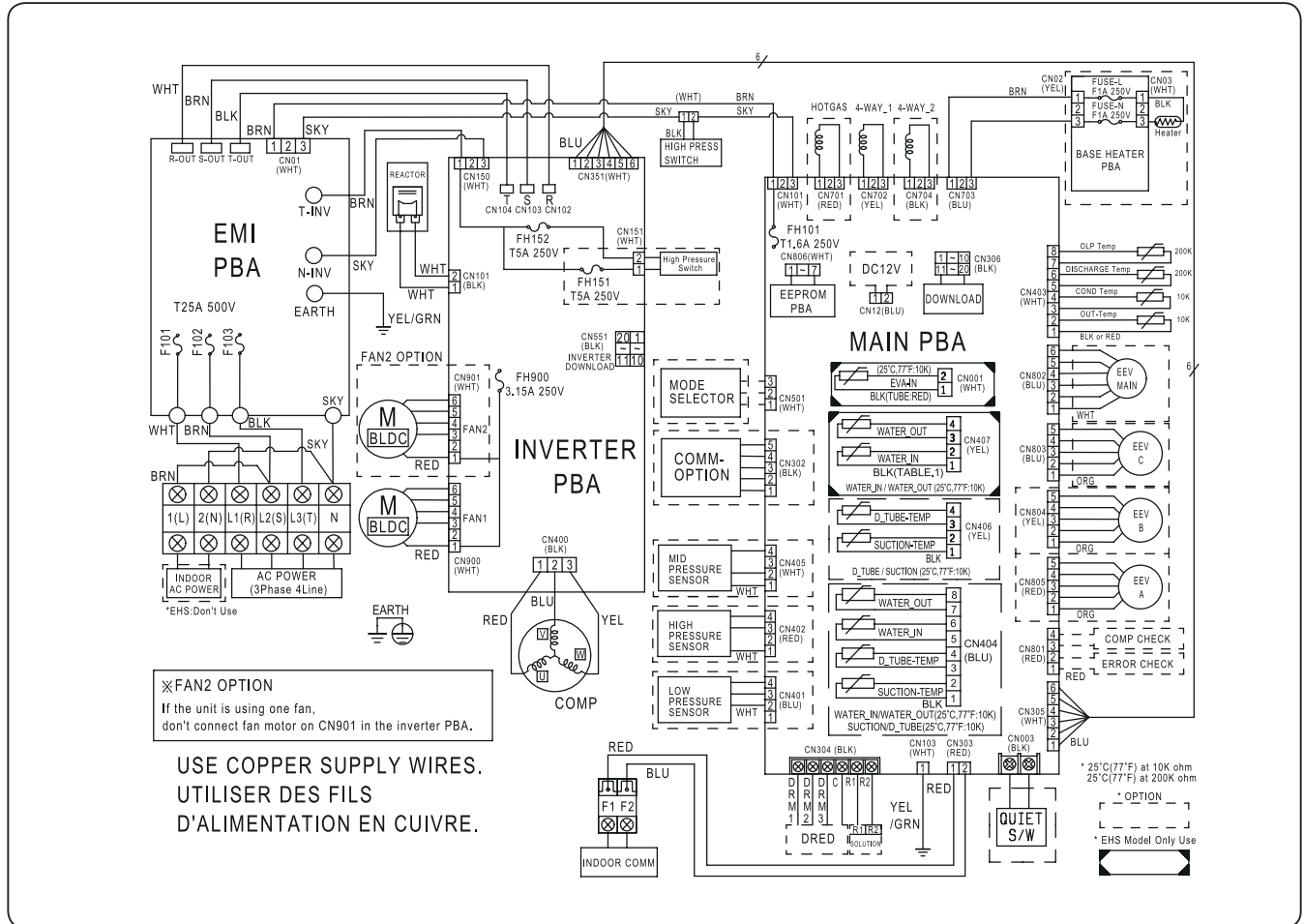
NOTES

- 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

2-4. 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

2-5. Sound data

Summary

Capacity (kW)	Model	Sound Pressure dB(A)		Sound Power dB(A)
		Cooling	Heating	Heating
5.0	AE050RXYDEG/EU	45	45	61
8.0	AE080RXYDEG/EU	48	48	63
12.0	AE120RXYDEG/EU	50	50	64
16.0	AE160RXYDEG/EU	54	52	66
8.0	AE080RXYDGG/EU	48	48	63
12.0	AE120RXYDGG/EU	50	50	64
16.0	AE160RXYDGG/EU	54	52	66

NOTE

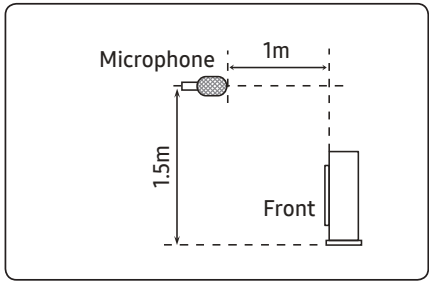
- Specifications may be subject to change without prior notice.
- Sound Pressure Level
 - Sound pressure level is obtained in an anechoic room.
 - Sound pressure level is a relative value, depending on the distance and acoustic environment.
 - Sound pressure level may differ depending on operation condition.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

2-5. Sound data

Sound Pressure level

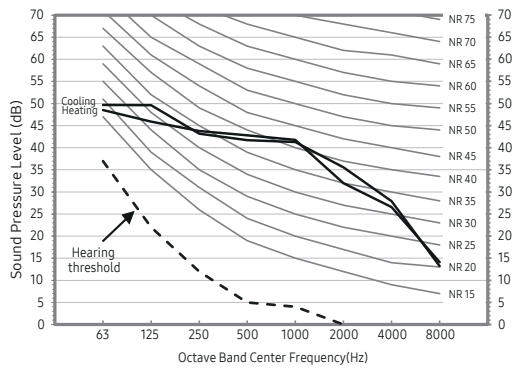
Unit: dB(A)



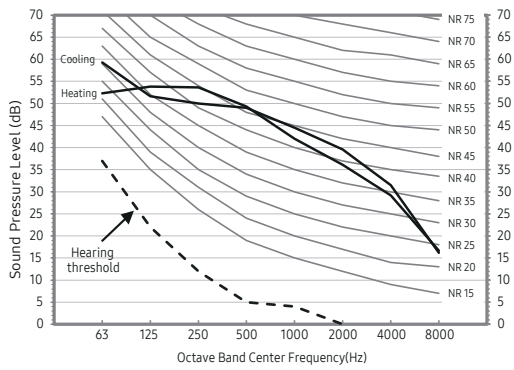
Model	Cooling	Heating
AE050RXYDEG/EU	45	45
AE080RXYDEG/EU	48	48
AE120RXYDEG/EU	50	50
AE160RXYDEG/EU	54	52

- NR Curve

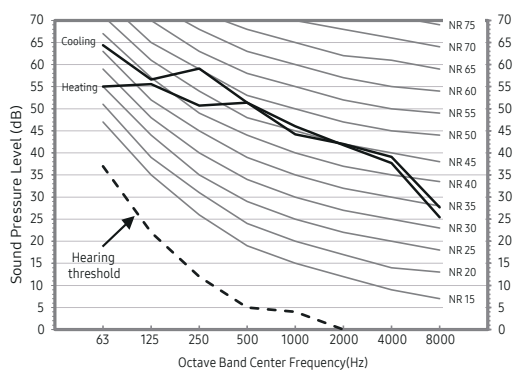
1) AE050RXYDEG/EU



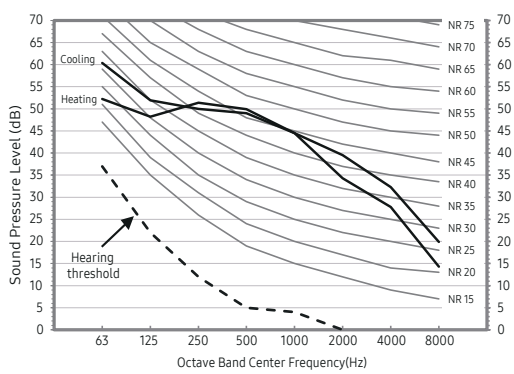
2) AE080RXYDEG/EU



3) AE120RXYDEG/EU



4) AE160RXYDEG/EU

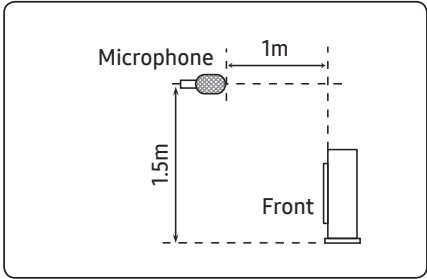


2. Outdoor Units

2-5. Sound data

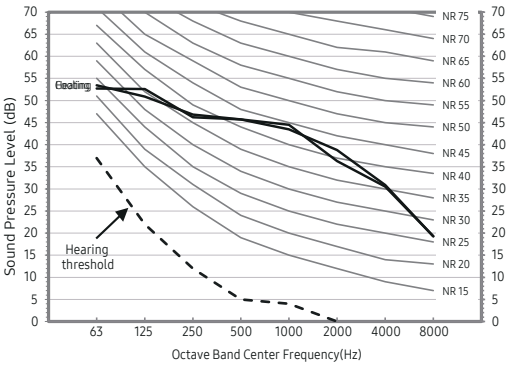
Sound Pressure level

Unit: dB(A)

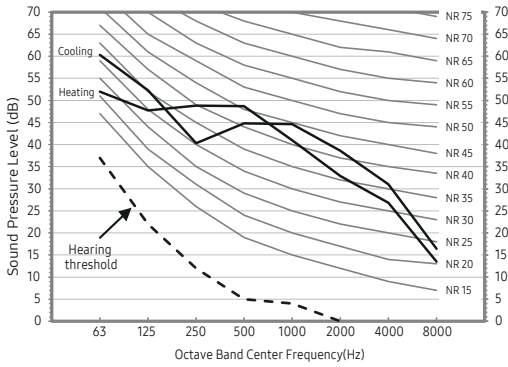


Model	Cooling	Heating
AE080RXYDGG/EU	48	48
AE120RXYDGG/EU	50	50
AE160RXYDGG/EU	54	52

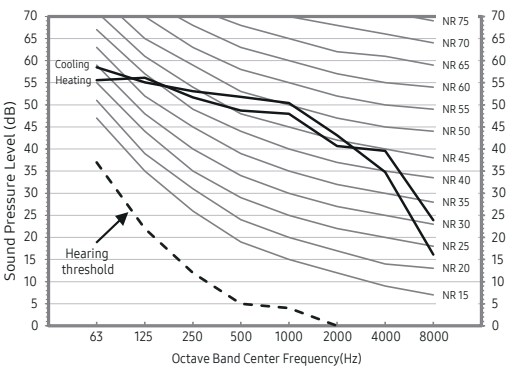
- NR Curve
- 5) AE080RXYDGG/EU



- 6) AE120RXYDGG/EU



- 7) AE160RXYDGG/EU



2. Outdoor Units

2-5. Sound data

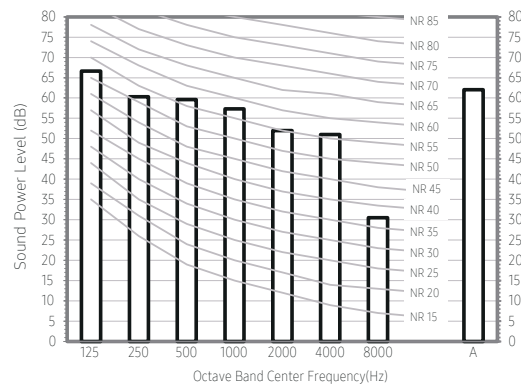
Sound Power level

 NOTE

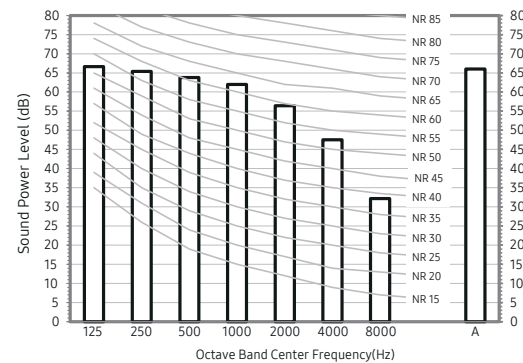
- Specifications may be subject to change without prior notice
 - Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

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

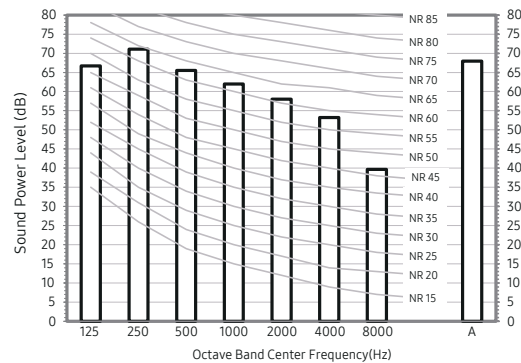
1) AE050RXYDEG/EU



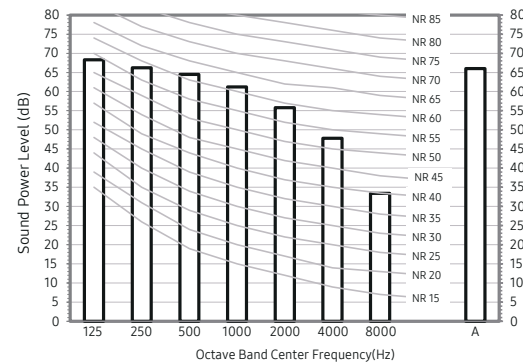
2) AE080RXYDEG/EU



3) AE120RXYDEG/EU



4) AE160RXYDEG/EU



2. Outdoor Units

2-5. Sound data

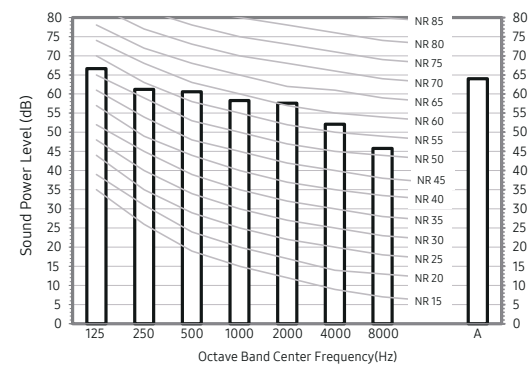
Sound Power level

 NOTE

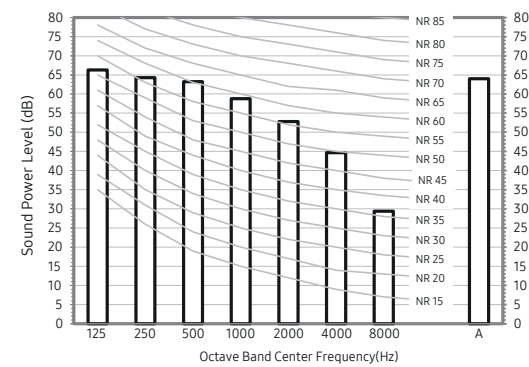
- Specifications may be subject to change without prior notice
 - Sound power level is an absolute value that a sound source generates.
 - dBA = A-weighted sound power level.
 - Reference power : 1pW.
 - Measured according to ISO 3741.

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

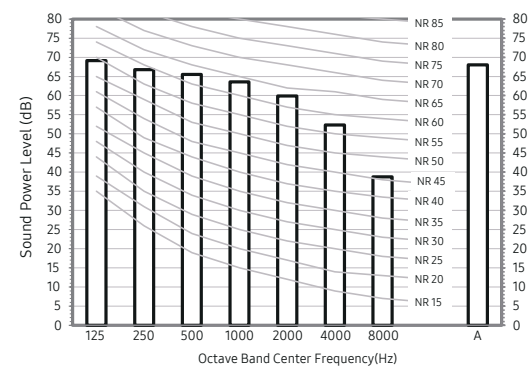
5) AE080RXYDGG/EU



6) AE120RXYDGG/EU



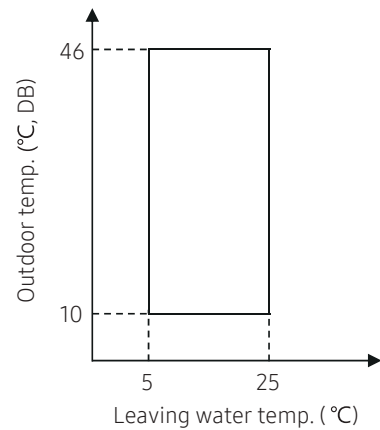
7) AE160RXYDGG/EU



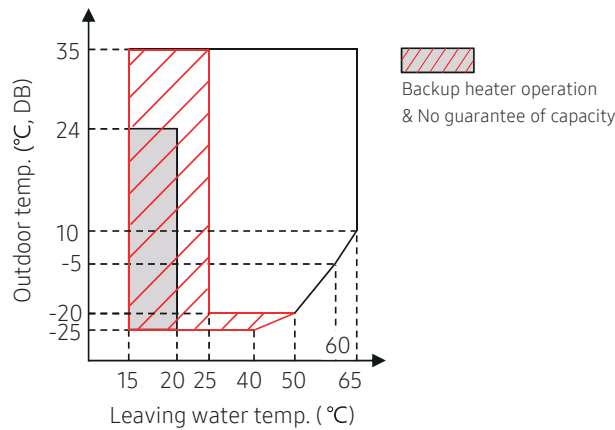
2. Outdoor Units

2-6. Operation range

1) Cooling



2) Heating



MONO Outdoor Unit		Water Temp. (°C)			Water Flow Rates (LPM)			Air Temp. (°C, DB/WB)				
		Min	Std	Max	Min	Std	Max	Min	Std	Max		
Controller	Cooling	5	-	25								
	Heating	15	-	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})	-								
	Outlet	25 (15 ^{*3})	35 (45 ^{*2})	65								

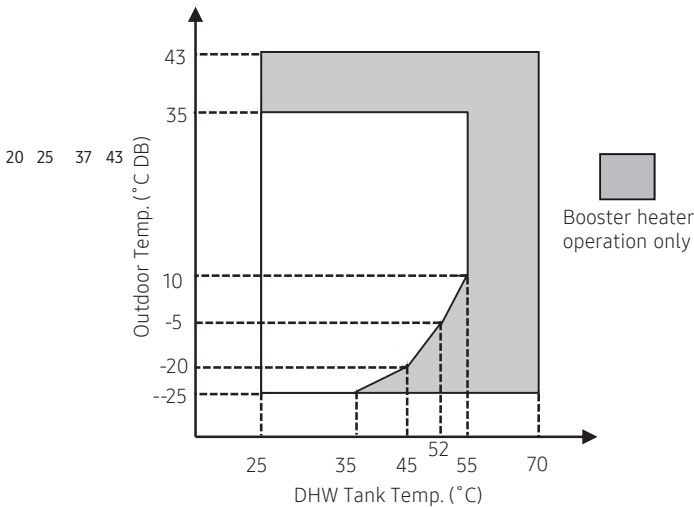
*1) Model : AE050RXYDEG
AE080RXYDEG
AE080RXYDGG

*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)

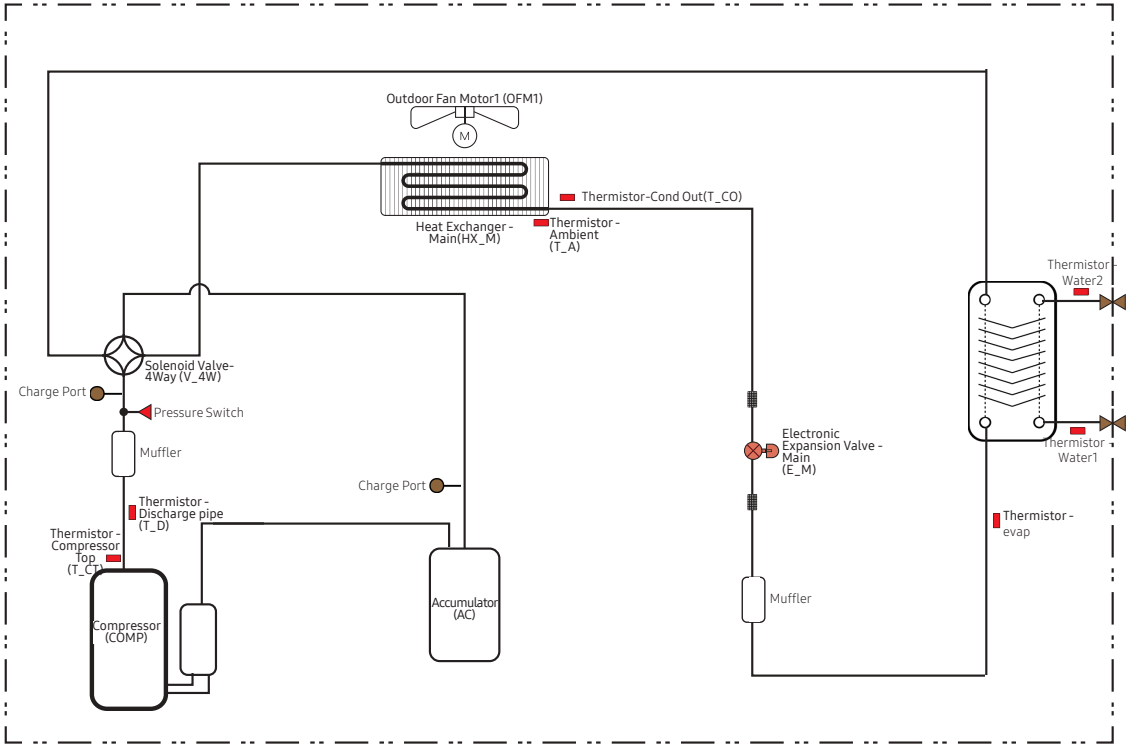


※ Special condition(35°C < Outdoor temp. ≤ 43°C) is operated by only Booster Heater.
SAMSUNG doesn't supply DHW for EHS Split.
Since it is a reference data, you have to check DHW operation range for yours.

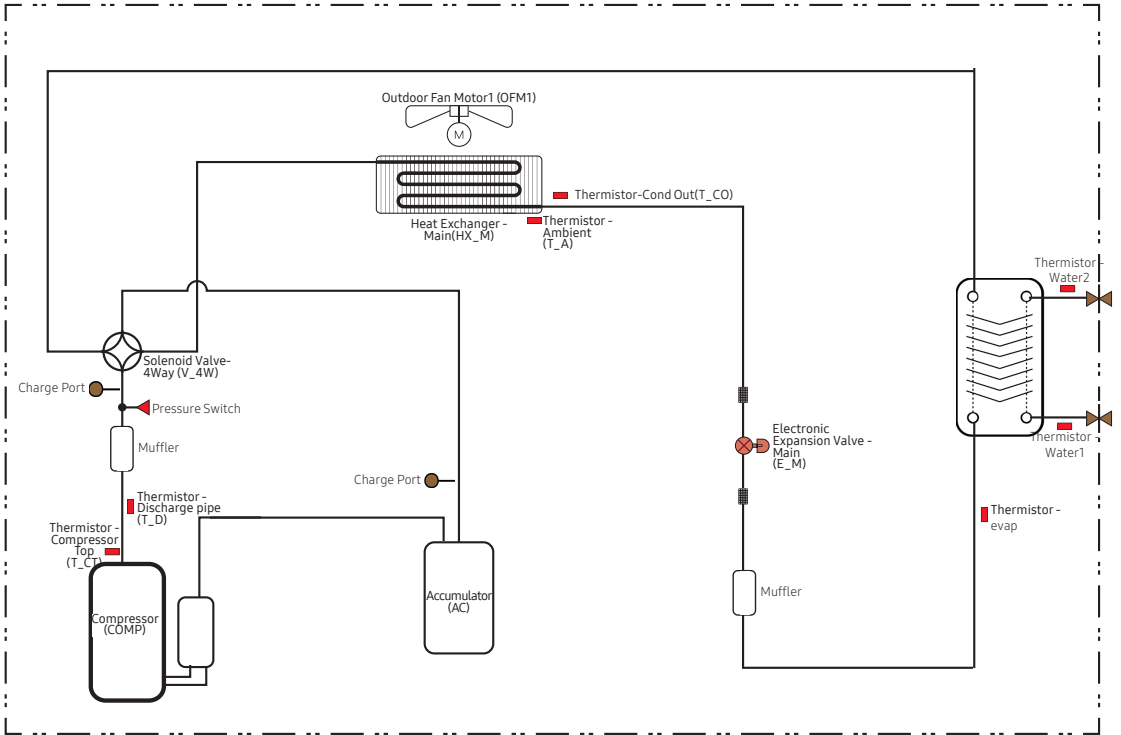
2. Outdoor Units

2-7. Piping diagram

AE050/080RXYD*G/EU



AE120/160RXYD*G/EU



2. Outdoor Units

2-8. Capacity table

1) Maximum Heating Capacity (Peak Value)

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

Model	LWT(°C)	30		35		40		45		50		55		60		65	
	Tamb(°C)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)
AE050RXYDEG	-20	3.57	1.50	3.40	1.66	3.41	1.71	3.43	1.98								
	-15	4.47	1.71	4.26	1.90	4.12	1.94	3.99	2.00	3.87	2.10						
	-10	5.25	1.73	5.00	1.94	4.85	2.00	4.70	2.08	4.56	2.20	4.23	2.44				
	-7	5.58	1.74	5.31	1.96	5.20	2.17	5.08	2.40	4.97	2.68	4.86	2.91				
	-2	5.91	1.68	5.63	1.89	5.41	2.08	5.20	2.26	4.94	2.54	4.68	2.77	4.43	3.05		
	2	5.86	1.50	5.58	1.69	5.27	1.78	4.97	1.83	4.72	2.02	4.47	2.15	4.23	2.35		
	7	5.25	0.92	5.00	1.03	4.90	1.22	4.80	1.30	4.55	1.55	4.30	1.52	4.08	1.79	3.85	1.84
	10	5.62	0.95	5.35	1.07	5.27	1.21	5.24	1.38	4.98	1.55	4.72	1.80	4.48	1.86	4.29	1.97
	15	6.22	0.99	5.92	1.11	5.87	1.23	5.93	1.42	5.64	1.60	5.45	1.81	5.18	1.87	4.95	1.94
	20	6.76	1.02	6.58	1.16	6.69	1.31	6.80	1.49	6.46	1.66	6.18	1.82	5.93	1.86	5.62	1.88
Model	LWT(°C)	30		35		40		45		50		55		60		65	
	Tamb(°C)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)
AE080RXYD*G	-20	5.60	2.32	5.33	2.57	5.27	2.74	5.20	3.13								
	-15	6.56	2.54	6.25	2.82	6.15	2.98	6.06	3.16	5.88	3.32						
	-10	8.02	2.71	7.64	3.01	7.41	3.15	7.18	3.31	7.11	3.52	6.75	4.15				
	-7	8.04	2.80	7.80	2.95	7.43	3.25	7.27	3.40	7.15	3.73	6.80	4.01				
	-2	8.56	2.72	8.15	2.90	7.89	3.21	7.62	3.38	7.24	3.80	6.86	4.10	6.50	4.45		
	2	8.55	2.43	8.14	2.73	7.85	2.89	7.56	2.98	7.18	3.28	6.80	3.58	6.44	3.95		
	7	8.40	1.58	8.00	1.77	7.70	2.04	7.40	2.12	7.25	2.56	7.10	2.53	6.96	3.02	6.81	3.12
	10	9.04	1.62	8.61	1.82	8.36	2.02	8.19	2.27	7.78	2.56	7.37	2.98	7.01	3.07	6.70	3.25
	15	10.07	1.64	9.59	1.85	9.42	2.07	9.45	2.40	8.97	2.70	8.68	3.06	8.24	3.15	7.89	3.28
	20	11.02	1.67	10.73	1.89	10.85	2.20	10.98	2.55	10.43	2.84	9.98	3.13	9.58	3.20	9.07	3.24
Model	LWT(°C)	30		35		40		45		50		55		60		65	
	Tamb(°C)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)
AE120RXYD*G	-20	9.82	4.36	9.35	4.81	9.04	4.91	8.72	4.88								
	-15	10.80	4.38	10.49	4.87	10.33	4.98	10.16	4.98	9.85	5.23						
	-10	12.39	4.32	12.20	4.88	11.65	5.04	11.46	5.23	11.39	5.49	11.37	5.72				
	-7	13.13	4.37	12.56	4.61	11.95	5.39	11.40	5.88	11.04	6.31	10.28	6.65				
	-2	13.60	4.05	12.95	4.55	12.72	5.09	12.48	5.62	12.25	6.32	11.83	7.02	11.14	7.80		
	2	13.19	3.42	12.75	3.84	12.41	4.39	12.21	4.94	12.07	5.56	11.53	6.18	10.93	6.56		
	7	12.60	2.57	12.00	2.65	11.85	3.06	11.70	3.18	11.50	3.46	11.30	3.73	11.11	4.06	10.48	4.53
	10	13.91	2.55	12.98	2.76	12.79	3.03	12.61	3.26	11.98	3.67	11.35	4.16	11.00	4.45	10.42	4.71
	15	16.09	2.51	15.02	2.72	14.76	2.93	14.51	3.19	13.79	3.59	13.06	4.03	12.66	4.19	11.99	4.48
	20	18.27	2.50	17.05	2.68	16.73	2.88	16.08	3.06	15.44	3.44	14.77	3.83	14.03	3.91	13.57	3.98
Model	LWT(°C)	30		35		40		45		50		55		60		65	
	Tamb(°C)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)
AE160RXYD*G	-20	11.87	5.40	11.30	5.95	10.99	6.34	10.68	6.61								
	-15	13.24	5.50	12.87	6.12	12.66	6.50	12.44	6.74	12.07	7.08						
	-10	15.12	5.47	14.80	6.21	14.47	6.61	14.23	7.18	14.06	7.43	13.98	7.81				
	-7	15.97	5.56	15.65	6.03	15.27	7.05	14.91	7.84	14.36	7.72	13.60	7.91				
	-2	16.59	5.26	15.80	5.91	15.24	6.42	14.69	6.93	13.95	7.79	13.22	8.66	12.52	9.62		
	2	16.12	4.55	15.35	5.12	14.15	5.27	12.95	5.42	12.31	6.10	11.66	6.77	11.04	7.19		
	7	16.80	3.51	16.00	3.62	15.70	4.26	15.40	4.49	15.20	4.84	15.00	5.18	14.81	5.60	14.03	6.19
	10	18.25	3.55	17.04	3.85	16.75	4.31	16.47	4.72	15.64	5.31	14.82	6.01	14.37	6.43	13.61	6.81
	15	20.68	3.63	19.30	3.92	19.03	4.32	18.76	4.80	17.82	5.40	16.88	6.05	16.37	6.30	15.50	6.74
	20	23.10	3.73	21.56	4.00	21.31	4.42	20.62	4.78	19.79	5.38	18.95	5.98	18.00	6.11	17.40	6.23

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.
 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

2-8. Capacity table

2) Maximum Heating Capacity (Integrated Value)

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

Model	LWT(°C)	30		35		40		45		50		55		60		65	
	Tamb(°C)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)
AE050RXYDEG	-20	3.57	1.50	3.40	1.66	3.41	1.71	3.43	1.98								
	-15	4.47	1.71	4.26	1.90	4.12	1.94	3.99	2.00	3.87	2.10						
	-10	4.89	1.69	4.66	1.90	4.80	1.99	4.65	2.08	4.47	2.18	4.15	2.39				
	-7	5.09	1.67	4.90	1.69	5.04	2.12	4.93	2.36	4.78	2.58	4.67	2.79				
	-2	4.94	1.45	4.75	1.63	4.67	1.83	4.44	1.95	4.26	2.19	4.08	2.44	3.86	2.71		
	2	4.79	1.23	4.56	1.38	4.35	1.50	4.12	1.54	3.98	1.73	3.80	1.92	3.64	2.14		
	7	5.25	0.92	5.00	1.03	4.90	1.22	4.80	1.30	4.55	1.55	4.30	1.52	4.08	1.79	3.85	1.84
	10	5.62	0.95	5.35	1.07	5.27	1.21	5.24	1.38	4.98	1.55	4.72	1.80	4.48	1.86	4.29	1.97
	15	6.22	0.99	5.92	1.11	5.87	1.23	5.93	1.42	5.64	1.60	5.45	1.81	5.18	1.87	4.95	1.94
	20	6.76	1.02	6.58	1.16	6.69	1.31	6.80	1.49	6.46	1.66	6.18	1.82	5.93	1.86	5.62	1.88
Model	LWT(°C)	30		35		40		45		50		55		60		65	
	Tamb(°C)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)
AE080RXYD*G	-20	5.60	2.32	5.33	2.57	5.27	2.74	5.20	3.13								
	-15	6.56	2.54	6.25	2.82	6.15	2.98	6.06	3.16	5.88	3.32						
	-10	7.47	2.66	7.11	2.99	7.34	3.14	7.11	3.28	6.69	3.45	6.65	4.10				
	-7	7.33	2.69	7.06	2.72	7.20	3.17	6.98	3.32	6.93	3.73	6.00	3.97				
	-2	7.16	2.34	6.89	2.63	6.80	2.83	6.50	2.91	6.24	3.27	5.97	3.64	5.66	4.04		
	2	6.98	1.99	6.65	2.23	6.48	2.44	6.27	2.49	6.05	2.80	5.79	3.11	5.54	3.46		
	7	8.40	1.58	8.00	1.77	7.70	2.04	7.40	2.12	7.25	2.56	7.10	2.53	6.96	3.02	6.81	3.12
	10	9.04	1.62	8.61	1.82	8.36	2.02	8.19	2.27	7.78	2.56	7.37	2.98	7.01	3.07	6.70	3.25
	15	10.07	1.64	9.59	1.85	9.42	2.07	9.45	2.40	8.97	2.70	8.68	3.06	8.24	3.15	7.89	3.28
	20	11.02	1.67	10.73	1.89	10.85	2.20	10.98	2.55	10.43	2.84	9.98	3.13	9.58	3.20	9.07	3.24
Model	LWT(°C)	30		35		40		45		50		55		60		65	
	Tamb(°C)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)
AE120RXYD*G	-20	9.82	4.36	9.35	4.81	9.04	4.91	8.72	4.88								
	-15	10.80	4.38	10.49	4.87	10.33	4.98	10.16	4.98	9.85	5.23						
	-10	11.78	4.23	11.80	4.85	11.44	4.99	11.30	5.23	11.28	5.49	11.25	5.72				
	-7	11.97	4.19	11.64	4.33	11.07	5.18	10.50	5.64	10.61	6.11	10.07	6.57				
	-2	11.49	3.56	11.06	4.01	10.97	4.48	10.76	4.95	10.43	5.62	9.88	6.24	9.36	7.01		
	2	11.11	2.94	10.58	3.30	10.80	3.78	10.91	4.25	10.47	4.83	9.92	5.31	9.40	6.02		
	7	12.60	2.57	12.00	2.65	11.85	3.06	11.70	3.18	11.50	3.46	11.30	3.73	11.11	4.06	10.48	4.53
	10	13.91	2.55	12.98	2.76	12.79	3.03	12.61	3.26	11.98	3.67	11.35	4.16	11.00	4.45	10.42	4.71
	15	16.09	2.51	15.02	2.72	14.76	2.93	14.51	3.19	13.79	3.59	13.06	4.03	12.66	4.19	11.99	4.48
	20	18.27	2.50	17.05	2.68	16.73	2.88	16.08	3.06	15.44	3.44	14.77	3.83	14.03	3.91	13.57	3.98
Model	LWT(°C)	30		35		40		45		50		55		60		65	
	Tamb(°C)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)
AE160RXYD*G	-20	11.87	5.40	11.30	5.95	10.99	6.34	10.68	6.61								
	-15	13.24	5.50	12.87	6.12	12.66	6.50	12.44	6.74	12.07	7.08						
	-10	14.37	5.36	14.39	6.15	13.96	6.55	13.80	7.07	13.77	7.43	13.73	7.74				
	-7	14.56	5.34	14.16	5.52	14.14	6.77	14.12	7.53	14.06	7.64	13.12	7.75				
	-2	14.01	4.63	13.48	5.20	13.14	5.65	12.67	6.10	12.28	6.93	11.63	7.69	11.02	8.63		
	2	13.58	3.92	12.94	4.40	12.05	4.53	11.03	4.66	10.58	5.29	10.03	5.83	9.50	6.60		
	7	16.80	3.51	16.00	3.62	15.70	4.26	15.40	4.49	15.20	4.84	15.00	5.18	14.81	5.60	14.03	6.19
	10	18.25	3.55	17.04	3.85	16.75	4.31	16.47	4.72	15.64	5.31	14.82	6.01	14.37	6.43	13.61	6.81
	15	20.68	3.63	19.30	3.92	19.03	4.32	18.76	4.80	17.82	5.40	16.88	6.05	16.37	6.30	15.50	6.74
	20	23.10	3.73	21.56	4.00	21.31	4.42	20.62	4.78	19.79	5.38	18.95	5.98	18.00	6.11	17.40	6.23

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.
 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

2-8. Capacity table

3) Cooling Capacity

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

	LWT(°C)	7		10		13		15		18		25	
	Tamb(°C)	CC(kW)	PI(kW)	CC(kW)	PI(kW)	CC(kW)	PI(kW)	CC(kW)	PI(kW)	CC(kW)	PI(kW)	CC(kW)	PI(kW)
AE050RXYDEG	10	4.32	0.86	4.62	0.85	4.93	0.85	5.23	0.85	5.54	0.85	6.09	0.87
	20	4.15	0.97	4.45	0.97	4.74	0.97	5.03	0.97	5.33	0.96	5.86	0.98
	30	3.99	1.09	4.27	1.08	4.55	1.08	4.83	1.08	5.11	1.08	5.62	1.10
	35	3.90	1.15	4.18	1.15	4.45	1.15	4.73	1.14	5.00	1.14	5.50	1.16
	46	3.72	1.27	3.98	1.27	4.24	1.27	4.50	1.26	4.77	1.26	5.24	1.28
AE080RXYD*G	LWT(°C)	7		10		13		15		18		25	
	Tamb(°C)	CC(kW)	PI(kW)	CC(kW)	PI(kW)	CC(kW)	PI(kW)	CC(kW)	PI(kW)	CC(kW)	PI(kW)	CC(kW)	PI(kW)
	10	6.31	1.40	6.92	1.33	7.53	1.26	8.14	1.19	8.75	1.12	9.62	1.14
	20	6.07	1.59	6.66	1.51	7.24	1.43	7.83	1.35	8.41	1.27	9.25	1.29
	30	5.83	1.78	6.39	1.69	6.95	1.60	7.51	1.51	8.07	1.42	8.88	1.45
AE120RXYD*G	LWT(°C)	7		10		13		15		18		25	
	Tamb(°C)	CC(kW)	PI(kW)	CC(kW)	PI(kW)	CC(kW)	PI(kW)	CC(kW)	PI(kW)	CC(kW)	PI(kW)	CC(kW)	PI(kW)
	10	9.96	2.03	10.79	2.04	11.62	2.05	12.45	2.06	13.28	2.06	14.61	2.10
	20	9.59	2.31	10.38	2.32	11.18	2.32	11.98	2.33	12.78	2.34	14.06	2.39
	30	9.20	2.58	9.96	2.59	10.73	2.60	11.50	2.61	12.26	2.62	13.49	2.67
AE160RXYD*G	LWT(°C)	7		10		13		15		18		25	
	Tamb(°C)	CC(kW)	PI(kW)	CC(kW)	PI(kW)	CC(kW)	PI(kW)	CC(kW)	PI(kW)	CC(kW)	PI(kW)	CC(kW)	PI(kW)
	10	11.51	2.45	12.51	2.45	13.51	2.45	14.50	2.45	15.50	2.44	17.05	2.49
	20	11.08	2.78	12.03	2.78	12.99	2.78	13.95	2.77	14.91	2.77	16.40	2.83
	30	10.63	3.11	11.55	3.11	12.47	3.10	13.39	3.10	14.31	3.10	15.74	3.16
	LWT(°C)	7		10		13		15		18		25	
	Tamb(°C)	CC(kW)	PI(kW)	CC(kW)	PI(kW)	CC(kW)	PI(kW)	CC(kW)	PI(kW)	CC(kW)	PI(kW)	CC(kW)	PI(kW)
AE160RXYD*G	35	10.40	3.29	11.30	3.29	12.20	3.29	13.10	3.28	14.00	3.28	15.40	3.35
	46	9.91	3.64	10.77	3.63	11.63	3.63	12.48	3.63	13.34	3.62	14.68	3.70

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

2-9. Silent mode corrections

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

Heating

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



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