SAMSUNG

EHS Technical Data Book

EHS TDM Plus for Europe

(R410A, 50Hz, HP)



Model : Outdoor unit (AE✻✻✻MXTP✻H/EU)
Hydro unit (AE✻✻✻MNYD✻H/EU)
Indoor unit (AE✻✻✻MN✻DEH/EU, AE✻✻✻MN✻PEH/EU)

History

Version	Modification	Date	Remark
Ver.1.0	Release EHS TDM Plus for Europe TDB	17. 02	
Ver.1.0.1	Revised unit error in Specification page (P.10, P.12)	17. 08	
Ver.1.0.2	Revised error in Dimensional drawing page (P.16)	17. 09	

Nomenclature

Outdoor Unit

Model Name

AE	160	M	X	T	P	E	H	/	EU
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		Buyer

(1) Classification

AC	CAC
AM	DVM
AJ	FJM (Free Joint Multi)
AE	EHS

(2) Capacity

X 1/10 kW (3 digits)

(3) Version

H	2014
J	2015
K	2016
M	2017

(4) Product Type

S	SET (NASA)
N	Indoor Unit (NASA)
X	Outdoor Unit (NASA)
A	SET (Non NASA)
B	Indoor Unit (Non NASA)
C	Outdoor Unit (Non NASA)

(5) Feature 1

H	DVM HOME
E	SINGLE
T	MULTI
Y	MONO

(6) Feature 2

D	Deluxe
P	Premium

(7) Rating Voltage

A	115V, 60hz, 1Φ
B	220V, 60Hz, 1Φ
C	208~230V, 60Hz, 1Φ
D	200~220V, 50Hz, 1Φ
E	220~240V, 50Hz, 1Φ
F	208~230V, 60Hz, 3Φ
G	380~415V, 50Hz, 3Φ

(8) Mode

C	Cooling Only (R410A)
H	Heat Pump (R410A)
R	Heat Recovery (R410A)

Hydro & Indoor unit

Model Name

AE	071	M	N	A	D	E	H	/	EU
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		Buyer

(1) Classification

AC	CAC
AM	DVM
AJ	FJM (Free Joint Multi)
AE	EHS

(2) Capacity

X 1/10 kW (3 digits)

(3) Version

H	2014
J	2015
K	2016
M	2017

(4) Product Type

S	SET (NASA)
N	Indoor Unit (NASA)
X	Outdoor Unit (NASA)
A	SET (Non NASA)
B	Indoor Unit (Non NASA)
C	Outdoor Unit (Non NASA)

(5) Product Notation

A	RAC-A3050
Y	Hydro Unit
L	LSP Duct
M	MSP Duct
J	Console

(6) Feature

D	Deluxe
P	Premium

(7) Rating Voltage

A	115V, 60hz, 1Φ
B	220V, 60Hz, 1Φ
C	208~230V, 60Hz, 1Φ
D	200~220V, 50Hz, 1Φ
E	220~240V, 50Hz, 1Φ
F	208~230V, 60Hz, 3Φ
G	380~415V, 50Hz, 3Φ

(8) Mode

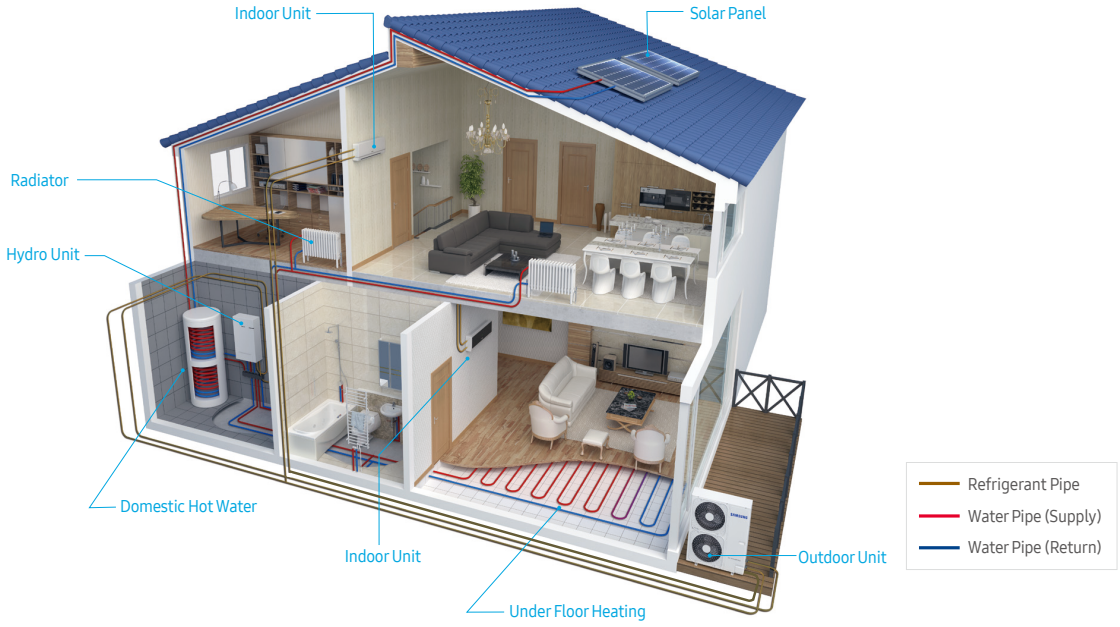
C	Cooling Only (R410A)
H	Heat Pump (R410A)
R	Heat Recovery (R410A)

Features & Benefits

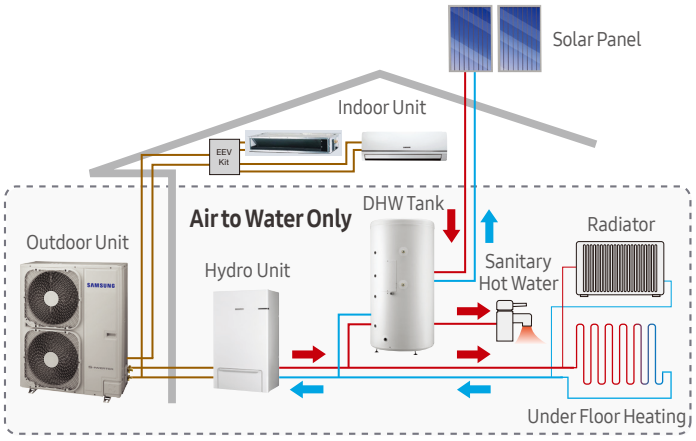
EHS TDM

Stabilize the atmosphere with all-season heating and cooling

The all-in-one Samsung EHS TDM (Time Division Multi) supports both air-to-air and air-to-water heating and cooling, providing the ultimate indoor climate solution for every season.



EHS TDM process (Air-to-Air and Air-to-Water)



Air to Air + Air to Water

- A2W+A2A Space heating and sanitary hot water
- A2W+A2A Space cooling (by reversing heating cycle)
- Consist of Outdoor unit, hydro unit, DHW tank (Field Supply) and indoor units (Wall mounted and slim duct type)
- Compatible with 2 hybrid energy sources (field supply) : Solar panel/ Back-up boiler

Air to Water Only

- A2W Space heating and sanitary hot water
- A2W Space cooling (by reversing heating cycle)
- Consist of Outdoor unit, hydro unit, DHW tank (Field Supply)
- Compatible with 2 hybrid energy sources (field supply) : Solar panel/ Back-up boiler

Enjoy smart temperature control throughout the year

Samsung EHS TDM offers an integrated solution to residents' heating and cooling needs in every season. Its all-in-one design, innovative TDM technology and broad flexibility only enhance its performance, delivering unparalleled comfort for any household.

Low-cost integrated heating and cooling

With EHS TDM, both water and air are heated by a single outdoor unit.

Air-to-air

Air-to-air heating and cooling brings comfort to the home while rapidly achieving a stable temperature. EHS TDM can also be used for cooling in the summer and heating in the winter.



Air Cooling



Air Heating

Air-to-water

Air-to-water heating and cooling tempers the atmosphere perfectly and cost effectively. The efficient system uses energy from the outside air to heat the radiator, under-floor and sanitary water supply.


Under Floor Heating

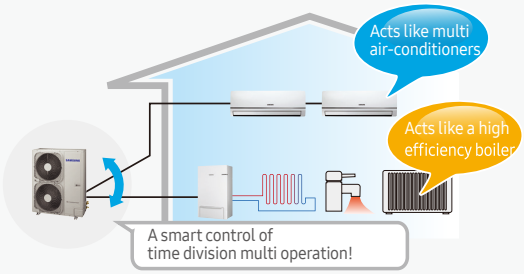

Radiator


Hot Water

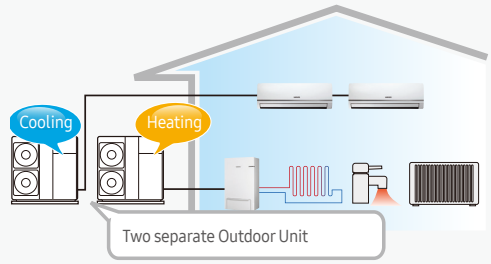
Perfect all-in-one system

EHS TDM requires installation of only one outdoor unit. Smart control of TDM operation between air-to-water and air-to-air enables one outdoor unit to operate for both functionalities, resulting in lower product cost and space saving.

SAMSUNG EHS TDM System



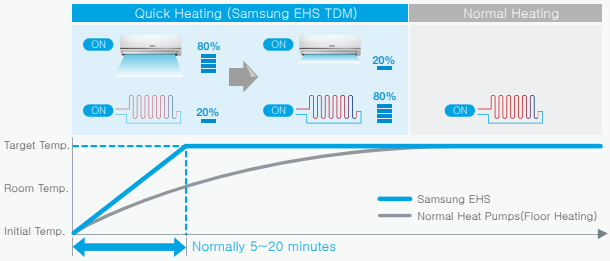
Company A



Quick heating with TDM technology

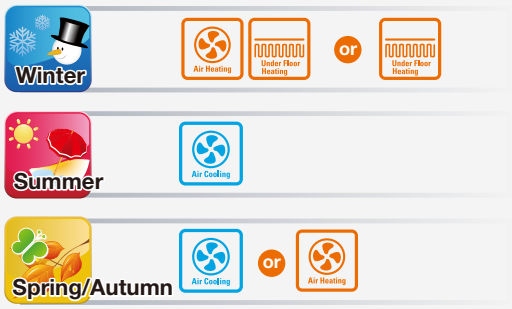
Floor heating is well recognized as the optimal heating option for indoor thermal comfort. However, it takes 4 ~ 8 hours to heat up the room after turning on the floor heating. Samsung TDM technology, the first of its kind in Europe, quickens the warmup with double the heating source. EHS TDM distributes hot air and provides floor heating to rapidly warm up the room.

Samsung TDM technology, the first of its kind in Europe, quickens the warmup with double the heating source.



Typical seasonal usage

Typically, a different heating solution is needed for each season's particular climate. Samsung EHS can be used all year long—regardless of the climate—because a single outdoor unit can be used for both air-to-water or air-to-air cooling and heating.



Wide compatibility and flexibility

Samsung EHS TDM offers broad compatibility for easier control. The unit can be implemented with a domestic hot water tank, thermostat, pump, solar panel or back-up boiler, making it exceptionally versatile.



Key features of the Hydro Unit

- **Quick Heating by TDM Technology**
  Floor heating is well known as the optimal heating option for indoor thermal comfort. However, it takes 4~8 hours to heat up the room after it is turned on. Samsung EHS TDM technology quickens that process by blowing hot air along with floor heating to warm up the room.
- **Integrated Heating & Cooling System at a Lower Cost**
  Time Division Multi (TDM), a smart alternating operation between air-to-water and air-to-air, enables one outdoor unit to operate for both functionalities resulting in lower product cost and space saving.
- **Running Costs-Reduction of Up to 33.3%**
  Samsung EHS, known for its world class efficiency (4.4kW floor heating system with COP of 4.73), can reduce 33.3% of your running costs as compared to a gas boiler.
- **Price and Space Reduction of Up to 50%**
  With an all-in-one outdoor unit capable of both air-to-water and air-to-air functions, Samsung EHS saves you in terms of the low initial purchase price & installation fee as well as the space needed for an extra outdoor unit.
- **High Performance at Low Temperature**
  Samsung EHS is made up of an inverter compressor optimally operated according to the outdoor temperature, offering heating performance of 90% at -10°C and reliable antifreezing protection at -25°C

Contents

1. Line-up 9

1-1. Outdoor Units 9
1-2. Hydro & Indoor units 9

2. Outdoor Units 10

2-1. Specifications 10
2-2. Electrical characteristics 14
2-3. Dimensional drawing 15
2-4. Electrical wiring diagram 18
2-5. Sound data 21
2-6. Operation range 24
2-7. Piping diagram 26
2-8. Capacity table 28
2-9. Capacity correction 55

3. Hydro Units 58

3-1. Specifications 58
3-2. Dimensional drawing 59
3-3. Electrical wiring diagram 60
3-4. Sound data 62
3-5. Piping diagram 65

4. Indoor Units 67

4-1. Specifications 67
4-2. Dimensional drawing 72
4-3. Electrical wiring diagram 80
4-4. Sound data 84
4-5. Piping diagram 91
4-6. Fan characteristics (PQ curve) 94
4-7. Temperature and air flow distribution 100

5. Installation 109

6. Accessory 143

1. Line-up

1-1. Outdoor Units

Capacity		4.4 / 6.6 kW	9.0 kW	12 / 16 kW
Image				
Model	1phase	AE044MXTPEH/EU AE066MXTPEH/EU	AE090MXTPEH/EU	AE120MXTPEH/EU AE160MXTPEH/EU
	3phase		AE090MXTPGH/EU	AE120MXTPGH/EU AE160MXTPGH/EU

1-2. Hydro & Indoor units

Type \ Capacity	2.2 kW	2.8 kW	3.6 kW	5.6 kW	7.1 kW	9 kW	16 kW
Hydro unit							
Slim Duct							
MSP Duct							
RAC(A3050)							
Console							

2. Outdoor Units

2-1. Specifications

Type					EHS TDM PLUS	EHS TDM PLUS	EHS TDM PLUS	EHS TDM PLUS
Model Name					AE044MXTPEH/EU	AE066MXTPEH/EU	AE090MXTPEH/EU	AE090MXTPGH/EU
System	Mode			-	Heat Pump (A2W)	Heat Pump (A2W)	Heat Pump (A2W)	Heat Pump (A2W)
	A2W Condition #1. (A7/W35) 1)*	Nominal Capacity	Heating (Min/Std/Max)	W	1,667/4,400/4,400	1,667/6,600/6,600	2,394/9,000/9,000	2,475/9,000/9,000
				Btu/h	5,700/15,000/15,000	5,700/22,500/22,500	8,200/30,700/30,700	8,400/30,700/30,700
			Cooling (Min/Std/Max)	W	1,658/5,100/5,100	1,658/6,700/6,700	1,818/8,000/8,000	1,875/8,000/8,000
				Btu/h	5,700/17,400/17,400	5,700/22,900/22,900	6,200/27,300/27,300	6,400/27,300/27,300
		Power Input (Nominal)	Heating (Min/Std/Max)	W	409/930/930	409/1,470/1,470	564/2,120/2,120	583/2,120/2,120
			Cooling (Min/Std/Max)	W	370/1,030/1,030	370/1,480/1,480	420/1,850/1,850	465/1,860/1,860
		Current Input (Nominal)	Heating (Min/Std/Max)	A	1.7/4.3/4.3	1.7/6.7/6.7	2.6/9.6/9.6	1.0/3.5/3.5
			Cooling (Min/Std/Max)	A	1.7/4.9/4.9	1.7/6.9/6.9	1.9/8.5/8.5	0.8/3.0/3.0
		COP (Nominal Heating)			4.73	4.49	4.25	4.25
		EER (Nominal Cooling)			4.95	4.53	4.32	4.30
		SCOP(35°C)			4.38	4.39	4.39	4.39
		ESEER			5.08	4.92	5.36	4.93
	A2W Condition #2. (A7/W35) 2)*	Capacity	Heating	W	4,000	6,100	8,000	8,300
				Btu/h	13,600	20,800	27,300	28,300
			Cooling	W	3,500	4,500	5,600	5,700
				Btu/h	11,900	15,400	19,100	19,400
		Power Input	Heating	W	1,160	1,830	2,380	2,500
			Cooling		1,030	1,420	1,790	1,750
		Current Input	Heating	A	5.4	8.4	10.9	3.9
			Cooling		4.8	6.6	8.2	2.8
		COP	Heating	W/W	3.45	3.33	3.36	3.32
		EER	Cooling	W/W	3.40	3.17	3.13	3.26
	A2/W35 3)*	Capacity	Heating	W	4,000	5,800	7,700	7,700
		COP		W/W	3.54	3.31	3.47	3.47
	A-7/W35 3)*	Capacity	Heating	W	3,900	5,700	7,400	7,400
		COP		W/W	2.81	2.79	2.79	2.79
	Maximum allowable connections for indoor units			EA	2	3	4	4
	(Not including Hydro-A2W)	Total capacity of the connected Indoor Units	Min. (Cooling)	kW	2.2	3.3	4.5	4.5
			Min. (Cooling)	kW	4.4	6.6	9.0	9.0
	Field Wiring	MCA		A	18.0	20.0	22.0	10.0
		MFA		A	25.0	25.0	27.5	16.1
	Water Connections	Water Flow Rate	Min/Std/Max	LPM	7.0/12.7/42.0	7.0/19.0/42.0	7.0/26.0/42.0	7.0/26.0/42.0
	Refrigerant	Piping Connections	Liquid pipe	Φ, mm (inch)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)
			Gas pipe(A2W)	Φ, mm (inch)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)
			Gas pipe(A2A)	Φ, mm (inch)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)
		Piping length (ODU-IDU)	Max.[Equiv.]	m	30	30	30	30
		Level difference (IDU-IDU)	Max.	m	20	20	20	20
		Chargeless Length		m	10	10	10	10
		Type		-	R410A	R410A	R410A	R410A
		Factory Charging		kg	2.6	2.6	2.4	2.4
				tCO2e	5.43	5.43	5.01	5.01
		Control Method		-	EEV	EEV	EEV	EEV

2. Outdoor Units

Type					EHS TDM PLUS	EHS TDM PLUS	EHS TDM PLUS	EHS TDM PLUS
Model Name					AE044MXTPEH/EU	AE066MXTPEH/EU	AE090MXTPEH/EU	AE090MXTPGH/EU
Outdoor Unit	Power Supply			Φ, #, V, Hz	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50	3,4,380-415,50
	Compressor	Type		-	Rotary Comp	Rotary Comp	Rotary Comp	Rotary Comp
		Model Name		-	UG4TH8200FE4	UG4TH8200FE4	UG8TH8265FJW	UG8T300FUCJU
		Oil	Type	-	POE	POE	POE	PVE
			Initial Charge	cc	650	650	700	1,200
	Fan	Type		-	Propeller Fan	Propeller Fan	Propeller Fan	Propeller Fan
		Discharge direction			Horizontal	Horizontal	Horizontal	Horizontal
		Air Flow Rate		m^3/min	45	47	67	67
		Quantity		EA	1	1	1	1
	Sound	Sound Pressure	Heating	dB(A)	47	48	51	51
			Cooling	dB(A)	46	47	50	50
		Sound Power		dB(A)	65	67	69	69
	External Dimension	Net Weight		kg	61	61	74	76
		Shipping Weight		kg	64.5	64.5	82	84
		Net Dimensions (WxHxD)		mm	880 x 793 x 310	880 x 793 x 310	940 x 998 x 330	940 x 998 x 330
		Shipping Dimensions (WxHxD)		mm	1,023 x 911 x 413	1,023 x 911 x 413	995 x 1,178 x 426	995 x 1,178 x 426
	Operating Temp. Range	A2W	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
		A2A	Heating	℃	-25~24	-25~24	-25~24	-25~24
			Cooling	℃	10~46	10~46	10~46	10~46

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 : (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 R410A (GWP=2,088) 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

Type					EHS TDM PLUS	EHS TDM PLUS	EHS TDM PLUS	EHS TDM PLUS
Model Name					AE120MXTPEH/EU	AE120MXTPGH/EU	AE160MXTPEH/EU	AE160MXTPGH/EU
System	Mode			-	Heat Pump (A2W)	Heat Pump (A2W)	Heat Pump (A2W)	Heat Pump (A2W)
	A2W Condition #1. (A7/W35) 1)*	Nominal Capacity	Heating (Min/Std/Max)	W	3,750/12,000/12,000	3,750/12,000/12,000	3,750/16,000/16,000	3,750/16,000/16,000
				Btu/h	12,800/40,900/40,900	12,800/40,900/40,900	12,800/54,600/54,600	12,800/54,600/54,600
			Cooling (Min/Std/Max)	W	3,300/12,000/12,000	3,300/12,000/12,000	3,300/14,500/14,500	3,300/14,500/14,500
				Btu/h	11,300/40,900/40,900	11,300/40,900/40,900	11,300/49,500/49,500	11,300/49,500/49,500
		Power Input (Nominal)	Heating (Min/Std/Max)	W	850/2,720/2,720	850/2,720/2,720	850/3,950/3,950	850/3,950/3,950
			Cooling (Min/Std/Max)	W	798/2,900/2,900	798/2,900/2,900	798/3,840/3,840	798/3,840/3,840
		Current Input (Nominal)	Heating (Min/Std/Max)	A	3.9/12.4/12.4	1.4/4.3/4.3	3.9/18.0/18.0	1.4/6.0/6.0
			Cooling (Min/Std/Max)	A	3.6/13.2/13.2	1.2/4.5/4.5	3.6/13.2/13.2	1.2/5.9/5.9
		COP (Nominal Heating)			4.41	4.41	4.05	4.05
		EER (Nominal Cooling)			4.14	4.14	3.78	3.78
		SCOP(35℃)			4.59	4.59	4.59	4.59
		ESEER			5.29	5.29	5.21	5.21
	A2W Condition #2. (A7/W35) 2)*	Capacity	Heating	W	11,200	11,200	15,000	15,000
				Btu/h	38,200	38,200	51,200	51,200
			Cooling	W	8,600	8,600	10,300	10,300
				Btu/h	29,300	29,300	35,100	35,100
		Power Input	Heating	W	3,300	3,300	4,710	4,710
			Cooling		2,790	2,790	3,590	3,590
		Current Input	Heating	A	15.1	5.1	21.5	7.3
			Cooling		12.8	4.3	16.4	5.6
		COP	Heating	W/W	3.39	3.39	3.18	3.18
		EER	Cooling	W/W	3.08	3.08	2.87	2.87
	A2/W35 3)*	Capacity	Heating	W	11,000	11,000	13,700	13,700
		COP		W/W	3.41	3.41	3.19	3.19
	A-7/W35 3)*	Capacity	Heating	W	10,600	10,600	14,000	14,000
		COP		W/W	2.97	2.97	2.73	2.73
	Maximum allowable connections for indoor units			EA	5	5	7	7
	(Not including Hydro-A2W)	Total capacity of the connected Indoor Units	Min. (Cooling)	kW	6.0	6.0	7.7	7.7
			Min. (Cooling)	kW	12.1	12.1	15.4	15.4
	Field Wiring	MCA		A	28.0	10.0	32.0	12.0
		MFA		A	35.0	16.1	40.0	16.1
	Water Connections	Water Flow Rate	Min/Std/Max	LPM	12.0/34.6/58.0	12.0/34.6/58.0	12.0/46.2/58.0	12.0/46.2/58.0
	Refrigerant	Piping Connections	Liquid pipe	Φ, mm (inch)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)
			Gas pipe(A2W)	Φ, mm (inch)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)
			Gas pipe(A2A)	Φ, mm (inch)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)
		Piping length (ODU-IDU)	Max.[Equiv.]	m	70	70	70	70
		Level difference (IDU-IDU)	Max.	m	30	30	30	30
		Chargeless Length		m	10	10	10	10
		Type		-	R410A	R410A	R410A	R410A
		Factory Charging		kg	3.5	3.5	3.5	3.5
				tCO2e	7.31	7.31	7.31	7.31
		Control Method		-	EEV	EEV	EEV	EEV

2. Outdoor Units

Type					EHS TDM PLUS	EHS TDM PLUS	EHS TDM PLUS	EHS TDM PLUS
Model Name					AE120MXTPEH/EU	AE120MXTPGH/EU	AE160MXTPEH/EU	AE160MXTPGH/EU
Outdoor Unit	Power Supply			Φ, #, V, Hz	1,2,220-240,50	3,4,380-415,50	1,2,220-240,50	3,4,380-415,50
	Compressor	Type		-	Rotary Comp	Rotary Comp	Rotary Comp	Rotary Comp
		Model Name		-	UG5TK1450FJX	UG5TK1450FJX	UG5TK1450FJX	UG5TK1450FJX
		Oil	Type	-	PVE	PVE	PVE	PVE
			Initial Charge	cc	1,700	1,700	1,700	1,700
	Fan	Type		-	Propeller Fan	Propeller Fan	Propeller Fan	Propeller Fan
		Discharge direction			Horizontal	Horizontal	Horizontal	Horizontal
		Air Flow Rate		m^3/min	103	103	123	123
		Quantity		EA	2	2	2	2
	Sound	Sound Pressure	Heating	dB(A)	52	52	55	55
			Cooling	dB(A)	51	51	54	54
		Sound Power		dB(A)	70	70	73	73
	External Dimension	Net Weight		kg	107	107	107	107
		Shipping Weight		kg	115	115	115	115
		Net Dimensions (WxHxD)		mm	940 x 1,420 x 330	940 x 1,420 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 1,598 x 426	995 x 1,598 x 426	995 x 1,598 x 426
	Operating Temp. Range	A2W	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
		A2A	Heating	℃	-25~24	-25~24	-25~24	-25~24
			Cooling	℃	10~46	10~46	10~46	10~46

NOTE

- Specifications may be subject to change without prior notice.
  1)* A2W Condition #1 : (Heating) Water In/Out 30℃/35℃, Outdoor Air 7℃[DB]/6℃[WB]; (Cooling) Water In/Out 23℃/18℃, Outdoor Air 35℃[DB].
  2)* A2W Condition #2 : (Heating) Water In/Out 40℃/45℃, Outdoor Air 7℃[DB]/6℃[WB]; (Cooling) Water In/Out 12℃/7℃, Outdoor Air 35℃[DB].
  3)* A2W Condition : (A2W35) Water In/Out -/35℃, Outdoor Air 2℃[DB]/1℃[WB]; (A-7/W35) Water In/Out -/35℃, Outdoor Air -7℃[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 R410A (GWP=2,088) 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
4.4	AE044MXTPEH/EU	1	2	50	220~240	198	264	4.3	4.9	18.0	25.0
6.6	AE066MXTPEH/EU	1	2	50	220~240	198	264	6.7	6.9	20.0	25.0
9.0	AE090MXTPEH/EU	1	2	50	220~240	198	264	9.6	8.5	22.0	27.5
9.0	AE090MXTPGH/EU	3	4	50	380~415	342	456	3.5	3.0	10.0	16.1
12.0	AE120MXTPEH/EU	1	2	50	220~240	198	264	12.4	13.2	28.0	35.0
12.0	AE120MXTPGH/EU	3	4	50	380~415	342	456	4.3	4.5	10.0	16.1
16.0	AE160MXTPEH/EU	1	2	50	220~240	198	264	18.0	17.5	32.0	40.0
16.0	AE160MXTPGH/EU	3	4	50	380~415	342	456	6.0	5.9	12.0	16.1

NOTE

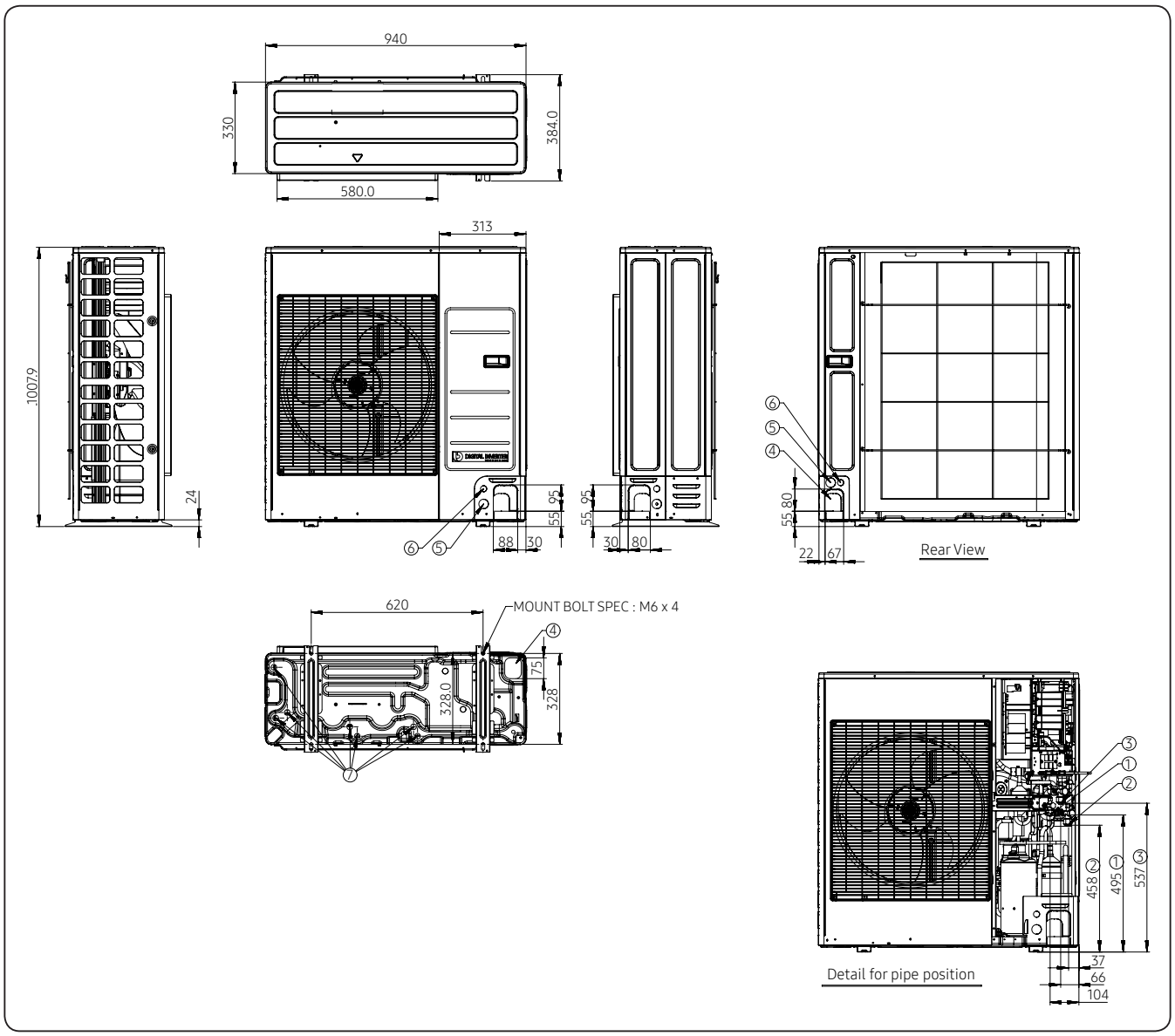
- MCA : Mimium circuit amperes
- MFA : Maximum fuse amperes
- Select wire size based on the value of MCA

2. Outdoor Units

2-3. Dimensional drawing

AE090MXTP✳H✳✳

Unit : mm



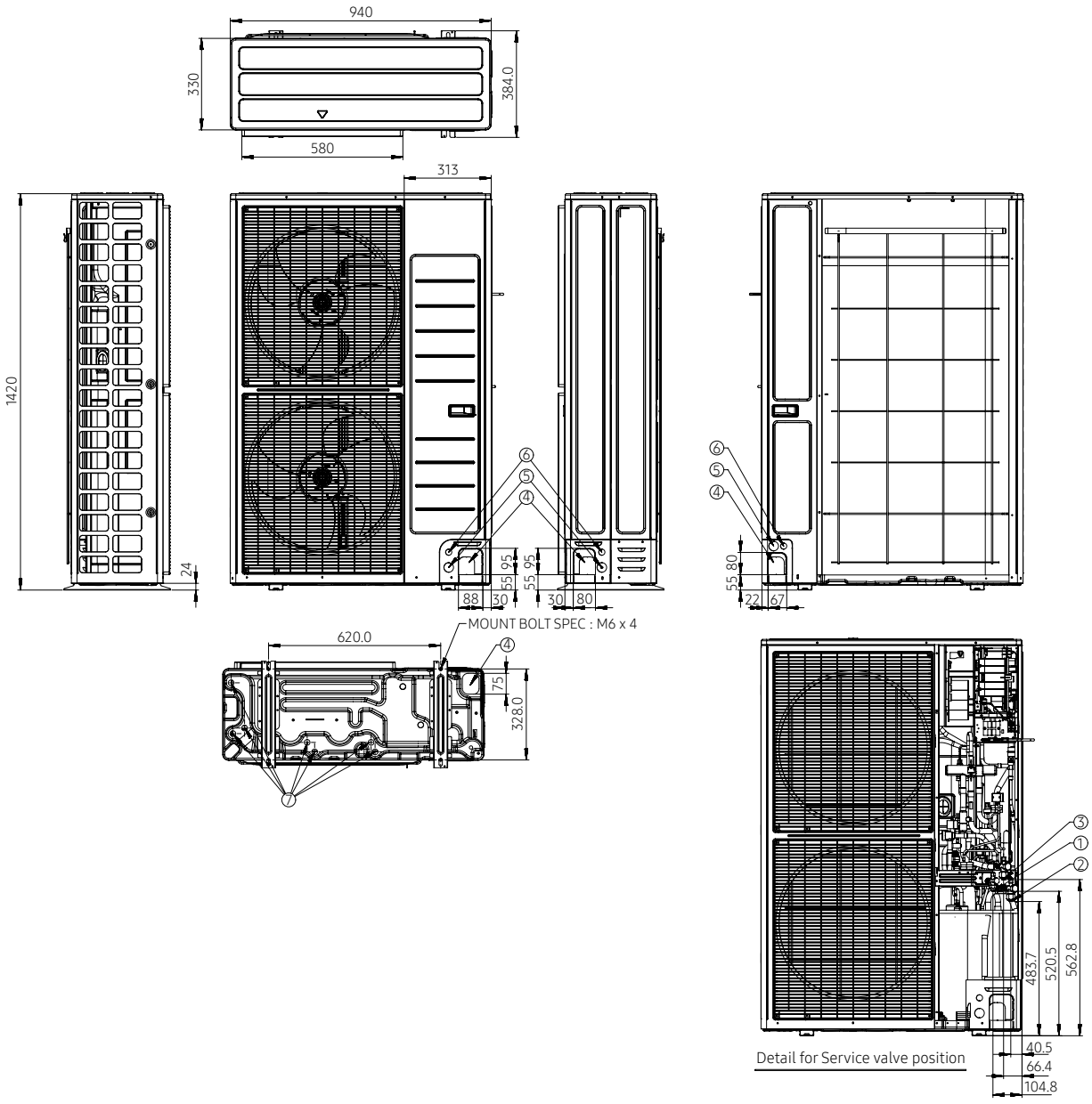
NO	Name	Description
		9 kW
1	Refrigerant liquid pipe	Φ9.52("3/8)
2	Refrigerant gas pipe for air	Φ15.88("5/8)
3	Refrigerant gas pipe for water	Φ15.88("5/8)
4	Knockout hole for pipe intake	Front / Side / Rear / Bottom
5	Power wiring conduits	Front / Side / Rear, Φ34("1-3/8)
6	Communication wiring conduits	Front / Side / Rear, Φ22("7/8)
7	Drain holes	Connect with the provided drain plug.

2. Outdoor Units

2-3. Dimensional drawing

AE120/160MXTP✳H✳✳

Unit : mm

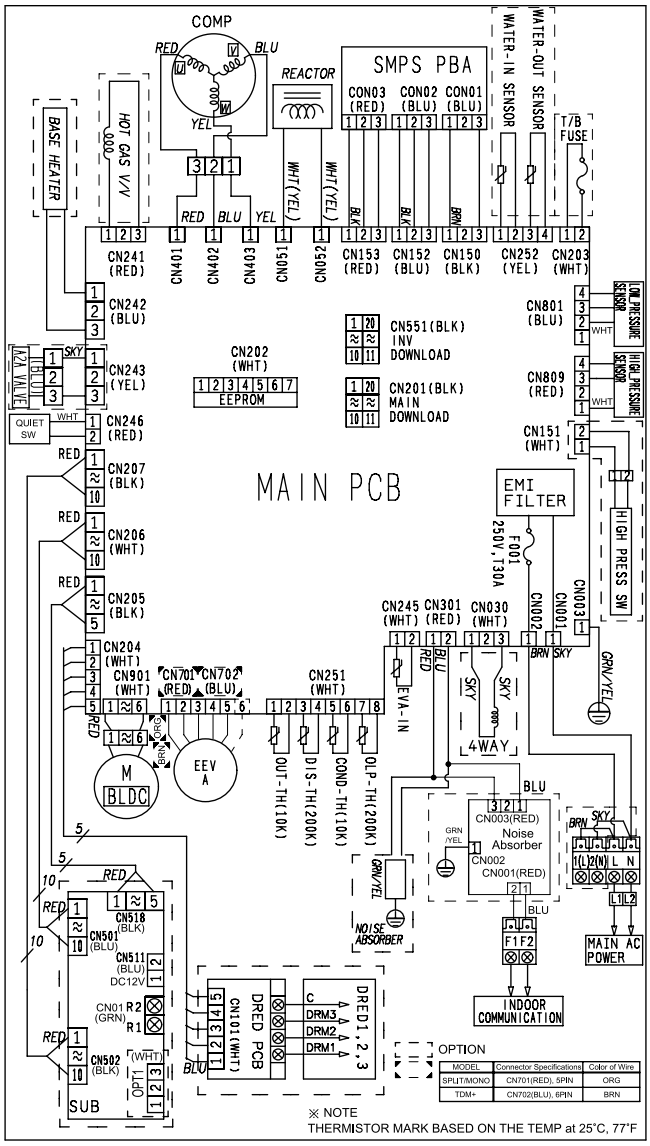


NO	Name	Description	
		12 kW	16 kW
1	Refrigerant liquid pipe	Φ9.52("3/8)	
2	Refrigerant gas pipe for air	Φ15.88("5/8)	Φ15.88("5/8)
3	Refrigerant gas pipe for water	Φ15.88("5/8)	Φ15.88("5/8)
4	Knockout hole for pipe intake	Front / Side / Rear / Bottom	Front / Side / Rear / Bottom
5	Power wiring conduits	Front / Side / Rear, Φ34("1-3/8)	Front / Side / Rear, Φ34("1-3/8)
6	Communication wiring conduits	Front / Side / Rear, Φ22("7/8)	Front / Side / Rear, Φ22("7/8)
7	Drain holes	Connect with the provided drain plug.	Connect with the provided drain plug.

2. Outdoor Units

2-4. Electrical wiring diagram

AE044/066MXTPEH✳✳



M BLDC	BLDC FAN MOTOR	HOTGAS V/V	HOTGAS VALVE
OUT-TH	Thermistor OUT(10K)	DIS-TH	Thermistor DISCHARGE(200K)
COND-TH	Thermistor COND(10K)	OLP-TH	Thermistor OLP(200K)

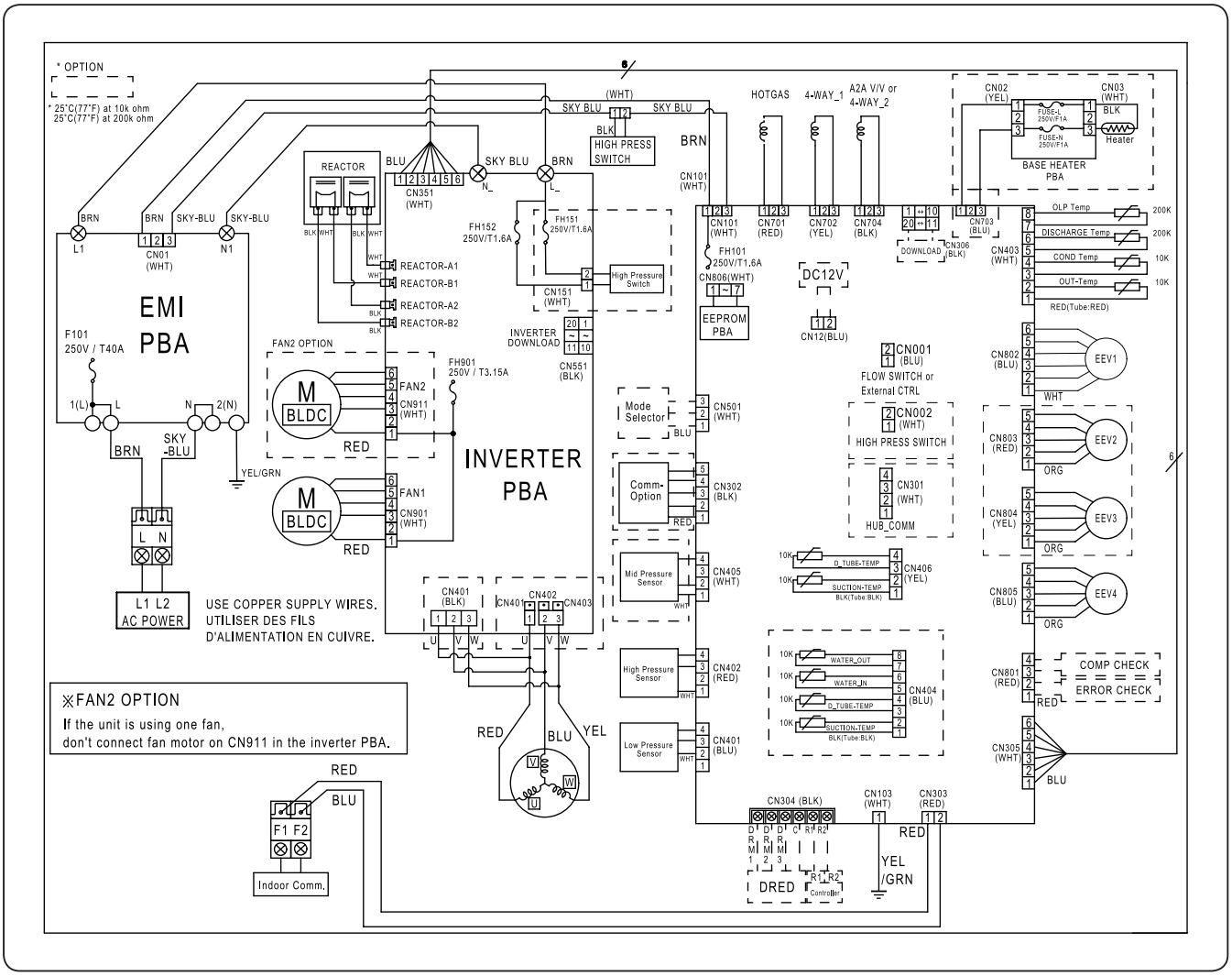
NOTES

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

AE090/120/160MXTPEH✳✳



M BLDC	BLDC FAN MOTOR	**External CTRL**	External Control
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)
D_TUBE-TEMP	Thermistor SUB-COOLER(10K)		

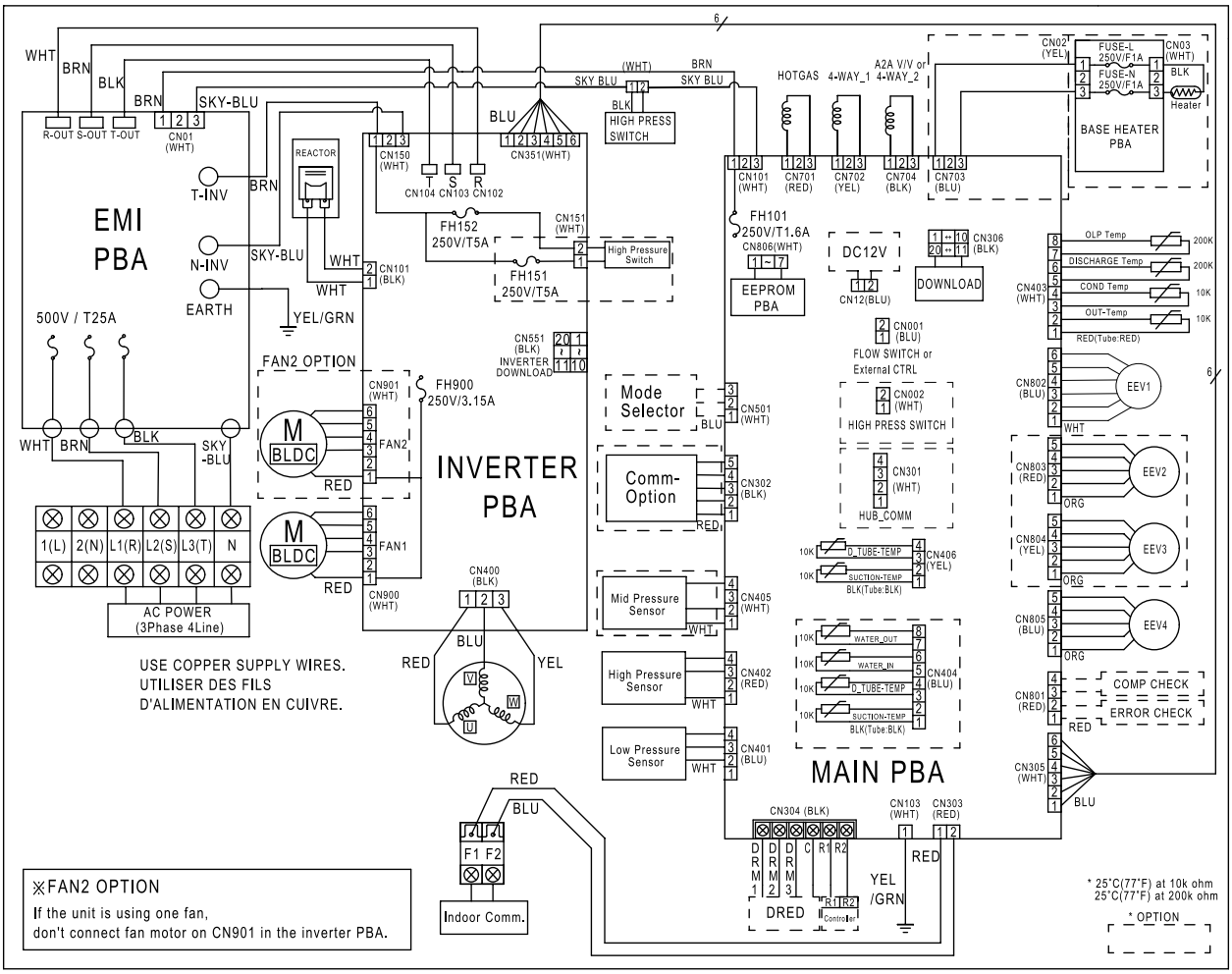
NOTES

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

AE090/120/160MXTPGH※※



M BLDC	BLDC FAN MOTOR	External CTRL	External Control
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)
D_TUBE-TEMP	Thermistor SUB-COOLER(10K)		

NOTES

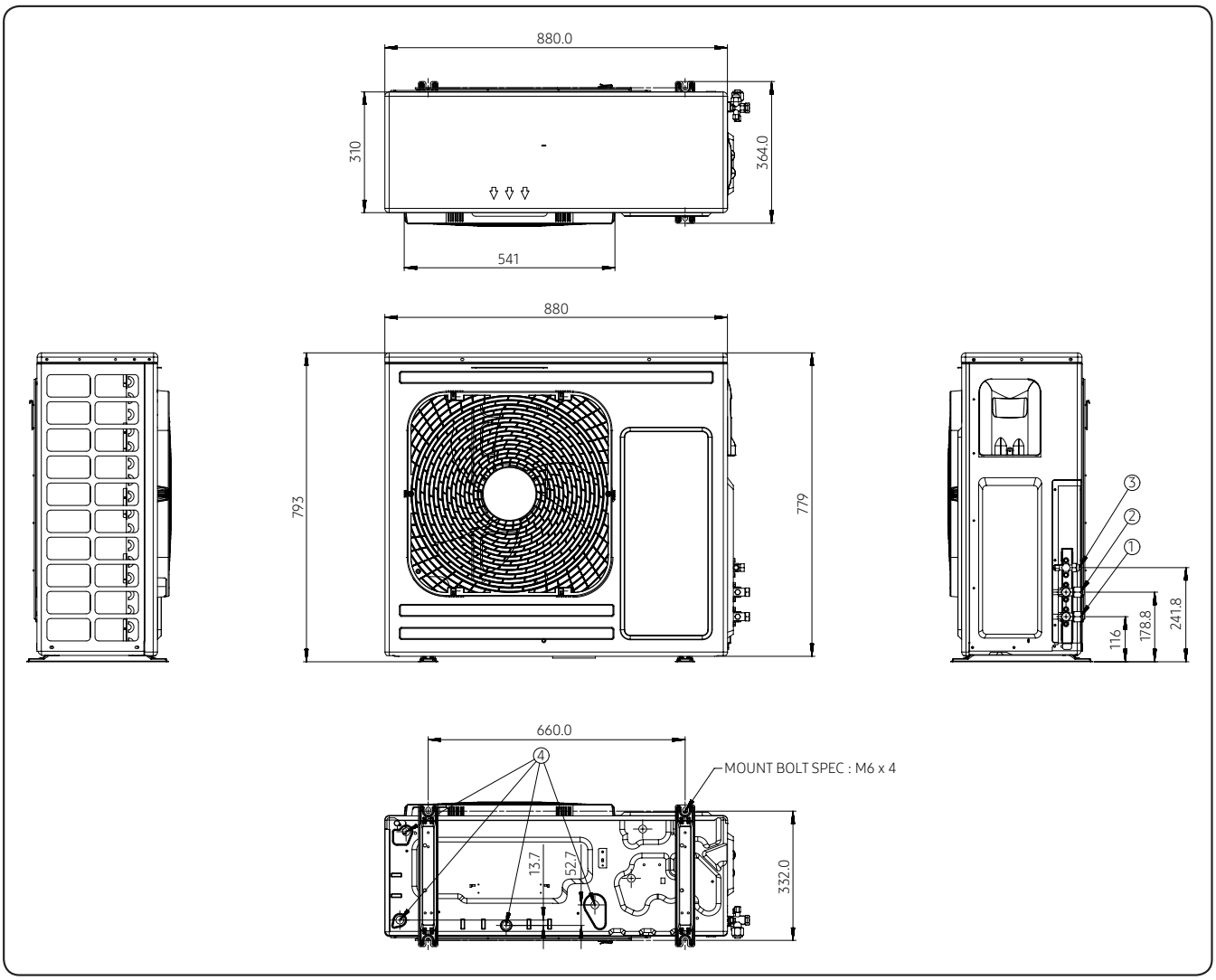
1. This wiring diagram applies only to the Outdoor unit.
2. Symbols show as follow :
   blk: black, red: red, blu: blue, wht: white, yel: yellow, brn: brown, sky: skyblue, grn: green
3. For connection wiring indoor-outdoor transmission F1-F2, indoor-wired remote controller transmission F3-F4.
4. ⏚ Protective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

2. Outdoor Units

2-3. Dimensional drawing

AE044/066MXTPEH✳✳

Unit : mm



NO	Name	Description	
		4.4 kW	6.6 kW
1	Refrigerant Gas Pipe(For AIR)	Φ15.88(Φ5/8)	
2	Refrigerant Gas Pipe(For WATER)	Φ15.88(Φ5/8)	
3	Refrigerant Liquid Pipe	Φ9.52(Φ3/8)	
4	Drain Holes	Connect with the provided drain plug	

2. Outdoor Units

2-5. Sound data

Summary

Capacity (kW)	Model	Sound Pressure dB(A)		Sound Power dB(A)
		Cooling	Heating	
4.4	AE044MXTPEH/EU	46	47	65
6.6	AE066MXTPEH/EU	47	48	67
9.0	AE090MXTP¥H/EU	50	51	69
12.0	AE120MXTP¥H/EU	51	52	70
16.0	AE160MXTP¥H/EU	54	55	73

NOTE

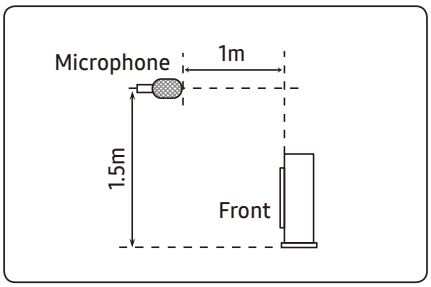
- Specifications may be subject to change without prior notice.
- Sound Pressure Level
  - Sound pressure level is obtained in an anechoic room.
  - Sound pressure level is a relative value, depending on the distance and acoustic environment.
  - Sound pressure level may differ depending on operation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

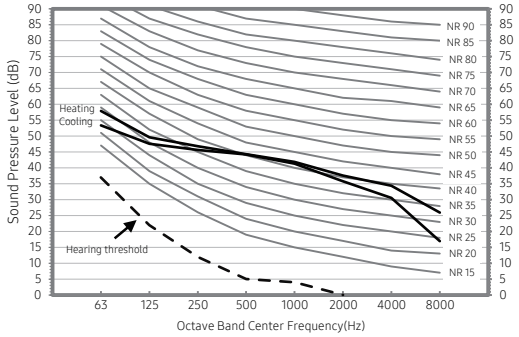
Unit: dB(A)



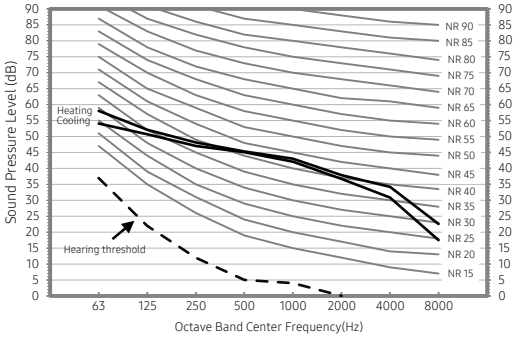
Model	Cooling	Heating
AE044MXTPEH✻✻	46	47
AE066MXTPEH✻✻	47	48
AE090MXTP✻H✻✻	50	51
AE120MXTP✻H✻✻	51	52
AE160MXTP✻H✻✻	54	55

- NR Curve

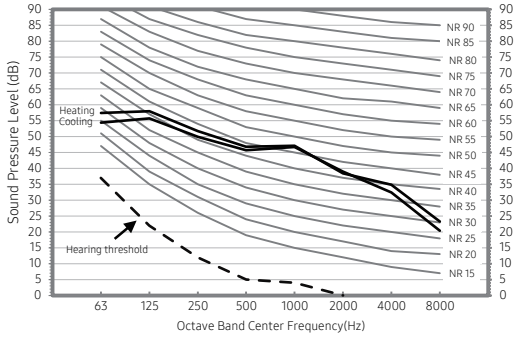
1) AE044MXTPEH✻✻



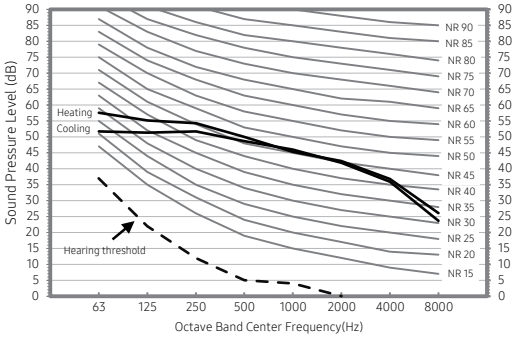
2) AE066MXTPEH✻✻



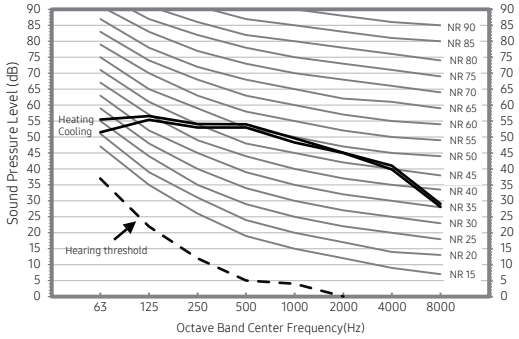
3) AE090MXTP✻H✻✻



4) AE120MXTP✻H✻✻



5) AE160MXTP✻H✻✻



2. Outdoor Units

2-5. Sound data

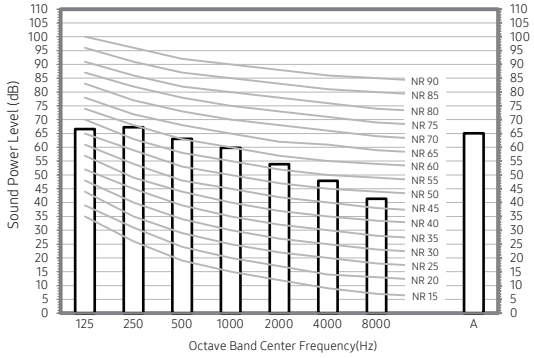
Sound Power level

NOTE

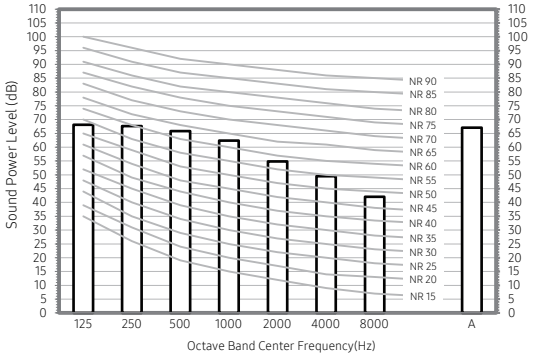
- Specifications may be subject to change without prior notice
  - Sound power level is an absolute value that a sound source generates.
  - dBA = A-weighted sound power level.
  - Reference power : 1pW.
  - Measured according to ISO 3741.

Model	Power (dBA)
AE044MXTPEH✳✳	65
AE066MXTPEH✳✳	67
AE090MXTP✳H✳✳	69
AE120MXTP✳H✳✳	70
AE160MXTP✳H✳✳	73

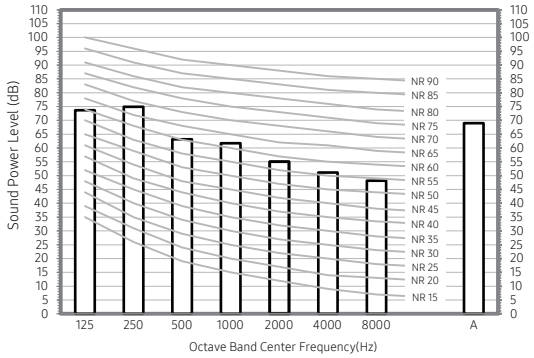
1) AE044MXTPEH✳✳



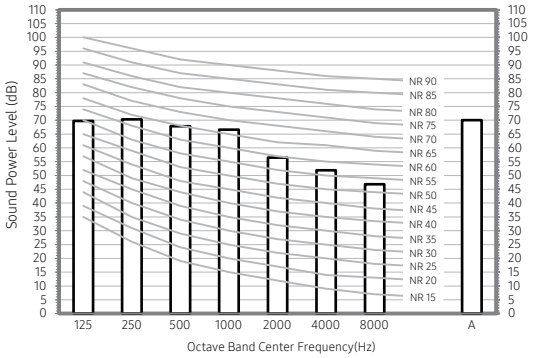
2) AE066MXTPEH✳✳



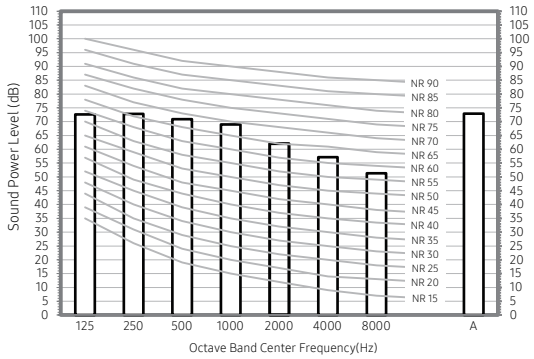
3) AE090MXTP✳H✳✳



4) AE120MXTP✳H✳✳



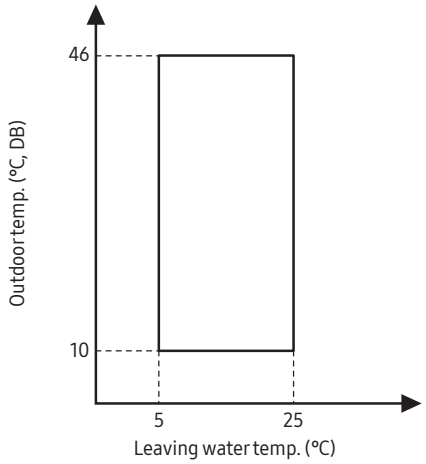
5) AE160MXTP✳H✳✳



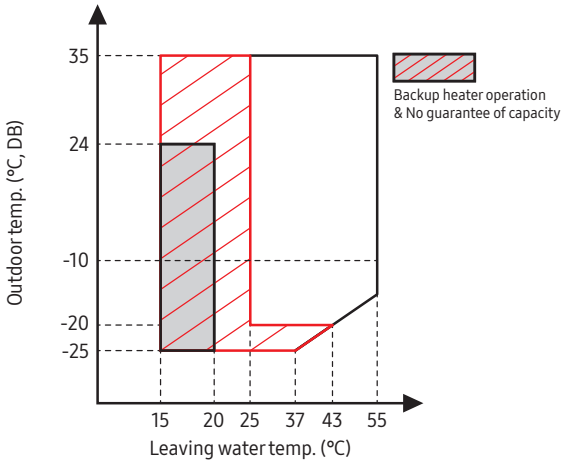
2. Outdoor Units

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	-	55						
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 (-7/-8*3)	35/24
	Outlet	25 (15*4)	35 (45*2)	55						

*1) Model : AE044/066/090MXTP✳H

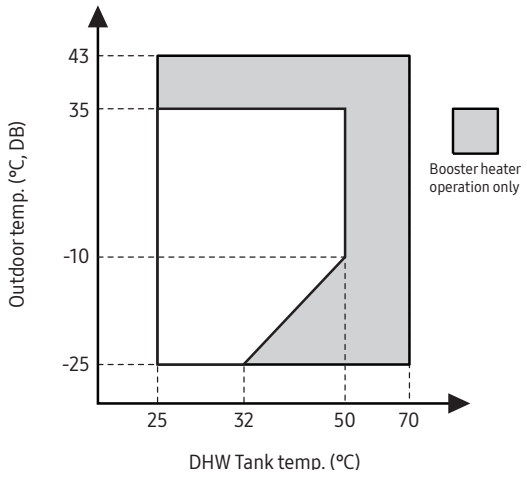
*2) Eurovent Test Condition #2

*3) NF PAC Low Temp. Heating Condition.

*4) Back up heater operation.

※ Operation of outdoor unit possible, but no guarantee of capacity in this condition.

3) DHW (Domestic Hot Water Tank)



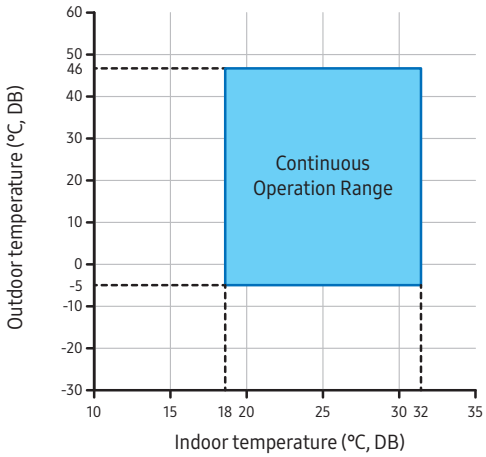
※ Special condition(35°C < Outdoor temp. ≤ 43°C) is operated by only Booster Heater.
SAMSUNG doesn't supply DHW for EHS TDM.
Since it is a reference data, you have to check DHW operation range for yours.

2. Outdoor Units

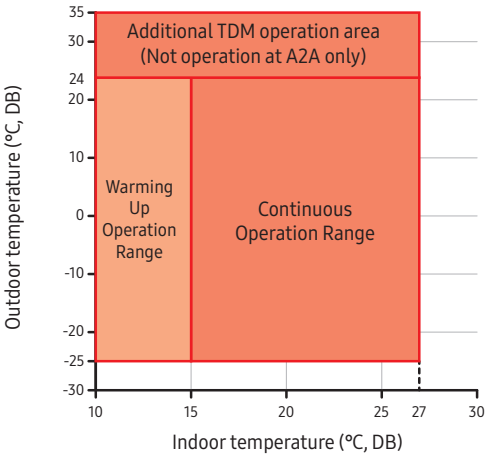
2-6. Operation range

Air to Air

1) Cooling



2) Heating



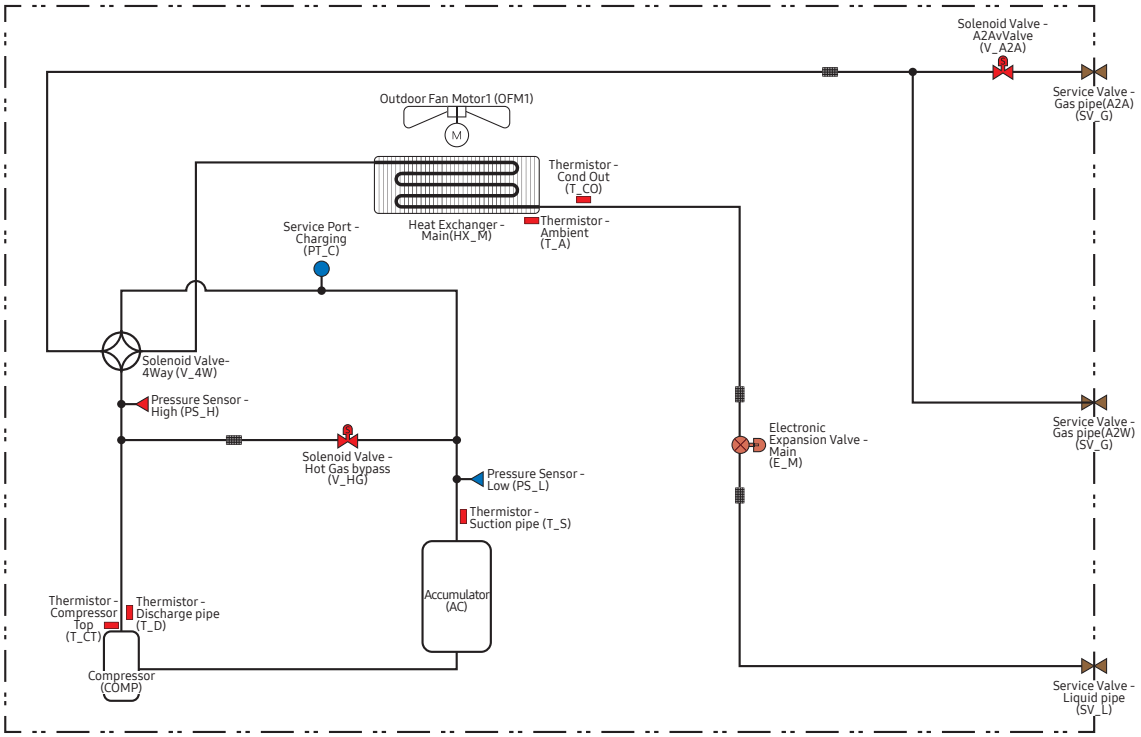
NOTE

- The standardized temperature for heating is 7°C DB. If the outdoor temperature drops to 0°C DB or below, the heating capacity can be reduced depending on the temperature condition.
- The use of the air conditioner at a relative humidity above the expected one (80%) may cause the formation of condensate and the leakage of water drops on the floor.
- When A2A and A2W are in TDM operation, the heating temperature can be set to up to 35 °C.

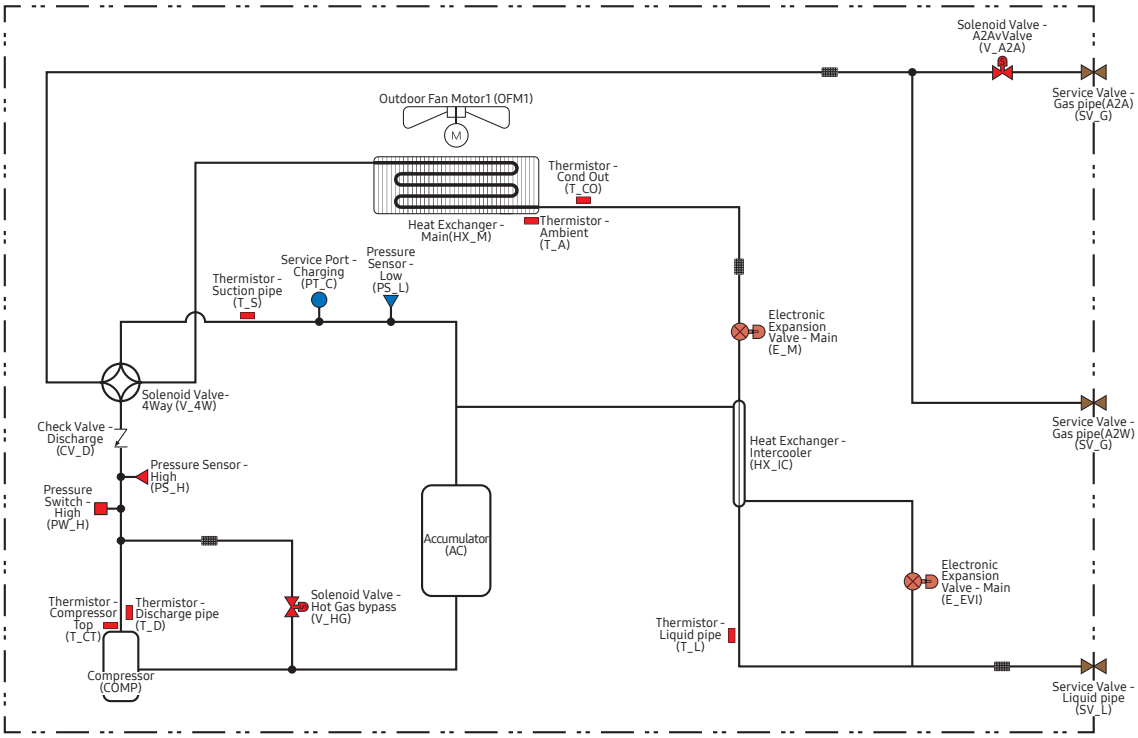
2. Outdoor Units

2-7. Piping diagram

AE044/066MXTPEH/EU



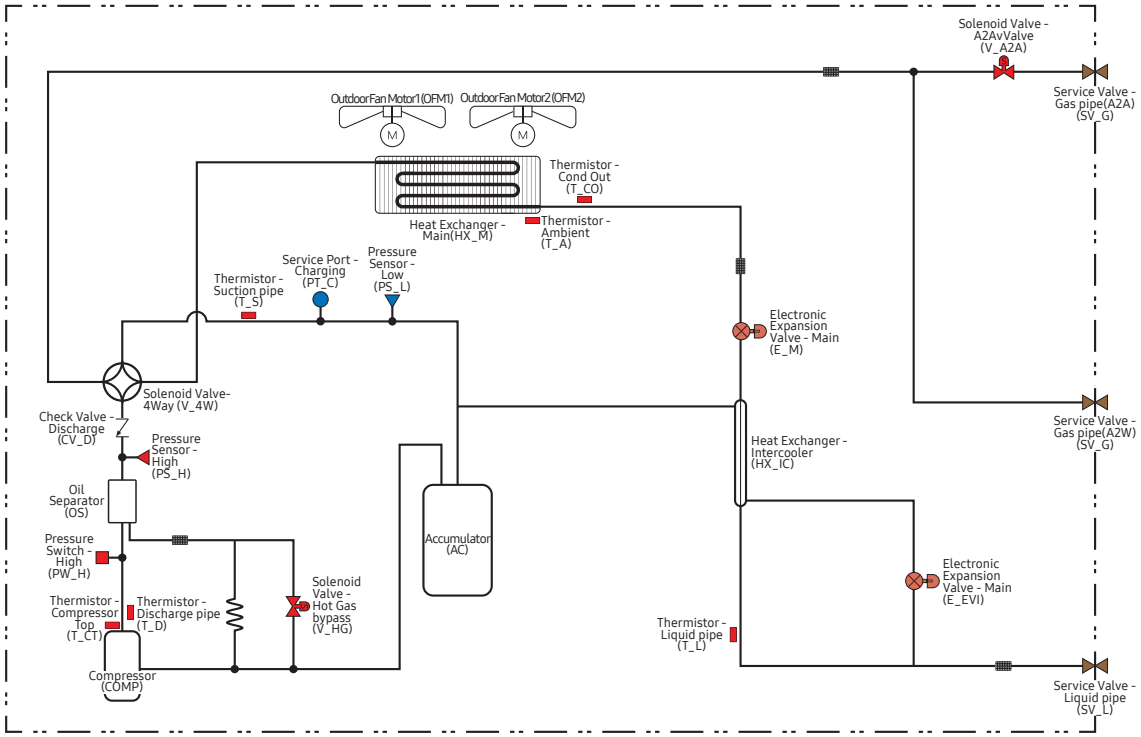
AE090MXTP*H/EU



2. Outdoor Units

2-7. Piping diagram

AE120/160MXTP✳H/EU



2. Outdoor Units

2-8. Capacity table (A2W)

AE044/066/090/120/160MXTP*H/EU

1) Maximum Heating Capacity (Peak Value)

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

	LWT (°C)	25		30		35		40		45		50		55	
	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)
AE044MXTPEH/EU	-20	3.51	1.24	3.41	1.33	3.25	1.50	3.13	1.60	3.00	1.76				
	-15	4.04	1.33	3.93	1.42	3.74	1.60	3.63	1.70	3.53	1.80	3.42	1.89		
	-10	4.32	1.24	4.20	1.32	4.00	1.49	3.88	1.69	3.76	1.89	3.65	1.98	3.39	2.17
	-7	4.21	1.15	4.10	1.24	3.90	1.39	3.82	1.57	3.73	1.75	3.58	1.77	3.43	1.80
	-2	4.36	1.07	4.24	1.14	4.03	1.28	3.88	1.41	3.72	1.53	3.53	1.72	3.35	1.91
	2	4.50	0.98	4.38	1.05	4.17	1.18	3.94	1.24	3.70	1.31	3.52	1.48	3.33	1.64
	7	4.75	0.77	4.62	0.83	4.40	0.93	4.20	1.05	4.00	1.16	3.91	1.27	3.83	1.37
	10	5.19	0.78	5.05	0.83	4.81	0.94	4.63	1.06	4.46	1.18	4.23	1.32	4.01	1.47
	15	5.92	0.79	5.76	0.85	5.48	0.95	5.35	1.06	5.22	1.20	4.96	1.35	4.70	1.50
	20	6.65	0.80	6.47	0.86	6.16	0.97	6.07	1.09	5.98	1.23	5.68	1.38	5.39	1.54
	LWT (°C)	25		30		35		40		45		50		55	
	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)
AE066MXTPEH/EU	-20	5.27	1.97	5.12	2.11	4.88	2.37	4.69	2.53	4.50	2.79				
	-15	6.06	2.10	5.89	2.25	5.61	2.53	5.45	2.69	5.29	2.84	5.14	2.99		
	-10	6.49	1.95	6.31	2.09	6.01	2.35	5.83	2.67	5.65	2.99	5.48	3.14	5.08	3.43
	-7	6.16	1.69	5.99	1.82	5.70	2.04	5.58	2.30	5.46	2.56	4.82	2.47	4.19	2.38
	-2	6.34	1.60	6.16	1.72	5.87	1.93	5.64	2.12	5.41	2.30	5.14	2.59	4.87	2.87
	2	6.53	1.51	6.34	1.62	6.04	1.82	5.71	1.93	5.37	2.03	5.10	2.29	4.83	2.54
	7	7.13	1.22	6.93	1.31	6.60	1.47	6.35	1.65	6.10	1.83	5.45	1.84	4.80	1.85
	10	7.79	1.23	7.57	1.32	7.21	1.48	6.99	1.67	6.76	1.86	6.43	2.09	6.09	2.32
	15	8.88	1.25	8.64	1.34	8.22	1.50	8.05	1.68	7.87	1.90	7.48	2.14	7.08	2.37
	20	9.98	1.27	9.70	1.36	9.24	1.53	9.11	1.72	8.98	1.94	8.53	2.18	8.08	2.43
	LWT (°C)	25		30		35		40		45		50		55	
	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)
AE090MXTPEH/EU	-20	7.18	2.83	6.98	3.04	6.65	3.41	6.39	3.64	6.14	4.02				
	-15	8.26	3.03	8.03	3.25	7.65	3.65	7.43	3.87	7.22	4.10	7.00	4.31		
	-10	8.85	2.82	8.60	3.02	8.19	3.39	7.94	3.85	7.70	4.31	7.47	4.52	6.93	4.95
	-7	7.99	2.20	7.77	2.36	7.40	2.65	7.24	2.99	7.09	3.33	6.80	3.38	6.52	3.42
	-2	8.33	2.06	8.10	2.21	7.71	2.48	7.41	2.72	7.11	2.96	6.75	3.32	6.40	3.69
	2	8.66	1.92	8.42	2.06	8.02	2.31	7.58	2.45	7.13	2.58	6.77	2.90	6.42	3.22
	7	9.72	1.76	9.45	1.89	9.00	2.12	8.50	2.25	8.00	2.38	7.83	2.60	7.66	2.82
	10	10.62	1.77	10.32	1.90	9.83	2.14	9.40	2.31	8.98	2.48	8.53	2.79	8.08	3.10
	15	12.11	1.80	11.78	1.93	11.22	2.17	10.91	2.37	10.61	2.64	10.08	2.97	9.55	3.30
	20	13.61	1.83	13.23	1.96	12.60	2.20	12.42	2.48	12.24	2.80	11.63	3.15	11.02	3.50
	LWT (°C)	25		30		35		40		45		50		55	
	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)
AE090MXTPGH/EU	-20	7.18	2.83	6.98	3.04	6.65	3.41	6.39	3.64	6.14	4.02				
	-15	8.26	3.03	8.03	3.25	7.65	3.65	7.43	3.87	7.22	4.10	7.00	4.31		
	-10	8.85	2.82	8.60	3.02	8.19	3.39	7.94	3.85	7.70	4.31	7.47	4.52	6.93	4.95
	-7	7.99	2.20	7.77	2.36	7.40	2.65	7.24	2.99	7.09	3.33	6.80	3.38	6.52	3.42
	-2	8.33	2.06	8.10	2.21	7.71	2.48	7.41	2.72	7.11	2.96	6.75	3.32	6.40	3.69
	2	8.66	1.92	8.42	2.06	8.02	2.31	7.58	2.45	7.13	2.58	6.77	2.90	6.42	3.22
	7	9.72	1.76	9.45	1.89	9.00	2.12	8.65	2.31	8.30	2.50	8.12	2.73	7.95	2.96
	10	10.62	1.77	10.32	1.90	9.83	2.14	9.52	2.35	9.21	2.57	8.75	2.89	8.29	3.21
	15	12.11	1.80	11.78	1.93	11.22	2.17	10.97	2.39	10.72	2.68	10.19	3.02	9.65	3.36
	20	13.61	1.83	13.23	1.96	12.60	2.20	12.42	2.48	12.24	2.80	11.63	3.15	11.02	3.50
	LWT (°C)	25		30		35		40		45		50		55	
	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)
AE120MXTP*H/EU	-20	9.58	3.64	9.31	3.90	8.87	4.38	8.52	4.67	8.18	5.16				
	-15	11.02	3.88	10.71	4.16	10.20	4.68	9.91	4.97	9.63	5.26	9.34	5.53		
	-10	11.79	3.61	11.47	3.87	10.92	4.35	10.59	4.94	10.26	5.53	9.96	5.80	9.24	6.36
	-7	11.45	2.96	11.13	3.18	10.60	3.57	10.37	4.03	10.15	4.49	9.74	4.55	9.33	4.61
	-2	11.91	2.88	11.58	3.09	11.03	3.47	10.60	3.79	10.17	4.12	9.66	4.64	9.15	5.15
	2	12.38	2.79	12.03	2.99	11.46	3.36	10.82	3.56	10.19	3.75	9.68	4.22	9.17	4.69
	7	12.96	2.26	12.60	2.42	12.00	2.72	11.60	3.01	11.20	3.30	10.96	3.61	10.72	3.91
	10	14.16	2.28	13.76	2.44	13.11	2.74	12.74	3.06	12.38	3.37	11.76	3.79	11.14	4.21
	15	16.15	2.31	15.70	2.48	14.95	2.78	14.65	3.09	14.35	3.48	13.63	3.91	12.92	4.35
	20	18.14	2.34	17.64	2.51	16.80	2.82	16.56	3.18	16.32	3.59	15.50	4.04	14.69	4.49
	LWT (°C)	25		30		35		40		45		50		55	
	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)
AE160MXTP*H/EU	-20	12.47	5.28	12.12	5.66	11.54	6.36	11.10	6.79	10.65	7.49				
	-15	14.34	5.64	13.94	6.05	13.28	6.79	12.91	7.22	12.53	7.64	12.16	8.03		
	-10	15.55	5.25	15.12	5.62	14.40	6.32	13.97	7.17	13.54	8.03	13.13	8.43	12.18	9.23
	-7	15.12	4.25	14.70	4.56	14.00	5.12	13.70	5.78	13.40	6.44	12.87	6.52	12.33	6.61
	-2	15.27	3.98	14.84	4.27	14.14	4.80	13.59	5.26	13.04	5.72	12.39	6.43	11.74	7.15
	2	15.41	3.72	14.98	3.99	14.27	4.48	13.48	4.74	12.69	5.00	12.05	5.62	11.42	6.24
	7	17.28	3.28	16.80	3.52	16.00	3.95	15.50	4.33	15.00	4.71	14.80	5.02	14.60	5.32
	10	18.88	3.31	18.35	3.55	17.48	3.98	17.02	4.41	16.56	4.83	15.73	5.43	14.90	6.03
	15	21.53	3.35	20.94	3.60	19.94	4.04	19.55	4.46	19.16	5.02	18.20	5.65	17.24	6.28
	20	24.19	3.40	23.52	3.65	22.40	4.10	22.08	4.61	21.76	5.22	20.67	5.87	19.58	6.52

1. Heating capacity : Capacity is according to Eurovent rating standard OM-3-2015 and valid for heated water range △t = 3~8°C
2. Cooling capacity : Capacity is according to Eurovent rating standard OM-3-2015 and valid for chilled water range △t = 3~8°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 (A2W)

AE044/066/090/120/160MXTP※H/EU

2) Maximum Heating Capacity (Integrated Value)

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

	LWT (°C)	25		30		35		40		45		50		55	
	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)
AE044MXTPEH/EU	-20	3.51	1.24	3.41	1.33	3.25	1.50	3.13	1.60	3.00	1.76				
	-15	4.04	1.33	3.93	1.42	3.74	1.60	3.63	1.70	3.53	1.80	3.42	1.89		
	-10	4.32	1.24	4.20	1.32	4.00	1.49	3.88	1.69	3.76	1.89	3.65	1.98	3.39	2.17
	-7	4.04	1.11	3.93	1.19	3.74	1.33	3.66	1.51	3.58	1.68	3.44	1.70	3.30	1.72
	-2	4.18	1.02	4.07	1.10	3.87	1.23	3.72	1.35	3.57	1.47	3.39	1.65	3.21	1.84
	2	4.32	0.94	4.20	1.01	4.00	1.13	3.78	1.20	3.56	1.26	3.38	1.42	3.20	1.58
	7	4.75	0.77	4.62	0.83	4.40	0.93	4.20	1.05	4.00	1.16	3.91	1.27	3.83	1.37
	10	5.19	0.78	5.05	0.83	4.81	0.94	4.63	1.06	4.46	1.18	4.23	1.32	4.01	1.47
	15	5.92	0.79	5.76	0.85	5.48	0.95	5.35	1.06	5.22	1.20	4.96	1.35	4.70	1.50
	20	6.65	0.80	6.47	0.86	6.16	0.97	6.07	1.09	5.98	1.23	5.68	1.38	5.39	1.54
	LWT (°C)	25		30		35		40		45		50		55	
	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)
AE066MXTPEH/EU	-20	5.27	1.97	5.12	2.11	4.88	2.37	4.69	2.53	4.50	2.79				
	-15	6.06	2.10	5.89	2.25	5.61	2.53	5.45	2.69	5.29	2.84	5.14	2.99		
	-10	6.36	1.95	6.18	2.09	5.89	2.35	5.71	2.67	5.53	2.99	5.37	3.14	4.98	3.43
	-7	5.91	1.63	5.75	1.74	5.47	1.96	5.36	2.21	5.24	2.46	4.63	2.37	4.02	2.28
	-2	6.09	1.54	5.92	1.65	5.64	1.85	5.42	2.03	5.20	2.21	4.94	2.48	4.68	2.76
	2	6.26	1.45	6.09	1.56	5.80	1.75	5.48	1.85	5.16	1.95	4.90	2.20	4.64	2.44
	7	7.13	1.22	6.93	1.31	6.60	1.47	6.35	1.65	6.10	1.83	5.45	1.84	4.80	1.85
	10	7.79	1.23	7.57	1.32	7.21	1.48	6.99	1.67	6.76	1.86	6.43	2.09	6.09	2.32
	15	8.88	1.25	8.64	1.34	8.22	1.50	8.05	1.68	7.87	1.90	7.48	2.14	7.08	2.37
	20	9.98	1.27	9.70	1.36	9.24	1.53	9.11	1.72	8.98	1.94	8.53	2.18	8.08	2.43
	LWT (°C)	25		30		35		40		45		50		55	
	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)
AE090MXTPEH/EU	-20	7.18	2.83	6.98	3.04	6.65	3.41	6.39	3.64	6.14	4.02				
	-15	8.26	3.03	8.03	3.25	7.65	3.65	7.43	3.87	7.22	4.10	7.00	4.31		
	-10	8.85	2.82	8.60	3.02	8.19	3.39	7.94	3.85	7.70	4.31	7.47	4.52	6.93	4.95
	-7	7.67	2.11	7.46	2.26	7.10	2.54	6.95	2.87	6.80	3.20	6.53	3.24	6.26	3.29
	-2	7.99	1.98	7.77	2.12	7.40	2.38	7.11	2.61	6.82	2.84	6.48	3.19	6.14	3.55
	2	8.32	1.84	8.09	1.98	7.70	2.22	7.27	2.35	6.84	2.48	6.50	2.79	6.16	3.10
	7	9.72	1.76	9.45	1.89	9.00	2.12	8.50	2.25	8.00	2.38	7.83	2.60	7.66	2.82
	10	10.62	1.77	10.32	1.90	9.83	2.14	9.40	2.31	8.98	2.48	8.53	2.79	8.08	3.10
	15	12.11	1.80	11.78	1.93	11.22	2.17	10.91	2.37	10.61	2.64	10.08	2.97	9.55	3.30
	20	13.61	1.83	13.23	1.96	12.60	2.20	12.42	2.48	12.24	2.80	11.63	3.15	11.02	3.50
	LWT (°C)	25		30		35		40		45		50		55	
	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)
AE090MXTPGH/EU	-20	7.18	2.83	6.98	3.04	6.65	3.41	6.39	3.64	6.14	4.02				
	-15	8.26	3.03	8.03	3.25	7.65	3.65	7.43	3.87	7.22	4.10	7.00	4.31		
	-10	8.85	2.82	8.60	3.02	8.19	3.39	7.94	3.85	7.70	4.31	7.47	4.52	6.93	4.95
	-7	7.67	2.11	7.46	2.26	7.10	2.54	6.95	2.87	6.80	3.20	6.53	3.24	6.26	3.29
	-2	7.99	1.98	7.77	2.12	7.40	2.38	7.11	2.61	6.82	2.84	6.48	3.19	6.14	3.55
	2	8.32	1.84	8.09	1.98	7.70	2.22	7.27	2.35	6.84	2.48	6.50	2.79	6.16	3.10
	7	9.72	1.76	9.45	1.89	9.00	2.12	8.65	2.31	8.30	2.50	8.12	2.73	7.95	2.96
	10	10.62	1.77	10.32	1.90	9.83	2.14	9.52	2.35	9.21	2.57	8.75	2.89	8.29	3.21
	15	12.11	1.80	11.78	1.93	11.22	2.17	10.97	2.39	10.72	2.68	10.19	3.02	9.65	3.36
	20	13.61	1.83	13.23	1.96	12.60	2.20	12.42	2.48	12.24	2.80	11.63	3.15	11.02	3.50
	LWT (°C)	25		30		35		40		45		50		55	
	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)
AE120MXTP※H/EU	-20	9.58	3.64	9.31	3.90	8.87	4.38	8.52	4.67	8.18	5.16				
	-15	11.02	3.88	10.71	4.16	10.20	4.68	9.91	4.97	9.63	5.26	9.34	5.53		
	-10	11.79	3.61	11.47	3.87	10.92	4.35	10.59	4.94	10.26	5.53	9.96	5.80	9.24	6.36
	-7	10.99	2.84	10.68	3.05	10.18	3.43	9.96	3.87	9.74	4.31	9.35	4.37	8.96	4.43
	-2	11.44	2.76	11.12	2.96	10.59	3.33	10.17	3.64	9.76	3.96	9.27	4.45	8.78	4.94
	2	11.88	2.68	11.55	2.87	11.00	3.23	10.39	3.42	9.78	3.60	9.29	4.05	8.80	4.50
	7	12.96	2.26	12.60	2.42	12.00	2.72	11.60	3.01	11.20	3.30	10.96	3.61	10.72	3.91
	10	14.16	2.28	13.76	2.44	13.11	2.74	12.74	3.06	12.38	3.37	11.76	3.79	11.14	4.21
	15	16.15	2.31	15.70	2.48	14.95	2.78	14.65	3.09	14.35	3.48	13.63	3.91	12.92	4.35
	20	18.14	2.34	17.64	2.51	16.80	2.82	16.56	3.18	16.32	3.59	15.50	4.04	14.69	4.49
	LWT (°C)	25		30		35		40		45		50		55	
	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)
AE160MXTP※H/EU	-20	12.47	5.28	12.12	5.66	11.54	6.36	11.10	6.79	10.65	7.49				
	-15	14.34	5.64	13.94	6.05	13.28	6.79	12.91	7.22	12.53	7.64	12.16	8.03		
	-10	15.55	5.25	15.12	5.62	14.40	6.32	13.97	7.17	13.54	8.03	13.13	8.43	12.18	9.23
	-7	14.52	4.08	14.11	4.37	13.44	4.92	13.15	5.55	12.87	6.18	12.35	6.26	11.84	6.35
	-2	14.66	3.82	14.25	4.10	13.57	4.61	13.05	5.05	12.52	5.49	11.90	6.17	11.27	6.86
	2	14.80	3.57	14.39	3.83	13.70	4.30	12.94	4.55	12.18	4.80	11.57	5.40	10.96	6.00
	7	17.28	3.28	16.80	3.52	16.00	3.95	15.50	4.33	15.00	4.71	14.80	5.02	14.60	5.32
	10	18.88	3.31	18.35	3.55	17.48	3.98	17.02	4.41	16.56	4.83	15.73	5.43	14.90	6.03
	15	21.53	3.35	20.94	3.60	19.94	4.04	19.55	4.46	19.16	5.02	18.20	5.65	17.24	6.28
	20	24.19	3.40	23.52	3.65	22.40	4.10	22.08	4.61	21.76	5.22	20.67	5.87	19.58	6.52

1. Heating capacity : Capacity is according to Eurovent rating standard OM-3-2015 and valid for heated water range △t = 3~8°C
2. Cooling capacity : Capacity is according to Eurovent rating standard OM-3-2015 and valid for chilled water range △t = 3~8°C
3. Power input : Power input is according to Eurovent rating standard OM-3-2015.
4. Integrated value : Tested with defrost operation in accordance with EN14511

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

2. Outdoor Units

2-8. Capacity table (A2W)

AE044/066/090/120/160MXTP*H/EU

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)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)	HC(kW)	PI(kW)
AE044MXTPEH/EU	10	4.31	0.79	4.76	0.79	5.20	0.79	5.50	0.79	5.92	0.79	6.97	0.79
	20	3.99	0.89	4.41	0.89	4.85	0.89	5.18	0.89	5.61	0.89	6.61	0.89
	30	3.64	0.98	4.09	0.98	4.55	0.98	4.80	0.98	5.25	0.98	6.30	0.98
	35	3.50	1.03	3.94	1.03	4.37	1.03	4.66	1.03	5.10	1.03	6.12	1.03
	46	3.15	1.13	3.58	1.13	4.02	1.13	4.29	1.13	4.74	1.13	5.75	1.13
	LWT (°C)	7		10		13		15		18		25	
	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)
AE066MXTPEH/EU	10	6.89	1.38	7.14	1.31	7.38	1.25	7.55	1.20	7.77	1.14	8.44	0.99
	20	6.38	1.54	6.61	1.47	6.88	1.39	7.10	1.35	7.37	1.27	7.99	1.10
	30	5.82	1.70	6.14	1.62	6.45	1.54	6.59	1.49	6.90	1.41	7.62	1.22
	35	5.60	1.79	5.90	1.71	6.20	1.62	6.40	1.56	6.70	1.48	7.40	1.28
	46	5.04	1.97	5.37	1.88	5.70	1.78	5.89	1.72	6.23	1.63	6.96	1.41
	LWT (°C)	7		10		13		15		18		25	
	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)
AE090MXTPEH/E	10	7.39	1.22	8.07	1.25	8.77	1.26	9.18	1.27	9.92	1.28	11.43	1.32
	20	6.66	1.45	7.32	1.46	8.01	1.48	8.45	1.49	9.12	1.52	10.67	1.55
	30	5.94	1.68	6.63	1.70	7.25	1.71	7.71	1.72	8.40	1.74	9.91	1.77
	35	5.60	1.79	6.25	1.81	6.91	1.82	7.35	1.83	8.00	1.85	9.53	1.89
	46	4.82	2.04	5.44	2.06	6.08	2.06	6.54	2.09	7.20	2.11	8.67	2.13
	LWT (°C)	7		10		13		15		18		25	
	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)
AE090MXTPGH/EU	10	7.52	1.19	8.16	1.23	8.83	1.25	9.22	1.26	9.92	1.28	11.36	1.35
	20	6.78	1.42	7.40	1.44	8.07	1.47	8.48	1.48	9.12	1.53	10.60	1.58
	30	6.04	1.65	6.71	1.67	7.30	1.70	7.74	1.72	8.40	1.75	9.84	1.81
	35	5.70	1.75	6.33	1.78	6.95	1.81	7.37	1.83	8.00	1.86	9.46	1.93
	46	4.90	2.00	5.50	2.03	6.12	2.05	6.56	2.09	7.20	2.12	8.61	2.18
	LWT (°C)	7		10		13		15		18		25	
	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)
AE120MXTP*H/EU	10	11.35	1.90	12.29	1.95	13.28	1.97	13.84	1.98	14.88	2.00	17.00	2.08
	20	10.23	2.26	11.15	2.28	12.13	2.31	12.73	2.32	13.68	2.38	15.86	2.44
	30	9.12	2.62	10.10	2.65	10.98	2.68	11.63	2.70	12.60	2.73	14.73	2.79
	35	8.60	2.79	9.53	2.82	10.45	2.85	11.07	2.87	12.00	2.90	14.16	2.97
	46	7.40	3.18	8.29	3.21	9.20	3.22	9.85	3.27	10.80	3.31	12.89	3.36
	LWT (°C)	7		10		13		15		18		25	
	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)
AE160MXTP*H/EU	10	13.46	2.42	14.67	2.51	15.93	2.56	16.66	2.60	17.98	2.65	20.68	2.81
	20	12.14	2.88	13.31	2.95	14.55	3.01	15.33	3.05	16.53	3.15	19.30	3.29
	30	10.81	3.35	12.06	3.42	13.17	3.49	13.99	3.54	15.23	3.61	17.93	3.78
	35	10.20	3.56	11.37	3.64	12.55	3.71	13.33	3.76	14.50	3.84	17.24	4.02
	46	8.77	4.06	9.89	4.15	11.04	4.20	11.86	4.29	13.05	4.38	15.69	4.54

1. Heating capacity is according to Eurovent rating standard OM-3-2015 and valid for heated water range △t = 3~8°C
2. Cooling capacity is according to Eurovent rating standard OM-3-2015 and valid for chilled water range △t = 3~8°C
3. Power input is total of indoor and outdoor unit, according to Eurovent rating standard OM-3-2015.

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

2. Outdoor Units

2-8. Capacity table (A2A)

AE044MXTPEH/EU

Heating

Combination % (Capacity index)	Outdoor temperature (°C)		Indoor temperature (DB, °C)											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	DB	WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100%	-20	-20	3.8	1.60	3.7	1.70	3.7	1.80	3.7	1.80	3.7	1.80	3.7	1.80
	-19	-19	3.9	1.70	3.9	1.70	3.8	1.80	3.9	1.80	3.9	1.80	3.9	1.80
	-17	-17	4.1	1.70	4.1	1.80	4.0	1.80	4.1	1.80	4.1	1.80	4.1	1.90
	-15	-15	4.4	1.80	4.4	1.80	4.3	1.90	4.3	1.90	4.3	2.00	4.1	1.80
	-13	-13	4.6	1.80	4.6	1.90	4.5	1.90	4.6	2.00	4.4	1.80	4.1	1.70
	-11	-11	4.9	1.90	4.9	1.90	4.6	1.90	4.6	1.80	4.4	1.70	4.1	1.60
	-10	-10	4.9	1.80	4.9	1.80	4.6	1.80	4.6	1.70	4.4	1.60	4.1	1.50
	-9	-9	5.1	1.80	5.0	1.80	4.6	1.70	4.6	1.60	4.4	1.60	4.1	1.40
	-7	-8	5.3	1.80	5.0	1.80	4.6	1.60	4.6	1.60	4.4	1.50	4.1	1.40
	-5	-6	5.3	1.80	5.0	1.70	4.6	1.60	4.6	1.50	4.4	1.40	4.1	1.30
	-3	-4	5.3	1.60	5.0	1.50	4.6	1.40	4.6	1.40	4.4	1.30	4.1	1.20
	0	-1	5.3	1.50	5.0	1.40	4.6	1.30	4.6	1.30	4.4	1.20	4.1	1.10
	3	2	5.3	1.40	5.0	1.30	4.6	1.30	4.6	1.20	4.4	1.10	4.1	1.10
	5	4	5.3	1.40	5.0	1.30	4.6	1.20	4.6	1.10	4.4	1.10	4.1	1.00
	7	6	5.3	1.30	4.9	1.20	4.6	1.12	4.5	1.10	4.3	1.10	4.1	1.00
	9	8	5.5	1.30	5.1	1.20	4.8	1.10	4.7	1.10	4.5	1.00	4.2	0.90
	11	10	5.5	1.20	5.1	1.10	4.8	1.10	4.7	1.00	4.5	1.00	4.2	0.90
	13	12	5.5	1.10	5.1	1.10	4.8	1.00	4.7	1.00	4.5	0.90	4.2	0.90
	15	14	5.5	1.10	5.1	1.10	4.8	1.00	4.7	0.90	4.5	0.90	4.2	0.90
90%	-20	-20	3.5	1.70	3.5	1.80	3.5	1.80	3.5	1.80	3.5	1.80	3.4	1.80
	-19	-19	3.6	1.80	3.6	1.80	3.6	1.80	3.6	1.80	3.6	1.90	3.4	1.80
	-17	-17	3.8	1.80	3.8	1.80	3.8	1.90	3.8	1.90	3.7	1.80	3.4	1.60
	-15	-15	4.0	1.90	4.0	1.90	3.9	1.90	3.8	1.80	3.7	1.70	3.4	1.60
	-13	-13	4.3	1.90	4.2	1.90	3.9	1.80	3.8	1.70	3.7	1.60	3.4	1.50
	-11	-11	4.4	1.90	4.2	1.80	3.9	1.60	3.8	1.60	3.7	1.50	3.4	1.40
	-10	-10	4.4	1.80	4.2	1.70	3.9	1.60	3.8	1.50	3.7	1.40	3.4	1.30
	-9	-9	4.4	1.80	4.2	1.60	3.9	1.50	3.8	1.40	3.7	1.40	3.4	1.30
	-7	-8	4.4	1.70	4.2	1.60	3.9	1.40	3.8	1.40	3.7	1.30	3.4	1.30
	-5	-6	4.4	1.60	4.2	1.50	3.9	1.40	3.8	1.30	3.7	1.30	3.4	1.20
	-3	-4	4.4	1.40	4.2	1.30	3.9	1.30	3.8	1.20	3.7	1.10	3.4	1.10
	0	-1	4.4	1.30	4.2	1.30	3.9	1.20	3.8	1.10	3.7	1.10	3.4	1.00
	3	2	4.4	1.30	4.2	1.20	3.9	1.10	3.8	1.10	3.7	1.00	3.4	0.90
	5	4	4.4	1.20	4.2	1.10	3.9	1.10	3.8	1.00	3.7	1.00	3.4	0.90
	7	6	4.7	1.10	4.5	1.10	4.2	1.00	4.1	1.00	3.9	0.90	3.7	0.90
	9	8	4.8	1.10	4.5	1.00	4.3	0.90	4.1	0.90	3.9	0.90	3.7	0.80
	11	10	4.8	1.10	4.5	1.00	4.3	0.90	4.1	0.90	3.9	0.90	3.7	0.80
	13	12	4.8	1.00	4.5	0.90	4.3	0.90	4.1	0.90	3.9	0.80	3.7	0.80
	15	14	4.8	1.00	4.5	0.90	4.3	0.90	4.1	0.90	3.9	0.80	3.7	0.70
80%	-20	-20	3.5	1.80	3.5	1.80	3.5	1.90	3.4	1.80	3.3	1.80	3.0	1.60
	-19	-19	3.6	1.80	3.6	1.80	3.5	1.80	3.4	1.80	3.3	1.70	3.0	1.50
	-17	-17	3.8	1.90	3.7	1.80	3.5	1.70	3.4	1.60	3.3	1.60	3.0	1.40
	-15	-15	3.9	1.90	3.7	1.80	3.5	1.60	3.4	1.60	3.3	1.50	3.0	1.40
	-13	-13	3.9	1.80	3.7	1.60	3.5	1.50	3.4	1.40	3.3	1.40	3.0	1.30
	-11	-11	3.9	1.60	3.7	1.60	3.5	1.40	3.4	1.40	3.3	1.30	3.0	1.20
	-10	-10	3.9	1.60	3.7	1.40	3.5	1.30	3.4	1.30	3.3	1.30	3.0	1.10
	-9	-9	3.9	1.50	3.7	1.40	3.5	1.30	3.4	1.30	3.3	1.20	3.0	1.10
	-7	-8	3.9	1.40	3.7	1.40	3.5	1.30	3.4	1.20	3.3	1.20	3.0	1.10
	-5	-6	3.9	1.40	3.7	1.30	3.5	1.20	3.4	1.10	3.3	1.10	3.0	1.00
	-3	-4	3.9	1.30	3.7	1.20	3.5	1.10	3.4	1.10	3.3	1.00	3.0	0.90
	0	-1	3.9	1.20	3.7	1.10	3.5	1.00	3.4	1.00	3.3	0.90	3.0	0.90
	3	2	3.9	1.10	3.7	1.00	3.5	0.90	3.4	0.90	3.3	0.90	3.0	0.80
	5	4	3.9	1.10	3.7	1.00	3.5	0.90	3.4	0.90	3.3	0.90	3.0	0.80
	7	6	4.2	1.00	3.9	0.90	3.7	0.90	3.6	0.90	3.5	0.80	3.2	0.70
	9	8	4.3	0.90	4.0	0.90	3.7	0.90	3.7	0.80	3.5	0.80	3.3	0.70
	11	10	4.3	0.90	4.0	0.90	3.7	0.80	3.7	0.80	3.5	0.70	3.3	0.70
	13	12	4.3	0.90	4.0	0.90	3.7	0.80	3.7	0.70	3.5	0.70	3.3	0.70
	15	14	4.3	0.90	4.0	0.80	3.7	0.70	3.7	0.70	3.5	0.70	3.3	0.70

※ Peak value : Tested without defrost operation in accordance with EN14511

2. Outdoor Units

2-8. Capacity table (A2A)

AE044MXTPEH/EU

Heating

Combination % (Capacity index)	Outdoor temperature (°C)		Indoor temperature (DB, °C)											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	DB	WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	-20	-20	3.4	1.80	3.2	1.70	3.0	1.60	3.0	1.50	2.8	1.40	2.6	1.40
	-19	-19	3.4	1.80	3.2	1.60	3.0	1.50	3.0	1.50	2.8	1.40	2.6	1.30
	-17	-17	3.4	1.60	3.2	1.60	3.0	1.40	3.0	1.40	2.8	1.30	2.6	1.20
	-15	-15	3.4	1.60	3.2	1.50	3.0	1.40	3.0	1.30	2.8	1.30	2.6	1.20
	-13	-13	3.4	1.50	3.2	1.40	3.0	1.30	3.0	1.30	2.8	1.20	2.6	1.10
	-11	-11	3.4	1.40	3.2	1.30	3.0	1.30	3.0	1.20	2.8	1.10	2.6	1.10
	-10	-10	3.4	1.30	3.2	1.30	3.0	1.10	3.0	1.10	2.8	1.10	2.6	1.00
	-9	-9	3.4	1.30	3.2	1.20	3.0	1.10	3.0	1.10	2.8	1.10	2.6	0.90
	-7	-8	3.4	1.30	3.2	1.10	3.0	1.10	3.0	1.10	2.8	1.00	2.6	0.90
	-5	-6	3.4	1.20	3.2	1.10	3.0	1.00	3.0	1.00	2.8	0.90	2.6	0.90
	-3	-4	3.4	1.10	3.2	1.00	3.0	0.90	3.0	0.90	2.8	0.90	2.6	0.80
	0	-1	3.4	1.00	3.2	0.90	3.0	0.90	3.0	0.90	2.8	0.80	2.6	0.70
	3	2	3.4	0.90	3.2	0.90	3.0	0.80	3.0	0.80	2.8	0.80	2.6	0.70
	5	4	3.4	0.90	3.2	0.90	3.0	0.80	3.0	0.80	2.8	0.70	2.6	0.70
	7	6	3.7	0.90	3.5	0.80	3.3	0.70	3.2	0.70	3.0	0.70	2.8	0.70
	9	8	3.7	0.80	3.5	0.80	3.3	0.70	3.2	0.70	3.1	0.70	2.9	0.60
	11	10	3.7	0.80	3.5	0.70	3.3	0.70	3.2	0.70	3.1	0.70	2.9	0.60
	13	12	3.7	0.80	3.5	0.70	3.3	0.70	3.2	0.70	3.1	0.60	2.9	0.60
	15	14	3.7	0.70	3.5	0.70	3.3	0.70	3.2	0.70	3.1	0.60	2.9	0.60
60%	-20	-20	3.0	1.50	2.8	1.40	2.6	1.30	2.5	1.30	2.4	1.30	2.3	1.10
	-19	-19	3.0	1.50	2.8	1.40	2.6	1.30	2.5	1.30	2.4	1.20	2.3	1.10
	-17	-17	3.0	1.40	2.8	1.30	2.6	1.20	2.5	1.10	2.4	1.10	2.3	1.00
	-15	-15	3.0	1.30	2.8	1.30	2.6	1.10	2.5	1.10	2.4	1.10	2.3	1.00
	-13	-13	3.0	1.30	2.8	1.20	2.6	1.10	2.5	1.10	2.4	1.00	2.3	0.90
	-11	-11	3.0	1.20	2.8	1.10	2.6	1.00	2.5	1.00	2.4	0.90	2.3	0.90
	-10	-10	3.0	1.10	2.8	1.10	2.6	1.00	2.5	0.90	2.4	0.90	2.3	0.80
	-9	-9	3.0	1.10	2.8	1.00	2.6	0.90	2.5	0.90	2.4	0.90	2.3	0.80
	-7	-8	3.0	1.10	2.8	1.00	2.6	0.90	2.5	0.90	2.4	0.90	2.3	0.80
	-5	-6	3.0	1.00	2.8	0.90	2.6	0.90	2.5	0.80	2.4	0.80	2.3	0.70
	-3	-4	3.0	0.90	2.8	0.90	2.6	0.80	2.5	0.70	2.4	0.70	2.3	0.70
	0	-1	3.0	0.90	2.8	0.80	2.6	0.70	2.5	0.70	2.4	0.70	2.3	0.70
	3	2	3.0	0.80	2.8	0.70	2.6	0.70	2.5	0.70	2.4	0.70	2.3	0.60
	5	4	3.0	0.70	2.8	0.70	2.6	0.70	2.5	0.70	2.4	0.60	2.3	0.60
	7	6	3.2	0.70	3.0	0.70	2.8	0.70	2.7	0.60	2.6	0.60	2.4	0.50
	9	8	3.2	0.70	3.0	0.70	2.8	0.60	2.8	0.60	2.6	0.60	2.5	0.50
	11	10	3.2	0.70	3.0	0.70	2.8	0.60	2.8	0.60	2.6	0.50	2.5	0.50
	13	12	3.2	0.70	3.0	0.60	2.8	0.60	2.8	0.50	2.6	0.50	2.5	0.50
	15	14	3.2	0.70	3.0	0.60	2.8	0.50	2.8	0.50	2.6	0.50	2.5	0.50
50%	-20	-20	2.4	1.30	2.3	1.10	2.2	1.10	2.1	1.10	2.0	1.00	1.9	0.90
	-19	-19	2.4	1.20	2.3	1.10	2.2	1.10	2.1	1.00	2.0	0.90	1.9	0.90
	-17	-17	2.4	1.10	2.3	1.10	2.2	1.00	2.1	0.90	2.0	0.90	1.9	0.90
	-15	-15	2.4	1.10	2.3	1.00	2.2	0.90	2.1	0.90	2.0	0.90	1.9	0.80
	-13	-13	2.4	1.00	2.3	0.90	2.2	0.90	2.1	0.90	2.0	0.80	1.9	0.70
	-11	-11	2.4	0.90	2.3	0.90	2.2	0.90	2.1	0.80	2.0	0.80	1.9	0.70
	-10	-10	2.4	0.90	2.3	0.90	2.2	0.80	2.1	0.70	2.0	0.70	1.9	0.70
	-9	-9	2.4	0.90	2.3	0.80	2.2	0.80	2.1	0.70	2.0	0.70	1.9	0.70
	-7	-8	2.4	0.90	2.3	0.80	2.2	0.70	2.1	0.70	2.0	0.70	1.9	0.70
	-5	-6	2.4	0.80	2.3	0.70	2.2	0.70	2.1	0.70	2.0	0.70	1.9	0.60
	-3	-4	2.4	0.70	2.3	0.70	2.2	0.70	2.1	0.60	2.0	0.60	1.9	0.50
	0	-1	2.4	0.70	2.3	0.70	2.2	0.60	2.1	0.60	2.0	0.60	1.9	0.50
	3	2	2.4	0.70	2.3	0.60	2.2	0.60	2.1	0.50	2.0	0.50	1.9	0.50
	5	4	2.4	0.60	2.3	0.60	2.2	0.50	2.1	0.50	2.0	0.50	1.9	0.50
	7	6	2.6	0.60	2.5	0.60	2.3	0.50	2.2	0.50	2.2	0.50	2.0	0.50
	9	8	2.7	0.60	2.5	0.50	2.4	0.50	2.3	0.50	2.2	0.50	2.0	0.50
	11	10	2.7	0.50	2.5	0.50	2.4	0.50	2.3	0.50	2.2	0.50	2.0	0.50
	13	12	2.7	0.50	2.5	0.50	2.4	0.50	2.3	0.50	2.2	0.50	2.0	0.40
	15	14	2.7	0.50	2.5	0.50	2.4	0.50	2.3	0.50	2.2	0.50	2.0	0.40

※ Peak value : Tested without defrost operation in accordance with EN14511

2. Outdoor Units

2-8. Capacity table (A2A)

AE066MXTPEH/EU

Heating

Combination % (Capacity index)	Outdoor temperature (°C)		Indoor temperature (DB, °C)											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	DB	WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100%	-20	-20	5.8	2.50	5.7	2.50	5.6	2.60	5.7	2.60	5.7	2.70	5.7	2.80
	-19	-19	6.0	2.50	6.0	2.60	5.8	2.60	5.9	2.70	5.9	2.70	5.9	2.80
	-17	-17	6.3	2.60	6.3	2.60	6.1	2.70	6.2	2.80	6.2	2.80	6.2	2.90
	-15	-15	6.6	2.70	6.6	2.80	6.5	2.90	6.6	2.90	6.6	2.90	6.2	2.70
	-13	-13	7.0	2.80	7.0	2.90	6.7	2.90	6.9	2.90	6.6	2.80	6.2	2.50
	-11	-11	7.3	2.90	7.3	2.90	6.9	2.90	6.9	2.70	6.6	2.60	6.2	2.40
	-10	-10	7.5	2.80	7.5	2.80	6.9	2.60	6.9	2.50	6.6	2.50	6.2	2.20
	-9	-9	7.7	2.80	7.6	2.80	6.9	2.60	6.9	2.50	6.6	2.40	6.2	2.20
	-7	-8	7.9	2.80	7.6	2.70	6.9	2.50	6.9	2.40	6.6	2.30	6.2	2.10
	-5	-6	8.1	2.70	7.6	2.50	6.9	2.40	6.9	2.30	6.6	2.20	6.2	1.90
	-3	-4	8.1	2.50	7.6	2.30	6.9	2.10	6.9	2.00	6.6	1.90	6.2	1.80
	0	-1	8.1	2.30	7.6	2.10	6.9	1.90	6.9	1.90	6.6	1.80	6.2	1.70
	3	2	8.1	2.10	7.6	2.00	6.9	1.90	6.9	1.80	6.6	1.70	6.2	1.60
	5	4	8.1	2.00	7.6	1.90	6.9	1.80	6.9	1.70	6.6	1.60	6.2	1.50
	7	6	7.9	1.90	7.5	1.80	6.9	1.69	6.8	1.60	6.6	1.50	6.1	1.40
	9	8	8.2	1.90	7.8	1.70	7.2	1.60	7.1	1.50	6.8	1.50	6.4	1.40
	11	10	8.2	1.80	7.8	1.70	7.2	1.50	7.1	1.50	6.8	1.40	6.4	1.40
	13	12	8.2	1.70	7.8	1.60	7.2	1.50	7.1	1.40	6.8	1.40	6.4	1.30
	15	14	8.2	1.70	7.8	1.50	7.2	1.40	7.1	1.40	6.8	1.40	6.4	1.30
90%	-20	-20	5.3	2.60	5.3	2.70	5.3	2.70	5.3	2.80	5.3	2.80	5.2	2.80
	-19	-19	5.5	2.60	5.5	2.70	5.5	2.80	5.5	2.80	5.5	2.80	5.2	2.70
	-17	-17	5.7	2.70	5.7	2.80	5.7	2.80	5.7	2.90	5.5	2.70	5.2	2.50
	-15	-15	6.1	2.90	6.0	2.90	6.0	2.90	5.7	2.70	5.5	2.60	5.2	2.40
	-13	-13	6.4	2.90	6.3	2.90	6.0	2.60	5.7	2.50	5.5	2.50	5.2	2.20
	-11	-11	6.7	2.90	6.3	2.70	6.0	2.50	5.7	2.40	5.5	2.30	5.2	2.10
	-10	-10	6.7	2.70	6.3	2.50	6.0	2.30	5.7	2.20	5.5	2.10	5.2	1.90
	-9	-9	6.7	2.60	6.3	2.50	6.0	2.30	5.7	2.20	5.5	2.10	5.2	1.90
	-7	-8	6.7	2.50	6.3	2.40	6.0	2.20	5.7	2.10	5.5	2.00	5.2	1.90
	-5	-6	6.7	2.40	6.3	2.20	6.0	2.00	5.7	1.90	5.5	1.90	5.2	1.80
	-3	-4	6.7	2.20	6.3	2.00	6.0	1.90	5.7	1.80	5.5	1.70	5.2	1.60
	0	-1	6.7	2.00	6.3	1.90	6.0	1.80	5.7	1.70	5.5	1.60	5.2	1.40
	3	2	6.7	1.90	6.3	1.80	6.0	1.60	5.7	1.50	5.5	1.50	5.2	1.40
	5	4	6.7	1.80	6.3	1.70	6.0	1.50	5.7	1.50	5.5	1.40	5.2	1.40
	7	6	7.2	1.70	6.7	1.60	6.4	1.50	6.1	1.40	6.0	1.40	5.5	1.30
	9	8	7.2	1.60	6.8	1.50	6.5	1.40	6.2	1.40	6.0	1.40	5.6	1.20
	11	10	7.2	1.60	6.8	1.40	6.5	1.40	6.2	1.40	6.0	1.30	5.6	1.20
	13	12	7.2	1.50	6.8	1.40	6.5	1.40	6.2	1.30	6.0	1.30	5.6	1.10
	15	14	7.2	1.40	6.8	1.40	6.5	1.30	6.2	1.30	6.0	1.20	5.6	1.10
80%	-20	-20	5.3	2.70	5.3	2.80	5.3	2.90	5.1	2.70	4.9	2.60	4.6	2.40
	-19	-19	5.5	2.80	5.5	2.80	5.3	2.70	5.1	2.60	4.9	2.50	4.6	2.30
	-17	-17	5.7	2.80	5.6	2.80	5.3	2.50	5.1	2.50	4.9	2.40	4.6	2.10
	-15	-15	6.0	2.90	5.6	2.60	5.3	2.50	5.1	2.40	4.9	2.30	4.6	2.00
	-13	-13	6.0	2.60	5.6	2.50	5.3	2.30	5.1	2.20	4.9	2.10	4.6	1.90
	-11	-11	6.0	2.50	5.6	2.30	5.3	2.10	5.1	2.00	4.9	1.90	4.6	1.80
	-10	-10	6.0	2.40	5.6	2.20	5.3	2.00	5.1	1.90	4.9	1.90	4.6	1.70
	-9	-9	6.0	2.30	5.6	2.10	5.3	1.90	5.1	1.90	4.9	1.80	4.6	1.70
	-7	-8	6.0	2.20	5.6	2.00	5.3	1.90	5.1	1.80	4.9	1.80	4.6	1.60
	-5	-6	6.0	2.00	5.6	1.90	5.3	1.80	5.1	1.70	4.9	1.60	4.6	1.50
	-3	-4	6.0	1.90	5.6	1.80	5.3	1.60	5.1	1.50	4.9	1.50	4.6	1.40
	0	-1	6.0	1.80	5.6	1.60	5.3	1.50	5.1	1.40	4.9	1.40	4.6	1.30
	3	2	6.0	1.60	5.6	1.50	5.3	1.40	5.1	1.40	4.9	1.40	4.6	1.20
	5	4	6.0	1.60	5.6	1.40	5.3	1.40	5.1	1.40	4.9	1.30	4.6	1.20
	7	6	6.4	1.50	6.0	1.40	5.6	1.30	5.5	1.30	5.3	1.20	4.9	1.10
	9	8	6.5	1.40	6.0	1.40	5.7	1.30	5.5	1.20	5.4	1.20	4.9	1.10
	11	10	6.5	1.40	6.0	1.30	5.7	1.20	5.5	1.20	5.4	1.10	4.9	1.00
	13	12	6.5	1.40	6.0	1.30	5.7	1.20	5.5	1.10	5.4	1.10	4.9	1.00
	15	14	6.5	1.30	6.0	1.20	5.7	1.10	5.5	1.10	5.4	1.00	4.9	0.90

※ Peak value : Tested without defrost operation in accordance with EN14511

2. Outdoor Units

2-8. Capacity table (A2A)

AE066MXTPEH/EU

Heating

Combination % (Capacity index)	Outdoor temperature (°C)		Indoor temperature (DB, °C)											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	DB	WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	-20	-20	5.2	2.80	4.9	2.60	4.6	2.40	4.4	2.30	4.3	2.20	4.0	2.00
	-19	-19	5.2	2.70	4.9	2.50	4.6	2.30	4.4	2.20	4.3	2.10	4.0	1.90
	-17	-17	5.2	2.50	4.9	2.40	4.6	2.10	4.4	2.00	4.3	1.90	4.0	1.90
	-15	-15	5.2	2.40	4.9	2.20	4.6	2.00	4.4	1.90	4.3	1.90	4.0	1.80
	-13	-13	5.2	2.30	4.9	2.10	4.6	1.90	4.4	1.90	4.3	1.80	4.0	1.60
	-11	-11	5.2	2.10	4.9	1.90	4.6	1.90	4.4	1.80	4.3	1.70	4.0	1.50
	-10	-10	5.2	1.90	4.9	1.90	4.6	1.70	4.4	1.60	4.3	1.60	4.0	1.40
	-9	-9	5.2	1.90	4.9	1.80	4.6	1.70	4.4	1.60	4.3	1.50	4.0	1.40
	-7	-8	5.2	1.90	4.9	1.70	4.6	1.60	4.4	1.50	4.3	1.50	4.0	1.40
	-5	-6	5.2	1.80	4.9	1.60	4.6	1.50	4.4	1.40	4.3	1.40	4.0	1.30
	-3	-4	5.2	1.60	4.9	1.50	4.6	1.40	4.4	1.40	4.3	1.30	4.0	1.20
	0	-1	5.2	1.50	4.9	1.40	4.6	1.30	4.4	1.30	4.3	1.20	4.0	1.10
	3	2	5.2	1.40	4.9	1.30	4.6	1.20	4.4	1.20	4.3	1.10	4.0	1.00
	5	4	5.2	1.40	4.9	1.30	4.6	1.20	4.4	1.10	4.3	1.10	4.0	1.00
	7	6	5.5	1.30	5.3	1.20	4.9	1.10	4.8	1.10	4.6	1.00	4.3	0.90
	9	8	5.6	1.20	5.3	1.20	5.0	1.10	4.9	1.00	4.7	1.00	4.3	0.90
	11	10	5.6	1.20	5.3	1.10	5.0	1.00	4.9	1.00	4.7	0.90	4.3	0.90
	13	12	5.6	1.10	5.3	1.10	5.0	1.00	4.9	0.90	4.7	0.90	4.3	0.80
	15	14	5.6	1.10	5.3	1.00	5.0	1.00	4.9	0.90	4.7	0.90	4.3	0.80
60%	-20	-20	4.4	2.30	4.2	2.10	3.9	2.00	3.8	1.90	3.7	1.90	3.4	1.70
	-19	-19	4.4	2.20	4.2	2.00	3.9	1.90	3.8	1.90	3.7	1.80	3.4	1.60
	-17	-17	4.4	2.00	4.2	1.90	3.9	1.80	3.8	1.70	3.7	1.60	3.4	1.50
	-15	-15	4.4	1.90	4.2	1.90	3.9	1.70	3.8	1.70	3.7	1.60	3.4	1.40
	-13	-13	4.4	1.90	4.2	1.80	3.9	1.60	3.8	1.50	3.7	1.50	3.4	1.40
	-11	-11	4.4	1.80	4.2	1.60	3.9	1.50	3.8	1.40	3.7	1.40	3.4	1.30
	-10	-10	4.4	1.60	4.2	1.50	3.9	1.40	3.8	1.40	3.7	1.40	3.4	1.20
	-9	-9	4.4	1.60	4.2	1.50	3.9	1.40	3.8	1.40	3.7	1.30	3.4	1.20
	-7	-8	4.4	1.50	4.2	1.40	3.9	1.40	3.8	1.30	3.7	1.30	3.4	1.20
	-5	-6	4.4	1.40	4.2	1.40	3.9	1.30	3.8	1.30	3.7	1.20	3.4	1.10
	-3	-4	4.4	1.40	4.2	1.30	3.9	1.20	3.8	1.10	3.7	1.10	3.4	1.00
	0	-1	4.4	1.30	4.2	1.20	3.9	1.10	3.8	1.00	3.7	1.00	3.4	0.90
	3	2	4.4	1.20	4.2	1.10	3.9	1.00	3.8	1.00	3.7	0.90	3.4	0.90
	5	4	4.4	1.10	4.2	1.10	3.9	1.00	3.8	0.90	3.7	0.90	3.4	0.80
	7	6	4.8	1.10	4.5	1.00	4.3	0.90	4.1	0.90	3.9	0.80	3.7	0.80
	9	8	4.9	1.00	4.6	0.90	4.3	0.90	4.2	0.80	4.0	0.80	3.7	0.80
	11	10	4.9	1.00	4.6	0.90	4.3	0.80	4.2	0.80	4.0	0.80	3.7	0.80
	13	12	4.9	0.90	4.6	0.90	4.3	0.80	4.2	0.80	4.0	0.80	3.7	0.80
	15	14	4.9	0.90	4.6	0.80	4.3	0.80	4.2	0.80	4.0	0.80	3.7	0.80
50%	-20	-20	3.7	1.90	3.5	1.70	3.3	1.60	3.2	1.50	3.1	1.50	2.9	1.40
	-19	-19	3.7	1.80	3.5	1.70	3.3	1.50	3.2	1.50	3.1	1.40	2.9	1.40
	-17	-17	3.7	1.70	3.5	1.50	3.3	1.40	3.2	1.40	3.1	1.40	2.9	1.30
	-15	-15	3.7	1.60	3.5	1.50	3.3	1.40	3.2	1.40	3.1	1.30	2.9	1.20
	-13	-13	3.7	1.50	3.5	1.40	3.3	1.40	3.2	1.30	3.1	1.20	2.9	1.10
	-11	-11	3.7	1.40	3.5	1.40	3.3	1.30	3.2	1.20	3.1	1.20	2.9	1.10
	-10	-10	3.7	1.40	3.5	1.30	3.3	1.20	3.2	1.10	3.1	1.10	2.9	1.00
	-9	-9	3.7	1.30	3.5	1.20	3.3	1.10	3.2	1.10	3.1	1.10	2.9	1.00
	-7	-8	3.7	1.30	3.5	1.20	3.3	1.10	3.2	1.10	3.1	1.00	2.9	0.90
	-5	-6	3.7	1.20	3.5	1.10	3.3	1.00	3.2	1.00	3.1	1.00	2.9	0.90
	-3	-4	3.7	1.10	3.5	1.00	3.3	0.90	3.2	0.90	3.1	0.90	2.9	0.80
	0	-1	3.7	1.00	3.5	0.90	3.3	0.90	3.2	0.80	3.1	0.80	2.9	0.80
	3	2	3.7	0.90	3.5	0.90	3.3	0.80	3.2	0.80	3.1	0.80	2.9	0.80
	5	4	3.7	0.90	3.5	0.80	3.3	0.80	3.2	0.80	3.1	0.80	2.9	0.80
	7	6	4.0	0.90	3.7	0.80	3.5	0.80	3.4	0.80	3.3	0.80	3.1	0.70
	9	8	4.0	0.80	3.8	0.80	3.6	0.80	3.5	0.80	3.3	0.70	3.2	0.70
	11	10	4.0	0.80	3.8	0.80	3.6	0.80	3.5	0.70	3.3	0.70	3.2	0.70
	13	12	4.0	0.80	3.8	0.80	3.6	0.70	3.5	0.70	3.3	0.70	3.2	0.60
	15	14	4.0	0.80	3.8	0.80	3.6	0.70	3.5	0.70	3.3	0.70	3.2	0.60

※ Peak value : Tested without defrost operation in accordance with EN14511

2. Outdoor Units

2-8. Capacity table (A2A)

AE090MXTPEH/EU

Heating

Combination % (Capacity index)	Outdoor temperature (°C)		Indoor temperature (DB, °C)											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	DB	WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100%	-20	-20	7.9	3.50	7.9	3.70	7.7	3.80	7.9	3.80	7.9	3.80	7.9	3.90
	-19	-19	8.2	3.50	8.2	3.70	7.9	3.80	8.1	3.80	8.1	3.90	8.1	4.00
	-17	-17	8.6	3.70	8.6	3.80	8.4	3.90	8.6	3.90	8.6	4.00	8.6	4.00
	-15	-15	9.1	3.90	9.1	4.00	8.8	4.10	9.0	4.10	9.0	4.10	8.6	3.90
	-13	-13	9.5	4.00	9.5	4.00	9.3	4.10	9.5	4.10	9.2	4.00	8.6	3.50
	-11	-11	10.0	4.00	10.0	4.10	9.5	4.00	9.5	3.90	9.2	3.70	8.6	3.30
	-10	-10	10.2	3.90	10.2	4.00	9.5	3.80	9.5	3.50	9.2	3.40	8.6	3.10
	-9	-9	10.5	4.00	10.4	4.00	9.5	3.70	9.5	3.50	9.2	3.30	8.6	3.00
	-7	-8	10.9	4.00	10.4	3.80	9.5	3.40	9.5	3.30	9.2	3.20	8.6	2.90
	-5	-6	11.0	3.90	10.4	3.50	9.5	3.30	9.5	3.10	9.2	3.00	8.6	2.80
	-3	-4	11.0	3.40	10.4	3.20	9.5	3.00	9.5	2.90	9.2	2.70	8.6	2.50
	0	-1	11.0	3.20	10.4	3.00	9.5	2.80	9.5	2.70	9.2	2.60	8.6	2.40
	3	2	11.0	3.00	10.4	2.80	9.5	2.60	9.5	2.50	9.2	2.40	8.6	2.20
	5	4	11.0	2.90	10.4	2.70	9.5	2.50	9.5	2.40	9.2	2.30	8.6	2.10
	7	6	10.9	2.70	10.3	2.60	9.5	2.40	7.9	3.50	7.9	3.50	7.9	3.50
	9	8	11.2	2.60	10.6	2.40	10.0	2.30	9.7	2.20	9.3	2.10	8.7	2.00
	11	10	11.2	2.50	10.6	2.40	10.0	2.20	9.7	2.10	9.3	2.00	8.7	1.90
	13	12	11.2	2.40	10.6	2.30	10.0	2.10	9.7	2.00	9.3	2.00	8.7	1.80
	15	14	11.2	2.30	10.6	2.20	10.0	2.10	9.7	2.00	9.3	1.90	8.7	1.80
90%	-20	-20	7.3	3.70	7.3	3.80	7.3	3.90	7.3	3.90	7.3	4.00	7.0	4.00
	-19	-19	7.5	3.80	7.5	3.90	7.5	3.90	7.5	4.00	7.5	4.00	7.0	3.80
	-17	-17	7.9	3.90	7.9	3.90	7.9	4.00	7.9	4.00	7.6	3.90	7.0	3.50
	-15	-15	8.4	4.00	8.3	4.10	8.2	4.00	7.9	3.90	7.6	3.70	7.0	3.30
	-13	-13	8.8	4.10	8.7	4.10	8.2	3.80	7.9	3.50	7.6	3.40	7.0	3.10
	-11	-11	9.2	4.10	8.7	3.80	8.2	3.50	7.9	3.30	7.6	3.20	7.0	2.90
	-10	-10	9.2	3.90	8.7	3.50	8.2	3.20	7.9	3.10	7.6	3.00	7.0	2.70
	-9	-9	9.2	3.80	8.7	3.40	8.2	3.20	7.9	3.00	7.6	2.90	7.0	2.70
	-7	-8	9.2	3.50	8.7	3.30	8.2	3.00	7.9	2.90	7.6	2.80	7.0	2.60
	-5	-6	9.2	3.30	8.7	3.10	8.2	2.90	7.9	2.80	7.6	2.70	7.0	2.50
	-3	-4	9.2	3.00	8.7	2.80	8.2	2.60	7.9	2.50	7.6	2.40	7.0	2.20
	0	-1	9.2	2.80	8.7	2.60	8.2	2.40	7.9	2.40	7.6	2.30	7.0	2.10
	3	2	9.2	2.60	8.7	2.50	8.2	2.30	7.9	2.20	7.6	2.10	7.0	2.00
	5	4	9.2	2.50	8.7	2.40	8.2	2.20	7.9	2.10	7.6	2.10	7.0	1.90
	7	6	9.8	2.40	9.3	2.30	8.8	2.10	8.4	2.00	8.1	2.00	7.6	1.80
	9	8	9.9	2.30	9.4	2.20	8.9	2.00	8.6	1.90	8.2	1.90	7.7	1.70
	11	10	9.9	2.20	9.4	2.10	8.9	2.00	8.6	1.90	8.2	1.80	7.7	1.70
	13	12	9.9	2.20	9.4	2.00	8.9	1.90	8.6	1.80	8.2	1.80	7.7	1.60
	15	14	9.9	2.10	9.4	2.00	8.9	1.80	8.6	1.80	8.2	1.70	7.7	1.60
80%	-20	-20	7.3	3.90	7.3	4.00	7.3	4.00	6.9	3.90	6.7	3.70	6.3	3.30
	-19	-19	7.5	3.90	7.5	4.00	7.3	3.90	6.9	3.80	6.7	3.50	6.3	3.20
	-17	-17	7.9	4.00	7.7	3.90	7.3	3.50	6.9	3.40	6.7	3.30	6.3	3.00
	-15	-15	8.2	4.00	7.7	3.80	7.3	3.40	6.9	3.30	6.7	3.10	6.3	2.90
	-13	-13	8.2	3.80	7.7	3.40	7.3	3.20	6.9	3.10	6.7	2.90	6.3	2.70
	-11	-11	8.2	3.50	7.7	3.20	7.3	3.00	6.9	2.90	6.7	2.80	6.3	2.60
	-10	-10	8.2	3.30	7.7	3.00	7.3	2.80	6.9	2.70	6.7	2.60	6.3	2.40
	-9	-9	8.2	3.20	7.7	3.00	7.3	2.70	6.9	2.60	6.7	2.50	6.3	2.30
	-7	-8	8.2	3.00	7.7	2.80	7.3	2.60	6.9	2.50	6.7	2.40	6.3	2.30
	-5	-6	8.2	2.90	7.7	2.70	7.3	2.50	6.9	2.40	6.7	2.30	6.3	2.10
	-3	-4	8.2	2.60	7.7	2.50	7.3	2.30	6.9	2.20	6.7	2.10	6.3	2.00
	0	-1	8.2	2.50	7.7	2.30	7.3	2.10	6.9	2.10	6.7	2.00	6.3	1.80
	3	2	8.2	2.30	7.7	2.20	7.3	2.00	6.9	1.90	6.7	1.90	6.3	1.70
	5	4	8.2	2.20	7.7	2.10	7.3	1.90	6.9	1.90	6.7	1.80	6.3	1.70
	7	6	8.8	2.10	8.2	2.00	7.8	1.90	7.5	1.80	7.3	1.70	6.7	1.60
	9	8	8.9	2.00	8.3	1.90	7.9	1.80	7.6	1.70	7.4	1.70	6.8	1.50
	11	10	8.9	2.00	8.3	1.80	7.9	1.70	7.6	1.70	7.4	1.60	6.8	1.50
	13	12	8.9	1.90	8.3	1.80	7.9	1.70	7.6	1.60	7.4	1.60	6.8	1.50
	15	14	8.9	1.80	8.3	1.70	7.9	1.60	7.6	1.60	7.4	1.50	6.8	1.40

※ Peak value : Tested without defrost operation in accordance with EN14511

2. Outdoor Units

2-8. Capacity table (A2A)

AE090MXTPEH/EU

Heating

Combination % (Capacity index)	Outdoor temperature (°C)		Indoor temperature (DB, °C)											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	DB	WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	-20	-20	7.2	4.00	6.7	3.70	6.3	3.40	6.1	3.20	5.9	3.10	5.5	2.80
	-19	-19	7.2	3.80	6.7	3.50	6.3	3.20	6.1	3.10	5.9	3.00	5.5	2.70
	-17	-17	7.2	3.50	6.7	3.20	6.3	3.00	6.1	2.90	5.9	2.80	5.5	2.60
	-15	-15	7.2	3.30	6.7	3.10	6.3	2.90	6.1	2.80	5.9	2.70	5.5	2.50
	-13	-13	7.2	3.10	6.7	2.90	6.3	2.70	6.1	2.60	5.9	2.50	5.5	2.30
	-11	-11	7.2	3.00	6.7	2.80	6.3	2.60	6.1	2.50	5.9	2.40	5.5	2.20
	-10	-10	7.2	2.80	6.7	2.60	6.3	2.40	6.1	2.30	5.9	2.20	5.5	2.10
	-9	-9	7.2	2.70	6.7	2.50	6.3	2.40	6.1	2.30	5.9	2.20	5.5	2.00
	-7	-8	7.2	2.60	6.7	2.40	6.3	2.30	6.1	2.20	5.9	2.10	5.5	2.00
	-5	-6	7.2	2.50	6.7	2.30	6.3	2.20	6.1	2.10	5.9	2.00	5.5	1.90
	-3	-4	7.2	2.30	6.7	2.10	6.3	2.00	6.1	1.90	5.9	1.80	5.5	1.70
	0	-1	7.2	2.10	6.7	2.00	6.3	1.80	6.1	1.80	5.9	1.70	5.5	1.60
	3	2	7.2	2.00	6.7	1.90	6.3	1.70	6.1	1.70	5.9	1.60	5.5	1.50
	5	4	7.2	1.90	6.7	1.80	6.3	1.70	6.1	1.60	5.9	1.60	5.5	1.50
	7	6	7.7	1.80	7.2	1.70	6.7	1.60	6.5	1.60	6.3	1.50	5.9	1.40
	9	8	7.8	1.80	7.3	1.60	6.8	1.50	6.6	1.50	6.4	1.50	5.9	1.40
	11	10	7.8	1.70	7.3	1.60	6.8	1.50	6.6	1.50	6.4	1.40	5.9	1.30
	13	12	7.8	1.60	7.3	1.50	6.8	1.50	6.6	1.40	6.4	1.40	5.9	1.30
	15	14	7.8	1.60	7.3	1.50	6.8	1.40	6.6	1.40	6.4	1.30	5.9	1.10
60%	-20	-20	6.1	3.20	5.7	3.00	5.4	2.80	5.2	2.70	5.1	2.60	4.7	2.40
	-19	-19	6.1	3.10	5.7	2.90	5.4	2.70	5.2	2.60	5.1	2.50	4.7	2.30
	-17	-17	6.1	2.90	5.7	2.70	5.4	2.50	5.2	2.40	5.1	2.30	4.7	2.20
	-15	-15	6.1	2.80	5.7	2.60	5.4	2.40	5.2	2.30	5.1	2.20	4.7	2.10
	-13	-13	6.1	2.60	5.7	2.40	5.4	2.30	5.2	2.20	5.1	2.10	4.7	2.00
	-11	-11	6.1	2.50	5.7	2.30	5.4	2.20	5.2	2.10	5.1	2.00	4.7	1.90
	-10	-10	6.1	2.30	5.7	2.20	5.4	2.00	5.2	2.00	5.1	1.90	4.7	1.80
	-9	-9	6.1	2.30	5.7	2.10	5.4	2.00	5.2	1.90	5.1	1.90	4.7	1.70
	-7	-8	6.1	2.20	5.7	2.00	5.4	1.90	5.2	1.90	5.1	1.80	4.7	1.70
	-5	-6	6.1	2.10	5.7	2.00	5.4	1.80	5.2	1.80	5.1	1.70	4.7	1.60
	-3	-4	6.1	1.90	5.7	1.80	5.4	1.70	5.2	1.60	5.1	1.60	4.7	1.50
	0	-1	6.1	1.80	5.7	1.70	5.4	1.60	5.2	1.50	5.1	1.50	4.7	1.40
	3	2	6.1	1.70	5.7	1.60	5.4	1.50	5.2	1.40	5.1	1.40	4.7	1.30
	5	4	6.1	1.60	5.7	1.50	5.4	1.40	5.2	1.40	5.1	1.40	4.7	1.30
	7	6	6.5	1.60	6.1	1.50	5.8	1.40	5.6	1.30	5.4	1.30	5.0	1.10
	9	8	6.6	1.50	6.2	1.40	5.8	1.30	5.7	1.30	5.5	1.10	5.1	1.10
	11	10	6.6	1.50	6.2	1.40	5.8	1.30	5.7	1.30	5.5	1.10	5.1	1.00
	13	12	6.6	1.40	6.2	1.30	5.8	1.30	5.7	1.10	5.5	1.10	5.1	1.00
	15	14	6.6	1.40	6.2	1.30	5.8	1.10	5.7	1.10	5.5	1.00	5.1	1.00
50%	-20	-20	5.1	2.60	4.8	2.40	4.5	2.30	4.4	2.20	4.2	2.10	4.0	1.90
	-19	-19	5.1	2.50	4.8	2.30	4.5	2.20	4.4	2.10	4.2	2.00	4.0	1.90
	-17	-17	5.1	2.30	4.8	2.20	4.5	2.00	4.4	2.00	4.2	1.90	4.0	1.80
	-15	-15	5.1	2.30	4.8	2.10	4.5	2.00	4.4	1.90	4.2	1.80	4.0	1.70
	-13	-13	5.1	2.10	4.8	2.00	4.5	1.90	4.4	1.80	4.2	1.70	4.0	1.60
	-11	-11	5.1	2.00	4.8	1.90	4.5	1.80	4.4	1.70	4.2	1.70	4.0	1.60
	-10	-10	5.1	1.90	4.8	1.80	4.5	1.70	4.4	1.60	4.2	1.60	4.0	1.50
	-9	-9	5.1	1.90	4.8	1.80	4.5	1.60	4.4	1.60	4.2	1.50	4.0	1.40
	-7	-8	5.1	1.80	4.8	1.70	4.5	1.60	4.4	1.50	4.2	1.50	4.0	1.40
	-5	-6	5.1	1.70	4.8	1.60	4.5	1.50	4.4	1.50	4.2	1.40	4.0	1.30
	-3	-4	5.1	1.60	4.8	1.50	4.5	1.40	4.4	1.40	4.2	1.30	4.0	1.10
	0	-1	5.1	1.50	4.8	1.40	4.5	1.30	4.4	1.30	4.2	1.10	4.0	1.10
	3	2	5.1	1.40	4.8	1.30	4.5	1.30	4.4	1.10	4.2	1.10	4.0	1.00
	5	4	5.1	1.40	4.8	1.30	4.5	1.10	4.4	1.10	4.2	1.00	4.0	1.00
	7	6	5.4	1.30	5.1	1.10	4.8	1.10	4.7	1.00	4.5	1.00	4.2	0.90
	9	8	5.5	1.30	5.2	1.10	4.9	1.00	4.7	1.00	4.6	1.00	4.3	0.90
	11	10	5.5	1.10	5.2	1.10	4.9	1.00	4.7	1.00	4.6	0.90	4.3	0.90
	13	12	5.5	1.10	5.2	1.00	4.9	1.00	4.7	0.90	4.6	0.90	4.3	0.80
	15	14	5.5	1.10	5.2	1.00	4.9	0.90	4.7	0.90	4.6	0.90	4.3	0.80

※ Peak value : Tested without defrost operation in accordance with EN14511

2. Outdoor Units

2-8. Capacity table (A2A)

AE090MXTPGH/EU

Heating

Combination % (Capacity index)	Outdoor temperature (°C)		Indoor temperature (DB, °C)											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	DB	WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100%	-20	-20	7.9	3.70	7.9	3.80	7.7	3.90	7.9	3.90	7.9	3.90	7.9	4.10
	-19	-19	8.2	3.70	8.2	3.80	7.9	3.90	8.1	3.90	8.1	4.10	8.1	4.20
	-17	-17	8.6	3.80	8.6	3.90	8.4	4.10	8.6	4.10	8.6	4.20	8.6	4.20
	-15	-15	9.1	4.10	9.1	4.20	8.8	4.30	9.0	4.30	9.0	4.30	8.6	4.10
	-13	-13	9.5	4.20	9.5	4.20	9.3	4.30	9.5	4.30	9.2	4.20	8.6	3.70
	-11	-11	10.0	4.20	10.0	4.30	9.5	4.20	9.5	4.10	9.2	3.80	8.6	3.50
	-10	-10	10.2	4.10	10.2	4.20	9.5	3.90	9.5	3.70	9.2	3.60	8.6	3.30
	-9	-9	10.5	4.20	10.4	4.20	9.5	3.80	9.5	3.70	9.2	3.50	8.6	3.20
	-7	-8	10.9	4.20	10.4	3.90	9.5	3.60	9.5	3.50	9.2	3.40	8.6	3.10
	-5	-6	11.0	4.10	10.4	3.70	9.5	3.50	9.5	3.30	9.2	3.20	8.6	3.00
	-3	-4	11.0	3.60	10.4	3.40	9.5	3.20	9.5	3.10	9.2	2.80	8.6	2.60
	0	-1	11.0	3.40	10.4	3.20	9.5	3.00	9.5	2.80	9.2	2.70	8.6	2.50
	3	2	11.0	3.20	10.4	3.00	9.5	2.70	9.5	2.60	9.2	2.50	8.6	2.30
	5	4	11.0	3.10	10.4	2.80	9.5	2.60	9.5	2.50	9.2	2.40	8.6	2.20
	7	6	10.9	2.80	10.3	2.70	9.5	2.52	9.4	2.40	9.1	2.30	8.4	2.10
	9	8	11.2	2.70	10.6	2.50	10.0	2.40	9.7	2.30	9.3	2.20	8.7	2.10
	11	10	11.2	2.60	10.6	2.50	10.0	2.30	9.7	2.20	9.3	2.10	8.7	2.00
	13	12	11.2	2.50	10.6	2.40	10.0	2.20	9.7	2.10	9.3	2.10	8.7	1.90
	15	14	11.2	2.40	10.6	2.30	10.0	2.20	9.7	2.10	9.3	2.00	8.7	1.90
90%	-20	-20	7.3	3.80	7.3	3.90	7.3	4.10	7.3	4.10	7.3	4.20	7.0	4.20
	-19	-19	7.5	3.90	7.5	4.10	7.5	4.10	7.5	4.20	7.5	4.20	7.0	3.90
	-17	-17	7.9	4.10	7.9	4.10	7.9	4.20	7.9	4.20	7.6	4.10	7.0	3.70
	-15	-15	8.4	4.20	8.3	4.30	8.2	4.20	7.9	4.10	7.6	3.80	7.0	3.50
	-13	-13	8.8	4.30	8.7	4.30	8.2	3.90	7.9	3.70	7.6	3.60	7.0	3.30
	-11	-11	9.2	4.30	8.7	3.90	8.2	3.70	7.9	3.50	7.6	3.40	7.0	3.10
	-10	-10	9.2	4.10	8.7	3.70	8.2	3.40	7.9	3.30	7.6	3.20	7.0	2.80
	-9	-9	9.2	3.90	8.7	3.60	8.2	3.40	7.9	3.20	7.6	3.10	7.0	2.80
	-7	-8	9.2	3.70	8.7	3.50	8.2	3.20	7.9	3.10	7.6	3.00	7.0	2.70
	-5	-6	9.2	3.50	8.7	3.30	8.2	3.10	7.9	3.00	7.6	2.80	7.0	2.60
	-3	-4	9.2	3.20	8.7	3.00	8.2	2.70	7.9	2.60	7.6	2.50	7.0	2.30
	0	-1	9.2	3.00	8.7	2.70	8.2	2.50	7.9	2.50	7.6	2.40	7.0	2.20
	3	2	9.2	2.70	8.7	2.60	8.2	2.40	7.9	2.30	7.6	2.20	7.0	2.10
	5	4	9.2	2.60	8.7	2.50	8.2	2.30	7.9	2.20	7.6	2.20	7.0	2.00
	7	6	9.8	2.50	9.3	2.40	8.8	2.20	8.4	2.10	8.1	2.10	7.6	1.90
	9	8	9.9	2.40	9.4	2.30	8.9	2.10	8.6	2.00	8.2	2.00	7.7	1.80
	11	10	9.9	2.30	9.4	2.20	8.9	2.10	8.6	2.00	8.2	1.90	7.7	1.80
	13	12	9.9	2.30	9.4	2.10	8.9	2.00	8.6	1.90	8.2	1.90	7.7	1.60
	15	14	9.9	2.20	9.4	2.10	8.9	1.90	8.6	1.90	8.2	1.80	7.7	1.60
80%	-20	-20	7.3	4.10	7.3	4.20	7.3	4.20	6.9	4.10	6.7	3.80	6.3	3.50
	-19	-19	7.5	4.10	7.5	4.20	7.3	4.10	6.9	3.90	6.7	3.70	6.3	3.40
	-17	-17	7.9	4.20	7.7	4.10	7.3	3.70	6.9	3.60	6.7	3.50	6.3	3.20
	-15	-15	8.2	4.20	7.7	3.90	7.3	3.60	6.9	3.50	6.7	3.30	6.3	3.10
	-13	-13	8.2	3.90	7.7	3.60	7.3	3.40	6.9	3.30	6.7	3.10	6.3	2.80
	-11	-11	8.2	3.70	7.7	3.40	7.3	3.20	6.9	3.10	6.7	3.00	6.3	2.70
	-10	-10	8.2	3.50	7.7	3.20	7.3	3.00	6.9	2.80	6.7	2.70	6.3	2.50
	-9	-9	8.2	3.40	7.7	3.20	7.3	2.80	6.9	2.70	6.7	2.60	6.3	2.40
	-7	-8	8.2	3.20	7.7	3.00	7.3	2.70	6.9	2.60	6.7	2.50	6.3	2.40
	-5	-6	8.2	3.10	7.7	2.80	7.3	2.60	6.9	2.50	6.7	2.40	6.3	2.20
	-3	-4	8.2	2.70	7.7	2.60	7.3	2.40	6.9	2.30	6.7	2.20	6.3	2.10
	0	-1	8.2	2.60	7.7	2.40	7.3	2.20	6.9	2.20	6.7	2.10	6.3	1.90
	3	2	8.2	2.40	7.7	2.30	7.3	2.10	6.9	2.00	6.7	2.00	6.3	1.80
	5	4	8.2	2.30	7.7	2.20	7.3	2.00	6.9	2.00	6.7	1.90	6.3	1.80
	7	6	8.8	2.20	8.2	2.10	7.8	2.00	7.5	1.90	7.3	1.80	6.7	1.60
	9	8	8.9	2.10	8.3	2.00	7.9	1.90	7.6	1.80	7.4	1.80	6.8	1.50
	11	10	8.9	2.10	8.3	1.90	7.9	1.80	7.6	1.80	7.4	1.60	6.8	1.50
	13	12	8.9	2.00	8.3	1.90	7.9	1.80	7.6	1.60	7.4	1.60	6.8	1.50
	15	14	8.9	1.90	8.3	1.80	7.9	1.60	7.6	1.60	7.4	1.50	6.8	1.40

※ Peak value : Tested without defrost operation in accordance with EN14511

2. Outdoor Units

2-8. Capacity table (A2A)

AE090MXTPGH/EU

Heating

Combination % (Capacity index)	Outdoor temperature (°C)		Indoor temperature (DB, °C)											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	DB	WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	-20	-20	7.2	4.20	6.7	3.80	6.3	3.60	6.1	3.40	5.9	3.30	5.5	3.00
	-19	-19	7.2	3.90	6.7	3.70	6.3	3.40	6.1	3.30	5.9	3.20	5.5	2.80
	-17	-17	7.2	3.70	6.7	3.40	6.3	3.20	6.1	3.10	5.9	3.00	5.5	2.70
	-15	-15	7.2	3.50	6.7	3.30	6.3	3.10	6.1	3.00	5.9	2.80	5.5	2.60
	-13	-13	7.2	3.30	6.7	3.10	6.3	2.80	6.1	2.70	5.9	2.60	5.5	2.40
	-11	-11	7.2	3.20	6.7	3.00	6.3	2.70	6.1	2.60	5.9	2.50	5.5	2.30
	-10	-10	7.2	3.00	6.7	2.70	6.3	2.50	6.1	2.40	5.9	2.30	5.5	2.20
	-9	-9	7.2	2.80	6.7	2.60	6.3	2.50	6.1	2.40	5.9	2.30	5.5	2.10
	-7	-8	7.2	2.70	6.7	2.50	6.3	2.40	6.1	2.30	5.9	2.20	5.5	2.10
	-5	-6	7.2	2.60	6.7	2.40	6.3	2.30	6.1	2.20	5.9	2.10	5.5	2.00
	-3	-4	7.2	2.40	6.7	2.20	6.3	2.10	6.1	2.00	5.9	1.90	5.5	1.80
	0	-1	7.2	2.20	6.7	2.10	6.3	1.90	6.1	1.90	5.9	1.80	5.5	1.60
	3	2	7.2	2.10	6.7	2.00	6.3	1.80	6.1	1.80	5.9	1.60	5.5	1.50
	5	4	7.2	2.00	6.7	1.90	6.3	1.80	6.1	1.60	5.9	1.60	5.5	1.50
	7	6	7.7	1.90	7.2	1.80	6.7	1.60	6.5	1.60	6.3	1.50	5.9	1.40
	9	8	7.8	1.90	7.3	1.60	6.8	1.50	6.6	1.50	6.4	1.50	5.9	1.40
	11	10	7.8	1.80	7.3	1.60	6.8	1.50	6.6	1.50	6.4	1.40	5.9	1.30
	13	12	7.8	1.60	7.3	1.50	6.8	1.50	6.6	1.40	6.4	1.40	5.9	1.30
	15	14	7.8	1.60	7.3	1.50	6.8	1.40	6.6	1.40	6.4	1.30	5.9	1.20
60%	-20	-20	6.1	3.40	5.7	3.20	5.4	3.00	5.2	2.80	5.1	2.70	4.7	2.50
	-19	-19	6.1	3.30	5.7	3.10	5.4	2.80	5.2	2.70	5.1	2.60	4.7	2.40
	-17	-17	6.1	3.10	5.7	2.80	5.4	2.60	5.2	2.50	5.1	2.40	4.7	2.30
	-15	-15	6.1	3.00	5.7	2.70	5.4	2.50	5.2	2.40	5.1	2.30	4.7	2.20
	-13	-13	6.1	2.70	5.7	2.50	5.4	2.40	5.2	2.30	5.1	2.20	4.7	2.10
	-11	-11	6.1	2.60	5.7	2.40	5.4	2.30	5.2	2.20	5.1	2.10	4.7	2.00
	-10	-10	6.1	2.40	5.7	2.30	5.4	2.10	5.2	2.10	5.1	2.00	4.7	1.90
	-9	-9	6.1	2.40	5.7	2.20	5.4	2.10	5.2	2.00	5.1	2.00	4.7	1.80
	-7	-8	6.1	2.30	5.7	2.10	5.4	2.00	5.2	2.00	5.1	1.90	4.7	1.80
	-5	-6	6.1	2.20	5.7	2.10	5.4	1.90	5.2	1.90	5.1	1.80	4.7	1.60
	-3	-4	6.1	2.00	5.7	1.90	5.4	1.80	5.2	1.60	5.1	1.60	4.7	1.50
	0	-1	6.1	1.90	5.7	1.80	5.4	1.60	5.2	1.50	5.1	1.50	4.7	1.40
	3	2	6.1	1.80	5.7	1.60	5.4	1.50	5.2	1.40	5.1	1.40	4.7	1.30
	5	4	6.1	1.60	5.7	1.50	5.4	1.40	5.2	1.40	5.1	1.40	4.7	1.30
	7	6	6.5	1.60	6.1	1.50	5.8	1.40	5.6	1.30	5.4	1.30	5.0	1.20
	9	8	6.6	1.50	6.2	1.40	5.8	1.30	5.7	1.30	5.5	1.20	5.1	1.20
	11	10	6.6	1.50	6.2	1.40	5.8	1.30	5.7	1.30	5.5	1.20	5.1	1.10
	13	12	6.6	1.40	6.2	1.30	5.8	1.30	5.7	1.20	5.5	1.20	5.1	1.10
	15	14	6.6	1.40	6.2	1.30	5.8	1.20	5.7	1.20	5.5	1.10	5.1	1.10
50%	-20	-20	5.1	2.70	4.8	2.50	4.5	2.40	4.4	2.30	4.2	2.20	4.0	2.00
	-19	-19	5.1	2.60	4.8	2.40	4.5	2.30	4.4	2.20	4.2	2.10	4.0	2.00
	-17	-17	5.1	2.40	4.8	2.30	4.5	2.10	4.4	2.10	4.2	2.00	4.0	1.90
	-15	-15	5.1	2.40	4.8	2.20	4.5	2.10	4.4	2.00	4.2	1.90	4.0	1.80
	-13	-13	5.1	2.20	4.8	2.10	4.5	2.00	4.4	1.90	4.2	1.80	4.0	1.60
	-11	-11	5.1	2.10	4.8	2.00	4.5	1.90	4.4	1.80	4.2	1.80	4.0	1.60
	-10	-10	5.1	2.00	4.8	1.90	4.5	1.80	4.4	1.60	4.2	1.60	4.0	1.50
	-9	-9	5.1	2.00	4.8	1.90	4.5	1.60	4.4	1.60	4.2	1.50	4.0	1.40
	-7	-8	5.1	1.90	4.8	1.80	4.5	1.60	4.4	1.50	4.2	1.50	4.0	1.40
	-5	-6	5.1	1.80	4.8	1.60	4.5	1.50	4.4	1.50	4.2	1.40	4.0	1.30
	-3	-4	5.1	1.60	4.8	1.50	4.5	1.40	4.4	1.40	4.2	1.30	4.0	1.20
	0	-1	5.1	1.50	4.8	1.40	4.5	1.30	4.4	1.30	4.2	1.20	4.0	1.20
	3	2	5.1	1.40	4.8	1.30	4.5	1.30	4.4	1.20	4.2	1.20	4.0	1.10
	5	4	5.1	1.40	4.8	1.30	4.5	1.20	4.4	1.20	4.2	1.10	4.0	1.10
	7	6	5.4	1.30	5.1	1.20	4.8	1.20	4.7	1.10	4.5	1.10	4.2	1.00
	9	8	5.5	1.30	5.2	1.20	4.9	1.10	4.7	1.10	4.6	1.10	4.3	1.00
	11	10	5.5	1.20	5.2	1.20	4.9	1.10	4.7	1.10	4.6	1.00	4.3	1.00
	13	12	5.5	1.20	5.2	1.10	4.9	1.10	4.7	1.00	4.6	1.00	4.3	0.90
	15	14	5.5	1.20	5.2	1.10	4.9	1.00	4.7	1.00	4.6	1.00	4.3	0.90

※ Peak value : Tested without defrost operation in accordance with EN14511

2. Outdoor Units

2-8. Capacity table (A2A)

AE120MXTP⁎H/EU

Heating

Combination % (Capacity index)	Outdoor temperature (°C)		Indoor temperature (DB, °C)											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	DB	WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100%	-20	-20	10.6	4.80	10.5	5.00	10.5	5.10	10.5	5.20	10.5	5.20	10.5	5.30
	-19	-19	10.9	4.90	10.9	5.00	10.8	5.20	10.8	5.20	10.8	5.30	10.8	5.40
	-17	-17	11.5	5.00	11.5	5.20	11.4	5.30	11.4	5.30	11.4	5.40	11.4	5.50
	-15	-15	12.1	5.30	12.1	5.40	12.1	5.50	12.0	5.60	12.0	5.60	11.4	5.30
	-13	-13	12.8	5.40	12.8	5.50	12.5	5.60	12.7	5.60	12.3	5.40	11.4	4.90
	-11	-11	13.4	5.50	13.4	5.60	12.7	5.50	12.7	5.30	12.3	5.10	11.4	4.60
	-10	-10	13.7	5.30	13.7	5.40	12.7	5.10	12.7	4.90	12.3	4.70	11.4	4.40
	-9	-9	14.0	5.40	13.9	5.40	12.7	5.00	12.7	4.80	12.3	4.60	11.4	4.30
	-7	-8	14.5	5.40	13.9	5.20	12.7	4.80	12.7	4.60	12.3	4.40	11.4	4.00
	-5	-6	14.7	5.30	13.9	4.90	12.7	4.60	12.7	4.40	12.3	4.20	11.4	3.80
	-3	-4	14.7	4.80	13.9	4.50	12.7	4.20	12.7	3.90	12.3	3.80	11.4	3.50
	0	-1	14.7	4.50	13.9	4.20	12.7	3.80	12.7	3.70	12.3	3.50	11.4	3.20
	3	2	14.7	4.20	13.9	3.80	12.7	3.60	12.7	3.40	12.3	3.30	11.4	3.10
	5	4	14.7	3.90	13.9	3.70	12.7	3.40	12.7	3.30	12.3	3.20	11.4	2.90
	7	6	14.7	3.80	13.9	3.50	12.7	3.30	12.7	3.20	12.3	3.00	11.4	2.80
	9	8	14.7	3.60	13.9	3.40	13.0	3.10	12.7	3.00	12.3	2.90	11.4	2.70
	11	10	14.7	3.50	13.9	3.20	13.0	3.00	12.7	2.90	12.3	2.80	11.4	2.60
	13	12	14.7	3.30	13.9	3.10	13.0	2.90	12.7	2.80	12.3	2.70	11.4	2.40
	15	14	14.7	3.20	13.9	3.00	13.0	2.80	12.7	2.70	12.3	2.60	11.4	2.30
90%	-20	-20	10.5	5.60	10.5	5.70	10.5	5.90	10.5	6.00	10.5	6.00	10.3	6.00
	-19	-19	10.8	5.60	10.8	5.70	10.8	6.00	10.8	6.00	10.8	6.10	10.3	5.70
	-17	-17	11.4	5.70	11.4	6.00	11.4	6.10	11.4	6.10	11.0	5.90	10.3	5.30
	-15	-15	12.1	6.10	12.0	6.20	11.8	6.10	11.4	5.90	11.0	5.50	10.3	5.10
	-13	-13	12.8	6.20	12.6	6.20	11.8	5.60	11.4	5.40	11.0	5.20	10.3	4.80
	-11	-11	13.3	6.30	12.6	5.70	11.8	5.30	11.4	5.10	11.0	4.90	10.3	4.50
	-10	-10	13.3	5.90	12.6	5.40	11.8	5.00	11.4	4.80	11.0	4.60	10.3	4.20
	-9	-9	13.3	5.60	12.6	5.20	11.8	4.90	11.4	4.70	11.0	4.50	10.3	4.20
	-7	-8	13.3	5.40	12.6	5.00	11.8	4.70	11.4	4.50	11.0	4.30	10.3	3.90
	-5	-6	13.3	5.10	12.6	4.80	11.8	4.40	11.4	4.30	11.0	4.00	10.3	3.70
	-3	-4	13.3	4.70	12.6	4.30	11.8	4.00	11.4	3.80	11.0	3.70	10.3	3.40
	0	-1	13.3	4.30	12.6	4.00	11.8	3.70	11.4	3.60	11.0	3.40	10.3	3.20
	3	2	13.3	4.00	12.6	3.70	11.8	3.50	11.4	3.30	11.0	3.20	10.3	3.00
	5	4	13.3	3.80	12.6	3.60	11.8	3.30	11.4	3.20	11.0	3.10	10.3	2.90
	7	6	13.3	3.70	12.6	3.40	11.8	3.20	11.4	3.10	11.0	3.00	10.3	2.80
	9	8	13.3	3.50	12.6	3.30	11.8	3.10	11.4	2.90	11.0	2.90	10.3	2.60
	11	10	13.3	3.40	12.6	3.20	11.8	3.00	11.4	2.90	11.0	2.80	10.3	2.60
	13	12	13.3	3.30	12.6	3.10	11.8	2.90	11.4	2.80	11.0	2.70	10.3	2.40
	15	14	13.3	3.20	12.6	3.00	11.8	2.80	11.4	2.70	11.0	2.60	10.3	2.30
80%	-20	-20	10.5	5.90	10.5	6.00	10.5	6.10	10.2	5.90	9.8	5.60	9.1	5.10
	-19	-19	10.8	6.00	10.8	6.10	10.5	5.90	10.2	5.60	9.8	5.40	9.1	4.90
	-17	-17	11.4	6.10	11.1	6.00	10.5	5.40	10.2	5.20	9.8	5.00	9.1	4.60
	-15	-15	11.8	6.10	11.1	5.60	10.5	5.20	10.2	5.00	9.8	4.80	9.1	4.40
	-13	-13	11.8	5.70	11.1	5.30	10.5	4.90	10.2	4.70	9.8	4.50	9.1	4.20
	-11	-11	11.8	5.30	11.1	5.00	10.5	4.60	10.2	4.50	9.8	4.30	9.1	3.90
	-10	-10	11.8	5.00	11.1	4.70	10.5	4.30	10.2	4.20	9.8	3.90	9.1	3.60
	-9	-9	11.8	4.90	11.1	4.60	10.5	4.20	10.2	4.00	9.8	3.80	9.1	3.50
	-7	-8	11.8	4.70	11.1	4.40	10.5	4.00	10.2	3.80	9.8	3.70	9.1	3.40
	-5	-6	11.8	4.50	11.1	4.20	10.5	3.80	10.2	3.70	9.8	3.50	9.1	3.30
	-3	-4	11.8	4.00	11.1	3.70	10.5	3.50	10.2	3.30	9.8	3.20	9.1	3.00
	0	-1	11.8	3.70	11.1	3.50	10.5	3.20	10.2	3.10	9.8	3.00	9.1	2.80
	3	2	11.8	3.50	11.1	3.30	10.5	3.10	10.2	2.90	9.8	2.80	9.1	2.60
	5	4	11.8	3.40	11.1	3.10	10.5	2.90	10.2	2.80	9.8	2.70	9.1	2.60
	7	6	11.8	3.20	11.1	3.00	10.5	2.80	10.2	2.70	9.8	2.60	9.1	2.40
	9	8	11.8	3.10	11.1	2.90	10.5	2.70	10.2	2.60	9.8	2.40	9.1	2.30
	11	10	11.8	3.00	11.1	2.80	10.5	2.60	10.2	2.40	9.8	2.30	9.1	2.20
	13	12	11.8	2.90	11.1	2.70	10.5	2.40	10.2	2.30	9.8	2.30	9.1	2.10
	15	14	11.8	2.80	11.1	2.60	10.5	2.40	10.2	2.30	9.8	2.20	9.1	2.10

※ Peak value : Tested without defrost operation in accordance with EN14511

2. Outdoor Units

2-8. Capacity table (A2A)

AE120MXTP⁎H/EU

Heating

Combination % (Capacity index)	Outdoor temperature (°C)		Indoor temperature (DB, °C)											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	DB	WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	-20	-20	10.4	6.10	9.8	5.50	9.1	5.10	8.8	5.00	8.5	4.80	8.0	4.40
	-19	-19	10.4	5.70	9.8	5.30	9.1	5.00	8.8	4.80	8.5	4.60	8.0	4.20
	-17	-17	10.4	5.30	9.8	5.00	9.1	4.60	8.8	4.50	8.5	4.30	8.0	3.90
	-15	-15	10.4	5.10	9.8	4.80	9.1	4.50	8.8	4.30	8.5	4.00	8.0	3.70
	-13	-13	10.4	4.80	9.8	4.50	9.1	4.20	8.8	4.00	8.5	3.80	8.0	3.50
	-11	-11	10.4	4.60	9.8	4.30	9.1	3.90	8.8	3.70	8.5	3.60	8.0	3.30
	-10	-10	10.4	4.30	9.8	3.90	9.1	3.60	8.8	3.50	8.5	3.40	8.0	3.10
	-9	-9	10.4	4.20	9.8	3.80	9.1	3.60	8.8	3.40	8.5	3.30	8.0	3.10
	-7	-8	10.4	3.90	9.8	3.70	9.1	3.40	8.8	3.30	8.5	3.20	8.0	3.00
	-5	-6	10.4	3.70	9.8	3.50	9.1	3.30	8.8	3.20	8.5	3.00	8.0	2.80
	-3	-4	10.4	3.40	9.8	3.20	9.1	3.00	8.8	2.90	8.5	2.80	8.0	2.60
	0	-1	10.4	3.20	9.8	3.00	9.1	2.80	8.8	2.70	8.5	2.60	8.0	2.30
	3	2	10.4	3.00	9.8	2.80	9.1	2.70	8.8	2.60	8.5	2.40	8.0	2.20
	5	4	10.4	2.90	9.8	2.70	9.1	2.60	8.8	2.40	8.5	2.30	8.0	2.10
	7	6	10.4	2.80	9.8	2.60	9.1	2.40	8.8	2.30	8.5	2.20	8.0	2.00
	9	8	10.4	2.70	9.8	2.40	9.1	2.30	8.8	2.20	8.5	2.10	8.0	2.00
	11	10	10.4	2.60	9.8	2.30	9.1	2.20	8.8	2.10	8.5	2.00	8.0	1.90
	13	12	10.4	2.40	9.8	2.30	9.1	2.10	8.8	2.10	8.5	2.00	8.0	1.80
	15	14	10.4	2.30	9.8	2.20	9.1	2.10	8.8	2.00	8.5	1.90	8.0	1.80
60%	-20	-20	8.8	5.00	8.3	4.60	7.8	4.30	7.6	4.00	7.3	3.90	6.8	3.60
	-19	-19	8.8	4.80	8.3	4.50	7.8	4.20	7.6	3.90	7.3	3.80	6.8	3.50
	-17	-17	8.8	4.50	8.3	4.20	7.8	3.80	7.6	3.70	7.3	3.50	6.8	3.30
	-15	-15	8.8	4.30	8.3	3.90	7.8	3.70	7.6	3.50	7.3	3.40	6.8	3.10
	-13	-13	8.8	3.90	8.3	3.70	7.8	3.50	7.6	3.30	7.3	3.20	6.8	3.00
	-11	-11	8.8	3.70	8.3	3.50	7.8	3.30	7.6	3.20	7.3	3.10	6.8	2.80
	-10	-10	8.8	3.50	8.3	3.30	7.8	3.10	7.6	3.00	7.3	2.90	6.8	2.70
	-9	-9	8.8	3.40	8.3	3.20	7.8	3.00	7.6	2.90	7.3	2.80	6.8	2.60
	-7	-8	8.8	3.30	8.3	3.10	7.8	2.90	7.6	2.80	7.3	2.70	6.8	2.40
	-5	-6	8.8	3.20	8.3	3.00	7.8	2.80	7.6	2.70	7.3	2.60	6.8	2.30
	-3	-4	8.8	2.90	8.3	2.70	7.8	2.40	7.6	2.40	7.3	2.30	6.8	2.10
	0	-1	8.8	2.70	8.3	2.60	7.8	2.30	7.6	2.20	7.3	2.10	6.8	2.00
	3	2	8.8	2.60	8.3	2.30	7.8	2.20	7.6	2.10	7.3	2.00	6.8	1.90
	5	4	8.8	2.40	8.3	2.20	7.8	2.10	7.6	2.00	7.3	2.00	6.8	1.80
	7	6	8.8	2.30	8.3	2.10	7.8	2.00	7.6	2.00	7.3	1.90	6.8	1.80
	9	8	8.8	2.20	8.3	2.10	7.8	1.90	7.6	1.90	7.3	1.80	6.8	1.70
	11	10	8.8	2.10	8.3	2.00	7.8	1.90	7.6	1.80	7.3	1.80	6.8	1.60
	13	12	8.8	2.10	8.3	1.90	7.8	1.80	7.6	1.80	7.3	1.70	6.8	1.60
	15	14	8.8	2.00	8.3	1.90	7.8	1.80	7.6	1.70	7.3	1.70	6.8	1.60
50%	-20	-20	7.4	3.90	6.9	3.70	6.5	3.40	6.3	3.30	6.1	3.20	5.7	3.00
	-19	-19	7.4	3.80	6.9	3.50	6.5	3.30	6.3	3.20	6.1	3.10	5.7	2.90
	-17	-17	7.4	3.50	6.9	3.30	6.5	3.10	6.3	3.00	6.1	2.90	5.7	2.70
	-15	-15	7.4	3.40	6.9	3.20	6.5	3.00	6.3	2.90	6.1	2.80	5.7	2.60
	-13	-13	7.4	3.20	6.9	3.00	6.5	2.80	6.3	2.70	6.1	2.70	5.7	2.40
	-11	-11	7.4	3.10	6.9	2.90	6.5	2.70	6.3	2.60	6.1	2.40	5.7	2.30
	-10	-10	7.4	2.90	6.9	2.70	6.5	2.40	6.3	2.40	6.1	2.30	5.7	2.10
	-9	-9	7.4	2.80	6.9	2.70	6.5	2.40	6.3	2.30	6.1	2.20	5.7	2.10
	-7	-8	7.4	2.70	6.9	2.60	6.5	2.30	6.3	2.20	6.1	2.20	5.7	2.00
	-5	-6	7.4	2.60	6.9	2.40	6.5	2.20	6.3	2.10	6.1	2.10	5.7	1.90
	-3	-4	7.4	2.30	6.9	2.20	6.5	2.00	6.3	2.00	6.1	1.90	5.7	1.80
	0	-1	7.4	2.20	6.9	2.00	6.5	1.90	6.3	1.90	6.1	1.80	5.7	1.70
	3	2	7.4	2.00	6.9	1.90	6.5	1.80	6.3	1.80	6.1	1.70	5.7	1.60
	5	4	7.4	2.00	6.9	1.90	6.5	1.80	6.3	1.70	6.1	1.70	5.7	1.60
	7	6	7.4	1.90	6.9	1.80	6.5	1.70	6.3	1.60	6.1	1.60	5.7	1.50
	9	8	7.4	1.80	6.9	1.70	6.5	1.60	6.3	1.60	6.1	1.50	5.7	1.40
	11	10	7.4	1.80	6.9	1.70	6.5	1.60	6.3	1.50	6.1	1.50	5.7	1.40
	13	12	7.4	1.70	6.9	1.60	6.5	1.50	6.3	1.50	6.1	1.40	5.7	1.40
	15	14	7.4	1.70	6.9	1.60	6.5	1.50	6.3	1.50	6.1	1.40	5.7	1.30

※ Peak value : Tested without defrost operation in accordance with EN14511

2. Outdoor Units

2-8. Capacity table (A2A)

AE160MXTP✳H/EU

Heating

Combination % (Capacity index)	Outdoor temperature (°C)		Indoor temperature (DB, °C)											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	DB	WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100%	-20	-20	10.9	3.60	10.9	3.80	10.9	4.00	10.9	4.10	10.9	4.20	10.9	4.40
	-19	-19	11.2	3.70	11.0	3.90	10.9	4.10	11.0	4.20	11.0	4.30	10.9	4.40
	-17	-17	11.8	3.90	11.8	4.10	11.7	4.30	11.8	4.30	11.8	4.40	11.8	4.60
	-15	-15	12.3	4.20	12.2	4.40	12.2	4.50	12.3	4.60	12.3	4.70	12.3	4.80
	-13	-13	13.0	4.40	12.8	4.50	12.6	4.70	13.0	4.70	13.0	4.80	12.8	5.00
	-11	-11	13.6	4.50	13.6	4.60	13.3	4.80	13.6	4.90	13.4	4.90	13.4	5.00
	-10	-10	13.9	4.40	14.2	4.50	13.6	4.60	13.8	4.70	13.8	4.80	13.8	4.90
	-9	-9	14.1	4.40	14.4	4.60	13.8	4.70	14.1	4.80	14.1	4.80	13.9	5.00
	-7	-8	14.6	4.50	14.6	4.60	13.9	4.80	14.4	4.80	14.4	4.90	14.4	5.00
	-5	-6	15.0	4.60	14.9	4.70	14.6	4.90	15.0	4.90	15.0	5.00	14.9	5.00
	-3	-4	15.2	4.50	15.0	4.60	14.7	4.70	15.1	4.80	15.1	4.80	14.4	4.60
	0	-1	16.1	4.60	16.0	4.70	15.6	4.80	15.9	4.80	15.4	4.60	14.4	4.20
	3	2	17.0	4.70	17.0	4.80	16.0	4.70	15.9	4.50	15.4	4.30	14.4	3.90
	5	4	17.6	4.80	17.5	4.90	16.0	4.50	15.9	4.30	15.4	4.10	14.4	3.80
	7	6	18.1	4.80	17.6	4.60	16.0	4.30	15.9	4.10	15.4	3.90	14.4	3.60
	9	8	18.6	4.70	17.6	4.40	16.2	4.00	15.9	3.90	15.4	3.70	14.4	3.50
	11	10	18.6	4.50	17.6	4.20	16.2	3.90	15.9	3.70	15.4	3.60	14.4	3.40
	13	12	18.6	4.40	17.6	4.00	16.2	3.70	15.9	3.60	15.4	3.50	14.4	3.20
	15	14	18.6	4.20	17.6	3.90	16.2	3.60	15.9	3.60	15.4	3.40	14.4	3.10
90%	-20	-20	10.9	4.00	10.9	4.10	10.9	4.30	10.9	4.40	10.9	4.40	10.9	4.60
	-19	-19	11.0	4.00	11.0	4.20	11.0	4.40	10.9	4.40	10.9	4.50	10.9	4.70
	-17	-17	11.8	4.20	11.8	4.40	11.8	4.50	11.8	4.60	11.8	4.70	11.8	4.80
	-15	-15	12.3	4.50	12.3	4.60	12.3	4.80	12.3	4.90	12.3	4.90	12.2	5.00
	-13	-13	13.0	4.60	13.0	4.80	13.0	4.90	12.8	5.00	12.8	5.00	12.8	5.10
	-11	-11	13.6	4.70	13.6	4.90	13.4	5.00	13.4	5.00	13.4	5.00	13.4	5.20
	-10	-10	13.8	4.60	13.8	4.70	13.8	4.90	13.8	4.90	13.8	5.00	13.6	5.00
	-9	-9	14.1	4.70	14.1	4.80	14.1	4.90	13.9	5.00	13.9	5.00	13.6	4.90
	-7	-8	14.4	4.70	14.4	4.90	14.4	5.00	14.4	5.00	14.4	5.00	13.4	4.70
	-5	-6	15.0	4.80	15.0	4.90	15.0	5.00	14.9	5.00	14.4	4.80	13.4	4.40
	-3	-4	15.1	4.70	15.1	4.80	14.8	4.70	14.4	4.50	14.0	4.40	12.9	4.00
	0	-1	16.0	4.80	15.7	4.80	14.8	4.40	14.4	4.20	14.0	4.00	12.9	3.70
	3	2	16.7	4.80	15.7	4.40	14.8	4.10	14.4	3.90	14.0	3.80	12.9	3.50
	5	4	16.7	4.60	15.7	4.20	14.8	3.90	14.4	3.80	14.0	3.60	12.9	3.40
	7	6	16.7	4.30	15.7	4.00	14.8	3.70	14.4	3.60	14.0	3.50	12.9	3.20
	9	8	16.7	4.10	15.7	3.80	14.8	3.60	14.4	3.50	14.0	3.40	12.9	3.10
	11	10	16.7	4.00	15.7	3.70	14.8	3.50	14.4	3.40	14.0	3.20	12.9	3.00
	13	12	16.7	3.80	15.7	3.60	14.8	3.40	14.4	3.20	14.0	3.10	12.9	2.90
	15	14	16.7	3.70	15.7	3.50	14.8	3.30	14.4	3.10	14.0	3.00	12.9	2.80
80%	-20	-20	10.9	4.30	10.9	4.40	10.9	4.60	10.9	4.60	10.7	4.70	10.7	4.90
	-19	-19	11.0	4.40	10.9	4.50	10.9	4.60	10.9	4.70	10.9	4.80	10.9	4.90
	-17	-17	11.8	4.50	11.8	4.60	11.8	4.80	11.8	4.80	11.7	4.90	11.7	5.00
	-15	-15	12.3	4.80	12.3	4.90	12.2	5.00	12.2	5.00	12.2	5.10	12.2	5.20
	-13	-13	13.0	4.90	12.8	5.00	12.8	5.00	12.8	5.10	12.8	5.20	12.2	4.90
	-11	-11	13.4	5.00	13.4	5.00	13.4	5.10	13.3	5.20	13.0	5.00	12.2	4.60
	-10	-10	13.8	4.90	13.8	5.00	13.8	5.00	13.3	4.90	13.0	4.70	12.2	4.30
	-9	-9	14.1	4.90	13.9	5.00	13.8	5.00	13.3	4.80	13.0	4.60	12.2	4.20
	-7	-8	14.4	5.00	14.4	5.00	13.6	4.80	13.1	4.60	12.8	4.40	12.0	4.00
	-5	-6	15.0	5.00	14.6	4.90	13.6	4.50	13.1	4.30	12.8	4.20	12.0	3.80
	-3	-4	14.9	4.80	14.0	4.40	13.2	4.10	12.7	3.90	12.4	3.70	11.5	3.50
	0	-1	14.9	4.40	14.0	4.10	13.2	3.80	12.7	3.60	12.4	3.60	11.5	3.30
	3	2	14.9	4.10	14.0	3.80	13.2	3.60	12.7	3.50	12.4	3.30	11.5	3.10
	5	4	14.9	3.90	14.0	3.70	13.2	3.50	12.7	3.30	12.4	3.20	11.5	3.00
	7	6	14.9	3.70	14.0	3.60	13.2	3.30	12.7	3.20	12.4	3.10	11.5	2.80
	9	8	14.9	3.60	14.0	3.40	13.2	3.20	12.7	3.00	12.4	2.90	11.5	2.70
	11	10	14.9	3.50	14.0	3.30	13.2	3.00	12.7	2.90	12.4	2.80	11.5	2.60
	13	12	14.9	3.40	14.0	3.20	13.2	2.90	12.7	2.80	12.4	2.70	11.5	2.50
	15	14	14.9	3.30	14.0	3.10	13.2	2.80	12.7	2.70	12.4	2.60	11.5	2.40

※ Peak value : Tested without defrost operation in accordance with EN14511

2. Outdoor Units

2-8. Capacity table (A2A)

AE160MXTP⁎H/EU

Heating

Combination % (Capacity index)	Outdoor temperature (°C)		Indoor temperature (DB, °C)											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	DB	WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	-20	-20	10.7	4.70	10.7	4.80	10.6	4.90	10.6	5.00	10.4	4.90	9.8	4.40
	-19	-19	10.7	4.80	10.7	4.90	10.7	5.00	10.6	4.90	10.2	4.70	9.6	4.20
	-17	-17	11.7	4.90	11.5	5.00	11.0	4.70	10.7	4.50	10.4	4.30	9.8	3.90
	-15	-15	12.0	5.00	11.5	4.90	10.9	4.50	10.6	4.30	10.2	4.10	9.6	3.80
	-13	-13	12.2	4.90	11.5	4.60	10.9	4.20	10.6	4.00	10.2	3.90	9.6	3.60
	-11	-11	12.2	4.60	11.5	4.30	10.9	3.90	10.6	3.80	10.2	3.60	9.6	3.40
	-10	-10	12.2	4.30	11.5	4.00	10.9	3.70	10.6	3.60	10.2	3.50	9.6	3.20
	-9	-9	12.2	4.20	11.5	3.90	10.9	3.60	10.6	3.50	10.2	3.40	9.6	3.10
	-7	-8	12.0	4.00	11.4	3.70	10.7	3.50	10.4	3.40	10.1	3.30	9.4	3.00
	-5	-6	12.0	3.80	11.4	3.60	10.7	3.30	10.4	3.20	10.1	3.10	9.4	2.80
	-3	-4	11.6	3.50	10.9	3.30	10.2	3.00	9.9	2.90	9.6	2.80	9.0	2.60
	0	-1	11.6	3.30	10.9	3.00	10.2	2.80	9.9	2.70	9.6	2.60	9.0	2.40
	3	2	11.6	3.00	10.9	2.80	10.2	2.60	9.9	2.50	9.6	2.40	9.0	2.20
	5	4	11.6	2.90	10.9	2.70	10.2	2.50	9.9	2.40	9.6	2.30	9.0	2.20
	7	6	11.6	2.80	10.9	2.60	10.2	2.40	9.9	2.30	9.6	2.20	9.0	2.20
	9	8	11.6	2.60	10.9	2.50	10.2	2.30	9.9	2.20	9.6	2.20	9.0	2.10
	11	10	11.6	2.50	10.9	2.40	10.2	2.20	9.9	2.20	9.6	2.10	9.0	2.00
	13	12	11.6	2.50	10.9	2.30	10.2	2.20	9.9	2.10	9.6	2.10	9.0	1.90
	15	14	11.6	2.40	10.9	2.20	10.2	2.20	9.9	2.10	9.6	2.00	9.0	1.90
60%	-20	-20	9.8	5.00	9.3	4.70	8.8	4.30	8.5	4.10	8.2	4.00	7.6	3.60
	-19	-19	9.9	4.90	9.3	4.50	8.8	4.20	8.5	4.00	8.2	3.80	7.6	3.60
	-17	-17	9.9	4.50	9.3	4.20	8.8	3.80	8.5	3.70	8.2	3.60	7.6	3.30
	-15	-15	9.9	4.30	9.3	4.00	8.8	3.70	8.5	3.60	8.2	3.50	7.6	3.20
	-13	-13	9.9	4.00	9.3	3.70	8.8	3.60	8.5	3.40	8.2	3.30	7.6	3.00
	-11	-11	9.9	3.80	9.3	3.60	8.8	3.40	8.5	3.20	8.2	3.10	7.6	2.80
	-10	-10	9.9	3.60	9.3	3.40	8.8	3.10	8.5	3.00	8.2	2.90	7.6	2.70
	-9	-9	9.9	3.50	9.3	3.30	8.8	3.00	8.5	2.90	8.2	2.80	7.6	2.60
	-7	-8	9.9	3.40	9.3	3.10	8.8	2.90	8.5	2.80	8.2	2.70	7.6	2.50
	-5	-6	9.9	3.20	9.3	3.00	8.8	2.80	8.5	2.70	8.2	2.60	7.6	2.40
	-3	-4	9.9	2.90	9.3	2.70	8.8	2.50	8.5	2.40	8.2	2.30	7.6	2.20
	0	-1	9.9	2.70	9.3	2.50	8.8	2.30	8.5	2.30	8.2	2.20	7.6	2.10
	3	2	9.9	2.50	9.3	2.40	8.8	2.20	8.5	2.20	8.2	2.10	7.6	2.00
	5	4	9.9	2.40	9.3	2.30	8.8	2.20	8.5	2.10	8.2	2.10	7.6	1.90
	7	6	9.9	2.30	9.3	2.20	8.8	2.10	8.5	2.00	8.2	2.00	7.6	1.80
	9	8	9.9	2.20	9.3	2.20	8.8	2.00	8.5	2.00	8.2	1.90	7.6	1.70
	11	10	9.9	2.20	9.3	2.10	8.8	2.00	8.5	1.90	8.2	1.80	7.6	1.70
	13	12	9.9	2.10	9.3	2.00	8.8	1.90	8.5	1.80	8.2	1.80	7.6	1.60
	15	14	9.9	2.10	9.3	2.00	8.8	1.80	8.5	1.80	8.2	1.70	7.6	1.60
50%	-20	-20	8.3	4.00	7.8	3.70	7.3	3.50	7.1	3.40	6.8	3.20	6.4	3.00
	-19	-19	8.3	3.80	7.8	3.60	7.3	3.40	7.1	3.30	6.8	3.10	6.4	2.90
	-17	-17	8.3	3.60	7.8	3.40	7.3	3.20	7.1	3.00	6.8	2.90	6.4	2.70
	-15	-15	8.3	3.50	7.8	3.30	7.3	3.00	7.1	2.90	6.8	2.80	6.4	2.60
	-13	-13	8.3	3.30	7.8	3.10	7.3	2.90	7.1	2.70	6.8	2.60	6.4	2.40
	-11	-11	8.3	3.10	7.8	2.90	7.3	2.70	7.1	2.60	6.8	2.50	6.4	2.30
	-10	-10	8.3	2.90	7.8	2.70	7.3	2.50	7.1	2.40	6.8	2.30	6.4	2.20
	-9	-9	8.3	2.80	7.8	2.60	7.3	2.50	7.1	2.40	6.8	2.30	6.4	2.20
	-7	-8	8.3	2.70	7.8	2.50	7.3	2.40	7.1	2.30	6.8	2.20	6.4	2.10
	-5	-6	8.3	2.60	7.8	2.40	7.3	2.20	7.1	2.20	6.8	2.20	6.4	2.00
	-3	-4	8.3	2.30	7.8	2.20	7.3	2.10	7.1	2.10	6.8	2.00	6.4	1.80
	0	-1	8.3	2.20	7.8	2.10	7.3	2.00	7.1	1.90	6.8	1.90	6.4	1.70
	3	2	8.3	2.10	7.8	2.00	7.3	1.90	7.1	1.80	6.8	1.80	6.4	1.60
	5	4	8.3	2.10	7.8	1.90	7.3	1.80	7.1	1.80	6.8	1.70	6.4	1.60
	7	6	8.3	2.00	7.8	1.90	7.3	1.70	7.1	1.70	6.8	1.60	6.4	1.50
	9	8	8.3	1.90	7.8	1.80	7.3	1.70	7.1	1.60	6.8	1.50	6.4	1.40
	11	10	8.3	1.80	7.8	1.70	7.3	1.60	7.1	1.60	6.8	1.50	6.4	1.40
	13	12	8.3	1.80	7.8	1.70	7.3	1.60	7.1	1.50	6.8	1.50	6.4	1.40
	15	14	8.3	1.70	7.8	1.60	7.3	1.50	7.1	1.50	6.8	1.40	6.4	1.30

※ Peak value : Tested without defrost operation in accordance with EN14511

2. Outdoor Units

2-8. Capacity table (A2A)

AE044MXTPEH/EU

Cooling

Combination % (Capacity index)	Outdoor temperature (°C, DB)	Indoor temperature (WB, °C)													
		14		16		18		19		20		22		24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	DB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100%	10	3.0	0.47	3.6	0.53	4.2	0.65	4.5	0.70	4.7	0.76	5.3	0.82	5.9	0.94
	12	3.0	0.47	3.6	0.53	4.2	0.65	4.5	0.70	4.7	0.76	5.3	0.88	5.9	0.94
	14	3.0	0.47	3.6	0.53	4.1	0.65	4.5	0.70	4.7	0.76	5.3	0.88	5.9	1.00
	16	3.0	0.47	3.6	0.59	4.1	0.65	4.5	0.70	4.7	0.76	5.3	0.88	5.9	1.00
	18	3.0	0.47	3.6	0.59	4.1	0.70	4.5	0.76	4.7	0.82	5.3	0.94	5.9	1.11
	20	3.0	0.47	3.6	0.59	4.1	0.70	4.5	0.76	4.7	0.88	5.3	1.00	5.8	1.17
	21	3.0	0.47	3.6	0.59	4.1	0.70	4.5	0.82	4.7	0.88	5.3	1.06	5.8	1.23
	23	3.0	0.53	3.6	0.65	4.1	0.76	4.5	0.88	4.7	0.94	5.3	1.11	5.8	1.29
	25	3.0	0.53	3.6	0.70	4.1	0.82	4.4	0.94	4.7	1.00	5.3	1.23	5.7	1.35
	27	3.0	0.59	3.6	0.70	4.1	0.88	4.4	1.00	4.7	1.06	5.3	1.29	5.7	1.41
	29	3.0	0.59	3.6	0.76	4.1	0.94	4.4	1.06	4.7	1.17	5.3	1.41	5.6	1.47
	31	3.0	0.65	3.6	0.82	4.1	1.00	4.4	1.11	4.7	1.23	5.3	1.47	5.5	1.52
	33	3.0	0.70	3.6	0.88	4.1	1.06	4.4	1.17	4.7	1.29	5.3	1.58	5.3	1.58
	35	3.0	0.70	3.5	0.94	4.1	1.17	4.4	1.29	4.7	1.41	5.2	1.64	5.3	1.64
	37	2.9	0.76	3.5	1.00	4.0	1.23	4.3	1.35	4.5	1.52	4.9	1.70	5.0	1.70
	39	2.8	0.82	3.4	1.06	3.9	1.29	4.2	1.47	4.5	1.58	4.7	1.76	4.8	1.76
	42	2.8	0.88	3.4	1.11	3.9	1.41	4.2	1.52	4.5	1.70	4.7	1.82	4.8	1.82
	44	2.8	0.94	3.4	1.17	3.9	1.47	4.2	1.64	4.5	1.82	4.6	1.88	4.7	1.88
	46	2.8	0.94	3.4	1.23	3.9	1.52	4.2	1.70	4.5	1.88	4.5	1.94	4.7	1.94
90%	10	2.7	0.41	3.2	0.47	3.8	0.59	4.0	0.59	4.3	0.65	4.8	0.76	5.3	0.82
	12	2.7	0.41	3.2	0.47	3.8	0.59	4.0	0.65	4.3	0.65	4.8	0.76	5.3	0.88
	14	2.7	0.41	3.2	0.47	3.8	0.59	4.0	0.65	4.3	0.70	4.8	0.76	5.3	0.88
	16	2.7	0.41	3.2	0.53	3.8	0.59	4.0	0.65	4.3	0.70	4.8	0.76	5.3	0.88
	18	2.7	0.41	3.2	0.53	3.8	0.59	4.0	0.65	4.3	0.70	4.8	0.82	5.3	0.94
	20	2.7	0.41	3.2	0.53	3.7	0.65	4.0	0.65	4.3	0.70	4.8	0.88	5.3	1.00
	21	2.7	0.41	3.2	0.53	3.7	0.65	4.0	0.70	4.2	0.76	4.8	0.88	5.3	1.06
	23	2.7	0.47	3.2	0.53	3.7	0.65	4.0	0.76	4.2	0.82	4.8	0.94	5.3	1.11
	25	2.7	0.47	3.2	0.59	3.7	0.70	4.0	0.76	4.2	0.88	4.8	1.06	5.3	1.23
	27	2.7	0.47	3.2	0.65	3.7	0.76	4.0	0.82	4.2	0.94	4.7	1.11	5.3	1.29
	29	2.7	0.53	3.2	0.65	3.7	0.82	4.0	0.88	4.2	1.00	4.7	1.17	5.3	1.35
	31	2.7	0.59	3.2	0.70	3.7	0.88	4.0	0.94	4.2	1.06	4.7	1.23	5.3	1.47
	33	2.7	0.59	3.2	0.76	3.7	0.94	4.0	1.00	4.2	1.11	4.7	1.35	5.3	1.58
	35	2.7	0.65	3.2	0.82	3.7	1.00	4.0	1.11	4.2	1.17	4.7	1.41	5.2	1.64
	37	2.6	0.65	3.1	0.88	3.6	1.06	3.8	1.17	4.1	1.29	4.6	1.52	4.9	1.70
	39	2.5	0.70	3.0	0.88	3.5	1.11	3.8	1.23	4.0	1.35	4.5	1.64	4.7	1.76
	42	2.5	0.76	3.0	0.94	3.5	1.17	3.8	1.29	4.0	1.47	4.5	1.70	4.7	1.82
	44	2.5	0.76	3.0	1.00	3.5	1.23	3.8	1.41	4.0	1.52	4.5	1.82	4.6	1.88
	46	2.5	0.82	3.0	1.06	3.5	1.35	3.8	1.47	4.0	1.58	4.5	1.94	4.5	1.94
80%	10	2.4	0.35	2.9	0.41	3.3	0.47	3.6	0.53	3.8	0.59	4.3	0.65	4.7	0.70
	12	2.4	0.35	2.9	0.41	3.3	0.53	3.6	0.53	3.8	0.59	4.3	0.65	4.7	0.76
	14	2.4	0.35	2.9	0.41	3.3	0.53	3.6	0.53	3.8	0.59	4.3	0.65	4.7	0.76
	16	2.4	0.35	2.9	0.47	3.3	0.53	3.6	0.59	3.8	0.59	4.3	0.70	4.7	0.76
	18	2.4	0.35	2.9	0.47	3.3	0.53	3.6	0.59	3.8	0.59	4.3	0.70	4.7	0.76
	20	2.4	0.35	2.9	0.47	3.3	0.53	3.6	0.59	3.8	0.65	4.3	0.70	4.7	0.82
	21	2.4	0.41	2.8	0.47	3.3	0.53	3.6	0.59	3.8	0.65	4.2	0.76	4.7	0.88
	23	2.4	0.41	2.8	0.47	3.3	0.59	3.5	0.65	3.8	0.70	4.2	0.82	4.7	0.94
	25	2.4	0.41	2.8	0.53	3.3	0.59	3.5	0.65	3.8	0.70	4.2	0.88	4.7	1.00
	27	2.4	0.41	2.8	0.53	3.3	0.65	3.5	0.70	3.8	0.76	4.2	0.94	4.7	1.06
	29	2.4	0.47	2.8	0.59	3.3	0.70	3.5	0.76	3.8	0.82	4.2	1.00	4.7	1.17
	31	2.4	0.47	2.8	0.59	3.3	0.76	3.5	0.82	3.8	0.88	4.2	1.06	4.7	1.23
	33	2.4	0.53	2.8	0.65	3.3	0.76	3.5	0.88	3.8	0.94	4.2	1.11	4.7	1.29
	35	2.4	0.53	2.8	0.70	3.3	0.82	3.5	0.94	3.8	1.00	4.2	1.17	4.7	1.41
	37	2.3	0.59	2.8	0.70	3.2	0.88	3.4	1.00	3.6	1.06	4.1	1.29	4.5	1.47
	39	2.3	0.59	2.7	0.76	3.1	0.94	3.3	1.06	3.6	1.11	4.0	1.35	4.5	1.58
	42	2.3	0.65	2.7	0.82	3.1	1.00	3.3	1.11	3.6	1.23	4.0	1.47	4.5	1.70
	44	2.3	0.70	2.7	0.88	3.1	1.06	3.3	1.17	3.6	1.29	4.0	1.52	4.5	1.76
	46	2.3	0.70	2.7	0.88	3.1	1.11	3.3	1.23	3.6	1.35	4.0	1.58	4.5	1.88

2. Outdoor Units

2-8. Capacity table (A2A)

AE044MXTPEH/EU

Cooling

Combination % (Capacity index)	Outdoor temperature (°C, DB)	Indoor temperature (WB, °C)													
		14		16		18		19		20		22		24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	DB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	10	2.1	0.29	2.5	0.35	2.9	0.41	3.1	0.47	3.3	0.47	3.7	0.59	4.1	0.65
	12	2.1	0.29	2.5	0.35	2.9	0.41	3.1	0.47	3.3	0.53	3.7	0.59	4.1	0.65
	14	2.1	0.29	2.5	0.35	2.9	0.47	3.1	0.47	3.3	0.53	3.7	0.59	4.1	0.65
	16	2.1	0.29	2.5	0.41	2.9	0.47	3.1	0.47	3.3	0.53	3.7	0.59	4.1	0.65
	18	2.1	0.35	2.5	0.41	2.9	0.47	3.1	0.47	3.3	0.53	3.7	0.59	4.1	0.70
	20	2.1	0.35	2.5	0.41	2.9	0.47	3.1	0.53	3.3	0.53	3.7	0.59	4.1	0.70
	21	2.1	0.35	2.5	0.41	2.9	0.47	3.1	0.53	3.3	0.53	3.7	0.65	4.1	0.70
	23	2.1	0.35	2.5	0.41	2.9	0.47	3.1	0.53	3.3	0.59	3.7	0.65	4.1	0.76
	25	2.1	0.35	2.5	0.41	2.9	0.53	3.1	0.59	3.3	0.59	3.7	0.70	4.1	0.82
	27	2.1	0.35	2.5	0.47	2.9	0.53	3.1	0.59	3.3	0.65	3.7	0.76	4.1	0.88
	29	2.1	0.41	2.5	0.47	2.9	0.59	3.1	0.65	3.3	0.70	3.7	0.82	4.1	0.94
	31	2.1	0.41	2.5	0.53	2.9	0.65	3.1	0.70	3.3	0.76	3.7	0.88	4.1	1.00
	33	2.1	0.41	2.5	0.53	2.9	0.65	3.1	0.70	3.3	0.76	3.7	0.94	4.1	1.06
	35	2.1	0.47	2.5	0.59	2.9	0.70	3.1	0.76	3.3	0.82	3.7	1.00	4.1	1.11
	37	2.0	0.47	2.4	0.59	2.8	0.76	3.0	0.82	3.2	0.88	3.6	1.06	4.0	1.23
	39	1.9	0.53	2.3	0.65	2.8	0.76	3.0	0.88	3.1	0.94	3.5	1.11	3.9	1.29
	42	1.9	0.53	2.3	0.70	2.8	0.82	3.0	0.94	3.1	1.00	3.5	1.17	3.9	1.35
	44	1.9	0.59	2.3	0.70	2.8	0.88	3.0	0.94	3.1	1.06	3.5	1.23	3.9	1.47
	46	1.9	0.59	2.3	0.76	2.8	0.94	3.0	1.00	3.1	1.11	3.5	1.29	3.9	1.52
60%	10	1.8	0.29	2.1	0.29	2.5	0.35	2.7	0.41	2.8	0.41	3.2	0.47	3.5	0.53
	12	1.8	0.29	2.1	0.29	2.5	0.35	2.7	0.41	2.8	0.41	3.2	0.47	3.5	0.53
	14	1.8	0.29	2.1	0.35	2.5	0.35	2.7	0.41	2.8	0.41	3.2	0.47	3.5	0.53
	16	1.8	0.29	2.1	0.35	2.5	0.41	2.7	0.41	2.8	0.41	3.2	0.47	3.5	0.53
	18	1.8	0.29	2.1	0.35	2.5	0.41	2.6	0.41	2.8	0.47	3.2	0.53	3.5	0.59
	20	1.8	0.29	2.1	0.35	2.5	0.41	2.6	0.41	2.8	0.47	3.2	0.53	3.5	0.59
	21	1.8	0.29	2.1	0.35	2.5	0.41	2.6	0.41	2.8	0.47	3.2	0.53	3.5	0.59
	23	1.8	0.29	2.1	0.35	2.5	0.41	2.6	0.41	2.8	0.47	3.2	0.53	3.5	0.65
	25	1.8	0.29	2.1	0.35	2.5	0.41	2.6	0.47	2.8	0.47	3.2	0.59	3.5	0.65
	27	1.8	0.29	2.1	0.35	2.5	0.47	2.6	0.47	2.8	0.53	3.1	0.59	3.5	0.70
	29	1.8	0.35	2.1	0.41	2.5	0.47	2.6	0.53	2.8	0.59	3.1	0.65	3.5	0.76
	31	1.8	0.35	2.1	0.41	2.5	0.53	2.6	0.53	2.8	0.59	3.1	0.70	3.5	0.82
	33	1.8	0.35	2.1	0.47	2.5	0.53	2.6	0.59	2.8	0.65	3.1	0.76	3.5	0.88
	35	1.8	0.41	2.1	0.47	2.5	0.59	2.6	0.65	2.8	0.70	3.1	0.76	3.5	0.94
	37	1.8	0.41	2.1	0.53	2.4	0.59	2.6	0.65	2.7	0.70	3.1	0.82	3.4	1.00
	39	1.7	0.41	2.0	0.53	2.3	0.65	2.5	0.70	2.7	0.76	3.0	0.88	3.3	1.06
	42	1.7	0.47	2.0	0.59	2.3	0.70	2.5	0.76	2.7	0.82	3.0	0.94	3.3	1.11
	44	1.7	0.47	2.0	0.59	2.3	0.70	2.5	0.76	2.7	0.82	3.0	1.00	3.3	1.17
	46	1.7	0.53	2.0	0.65	2.3	0.76	2.5	0.82	2.7	0.88	3.0	1.06	3.3	1.23
50%	10	1.5	0.23	1.8	0.29	2.1	0.29	2.3	0.35	2.4	0.35	2.6	0.41	3.0	0.41
	12	1.5	0.23	1.8	0.29	2.1	0.29	2.2	0.35	2.4	0.35	2.6	0.41	3.0	0.41
	14	1.5	0.23	1.8	0.29	2.1	0.29	2.2	0.35	2.4	0.35	2.6	0.41	3.0	0.47
	16	1.5	0.23	1.8	0.29	2.1	0.29	2.2	0.35	2.4	0.35	2.6	0.41	3.0	0.47
	18	1.5	0.23	1.8	0.29	2.1	0.35	2.2	0.35	2.4	0.35	2.6	0.41	3.0	0.47
	20	1.5	0.23	1.8	0.29	2.1	0.35	2.2	0.35	2.4	0.35	2.6	0.41	3.0	0.47
	21	1.5	0.23	1.8	0.29	2.1	0.35	2.2	0.35	2.4	0.35	2.6	0.41	3.0	0.47
	23	1.5	0.23	1.8	0.29	2.1	0.35	2.2	0.35	2.4	0.41	2.6	0.41	3.0	0.47
	25	1.5	0.23	1.8	0.29	2.1	0.35	2.2	0.35	2.4	0.41	2.6	0.47	3.0	0.53
	27	1.5	0.23	1.8	0.29	2.1	0.35	2.2	0.41	2.3	0.41	2.6	0.47	3.0	0.53
	29	1.5	0.29	1.8	0.35	2.1	0.41	2.2	0.41	2.3	0.47	2.6	0.53	3.0	0.59
	31	1.5	0.29	1.8	0.35	2.1	0.41	2.2	0.47	2.3	0.47	2.6	0.53	3.0	0.65
	33	1.5	0.29	1.8	0.35	2.1	0.41	2.2	0.47	2.3	0.53	2.6	0.59	3.0	0.65
	35	1.5	0.35	1.8	0.41	2.1	0.47	2.2	0.47	2.3	0.53	2.6	0.65	2.9	0.70
	37	1.4	0.35	1.7	0.41	2.0	0.47	2.1	0.53	2.3	0.59	2.6	0.65	2.8	0.76
	39	1.4	0.35	1.7	0.41	1.9	0.53	2.1	0.59	2.2	0.59	2.5	0.70	2.8	0.82
	42	1.4	0.35	1.7	0.47	1.9	0.53	2.1	0.59	2.2	0.65	2.5	0.76	2.8	0.82
	44	1.4	0.41	1.7	0.47	1.9	0.59	2.1	0.65	2.2	0.65	2.5	0.76	2.8	0.88
	46	1.4	0.41	1.7	0.53	1.9	0.59	2.1	0.65	2.2	0.70	2.5	0.82	2.8	0.94

2. Outdoor Units

2-8. Capacity table (A2A)

AE066MXTPEH/EU

Cooling

Combination % (Capacity index)	Outdoor temperature (°C, DB)	Indoor temperature (WB, °C)													
		14		16		18		19		20		22		24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	DB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100%	10	4.5	0.67	5.4	0.84	6.2	1.01	6.7	1.01	7.1	1.10	8.0	1.27	8.9	1.43
	12	4.5	0.67	5.4	0.84	6.2	1.01	6.7	1.10	7.1	1.18	8.0	1.35	8.8	1.52
	14	4.5	0.67	5.4	0.84	6.2	1.01	6.7	1.10	7.1	1.18	8.0	1.35	8.8	1.52
	16	4.5	0.67	5.4	0.84	6.2	1.01	6.7	1.10	7.1	1.18	8.0	1.35	8.8	1.60
	18	4.5	0.76	5.4	0.84	6.2	1.01	6.7	1.10	7.1	1.18	8.0	1.43	8.8	1.69
	20	4.5	0.76	5.4	0.93	6.2	1.10	6.7	1.18	7.0	1.35	8.0	1.52	8.8	1.86
	21	4.5	0.76	5.4	0.93	6.2	1.10	6.7	1.27	7.0	1.35	8.0	1.60	8.8	1.86
	23	4.5	0.76	5.4	1.01	6.2	1.18	6.7	1.35	7.0	1.43	7.9	1.77	8.7	2.02
	25	4.5	0.84	5.4	1.01	6.2	1.27	6.7	1.43	7.0	1.52	7.9	1.86	8.6	2.11
	27	4.5	0.84	5.4	1.10	6.2	1.35	6.6	1.52	7.0	1.69	7.9	2.02	8.4	2.19
	29	4.5	0.93	5.4	1.18	6.2	1.43	6.6	1.60	7.0	1.77	7.9	2.11	8.4	2.28
	31	4.5	1.01	5.4	1.27	6.2	1.60	6.6	1.69	7.0	1.94	7.9	2.28	8.2	2.36
	33	4.5	1.01	5.4	1.35	6.2	1.69	6.6	1.86	7.0	2.02	7.9	2.45	8.0	2.45
	35	4.5	1.10	5.3	1.43	6.2	1.77	6.6	1.94	7.0	2.19	7.7	2.53	7.9	2.53
	37	4.3	1.18	5.2	1.52	6.0	1.86	6.4	2.11	6.8	2.28	7.4	2.61	7.6	2.61
	39	4.2	1.27	5.0	1.60	5.9	2.02	6.2	2.28	6.7	2.45	7.1	2.70	7.3	2.70
	42	4.2	1.35	5.0	1.69	5.9	2.11	6.2	2.36	6.7	2.61	7.0	2.78	7.1	2.78
	44	4.2	1.43	5.0	1.77	5.9	2.28	6.2	2.53	6.7	2.78	6.9	2.87	7.0	2.87
	46	4.2	1.52	5.0	1.94	5.9	2.36	6.2	2.61	6.7	2.95	6.8	2.95	7.0	2.95
90%	10	4.0	0.59	4.8	0.76	5.6	0.84	6.1	0.93	6.4	1.01	7.2	1.18	8.0	1.27
	12	4.0	0.59	4.8	0.76	5.6	0.84	6.1	0.93	6.4	1.01	7.1	1.18	8.0	1.35
	14	4.0	0.59	4.8	0.76	5.6	0.93	6.1	0.93	6.4	1.01	7.1	1.18	8.0	1.35
	16	4.0	0.67	4.8	0.76	5.6	0.93	6.0	1.01	6.4	1.10	7.1	1.18	8.0	1.35
	18	4.0	0.67	4.8	0.76	5.6	0.93	6.0	1.01	6.3	1.10	7.1	1.27	8.0	1.43
	20	4.0	0.67	4.8	0.76	5.6	0.93	6.0	1.01	6.3	1.10	7.1	1.35	8.0	1.52
	21	4.0	0.67	4.8	0.84	5.6	0.93	6.0	1.10	6.3	1.18	7.1	1.35	8.0	1.60
	23	4.0	0.67	4.8	0.84	5.6	1.01	6.0	1.10	6.3	1.27	7.1	1.43	7.9	1.69
	25	4.0	0.67	4.8	0.93	5.6	1.10	6.0	1.18	6.3	1.35	7.1	1.60	7.9	1.86
	27	4.0	0.76	4.8	0.93	5.5	1.18	6.0	1.27	6.3	1.43	7.1	1.69	7.9	1.94
	29	4.0	0.84	4.8	1.01	5.5	1.27	6.0	1.35	6.3	1.52	7.1	1.77	7.9	2.11
	31	4.0	0.84	4.8	1.10	5.5	1.35	6.0	1.52	6.3	1.60	7.1	1.94	7.9	2.28
	33	4.0	0.93	4.8	1.18	5.5	1.43	6.0	1.60	6.3	1.77	7.1	2.02	7.9	2.45
	35	4.0	1.01	4.8	1.27	5.5	1.52	6.0	1.69	6.3	1.86	7.0	2.19	7.7	2.53
	37	3.9	1.01	4.7	1.35	5.4	1.60	5.8	1.77	6.2	1.94	6.9	2.36	7.4	2.61
	39	3.8	1.10	4.6	1.43	5.3	1.69	5.6	1.94	6.0	2.11	6.7	2.53	7.1	2.70
	42	3.8	1.18	4.6	1.52	5.3	1.86	5.6	2.02	6.0	2.19	6.7	2.70	7.0	2.78
	44	3.8	1.18	4.6	1.60	5.3	1.94	5.6	2.11	6.0	2.36	6.7	2.78	6.9	2.87
	46	3.8	1.27	4.6	1.69	5.3	2.02	5.6	2.28	6.0	2.45	6.7	2.95	6.8	2.95
80%	10	3.6	0.51	4.3	0.67	5.0	0.76	5.4	0.84	5.7	0.84	6.4	1.01	7.1	1.10
	12	3.6	0.51	4.3	0.67	5.0	0.76	5.4	0.84	5.7	0.93	6.4	1.01	7.1	1.18
	14	3.6	0.59	4.3	0.67	5.0	0.76	5.4	0.84	5.7	0.93	6.4	1.01	7.1	1.18
	16	3.6	0.59	4.3	0.67	5.0	0.76	5.4	0.84	5.7	0.93	6.4	1.10	7.1	1.18
	18	3.6	0.59	4.3	0.67	5.0	0.84	5.4	0.84	5.7	0.93	6.3	1.10	7.1	1.18
	20	3.6	0.59	4.3	0.67	5.0	0.84	5.4	0.93	5.7	0.93	6.3	1.10	7.0	1.27
	21	3.6	0.59	4.3	0.67	5.0	0.84	5.4	0.93	5.6	1.01	6.3	1.18	7.0	1.35
	23	3.6	0.59	4.3	0.76	5.0	0.84	5.3	0.93	5.6	1.01	6.3	1.27	7.0	1.43
	25	3.6	0.59	4.3	0.76	5.0	0.93	5.3	1.01	5.6	1.10	6.3	1.35	7.0	1.52
	27	3.6	0.67	4.3	0.84	4.9	1.01	5.3	1.10	5.6	1.18	6.3	1.43	7.0	1.69
	29	3.6	0.67	4.3	0.84	4.9	1.10	5.3	1.18	5.6	1.27	6.3	1.52	7.0	1.77
	31	3.6	0.76	4.2	0.93	4.9	1.10	5.3	1.27	5.6	1.35	6.3	1.60	7.0	1.86
	33	3.6	0.76	4.2	1.01	4.9	1.18	5.3	1.35	5.6	1.43	6.3	1.69	7.0	2.02
	35	3.6	0.84	4.2	1.01	4.9	1.27	5.3	1.43	5.6	1.52	6.3	1.86	7.0	2.11
	37	3.4	0.93	4.1	1.10	4.8	1.35	5.1	1.52	5.5	1.69	6.2	1.94	6.8	2.28
	39	3.3	0.93	4.0	1.18	4.7	1.43	5.0	1.60	5.4	1.77	6.0	2.11	6.7	2.45
	42	3.3	1.01	4.0	1.27	4.7	1.52	5.0	1.69	5.4	1.86	6.0	2.19	6.7	2.61
	44	3.3	1.01	4.0	1.35	4.7	1.60	5.0	1.77	5.4	1.94	6.0	2.36	6.7	2.78
	46	3.3	1.10	4.0	1.35	4.7	1.69	5.0	1.86	5.4	2.02	6.0	2.45	6.7	2.87

2. Outdoor Units

2-8. Capacity table (A2A)

AE066MXTPEH/EU

Cooling

Combination % (Capacity index)	Outdoor temperature (°C, DB)	Indoor temperature (WB, °C)													
		14		16		18		19		20		22		24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	DB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	10	3.2	0.51	3.8	0.59	4.4	0.67	4.7	0.67	5.0	0.76	5.6	0.84	6.2	0.93
	12	3.2	0.51	3.8	0.59	4.4	0.67	4.7	0.67	5.0	0.76	5.6	0.84	6.2	1.01
	14	3.2	0.51	3.8	0.59	4.4	0.67	4.7	0.76	5.0	0.76	5.6	0.93	6.2	1.01
	16	3.2	0.51	3.8	0.59	4.4	0.67	4.7	0.76	5.0	0.76	5.5	0.93	6.2	1.01
	18	3.2	0.51	3.8	0.59	4.4	0.67	4.7	0.76	5.0	0.84	5.5	0.93	6.2	1.01
	20	3.2	0.51	3.8	0.59	4.4	0.67	4.7	0.76	4.9	0.84	5.5	0.93	6.2	1.10
	21	3.2	0.51	3.8	0.59	4.4	0.76	4.7	0.76	4.9	0.84	5.5	0.93	6.2	1.10
	23	3.2	0.51	3.8	0.59	4.3	0.76	4.7	0.84	4.9	0.84	5.5	1.01	6.2	1.18
	25	3.2	0.51	3.8	0.67	4.3	0.76	4.7	0.84	4.9	0.93	5.5	1.10	6.2	1.27
	27	3.2	0.59	3.8	0.67	4.3	0.84	4.7	0.93	4.9	1.01	5.5	1.18	6.2	1.35
	29	3.2	0.59	3.7	0.76	4.3	0.93	4.7	1.01	4.9	1.10	5.5	1.27	6.2	1.43
	31	3.2	0.67	3.7	0.76	4.3	0.93	4.7	1.01	4.9	1.10	5.5	1.35	6.2	1.52
	33	3.2	0.67	3.7	0.84	4.3	1.01	4.7	1.10	4.9	1.18	5.5	1.43	6.2	1.69
	35	3.1	0.67	3.7	0.84	4.3	1.10	4.7	1.18	4.9	1.27	5.5	1.52	6.2	1.77
	37	3.0	0.76	3.6	0.93	4.2	1.18	4.5	1.27	4.8	1.35	5.4	1.60	6.0	1.86
	39	3.0	0.76	3.5	1.01	4.1	1.18	4.4	1.35	4.7	1.43	5.3	1.69	5.8	2.02
	42	3.0	0.84	3.5	1.01	4.1	1.27	4.4	1.43	4.7	1.52	5.3	1.77	5.8	2.11
	44	3.0	0.84	3.5	1.10	4.1	1.35	4.4	1.52	4.7	1.60	5.3	1.94	5.8	2.19
	46	3.0	0.93	3.5	1.18	4.1	1.43	4.4	1.60	4.7	1.69	5.3	2.02	5.8	2.36
60%	10	2.7	0.42	3.3	0.51	3.8	0.59	4.0	0.59	4.3	0.67	4.8	0.76	5.3	0.84
	12	2.7	0.42	3.3	0.51	3.8	0.59	4.0	0.59	4.3	0.67	4.8	0.76	5.3	0.84
	14	2.7	0.42	3.3	0.51	3.8	0.59	4.0	0.59	4.3	0.67	4.8	0.76	5.3	0.84
	16	2.7	0.42	3.3	0.51	3.8	0.59	4.0	0.59	4.3	0.67	4.8	0.76	5.3	0.84
	18	2.7	0.42	3.3	0.51	3.8	0.59	4.0	0.67	4.2	0.67	4.8	0.76	5.3	0.84
	20	2.7	0.42	3.3	0.51	3.7	0.59	4.0	0.67	4.2	0.67	4.8	0.76	5.3	0.93
	21	2.7	0.42	3.3	0.51	3.7	0.59	4.0	0.67	4.2	0.67	4.8	0.76	5.3	0.93
	23	2.7	0.42	3.3	0.51	3.7	0.59	4.0	0.67	4.2	0.76	4.8	0.84	5.3	0.93
	25	2.7	0.42	3.2	0.51	3.7	0.67	4.0	0.67	4.2	0.76	4.8	0.93	5.3	1.01
	27	2.7	0.51	3.2	0.59	3.7	0.67	4.0	0.76	4.2	0.84	4.8	0.93	5.3	1.10
	29	2.7	0.51	3.2	0.59	3.7	0.76	4.0	0.76	4.2	0.84	4.8	1.01	5.3	1.18
	31	2.7	0.51	3.2	0.67	3.7	0.76	4.0	0.84	4.2	0.93	4.8	1.10	5.3	1.27
	33	2.6	0.59	3.2	0.67	3.7	0.84	4.0	0.93	4.2	1.01	4.8	1.18	5.3	1.35
	35	2.6	0.59	3.2	0.76	3.7	0.84	4.0	0.93	4.2	1.01	4.8	1.18	5.3	1.43
	37	2.6	0.67	3.1	0.76	3.6	0.93	3.9	1.01	4.1	1.10	4.6	1.27	5.1	1.52
	39	2.6	0.67	3.0	0.84	3.5	1.01	3.8	1.10	4.0	1.18	4.5	1.35	5.0	1.60
	42	2.6	0.67	3.0	0.84	3.5	1.01	3.8	1.10	4.0	1.27	4.5	1.43	5.0	1.69
	44	2.6	0.76	3.0	0.93	3.5	1.10	3.8	1.18	4.0	1.27	4.5	1.52	5.0	1.77
	46	2.6	0.76	3.0	0.93	3.5	1.18	3.8	1.27	4.0	1.35	4.5	1.60	5.0	1.86
50%	10	2.3	0.34	2.7	0.42	3.2	0.51	3.3	0.51	3.6	0.51	4.0	0.59	4.4	0.67
	12	2.3	0.34	2.7	0.42	3.2	0.51	3.3	0.51	3.5	0.51	4.0	0.59	4.4	0.67
	14	2.3	0.34	2.7	0.42	3.2	0.51	3.3	0.51	3.5	0.51	4.0	0.59	4.4	0.67
	16	2.3	0.34	2.7	0.42	3.2	0.51	3.3	0.51	3.5	0.59	4.0	0.59	4.4	0.67
	18	2.3	0.34	2.7	0.42	3.1	0.51	3.3	0.51	3.5	0.59	4.0	0.67	4.4	0.67
	20	2.3	0.34	2.7	0.42	3.1	0.51	3.3	0.51	3.5	0.59	4.0	0.67	4.4	0.76
	21	2.3	0.34	2.6	0.42	3.1	0.51	3.3	0.51	3.5	0.59	4.0	0.67	4.4	0.76
	23	2.3	0.42	2.6	0.42	3.1	0.51	3.3	0.59	3.5	0.59	4.0	0.67	4.4	0.76
	25	2.2	0.42	2.6	0.42	3.1	0.51	3.3	0.59	3.5	0.59	4.0	0.67	4.4	0.76
	27	2.2	0.42	2.6	0.51	3.1	0.59	3.3	0.59	3.5	0.67	4.0	0.76	4.4	0.84
	29	2.2	0.42	2.6	0.51	3.1	0.59	3.3	0.67	3.5	0.67	4.0	0.76	4.4	0.93
	31	2.2	0.42	2.6	0.51	3.1	0.59	3.3	0.67	3.5	0.76	4.0	0.84	4.4	0.93
	33	2.2	0.51	2.6	0.59	3.1	0.67	3.3	0.76	3.5	0.76	4.0	0.93	4.4	1.01
	35	2.2	0.51	2.6	0.59	3.1	0.67	3.3	0.76	3.5	0.84	4.0	0.93	4.4	1.10
	37	2.2	0.51	2.6	0.59	3.0	0.76	3.2	0.84	3.4	0.84	3.8	1.01	4.2	1.18
	39	2.1	0.59	2.6	0.67	2.9	0.76	3.2	0.84	3.3	0.93	3.8	1.10	4.1	1.27
	42	2.1	0.59	2.6	0.67	2.9	0.84	3.2	0.93	3.3	1.01	3.8	1.10	4.1	1.27
	44	2.1	0.59	2.6	0.76	2.9	0.84	3.2	0.93	3.3	1.01	3.8	1.18	4.1	1.35
	46	2.1	0.67	2.6	0.76	2.9	0.93	3.2	1.01	3.3	1.10	3.8	1.27	4.1	1.43

2. Outdoor Units

2-8. Capacity table (A2A)

AE090MXTPEH/EU

Cooling

Combination % (Capacity index)	Outdoor temperature (°C, DB)	Indoor temperature (WB, °C)													
		14		16		18		19		20		22		24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	DB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100%	10	6.2	0.97	7.3	1.08	8.6	1.29	9.1	1.40	9.7	1.51	10.9	1.72	12.0	1.94
	12	6.2	0.97	7.3	1.18	8.6	1.40	9.1	1.51	9.7	1.61	10.9	1.83	12.0	2.04
	14	6.2	0.97	7.3	1.18	8.6	1.40	9.1	1.51	9.7	1.61	10.9	1.83	12.0	2.04
	16	6.2	0.97	7.3	1.18	8.6	1.40	9.1	1.51	9.7	1.61	10.9	1.83	12.0	2.15
	18	6.2	0.97	7.3	1.18	8.6	1.40	9.1	1.51	9.7	1.61	10.9	1.94	12.0	2.26
	20	6.2	0.97	7.3	1.18	8.6	1.51	9.1	1.61	9.7	1.83	10.9	2.15	12.0	2.47
	21	6.1	1.08	7.3	1.29	8.6	1.51	9.1	1.72	9.7	1.83	10.9	2.15	12.0	2.58
	23	6.1	1.08	7.3	1.29	8.6	1.61	9.1	1.83	9.7	1.94	10.8	2.37	11.9	2.69
	25	6.1	1.08	7.3	1.40	8.6	1.72	9.1	1.94	9.7	2.15	10.8	2.58	11.7	2.80
	27	6.1	1.18	7.3	1.51	8.4	1.83	9.0	2.04	9.7	2.26	10.8	2.69	11.6	3.01
	29	6.1	1.29	7.3	1.61	8.4	2.04	9.0	2.15	9.6	2.47	10.8	2.91	11.4	3.12
	31	6.1	1.40	7.3	1.72	8.4	2.15	9.0	2.37	9.6	2.58	10.8	3.12	11.3	3.23
	33	6.1	1.40	7.3	1.83	8.4	2.26	9.0	2.47	9.6	2.80	10.8	3.34	10.9	3.34
	35	6.1	1.51	7.2	1.94	8.4	2.47	9.0	2.69	9.6	2.91	10.6	3.44	10.8	3.44
	37	5.9	1.61	7.0	2.04	8.2	2.58	8.8	2.91	9.2	3.12	10.0	3.55	10.2	3.55
	39	5.7	1.72	6.9	2.15	8.0	2.80	8.6	3.01	9.1	3.34	9.7	3.66	9.9	3.66
	42	5.7	1.83	6.9	2.37	8.0	2.91	8.6	3.23	9.1	3.55	9.6	3.77	9.8	3.77
	44	5.7	1.94	6.9	2.47	8.0	3.12	8.6	3.44	9.1	3.77	9.3	3.87	9.7	3.98
	46	5.7	2.04	6.9	2.58	8.0	3.23	8.6	3.66	9.1	3.98	9.2	3.98	9.5	4.09
90%	10	5.5	0.86	6.6	0.97	7.7	1.18	8.2	1.29	8.8	1.40	9.8	1.51	10.9	1.72
	12	5.5	0.86	6.6	0.97	7.7	1.18	8.2	1.29	8.7	1.40	9.8	1.61	10.9	1.83
	14	5.5	0.86	6.6	1.08	7.7	1.18	8.2	1.29	8.7	1.40	9.8	1.61	10.9	1.83
	16	5.5	0.86	6.6	1.08	7.7	1.29	8.2	1.29	8.7	1.40	9.8	1.61	10.9	1.83
	18	5.5	0.86	6.6	1.08	7.7	1.29	8.2	1.40	8.7	1.51	9.8	1.72	10.9	1.94
	20	5.5	0.86	6.6	1.08	7.7	1.29	8.2	1.40	8.7	1.51	9.8	1.83	10.9	2.15
	21	5.5	0.86	6.5	1.08	7.7	1.29	8.2	1.40	8.7	1.61	9.7	1.83	10.9	2.15
	23	5.5	0.97	6.5	1.18	7.7	1.40	8.2	1.51	8.7	1.72	9.7	2.04	10.8	2.37
	25	5.5	0.97	6.5	1.18	7.7	1.51	8.2	1.61	8.7	1.83	9.7	2.15	10.8	2.47
	27	5.5	1.08	6.5	1.29	7.7	1.61	8.2	1.72	8.7	1.94	9.7	2.26	10.8	2.69
	29	5.5	1.08	6.5	1.40	7.7	1.72	8.2	1.94	8.7	2.04	9.7	2.47	10.8	2.91
	31	5.5	1.18	6.5	1.51	7.7	1.83	8.1	2.04	8.7	2.26	9.7	2.58	10.8	3.12
	33	5.5	1.29	6.5	1.61	7.5	1.94	8.1	2.15	8.7	2.37	9.7	2.80	10.8	3.34
	35	5.5	1.29	6.5	1.72	7.5	2.04	8.1	2.26	8.6	2.47	9.7	3.01	10.6	3.44
	37	5.3	1.40	6.3	1.83	7.3	2.26	7.9	2.47	8.3	2.69	9.3	3.23	10.0	3.55
	39	5.2	1.51	6.2	1.94	7.2	2.37	7.8	2.58	8.2	2.80	9.1	3.44	9.7	3.66
	42	5.2	1.61	6.2	2.04	7.2	2.47	7.8	2.80	8.2	3.01	9.1	3.66	9.6	3.77
	44	5.2	1.61	6.2	2.15	7.2	2.58	7.8	2.91	8.2	3.23	9.1	3.87	9.3	3.87
	46	5.2	1.72	6.2	2.26	7.2	2.80	7.8	3.01	8.2	3.34	9.1	4.09	9.2	3.98
80%	10	5.0	0.75	5.9	0.86	6.9	1.08	7.3	1.08	7.8	1.18	8.8	1.40	9.7	1.51
	12	5.0	0.75	5.9	0.86	6.9	1.08	7.3	1.18	7.8	1.18	8.7	1.40	9.7	1.61
	14	5.0	0.75	5.9	0.86	6.9	1.08	7.3	1.18	7.8	1.18	8.7	1.40	9.7	1.61
	16	5.0	0.75	5.9	0.97	6.9	1.08	7.3	1.18	7.8	1.29	8.7	1.40	9.7	1.61
	18	5.0	0.75	5.9	0.97	6.9	1.08	7.3	1.18	7.8	1.29	8.7	1.51	9.7	1.61
	20	5.0	0.75	5.9	0.97	6.8	1.18	7.3	1.18	7.8	1.29	8.7	1.51	9.7	1.72
	21	5.0	0.75	5.9	0.97	6.8	1.18	7.3	1.18	7.8	1.29	8.7	1.61	9.7	1.83
	23	5.0	0.86	5.9	0.97	6.8	1.18	7.3	1.29	7.8	1.40	8.7	1.72	9.7	1.94
	25	5.0	0.86	5.9	1.08	6.8	1.29	7.2	1.40	7.8	1.51	8.7	1.83	9.7	2.15
	27	4.8	0.86	5.9	1.08	6.8	1.40	7.2	1.51	7.8	1.61	8.7	1.94	9.7	2.26
	29	4.8	0.97	5.9	1.18	6.8	1.51	7.2	1.61	7.7	1.72	8.7	2.04	9.6	2.37
	31	4.8	0.97	5.9	1.29	6.8	1.51	7.2	1.72	7.7	1.83	8.7	2.15	9.6	2.58
	33	4.8	1.08	5.9	1.40	6.8	1.61	7.2	1.83	7.7	1.94	8.7	2.37	9.6	2.80
	35	4.8	1.18	5.9	1.40	6.8	1.72	7.2	1.94	7.7	2.15	8.6	2.47	9.6	2.91
	37	4.7	1.18	5.6	1.51	6.5	1.83	7.0	2.04	7.4	2.26	8.3	2.69	9.2	3.12
	39	4.6	1.29	5.5	1.61	6.4	1.94	6.9	2.15	7.3	2.37	8.2	2.80	9.1	3.34
	42	4.6	1.40	5.5	1.72	6.4	2.04	6.9	2.37	7.3	2.58	8.2	3.01	9.1	3.55
	44	4.6	1.40	5.5	1.83	6.4	2.26	6.9	2.47	7.3	2.69	8.2	3.23	9.1	3.77
	46	4.6	1.51	5.5	1.94	6.4	2.37	6.9	2.58	7.3	2.80	8.2	3.34	9.1	3.98

2. Outdoor Units

2-8. Capacity table (A2A)

AE090MXTPEH/EU

Cooling

Combination % (Capacity index)	Outdoor temperature (°C, DB)	Indoor temperature (WB, °C)													
		14		16		18		19		20		22		24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	DB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	10	4.3	0.65	5.2	0.75	6.0	0.86	6.4	0.97	6.9	1.08	7.7	1.18	8.4	1.29
	12	4.3	0.65	5.2	0.75	6.0	0.86	6.4	0.97	6.8	1.08	7.7	1.18	8.4	1.29
	14	4.3	0.65	5.2	0.75	6.0	0.97	6.4	0.97	6.8	1.08	7.7	1.18	8.4	1.40
	16	4.3	0.65	5.2	0.75	6.0	0.97	6.4	0.97	6.8	1.08	7.7	1.18	8.4	1.40
	18	4.3	0.65	5.2	0.86	6.0	0.97	6.4	1.08	6.8	1.08	7.7	1.29	8.4	1.40
	20	4.3	0.65	5.2	0.86	6.0	0.97	6.4	1.08	6.8	1.18	7.7	1.29	8.4	1.51
	21	4.3	0.75	5.1	0.86	6.0	0.97	6.4	1.08	6.8	1.18	7.7	1.29	8.4	1.51
	23	4.3	0.75	5.1	0.86	6.0	0.97	6.3	1.08	6.8	1.18	7.5	1.40	8.4	1.61
	25	4.3	0.75	5.1	0.86	6.0	1.08	6.3	1.18	6.8	1.29	7.5	1.51	8.4	1.72
	27	4.3	0.75	5.1	0.97	6.0	1.18	6.3	1.29	6.8	1.40	7.5	1.61	8.4	1.83
	29	4.3	0.86	5.1	0.97	6.0	1.18	6.3	1.29	6.8	1.40	7.5	1.72	8.4	1.94
	31	4.3	0.86	5.1	1.08	6.0	1.29	6.3	1.40	6.8	1.51	7.5	1.83	8.4	2.15
	33	4.3	0.97	5.1	1.18	6.0	1.40	6.3	1.51	6.8	1.61	7.5	1.94	8.4	2.26
	35	4.3	0.97	5.1	1.18	5.9	1.51	6.3	1.61	6.8	1.72	7.5	2.04	8.3	2.37
	37	4.2	1.08	5.0	1.29	5.7	1.51	6.1	1.72	6.5	1.83	7.3	2.15	8.1	2.58
	39	4.1	1.08	4.8	1.40	5.6	1.61	6.0	1.83	6.4	1.94	7.2	2.37	8.0	2.69
	42	4.1	1.18	4.8	1.40	5.6	1.72	6.0	1.94	6.4	2.04	7.2	2.47	8.0	2.91
	44	4.1	1.18	4.8	1.51	5.6	1.83	6.0	2.04	6.4	2.15	7.2	2.58	8.0	3.01
	46	4.1	1.29	4.8	1.61	5.6	1.94	6.0	2.15	6.4	2.37	7.2	2.80	8.0	3.23
60%	10	3.7	0.54	4.4	0.65	5.2	0.75	5.5	0.86	5.9	0.86	6.5	0.97	7.3	1.08
	12	3.7	0.54	4.4	0.65	5.1	0.75	5.5	0.86	5.9	0.86	6.5	0.97	7.2	1.08
	14	3.7	0.54	4.4	0.65	5.1	0.75	5.5	0.86	5.9	0.86	6.5	1.08	7.2	1.18
	16	3.7	0.54	4.4	0.65	5.1	0.75	5.5	0.86	5.9	0.97	6.5	1.08	7.2	1.18
	18	3.7	0.65	4.4	0.75	5.1	0.86	5.5	0.86	5.9	0.97	6.5	1.08	7.2	1.18
	20	3.7	0.65	4.4	0.75	5.1	0.86	5.4	0.86	5.9	0.97	6.5	1.08	7.2	1.18
	21	3.7	0.65	4.4	0.75	5.1	0.86	5.4	0.86	5.9	0.97	6.5	1.08	7.2	1.18
	23	3.7	0.65	4.4	0.75	5.1	0.86	5.4	0.97	5.9	0.97	6.5	1.18	7.2	1.29
	25	3.7	0.65	4.4	0.75	5.1	0.86	5.4	0.97	5.9	1.08	6.5	1.18	7.2	1.40
	27	3.7	0.65	4.4	0.75	5.1	0.97	5.4	1.08	5.7	1.08	6.5	1.29	7.2	1.51
	29	3.7	0.65	4.4	0.86	5.1	0.97	5.4	1.08	5.7	1.18	6.5	1.40	7.2	1.61
	31	3.7	0.75	4.4	0.86	5.1	1.08	5.4	1.18	5.7	1.29	6.5	1.51	7.2	1.72
	33	3.7	0.75	4.4	0.97	5.1	1.18	5.4	1.18	5.7	1.29	6.5	1.51	7.2	1.83
	35	3.6	0.86	4.4	0.97	5.1	1.18	5.4	1.29	5.7	1.40	6.4	1.61	7.2	1.94
	37	3.5	0.86	4.2	1.08	5.0	1.29	5.3	1.40	5.6	1.51	6.3	1.72	7.0	2.04
	39	3.5	0.97	4.2	1.08	4.8	1.40	5.2	1.51	5.5	1.61	6.1	1.83	6.8	2.15
	42	3.5	0.97	4.2	1.18	4.8	1.40	5.2	1.51	5.5	1.72	6.1	1.94	6.8	2.26
	44	3.5	0.97	4.2	1.29	4.8	1.51	5.2	1.61	5.5	1.83	6.1	2.04	6.8	2.47
	46	3.5	1.08	4.2	1.29	4.8	1.61	5.2	1.72	5.5	1.83	6.1	2.15	6.8	2.58
50%	10	3.0	0.43	3.7	0.54	4.3	0.65	4.6	0.65	4.8	0.75	5.5	0.86	6.1	0.86
	12	3.0	0.54	3.7	0.54	4.3	0.65	4.6	0.65	4.8	0.75	5.4	0.86	6.1	0.97
	14	3.0	0.54	3.7	0.54	4.3	0.65	4.6	0.75	4.8	0.75	5.4	0.86	6.1	0.97
	16	3.0	0.54	3.7	0.54	4.3	0.65	4.5	0.75	4.8	0.75	5.4	0.86	6.1	0.97
	18	3.0	0.54	3.7	0.54	4.3	0.65	4.5	0.75	4.8	0.75	5.4	0.86	6.1	0.97
	20	3.0	0.54	3.7	0.65	4.3	0.65	4.5	0.75	4.8	0.75	5.4	0.86	6.1	0.97
	21	3.0	0.54	3.7	0.65	4.3	0.65	4.5	0.75	4.8	0.75	5.4	0.86	6.0	0.97
	23	3.0	0.54	3.6	0.65	4.3	0.75	4.5	0.75	4.8	0.86	5.4	0.86	6.0	1.08
	25	3.0	0.54	3.6	0.65	4.3	0.75	4.5	0.75	4.8	0.86	5.4	0.97	6.0	1.08
	27	3.0	0.54	3.6	0.65	4.3	0.75	4.5	0.86	4.8	0.86	5.4	0.97	6.0	1.18
	29	3.0	0.54	3.6	0.65	4.3	0.86	4.5	0.86	4.8	0.97	5.4	1.08	6.0	1.18
	31	3.0	0.65	3.6	0.75	4.3	0.86	4.5	0.97	4.8	0.97	5.4	1.18	6.0	1.29
	33	3.0	0.65	3.6	0.75	4.3	0.86	4.5	0.97	4.8	1.08	5.4	1.18	6.0	1.40
	35	3.0	0.65	3.6	0.86	4.2	0.97	4.5	1.08	4.8	1.08	5.4	1.29	6.0	1.51
	37	2.9	0.75	3.5	0.86	4.1	0.97	4.4	1.08	4.6	1.18	5.2	1.40	5.7	1.61
	39	2.9	0.75	3.5	0.86	4.1	1.08	4.3	1.18	4.5	1.29	5.1	1.51	5.6	1.72
	42	2.9	0.75	3.5	0.97	4.1	1.18	4.3	1.18	4.5	1.29	5.1	1.51	5.6	1.83
	44	2.9	0.86	3.5	0.97	4.1	1.18	4.3	1.29	4.5	1.40	5.1	1.61	5.6	1.83
	46	2.9	0.86	3.5	1.08	4.1	1.29	4.3	1.40	4.5	1.51	5.1	1.72	5.6	1.94

2. Outdoor Units

2-8. Capacity table (A2A)

AE090MXTPGH/EU

Cooling

Combination % (Capacity index)	Outdoor temperature (°C, DB)	Indoor temperature (WB, °C)													
		14		16		18		19		20		22		24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	DB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100%	10	6.2	0.99	7.3	1.10	8.6	1.32	9.1	1.43	9.7	1.54	10.9	1.76	12.0	1.98
	12	6.2	0.99	7.3	1.21	8.6	1.43	9.1	1.54	9.7	1.65	10.9	1.87	12.0	2.09
	14	6.2	0.99	7.3	1.21	8.6	1.43	9.1	1.54	9.7	1.65	10.9	1.87	12.0	2.09
	16	6.2	0.99	7.3	1.21	8.6	1.43	9.1	1.54	9.7	1.65	10.9	1.87	12.0	2.20
	18	6.2	0.99	7.3	1.21	8.6	1.43	9.1	1.54	9.7	1.65	10.9	1.98	12.0	2.31
	20	6.2	0.99	7.3	1.21	8.6	1.54	9.1	1.65	9.7	1.87	10.9	2.20	12.0	2.53
	21	6.1	1.10	7.3	1.32	8.6	1.54	9.1	1.76	9.7	1.87	10.9	2.20	12.0	2.64
	23	6.1	1.10	7.3	1.32	8.6	1.65	9.1	1.87	9.7	1.98	10.8	2.42	11.9	2.75
	25	6.1	1.10	7.3	1.43	8.6	1.76	9.1	1.98	9.7	2.20	10.8	2.64	11.7	2.86
	27	6.1	1.21	7.3	1.54	8.4	1.87	9.0	2.09	9.7	2.31	10.8	2.75	11.6	3.08
	29	6.1	1.32	7.3	1.65	8.4	2.09	9.0	2.20	9.6	2.53	10.8	2.97	11.4	3.19
	31	6.1	1.43	7.3	1.76	8.4	2.20	9.0	2.42	9.6	2.64	10.8	3.19	11.3	3.30
	33	6.1	1.43	7.3	1.87	8.4	2.31	9.0	2.53	9.6	2.86	10.8	3.41	10.9	3.41
	35	6.1	1.54	7.2	1.98	8.4	2.53	9.0	2.75	9.6	2.97	10.6	3.52	10.8	3.52
	37	5.9	1.65	7.0	2.09	8.2	2.64	8.8	2.97	9.2	3.19	10.0	3.63	10.2	3.63
	39	5.7	1.76	6.9	2.20	8.0	2.86	8.6	3.08	9.1	3.41	9.7	3.74	9.9	3.74
	42	5.7	1.87	6.9	2.42	8.0	2.97	8.6	3.30	9.1	3.63	9.6	3.85	9.8	3.85
	44	5.7	1.98	6.9	2.53	8.0	3.19	8.6	3.52	9.1	3.85	9.3	3.96	9.7	4.07
	46	5.7	2.09	6.9	2.64	8.0	3.30	8.6	3.74	9.1	4.07	9.2	4.07	9.5	4.18
90%	10	5.5	0.88	6.6	0.99	7.7	1.21	8.2	1.32	8.8	1.43	9.8	1.54	10.9	1.76
	12	5.5	0.88	6.6	0.99	7.7	1.21	8.2	1.32	8.7	1.43	9.8	1.65	10.9	1.87
	14	5.5	0.88	6.6	1.10	7.7	1.21	8.2	1.32	8.7	1.43	9.8	1.65	10.9	1.87
	16	5.5	0.88	6.6	1.10	7.7	1.32	8.2	1.32	8.7	1.43	9.8	1.65	10.9	1.87
	18	5.5	0.88	6.6	1.10	7.7	1.32	8.2	1.43	8.7	1.54	9.8	1.76	10.9	1.98
	20	5.5	0.88	6.6	1.10	7.7	1.32	8.2	1.43	8.7	1.54	9.8	1.87	10.9	2.20
	21	5.5	0.88	6.5	1.10	7.7	1.32	8.2	1.43	8.7	1.65	9.7	1.87	10.9	2.20
	23	5.5	0.99	6.5	1.21	7.7	1.43	8.2	1.54	8.7	1.76	9.7	2.09	10.8	2.42
	25	5.5	0.99	6.5	1.21	7.7	1.54	8.2	1.65	8.7	1.87	9.7	2.20	10.8	2.53
	27	5.5	1.10	6.5	1.32	7.7	1.65	8.2	1.76	8.7	1.98	9.7	2.31	10.8	2.75
	29	5.5	1.10	6.5	1.43	7.7	1.76	8.2	1.98	8.7	2.09	9.7	2.53	10.8	2.97
	31	5.5	1.21	6.5	1.54	7.7	1.87	8.1	2.09	8.7	2.31	9.7	2.64	10.8	3.19
	33	5.5	1.32	6.5	1.65	7.5	1.98	8.1	2.20	8.7	2.42	9.7	2.86	10.8	3.41
	35	5.5	1.32	6.5	1.76	7.5	2.09	8.1	2.31	8.6	2.53	9.7	3.08	10.6	3.52
	37	5.3	1.43	6.3	1.87	7.3	2.31	7.9	2.53	8.3	2.75	9.3	3.30	10.0	3.63
	39	5.2	1.54	6.2	1.98	7.2	2.42	7.8	2.64	8.2	2.86	9.1	3.52	9.7	3.74
	42	5.2	1.65	6.2	2.09	7.2	2.53	7.8	2.86	8.2	3.08	9.1	3.74	9.6	3.85
	44	5.2	1.65	6.2	2.20	7.2	2.64	7.8	2.97	8.2	3.30	9.1	3.96	9.3	3.96
	46	5.2	1.76	6.2	2.31	7.2	2.86	7.8	3.08	8.2	3.41	9.1	4.18	9.2	4.07
80%	10	5.0	0.77	5.9	0.88	6.9	1.10	7.3	1.10	7.8	1.21	8.8	1.43	9.7	1.54
	12	5.0	0.77	5.9	0.88	6.9	1.10	7.3	1.21	7.8	1.21	8.7	1.43	9.7	1.65
	14	5.0	0.77	5.9	0.88	6.9	1.10	7.3	1.21	7.8	1.21	8.7	1.43	9.7	1.65
	16	5.0	0.77	5.9	0.99	6.9	1.10	7.3	1.21	7.8	1.32	8.7	1.43	9.7	1.65
	18	5.0	0.77	5.9	0.99	6.9	1.10	7.3	1.21	7.8	1.32	8.7	1.54	9.7	1.65
	20	5.0	0.77	5.9	0.99	6.8	1.21	7.3	1.21	7.8	1.32	8.7	1.54	9.7	1.76
	21	5.0	0.77	5.9	0.99	6.8	1.21	7.3	1.21	7.8	1.32	8.7	1.65	9.7	1.87
	23	5.0	0.88	5.9	0.99	6.8	1.21	7.3	1.32	7.8	1.43	8.7	1.76	9.7	1.98
	25	5.0	0.88	5.9	1.10	6.8	1.32	7.2	1.43	7.8	1.54	8.7	1.87	9.7	2.20
	27	4.8	0.88	5.9	1.10	6.8	1.43	7.2	1.54	7.8	1.65	8.7	1.98	9.7	2.31
	29	4.8	0.99	5.9	1.21	6.8	1.54	7.2	1.65	7.7	1.76	8.7	2.09	9.6	2.42
	31	4.8	0.99	5.9	1.32	6.8	1.54	7.2	1.76	7.7	1.87	8.7	2.20	9.6	2.64
	33	4.8	1.10	5.9	1.43	6.8	1.65	7.2	1.87	7.7	1.98	8.7	2.42	9.6	2.86
	35	4.8	1.21	5.9	1.43	6.8	1.76	7.2	1.98	7.7	2.20	8.6	2.53	9.6	2.97
	37	4.7	1.21	5.6	1.54	6.5	1.87	7.0	2.09	7.4	2.31	8.3	2.75	9.2	3.19
	39	4.6	1.32	5.5	1.65	6.4	1.98	6.9	2.20	7.3	2.42	8.2	2.86	9.1	3.41
	42	4.6	1.43	5.5	1.76	6.4	2.09	6.9	2.42	7.3	2.64	8.2	3.08	9.1	3.63
	44	4.6	1.43	5.5	1.87	6.4	2.31	6.9	2.53	7.3	2.75	8.2	3.30	9.1	3.85
	46	4.6	1.54	5.5	1.98	6.4	2.42	6.9	2.64	7.3	2.86	8.2	3.41	9.1	4.07

2. Outdoor Units

2-8. Capacity table (A2A)

AE090MXTPGH/EU

Cooling

Combination % (Capacity index)	Outdoor temperature (°C, DB)	Indoor temperature (WB, °C)													
		14		16		18		19		20		22		24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	DB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	10	4.3	0.66	5.2	0.77	6.0	0.88	6.4	0.99	6.9	1.10	7.7	1.21	8.4	1.32
	12	4.3	0.66	5.2	0.77	6.0	0.88	6.4	0.99	6.8	1.10	7.7	1.21	8.4	1.32
	14	4.3	0.66	5.2	0.77	6.0	0.99	6.4	0.99	6.8	1.10	7.7	1.21	8.4	1.43
	16	4.3	0.66	5.2	0.77	6.0	0.99	6.4	0.99	6.8	1.10	7.7	1.21	8.4	1.43
	18	4.3	0.66	5.2	0.88	6.0	0.99	6.4	1.10	6.8	1.10	7.7	1.32	8.4	1.43
	20	4.3	0.66	5.2	0.88	6.0	0.99	6.4	1.10	6.8	1.21	7.7	1.32	8.4	1.54
	21	4.3	0.77	5.1	0.88	6.0	0.99	6.4	1.10	6.8	1.21	7.7	1.32	8.4	1.54
	23	4.3	0.77	5.1	0.88	6.0	0.99	6.3	1.10	6.8	1.21	7.5	1.43	8.4	1.65
	25	4.3	0.77	5.1	0.88	6.0	1.10	6.3	1.21	6.8	1.32	7.5	1.54	8.4	1.76
	27	4.3	0.77	5.1	0.99	6.0	1.21	6.3	1.32	6.8	1.43	7.5	1.65	8.4	1.87
	29	4.3	0.88	5.1	0.99	6.0	1.21	6.3	1.32	6.8	1.43	7.5	1.76	8.4	1.98
	31	4.3	0.88	5.1	1.10	6.0	1.32	6.3	1.43	6.8	1.54	7.5	1.87	8.4	2.20
	33	4.3	0.99	5.1	1.21	6.0	1.43	6.3	1.54	6.8	1.65	7.5	1.98	8.4	2.31
	35	4.3	0.99	5.1	1.21	5.9	1.54	6.3	1.65	6.8	1.76	7.5	2.09	8.3	2.42
	37	4.2	1.10	5.0	1.32	5.7	1.54	6.1	1.76	6.5	1.87	7.3	2.20	8.1	2.64
	39	4.1	1.10	4.8	1.43	5.6	1.65	6.0	1.87	6.4	1.98	7.2	2.42	8.0	2.75
	42	4.1	1.21	4.8	1.43	5.6	1.76	6.0	1.98	6.4	2.09	7.2	2.53	8.0	2.97
	44	4.1	1.21	4.8	1.54	5.6	1.87	6.0	2.09	6.4	2.20	7.2	2.64	8.0	3.08
	46	4.1	1.32	4.8	1.65	5.6	1.98	6.0	2.20	6.4	2.42	7.2	2.86	8.0	3.30
60%	10	3.7	0.55	4.4	0.66	5.2	0.77	5.5	0.88	5.9	0.88	6.5	0.99	7.3	1.10
	12	3.7	0.55	4.4	0.66	5.1	0.77	5.5	0.88	5.9	0.88	6.5	0.99	7.2	1.10
	14	3.7	0.55	4.4	0.66	5.1	0.77	5.5	0.88	5.9	0.88	6.5	1.10	7.2	1.21
	16	3.7	0.55	4.4	0.66	5.1	0.77	5.5	0.88	5.9	0.99	6.5	1.10	7.2	1.21
	18	3.7	0.66	4.4	0.77	5.1	0.88	5.5	0.88	5.9	0.99	6.5	1.10	7.2	1.21
	20	3.7	0.66	4.4	0.77	5.1	0.88	5.4	0.88	5.9	0.99	6.5	1.10	7.2	1.21
	21	3.7	0.66	4.4	0.77	5.1	0.88	5.4	0.88	5.9	0.99	6.5	1.10	7.2	1.21
	23	3.7	0.66	4.4	0.77	5.1	0.88	5.4	0.99	5.9	0.99	6.5	1.21	7.2	1.32
	25	3.7	0.66	4.4	0.77	5.1	0.88	5.4	0.99	5.9	1.10	6.5	1.21	7.2	1.43
	27	3.7	0.66	4.4	0.77	5.1	0.99	5.4	1.10	5.7	1.10	6.5	1.32	7.2	1.54
	29	3.7	0.66	4.4	0.88	5.1	0.99	5.4	1.10	5.7	1.21	6.5	1.43	7.2	1.65
	31	3.7	0.77	4.4	0.88	5.1	1.10	5.4	1.21	5.7	1.32	6.5	1.54	7.2	1.76
	33	3.7	0.77	4.4	0.99	5.1	1.21	5.4	1.21	5.7	1.32	6.5	1.54	7.2	1.87
	35	3.6	0.88	4.4	0.99	5.1	1.21	5.4	1.32	5.7	1.43	6.4	1.65	7.2	1.98
	37	3.5	0.88	4.2	1.10	5.0	1.32	5.3	1.43	5.6	1.54	6.3	1.76	7.0	2.09
	39	3.5	0.99	4.2	1.10	4.8	1.43	5.2	1.54	5.5	1.65	6.1	1.87	6.8	2.20
	42	3.5	0.99	4.2	1.21	4.8	1.43	5.2	1.54	5.5	1.76	6.1	1.98	6.8	2.31
	44	3.5	0.99	4.2	1.32	4.8	1.54	5.2	1.65	5.5	1.87	6.1	2.09	6.8	2.53
	46	3.5	1.10	4.2	1.32	4.8	1.65	5.2	1.76	5.5	1.87	6.1	2.20	6.8	2.64
50%	10	3.0	0.44	3.7	0.55	4.3	0.66	4.6	0.66	4.8	0.77	5.5	0.88	6.1	0.88
	12	3.0	0.55	3.7	0.55	4.3	0.66	4.6	0.66	4.8	0.77	5.4	0.88	6.1	0.99
	14	3.0	0.55	3.7	0.55	4.3	0.66	4.6	0.77	4.8	0.77	5.4	0.88	6.1	0.99
	16	3.0	0.55	3.7	0.55	4.3	0.66	4.5	0.77	4.8	0.77	5.4	0.88	6.1	0.99
	18	3.0	0.55	3.7	0.55	4.3	0.66	4.5	0.77	4.8	0.77	5.4	0.88	6.1	0.99
	20	3.0	0.55	3.7	0.66	4.3	0.66	4.5	0.77	4.8	0.77	5.4	0.88	6.1	0.99
	21	3.0	0.55	3.7	0.66	4.3	0.66	4.5	0.77	4.8	0.77	5.4	0.88	6.0	0.99
	23	3.0	0.55	3.6	0.66	4.3	0.77	4.5	0.77	4.8	0.88	5.4	0.88	6.0	1.10
	25	3.0	0.55	3.6	0.66	4.3	0.77	4.5	0.77	4.8	0.88	5.4	0.99	6.0	1.10
	27	3.0	0.55	3.6	0.66	4.3	0.77	4.5	0.88	4.8	0.88	5.4	0.99	6.0	1.21
	29	3.0	0.55	3.6	0.66	4.3	0.88	4.5	0.88	4.8	0.99	5.4	1.10	6.0	1.21
	31	3.0	0.66	3.6	0.77	4.3	0.88	4.5	0.99	4.8	0.99	5.4	1.21	6.0	1.32
	33	3.0	0.66	3.6	0.77	4.3	0.88	4.5	0.99	4.8	1.10	5.4	1.21	6.0	1.43
	35	3.0	0.66	3.6	0.88	4.2	0.99	4.5	1.10	4.8	1.10	5.4	1.32	6.0	1.54
	37	2.9	0.77	3.5	0.88	4.1	0.99	4.4	1.10	4.6	1.21	5.2	1.43	5.7	1.65
	39	2.9	0.77	3.5	0.88	4.1	1.10	4.3	1.21	4.5	1.32	5.1	1.54	5.6	1.76
	42	2.9	0.77	3.5	0.99	4.1	1.21	4.3	1.21	4.5	1.32	5.1	1.54	5.6	1.87
	44	2.9	0.88	3.5	0.99	4.1	1.21	4.3	1.32	4.5	1.43	5.1	1.65	5.6	1.87
	46	2.9	0.88	3.5	1.10	4.1	1.32	4.3	1.43	4.5	1.54	5.1	1.76	5.6	1.98

2. Outdoor Units

2-8. Capacity table (A2A)

AE120MXTP✳H/EU

Cooling

Combination % (Capacity index)	Outdoor temperature (°C, DB)	Indoor temperature (WB, °C)													
		14		16		18		19		20		22		24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	DB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100%	10	8.3	1.22	9.9	1.59	11.6	1.84	12.3	1.96	13.1	2.08	14.7	2.45	16.2	2.69
	12	8.3	1.35	9.8	1.59	11.5	1.84	12.3	1.96	13.1	2.20	14.7	2.45	16.2	2.81
	14	8.3	1.35	9.8	1.59	11.5	1.84	12.2	2.08	13.1	2.20	14.7	2.45	16.2	2.81
	16	8.3	1.35	9.8	1.59	11.5	1.96	12.2	2.08	13.0	2.20	14.7	2.57	16.2	2.94
	18	8.2	1.35	9.8	1.59	11.5	1.96	12.2	2.08	13.0	2.32	14.6	2.69	16.2	3.18
	20	8.2	1.35	9.8	1.71	11.5	2.08	12.2	2.20	13.0	2.45	14.6	2.94	16.1	3.43
	21	8.2	1.35	9.8	1.71	11.5	2.08	12.2	2.32	13.0	2.57	14.6	3.06	16.1	3.55
	23	8.2	1.47	9.8	1.84	11.5	2.20	12.2	2.45	13.0	2.69	14.6	3.18	16.0	3.79
	25	8.2	1.47	9.8	1.96	11.5	2.45	12.2	2.69	13.0	2.94	14.6	3.43	15.8	3.91
	27	8.2	1.59	9.8	2.08	11.5	2.57	12.2	2.81	13.0	3.06	14.6	3.67	15.6	4.04
	29	8.2	1.71	9.8	2.20	11.5	2.69	12.2	3.06	13.0	3.30	14.6	3.91	15.3	4.16
	31	8.2	1.84	9.8	2.32	11.3	2.94	12.1	3.18	12.9	3.55	14.6	4.28	15.1	4.40
	33	8.2	1.96	9.7	2.45	11.3	3.06	12.1	3.43	12.9	3.79	14.5	4.53	14.7	4.53
	35	8.2	2.08	9.7	2.69	11.3	3.30	12.1	3.67	12.9	4.04	14.3	4.65	14.5	4.77
	37	7.9	2.20	9.4	2.81	11.0	3.55	11.8	3.91	12.4	4.28	13.5	4.89	13.8	4.89
	39	7.8	2.32	9.3	3.06	10.8	3.79	11.5	4.16	12.2	4.65	13.1	5.02	13.4	5.02
	42	5.9	1.71	7.0	2.20	8.2	2.81	12.1	4.40	9.3	3.43	9.7	3.55	9.9	3.67
	44	5.9	1.84	7.0	2.32	8.2	2.94	12.1	4.65	9.3	3.55	9.6	3.67	9.8	3.79
	46	8.2	3.06	9.7	3.91	11.3	4.89	12.1	5.38	12.9	5.87	13.1	5.99	13.4	6.12
90%	10	7.5	1.10	8.9	1.35	10.4	1.59	11.1	1.71	11.8	1.84	13.2	2.08	14.7	2.45
	12	7.5	1.10	8.9	1.35	10.4	1.59	11.0	1.71	11.7	1.96	13.2	2.20	14.7	2.45
	14	7.5	1.22	8.9	1.47	10.3	1.71	11.0	1.84	11.7	1.96	13.2	2.20	14.7	2.45
	16	7.5	1.22	8.9	1.47	10.3	1.71	11.0	1.84	11.7	1.96	13.1	2.20	14.7	2.57
	18	7.5	1.22	8.9	1.47	10.3	1.71	11.0	1.84	11.7	2.08	13.1	2.32	14.6	2.69
	20	7.5	1.22	8.9	1.47	10.3	1.71	11.0	1.96	11.7	2.08	13.1	2.45	14.6	2.94
	21	7.5	1.22	8.9	1.47	10.3	1.84	11.0	1.96	11.7	2.20	13.1	2.57	14.6	2.94
	23	7.5	1.22	8.9	1.59	10.3	1.96	11.0	2.08	11.7	2.32	13.1	2.69	14.6	3.18
	25	7.3	1.35	8.9	1.71	10.3	2.08	11.0	2.32	11.7	2.45	13.1	2.94	14.6	3.43
	27	7.3	1.47	8.9	1.84	10.3	2.20	11.0	2.45	11.7	2.69	13.1	3.18	14.6	3.67
	29	7.3	1.47	8.9	1.96	10.3	2.32	11.0	2.57	11.7	2.81	13.1	3.43	14.6	3.91
	31	7.3	1.59	8.8	2.08	10.3	2.45	10.9	2.81	11.6	3.06	13.0	3.55	14.6	4.28
	33	7.3	1.71	8.8	2.20	10.2	2.69	10.9	2.94	11.6	3.18	13.0	3.79	14.5	4.53
	35	7.3	1.84	8.8	2.32	10.2	2.81	10.9	3.18	11.6	3.43	13.0	4.16	14.3	4.65
	37	7.1	1.96	8.5	2.45	9.8	3.06	10.6	3.30	11.2	3.67	12.5	4.40	13.5	4.89
	39	7.0	2.08	8.3	2.57	9.6	3.18	10.4	3.55	11.0	3.91	12.3	4.65	13.1	5.02
	42	7.0	2.20	8.3	2.81	9.6	3.43	10.4	3.79	11.0	4.16	12.3	5.02	12.9	5.14
	44	7.0	2.32	8.3	2.94	9.6	3.55	10.4	4.04	11.0	4.40	12.3	5.26	12.6	5.38
	46	7.3	2.57	8.8	3.30	10.2	4.16	10.9	4.53	11.6	5.02	13.0	5.99	13.1	5.99
80%	10	6.6	0.98	7.9	1.22	9.2	1.47	9.8	1.47	10.5	1.59	11.8	1.84	13.1	2.08
	12	6.6	0.98	7.9	1.22	9.2	1.47	9.8	1.59	10.5	1.71	11.7	1.96	13.1	2.20
	14	6.6	0.98	7.9	1.22	9.2	1.47	9.8	1.59	10.5	1.71	11.7	1.96	13.1	2.20
	16	6.6	1.10	7.9	1.22	9.2	1.47	9.8	1.59	10.5	1.71	11.7	1.96	13.0	2.20
	18	6.6	1.10	7.9	1.35	9.2	1.47	9.8	1.59	10.4	1.71	11.7	1.96	13.0	2.32
	20	6.6	1.10	7.9	1.35	9.2	1.59	9.7	1.71	10.4	1.84	11.7	2.08	13.0	2.45
	21	6.6	1.10	7.9	1.35	9.2	1.59	9.7	1.71	10.4	1.84	11.7	2.20	13.0	2.57
	23	6.6	1.10	7.9	1.35	9.1	1.59	9.7	1.84	10.4	1.96	11.7	2.32	13.0	2.69
	25	6.6	1.10	7.9	1.47	9.1	1.71	9.7	1.96	10.4	2.08	11.7	2.45	13.0	2.94
	27	6.6	1.22	7.9	1.59	9.1	1.84	9.7	2.08	10.4	2.20	11.7	2.69	13.0	3.06
	29	6.6	1.35	7.8	1.59	9.1	1.96	9.7	2.20	10.4	2.45	11.7	2.81	13.0	3.30
	31	6.6	1.35	7.8	1.71	9.1	2.08	9.7	2.32	10.4	2.57	11.6	3.06	12.9	3.55
	33	6.6	1.47	7.8	1.84	9.1	2.20	9.7	2.45	10.4	2.69	11.6	3.18	12.9	3.79
	35	6.6	1.59	7.8	1.96	9.1	2.45	9.7	2.69	10.3	2.94	11.6	3.43	12.9	4.04
	37	6.4	1.71	7.6	2.08	8.8	2.57	9.4	2.81	10.0	3.06	11.2	3.67	12.4	4.28
	39	6.2	1.71	7.3	2.20	8.6	2.69	9.2	2.94	9.8	3.30	11.0	3.91	12.2	4.53
	42	6.2	1.84	7.3	2.32	8.6	2.81	9.2	3.18	9.8	3.43	11.0	4.16	12.2	4.89
	44	6.2	1.96	7.3	2.45	8.6	3.06	9.2	3.30	9.8	3.67	11.0	4.40	12.2	5.14
	46	6.6	2.20	7.8	2.81	9.1	3.43	9.7	3.91	10.3	4.16	11.6	5.02	12.9	5.87

2. Outdoor Units

2-8. Capacity table (A2A)

AE120MXTP*H/EU

Cooling

Combination % (Capacity index)	Outdoor temperature (°C, DB)	Indoor temperature (WB, °C)													
		14		16		18		19		20		22		24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	DB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	10	5.8	0.86	6.9	1.10	8.0	1.22	8.6	1.35	9.2	1.47	10.3	1.59	11.5	1.84
	12	5.8	0.86	6.9	1.10	8.0	1.22	8.5	1.35	9.2	1.47	10.3	1.59	11.3	1.84
	14	5.8	0.86	6.9	1.10	8.0	1.22	8.5	1.35	9.2	1.47	10.3	1.71	11.3	1.84
	16	5.8	0.98	6.9	1.10	8.0	1.35	8.5	1.35	9.2	1.47	10.3	1.71	11.3	1.96
	18	5.7	0.98	6.9	1.10	8.0	1.35	8.5	1.47	9.1	1.47	10.3	1.71	11.3	1.96
	20	5.7	0.98	6.9	1.10	8.0	1.35	8.5	1.47	9.1	1.59	10.3	1.71	11.3	1.96
	21	5.7	0.98	6.9	1.10	8.0	1.35	8.5	1.47	9.1	1.59	10.3	1.84	11.3	2.08
	23	5.7	0.98	6.9	1.22	8.0	1.35	8.5	1.47	9.1	1.59	10.2	1.96	11.3	2.20
	25	5.7	0.98	6.9	1.22	8.0	1.47	8.5	1.59	9.1	1.71	10.2	2.08	11.3	2.32
	27	5.7	1.10	6.8	1.35	8.0	1.59	8.5	1.71	9.1	1.84	10.2	2.20	11.3	2.57
	29	5.7	1.10	6.8	1.35	8.0	1.71	8.5	1.84	9.1	1.96	10.2	2.32	11.3	2.69
	31	5.7	1.22	6.8	1.47	8.0	1.71	8.5	1.96	9.1	2.08	10.2	2.45	11.2	2.94
	33	5.7	1.22	6.8	1.59	8.0	1.84	8.5	2.08	9.1	2.20	10.2	2.69	11.2	3.06
	35	5.7	1.35	6.8	1.59	7.9	1.96	8.4	2.20	9.1	2.45	10.2	2.81	11.2	3.30
	37	5.5	1.47	6.6	1.71	7.7	2.08	8.2	2.32	8.8	2.57	9.8	2.94	10.9	3.55
	39	5.4	1.47	6.5	1.84	7.6	2.20	8.0	2.45	8.5	2.69	9.6	3.18	10.7	3.67
	42	5.4	1.59	6.5	1.96	7.6	2.32	8.0	2.57	8.5	2.81	9.6	3.43	10.7	3.91
	44	5.4	1.59	6.5	2.08	7.6	2.45	8.0	2.81	8.5	3.06	9.6	3.55	10.7	4.16
	46	5.7	1.84	6.8	2.32	7.9	2.81	8.4	3.18	9.1	3.43	10.2	4.16	11.2	4.77
60%	10	5.0	0.73	5.9	0.86	6.9	1.10	7.3	1.10	7.9	1.22	8.9	1.35	9.7	1.47
	12	5.0	0.73	5.9	0.98	6.9	1.10	7.3	1.10	7.9	1.22	8.8	1.35	9.7	1.59
	14	5.0	0.73	5.9	0.98	6.9	1.10	7.3	1.10	7.9	1.22	8.8	1.35	9.7	1.59
	16	5.0	0.86	5.9	0.98	6.9	1.10	7.3	1.22	7.8	1.22	8.8	1.47	9.7	1.59
	18	5.0	0.86	5.9	0.98	6.8	1.10	7.3	1.22	7.8	1.22	8.8	1.47	9.7	1.59
	20	5.0	0.86	5.9	0.98	6.8	1.10	7.3	1.22	7.8	1.35	8.8	1.47	9.7	1.71
	21	5.0	0.86	5.9	0.98	6.8	1.10	7.3	1.22	7.8	1.35	8.8	1.47	9.7	1.71
	23	5.0	0.86	5.9	0.98	6.8	1.22	7.3	1.22	7.8	1.35	8.8	1.59	9.7	1.84
	25	5.0	0.86	5.8	0.98	6.8	1.22	7.3	1.35	7.8	1.47	8.8	1.71	9.7	1.96
	27	5.0	0.86	5.8	1.10	6.8	1.35	7.3	1.35	7.8	1.47	8.8	1.71	9.7	2.08
	29	5.0	0.98	5.8	1.10	6.8	1.35	7.3	1.47	7.8	1.59	8.8	1.84	9.6	2.20
	31	5.0	0.98	5.8	1.22	6.8	1.47	7.2	1.59	7.8	1.71	8.8	1.96	9.6	2.32
	33	5.0	1.10	5.8	1.35	6.8	1.59	7.2	1.71	7.8	1.84	8.8	2.08	9.6	2.45
	35	4.9	1.10	5.8	1.35	6.8	1.59	7.2	1.84	7.8	1.96	8.6	2.32	9.6	2.57
	37	4.8	1.22	5.6	1.47	6.6	1.71	7.0	1.96	7.5	2.08	8.4	2.45	9.3	2.81
	39	4.6	1.22	5.5	1.59	6.5	1.84	6.9	1.96	7.3	2.20	8.2	2.57	9.2	2.94
	42	4.6	1.35	5.5	1.59	6.5	1.96	6.9	2.08	7.3	2.32	8.2	2.69	9.2	3.18
	44	4.6	1.35	5.5	1.71	6.5	2.08	6.9	2.20	7.3	2.45	8.2	2.81	9.2	3.30
	46	4.9	1.59	5.8	1.96	6.8	2.45	7.2	2.57	7.8	2.81	8.6	3.30	9.6	3.79
50%	10	4.1	0.61	5.0	0.73	5.7	0.86	6.2	0.98	6.5	0.98	7.3	1.10	8.1	1.22
	12	4.1	0.73	5.0	0.73	5.7	0.86	6.2	0.98	6.5	0.98	7.3	1.10	8.1	1.22
	14	4.1	0.73	5.0	0.73	5.7	0.86	6.2	0.98	6.5	0.98	7.3	1.10	8.1	1.22
	16	4.1	0.73	5.0	0.86	5.7	0.98	6.2	0.98	6.5	1.10	7.3	1.22	8.1	1.35
	18	4.1	0.73	5.0	0.86	5.7	0.98	6.2	0.98	6.5	1.10	7.3	1.22	8.1	1.35
	20	4.1	0.73	5.0	0.86	5.7	0.98	6.2	0.98	6.5	1.10	7.3	1.22	8.1	1.35
	21	4.1	0.73	5.0	0.86	5.7	0.98	6.2	0.98	6.5	1.10	7.3	1.22	8.1	1.35
	23	4.1	0.73	4.9	0.86	5.7	0.98	6.1	1.10	6.5	1.10	7.2	1.22	8.1	1.35
	25	4.1	0.73	4.9	0.86	5.7	0.98	6.1	1.10	6.5	1.10	7.2	1.35	8.1	1.47
	27	4.1	0.73	4.9	0.86	5.7	1.10	6.1	1.10	6.5	1.22	7.2	1.35	8.1	1.59
	29	4.1	0.73	4.9	0.98	5.7	1.10	6.1	1.22	6.5	1.35	7.2	1.47	8.1	1.71
	31	4.1	0.86	4.9	0.98	5.7	1.22	6.1	1.22	6.5	1.35	7.2	1.59	8.0	1.84
	33	4.1	0.86	4.9	1.10	5.7	1.22	6.1	1.35	6.5	1.47	7.2	1.71	8.0	1.96
	35	4.1	0.98	4.9	1.10	5.6	1.35	6.1	1.47	6.5	1.59	7.2	1.84	8.0	2.08
	37	4.0	0.98	4.8	1.22	5.5	1.35	5.8	1.47	6.3	1.59	7.0	1.84	7.8	2.20
	39	3.9	0.98	4.6	1.22	5.4	1.47	5.7	1.59	6.2	1.71	6.9	1.96	7.6	2.32
	42	3.9	1.10	4.6	1.35	5.4	1.59	5.7	1.71	6.2	1.84	6.9	2.08	7.6	2.45
	44	3.9	1.10	4.6	1.35	5.4	1.59	5.7	1.84	6.2	1.96	6.9	2.20	7.6	2.57
	46	3.9	1.10	4.6	1.35	5.4	1.59	5.7	1.84	6.2	1.96	6.9	2.20	7.6	2.57

2. Outdoor Units

2-8. Capacity table (A2A)

AE160MXTP✳H/EU

Cooling

Combination % (Capacity index)	Outdoor temperature (°C, DB)	Indoor temperature (WB, °C)													
		14		16		18		19		20		22		24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	DB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100%	10	10.6	1.65	12.6	1.96	14.6	2.37	15.6	2.47	16.6	2.68	18.7	3.09	20.4	3.40
	12	10.5	1.65	12.6	1.96	14.6	2.37	15.6	2.58	16.6	2.78	18.7	3.19	20.2	3.40
	14	10.5	1.65	12.6	2.06	14.6	2.37	15.6	2.58	16.6	2.78	18.6	3.19	19.9	3.30
	16	10.5	1.75	12.6	2.06	14.6	2.47	15.6	2.68	16.6	2.89	18.6	3.30	19.5	3.40
	18	10.5	1.75	12.5	2.06	14.6	2.47	15.6	2.68	16.6	2.89	18.6	3.50	19.3	3.61
	20	10.5	1.75	12.5	2.16	14.5	2.58	15.6	2.89	16.6	3.09	18.6	3.71	19.0	3.71
	21	10.5	1.75	12.5	2.16	14.5	2.68	15.5	2.99	16.5	3.19	18.5	3.81	18.9	3.81
	23	10.5	1.85	12.5	2.37	14.5	2.89	15.5	3.19	16.5	3.50	18.1	4.02	18.5	4.02
	25	10.5	1.96	12.5	2.47	14.5	3.09	15.5	3.40	16.5	3.71	17.9	4.12	18.3	4.22
	27	10.5	2.06	12.5	2.68	14.5	3.30	15.5	3.61	16.5	4.02	17.6	4.33	18.0	4.33
	29	10.5	2.27	12.5	2.78	14.5	3.50	15.5	3.92	16.5	4.22	17.4	4.53	17.7	4.53
	31	10.4	2.37	12.5	2.99	14.5	3.71	15.5	4.12	16.5	4.53	17.1	4.64	17.5	4.74
	33	10.4	2.47	12.4	3.19	14.4	4.02	15.4	4.43	16.4	4.84	16.8	4.84	17.2	4.95
	35	10.4	2.68	12.4	3.40	14.4	4.22	15.4	4.74	16.1	4.95	16.5	5.05	16.8	5.05
	37	10.1	2.68	12.0	3.40	14.0	4.33	14.9	4.74	15.3	4.95	15.7	4.95	16.1	4.95
	39	9.9	2.68	11.8	3.50	13.7	4.33	14.6	4.84	14.8	4.84	15.1	4.84	15.5	4.95
	42	9.9	2.89	11.8	3.71	13.7	4.64	14.6	5.05	14.6	4.95	14.8	5.05	15.2	5.05
	44	9.9	2.99	11.8	3.92	13.7	4.84	14.6	5.36	14.4	5.15	14.5	5.15	14.9	5.26
	46	9.9	3.19	11.8	4.12	13.7	5.15	14.6	5.67	14.2	5.26	14.2	5.36	14.6	5.46
90%	10	9.5	1.44	11.3	1.75	13.1	2.06	14.1	2.27	15.0	2.37	16.9	2.78	18.7	3.09
	12	9.4	1.44	11.3	1.75	13.1	2.06	14.1	2.27	15.0	2.47	16.8	2.78	18.7	3.09
	14	9.4	1.55	11.2	1.85	13.1	2.16	14.1	2.27	15.0	2.47	16.8	2.89	18.6	3.19
	16	9.4	1.55	11.2	1.85	13.1	2.16	14.1	2.37	15.0	2.58	16.8	2.89	18.6	3.30
	18	9.4	1.55	11.2	1.85	13.0	2.27	14.1	2.37	15.0	2.58	16.8	2.99	18.6	3.40
	20	9.4	1.55	11.2	1.96	13.0	2.27	14.0	2.47	14.9	2.68	16.8	3.19	18.6	3.71
	21	9.4	1.55	11.2	1.96	13.0	2.27	14.0	2.58	14.9	2.78	16.8	3.30	18.5	3.81
	23	9.4	1.65	11.2	2.06	13.0	2.47	14.0	2.68	14.9	2.99	16.7	3.50	18.1	4.02
	25	9.4	1.75	11.2	2.16	13.0	2.68	14.0	2.89	14.9	3.19	16.7	3.81	17.9	4.12
	27	9.4	1.85	11.2	2.27	13.0	2.78	14.0	3.09	14.9	3.40	16.7	4.02	17.6	4.33
	29	9.4	1.96	11.2	2.47	13.0	2.99	14.0	3.30	14.9	3.61	16.7	4.33	17.3	4.53
	31	9.3	2.06	11.1	2.58	13.0	3.19	14.0	3.50	14.9	3.92	16.7	4.64	17.1	4.64
	33	9.3	2.16	11.1	2.78	12.9	3.40	13.9	3.81	14.8	4.12	16.4	4.84	16.8	4.84
	35	9.3	2.37	11.1	2.99	12.9	3.61	13.9	4.02	14.8	4.43	16.1	4.95	16.5	5.05
	37	9.0	2.37	10.8	2.99	12.5	3.71	13.5	4.02	14.4	4.43	15.4	4.95	15.7	4.95
	39	8.8	2.37	10.5	2.99	12.3	3.71	13.2	4.12	14.1	4.53	14.8	4.84	15.1	4.84
	42	8.8	2.47	10.5	3.19	12.3	3.92	13.2	4.33	14.1	4.74	14.5	4.95	14.8	5.05
	44	8.8	2.58	10.5	3.30	12.3	4.12	13.2	4.64	14.1	5.05	14.2	5.15	14.5	5.15
	46	8.8	2.78	10.5	3.50	12.3	4.43	13.2	4.84	14.1	5.36	14.0	5.26	14.2	5.36
80%	10	8.4	1.24	10.1	1.55	11.7	1.85	12.5	1.96	13.3	2.06	14.9	2.37	16.5	2.68
	12	8.4	1.34	10.0	1.55	11.7	1.85	12.5	1.96	13.3	2.16	14.9	2.47	16.5	2.78
	14	8.4	1.34	10.0	1.55	11.7	1.85	12.5	2.06	13.3	2.16	14.9	2.47	16.5	2.78
	16	8.4	1.34	10.0	1.65	11.6	1.96	12.4	2.06	13.3	2.16	14.9	2.58	16.5	2.89
	18	8.4	1.34	10.0	1.65	11.6	1.96	12.4	2.06	13.2	2.27	14.9	2.58	16.5	2.89
	20	8.4	1.44	10.0	1.65	11.6	1.96	12.4	2.16	13.2	2.27	14.8	2.68	16.5	3.09
	21	8.3	1.44	10.0	1.75	11.6	1.96	12.4	2.16	13.2	2.37	14.8	2.78	16.4	3.19
	23	8.3	1.44	10.0	1.75	11.6	2.06	12.4	2.27	13.2	2.47	14.8	2.99	16.4	3.40
	25	8.3	1.44	10.0	1.85	11.6	2.27	12.4	2.47	13.2	2.68	14.8	3.19	16.4	3.71
	27	8.3	1.55	10.0	1.96	11.6	2.37	12.4	2.68	13.2	2.89	14.8	3.40	16.4	3.92
	29	8.3	1.65	10.0	2.06	11.6	2.58	12.4	2.78	13.2	3.09	14.8	3.61	16.4	4.22
	31	8.3	1.75	9.9	2.27	11.5	2.68	12.3	2.99	13.2	3.30	14.8	3.81	16.4	4.53
	33	8.3	1.85	9.9	2.37	11.5	2.89	12.3	3.19	13.1	3.50	14.7	4.12	16.3	4.84
	35	8.3	1.96	9.9	2.47	11.5	3.09	12.3	3.40	13.1	3.71	14.7	4.43	16.1	4.95
	37	8.0	2.06	9.6	2.58	11.2	3.09	11.9	3.40	12.7	3.71	14.3	4.43	15.3	4.95
	39	7.9	2.06	9.4	2.58	10.9	3.09	11.7	3.40	12.4	3.81	14.0	4.53	14.8	4.84
	42	7.9	2.16	9.4	2.68	10.9	3.30	11.7	3.61	12.4	4.02	14.0	4.74	14.6	4.95
	44	7.9	2.27	9.4	2.78	10.9	3.50	11.7	3.81	12.4	4.22	14.0	5.05	14.4	5.15
	46	7.9	2.37	9.4	2.99	10.9	3.71	11.7	4.02	12.4	4.43	14.0	5.36	14.2	5.26

2. Outdoor Units

2-8. Capacity table (A2A)

AE160MXTP*H/EU

Cooling

Combination % (Capacity index)	Outdoor temperature (°C, DB)	Indoor temperature (WB, °C)													
		14		16		18		19		20		22		24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	DB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	10	7.4	1.13	8.8	1.34	10.2	1.55	11.0	1.65	11.7	1.75	13.1	2.06	14.5	2.27
	12	7.4	1.13	8.8	1.34	10.1	1.55	11.0	1.75	11.7	1.85	13.1	2.06	14.5	2.37
	14	7.4	1.13	8.7	1.34	10.1	1.65	10.9	1.75	11.7	1.85	13.1	2.16	14.5	2.37
	16	7.4	1.13	8.7	1.44	10.1	1.65	10.9	1.75	11.6	1.85	13.1	2.16	14.5	2.47
	18	7.4	1.24	8.7	1.44	10.1	1.65	10.9	1.85	11.6	1.96	13.0	2.16	14.5	2.47
	20	7.4	1.24	8.7	1.44	10.1	1.75	10.9	1.85	11.6	1.96	13.0	2.27	14.4	2.58
	21	7.4	1.24	8.7	1.44	10.1	1.75	10.9	1.85	11.6	1.96	13.0	2.27	14.4	2.68
	23	7.4	1.24	8.7	1.55	10.1	1.75	10.9	1.96	11.6	2.06	13.0	2.47	14.4	2.89
	25	7.4	1.24	8.7	1.55	10.1	1.85	10.9	2.06	11.6	2.27	13.0	2.58	14.4	2.99
	27	7.4	1.34	8.7	1.65	10.1	2.06	10.9	2.16	11.6	2.37	13.0	2.78	14.4	3.19
	29	7.4	1.44	8.7	1.75	10.1	2.16	10.9	2.37	11.6	2.58	13.0	2.99	14.4	3.50
	31	7.3	1.55	8.7	1.85	10.0	2.27	10.8	2.47	11.5	2.68	13.0	3.19	14.4	3.71
	33	7.3	1.65	8.7	1.96	10.0	2.37	10.8	2.68	11.5	2.89	12.9	3.40	14.3	3.92
	35	7.3	1.75	8.6	2.06	10.0	2.58	10.8	2.78	11.5	3.09	12.9	3.61	14.3	4.22
	37	7.1	1.75	8.4	2.16	9.7	2.58	10.5	2.89	11.2	3.09	12.5	3.61	13.9	4.22
	39	7.0	1.75	8.2	2.16	9.5	2.58	10.3	2.89	10.9	3.09	12.3	3.71	13.6	4.33
	42	7.0	1.85	8.2	2.27	9.5	2.78	10.3	2.99	10.9	3.30	12.3	3.92	13.6	4.53
	44	7.0	1.85	8.2	2.37	9.5	2.89	10.3	3.19	10.9	3.50	12.3	4.12	13.6	4.84
	46	7.0	1.96	8.2	2.47	9.5	3.09	10.3	3.40	10.9	3.71	12.3	4.33	13.6	5.05
60%	10	6.4	1.03	7.6	1.13	8.7	1.34	9.3	1.44	9.9	1.55	11.2	1.75	12.4	1.96
	12	6.4	1.03	7.6	1.13	8.7	1.34	9.3	1.44	9.9	1.55	11.2	1.75	12.4	1.96
	14	6.4	1.03	7.6	1.24	8.7	1.34	9.3	1.44	9.9	1.55	11.1	1.75	12.4	2.06
	16	6.4	1.03	7.6	1.24	8.7	1.44	9.3	1.55	9.9	1.65	11.1	1.85	12.3	2.06
	18	6.3	1.03	7.6	1.24	8.7	1.44	9.3	1.55	9.9	1.65	11.1	1.85	12.3	2.06
	20	6.3	1.03	7.6	1.24	8.7	1.44	9.3	1.55	9.9	1.65	11.1	1.85	12.3	2.16
	21	6.3	1.03	7.6	1.24	8.7	1.44	9.3	1.55	9.9	1.65	11.1	1.96	12.3	2.16
	23	6.3	1.13	7.5	1.24	8.7	1.44	9.3	1.65	9.9	1.75	11.1	1.96	12.3	2.27
	25	6.3	1.13	7.5	1.34	8.7	1.55	9.3	1.65	9.9	1.85	11.1	2.16	12.3	2.47
	27	6.3	1.13	7.5	1.34	8.7	1.65	9.3	1.75	9.9	1.96	11.1	2.27	12.3	2.58
	29	6.3	1.24	7.5	1.44	8.6	1.75	9.2	1.96	9.8	2.06	11.1	2.37	12.3	2.78
	31	6.3	1.24	7.5	1.55	8.6	1.85	9.2	2.06	9.8	2.16	11.0	2.58	12.2	2.99
	33	6.3	1.34	7.5	1.65	8.6	1.96	9.2	2.16	9.8	2.37	11.0	2.68	12.2	3.19
	35	6.3	1.44	7.5	1.75	8.6	2.06	9.2	2.27	9.8	2.47	11.0	2.89	12.2	3.40
	37	6.1	1.44	7.3	1.75	8.3	2.16	8.9	2.27	9.5	2.47	10.7	2.89	11.8	3.40
	39	6.0	1.44	7.1	1.75	8.2	2.16	8.7	2.37	9.3	2.58	10.4	2.99	11.6	3.40
	42	6.0	1.55	7.1	1.85	8.2	2.27	8.7	2.47	9.3	2.68	10.4	3.09	11.6	3.61
	44	6.0	1.65	7.1	1.96	8.2	2.37	8.7	2.58	9.3	2.78	10.4	3.30	11.6	3.81
	46	6.0	1.65	7.1	2.06	8.2	2.47	8.7	2.68	9.3	2.99	10.4	3.50	11.6	4.02
50%	10	5.3	0.82	6.3	0.93	7.4	1.13	7.8	1.24	8.3	1.24	9.3	1.44	10.4	1.55
	12	5.3	0.82	6.3	1.03	7.4	1.13	7.8	1.24	8.3	1.34	9.3	1.44	10.3	1.65
	14	5.3	0.82	6.3	1.03	7.3	1.13	7.8	1.24	8.3	1.34	9.3	1.44	10.3	1.65
	16	5.3	0.93	6.3	1.03	7.3	1.13	7.7	1.24	8.2	1.34	9.3	1.55	10.3	1.65
	18	5.3	0.93	6.3	1.03	7.3	1.24	7.7	1.24	8.2	1.34	9.3	1.55	10.3	1.75
	20	5.3	0.93	6.3	1.03	7.3	1.24	7.7	1.34	8.2	1.34	9.3	1.55	10.3	1.75
	21	5.3	0.93	6.3	1.03	7.3	1.24	7.7	1.34	8.2	1.44	9.2	1.55	10.3	1.75
	23	5.3	0.93	6.3	1.03	7.3	1.24	7.7	1.34	8.2	1.44	9.2	1.65	10.3	1.75
	25	5.3	0.93	6.3	1.13	7.3	1.24	7.7	1.34	8.2	1.44	9.2	1.65	10.3	1.96
	27	5.3	0.93	6.3	1.13	7.3	1.34	7.7	1.44	8.2	1.55	9.2	1.75	10.3	2.06
	29	5.3	1.03	6.3	1.24	7.3	1.44	7.7	1.55	8.2	1.65	9.2	1.85	10.3	2.16
	31	5.3	1.03	6.3	1.24	7.3	1.55	7.7	1.65	8.2	1.75	9.2	2.06	10.2	2.27
	33	5.2	1.13	6.3	1.34	7.3	1.55	7.7	1.75	8.2	1.85	9.2	2.16	10.2	2.47
	35	5.2	1.13	6.2	1.44	7.3	1.65	7.7	1.85	8.2	1.96	9.2	2.27	10.2	2.58
	37	5.1	1.24	6.1	1.44	7.0	1.65	7.5	1.85	7.9	1.96	8.9	2.27	9.9	2.68
	39	5.0	1.24	5.9	1.44	6.9	1.75	7.4	1.85	7.7	1.96	8.7	2.27	9.7	2.68
	42	5.0	1.24	5.9	1.55	6.9	1.75	7.4	1.96	7.7	2.06	8.7	2.47	9.7	2.78
	44	5.0	1.34	5.9	1.55	6.9	1.85	7.4	2.06	7.7	2.16	8.7	2.58	9.7	2.99
	46	5.0	1.34	5.9	1.65	6.9	1.96	7.4	2.16	7.7	2.27	8.7	2.68	9.7	3.09

2. Outdoor Units

2-9. Capacity correction

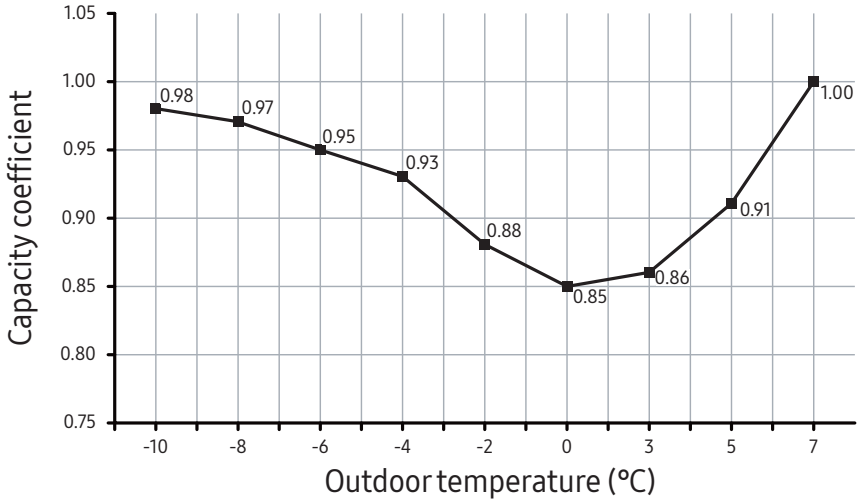
2-9-1. Defrosting correction factor

◆ On heating operation, frost can be formed on heat exchanger according to outdoor temperature.
(Frost on heat exchanger results in decreasing the performance.)
To remove frost on heat exchanger of outdoor unit, defrost operation is carried out periodically.
During defrost operation, capacity of outdoor unit may decrease.
The decrement is not considered to the individual capacity tables.

Outdoor temperature (°C, DB)	-10	-8	-6	-4	-2	0	3	5	7
Capacity coefficient	0.98	0.97	0.95	0.93	0.88	0.85	0.86	0.91	1.00

Corrected Heating Capacity = heating Capacity X Capacity coefficient

Capacity coefficient of outdoor unit on defrost operation

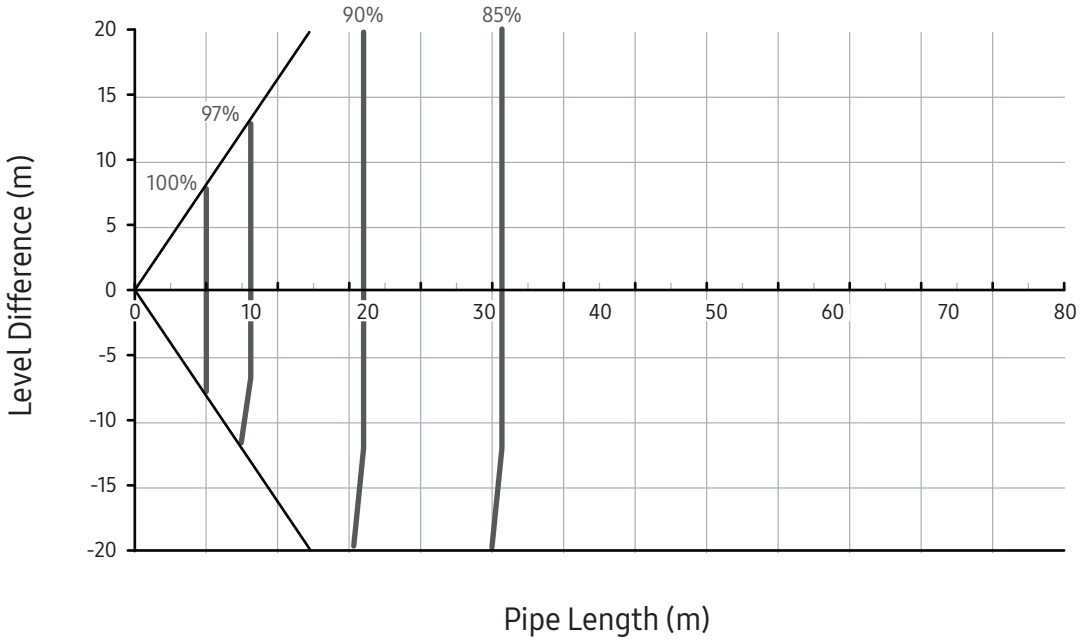


2. Outdoor Units

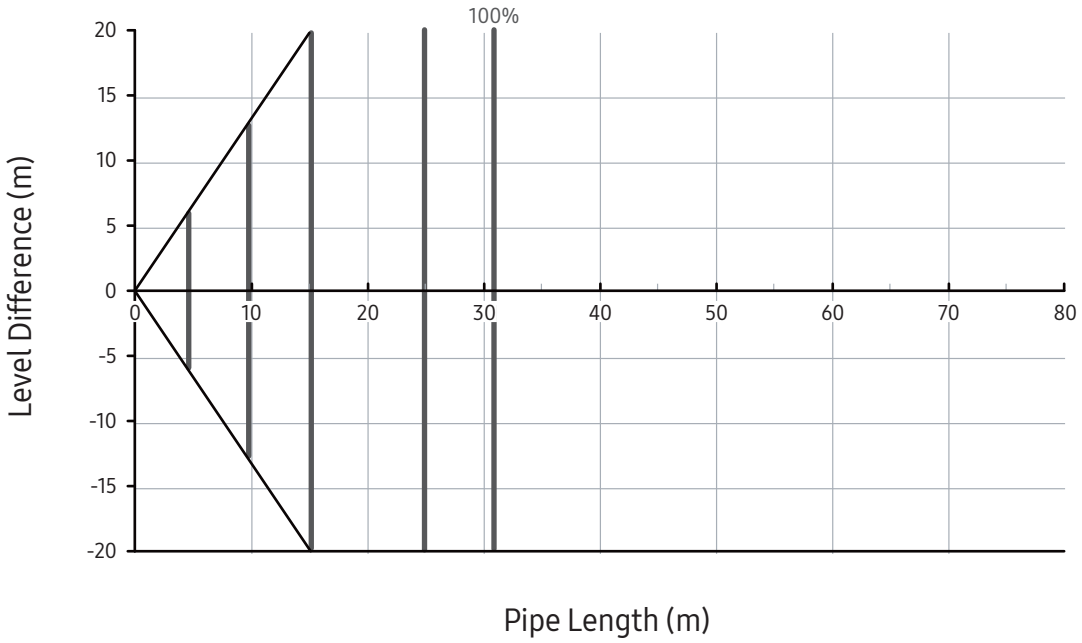
2-9. Capacity correction

2-9-2. AE044/066/090MXTP*H

1) Cooling



2) Heating

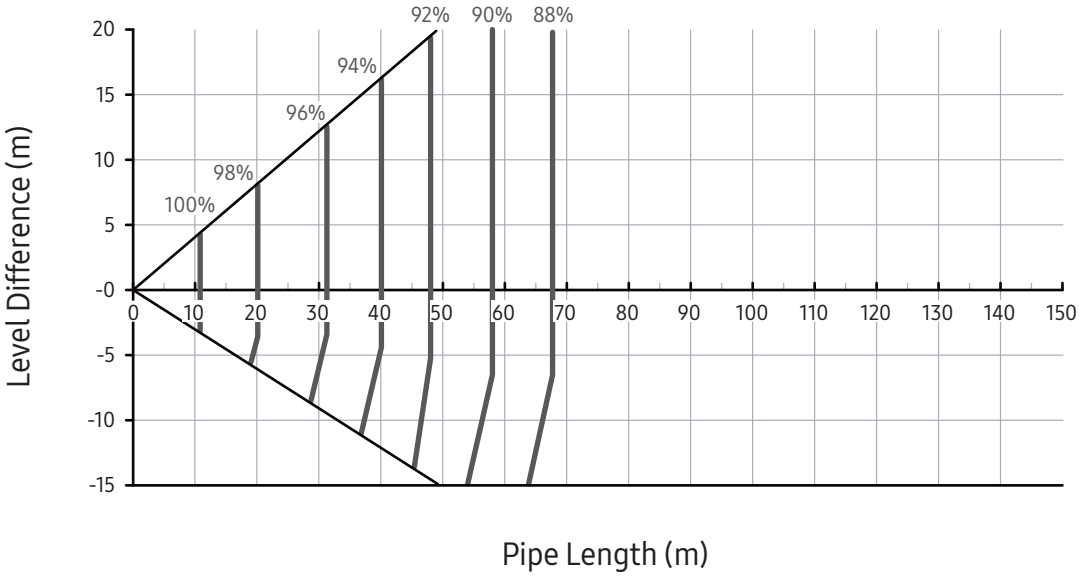


2. Outdoor Units

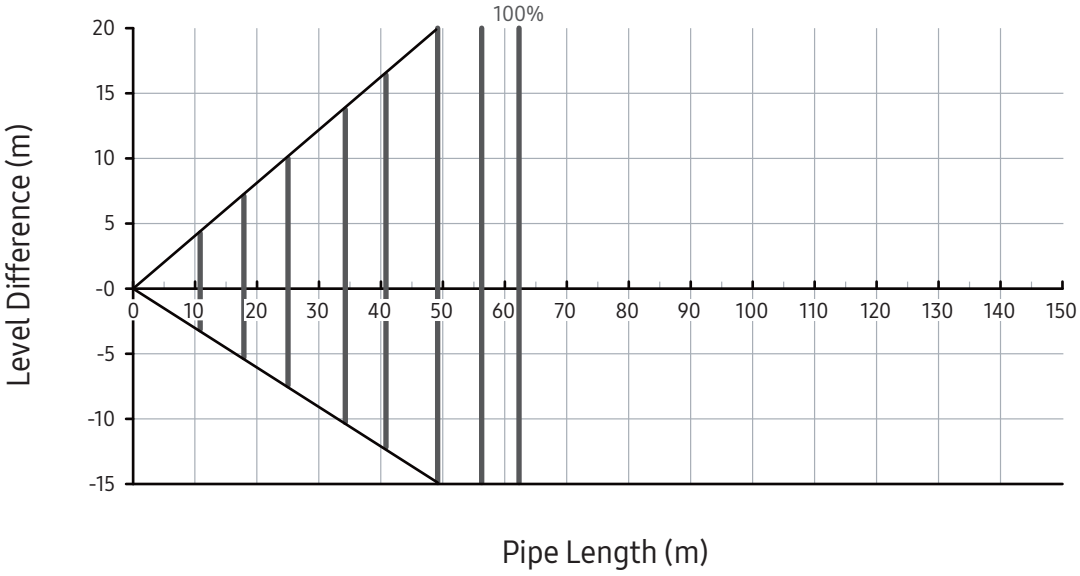
2-9. Capacity correction

2-9-2. AE120/160MXTP*H

1) Cooling



2) Heating



3. Hydro Units

3-1. Specifications

Type				EHS TDM PLUS (HYDRO UNIT)	EHS TDM PLUS (HYDRO UNIT)	EHS TDM PLUS (HYDRO UNIT)	EHS TDM PLUS (HYDRO UNIT)
Model Name				AE090MNYDEH/EU	AE090MNYDGH/EU	AE160MNYDEH/EU	AE160MNYDGH/EU
Mode			-	Heat Pump (A2W)	Heat Pump (A2W)	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply			Φ, #, V, Hz	1,2,220-240,50	3,4,380-415,50	1,2,220-240,50	3,4,380-415,50
Capacity	Heating		W	4,400~9,000	9,000	12,000~16,000	12,000~16,000
			Btu/h	15,000~30,700	30,700	40,900~54,600	40,900~54,600
	Cooling		W	5,100~8,000	8,000	12,000~14,500	12,000~14,500
			Btu/h	17,400~27,300	27,300	40,900~49,500	40,900~49,500
Water Connections	Water Flow Rate	Min/Std/Max	LPM	7/-/42	7/-/42	12/-/58	12/-/58
	Water Pressure	Max.	bar	Max 3.0	Max 3.0	Max 3.0	Max 3.0
	Water Pipe	Inlet	Φ, inch	BSPP 1+1/4"	BSPP 1+1/4"	BSPP 1+1/4"	BSPP 1+1/4"
		Outlet	Φ, inch	BSPP 1+1/4"	BSPP 1+1/4"	BSPP 1+1/4"	BSPP 1+1/4"
	Leaving Water Temperature	Heating	°C	15~55 (H/P : 25~55)	15~55 (H/P : 25~55)	15~55 (H/P : 25~55)	15~55 (H/P : 25~55)
		Cooling	°C	5~25	5~25	5~25	5~25
Ref. piping Connections	Liquid pipe		Φ, mm (inch)	6.35 (1/4")	6.35 (1/4")	9.52 (3/8")	9.52 (3/8")
	Gas pipe		Φ, mm (inch)	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")
Water Pump	Type		-	Centrifurugal (UPM3 25-7.5)	Centrifurugal (UPM3 25-7.5)	Centrifurugal (Stratos 25 1-9)	Centrifurugal (Stratos 25 1-9)
	Motor Input		W	60	60	90	90
	Number of Unit		EA	1	1	1	1
Flow Switch	Type		-	Magnetic, Decreasing	Magnetic, Decreasing	Magnetic, Decreasing	Magnetic, Decreasing
	Min. flow rates		LPM	7 ± 1.5	7 ± 1.5	12 ± 1.5	12 ± 1.5
Electric Expantion Vavle			-	EDM Φ3.2	EDM Φ3.2	EDM Φ4.0	EDM Φ4.0
Electric Heater			W	4,000	6,000	6,000	6,000
Expansion Vessel			Liter	8	8	8	8
Pressure Relief Valve			bar	2.9	2.9	2.9	2.9
Air Purge Valve			Φ, inch	BSPP male 3/8"	BSPP male 3/8"	BSPP male 3/8"	BSPP male 3/8"
Service Valve			Φ, inch	BSPP male 1 1/4"	BSPP male 1 1/4"	BSPP male 1 1/4"	BSPP male 1 1/4"
Sound	Sound Pressure	Heating	dB(A)	31	31	38	38
		Cooling	dB(A)	31	31	38	38
	Sound Power		dB(A)	48	48	55	55
External Dimension	Net Weight		kg	45.5	46.5	46.5	46.5
	Shipping Weight		kg	55.0	56.0	56.0	56.0
	Net Dimensions (WxHxD)		mm	510 x 850 x 315	510 x 850 x 315	510 x 850 x 315	510 x 850 x 315
	Shipping Dimensions (WxHxD)		mm	564 x 1,024 x 412	564 x 1,024 x 412	564 x 1,024 x 412	564 x 1,024 x 412

NOTE

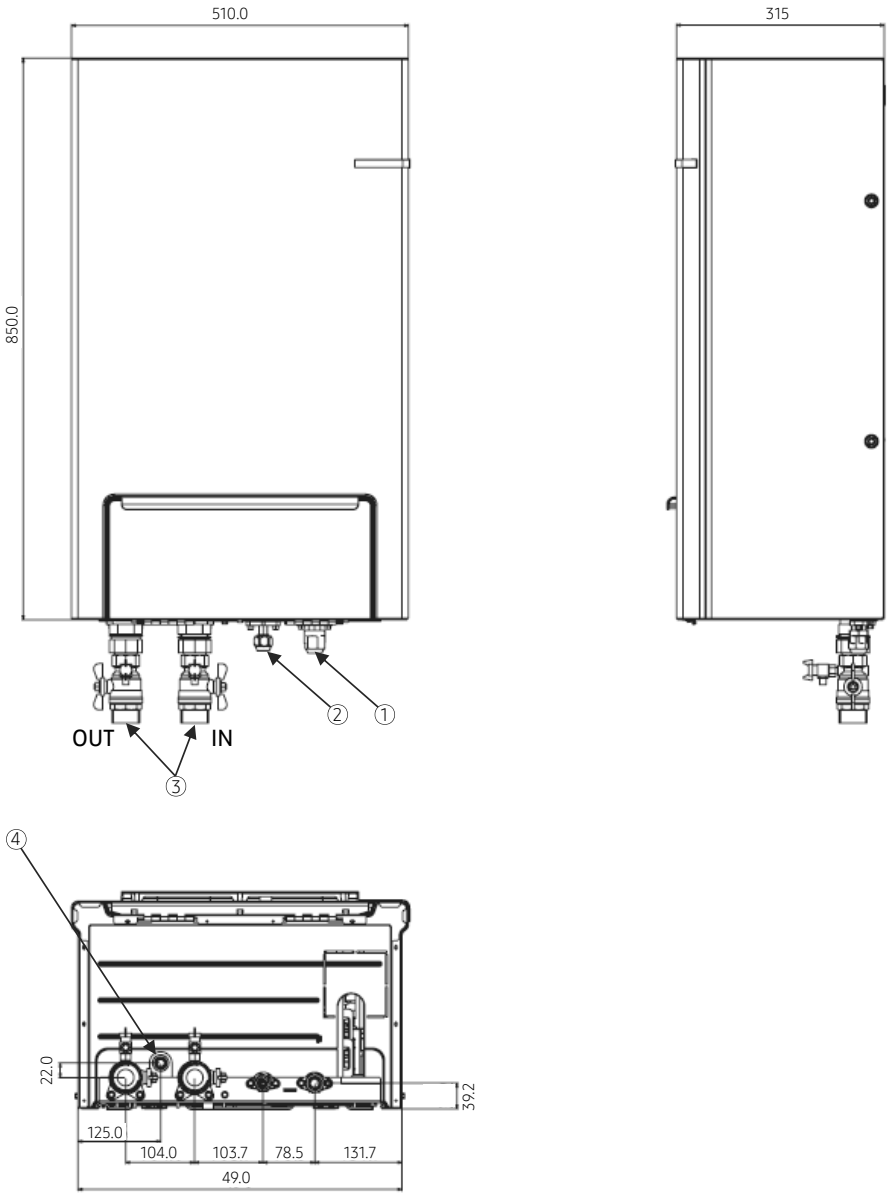
- Specifications may be subject to change without prior notice.

3. Hydro Units

3-2. Dimensional drawing

AE090/160MNYD✳H✳✳

Unit : mm

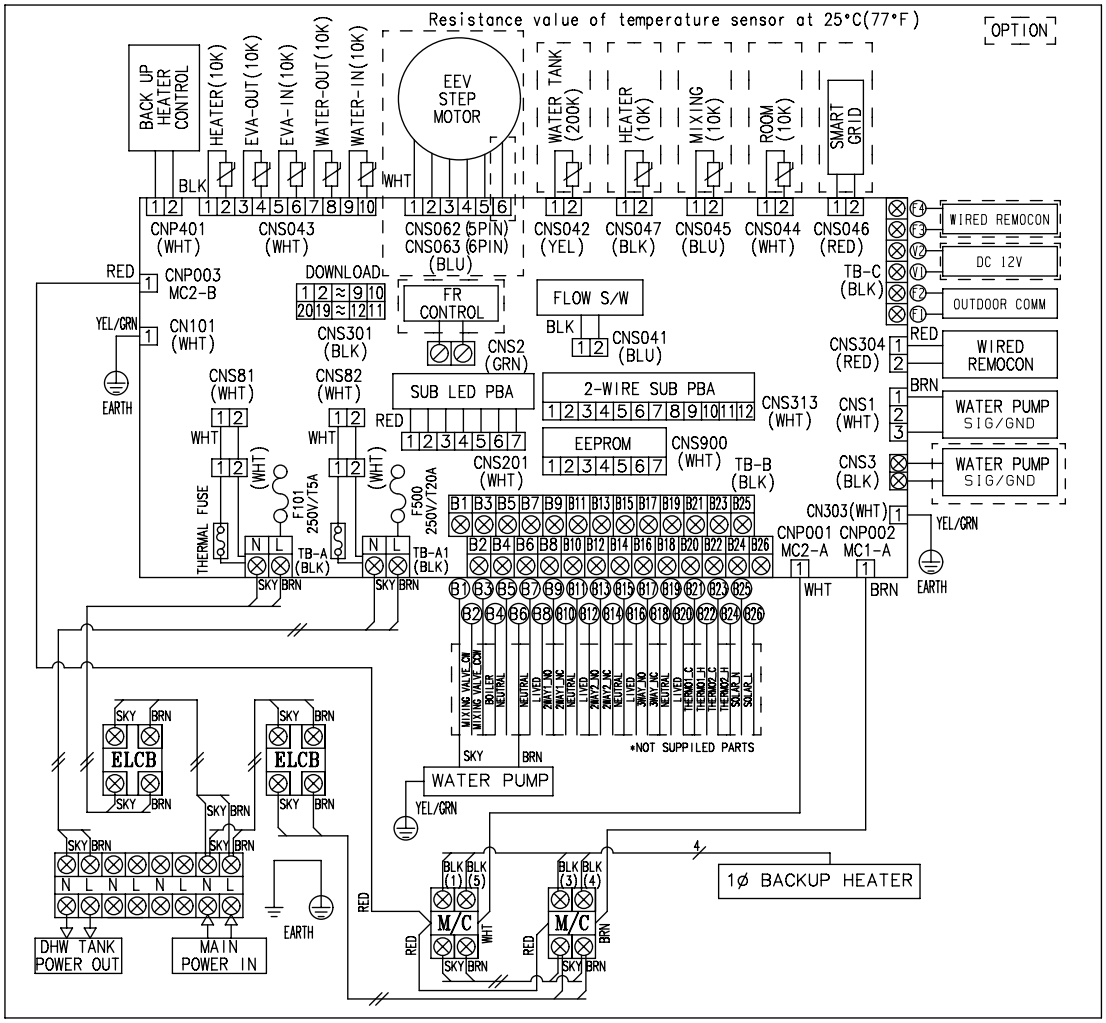


NO	Table of Descriptions
1	Gas Ref. Pipe
2	Liquid Ref. Pipe
3	Water Pipe (Inlet/Outlet)
4	Drain Hose Connector

3. Hydro Units

3-3. Electrical wiring diagram

AE090/160MNYDEH✳✳



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

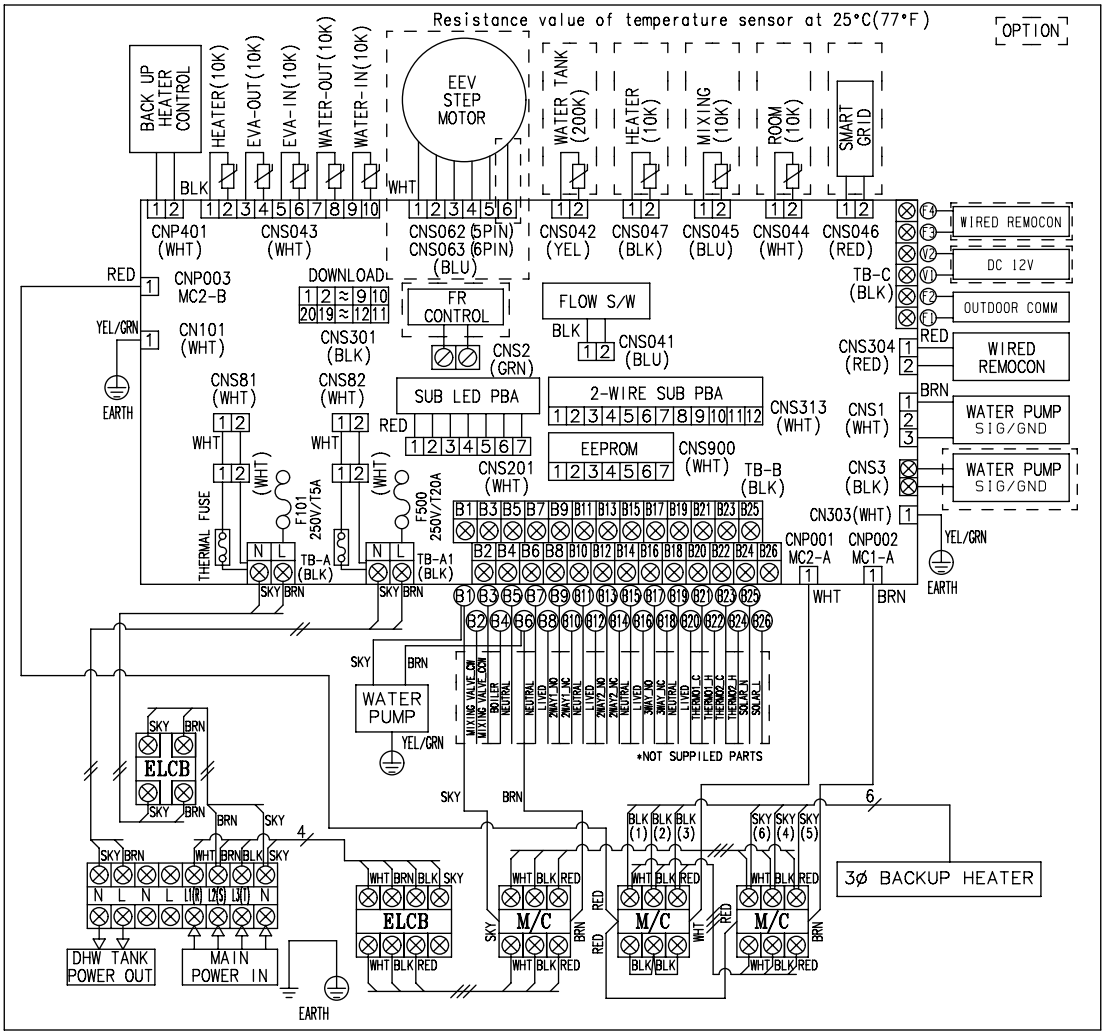
NOTES

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

3. Hydro Units

3-3. Electrical wiring diagram

AE090/160MNYDGH✳✳



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

NOTES

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

3. Hydro Units

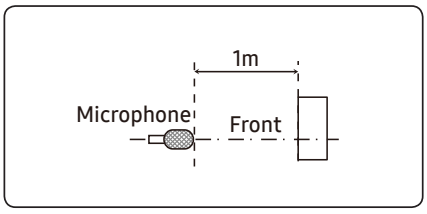
3-4. Sound data

Summary

Capacity (kW)	Model	Sound Pressure dB(A)		Sound Power dB(A)
		Cooling	Heating	
9	AE090MNYDEH/EU	31	31	48
9	AE090MNYDGH/EU	31	31	48
16	AE160MNYDEH/EU	38	38	55
16	AE160MNYDGH/EU	38	38	55

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.**Sound Pressure level**

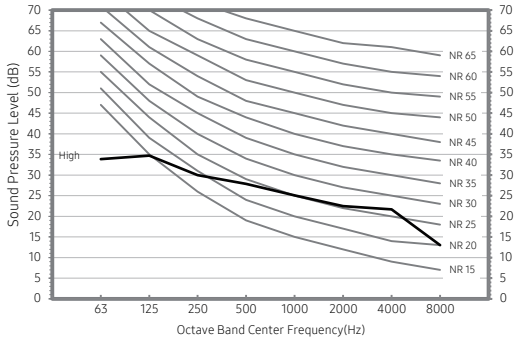


Unit: dB(A)

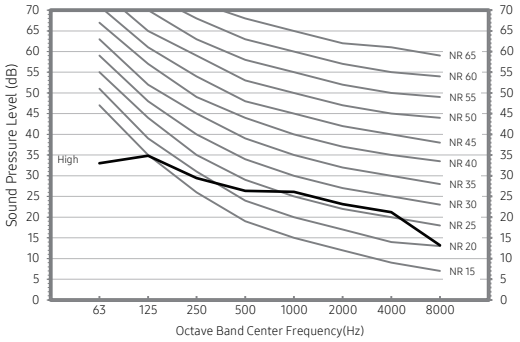
Model	Cooling	Heating
AE090MNYDEH/EU	31	31
AE090MNYDGH/EU	31	31
AE160MNYDEH/EU	38	38
AE160MNYDGH/EU	38	38

- NR Curve

1) AE090MNYDEH ✻✻



2) AE090MNYDGH ✻✻

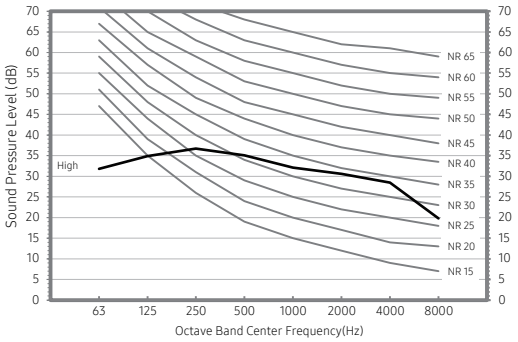


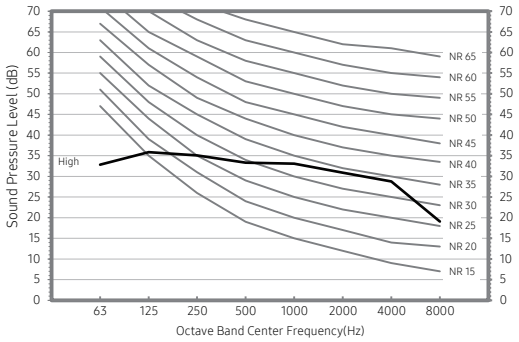
3) AE160MNYDEH ✻✻

4) AE160MNYDGH ✻✻

3. Hydro Units

3-4. Sound data





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. Hydro Units

3-4. Sound data

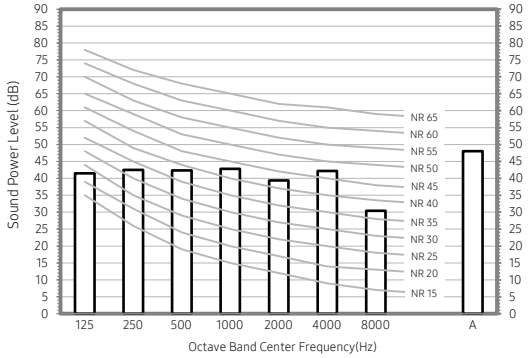
Sound Power level

NOTE

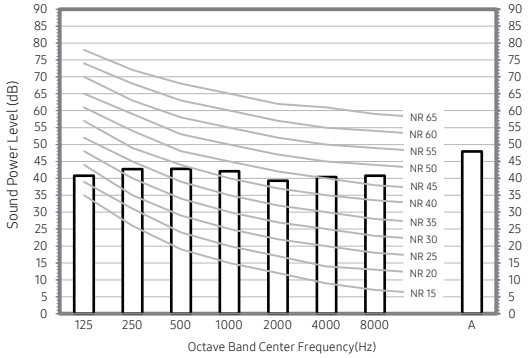
- Specifications may be subject to change without prior notice
  - Sound power level is an absolute value that a sound source generates.
  - dBA = A-weighted sound power level.
  - Reference power : 1pW.
  - Measured according to ISO 3741.

Model	Power (dBA)
AE090MNYDEH/EU	48
AE090MNYDGH/EU	48
AE160MNYDEH/EU	55
AE160MNYDGH/EU	55

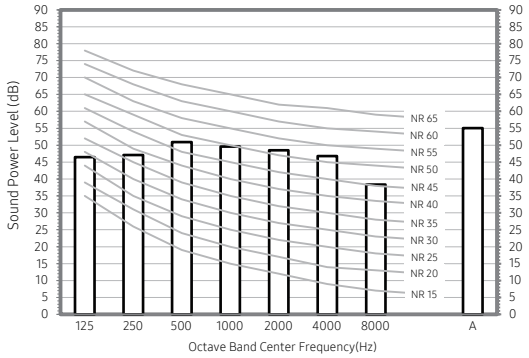
1) AE090MNYDEH ✻✻



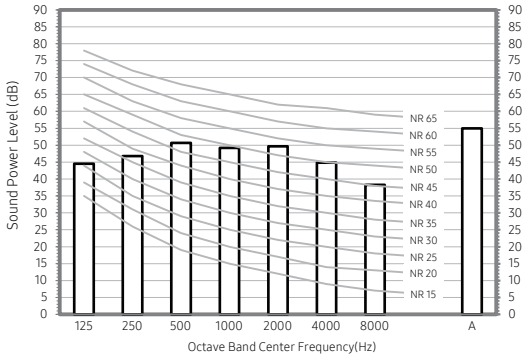
2) AE090MNYDGH ✻✻



3) AE160MNYDEH ✻✻



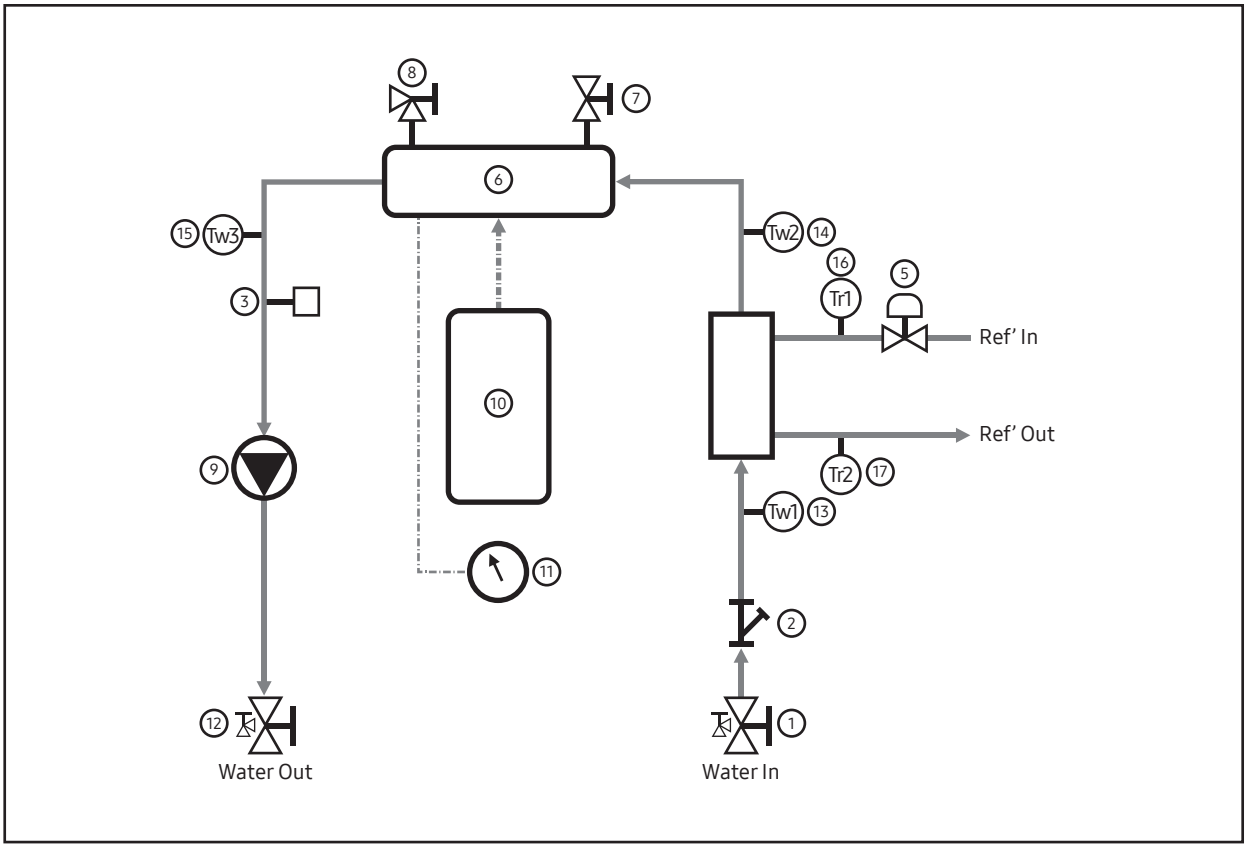
4) AE160MNYDGH ✻✻



3. Hydro Units

3-5. Piping diagram

AE090/160MNYD⁎H



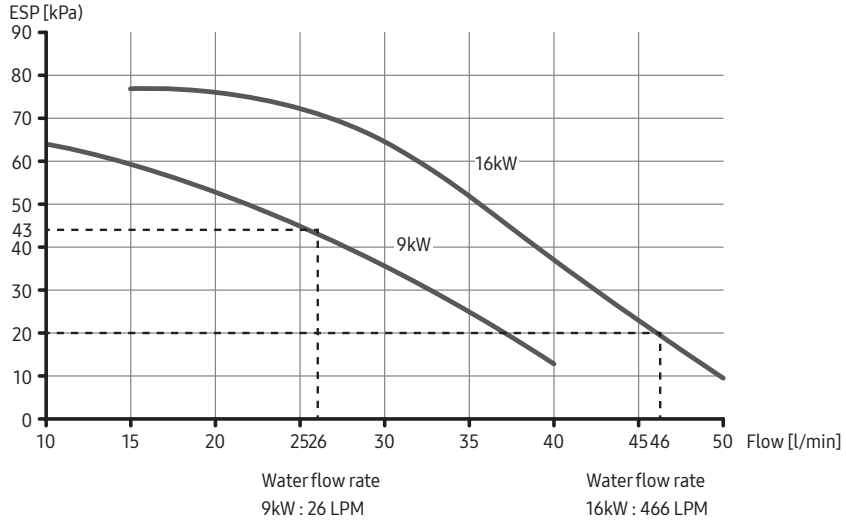
No.	Note
1	Service valve(R)
2	Strainer
3	Flow switch
4	Heat exchanger
5	EEV kit
6	Backup heater
7	Pressure relief valve
8	Air vent
9	Water pump
10	Expansion tank
11	Manometer
12	Service valve(L)
13	Water temp. sensor 1
14	Water temp. sensor 2
15	Water temp. sensor 3
16	Refrigerant temp. sensor 1
17	Refrigerant temp. sensor 2

3. Hydro Units

3-5. Hydraulic Performance

3-6-1. Water Pump

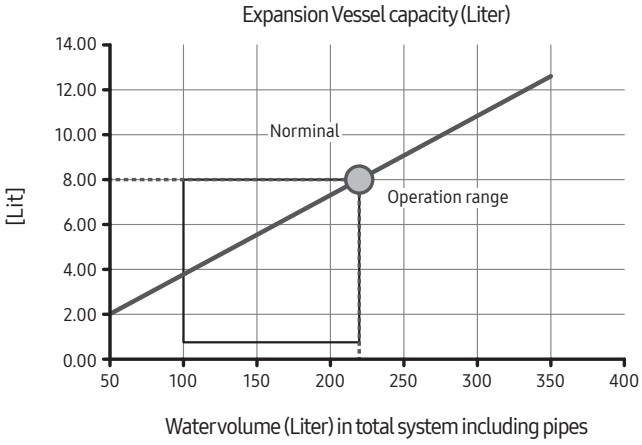
1) ESP(External Static Pressure) Diagram



The illustration below shows the external static pressure of the unit depending on the water flow and the pump setting.
If the pressure loss of total system is over 43(9 kW) or 20(16 kW)kPa, additional water pump should be installed in series.
Otherwise, the flow rate might decreased, causing insufficient heating or cooling.
When ESP is not enough, additional pump should be installed. In this case, install the PWM control external type pump additionally.

3-6-2. Expansion Vessel

1) Setting the pre-pressure of the expansion vessel



When it is required to change the default pre-pressure of the expansion vessel(1 bar), keep in mind the following guidelines

- Use only dry nitrogen to set the expansion vessel pre-pressure.
- Inappropriate setting of the expansion vessel pre-pressure will lead to malfunction of the system. Therefore, the pre-pressure should only be adjusted by a licensed installer.

⚠ CAUTION

- Water volume of total system for reliable performance is minimum 50 liters.

4. Indoor Units

4-1. Specifications

RAC (A3050)

Type				A3050	A3050	A3050
Model Name				AE022MNADEH/EU	AE028MNADEH/EU	AE036MNADEH/EU
Power Supply			Φ, #, V, Hz	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50
Mode			-	HEAT PUMP	HEAT PUMP	HEAT PUMP
Performance	Capacity	Cooling	Kw	2.2	2.8	3.6
		Heating	kW	2.5	3.2	4.0
Power	Power Input	Cooling	W	15	16	20
		Heating		18	24	28
	Current Input	Cooling	A	0.13	0.13	0.15
		Heating		0.15	0.19	0.20
Fan	Type		-	Cross flow Fan	Cross flow Fan	Cross flow Fan
	Quantity		EA	1	1	1
	Air Flow Rate	H/M/L (UL)	m³/min	5.4(C) / 6.5(H)	5.7(C) / 8.5(H)	7.1 (C) / 10.0 (H)
	External Pressure	Max. (Min/Std/Max)	mmAq	-	-	-
			Pa	-	-	-
Fan Motor	Type		-	BLDC Feedback	BLDC Feedback	BLDC Feedback
	Output x n		W	27x1	27x1	27x1
Piping Connections	Liquid Pipe		Type	Flare connection	Flare connection	Flare connection
			Φ, mm (inch)	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")
	Gas Pipe		Type	Flare connection	Flare connection	Flare connection
			Φ, mm (inch)	12.7 (1/2")	12.7 (1/2")	12.7 (1/2")
	Drain Pipe		Φ, mm	ID18mm Hose	ID18mm Hose	ID18mm Hose
Wiring connections	For power supply Below 20m/over 20m	Min.	mm²	1.5/2.5	1.5/2.5	1.5/2.5
	Communication	Min.	mm²	0.75	0.75	0.75
		Remark	-	F1, F2	F1, F2	F1, F2
Refrigerant	Type		-	R410A	R410A	R410A
	Control Method		-	EEV NOT INCLUDED	EEV NOT INCLUDED	EEV NOT INCLUDED
Sound	Sound Pressure	H/M/L	dB(A)	33 / 28 / 23	35 / 30 / 25	36 / 32 / 29
	Sound Power			50	53	54
Dimensions	Net Weight		kg	7.9	8.0	9.5
	Shipping Weight		kg	9.5	9.6	11.4
	Net Dimensions (W×H×D)		mm	750x249x246	750x249x246	826x261x261
	Shipping Dimensions (W×H×D)		mm	800x298x302	800x298x302	886x317x335
Optional Accessories	Drain pump	Model	-	-	-	-
		Option	-	-	-	-
		Max. lifting Height / Displacement	mm / Liter/h	-	-	-
	Virus Doctor		-	Included	Included	Included

NOTE

- Specification may be subject to change without prior notice.

1) Capacities are based on (Equivalent refrigerant piping 7.5m, Level differences 0m);
   - Cooling : Indoor temperature 27°C DB, 19°C WB / Outdoor temperature 35°C DB, 24°C WB
   - Heating : Indoor temperature 20°C DB, 15°C WB / Outdoor temperature 7°C DB, 6°C WB
2) Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.

4. Indoor Units

4-1. Specifications

RAC (A3050)

Type				A3050	A3050
Model Name				AE056MNADEH/EU	AE071MNADEH/EU
Power Supply			Φ, #, V, Hz	1,2,220-240,50	1,2,220-240,50
Mode			-	HEAT PUMP	HEAT PUMP
Performance	Capacity	Cooling	Kw	5.6	7.1
		Heating	kW	6.3	8.0
Power	Power Input	Cooling	W	27	41
		Heating		31	53
	Current Input	Cooling	A	0.21	0.31
		Heating		0.29	0.41
Fan	Type		-	Cross flow Fan	Cross flow Fan
	Quantity		EA	1	1
	Air Flow Rate	H/M/L (UL)	m³/min	11.8 (C) / 15.0 (H)	14.8 (C) / 17.4 (H)
	External Pressure	Max. (Min/Std/Max)	mmAq	-	-
			Pa	-	-
Fan Motor	Type		-	BLDC Feedback	BLDC Feedback
	Output x n		W	27x1	27x1
Piping Connections	Liquid Pipe		Type	Flare connection	Flare connection
			Φ, mm (inch)	6.35 (1/4")	9.52 (3/8")
	Gas Pipe		Type	Flare connection	Flare connection
			Φ, mm (inch)	12.7 (1/2")	15.88 (5/8")
	Drain Pipe		Φ, mm	ID18mm Hose	ID18mm Hose
Wiring connections	For power supply Below 20m/over 20m	Min.	mm²	1.5/2.5	1.5/2.5
	Communication	Min.	mm²	0.75	0.75
		Remark	-	F1, F2	F1, F2
Refrigerant	Type		-	R410A	R410A
	Control Method		-	EEV NOT INCLUDED	EEV NOT INCLUDED
Sound	Sound Pressure	H/M/L	dB(A)	39 / 35 / 32	44 / 40 / 36
	Sound Power			57	61
Dimensions	Net Weight		kg	14.3	14.3
	Shipping Weight		kg	16.7	16.7
	Net Dimensions (W×H×D)		mm	1065x301x294	1065x301x294
	Shipping Dimensions (W×H×D)		mm	1123x354x384	1123x354x384
Optional Accessories	Drain pump	Model	-	-	-
		Option	-	-	-
		Max. lifting Height / Displacement	mm / Liter/h	-	-
	Virus Doctor		-	Included	Included

NOTE

- Specification may be subject to change without prior notice.

1) Capacities are based on (Equivalent refrigerant piping 7.5m, Level differences 0m);
   - Cooling : Indoor temperature 27°C DB, 19°C WB / Outdoor temperature 35°C DB, 24°C WB
   - Heating : Indoor temperature 20°C DB, 15°C WB / Outdoor temperature 7°C DB, 6°C WB
2) Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.

4. Indoor Units

4-1. Specifications

Duct (Slim)

Type				Slim Duct	Slim Duct	Slim Duct	Slim Duct
Model Name				AE022MNLDEH/EU	AE028MNLDEH/EU	AE036MNLDEH/EU	AE056MNLDEH/EU
Power Supply			Φ, #, V, Hz	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50
Mode			-	HEAT PUMP	HEAT PUMP	HEAT PUMP	HEAT PUMP
Performance	Capacity	Cooling	Kw	2.2	2.8	3.6	5.6
		Heating	kW	2.5	3.2	4.0	6.3
Power	Power Input	Cooling	W	55	60	65	95
		Heating		55	60	65	95
	Current Input	Cooling	A	0.30	0.32	0.33	0.53
		Heating		0.30	0.32	0.33	0.53
Fan	Type		-	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Quantity		EA	2	2	2	2
	Air Flow Rate	H/M/L (UL)	m³/min	7.0 / 6.1 / 5.3	7.5 / 6.6 / 5.6	7.5 / 6.6 / 5.6	12.0 / 10.5 / 9.0
	External Pressure	Max. (Min/Std/Max)	mmAq	0/1/3	0/1/3	0/1/3	0/2/4
			Pa	0/9.8/29.4	0/9.8/29.4	0/9.8/29.4	0/19.6/39.2
Fan Motor	Type		-	SSR non-feedback	SSR non-feedback	SSR non-feedback	SSR non-feedback
	Output x n		W	28x1	28x1	28x1	50x1
Piping Connections	Liquid Pipe		Type	Flare connection	Flare connection	Flare connection	Flare connection
			Φ, mm (inch)	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")
	Gas Pipe		Type	Flare connection	Flare connection	Flare connection	Flare connection
			Φ, mm (inch)	12.7 (1/2")	12.7 (1/2")	12.7 (1/2")	12.7 (1/2")
	Drain Pipe		Φ, mm	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Wiring connections	For power supply Below 20m/ over 20m	Min.	mm²	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5
	Communication	Min.	mm²	0.75	0.75	0.75	0.75
		Remark	-	F1, F2	F1, F2	F1, F2	F1, F2
Refrigerant	Type		-	R410A	R410A	R410A	R410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Sound	Sound Pressure	H/M/L	dB(A)	26 / 24 / 21	28 / 26 / 23	32 / 30 / 27	36 / 34 / 31
	Sound Power			49	49	51	55
Dimensions	Net Weight		kg	19.0	19.0	19.5	24.5
	Shipping Weight		kg	23.0	23.0	23.5	28.5
	Net Dimensions (W×H×D)		mm	700 x 199 x 600	700 x 199 x 600	700 x 199 x 600	900x199x600
	Shipping Dimensions (W×H×D)		mm	950 x 270 x 710	950 x 270 x 710	950 x 270 x 710	1,150x280x710
Optional Accessories	Drain pump	Model	-	MDP-E075SEE3D (built-in)	MDP-E075SEE3D (built-in)	MDP-E075SEE3D (built-in)	MDP-E075SEE3D (built-in)
		Option	-	Option	Option	Option	Option
		Max. lifting Height / Displacement	mm / Liter/h	750 / 24	750 / 24	750 / 24	750 / 24
	Virus Doctor		-	-	-	-	-

NOTE

- Specification may be subject to change without prior notice.
  1) Capacities are based on (Equivalent refrigerant piping 7.5m, Level differences 0m);
     - Cooling : Indoor temperature 27°C DB, 19°C WB / Outdoor temperature 35°C DB, 24°C WB
     - Heating : Indoor temperature 20°C DB, 15°C WB / Outdoor temperature 7°C DB, 6°C WB
  2) Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.

4. Indoor Units

4-1. Specifications

Duct (MSP)

Type				MSP Duct	MSP Duct
Model Name				AE071MNMPEH/EU	AE090MNMPEH/EU
Power Supply			Φ, #, V, Hz	1,2,220-240,50	1,2,220-240,50
Mode			-	HEAT PUMP	HEAT PUMP
Performance	Capacity	Cooling	Kw	7.1	9.0
		Heating	kW	8.0	10.0
Power	Power Input	Cooling	W	120	145
		Heating		120	145
	Current Input	Cooling	A	1.00	1.20
		Heating		1.00	1.20
Fan	Type		-	Sirocco Fan	Sirocco Fan
	Quantity		EA	2	2
	Air Flow Rate	H/M/L (UL)	m³/min	22/19/16	29/25/22
	External Pressure	Max. (Min/Std/Max)	mmAq	0/3/15	0/4/15
			Pa	0/29.4/147.2	0/39.2/147.2
Fan Motor	Type		-	BLDC feedback	BLDC feedback
	Output x n		W	153x1	153x1
Piping Connections	Liquid Pipe		Type	Flare connection	Flare connection
			Φ, mm (inch)	9.52 (3/8")	9.52 (3/8")
	Gas Pipe		Type	Flare connection	Flare connection
			Φ, mm (inch)	15.88 (5/8")	15.88 (5/8")
	Drain Pipe		Φ, mm	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Wiring connections	For power supply Below 20m/over 20m	Min.	mm²	1.5/2.5	1.5/2.5
	Communication	Min.	mm²	0.75	0.75
		Remark	-	F1, F2	F1, F2
Refrigerant	Type		-	R410A	R410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED
Sound	Sound Pressure	H/M/L	dB(A)	37 / 33 / 29	38 / 35 / 32
	Sound Power			57	58
Dimensions	Net Weight		kg	25.5	33.0
	Shipping Weight		kg	30	38.5
	Net Dimensions (W×H×D)		mm	850x250x700	1,200x250x700
	Shipping Dimensions (W×H×D)		mm	1,064x320x784	1,429x320x779
Optional Accessories	Drain pump	Model	-	MDP-G075SQ(built-in) MDP-G075SP(external)	MDP-G075SQ(built-in) MDP-G075SP(external)
		Option	-	Option	Option
		Max. lifting Height / Displacement	mm / Liter/h	750 / 24	750 / 24
	Virus Doctor		-	-	-

NOTE

- Specification may be subject to change without prior notice.
  1) Capacities are based on (Equivalent refrigerant piping 7.5m, Level differences 0m);
     - Cooling : Indoor temperature 27°C DB, 19°C WB / Outdoor temperature 35°C DB, 24°C WB
     - Heating : Indoor temperature 20°C DB, 15°C WB / Outdoor temperature 7°C DB, 6°C WB
  2) Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.

4. Indoor Units

4-1. Specifications

Console

Type				CONSOLE	CONSOLE	CONSOLE	CONSOLE
Model Name				AE022MNJDEH/EU	AE028MNJDEH/EU	AE036MNJDEH/EU	AE056MNJDEH/EU
Power Supply			Φ, #, V, Hz	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50
Mode			-	HEAT PUMP	HEAT PUMP	HEAT PUMP	HEAT PUMP
Performance	Capacity	Cooling	Kw	2.2	2.8	3.6	5.6
		Heating	kW	2.5	3.2	4.0	6.3
Power	Power Input	Cooling	W	16	30	35	62
		Heating		16	30	35	62
	Current Input	Cooling	A	0.13	0.25	0.29	0.49
		Heating		0.13	0.25	0.29	0.49
Fan	Type		-	Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan
	Quantity		EA	1	1	1	1
	Air Flow Rate	H/M/L (UL)	m³/min	6.3/5.4/4.9	7.0/6.0/5.0	8.50/7.50/6.50	13.0/11.5/10.0
	External Pressure	Max. (Min/Std/Max)	mmAq	-	-	-	-
			Pa	-	-	-	-
Fan Motor	Type		-	BLDC feedback	BLDC feedback	BLDC feedback	BLDC feedback
	Output x n		W	37 x 1	37 x 1	37 x 1	37 x 1
Piping Connections	Liquid Pipe		Type	Flare connection	Flare connection	Flare connection	Flare connection
			Φ, mm (inch)	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")
	Gas Pipe		Type	Flare connection	Flare connection	Flare connection	Flare connection
			Φ, mm (inch)	12.7 (1/2")	12.7 (1/2")	12.7 (1/2")	12.7 (1/2")
	Drain Pipe		Φ, mm	ID18mm Hose	ID18mm Hose	ID18mm Hose	ID18mm Hose
Wiring connections	For power supply Below 20m/ over 20m	Min.	mm²	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5
	Communication	Min.	mm²	0.75	0.75	0.75	0.75
		Remark	-	F1, F2	F1, F2	F1, F2	F1, F2
Refrigerant	Type		-	R410A	R410A	R410A	R410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Sound	Sound Pressure	H/M/L	dB(A)	34 / 32 / 30	38 / 36 / 34	39 / 37 / 34	43 / 40 / 37
	Sound Power			52	58	59	64
Dimensions	Net Weight		kg	15.5	16.0	16.0	16.0
	Shipping Weight		kg	20.5	21.0	21.0	21.0
	Net Dimensions (W×H×D)		mm	720x620x199	720x620x199	720x620x199	720x620x199
	Shipping Dimensions (W×H×D)		mm	810x710x295	810x710x295	810x710x295	810x710x295
Optional Accessories	Drain pump	Model	-	-	-	-	-
		Option	-	-	-	-	-
		Max. lifting Height / Displacement	mm / Liter/h	-	-	-	-
	Virus Doctor		-	Included	Included	Included	Included

NOTE

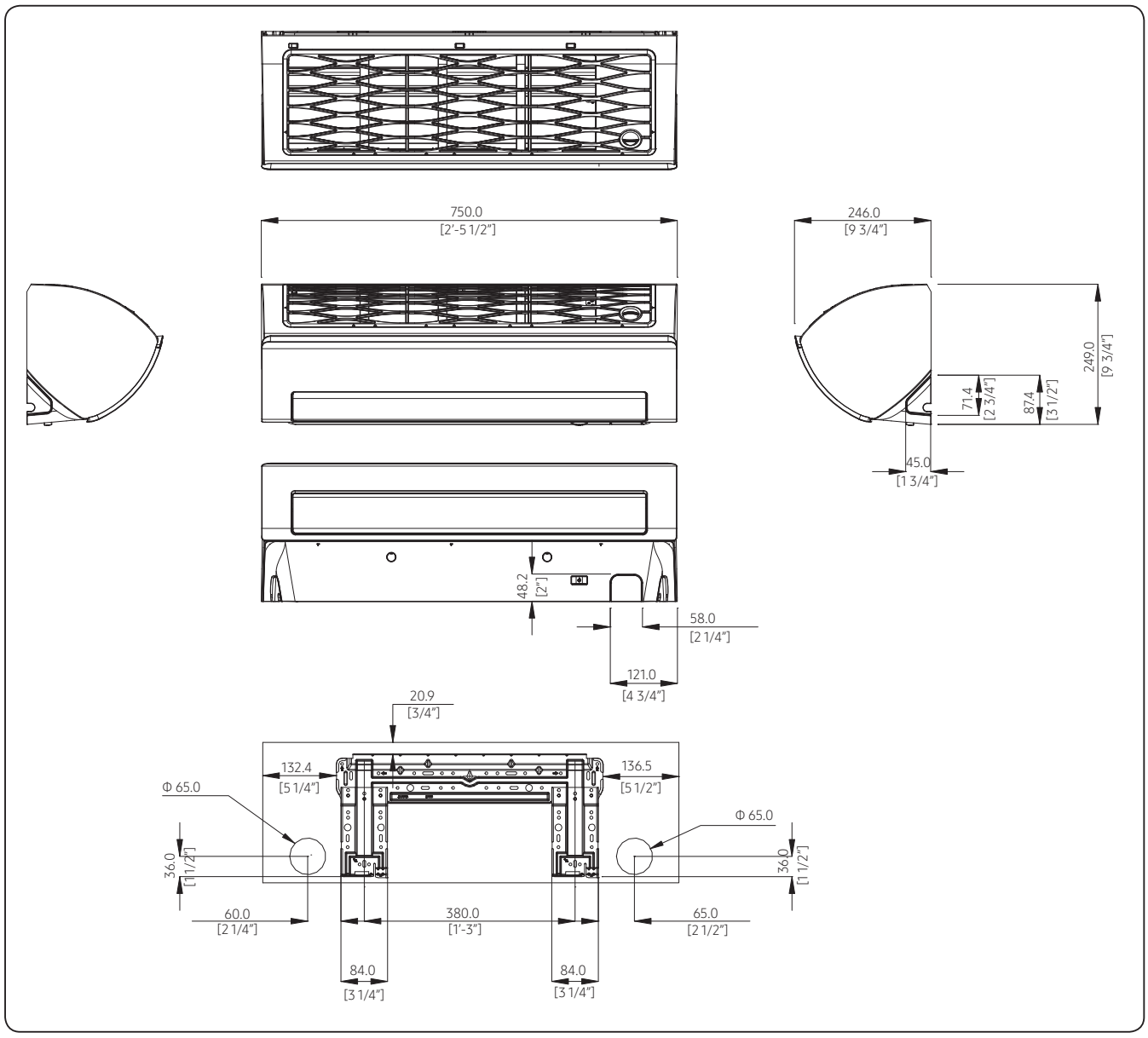
- Specification may be subject to change without prior notice.
  1) Capacities are based on (Equivalent refrigerant piping 7.5m, Level differences 0m);
     - Cooling : Indoor temperature 27°C DB, 19°C WB / Outdoor temperature 35°C DB, 24°C WB
     - Heating : Indoor temperature 20°C DB, 15°C WB / Outdoor temperature 7°C DB, 6°C WB
  2) Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.

4. Indoor Units

4-2. Dimensional drawing

RAC (A3050) : AE022/028MNDEH✳✳

Unit : mm / inches



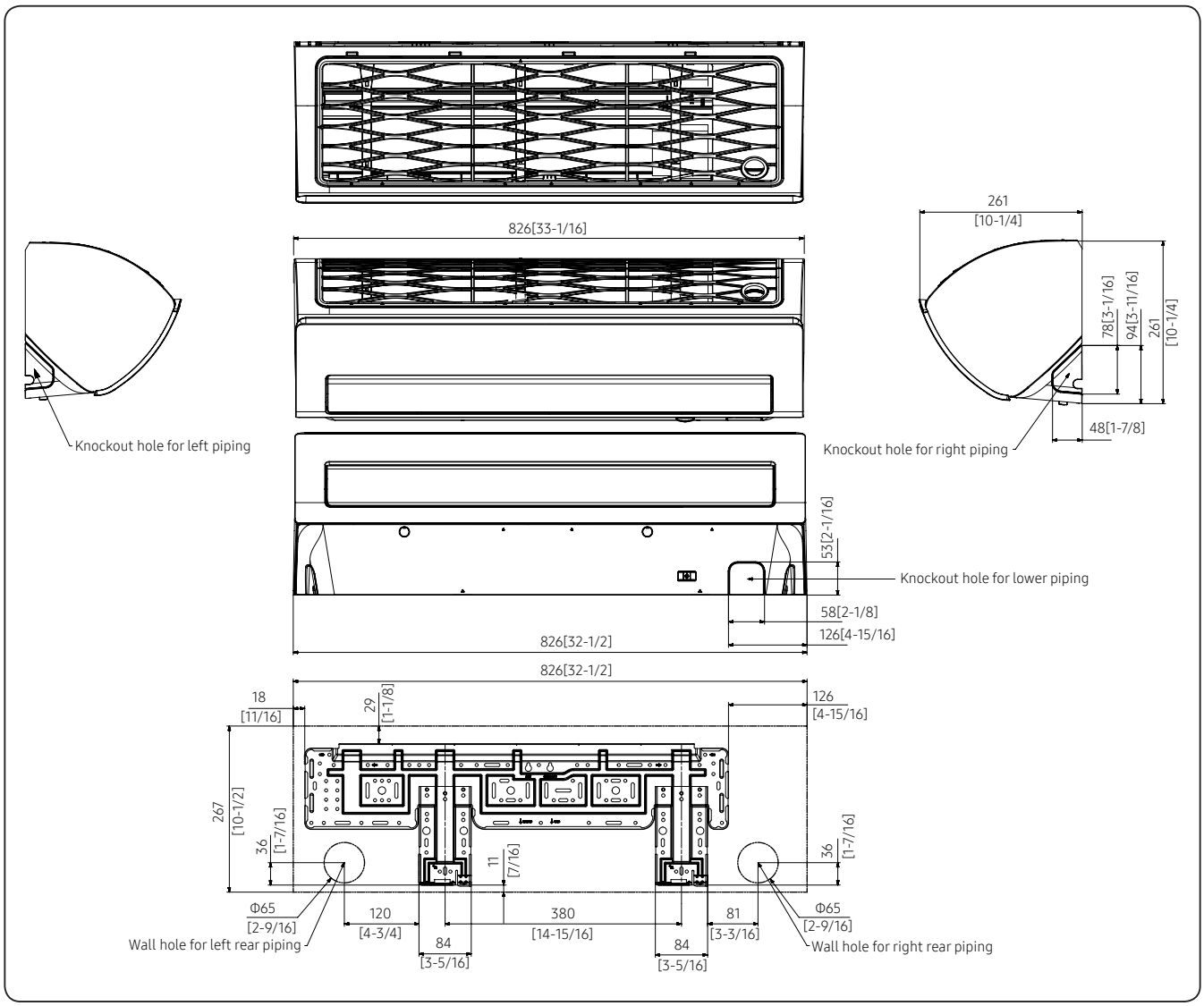
NO	Name	Description	
		2.2 kW	2.8 kW
1	Refrigerant gas pipe	Φ12.7 Flare	
2	Refrigerant liquid pipe	Φ6.35 Flare	
3	Drain pipe connection	ID 18 Hose	

4. Indoor Units

4-2. Dimensional drawing

RAC (A3050) : AE036MNDEH✳✳

Unit : mm / inches



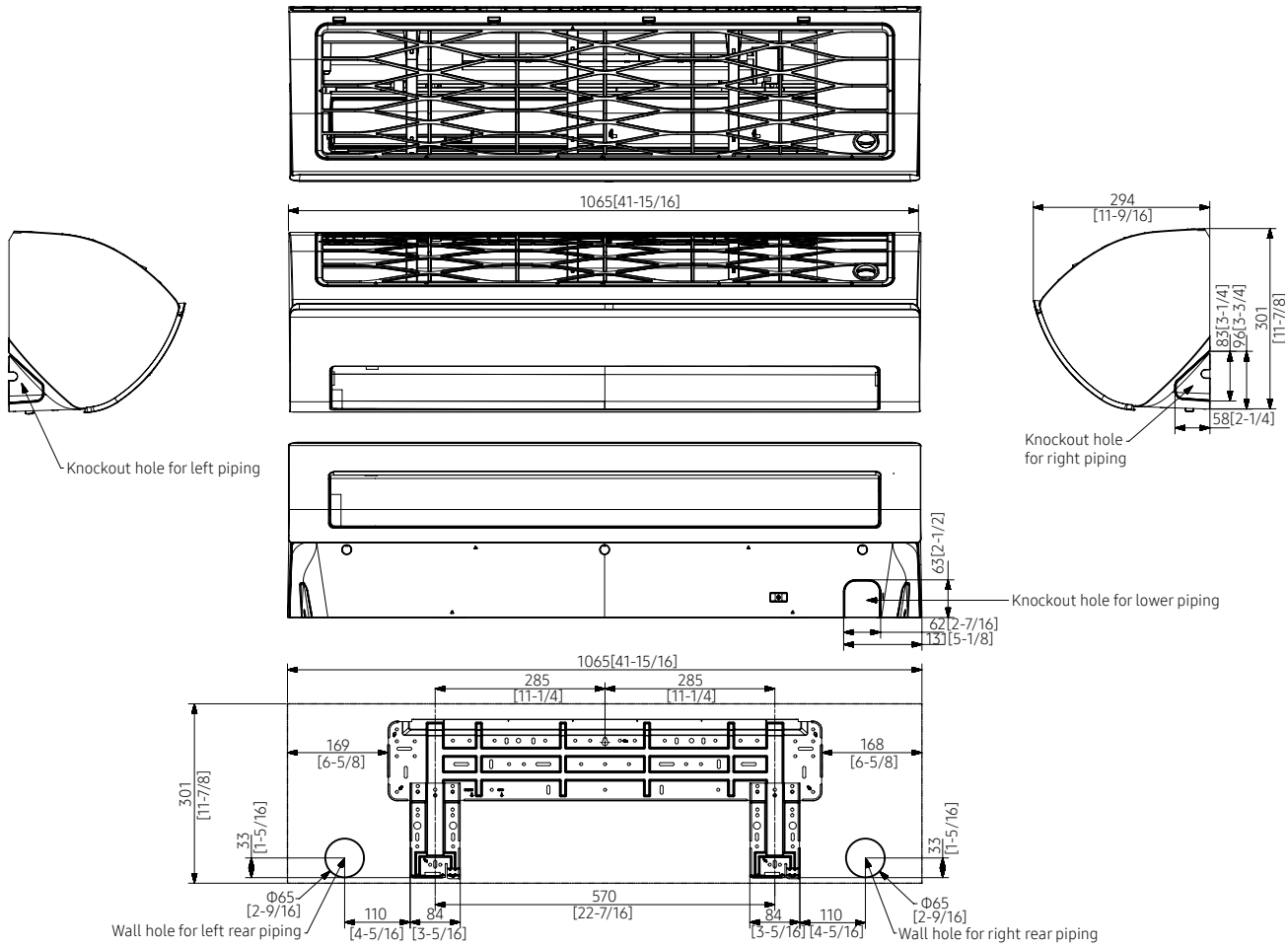
NO	Name	Description
1	Liquid pipe connection	Φ6.35(1/4)
2	Gas pipe connection	Φ12.7(Φ1/2)
3	Drain pipe connection	ID 18 Hose
4	Power & Communication wiring conduit	-

4. Indoor Units

4-2. Dimensional drawing

RAC (A3050) : AE056/071MNDEH✳✳

Unit : mm



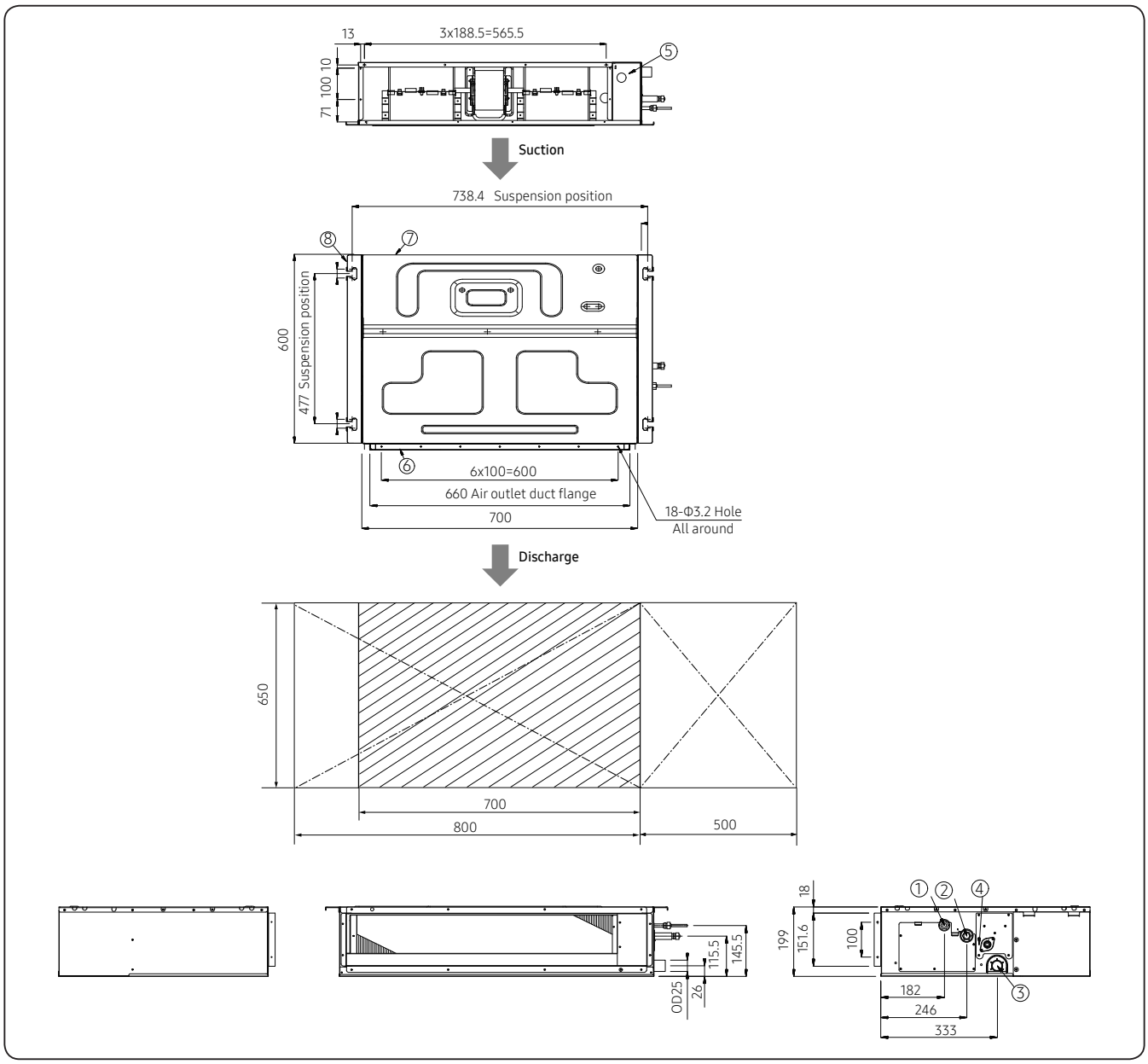
NO	Name	Description	
		5.6 kW	7.1 kW
1	Liquid pipe connection	Φ6.35(1/4)	Φ9.52(3/8)
2	Gas pipe connection	Φ12.7(Φ1/2)	Φ15.88(Φ5/8)
3	Drain pipe connection	ID 18 Hose	
4	Power & Communication wiring conduit	-	

4. Indoor Units

4-2. Dimensional drawing

Slim Duct : AE022/028/036MNLDEH✻✻

Unit : mm



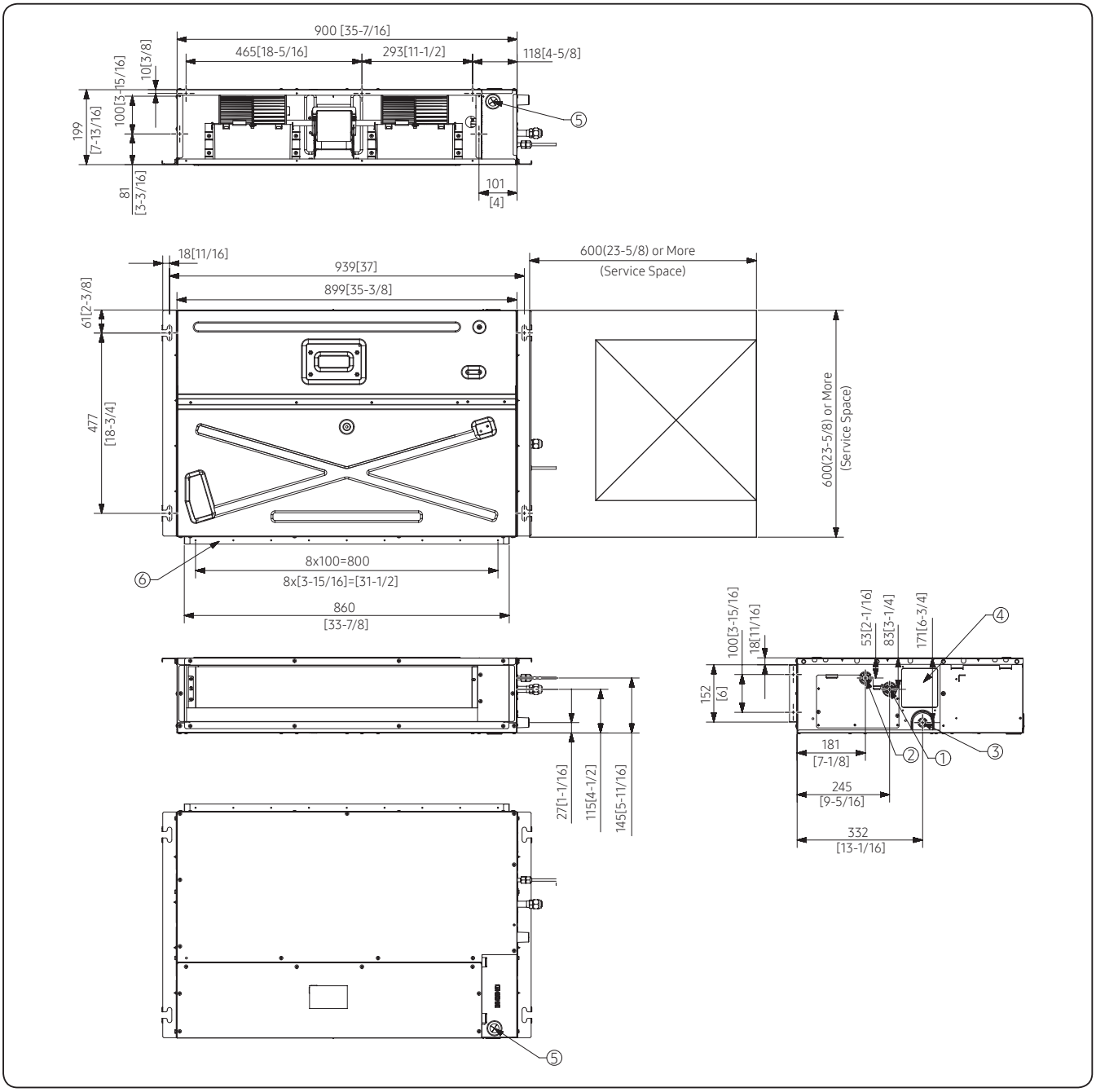
NO	Name	Description
1	Liquid pipe connection	Φ6.35(1/4")
2	Gas pipe connection	Φ12.70(1/2")
3	Drain pipe connection without drain pump	VP25(OD Φ32, ID Φ25)
4	Drain pipe connection with drain pump	VP25(OD Φ32, ID Φ25)
5	Power supply/Communication connection	-
6	Air discharge grille flange	-
7	Return air side	-
8	Hook	Φ9.52 or M10

4. Indoor Units

4-2. Dimensional drawing

Slim Duct : AE056MNLDEH✳✳

Unit : mm



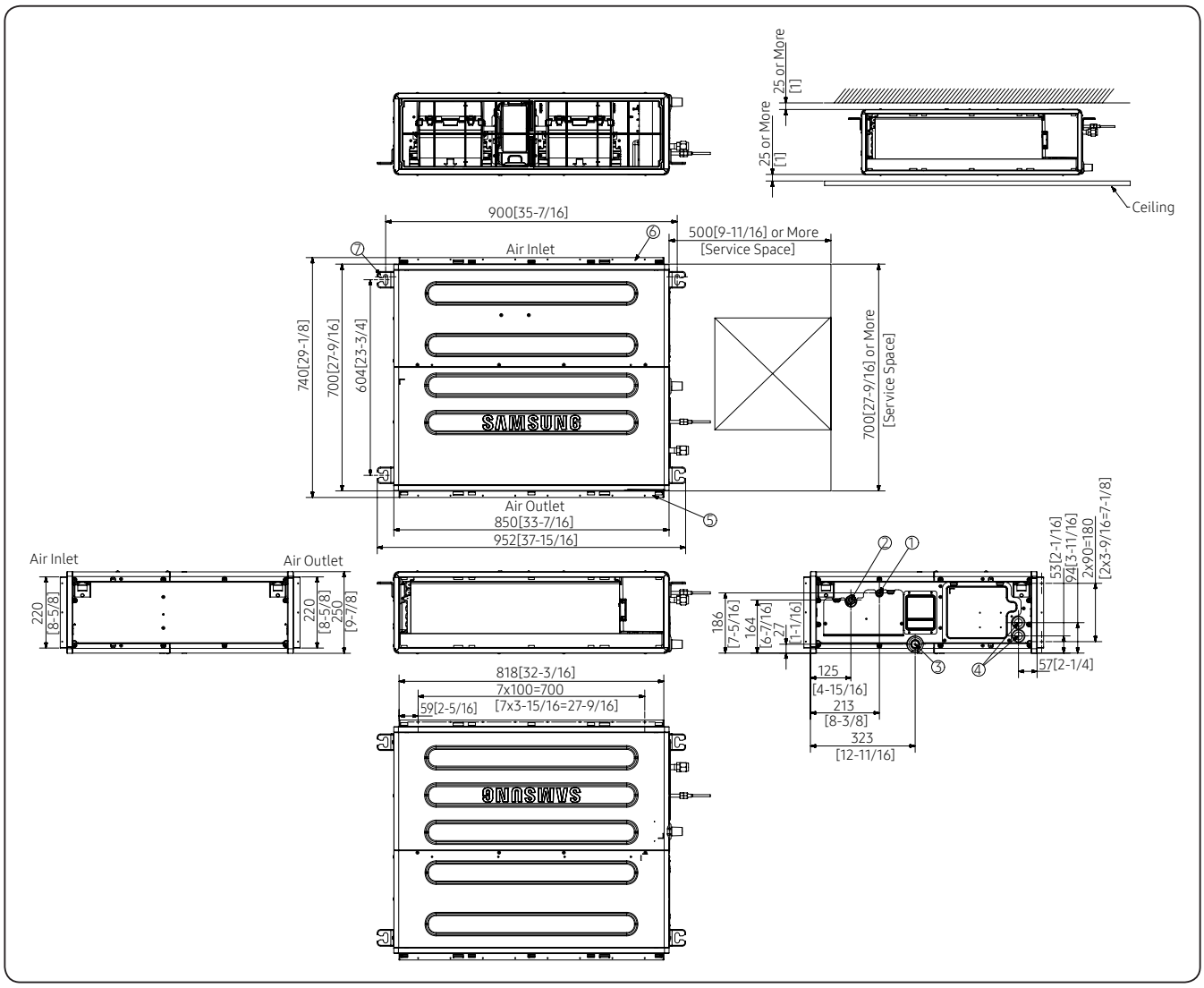
NO	Name	Description
1	Gas pipe connection	Φ12.7(1/2)
2	Liquid pipe connection	Φ6.35(1/4)
3	Drain pipe connection	VP-25(OD 32, ID 25)
4	Knockout hole for Drain pump	Option kit
5	Conduit for power supply & Communication wiring	-
6	Air outlet duct flange	-

4. Indoor Units

4-2. Dimensional drawing

MSP Duct : AE071MNMPEH/EU

Units : mm [inches]



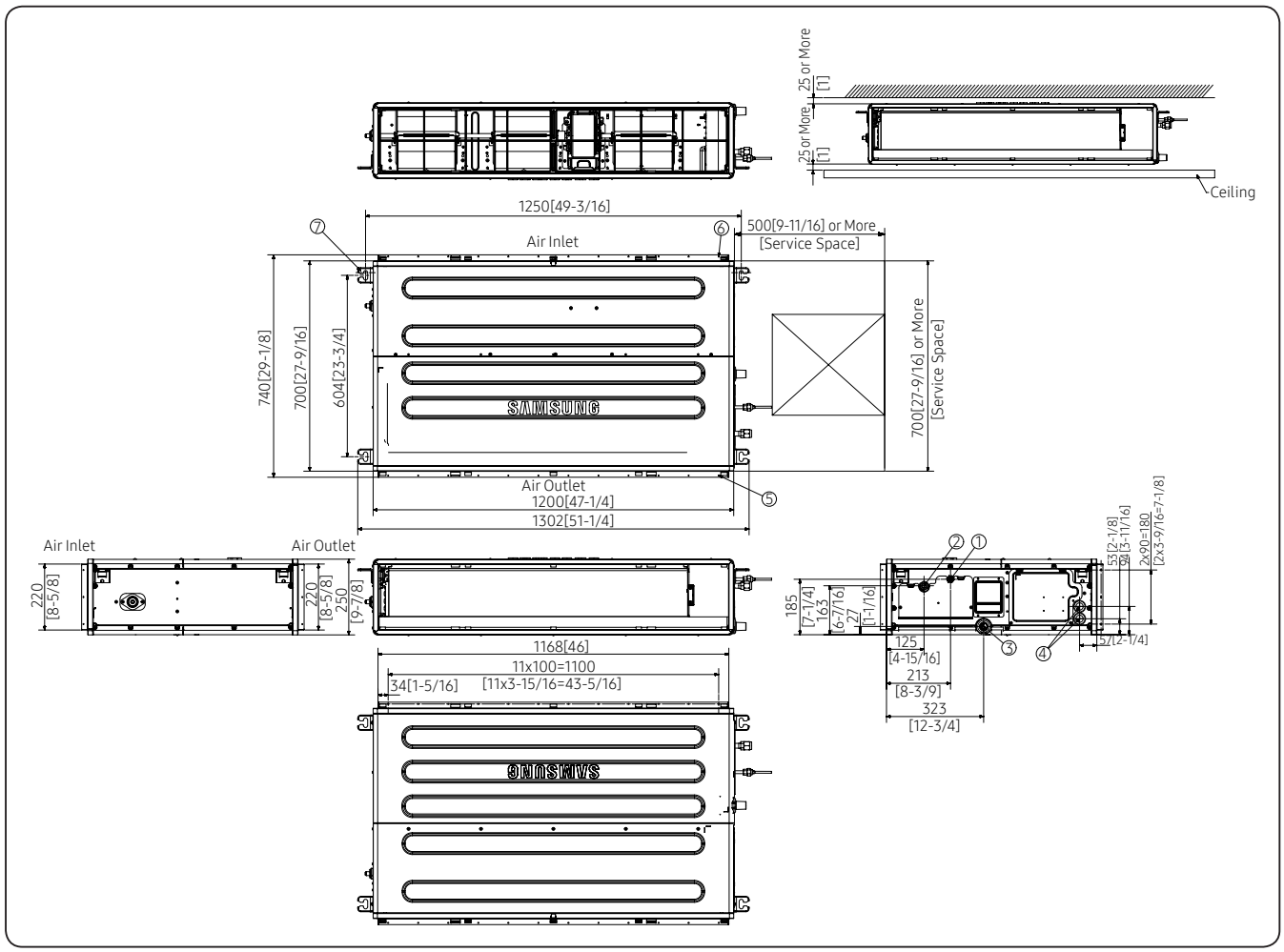
NO	Name	Description
1	Liquid pipe connection	Φ9.52(3/8)
2	Gas pipe connection	Φ15.88(5/8)
3	Drain pipe connection	VP-25(OD 32, ID 25)
4	Power supply & Communication wiring conduit	-
5	Air suction flange	-
6	Air discharge flange	-
7	Hook	Use M8~M10 bolt(4ea)

4. Indoor Units

4-2. Dimensional drawing

MSP Duct : AE090MNMPEH✳✳

Units : mm [inches]



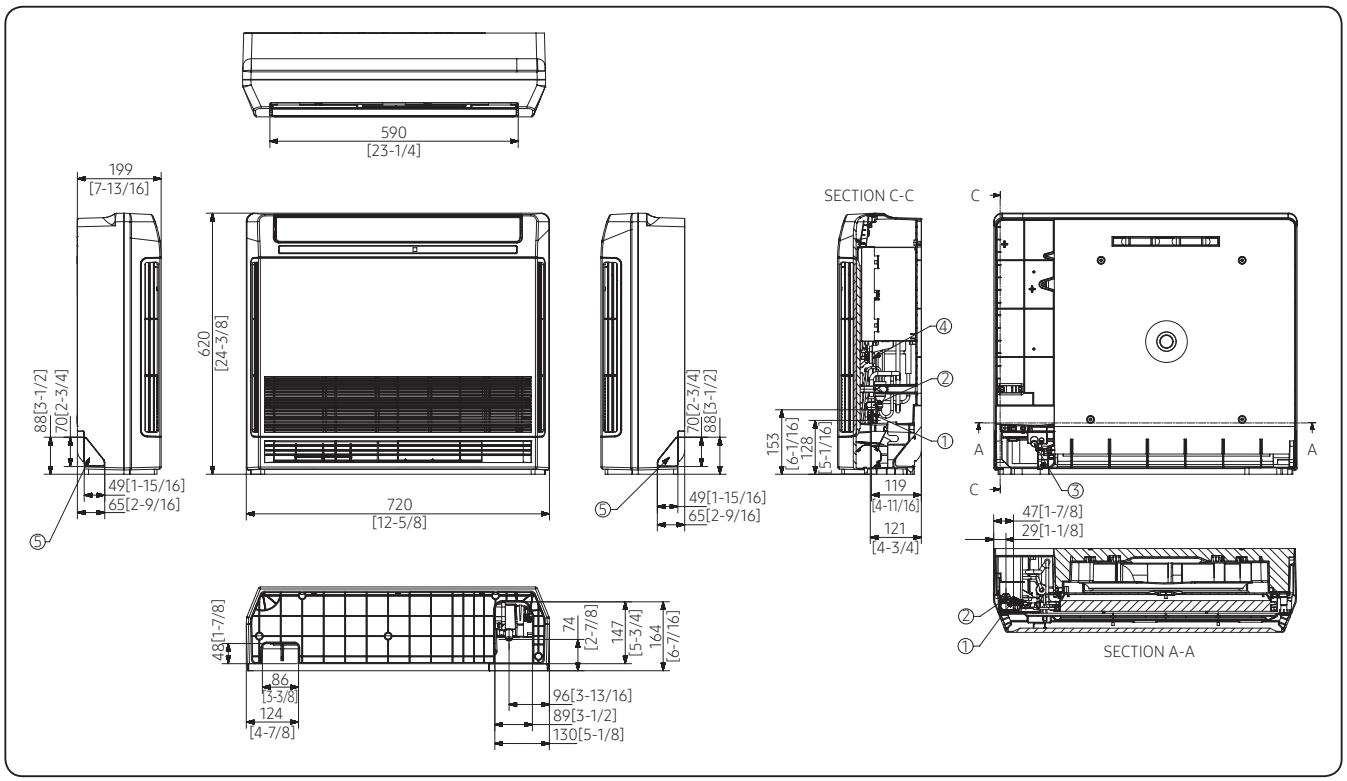
NO	Name	Description
1	Liquid pipe connection	Φ9.52(3/8)
2	Gas pipe connection	Φ15.88(5/8)
3	Drain pipe connection	VP-25(OD 32, ID 25)
4	Power supply & Communication wiring conduit	-
5	Air suction flange	-
6	Air discharge flange	-
7	Hook	Use M8~M10 bolt(4ea)

4. Indoor Units

4-2. Dimensional drawing

Console : AE022/028/036/056MNJDEH/EU

Units : mm [inches]

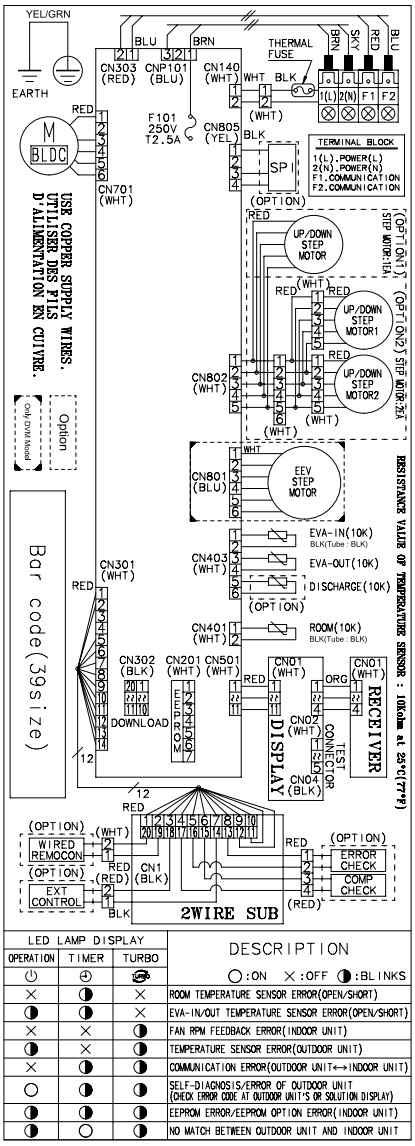


NO	Name	Description
1	Liquid pipe connection	Φ6.35(1/4)
2	Gas pipe connection	Φ12.7(1/2)
3	Drain pipe connection	ID 18mm[11/16 inch] Hose
4	Power supply & Communication wiring conduit	-
5	Knockout hole for drain hose	-

4. Indoor Units

4-3. Electrical wiring diagram

RAC (A3050)



LED LAMP DISPLAY			DESCRIPTION
OPERATION	TIMER	TURBO	○:ON ×:OFF ◑:BLINKS
×	◑	×	ROOM TEMPERATURE SENSOR ERROR(OPEN/SHORT)
◑	◑	×	EVA-IN/OUT TEMPERATURE SENSOR ERROR(OPEN/SHORT)
×	×	◑	FAN RPM FEEDBACK ERROR(INDOOR UNIT)
◑	×	◑	TEMPERATURE SENSOR ERROR(OUTDOOR UNIT)
×	◑	◑	COMMUNICATION ERROR(OUTDOOR UNIT↔INDOOR UNIT)
○	◑	◑	SELF-DIAGNOSIS/ERROR OF OUTDOOR UNIT (CHECK ERROR CODE AT OUTDOOR UNIT'S OR SOLUTION DISPLAY)
◑	◑	◑	EEPROM ERROR/EEPROM OPTION ERROR(INDOOR UNIT)
◑	○	◑	NO MATCH BETWEEN OUTDOOR UNIT AND INDOOR UNIT

M BLDC	BLDC FAN MOTOR	SPI	Super Plasma Ion
EVA-IN	Thermistor EVA-IN(10K)	EVA-OUT	Thermistor EVA-OUT(10K)
DISCHARGE	Thermistor DISCHARGE(10K)	ROOM	Thermistor ROOM(10K)
WIRED REMOCON	Wired Remote Controller	EXT CONTROL	External Controller

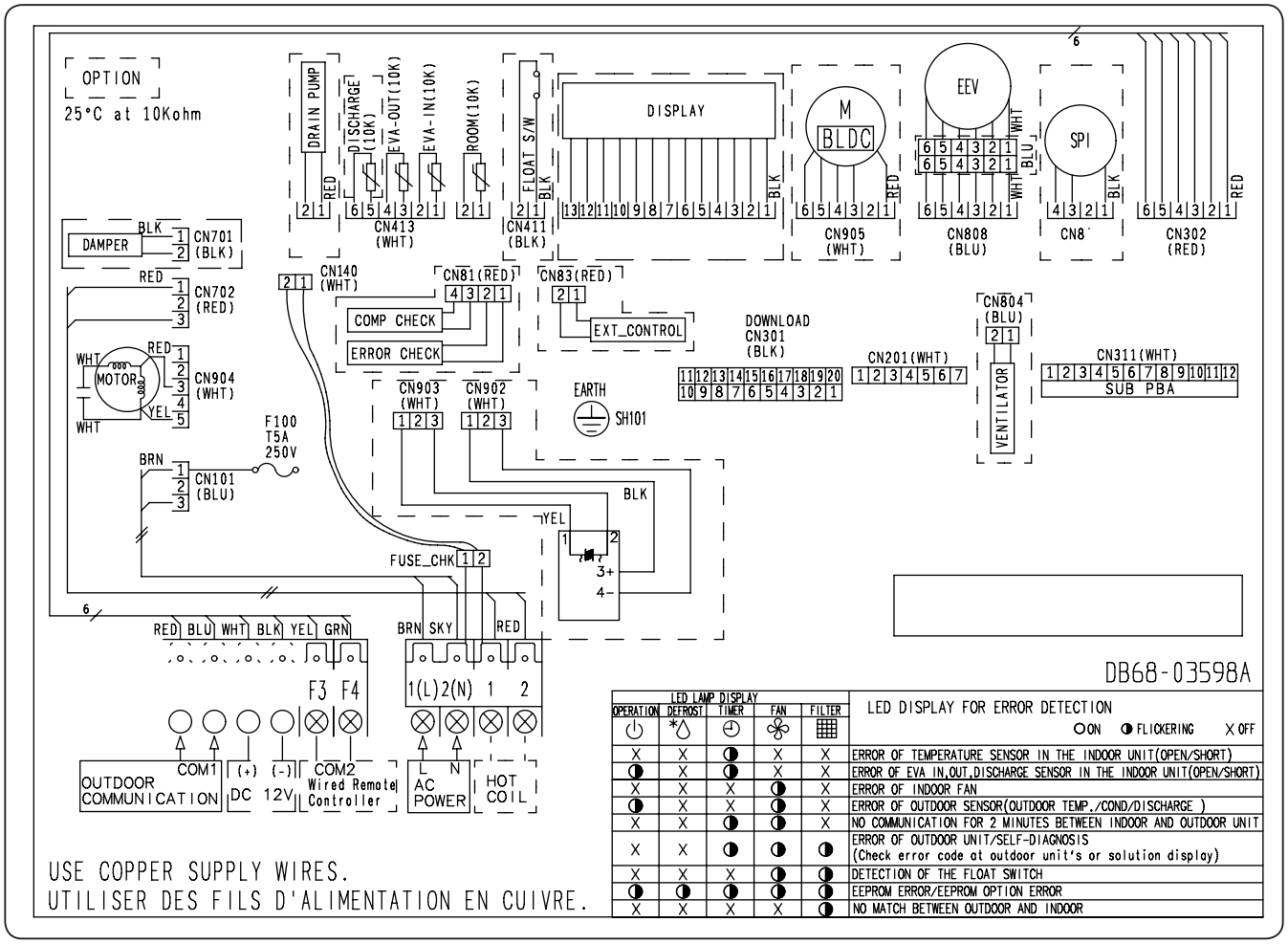
NOTES

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

4. Indoor Units

4-3. Electrical wiring diagram

Duct (Slim)



M BLDC	BLDC FAN MOTOR	SPI	Super Plasma Ion
EVA-IN	Thermistor EVA-IN(10K)	EVA-OUT	Thermistor EVA-OUT(10K)
DISCHARGE	Thermistor DISCHARGE(10K)	ROOM	Thermistor ROOM(10K)
FLOAT S/W	FLOAT SWITCH	EXT CONTROL	External Controller

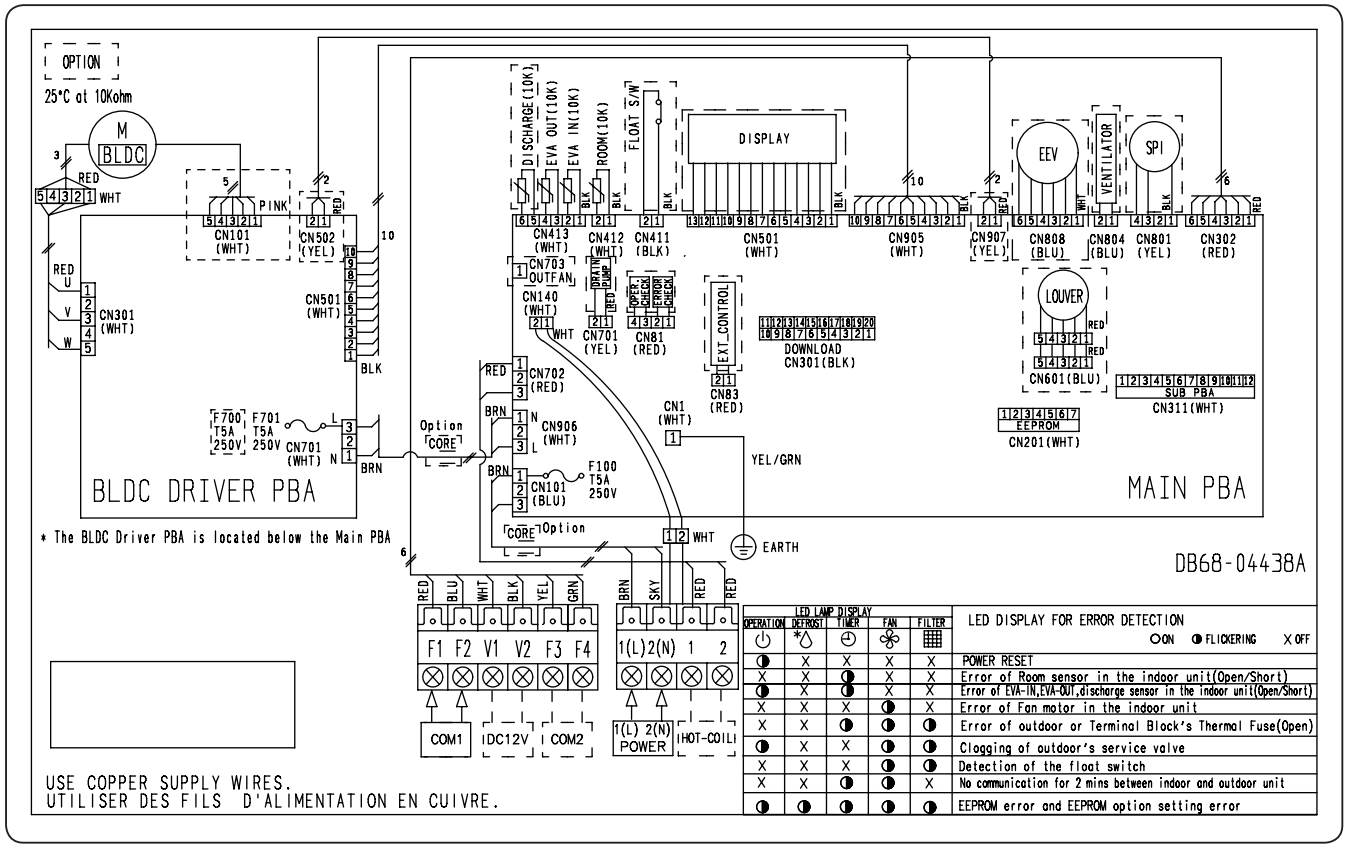
NOTES

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

4. Indoor Units

4-3. Electrical wiring diagram

Duct (MSP)



M BLDC	BLDC FAN MOTOR	SPI	Super Plasma Ion
EVA-IN	Thermistor EVA-IN(10K)	EVA-OUT	Thermistor EVA-OUT(10K)
DISCHARGE	Thermistor DISCHARGE(10K)	ROOM	Thermistor ROOM(10K)
FLOAT S/W	FLOAT SWITCH	EXT CONTROL	External Controller

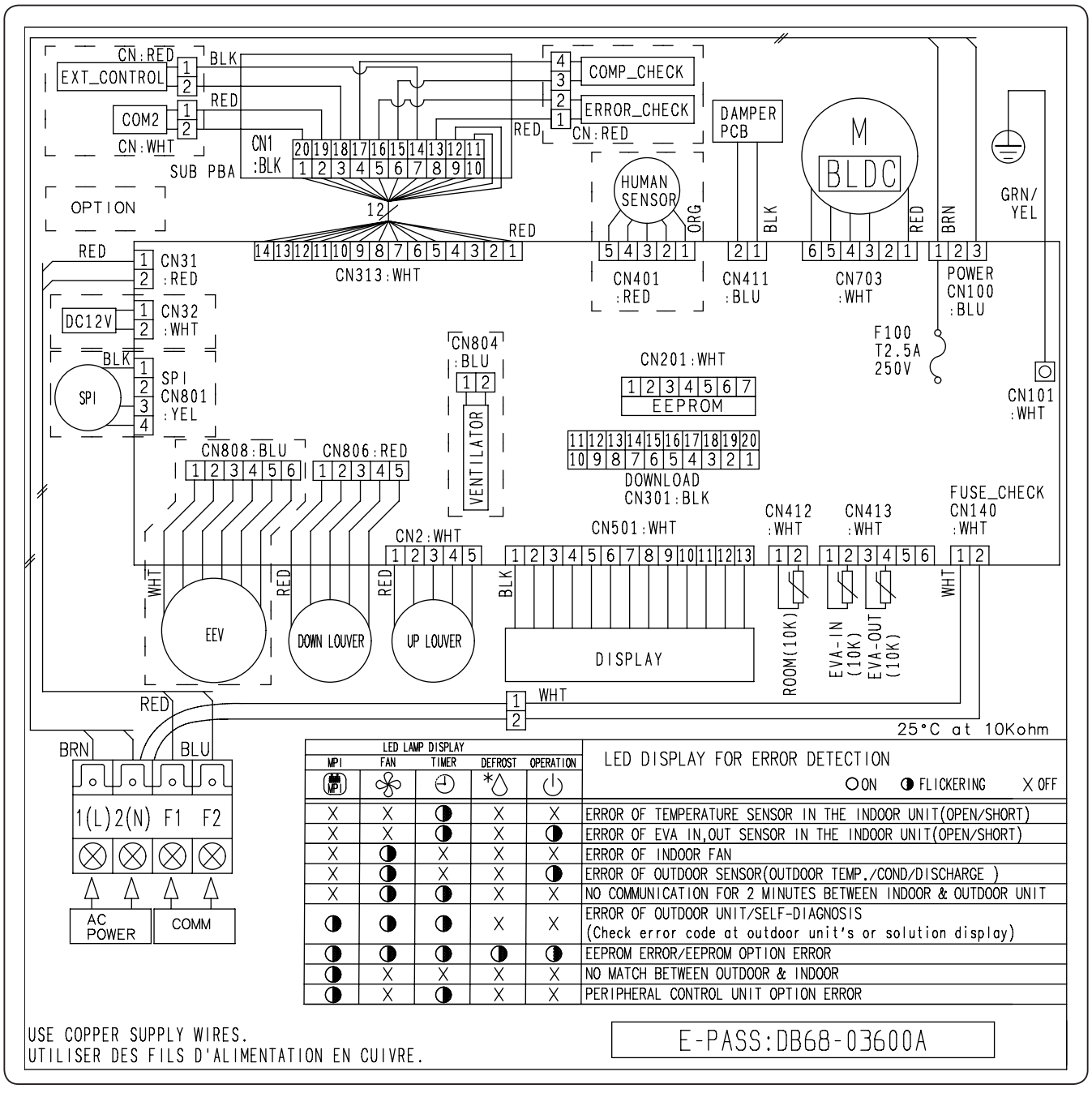
NOTES

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

4. Indoor Units

4-3. Electrical wiring diagram

Console



LED LAMP DISPLAY					LED DISPLAY FOR ERROR DETECTION ○ON ◑ FLICKERING X OFF
MPI	FAN	TIMER	DEFROST	OPERATION	
X	X	◑	X	X	ERROR OF TEMPERATURE SENSOR IN THE INDOOR UNIT(OPEN/SHORT)
X	X	◑	X	◑	ERROR OF EVA IN,OUT SENSOR IN THE INDOOR UNIT(OPEN/SHORT)
X	◑	X	X	X	ERROR OF INDOOR FAN
X	◑	X	X	◑	ERROR OF OUTDOOR SENSOR(OUTDOOR TEMP./COND/DISCHARGE)
X	◑	◑	X	X	NO COMMUNICATION FOR 2 MINUTES BETWEEN INDOOR & OUTDOOR UNIT
◑	◑	◑	X	X	ERROR OF OUTDOOR UNIT/SELF-DIAGNOSIS (Check error code at outdoor unit's or solution display)
◑	◑	◑	◑	◑	EEPROM ERROR/EEPROM OPTION ERROR
◑	X	X	X	X	NO MATCH BETWEEN OUTDOOR & INDOOR
◑	X	◑	X	X	PERIPHERAL CONTROL UNIT OPTION ERROR

M BLDC	BLDC FAN MOTOR	SPI	Super Plasma Ion
EVA-IN	Thermistor EVA-IN(10K)	EVA-OUT	Thermistor EVA-OUT(10K)
ROOM	Thermistor ROOM(10K)	EXT CONTROL	External Controller

NOTES

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

4. Indoor Units

4-4. Sound data

Summary

Indoor	Capacity (kW)	Model	Sound Pressure dB(A) (H/L/M)	Sound Power dB(A)
Slim Duct	2.2	AE022MNLDEH/EU	26 / 24 / 21	49
	2.8	AE028MNLDEH/EU	28 / 26 / 23	49
	3.6	AE036MNLDEH/EU	32 / 30 / 27	51
	5.6	AE056MNLDEH/EU	36 / 34 / 31	55
MSP Duct	7.1	AE071HNMPKH/EU	37 / 33 / 29	57
	9.0	AE090HNMPKH/EU	38 / 35 / 32	58
RAC (A3050)	2.2	AE022MNADEH/EU	33 / 28 / 23	50
	2.8	AE028MNADEH/EU	35 / 30 / 25	53
	3.6	AE036MNADEH/EU	36 / 32 / 29	54
	5.6	AE056MNADEH/EU	39 / 35 / 32	57
	7.1	AE071MNADEH/EU	44 / 40 / 36	61
Console	2.2	AE022MNJDEH/EU	34 / 32 / 30	52
	2.8	AE028MNJDEH/EU	38 / 36 / 34	58
	3.6	AE036MNJDEH/EU	39 / 37 / 34	59
	5.6	AE056MNJDEH/EU	43 / 40 / 37	64

NOTE

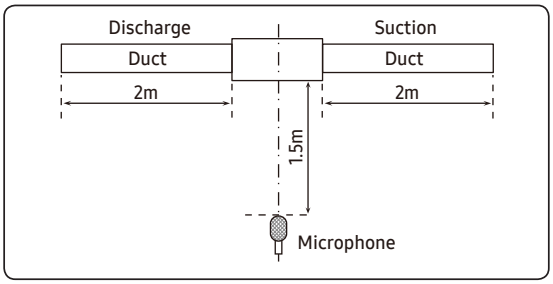
- Specifications may be subject to change without prior notice.
- Sound Pressure Level
  - Sound pressure level is obtained in an anechoic room.
  - Sound pressure level is a relative value, depending on the distance and acoustic environment.
  - Sound pressure level may differ depending on operation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

4. Indoor Units

4-4. Sound data

Sound Pressure level

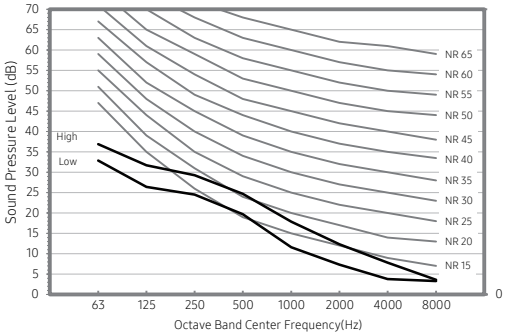
Duct (Slim & MSP)



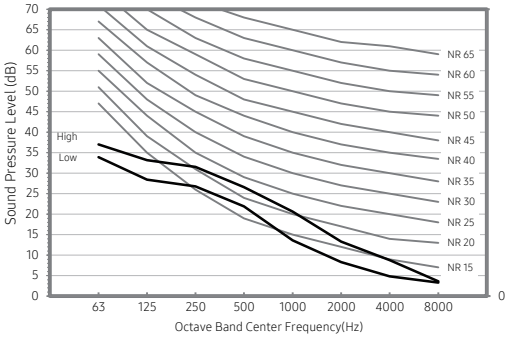
Model	dBA
AE022MNLDEH✱✱	26 / 24 / 21
AE028MNLDEH✱✱	28 / 26 / 23
AE036MNLDEH✱✱	32 / 30 / 27
AE056MNLDEH✱✱	36 / 34 / 31
AE071MNMPEH✱✱	37 / 33 / 29
AE090MNMPEH✱✱	38 / 35 / 32

- NR Curve

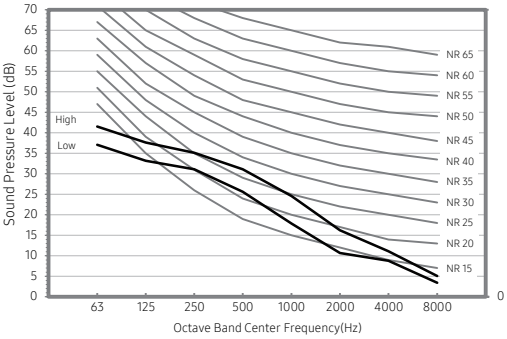
1) AE022MNLDEH✱✱



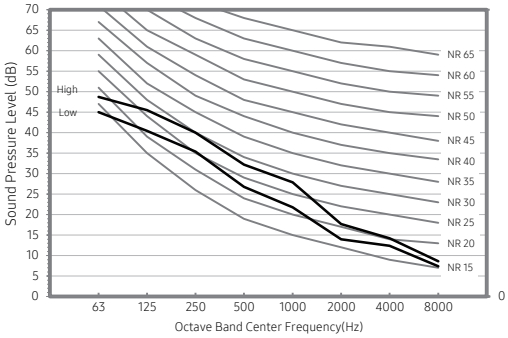
2) AE028MNLDEH✱✱



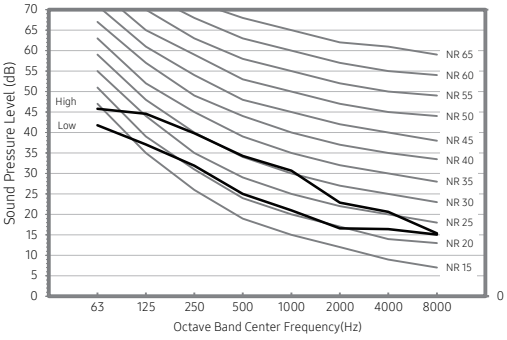
3) AE036MNLDEH✱✱



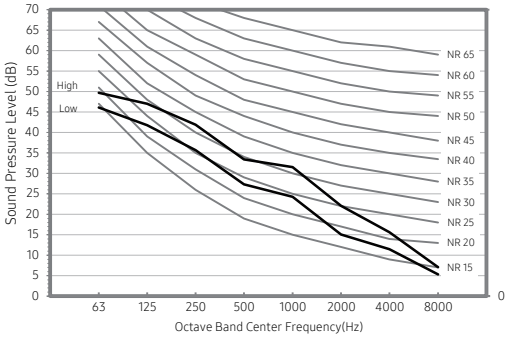
4) AE056MNLDEH✱✱



5) AE071MNMPEH✱✱



6) AE090MNMPEH✱✱

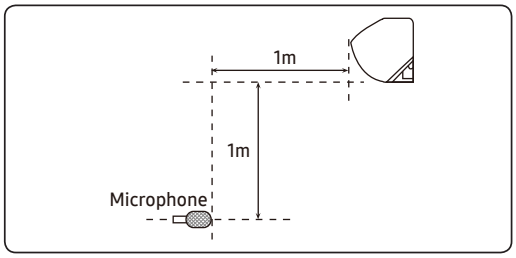


4. Indoor Units

4-4. Sound data

Sound Pressure level

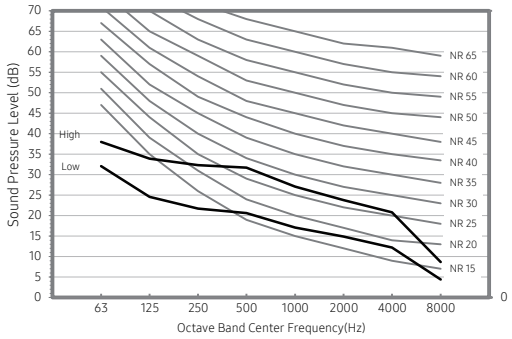
RAC (A3050)



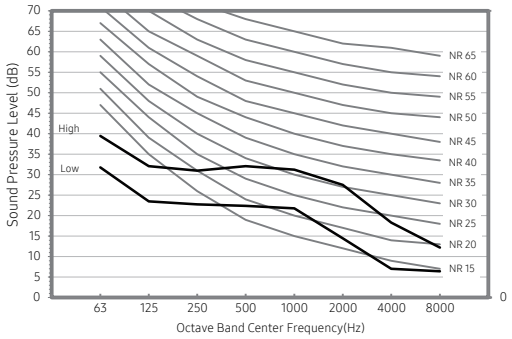
Model	dBA
AE022MNADEH✱✱	33 / 28 / 23
AE028MNADEH✱✱	35 / 30 / 25
AE036MNADEH✱✱	36 / 32 / 29
AE056MNADEH✱✱	39 / 35 / 32
AE071MNADEH✱✱	44 / 40 / 36

- NR Curve

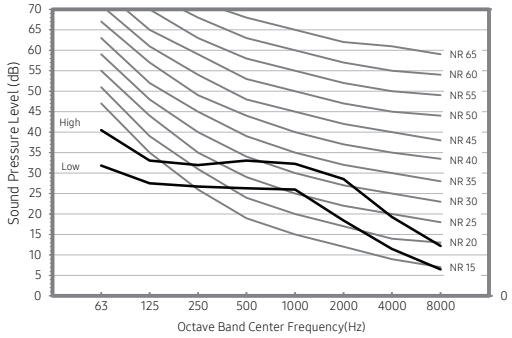
1) AE022MNADEH✱✱



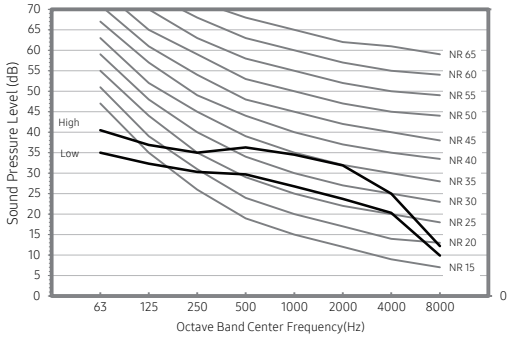
2) AE028MNADEH✱✱



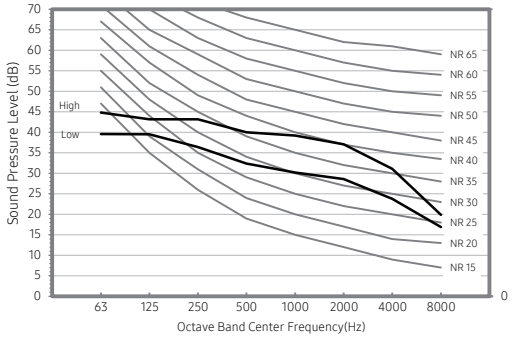
3) AE036MNADEH✱✱



4) AE056MNADEH✱✱



5) AE071MNADEH✱✱

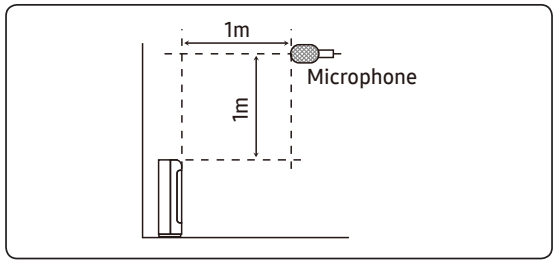


4. Indoor Units

4-4. Sound data

Sound Pressure level

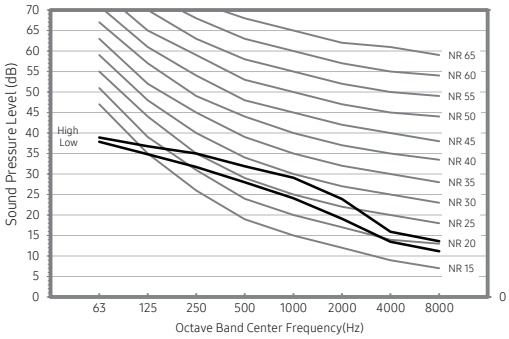
Console



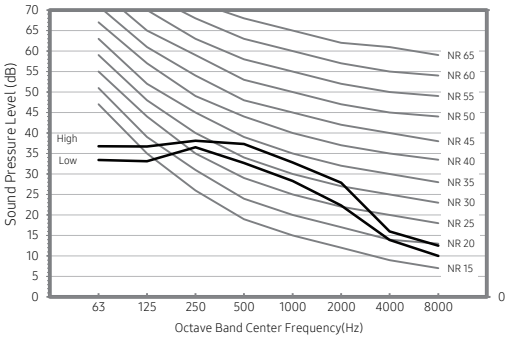
Model	dBA
AE022MNJDEH✳✳	34 / 32 / 30
AE028MNJDEH✳✳	38 / 36 / 34
AE036MNJDEH✳✳	39 / 37 / 34
AE056MNJDEH✳✳	43 / 40 / 37

- NR Curve

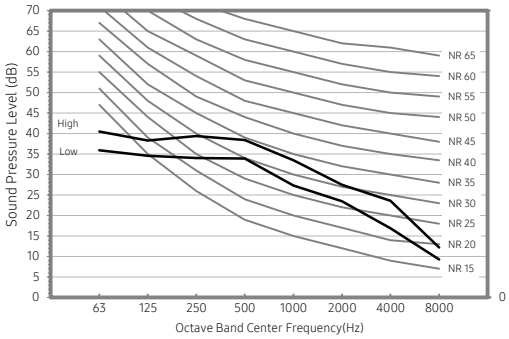
1) AE022MNJDEH✳✳



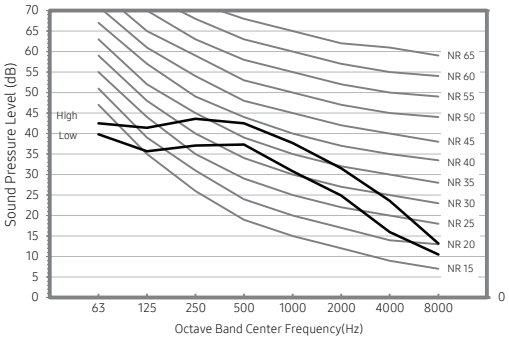
2) AE028MNJDEH✳✳



3) AE036MNJDEH✳✳



4) AE056MNJDEH✳✳



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

4. Indoor Units

4-4. Sound data

Sound Power level

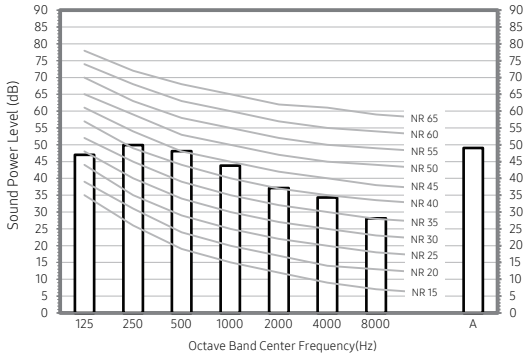
Duct (Slim & MSP)

NOTE

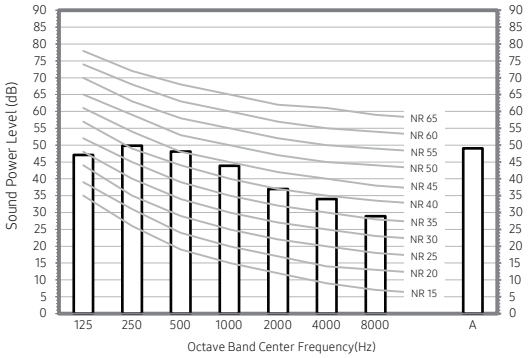
- Specifications may be subject to change without prior notice
  - Sound power level is an absolute value that a sound source generates.
  - dBA = A-weighted sound power level.
  - Reference power : 1pW.
  - Measured according to ISO 3741.

Model	Power (dBA)
AE022MNLDEH✻✻	49
AE028MNLDEH✻✻	49
AE036MNLDEH✻✻	51
AE056MNLDEH✻✻	55
AE071MNMPEH✻✻	57
AE090MNMPEH✻✻	58

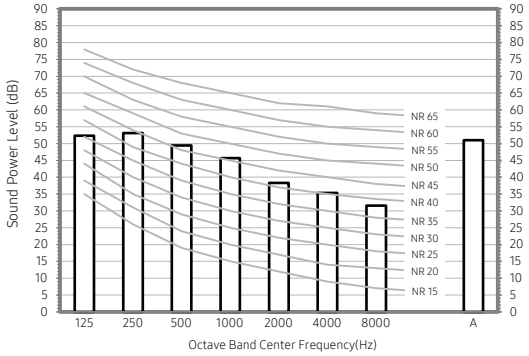
1) AE022MNLDEH✻✻



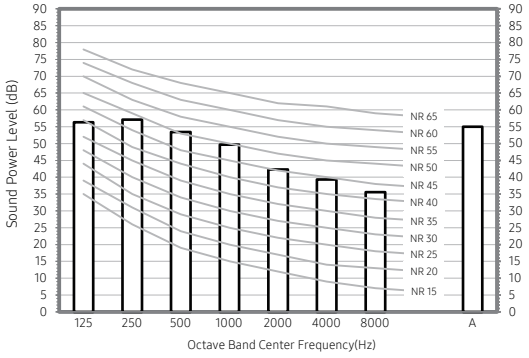
2) AE028MNLDEH✻✻



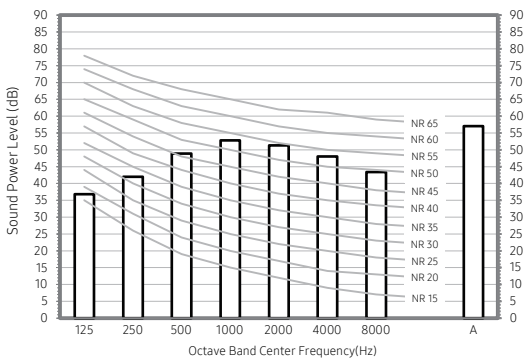
3) AE036MNLDEH✻✻



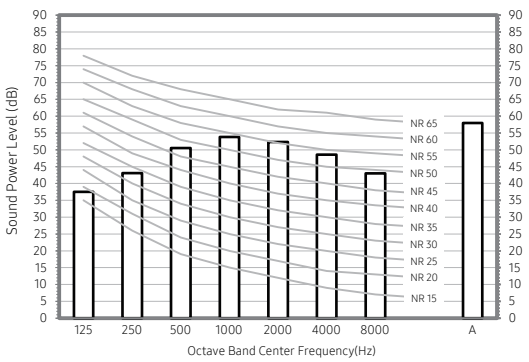
4) AE056MNLDEH✻✻



5) AE071MNMPEH✻✻



6) AE090MNMPEH✻✻



4. Indoor Units

4-4. Sound data

Sound Power level

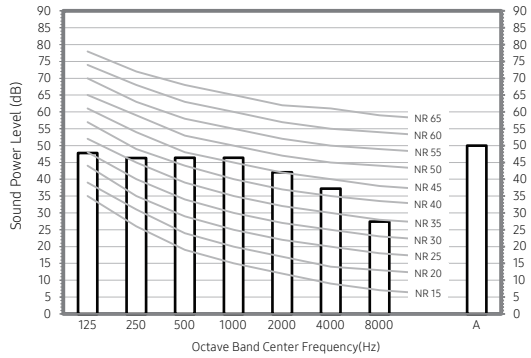
RAC (A3050)

NOTE

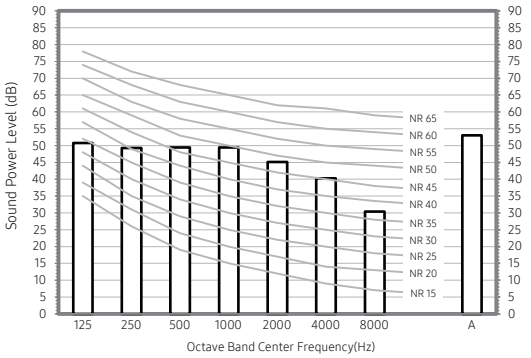
- Specifications may be subject to change without prior notice
  - Sound power level is an absolute value that a sound source generates.
  - dBA = A-weighted sound power level.
  - Reference power : 1pW.
  - Measured according to ISO 3741.

Model	Power (dBA)
AE022MNADEH✱✱	50
AE028MNADEH✱✱	53
AE036MNADEH✱✱	54
AE056MNADEH✱✱	57
AE071MNADEH✱✱	61

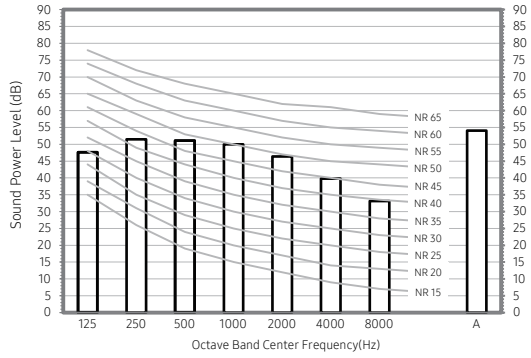
1) AE022MNADEH✱✱



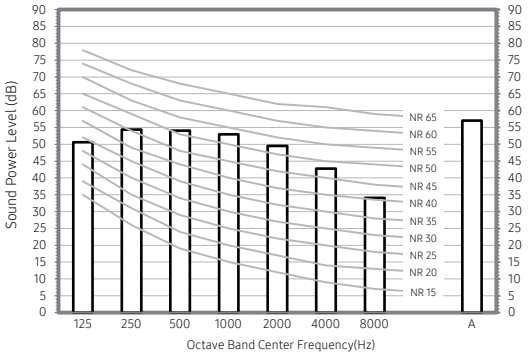
2) AE028MNADEH✱✱



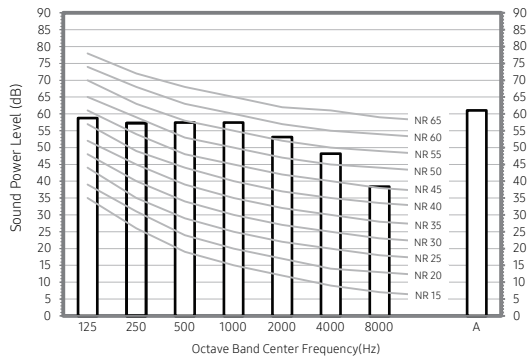
3) AE036MNADEH✱✱



4) AE056MNADEH✱✱



5) AE071MNADEH✱✱



4. Indoor Units

4-4. Sound data

Sound Power level

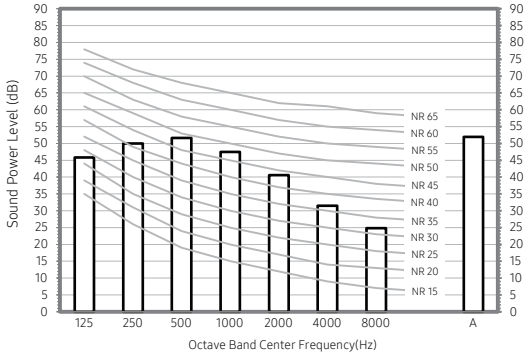
Console

NOTE

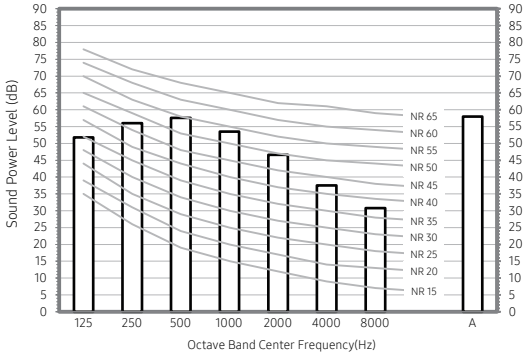
- Specifications may be subject to change without prior notice
  - Sound power level is an absolute value that a sound source generates.
  - dBA = A-weighted sound power level.
  - Reference power : 1pW.
  - Measured according to ISO 3741.

Model	Power (dBA)
AE022MNJDEH✕✕	52
AE028MNJDEH✕✕	58
AE036MNJDEH✕✕	59
AE056MNJDEH✕✕	64

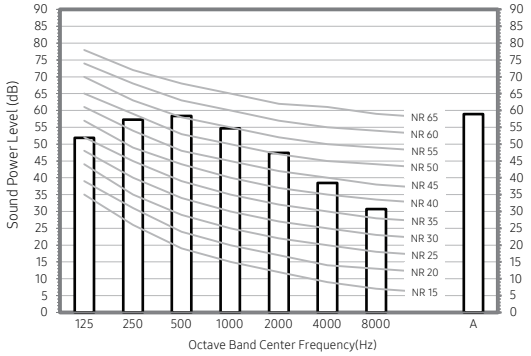
1) AE022MNJDEH✕✕



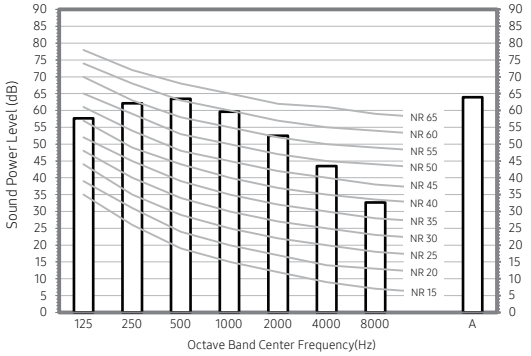
2) AE028MNJDEH✕✕



3) AE036MNJDEH✕✕



4) AE056MNJDEH✕✕

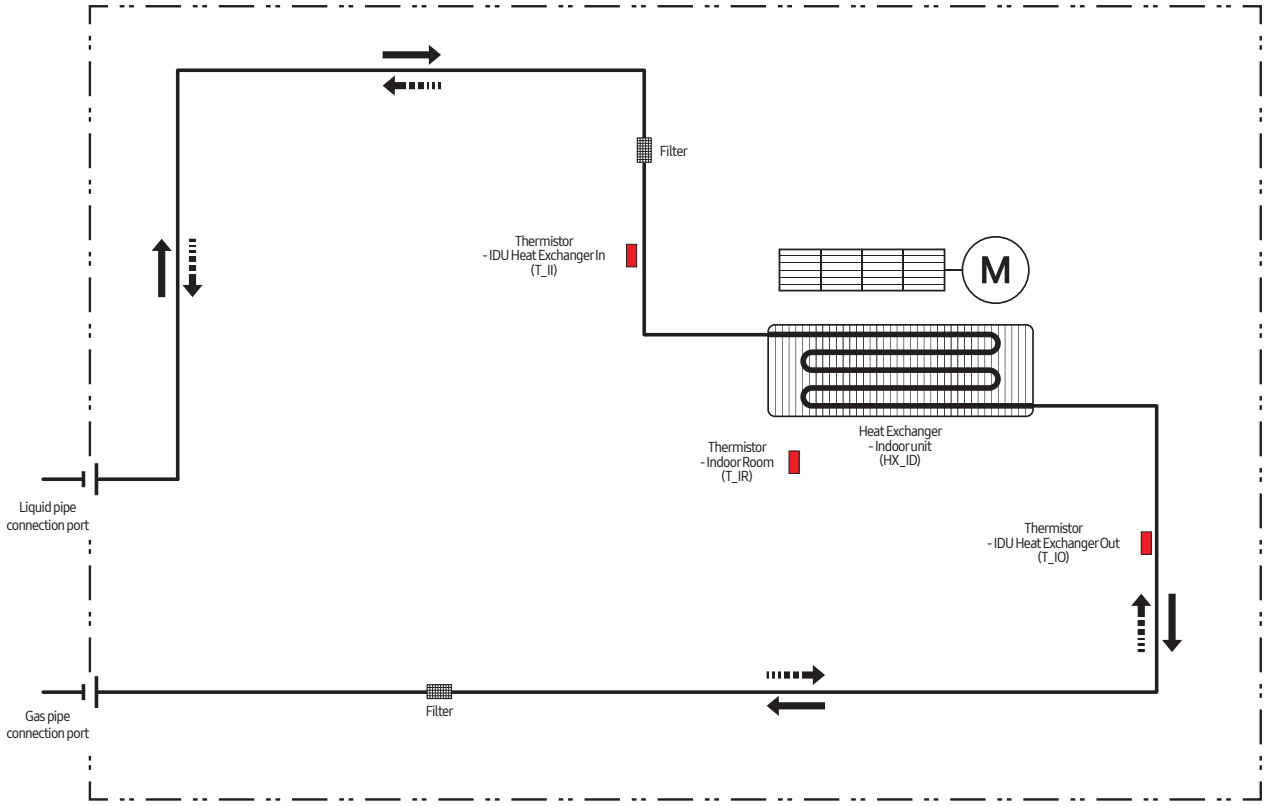


4. Indoor Units

4-5. Piping diagram

RAC (A3050)

EEV not included Model



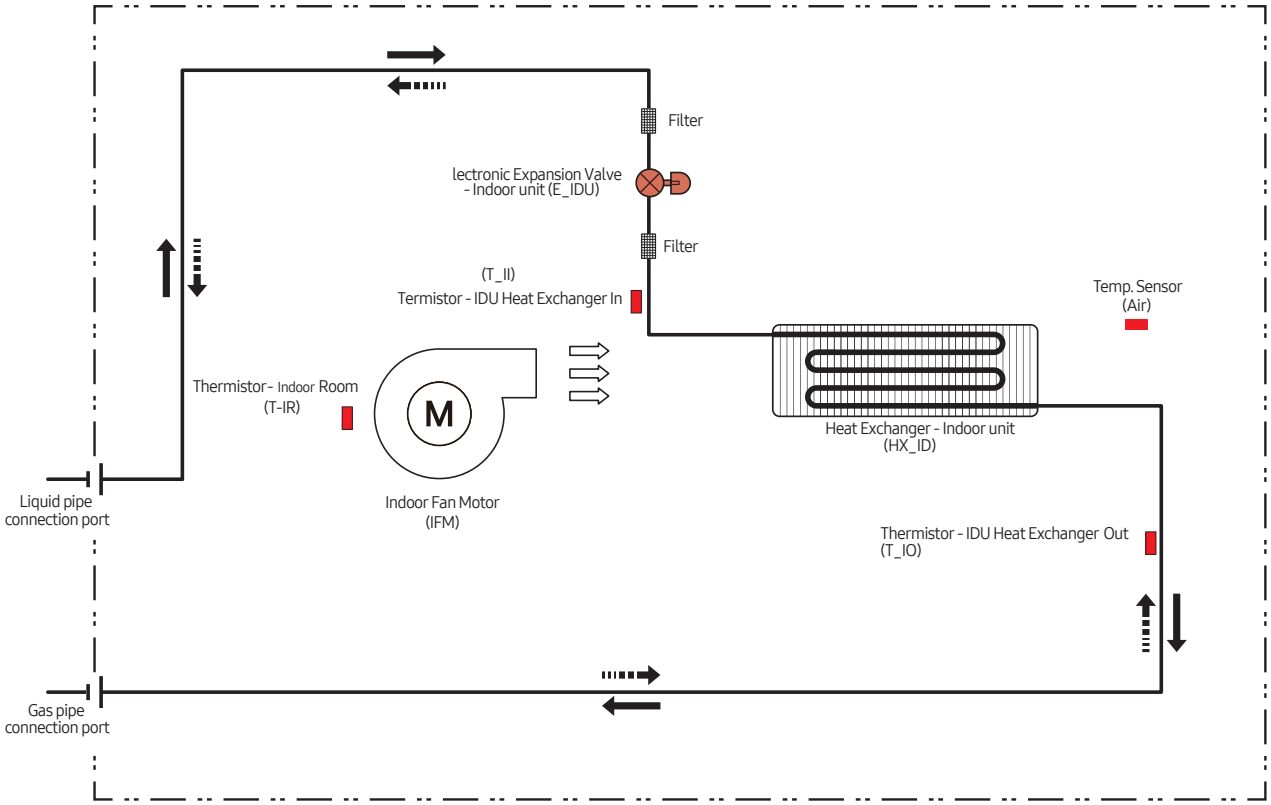
Refrigerant flow	
Cooling	Heating
→	⇢

4. Indoor Units

4-5. Piping diagram

Duct (Slim, MSP)

EEV included Model



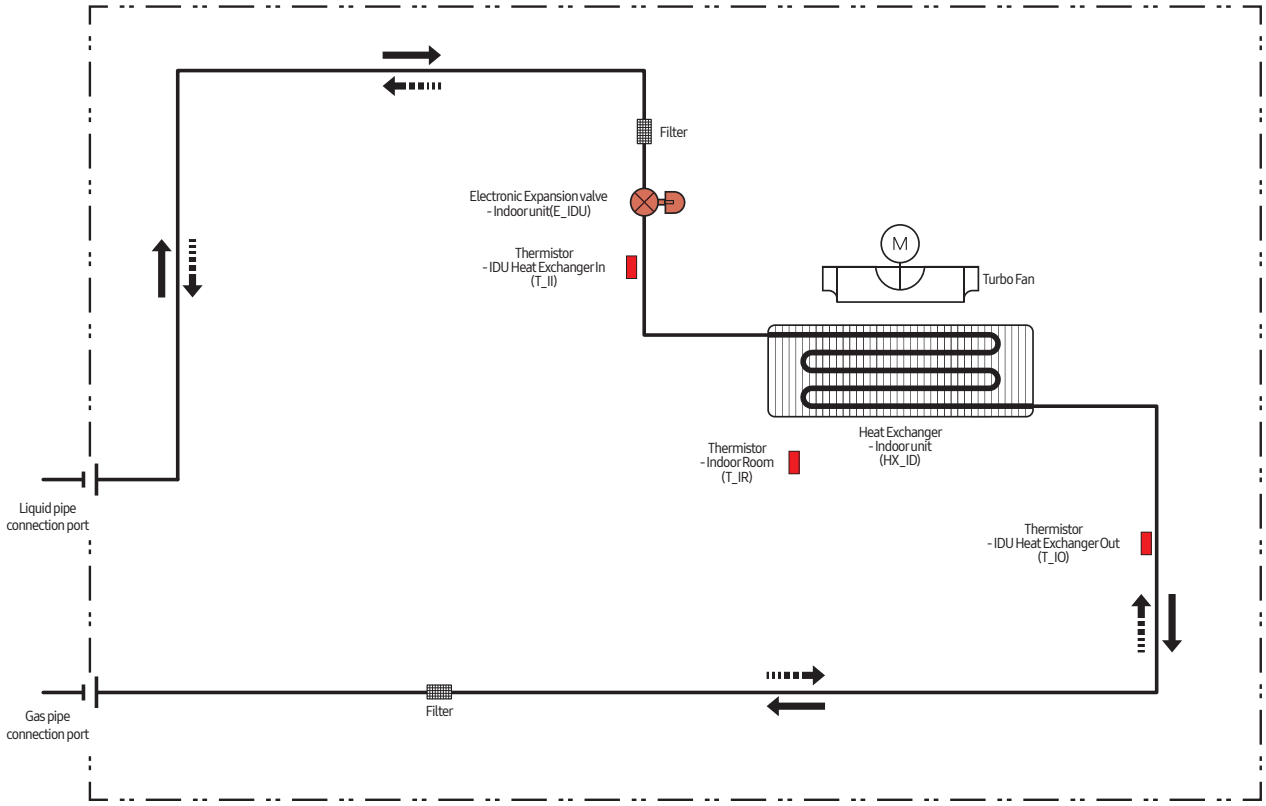
Refrigerant flow	
Cooling	Heating
→	⇢

4. Indoor Units

4-5. Piping diagram

Console

EEV included Model



Refrigerant flow	
Cooling	Heating
→	⇢

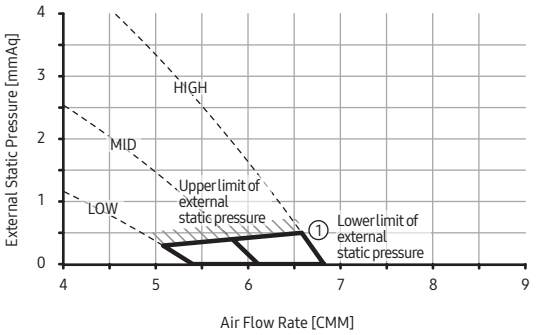
4. Indoor Units

4-6. Fan characteristics (PQ curve)

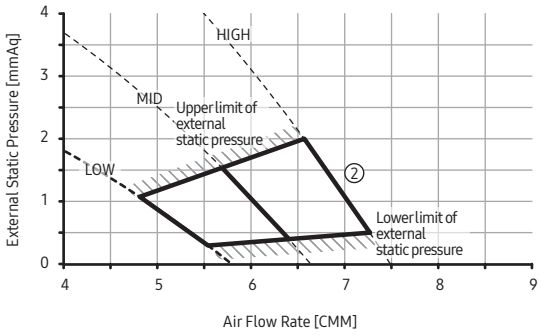
Duct (Slim)

1) AE022MNLDEH**

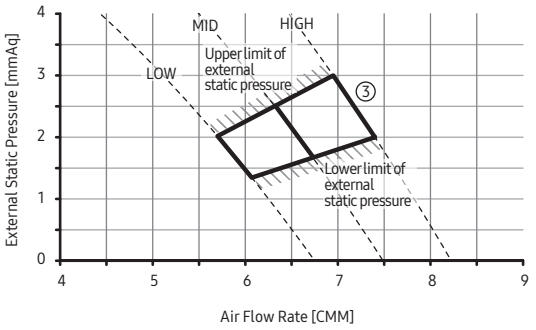
①	External Static Pressure(mmAq)	Option Code
	0	010954-125A80-201616-321110



②	External Static Pressure(mmAq)	Option Code
	1	010954-125AC3-201616-321110



③	External Static Pressure(mmAq)	Option Code
	3	010954-125E08-201616-321110



NOTE

- Adjust option code according to the actual installation condition (external static pressure).
  ESP = External Static Pressure
  The graphs display the available external static pressure range of installed indoor units.
  Therefore, they do not reflect the actual change of external static pressure and airflow rate according to adjusted airflow (High-Mid-Low) of installed indoor units.

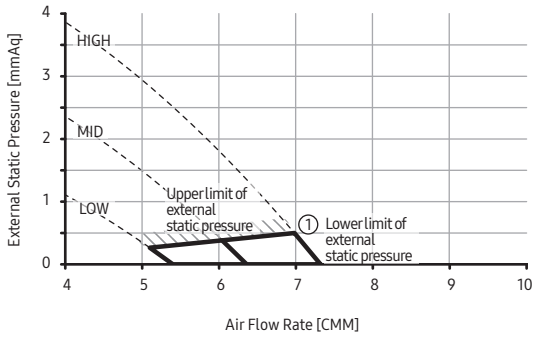
4. Indoor Units

4-6. Fan characteristics (PQ curve)

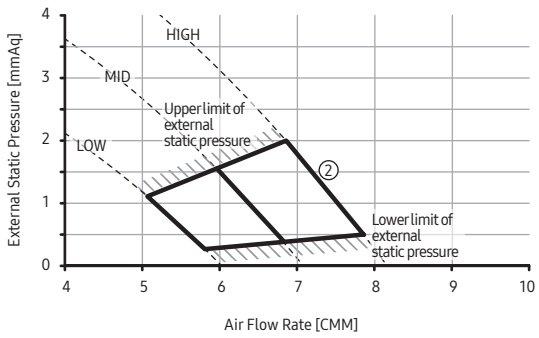
Duct (Slim)

2) AE028MNLDEH**

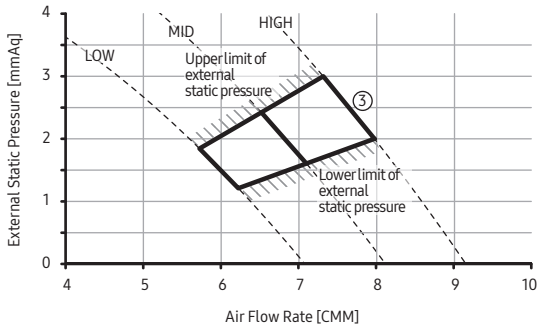
①	External Static Pressure(mmAq)	Option Code
	0	010954-125AE2-201C1C-321110



②	External Static Pressure(mmAq)	Option Code
	1	010954-125E15-201C1C-321110



③	External Static Pressure(mmAq)	Option Code
	3	010954-125E7A-201C1C-321110



NOTE

- Adjust option code according to the actual installation condition (external static pressure).
  ESP = External Static Pressure
  The graphs display the available external static pressure range of installed indoor units.
  Therefore, they do not reflect the actual change of external static pressure and airflow rate according to adjusted airflow (High-Mid-Low) of installed indoor units.

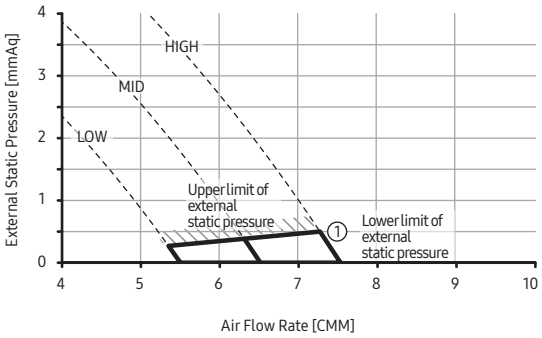
4. Indoor Units

4-6. Fan characteristics (PQ curve)

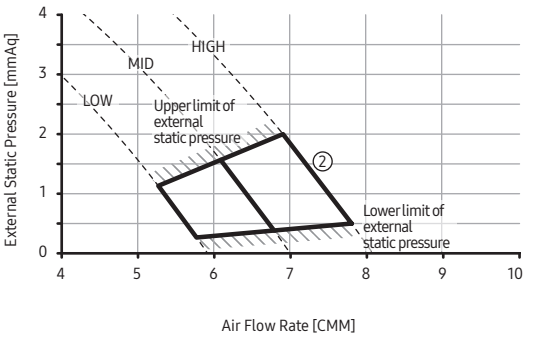
Duct (Slim)

3) AE036MNLDEH**

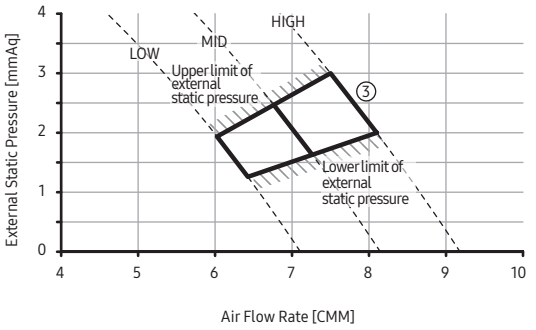
①	External Static Pressure(mmAq)	Option Code
	0	010954-125E35-202424-321110



②	External Static Pressure(mmAq)	Option Code
	1	010954-125E68-202424-321110



③	External Static Pressure(mmAq)	Option Code
	3	010954-125ECD-202424-321110



NOTE

- Adjust option code according to the actual installation condition (external static pressure).
  ESP = External Static Pressure
  The graphs display the available external static pressure range of installed indoor units.
  Therefore, they do not reflect the actual change of external static pressure and airflow rate according to adjusted airflow (High-Mid-Low) of installed indoor units.

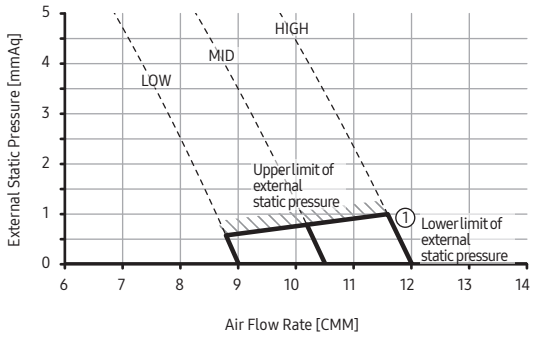
4. Indoor Units

4-6. Fan characteristics (PQ curve)

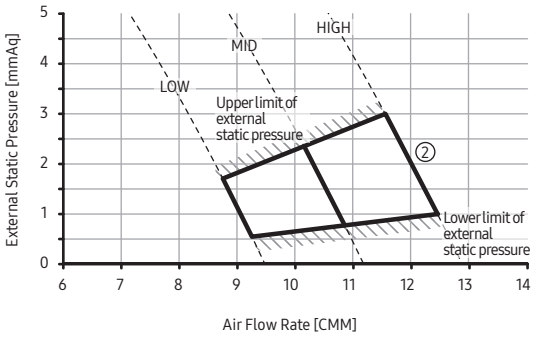
Duct (Slim)

4) AE056MNLDEH**

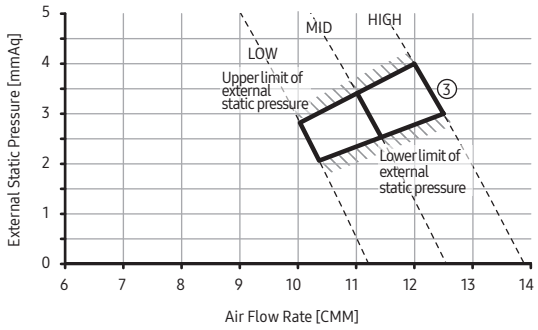
①	External Static Pressure(mmAq)	Option Code
	0	010954-125AC1-203838-321110



②	External Static Pressure(mmAq)	Option Code
	2	010954-125E34-203838-321110



③	External Static Pressure(mmAq)	Option Code
	4	010954-125EF9-203838-321110



NOTE

- Adjust option code according to the actual installation condition (external static pressure).
  ESP = External Static Pressure
  The graphs display the available external static pressure range of installed indoor units.
  Therefore, they do not reflect the actual change of external static pressure and airflow rate according to adjusted airflow (High-Mid-Low) of installed indoor units.

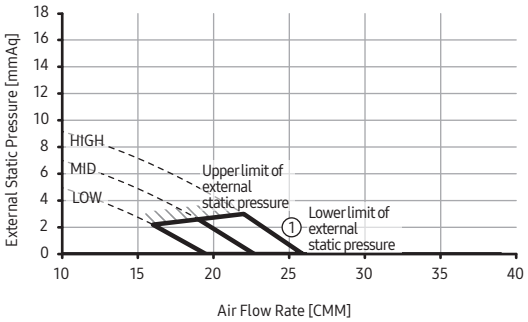
4. Indoor Units

4-6. Fan characteristics (PQ curve)

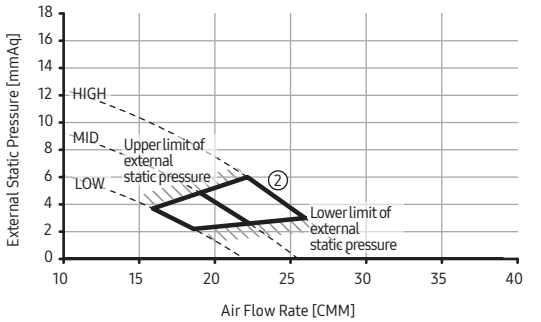
Duct (MSP)

5) AE071MNMPEH**

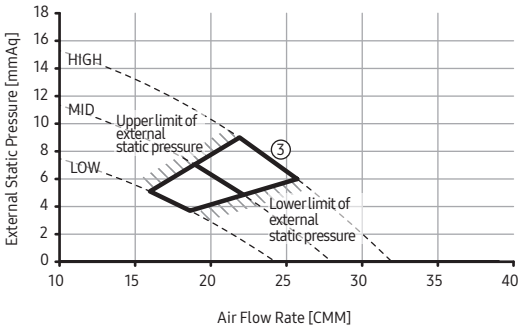
①	External Static Pressure(mmAq)	Option Code
	0 ≤ SP ≤ 3	010954-1C548D-204747-321201



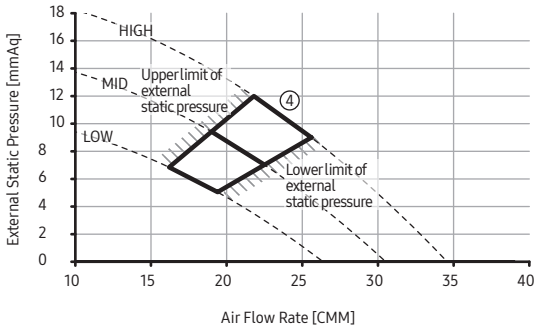
②	External Static Pressure(mmAq)	Option Code
	3 < SP ≤ 6	010954-1C55E1-204747-321201



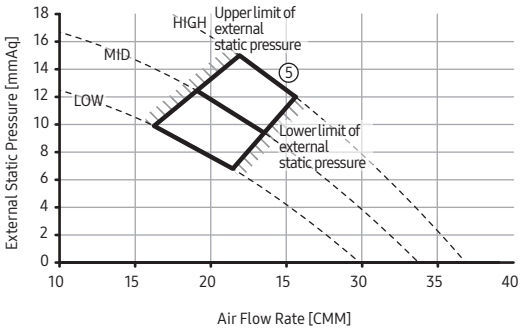
③	External Static Pressure(mmAq)	Option Code
	6 < SP ≤ 9	010954-1C5935-204747-321201



④	External Static Pressure(mmAq)	Option Code
	9 < SP ≤ 12	010954-1C5989-204747-321201



⑤	External Static Pressure(mmAq)	Option Code
	12 < SP ≤ 15	010954-1C59DF-204747-321201



NOTE

- Adjust option code according to the actual installation condition (external static pressure).
  ESP = External Static Pressure
  The graphs display the available external static pressure range of installed indoor units.
  Therefore, they do not reflect the actual change of external static pressure and airflow rate according to adjusted airflow (High-Mid-Low) of installed indoor units.

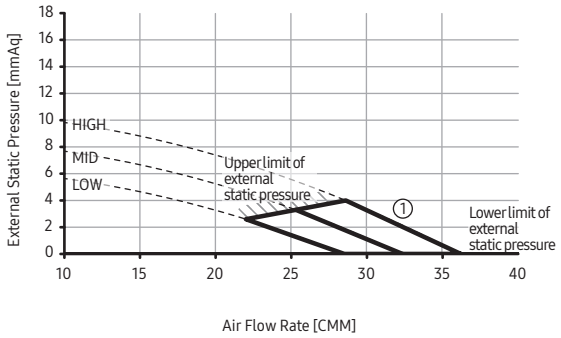
4. Indoor Units

4-6. Fan characteristics (PQ curve)

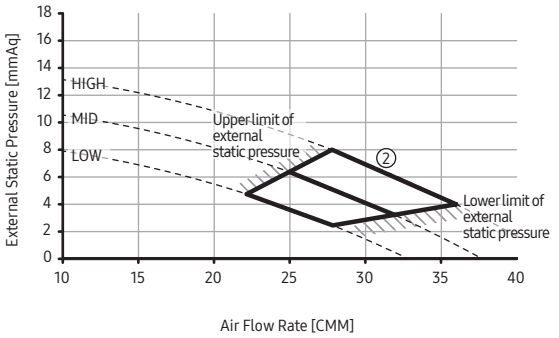
Duct (MSP)

6) AE090MNMPEH**

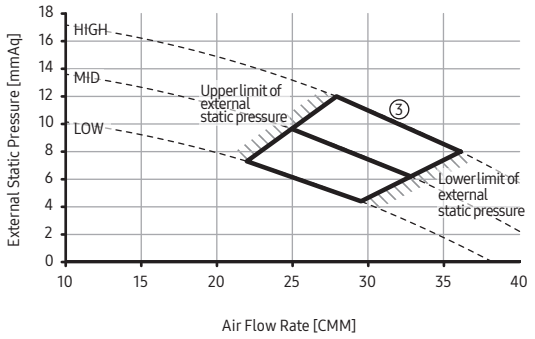
①	External Static Pressure(mmAq)	Option Code
	0 ≤ SP ≤ 4	010954-1C546D-205A5A-321212



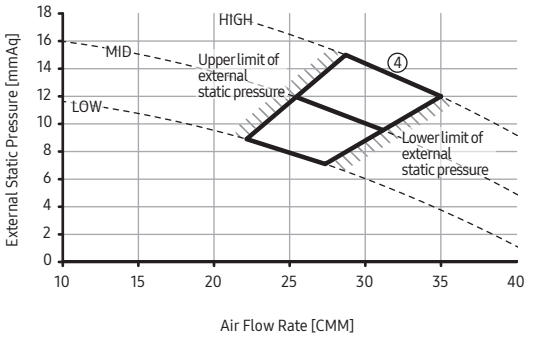
②	External Static Pressure(mmAq)	Option Code
	4 < SP ≤ 8	010954-1C55E3-205A5A-321212



③	External Static Pressure(mmAq)	Option Code
	8 < SP ≤ 12	010954-1C5969-205A5A-321212



④	External Static Pressure(mmAq)	Option Code
	12 < SP ≤ 15	010954-1C59CD-205A5A-321212



NOTE

- Adjust option code according to the actual installation condition (external static pressure).
  ESP = External Static Pressure
  The graphs display the available external static pressure range of installed indoor units.
  Therefore, they do not reflect the actual change of external static pressure and airflow rate according to adjusted airflow (High-Mid-Low) of installed indoor units.

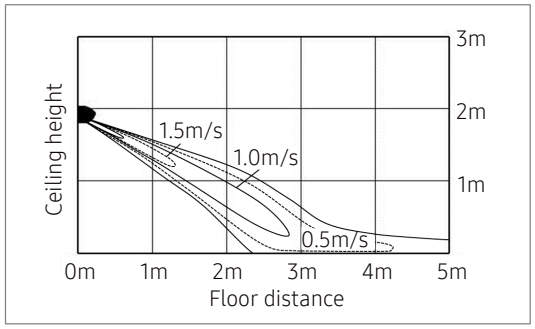
4. Indoor Units

4-7. Temperature and air flow distribution

RAC (A3050) : AE022MNADEH✻✻

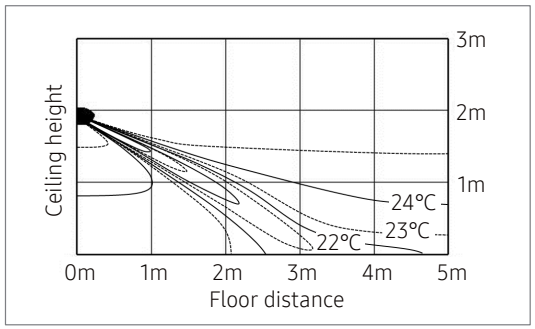
(1) Cooling air velocity distribution

Discharge angle : 25°



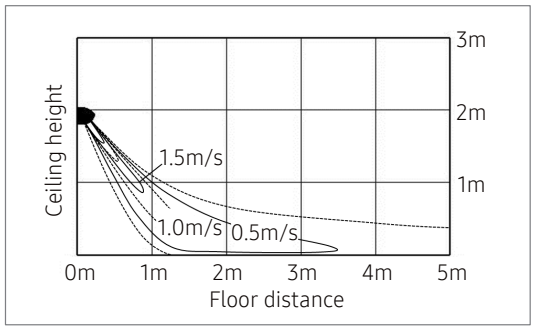
(2) Cooling temperature distribution

Discharge angle : 25°



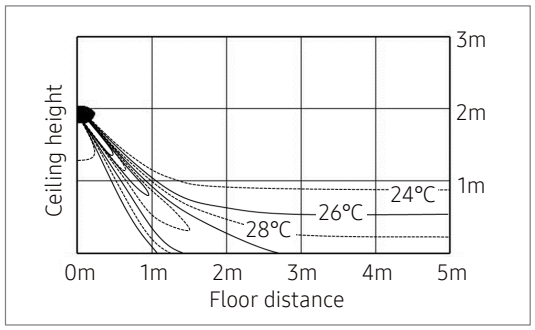
(3) Heating air velocity distribution

Discharge angle : 55°



(4) Heating temperature distribution

Discharge angle : 55°



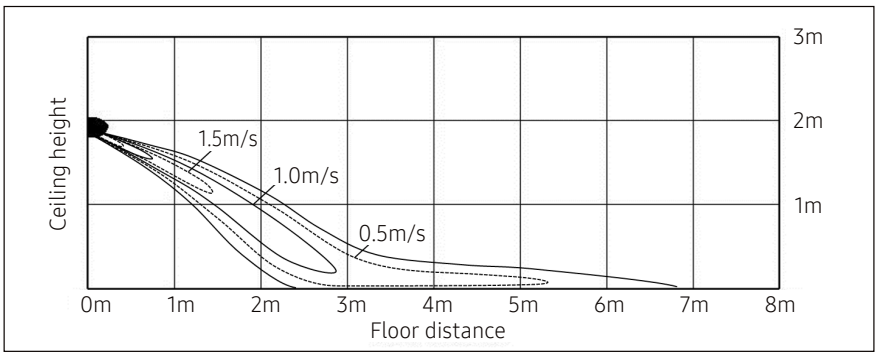
4. Indoor Units

4-7. Temperature and air flow distribution

RAC (A3050) : AE028MNADEH✻✻

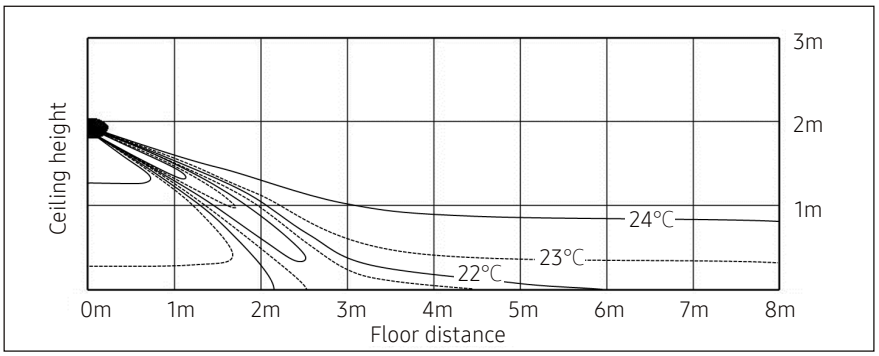
(1) Cooling air velocity distribution

Discharge angle : 25°



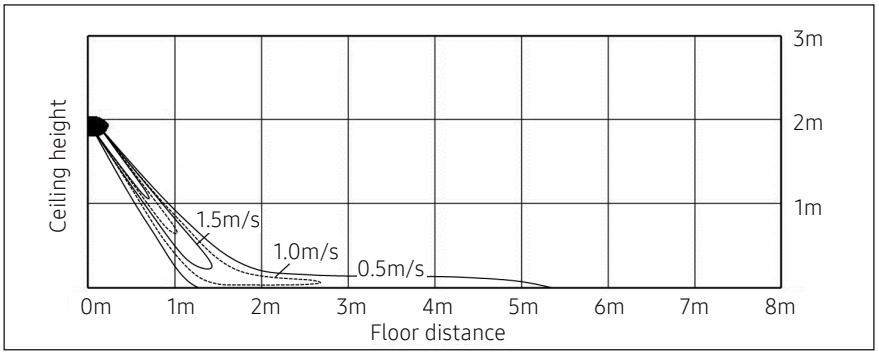
(2) Cooling temperature distribution

Discharge angle : 25°



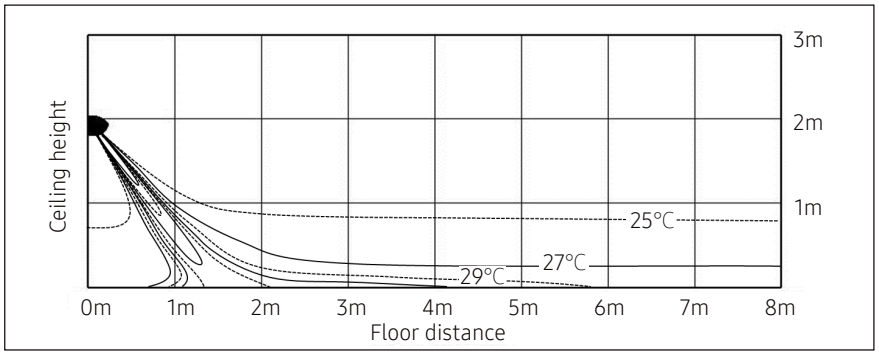
(3) Heating air velocity distribution

Discharge angle : 55°



(4) Heating temperature distribution

Discharge angle : 55°



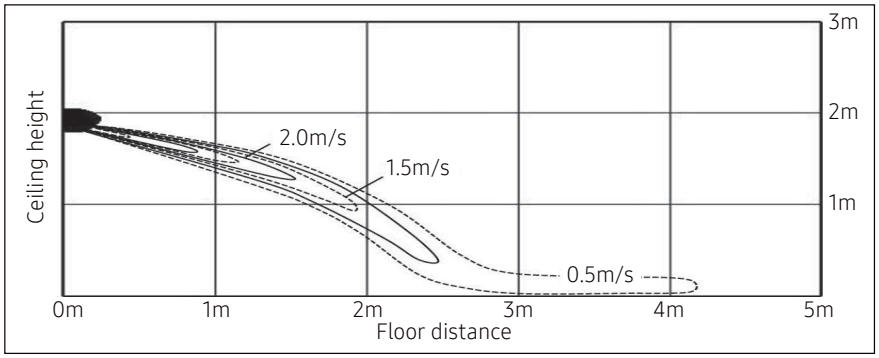
4. Indoor Units

4-7. Temperature and air flow distribution

RAC (A3050) : AE036MNADEH✳✳

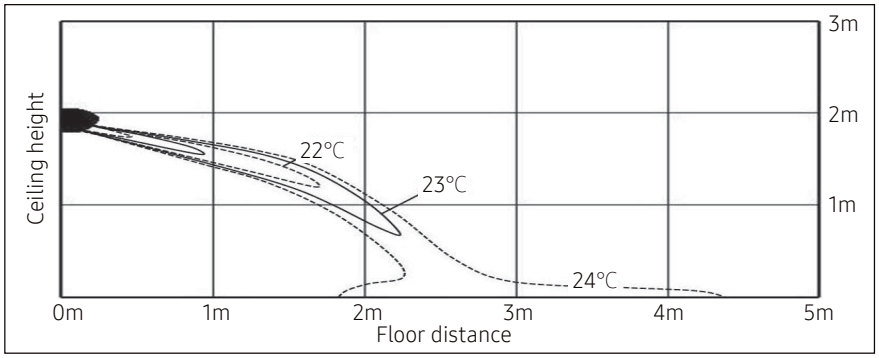
(1) Cooling air velocity distribution

Discharge angle : 18°



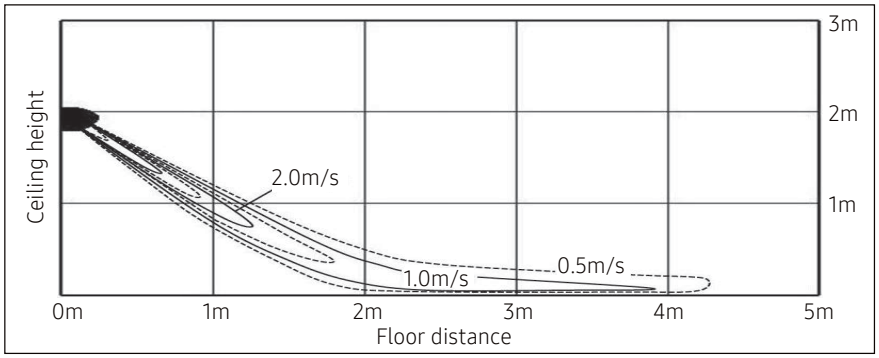
(2) Cooling temperature distribution

Discharge angle : 18°



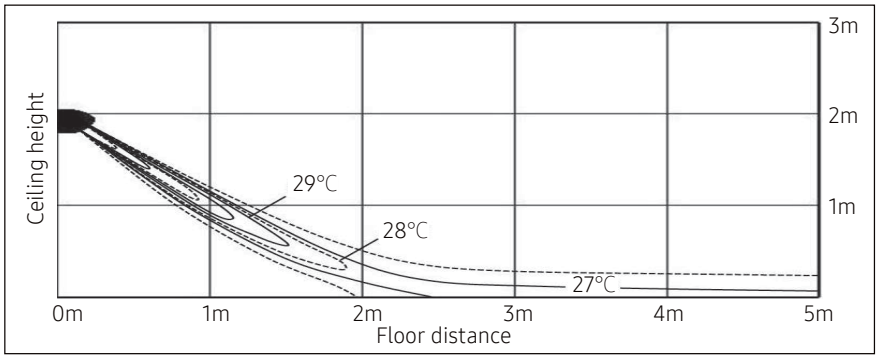
(3) Heating air velocity distribution

Discharge angle : 46°



(4) Heating temperature distribution

Discharge angle : 46°



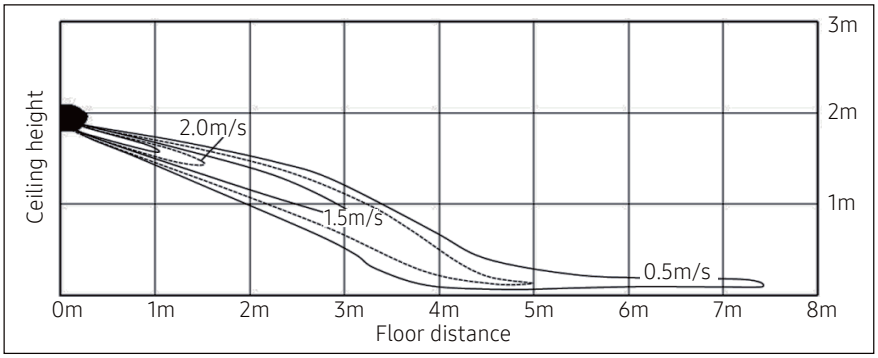
4. Indoor Units

4-7. Temperature and air flow distribution

RAC (A3050) : AE056MNADEH✻✻

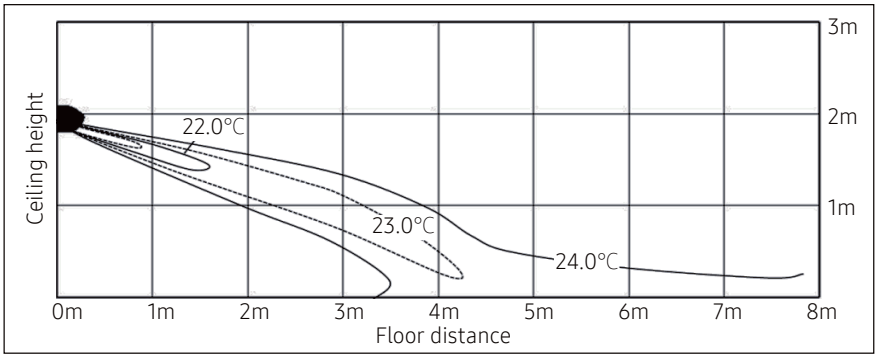
(1) Cooling air velocity distribution

Discharge angle : 18°



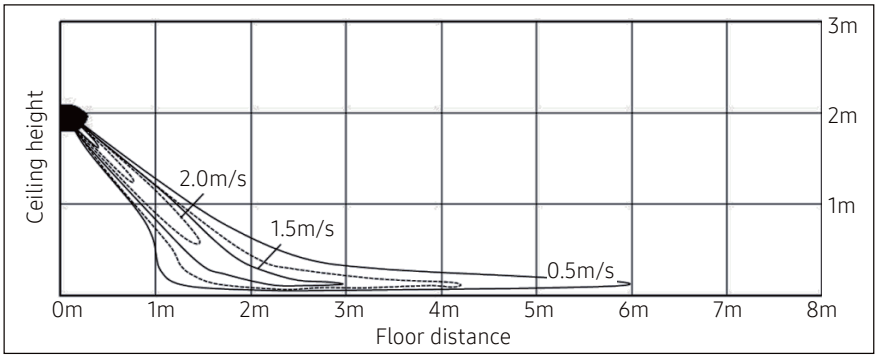
(2) Cooling temperature distribution

Discharge angle : 18°



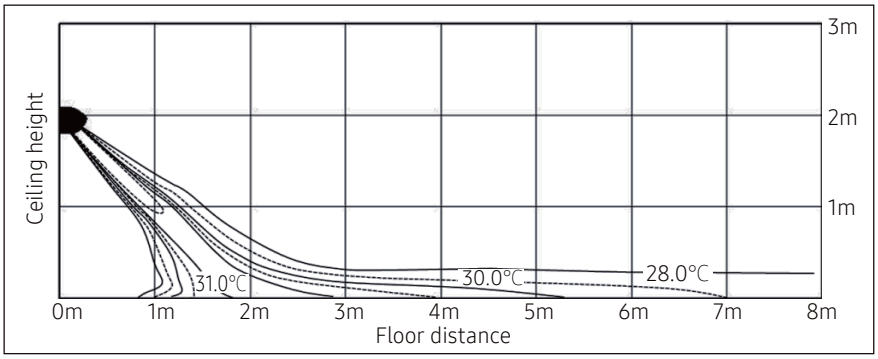
(3) Heating air velocity distribution

Discharge angle : 46°



(4) Heating temperature distribution

Discharge angle : 46°



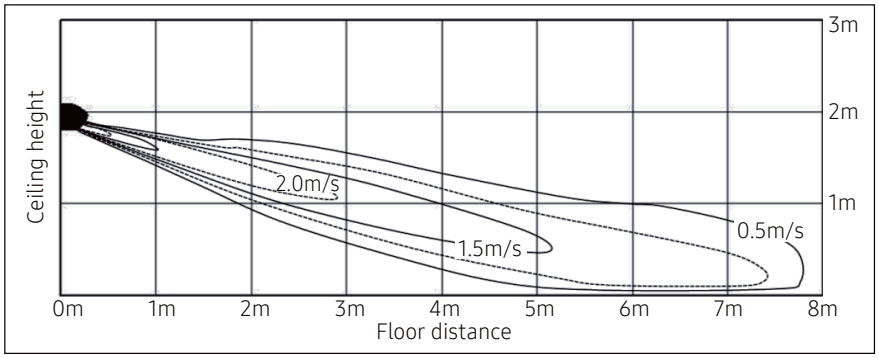
4. Indoor Units

4-7. Temperature and air flow distribution

RAC (A3050) : AE071MNADEH✳✳

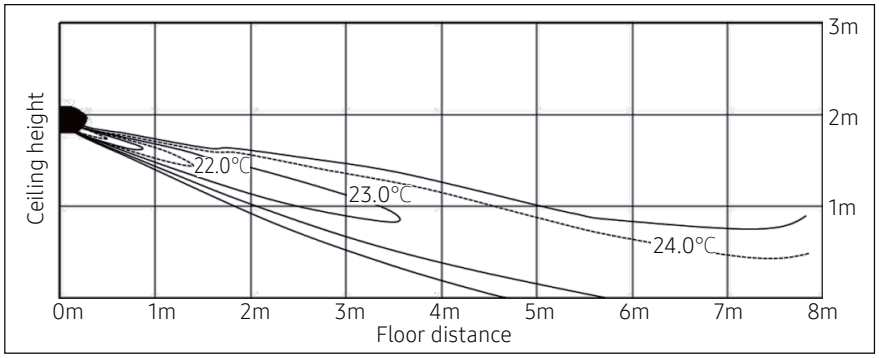
(1) Cooling air velocity distribution

Discharge angle : 18°



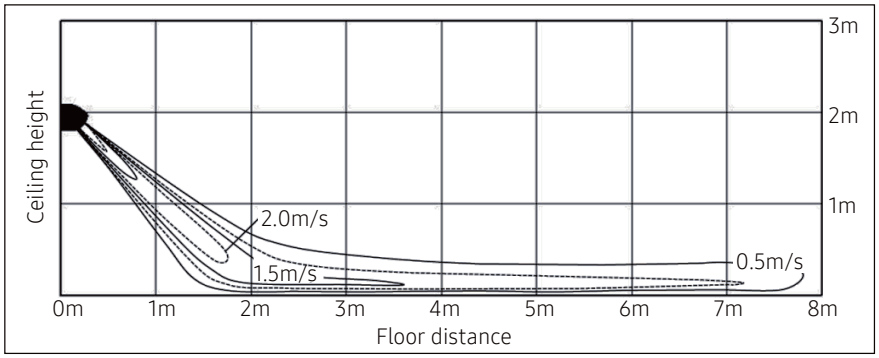
(2) Cooling temperature distribution

Discharge angle : 18°



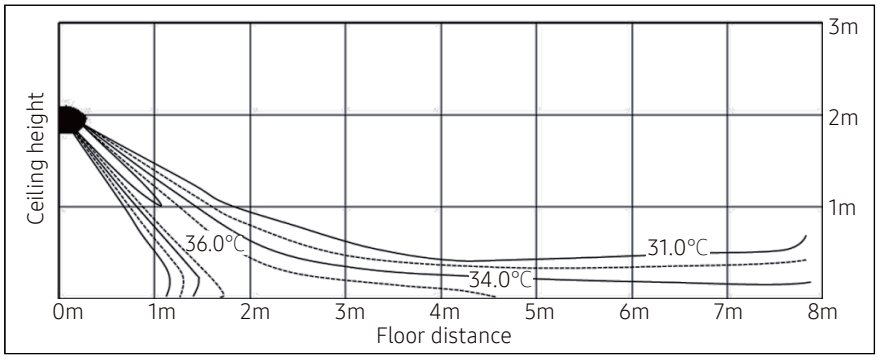
(3) Heating air velocity distribution

Discharge angle : 46°



(4) Heating temperature distribution

Discharge angle : 46°



4. Indoor Units

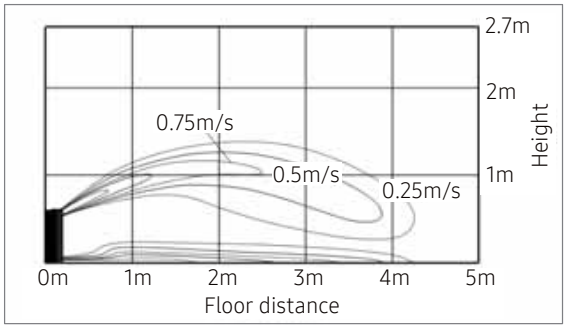
4-7. Temperature and air flow distribution

Console

AE022MNJDEH

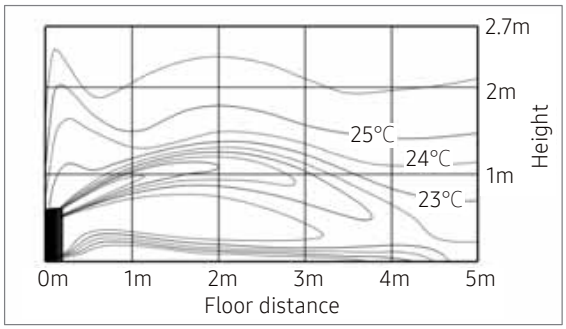
(1) Cooling air velocity distribution

Discharge angle (Default) : 40°



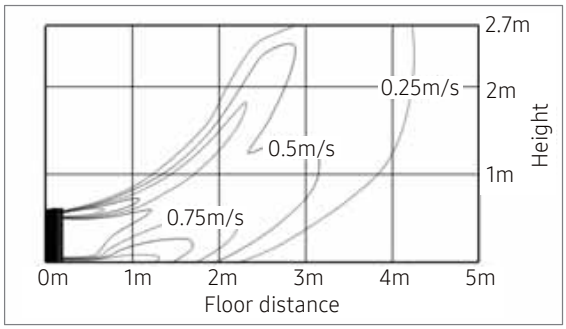
(2) Cooling temperature distribution

Discharge angle (Default) : 40°



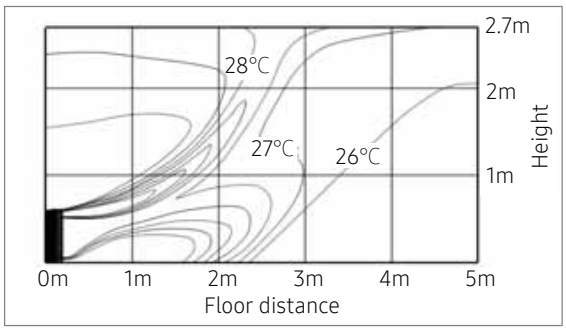
(3) Heating air velocity distribution

Discharge angle (Default) : 4°



(4) Heating temperature distribution

Discharge angle (Default) : 4°



4. Indoor Units

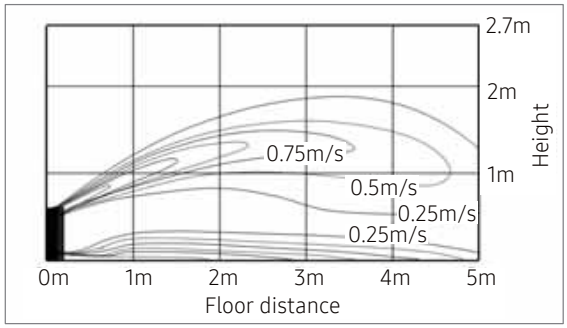
4-7. Temperature and air flow distribution

Console

AE028MNJDEH✶✶

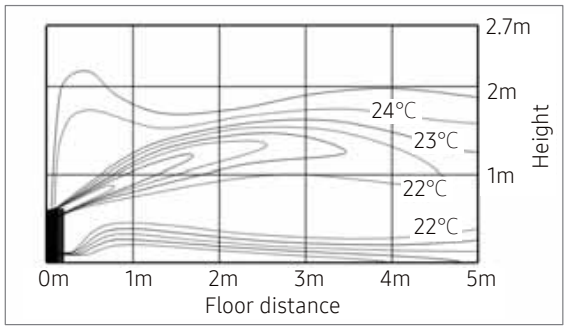
(1) Cooling air velocity distribution

Discharge angle (Default) : 40°



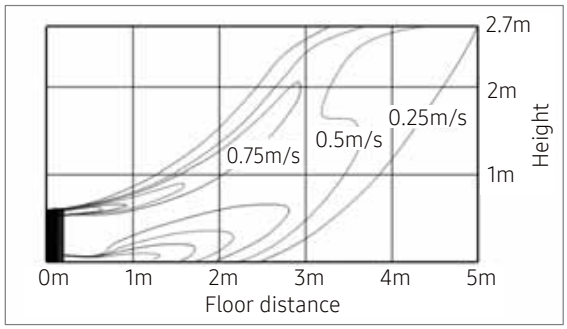
(2) Cooling temperature distribution

Discharge angle (Default) : 40°



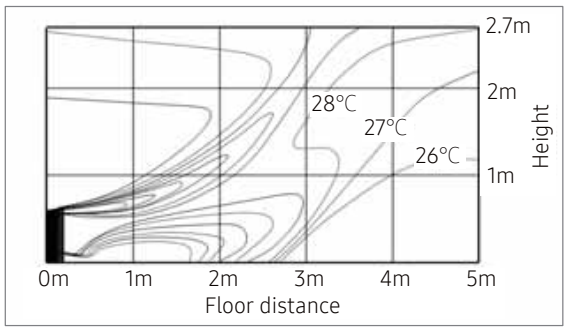
(3) Heating air velocity distribution

Discharge angle (Default) : 4°



(4) Heating temperature distribution

Discharge angle (Default) : 4°



4. Indoor Units

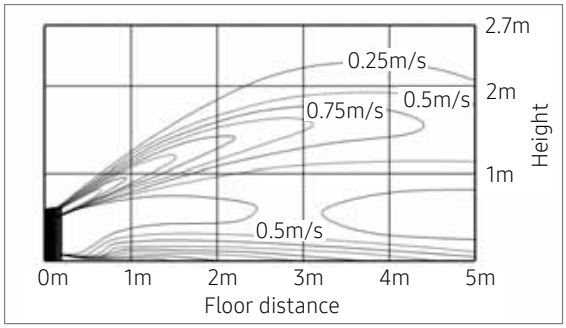
4-7. Temperature and air flow distribution

Console

AE036MNJDEH✻✻

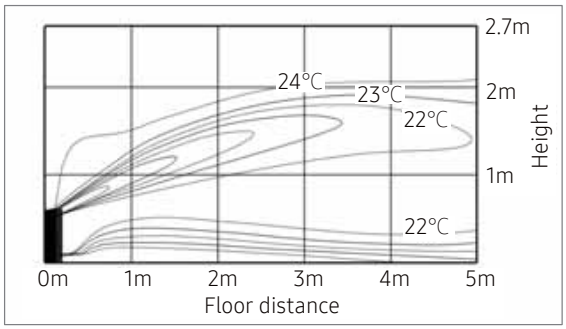
(1) Cooling air velocity distribution

Discharge angle (Default) : 40°



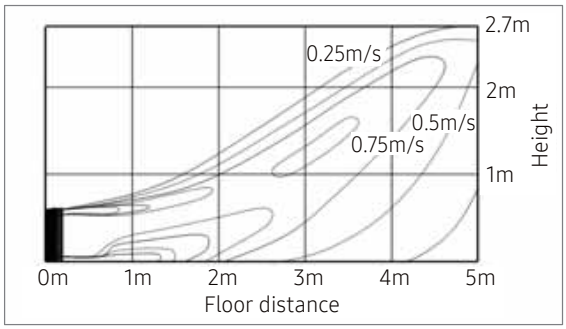
(2) Cooling temperature distribution

Discharge angle (Default) : 40°



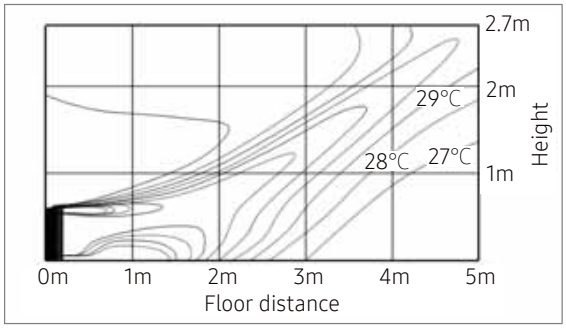
(3) Heating air velocity distribution

Discharge angle (Default) : 4°



(4) Heating temperature distribution

Discharge angle (Default) : 4°



4. Indoor Units

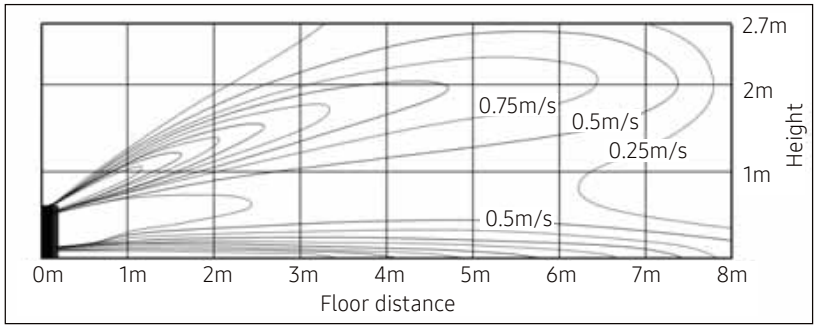
4-7. Temperature and air flow distribution

Console

AE056MNJDEH✶✶

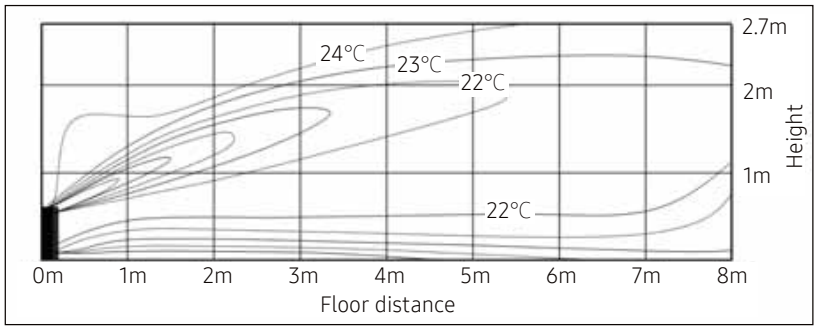
(1) Cooling air velocity distribution

Discharge angle (Default) : 40°



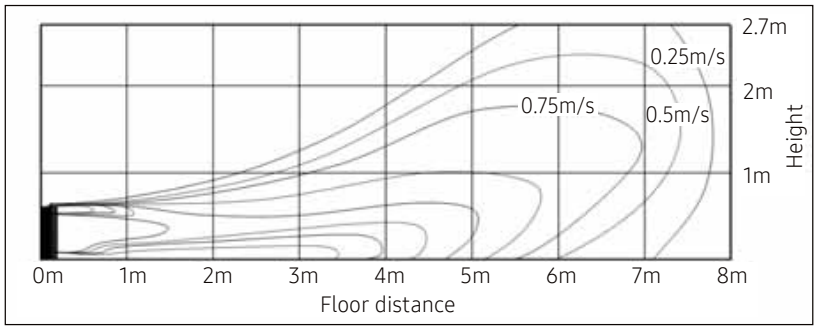
(2) Cooling temperature distribution

Discharge angle (Default) : 40°



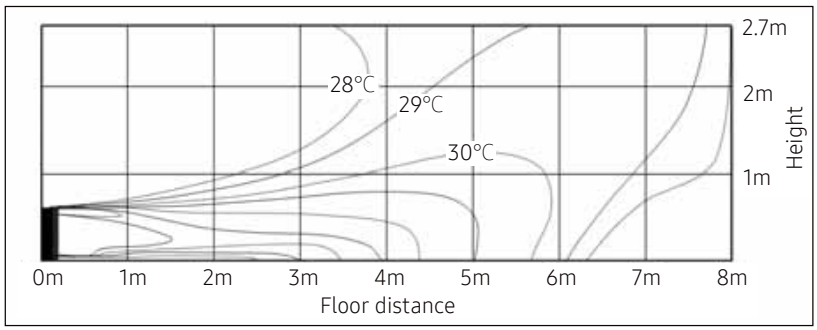
(3) Heating air velocity distribution

Discharge angle (Default) : 4°



(4) Heating temperature distribution

Discharge angle (Default) : 4°



5. Installation

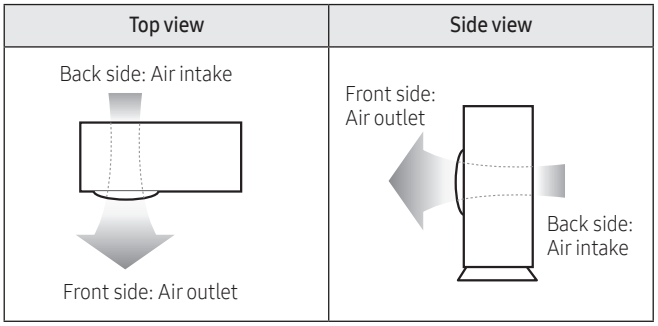
Outdoor Unit

Locating the Units

Space Requirements for Outdoor Unit

- Observe the clearances and dimensions as seen below when installing the outdoor unit.
- If you install several outdoor units simultaneously, observe the space for ventilation and free airflow. If the space for ventilation is insufficient, the Air to water heat pump may be inefficient.
- SAMSUNG logo is attached on the front side of the outdoor unit.

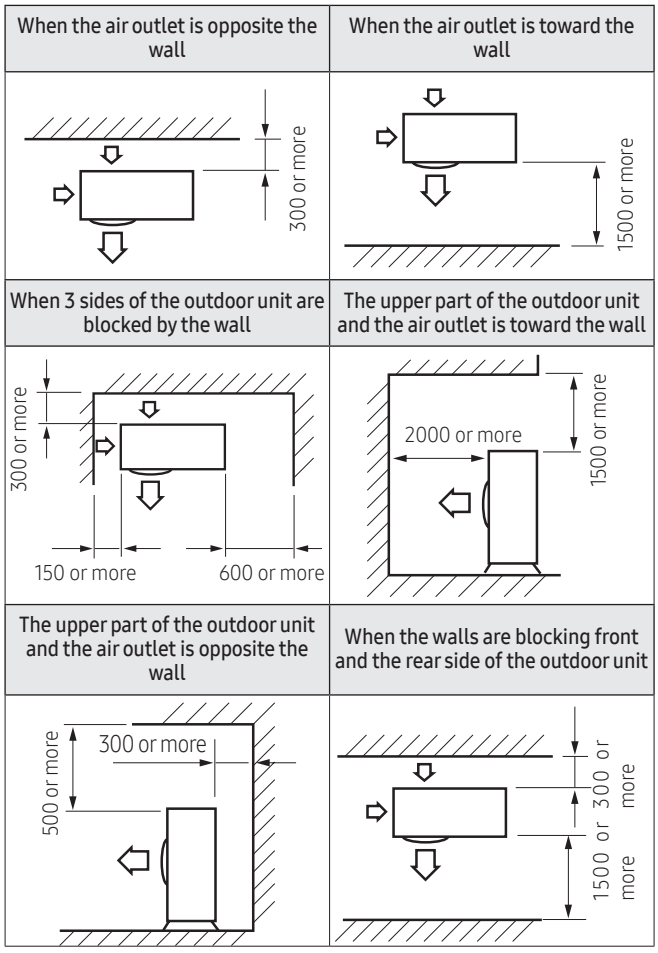
Figure Description



- , Air flow direction.

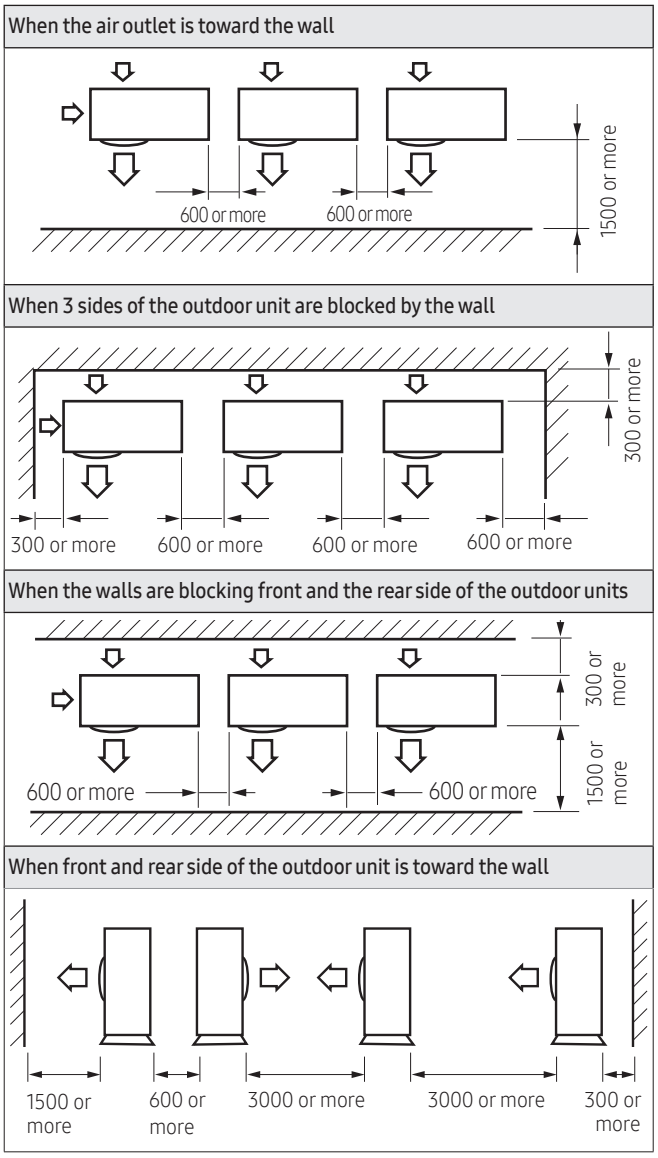
When installing 1 outdoor unit

(Unit: mm)



When installing more than 1 outdoor unit

(Unit: mm)

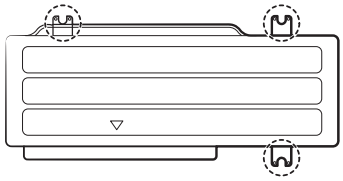


5. Installation

Outdoor Unit

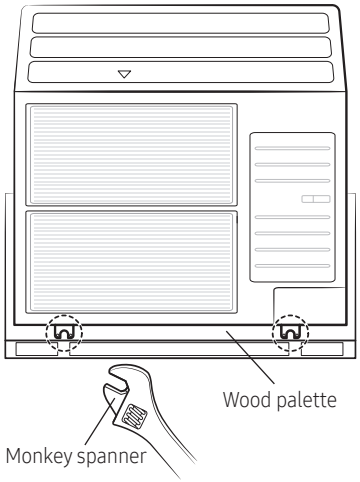
Disassembling the Leg Base and Wood Palette / Fastening the Anchor Bolt

1 Disassemble the three screws (with an electric driver) which fixes wood palette.



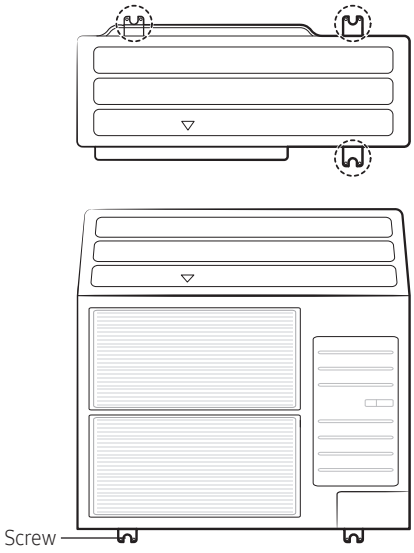
2 Disassemble the bottom-left screw with monkey spanner.

- Do not remove guard fan.



3 After removing the wood palette, move the outdoor unit to the installation place.

4 Fasten the bottom-left screw with monkey spanner first, and then fasten the other three anchor bolts.



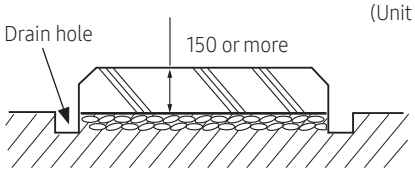
Installing the Outdoor Unit

⚠ CAUTION

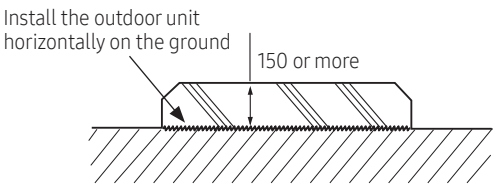
- Do not install the outdoor unit on a wooden pallet palette.
- Fix the outdoor unit completely to the base fix the outdoor unit with anchor bolts.
- The manufacturer is not responsible for the damage occurred by not keeping standard of the installation.

- Install the outdoor unit higher than 150mm from the base surface and install the drain hole to connect the pipe to the drainage.
- If front fan outdoor unit is installed where average snow fall is 150mm or more, a duct should be fitted to the unit.
- The concrete foundation should be 1.5 times larger than bottom of the outdoor unit.
- When heating, condensed water may be generated. Pay attention to waterproof and drainage of the concrete foundation where the outdoor unit is installed. (An ice patch may form on the base surface in winter.)
- Install a square pad(t=20mm or more) to prevent vibration of the outdoor unit delivering to the base surface when installing the concrete for the outdoor unit.

(Unit : mm)



‹ When installing on the ground ›



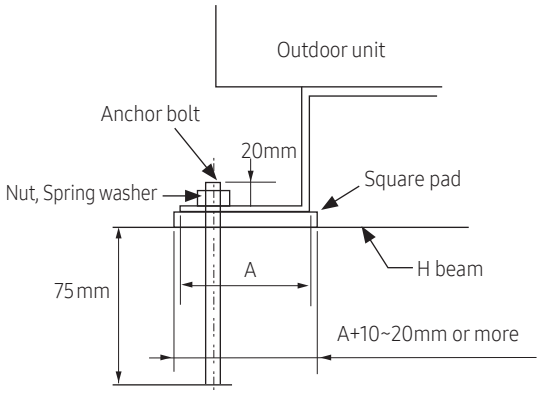
‹ When installing on the roof ›

※ Base mount construction

5. Installation

Outdoor Unit

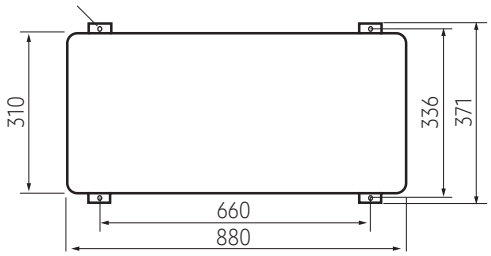
- Place the outdoor unit on the H beam and fix it with the bolt, nut and washer.



Outdoor unit base mount and anchor bolt position

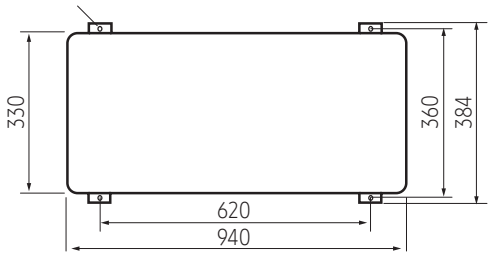
- 4.4/6.6kW

Anchor bolt position (ø7, 4 holes) (Unit : mm)



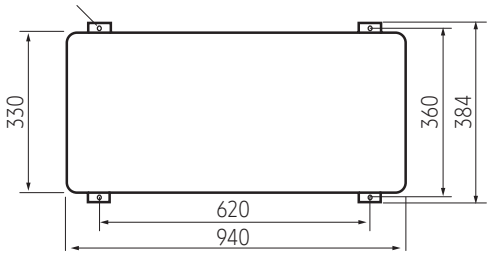
- 9kW

Anchor bolt position (ø7, 4 holes) (Unit : mm)



- 12/16kW

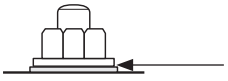
Anchor bolt position (ø7, 4 holes) (Unit : mm)



⚠ CAUTION

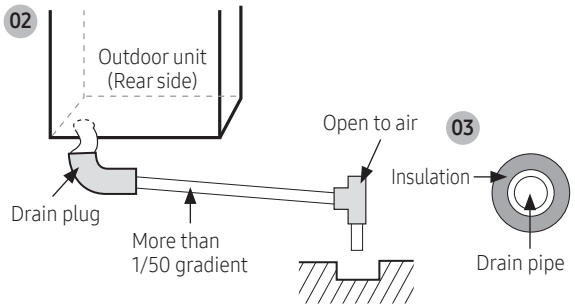
When tightening the anchor bolt

- Tighten the rubber washer to prevent the outdoor unit bolt connection part from corroding.

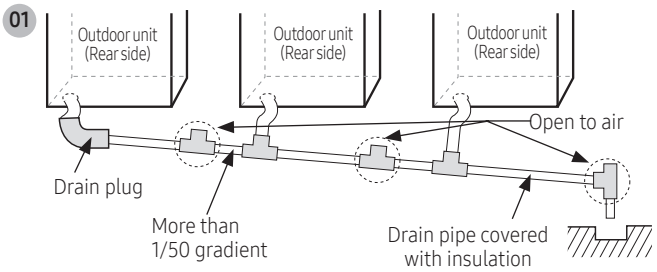


Installing the drain pipe

- When installing 1 outdoor unit



- When installing more than 1 outdoor unit



01 Open the upside of connected parts of outdoor units to prevent inner pressure.

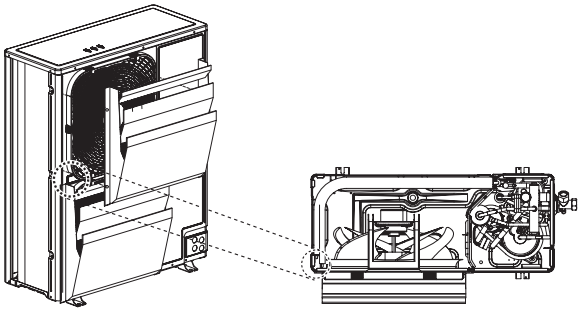
02 Do not install a trap in the drain pipe work and install with a 1/50 gradient or more.

03 Insulate the drain pipe and drain plug by using the insulation over 10mm.

04 Install a self-regulation heat cable to prevent the drain pipe from freezing.

Caution When Installing Cover for Heating Air Direction Change

- Parts shown in the picture is where the copper pipe may be passing by or the external plate may be near the copper pipe. When using screw for installing the air direction changing device such as heating air cover, check and make sure that it does not damage the copper pipe.



‹ Internal view from bottom›

5. Installation

Outdoor Unit

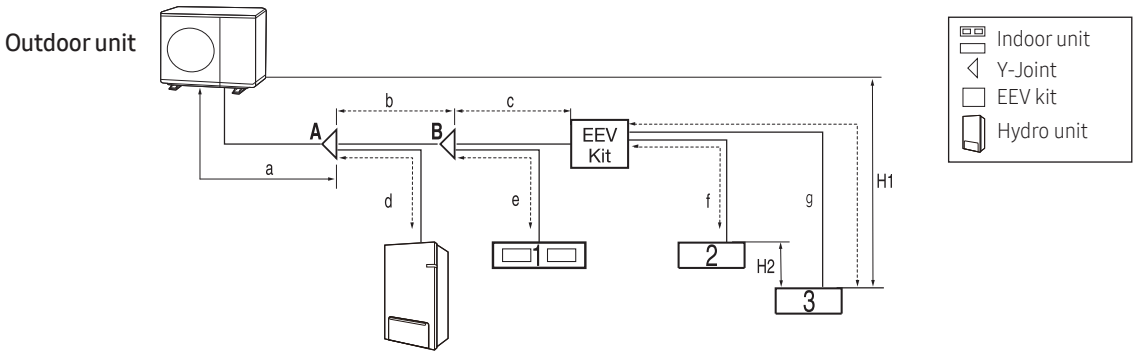
Installing the Refrigerant Pipe Work

- Install the refrigerant pipe within the maximum allowable length, difference in height and length of after the first branch pipe.
- The pressure of the R410A is high.
  Use only rated refrigerant pipe and follow the installation method.
- Use clean refrigerant pipe Where there is no harmful ion, oxide, dust, iron content or moisture.
- Use adequate tools and accessories for R410A.

Manifold gauge	• Use manifold gauge only for R410A to prevent the inflow of foreign substances.
Vacuum pump	• Use vacuum pump with check valve to prevent pump oil from flowing backward while the vacuum pump is stopped. • Use the vacuum pump that the vacuum induction is available up to 5 Torr (666.6Pa , 0.0067 kgf/cm², 5 mmHg)
Flare nut	• Use only flare nut supplied with the product.

Allowable Length of the Refrigerant Pipe and the Installation Examples

AE044MXTPEH/AE066MXTPEH



Item				Example	Remarks
Maximum allowable length of pipe	Outdoor unit ~ Indoor units	Longest piping length	Less than 30m	a+b+c+g ≤ 30m	
		Equivalent length	Less than 40m	Y-joint and EEV kit : 0.5m	
		Total length	Less than 75m	a+b+c+d+e+f+g ≤ 75 m	5m ≤ Total length ≤ 75m
Maximum allowable height	Outdoor unit ~ Indoor units	Less than 20m		H1	If outdoor unit is located lower position H1 ≤15m
	Indoor unit ~ Indoor unit	Height difference between indoor units	Less than 7.5m	H2	
Maximum allowable length of pipe	First Y-joint ~ Last indoor unit	Actual piping length	Less than 20m	b+c+g ≤ 20 m (between first Y-joint and indoor unit) h ≤ 20 m (between EEV kit and indoor unit)	
Additional refrigerant calculation	R=Basic Charge + Additional charge by the piping length + Additional charge by (A2A)Indoor Basic Charge : Up to 10m When Installing A2W only = 2600g Additional charge by the piping length : 3/8" - 50g/m, 1/4" - 20g/m Additional charge by (A2A)Indoor unit : Refer to the 113 page 'Amount of additional refrigerant for each indoor unit' table.				

5. Installation

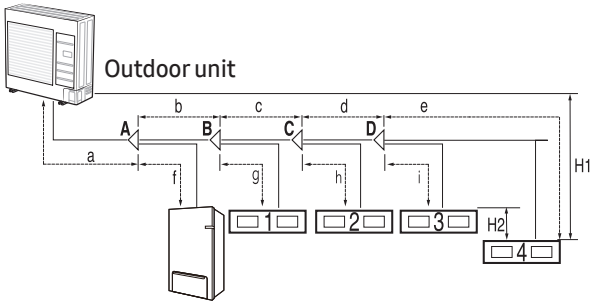
Outdoor Unit

- Amount of additional refrigerant for each indoor unit (Unit : kg)

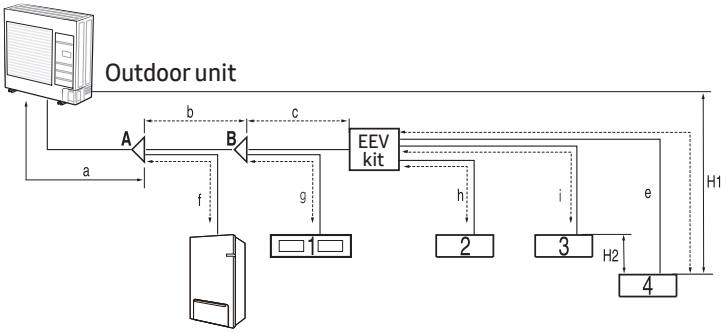
Model	Capacity[kW]	2.2	2.8	3.6	5.6	7.1	9.0
Slim Duct	Model name	AE022MNLDEH/EU	AE028MNLDEH/EU	AE036MNLDEH/EU	AE056MNLDEH/EU	-	-
	Refrigerant amount [kg]	0.17	0.17	0.26	0.35	-	-
MSP Duct	Model name	-	-	-	-	AE071MNMPEH/EU	AE090MNMPEH/EU
	Refrigerant amount [kg]	-	-	-	-	0.28	0.32
RAC (A3050)	Model name	AE022MNADEH/EU	AE028MNADEH/EU	AE036MNADEH/EU	AE056MNADEH/EU	AE071MNADEH/EU	-
	Refrigerant amount [kg]	0.22	0.25	0.34	0.71	0.71	-
Console	Model name	AE022MNJDEH/EU	AE028MNJDEH/EU	AE036MNJDEH/EU	AE056MNJDEH/EU	-	-
	Refrigerant amount [kg]	0.16	0.27	0.27	0.27	-	-

AE090MXTP✳H

Using only Y-joint



Using EEV kit



Item				Example	Remarks
Maximum allowable length of pipe	Outdoor unit ~ Indoor units	Longest piping length	Less than 30m	a+b+c+d+e ≤ 30m	
		Equivalent length	Less than 40m	Y-joint and EEV kit : 0.5m	
		Total length	Less than 75m	a+b+c+d+e+f+g+h+i ≤ 75m	5m ≤ Total length ≤ 75m
Maximum allowable height	Outdoor unit ~ Indoor units	Less than 20m		H1	If outdoor unit is located lower position H1 ≤15m
	Indoor unit ~ Indoor unit	Height difference between indoor units	Less than 7.5m	H2	
Maximum allowable length of pipe	First Y-joint ~ Last indoor unit	Actual piping length	Less than 20m	b+c+g ≤ 20 m (between first Y-joint and indoor unit) h ≤ 20 m (between EEV kit and indoor unit)	
Additional refrigerant calculation	R=Basic Charge + Additional charge by the piping length + Additional charge by (A2A)Indoor Basic Charge : Up to 10m When Installing A2W only = 2400g Additional charge by the piping length : 3/8" - 50g/m, 1/4" - 20g/m Additional charge by (A2A)Indoor unit : Refer to the above 'Amount of additional refrigerant for each indoor unit' table.				

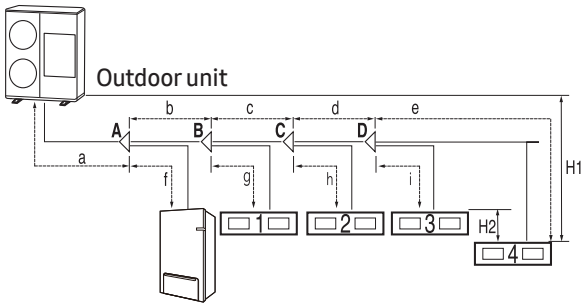
- Contact the manufacturer if the length should exceed.

5. Installation

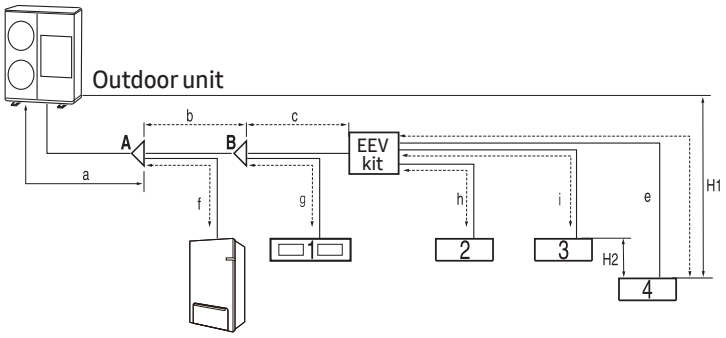
Outdoor Unit

AE120/160MXTP*H

Using only Y-joint



Using EEV kit



Item				Example	Remarks
Maximum allowable length of pipe	Outdoor unit ~ Indoor units	Longest piping length	Less than 70m	a+b+c+d+e ≤ 70m	
		Equivalent length	Less than 85m	Y-joint and EEV kit : 0.5m	
		Total length	Less than 200m	a+b+c+d+e+f+g+h+i ≤ 200m	10m ≤ Total length ≤ 200m
Maximum allowable height	Outdoor unit ~ Indoor units	Less than 30m		H1	If outdoor unit is located lower position H1 ≤ 25m
	Indoor unit ~ Indoor unit	Height difference between indoor units	Less than 15m	H2	
Maximum allowable length of pipe	First Y-joint ~ Last indoor unit	Actual piping length	Less than 40m	b+c+d+e ≤ 40m (between first Y-joint and indoor unit) h≤20m(between EEV kit and indoor unit)	
Additional refrigerant calculation		R=Basic Charge + Additional charge by the piping length + Additional charge by (A2A)Indoor Basic Charge : Up to 10m When Installing A2W only = 3500g Additional charge by the piping length : 3/8" - 60g/m, 1/4" - 20g/m Additional charge by (A2A)Indoor : Refer to the 113 page 'Amount of additional refrigerant for each indoor unit' table.			

- Contact the manufacturer if the length should exceed.

EEV Kit			Model name		Remarks
EEV Kit ~ Indoor units	Actual pipe lengh	2m or less	MEV-E24SA	1 indoor	Apply to products without EEV (Wall mounted & ceiling)
			MEV-E32SA		
		20m or less	MXD-E24K132A	2 indoor	
			MXD-E24K200A		
			MXD-E32K200A		
			MXD-E24K232A	3 indoor	
			MXD-E24K300A		
			MXD-E32K224A		
			MXD-E32K300A		

- Please refer to the EEV Kit manual.

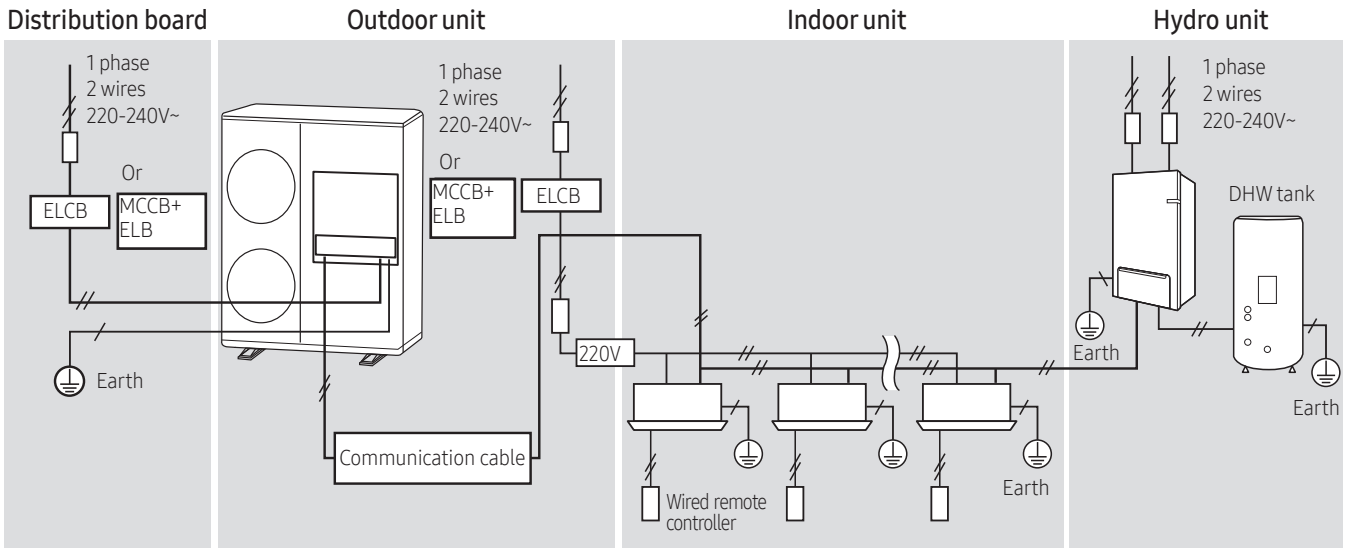
5. Installation

Outdoor Unit

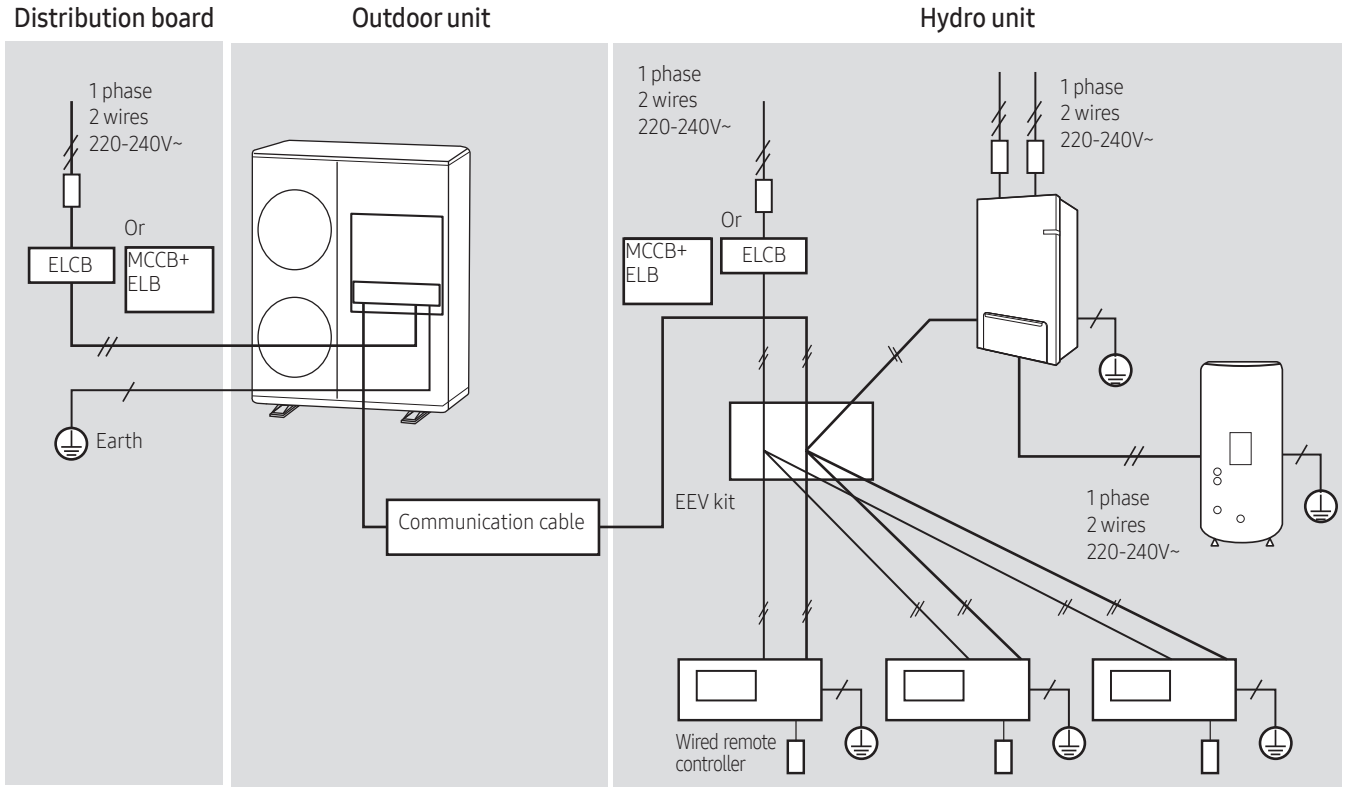
Electrical Connections

Overall System Configuration

Connection of the power cable (1 phase 2 wires)



Connection of the power cable (1 phase 2 wires using Electronic Expansion Valve kit)



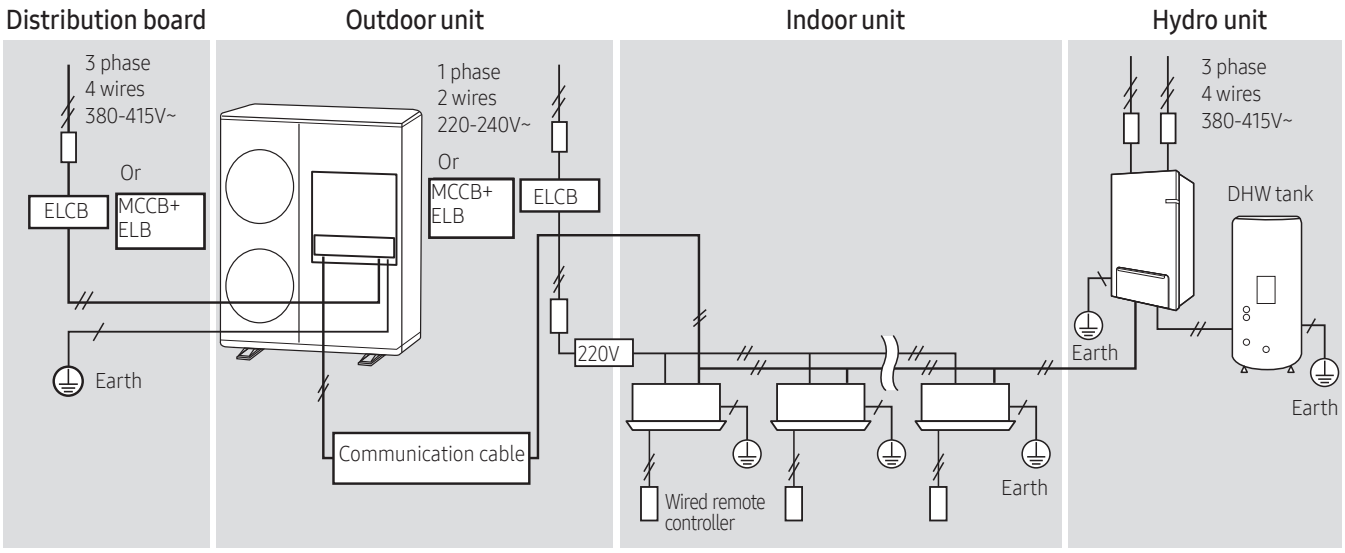
⚠ CAUTION

- Install cabinet panel near the outdoor unit for the convenience of service and emergency operation off.
- Make sure to install the circuit breaker with the over-current and electric leakage protection.

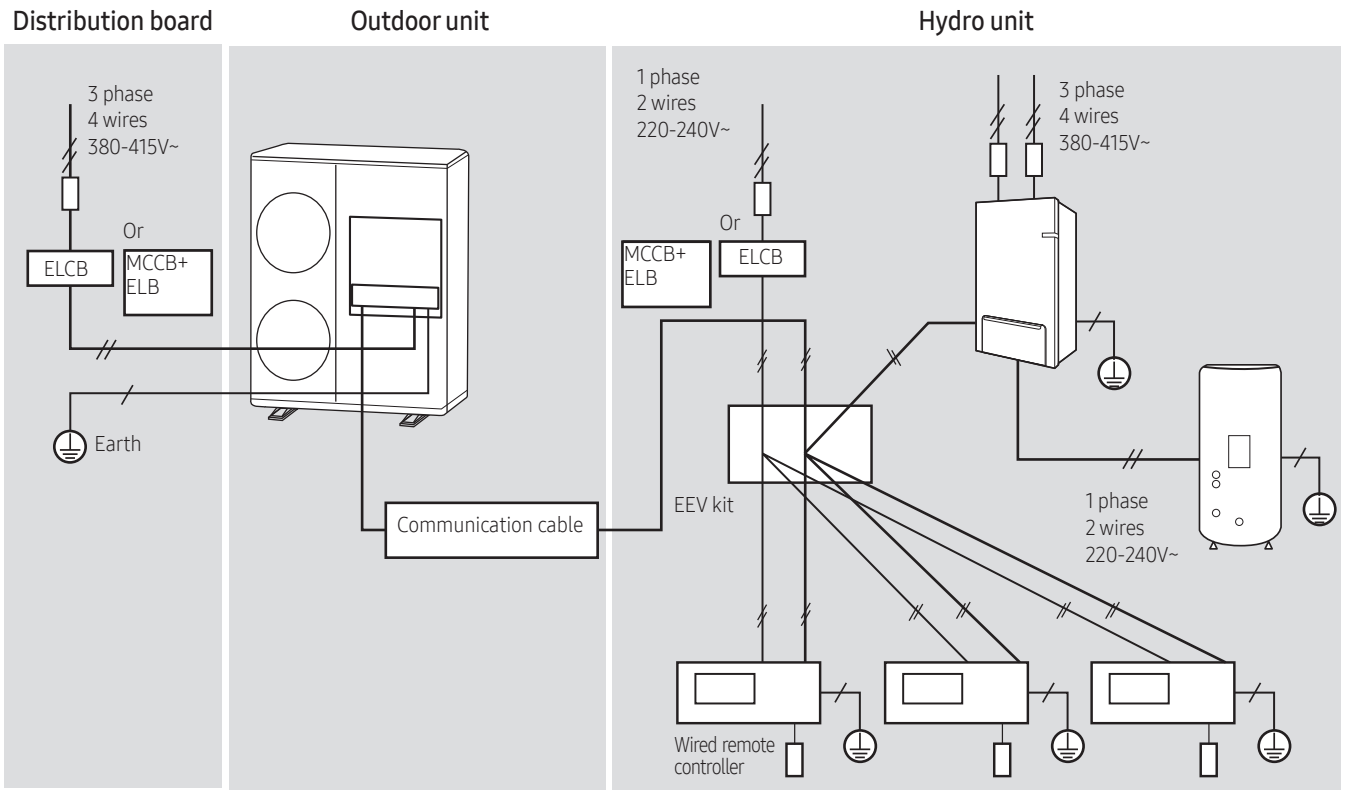
5. Installation

Outdoor Unit

Connection of the power cable (3 phase 4 wires)



Connection of the power cable (1 phase 2 wires using Electronic Expansion Valve kit)



⚠ CAUTION

- Install cabinet panel near the outdoor unit for the convenience of service and emergency operation off.
- Make sure to install the circuit breaker with the over-current and electric leakage protection.

5. Installation

Outdoor Unit

Specification of Electronic Wire of the Outdoor Unit

Outdoor unit	Power Supply		Voltage Range		MCA	MFA
	Hz	Volts	Min	Max	Min. Circuit Amps.	Max. Circuit Amps.
AE044MXTPEH	50	220-240	198	264	18.0	25.0
AE066MXTPEH			198	264	20.0	25.0
AE090MXTPEH			198	264	22.0	27.0
AE120MXTPEH			198	264	28.0	35.0
AE160MXTPEH			198	264	32.0	40.0
AE090MXTPGH	50	380-415	342	457	10.0	16.1
AE120MXTPGH			342	457	10.0	16.1
AE160MXTPGH			342	457	12.0	16.1

NOTE

- The power cable is not supplied with the Air to water heat pump.

NOTE

- Select the thickness and length of power cable less than 10% of voltage drop from input voltage.

⚠ CAUTION

- You should connect the power cable into the power cable terminal and fasten it with a clamp.
- To protect the product from water and possible shock, you should keep the power cable and the connection cord of the indoor and outdoor units in the iron pipe.
- Must keep the cable in a protection tube.
- Keep distances of 50mm or more between power cable and communication cable.
- Each indoor unit should be supplied between maximum and minimum voltage values (264V~198V).
- Power supply cords of parts of appliances for outdoor use shall not be lighter than polychloroprene sheathed flexible cord. (Code designation IEC:60245 IEC 57 / CENELEC:H05RN-F , IEC:60245 IEC 66 / CENELEC: H07RN-F)

5. Installation

Hydro Unit

Installing the unit

Installation of the indoor unit

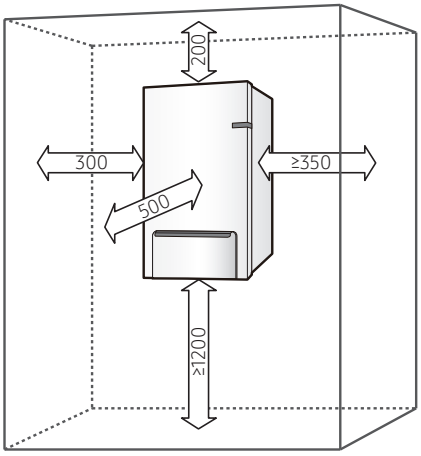
The indoor unit should be installed indoors and meet the following conditions.

- Installation site should be sheltered from frost.
- In area with suitable space for servicing.
- A place with adequate ventilation.
- Where there is no risk of leakage of flammable gases.
- There is a provision for condensate drain and pressure relief valve blow-off.
- The wall for installation is a flat, vertical and non-combustible wall, capable of supporting the operation weight of the unit.

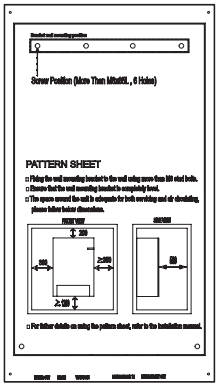
Installation space

- Ensure to leave the appropriate space as indicated in the drawing.
- Installation site should be secured with adequate ventilation so that the components of hydro unit will not be damaged from overheating.

(Unit : mm)



- Before installing the indoor unit, fix the pattern sheet on the wall. This sheet has a function to take correct position for the wall mounting bracket and screws.

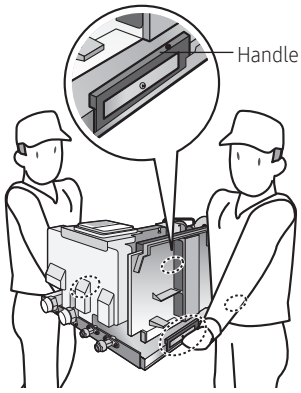


Pattern Sheet

5. Installation

Hydro Unit

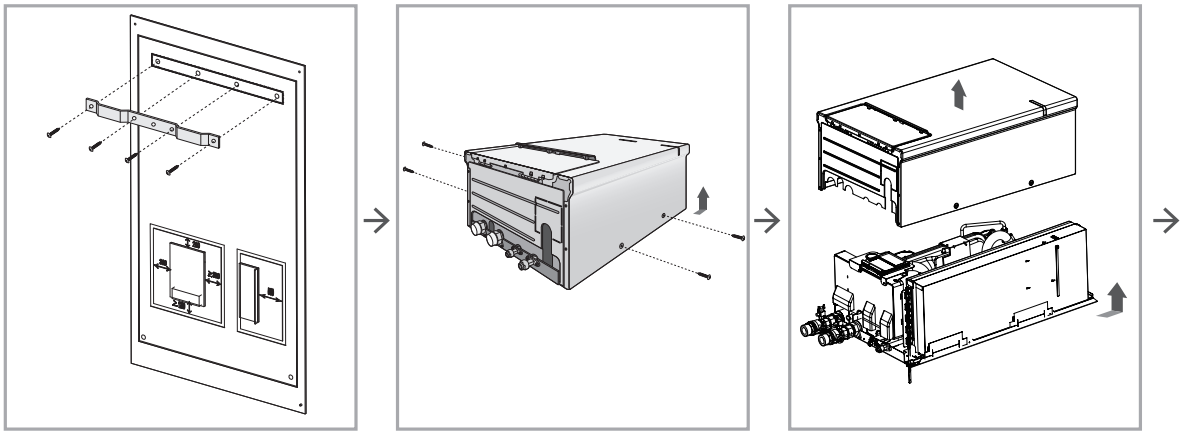
Mounting the indoor unit

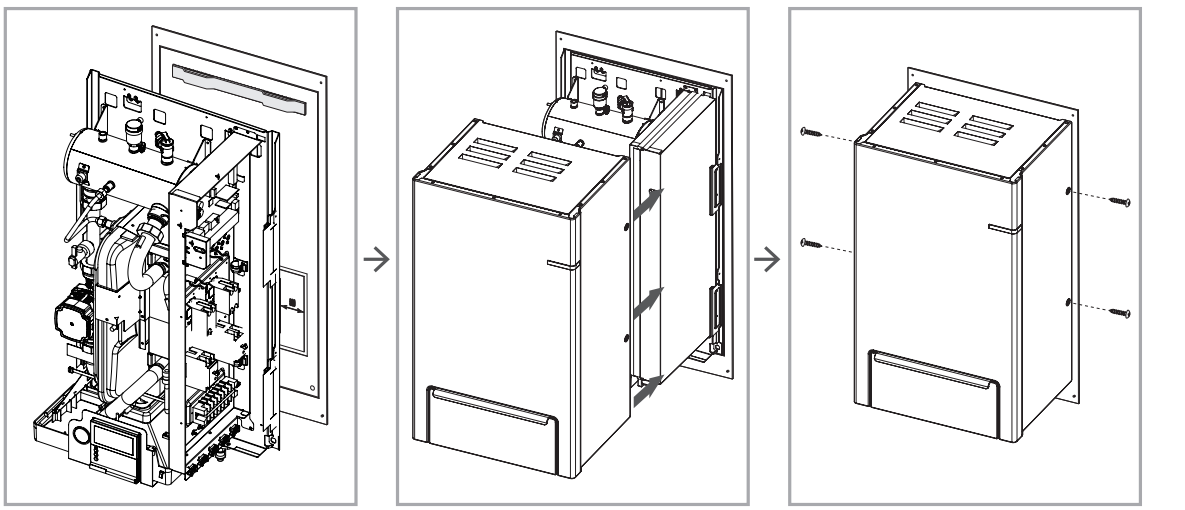


⚠ CAUTION

- A minimum of two people should lift the unit by the handles and not by the drain pan or pipe work.

- Drill 6 holes from the pattern sheet for fixing the wall bracket and unit. After completing holes, detach the pattern sheet.
- Fix the wall-mount-bracket to the wall using appropriate plugs and screws(Use over M8 6 screws).
- Hang the indoor unit on a wall-mount-bracket and fix a front cabinet on the unit by using 4 screws.





- Fix screw through base panel of the unit.

5. Installation

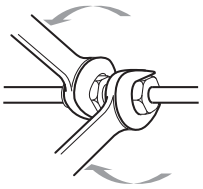
Hydro Unit

Pipe work

Refrigerant pipe work

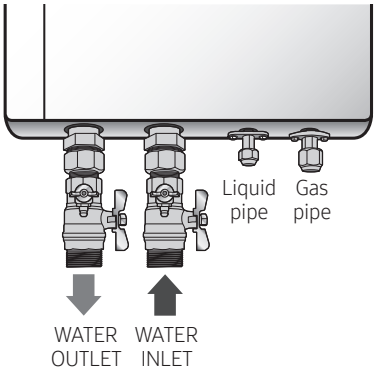
For all guide lines, specifications regarding refrigerant pipe work between the indoor unit and the outdoor unit, please follow the outdoor unit installation manual.

	Gas pipe (O.D.)	Liquid pipe (O.D.)	Tightening Torque	Final Torque
Indoor unit	15.88 mm (5/8 inch)	9 kW : 6.35 mm (1/4 inch) 16 kW : 9.52 mm (3/8 inch)	400 kg·cm	450 kg·cm
Outdoor unit	15.88 mm (5/8 inch)	Φ9.52mm(3/8 inch)	700 kg·cm	750 kg·cm



⚠ CAUTION

- When connecting the refrigerant pipes, always use 2 wrenches/spanners for tightening or loosening nuts. If not, piping connections can be damaged.



5. Installation

Hydro Unit

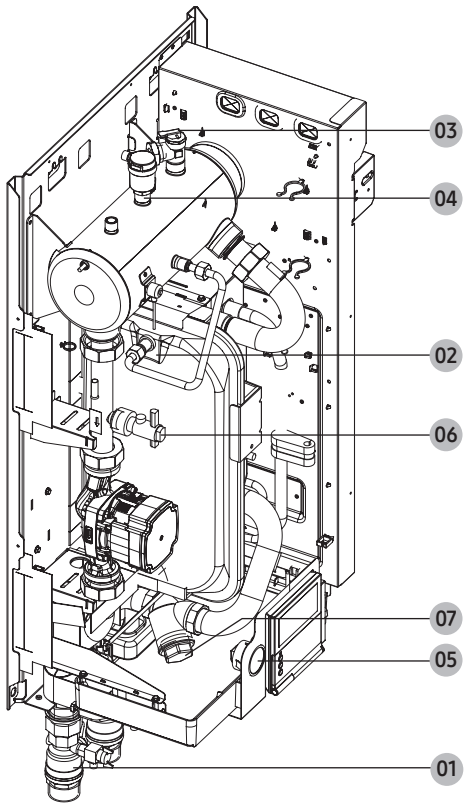
Water pipe work

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

The hot and cold water supply connections are clearly marked on the unit with labels. And service valves are provided.

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.
- 2 service valves are provided with the Hydro unit. To facilitate service and maintenance work, install R-Type service valve at the water inlet of the hydro unit and L-Type service valve at the water outlet of the hydro unit.
- 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.



	No.	Name	Tightening Torque	
Hydro unit	01	1.25” BSPP	350 ~ 380 kgf•cm	34 ~ 37 N•m
	02	3/8” BSPP	120 ~ 150 kgf•cm	12 ~ 15 N•m
	03	Pressure relief valve	120 ~ 150 kgf•cm	12 ~ 15 N•m
	04	Air-vent valve	120 ~ 150 kgf•cm	12 ~ 15 N•m
	05	Manometer	92~ 102 kgf•cm	9 ~ 10 N•m
	06	Flow switch	72 ~ 82 kgf•cm	7 ~ 8 N•m
	07	Strainer	350 ~ 380 kgf•cm	34 ~ 37 N•m

5. Installation

Hydro Unit

Flushing and air-purging

When filling water, the following start-up procedure should be followed.

1 All system components and pipes must be tested for the presence of leaks.

2 Preparation of a make-up water assembly or Flushing unit is recommended for installation and service.

3 Before connecting pipes to the hydro unit, Flush water pipes clean to remove contaminants during 1 hours using a flushing unit or tap water pressure if it is adequate (at 2 to 3 bar)

4 Fill water into the hydro unit by opening service valves.

5 Purge the air. (Fill with a flushing unit with sufficient capacity: avoid aerating the water)

6 Circulate for long enough to ensure that all air has been bled from the complete water piping system.

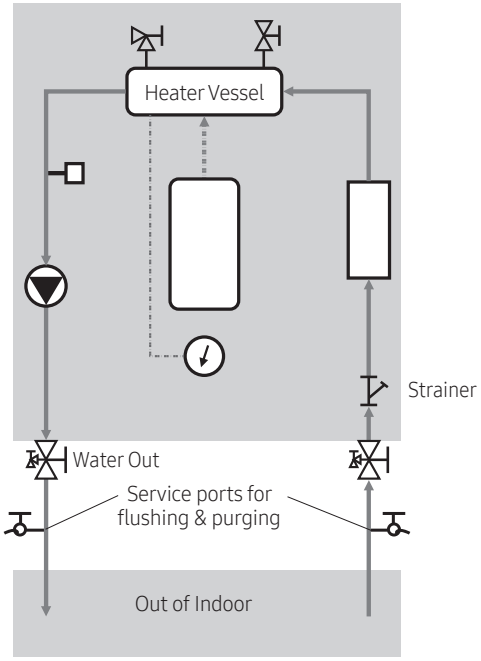
After installations, Commissioning should be performed by qualified representatives.

Unless flushing and air-purging works are performed adequately, it might result in malfunctions.



Flushing unit (or purging cart)

Hydro unit



⚠ CAUTION

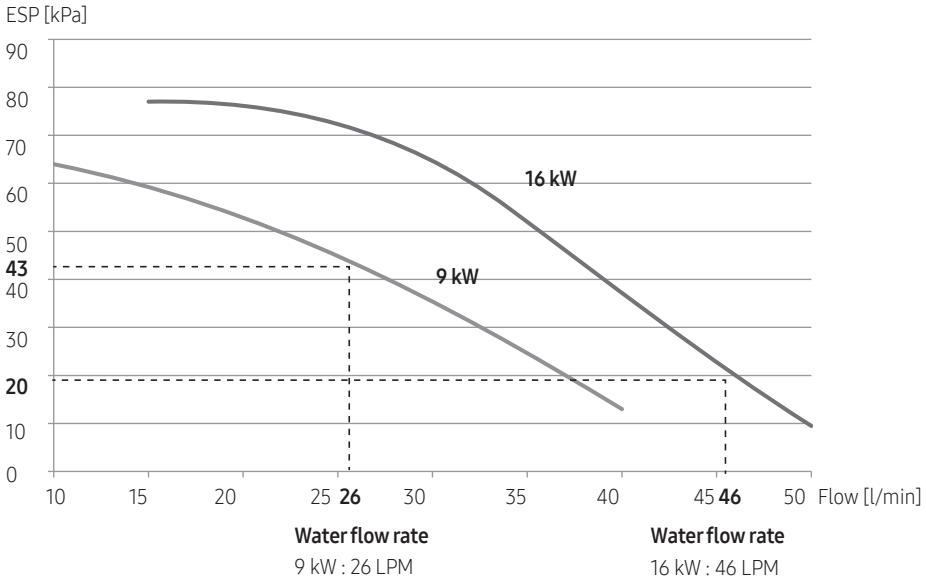
- Check and clean strainer periodically.
- Replace strainer when necessary.
- It is recommended that you flush the system for 4 hours minimum once a per annum.
- Use chemical cleaning agents(Begin with acid , finish with alkali).
- Install Air vents on the top of the system
- Pressure of entering water(over 2.0 bar)

5. Installation

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.



If the pressure loss of total system is over 43(9 kW) or 20(16 kW)kPa, additional water pump should be installed in series.

Otherwise, the flow rate might decreased, causing insufficient heating or cooling.

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

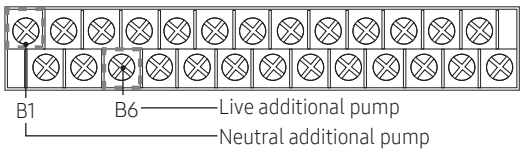
Connection guide of additional pump

Case 1) INV. pump

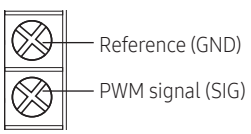
Connect the PWM control external type pump to PWM terminal block and power cable to the external contact terminal.

The maximum number of additional pump installation is one inverter pumps (Input power 100W).

1 Power supply (INV. Pump)



2 PWM control (for INV. Pump only)



⚠ CAUTION

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

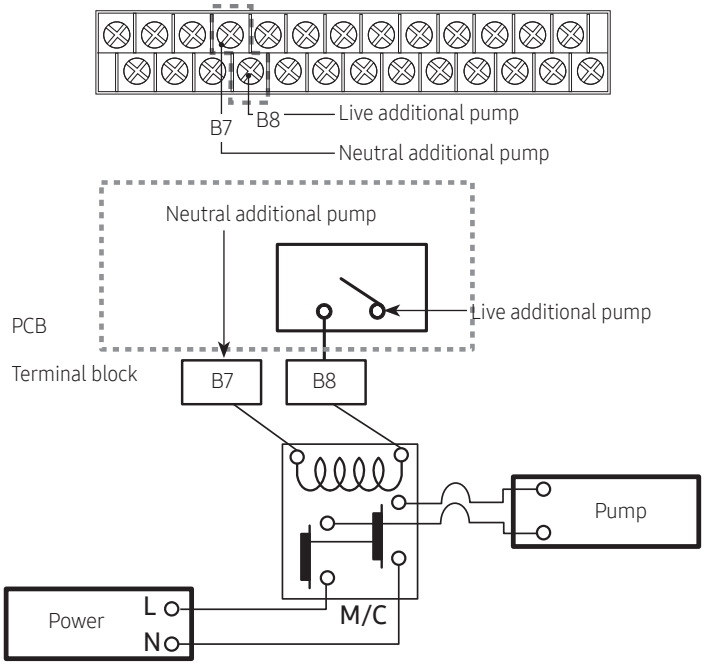
5. Installation

Hydro Unit

Case 2) AC pump

The maximum number of additional pump installation is one AC pumps (Input power 100W).

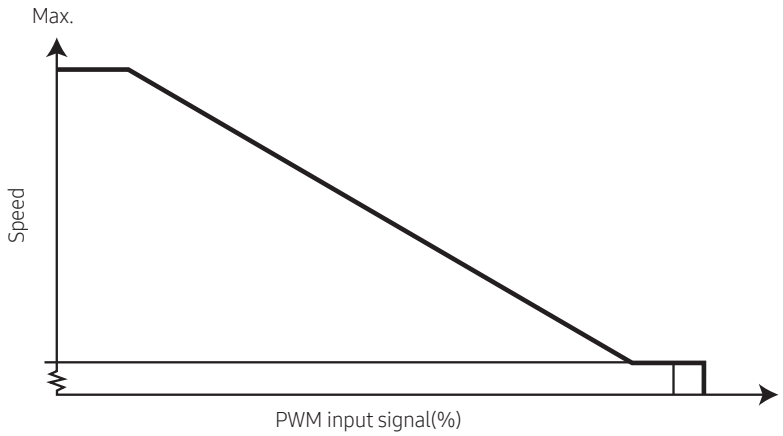
1 Power supply (AC Pump)



⚠ CAUTION

- Terminal of this product is for additional water pump and the maximum allowable current is 0.5 A.

PWM characteristic curve



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

Recommendation

- 9kW (AE090✳✳✳) : GRUNDFOS UPM3 25-75 (Heating Type)
- 16kW (AE160✳✳✳) : WILO STRATOS PARA 25/1-9 (Heating Type)

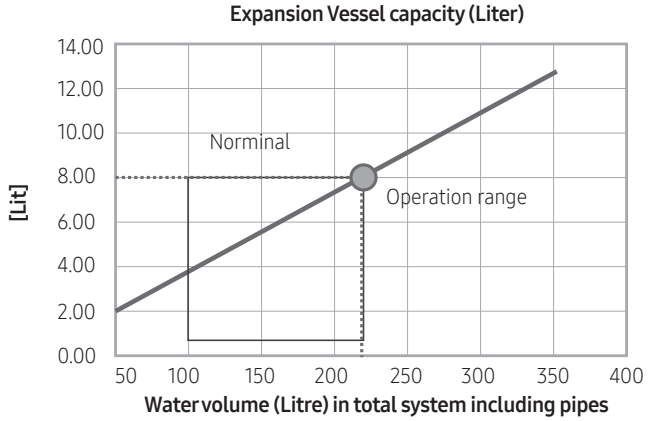
5. Installation

Hydro Unit

Setting the pre-pressure of the expansion vessel

When it is required to change the default pre-pressure of the expansion vessel(1 bar), keep in mind the following guidelines:

- Use only dry nitrogen to set the expansion vessel pre-pressure.
- Inappropriate setting of the expansion vessel pre-pressure will lead to malfunction of the system. Therefore, the pre-pressure should only be adjusted by a licensed installer.



⚠ CAUTION

- Water volume of total system for reliable performance is minimum 50 liters.

Installation height difference[a)]	Water volume	
	< 220 Litres	> 220 Litres
< 7 m	No pre-pressure adjustment required.	Actions required: • Pre-pressure must be decreased, calculate according to "Calculating the pre-pressure of the expansion vessel". • Check if the water volume is lower than maximum allowed water volume
> 7 m	Actions required: • Pre-pressure must be increased, calculate the appropriate value following by "Calculating the pre-pressure of the expansion vessel". • Check if the water volume is lower than maximum allowed water volume	Expansion vessel of the unit too small for the installation.

a) Installation height difference: height difference(m) between the highest point of the water circuit and the indoor unit. If the indoor unit is located at the highest point of the installation, the installation height is considered 0 m.

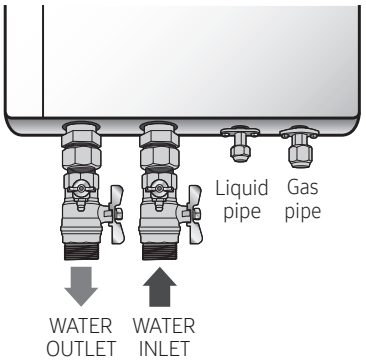
Calculating the pre-pressure of the expansion vessel

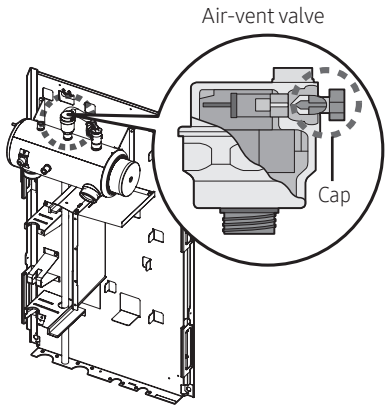
The pre-pressure(Pg) to be set depends on the maximum installation height difference(H) and is calculated as below: Pg=(H/10+0.3) bar

5. Installation

Hydro Unit

Charging water





After installation is completed the following procedures shall be used to charge water into the hydro unit.

- Connect water lines to water connections of hydro unit.
- The air-vent valve shall be opened at least 2 turns and drain valves shall be closed.
- Open the service valve in the water supply connection.
- Water pressure of supply line shall be over 2.0 bar for good charging work.
- Stop water supply when the pressure gauge of hydro unit indicates 2.0 bar.

⚠ CAUTION

- Service space should be secured.
- Water pipe and connections must be cleaned using water.
- If internal water pump capacity is not enough, install external water pump.
- Do not connect electric wire while water charging.
- When initial installation or re-installation required, open the cap to prevent air trap in the unit while charging water.
- The back-up heater vessel shall be full of water before heater is turned on. Confirm if the vessel is empty by opening the pressure relief valve of hydro unit. (OK if water is flowing out)
- It is recommended to install the make-up water assembly to feed small quantities of water to the system automatically, replacing the minor water losses and maintaining the system pressure. This assembly usually consists of a pressure-reducing valve, water filter, check-valve and shut-off valves. In this case, Check-valve must be installed to prevent from contaminating city water.

Pressure relief valve

A pressure relief valve is integrated on heater vessel of hydro unit and shall work in abnormal condition for protecting the hydro unit.

⚠ CAUTION

- The pressure relief valve will operate releasing the pressure by flowing out some water through the drain hose.
- Make certain that the discharged water out of drain pan can not contact any electrical parts.

Piping insulation

The complete water circuit, including all piping must be insulated to prevent condensation forming on the surface of the pipe and heat loss to external environment.

5. Installation

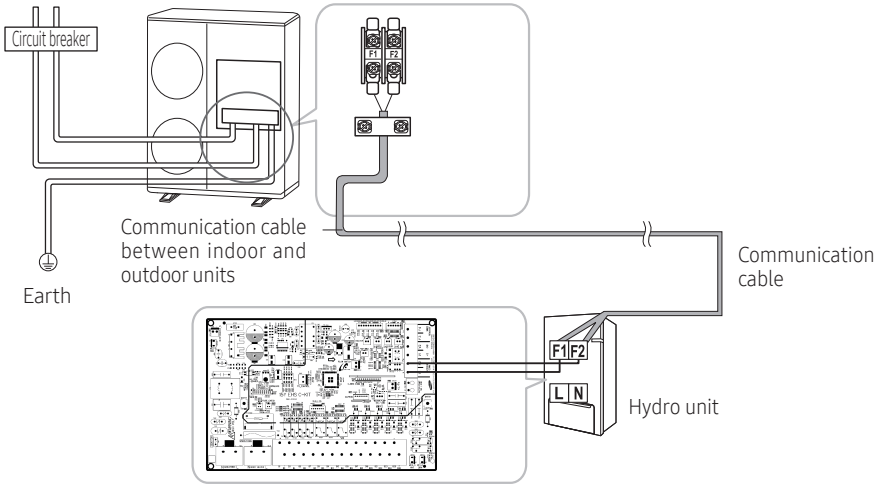
Hydro Unit

Wiring work

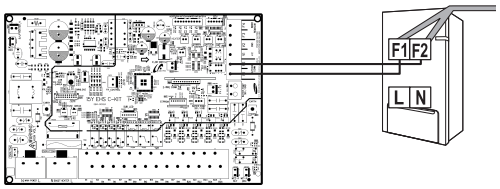
Connection of the power supply and communication cable

Description	No. of wires	Max. A	Thickness	Supply Scope
Main power	2+ground	32A	4.0mm^2 H05RN-F or H07RN-F	Field supply (230 V~, Input)
Communication	2	6A	0.75mm^2 H05RN-F or H07RN-F	7Vdc data

2 wires for communication cable

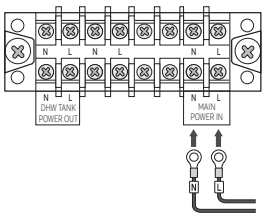


Communication cable connection

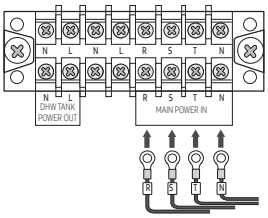


Power wire connection

1 phase



3 phase



⚠ CAUTION

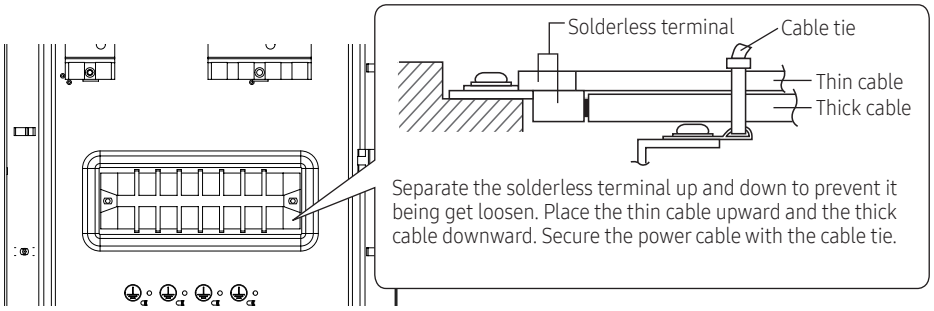
- If the supply cable is damaged, it must be replaced by a special cable or assembly available from the manufacturer or installer.
- Circuit Breaker (ELCB, ELB, MCCB etc.) for outdoor and indoor units shall be installed by installers because they are not sub-parts in the units. But you don't need to install for hydro unit (Built-in ELCB).
  - ELCB : Earth leakage circuit breaker
  - ELB : Earth leakage breaker
  - MCCB : Molded case circuit breaker

5. Installation

Hydro Unit

Connecting the power terminal

- Connect the cables to the terminal board using the solderless ring terminal.
- Use certified and reliable cables.
- Connect the cables with the torque chart as below.
- If the terminal is loose, fire may occur caused by arc. If the terminal is connected too firmly, the terminal may be damaged.
- External force should not be applied to the terminal block and wires.
- The cable ties to fasten the wire should be an incombustible material, V0 or above. (The cable ties should be used to fasten the power wire and they are supplied with the unit.)



Tightening Torque (kgf • cm)	
M3	5~7.5
M5	20 ~ 30

5. Installation

Hydro Unit

Connection of the backup heater power supply

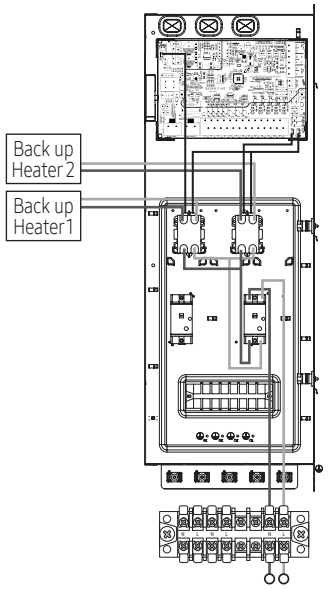
⚠ CAUTION

- Do not use a power supply shared by other appliances. Each components for outdoor unit, indoor unit, backup heater and booster heater has the dedicated power supply.

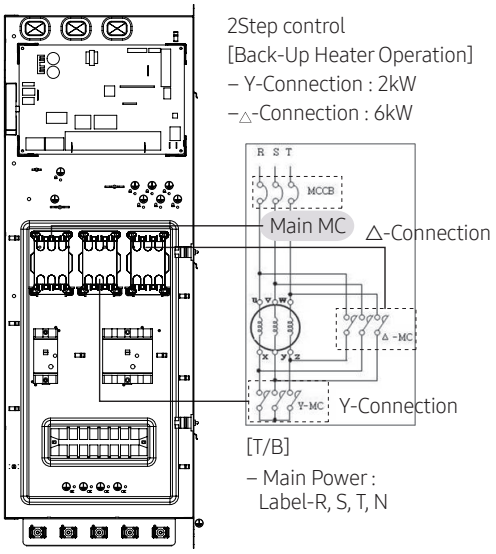
Model	Heater capacity (kW)	ELCB capacity (A)
AE090MNYDEH	4	30
AE160MNYDEH	6	40
AE090MNYDGH	6	20
AE160MNYDGH	6	20

✳ Circuit breakers (ELCB, ELB, MCCB etc.)s written above are already included in the hydro unit.
ELCB : Earth leakage circuit breaker
ELB : Earth leakage breaker
MCCB : Molded case circuit breaker

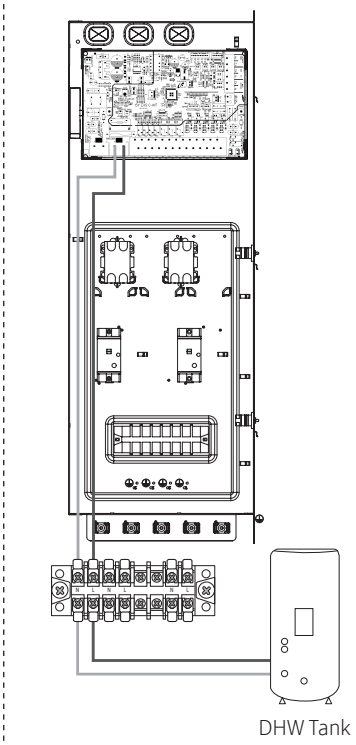
1 phase



3 phase



Booster heater (DHW)

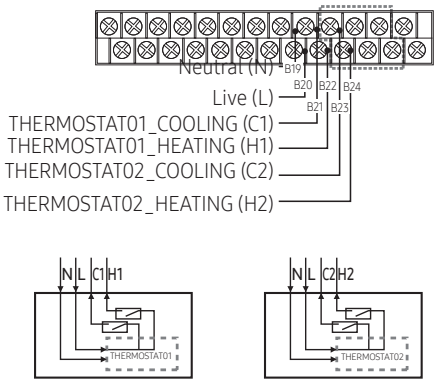


5. Installation

Hydro Unit

Connection of the thermostat

Description	No. of wires	Max. A	Thickness	Supply Scope
Room Thermostat for weather control	4	22 mA	› 0.75 mm^2, H05RN-F or H07RH-F	Field supply (230 V~, Input)



1 Before the installation, hydro unit should be turned off.

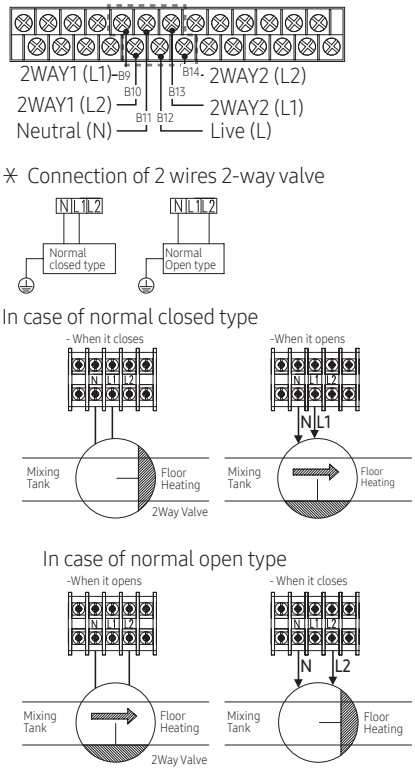
2 Using the appropriate equipment to correct position of terminal block as shown on the diagram.

3 Make sure what type is you use.

– Contact signal must be " L ". When you install two thermostats, thermostat2 is prior to thermostat1.

Connection of the 2-way valve

Description	No. of wires	Max. A	Thickness	Supply Scope
Motorized 2-way valve to shut off UFH loops during cooling.	2+ground	22 mA	› 0.75 mm^2, H05RN-F or H07RH-F	Field supply (230 V~, Output)



2-way motorized valve

- When outlet water temperature reach to lower than 16 °C in cooling mode, UFH loops will be closed.
- 230V AC
- 2 wires(Normal Open or Normal Close)

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 is you use.

– Normal OPEN or Normal CLOSED.

⚠ CAUTION

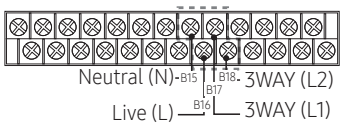
- There are 2 types of 2-way valve, normal open type and normal closed type. Make sure to connect terminals to right positions of terminal block. As detailed on the wiring diagram and illustrations above.

5. Installation

Hydro Unit

Connection of the 3-way valve

Description	No. of wires	Max. A	Thickness	Supply Scope
Diverting type 3way valve	4	22 mA	› 0.75 mm^2, H05RN-F or H07RN-F	Field supply (230 V~, Input)



Status	L1	L2
A (Initial)	OFF	ON
B	ON	OFF

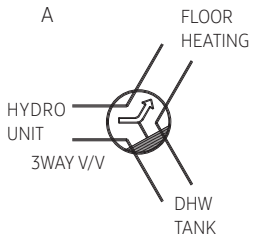
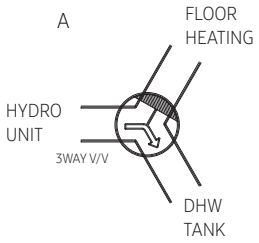
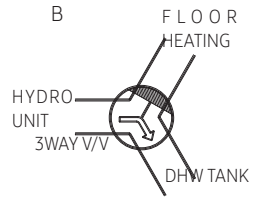
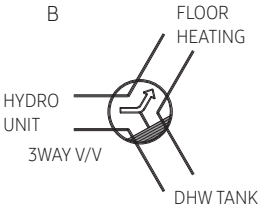
3-way diverting valve for water tank

- Diverting typecooling mode, UFH loops will be closed.
- 230V AC

1 Before the installation, hydro unit should be turned off.

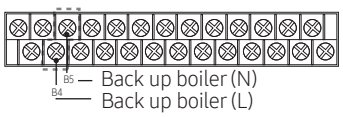
2 Using the appropriate equipment to correct position of terminal block as shown on the diagram.

3 Make sure what type of 3 way V/V you use.

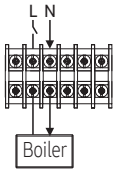
Field Setting Valve (#3071) "0" Floor heating as default	Field Setting Valve (#3071) "1" DHW tank as default
	
	

Connection of the back-up boiler

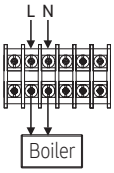
Description	No. of wires	Max. A	Thickness	Supply Scope
Back-up Boiler	2+ground	10 mA	0.75mm^2 H05RN-F or H07RN-F	Field supply (230 V~, Input)



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.

3 Make sure EXT-CTRL signal of back up boiler must be 230Vac.

– Do not connect supply power of back up boiler directly.

✳ Heat pump does not work when the Back-up boiler operates.

5. Installation

Hydro Unit

DHW tank

Electrical connections

⚠ WARNING

- Switch off the power supply before making any connections.
- Use a thermal grease in thermistor pocket after installing electric connections.

Connections to be made in the electrical box of DHW tank

1 Connect the booster heater power supply and thermal protection cable.

2 Make sure to ensure strain relief of the cable.

Connections to be made in the electrical box of indoor units

3 Plug the thermistor cable connector in the connector CNS042 on the pcb.

4 Connect the booster heater power supply and thermal protection cable(field supply) to terminal TB-A1 and earth on the terminal block.

5 Connector the loose ends of the TB-A1 on the terminal block and the connector CNS042 on the PCB.

6 Plug the thermistor cable connector in the socket X9A on the PCB.

7 Connect the booster heater power supply and thermal protection cable (field supply) to terminal 7, 8, 21, 22 and earth on the terminal block.

8 Connect the booster heater power supply cable to the circuit breaker and earthing screw.

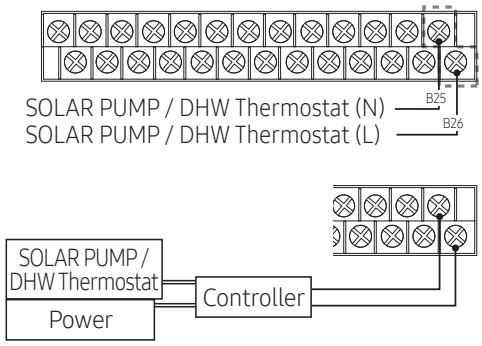
9 Fix the cables to the cable tie mountings with cable ties to ensure strain relief.

⚠ CAUTION

- It is of great importance that the heater is filled with water before the electricity is hooked up, or else- the warranty is not valid. If the heater is installed and not used, it must be flushed with water once a week.

Connection of the solar circulation pump for DHW tank

Description	No. of wires	Max. A	Thickness	Supply Scope
Solar pump / DHW Thermostat	2+ground	10 mA	0.75mm^2 H05RN-F or H07RN-F	Field supply (230 V~, Input)



1 Before the installation, control kit should be turned off.

2 Using the appropriate equipment to correct position of terminal block as shown on the diagram.

3 It is for control kit to inform that the Solar pump / DHW Thermostat is operating.

4 Solar pump / DHW Thermostat is controlled by installer's handling. And it send the signal to control kit depending on Solar pump / DHW Thermostat conditions. In operating mode, signal shall be around 230Vac B/W N&L. In non-operating mode, signal shall be around 0Vac B/W N&L.

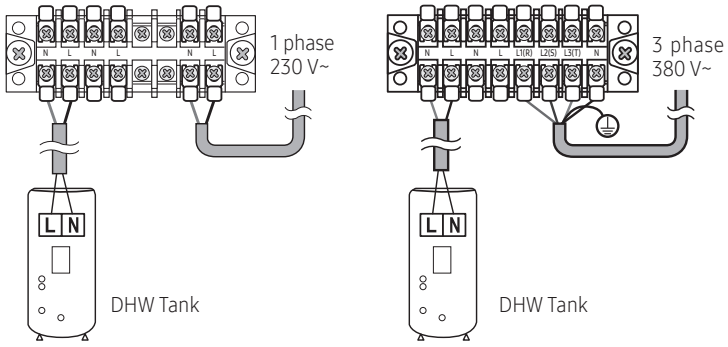
⚠ CAUTION

- Maximum allowable current of each terminal is below 10 mA.
- Ports number B25, B26 are for input port for detection and they do not supply power to a Solar pump / DHW Thermostat.

5. Installation

Hydro Unit

Power connection



NOTE

- It is important that the 3-way valve is fitted correctly: When the 3-way valve is idle (not activated) the space heating circuit should be selected, when the 3-way valve is activated the sanitary heating circuit should be selected.
- The booster heater that will be connected should be 3 kW or lower.

Troubleshooting

IMPORTANT: All maintenance or repair work must be executed by an approved installer.

Problem	Possible cause	Solution
Hot water is not coming out.	No power supply to the water heater	Check if there is any power on the power supply terminal on the thermostat.
	The thermostat may be set too high and cause the fuse or safety cut-off to operate.	Reduce thermostat setting by 5 °C and press the reset button.
Heating is not working	Heating element or internal electrical wiring is out of order.	Check if there is any power on the power supply on the connector of the heating element between black and yellow/green wires. If this is OK, press the reset button on the fuse/safety cut-off.
Water is not warm enough	Thermostat is set too low.	Adjust the thermostat up using a standard screwdriver.
	Heating element or the internal electrical wiring is partially out of order.	Check the resistance of the heating element on the connector of the heater bundle, and the condition of the internal wiring.
	UX mixing valve(fitted on top) is incorrectly adjusted.	Adjust the UX mixing valve correctly to the preferred temperature.

5. Installation

Hydro Unit

Safety valve(SV) is dripping.	Water expands when heated. If there is no consumption of hot water over a period of time pressure builds up, causing the safety valve to open.	If drip from the SV is severe, it might need to be replaced. Some dripping is normal. Alternatively an expansion vessel can be fitted.
Leak warning outlet is dripping.	The heating element may not be properly tightened.	Check the heating element o-ring seal and all connections.
	There may be a leak.	
Other problems, or if none of the above solves the problem.	-	Contact the installer/supplier regarding any other failure.

⚠ WARNING

Incorrect handling of thermostat, safety valve or other valves may lead to tank rupture. When servicing the unit follow instructions carefully:

- Always turn off main power supply when water supply is being shut off.
- Test the free operation of the safety valve regularly by opening the valve ensuring the water flows freely.
- Electrical connection and all servicing of the electrical components should only be carried out by an authorized electrician.
- Fitting and all servicing of plumbing fixtures should only be carried out by an authorized installer.
- When replacing the thermostat, safety valve or any other valve or part supplied with this unit, use only approved parts of the same specification.

⚠ CAUTION

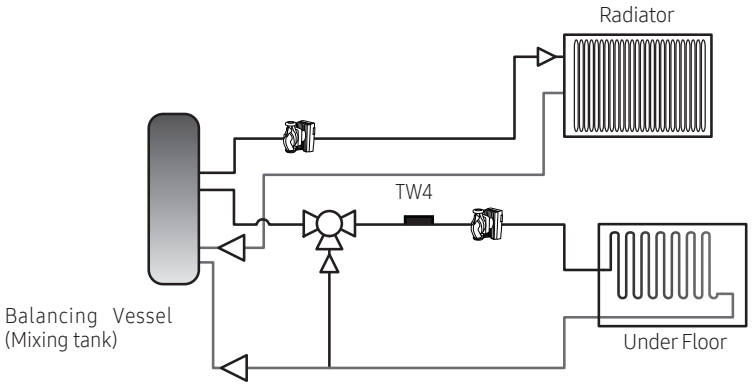
- Before resetting the safety cut-off or altering the thermostat setting, always remember to isolate the electrical supply to the unit. This must be done prior to removing the electrical box lid.
- If the electric element or thermostat is defective, contact authorized electrician.
- After adjustments are completed, ensure the lid to the electrical box is refitted correctly and that the retaining screw is properly fitted.

5. Installation

Hydro Unit

Mixing Valve

Installation of mixing valve



When two different zones are used with different temperature, adjust the temperature of discharge water to high temperature water and control the amount of bypass to provide low temperature water by applying the mixing valve and temperature sensor of the mixing valve (TW4).

1 Select a mixing valve from the manufacturers as below (recommended) and install it at the entrance of the zone.

2 Install the supplied temperature sensor (TW4) on the rear part of the mixing valve. Install TW4 Sensor within 1m of Mixing Valve.

3 Since running time varies depending on the manufacturer, set the FSV (default 90 sec.) by referring to the FSV value below.

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

NOTE

- The table above is for your reference. It can be changed without advanced notice.

5. Installation

Hydro Unit

4 Set the FSV value by referring to the table below depending on installation environment.

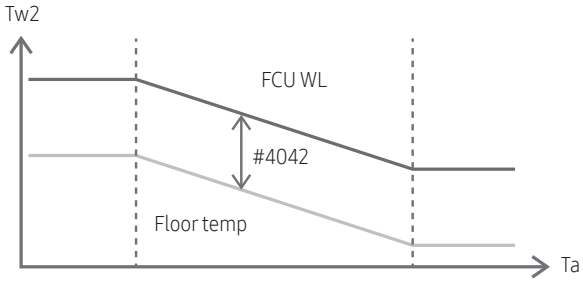
Function	Details	Code	Unit	Default	Min.	Max.
Mixing valve	Use or not	4041	-	0(No)	0	2
	Target temperature difference (Heating) (TW3-TW4)	4042	°C	10	5	15
	Target temperature difference (Cooling) (TW4-TW3)	4043	°C	10	5	15
	Control factor	4044	-	2	1	5
	Interval of valve control	4045	Min.	2	1	30
	Running time (10 second unit)	4046	(x10) sec	9	6	24

✳ 4041 =1 : Controlled based on the temperature difference (4042, 4043)

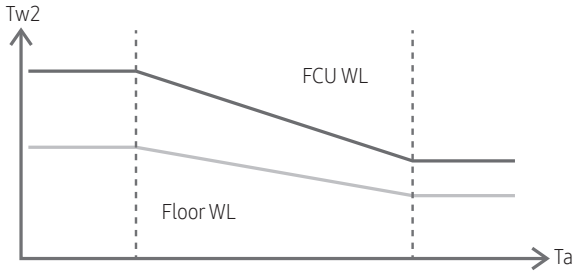
✳ 4041 =2 : Controlled based on the temperature difference of the WL value

ex) Heating

<#4041=1>



<#4041=2>



NOTE

- The mixing valve is controlled based on the FCU WL value.
- As the #4044 value increases and the #4045 value decreases, the control speed increases. (Temperature hunting may occur if the control speed increases depending on the load.)
- The additional pump and mixing valve should be purchased separately. TW4 sensor is included in the product accessories.
- TW3 : Water temp. sensor 3

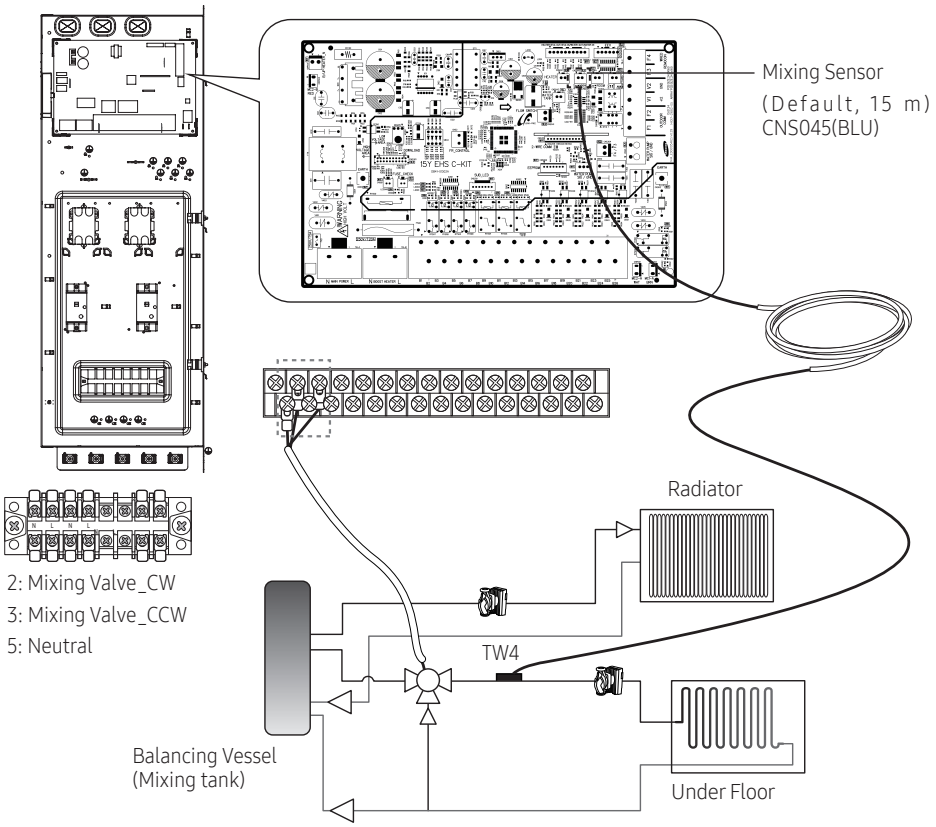
⚠ CAUTION

- When the thermostat control is set as 'Use', the mixing valve can be used for Zone 1 and Zone 2. (When both FSV #2091 and #2092 are set as 1)

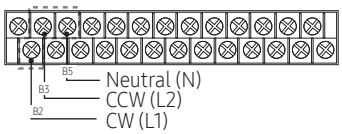
5. Installation

Hydro Unit

Connection of the mixing valve



Description	No. of wires	Max. A	Thickness	Supply Scope
Mixing valve	4	22 mA	› 0.75 mm^2, H05RN-F or H07RH-F	Field supply (230 V~, Input)



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.

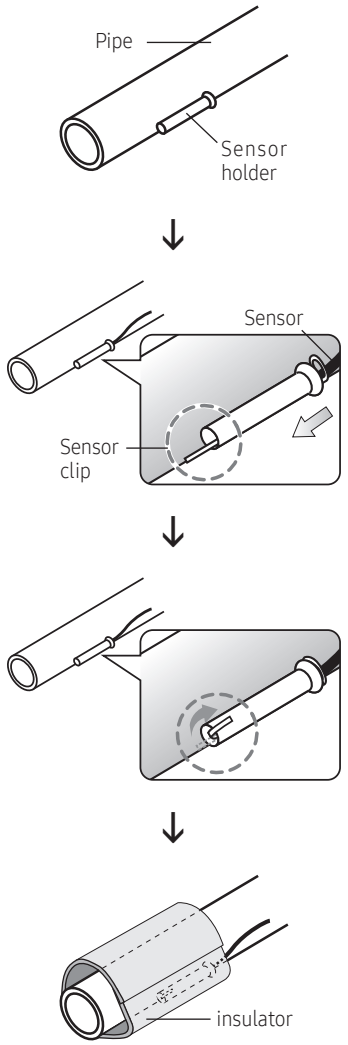
5. Installation

Hydro Unit

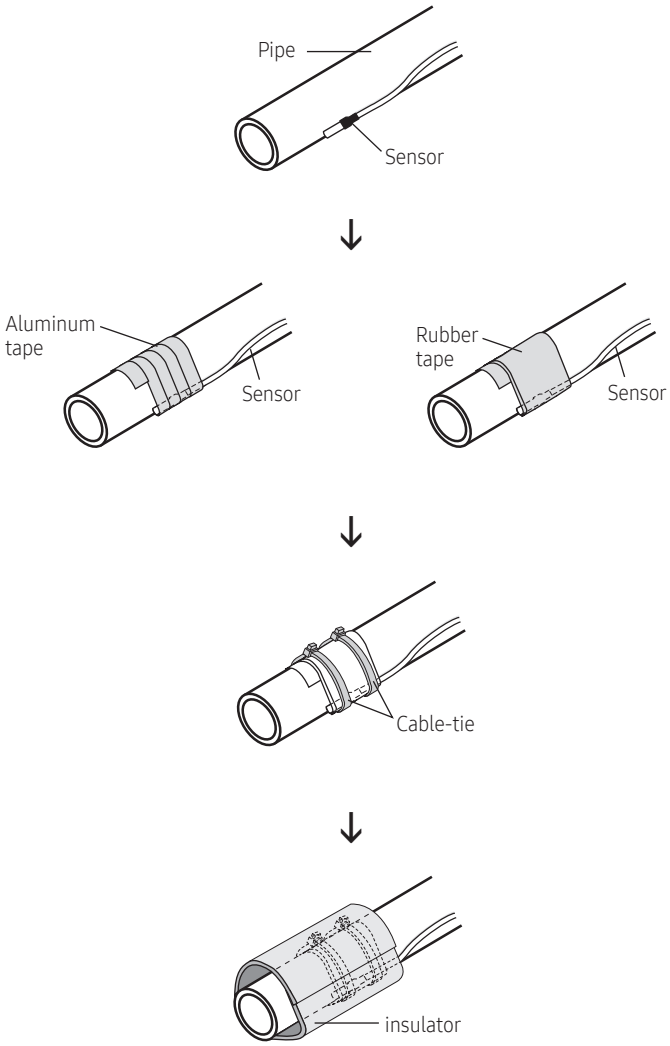
Example of sensor installation (TW4)

Weld the sensor holder on the selected location of the pipe and then insulate it.

When the pipe is a copper pipe



When the pipe is not a copper pipe



NOTE

- When the holder sensor cannot be welded on the pipe, fix the senor with aluminum tape and insulate it.

5. Installation

Hydro Unit

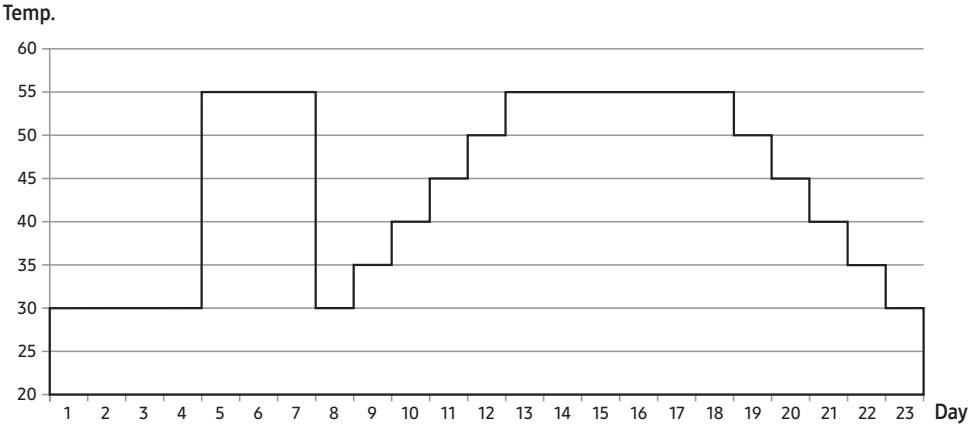
Concrete curing function

When pipes of floor heating are installed, operation for reinforcing concrete curing is applied.
(Period of operation: 23 days)

Entering procedure

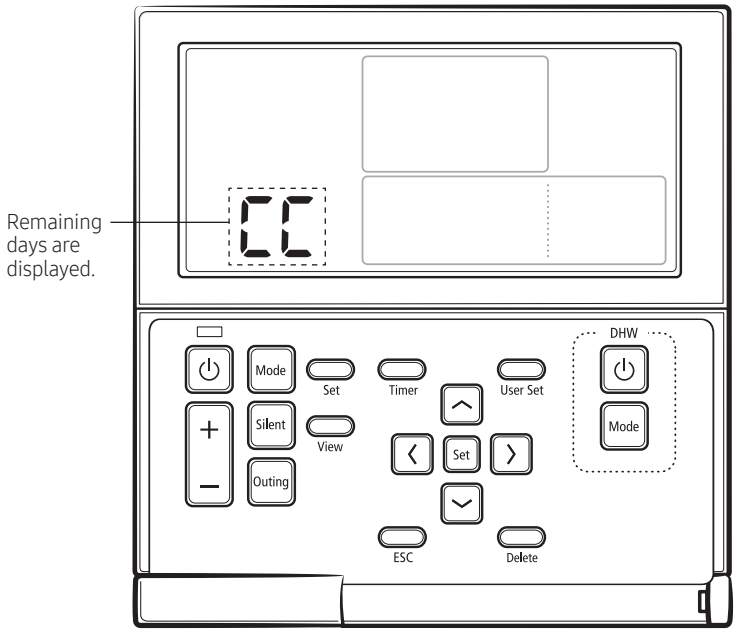
1 After turning off the DIP switch K3 of indoor unit (Default ON), turn off and turn on the indoor unit. The operation for concrete curing starts automatically. (If blackout occurs and communication restarts later, operation will continue.)

2 Temperature of discharge water is controlled as time goes on like below.



Classification	Initial Heating		Step raise					Heating	Step down					Total (Hour)
Time	96	72	24	24	24	24	24	144	24	24	24	24	24	552
Temperature	30	55	30	35	40	45	50	55	50	45	40	35	30	-

3 Remaining days are displayed on the wired remote controller during operation but key operation is unavailable.



✳ If an error is displayed, concrete curing function does not work.

5. Installation

Hydro Unit

NOTE

• When controlling only the power of the outdoor unit (Hydro Unit is turned on)

Classification		When the outdoor unit is turned off	When the outdoor unit is turned on
Hydro Unit operation according to the DIP S/W #4 setting	ON	• Hydro Unit E101 error occurs.	• Hydro Unit E101 error disappears. • Hydro Unit operation turns off.
	OFF	• Hydro Unit E101 error occurs.	• Hydro Unit E101 error disappears. • Hydro Unit keeps its previous operation.

- The outdoor unit on/off control is not available with the A2A indoor unit.
- Although the outdoor unit is turned on after the E101 error occurred, the A2A indoor unit operation keeps turned off.

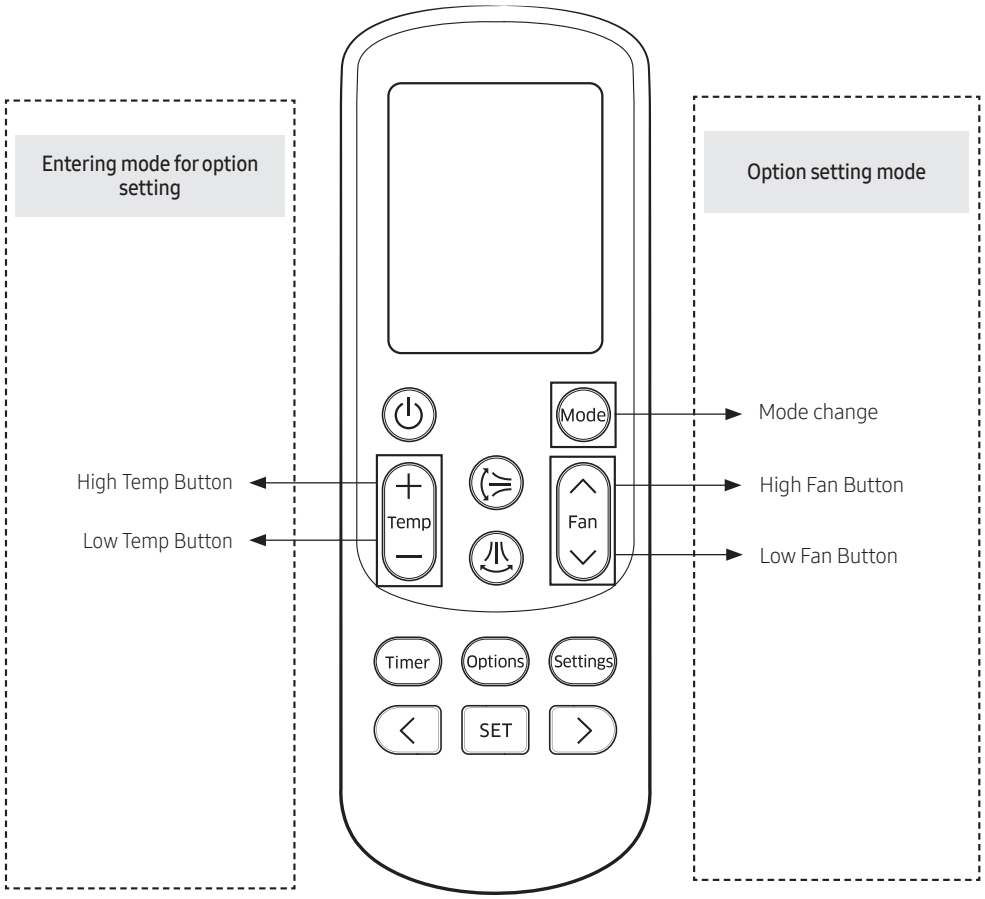
5. Installation

Hydro Unit

Installation option setting

Set the indoor unit installation option with remote controller option.

The procedure of option setting



Entering mode to set option

1 Remove batteries from the remote controller.

2 Insert batteries and enter the option setting mode while pressing High Temp button and Low Temp button. 

3 

Check if you have entered the option setting status.

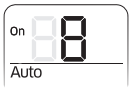
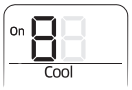
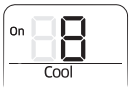
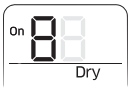
.

5. Installation

Hydro Unit

Changing a particular option

You can change each digit of set option.

Option	SEG1		SEG2		SEG3		SEG4		SEG5		SEG6	
Explanation	PAGE		MODE		The option mode you want to change		The tens' digit of an option SEG you will change		The unit digit of an option SEG you will change		The changed value	
Remote Controller Display												
Indication and Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details
	0		D		Option mode	1~6	Tens' digit of SEG	0~9	Unit digit of SEG	0~9	The changed value	0~F

NOTE

- When changing a digit of an control kit address setting option, set the SEG3 as 'A'.
- When changing a digit of control kit installation option, set the SEG3 as '2'.
  Ex) When setting the 'central controller' into disuse status.

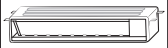
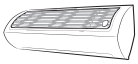
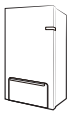
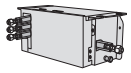
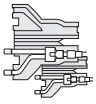
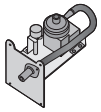
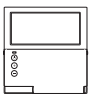
Option	SEG1	SEG2	SEG3	SEG4	SEG5	SEG6
Explanation	PAGE	MODE	The option mode you want to change	The tens' digit of an option SEG you will change	The unit digit of an option SEG you will change	The changed value
Indication	0	D	2	0	5	0

※ 02 Series installation option

Classification	SEG1~24
Use central controller (Default)	020010 100000 200000 300000
Disuse central controller	020000 100000 200000 300000

6. Accessory

Subsidiary materials compatibility

Indoor unit / Subsidiary materials		Slim Duct	MSP Duct	RAC	Console	Hydro Unit	Remark
							
		2.2~5.6kW	7.1~9kW	2.2~7.1kW	2.2~5.6kW	9/16kW	
EEV Kit	 EEV Kit for 1/2/3 room	-	-	MEV-E24SA MEV-E32SA MXD-E24K132A MXD-E24K200A MXD-E24K232A MXD-E24K300A MXD-E32K200A MXD-E32K224A MXD-E32K300A	-	-	Requisite
Y-joint		MXJ-YA1509K (≤15.0kW and below)					Requisite
Drain Pump		MDP-E075SEE3 (Option, Internal Type)	MDP-G075SP (Option, External Type) MDP-G075SQ (Option, Internal Type)	-	-	-	
Wireless remote controller		MR-EH00 (Option)		MR-EH00 (Included)	-	-	
Remote controller receive kit		MRK-A00 (Option)		-	-	-	
Wired remote controller		MWR-WE10N (Option)		-	-	MWR-WW00N (Included)	

NOTE

- Subsidiary materials are compatible with DVM products.
- Install distribution kit for 1, 2 or 3 rooms on the ceiling or outdoor area.
- A2W: Air to Water, A2A: Air to Air

2017. 09
Ver.1.0.2

Samsung Electronics Co., LTD.
B2B PM / SE
Head Office (Suwon Korea) 129, Samsung-Ro, Yeongtong-Gu, Suwon City, Gyeonggi-Do, Korea 16677
Website : www.samsung.com, http://btsp.samsunggsbn.com Email : airconditioner@samsung.com
Images and data in this book may subject to change without prior notice.