SAMSUNG

EHS Technical Data Book

EHS Quint for Europe

(R32, 50Hz)

Model : Outdoor unit (AE***HCTP*S/EU)
Hydro unit (AE***DN*MPK/EU)
Indoor unit (AE***HEADKG/EU, AM***DNVDKG/EU, AM***DN*DKG/EU)

History

Version	Modification	Date	Remark
Ver.1.0	Released EHS Quint for Europe TDB	25.11.07	
Ver.1.1	Updated some pages	26.01.28	
Ver.1.2	Updated installation page	26.03.13	

Nomenclature

Outdoor Unit

Model Name

AE	160	H	C	T	P	E	S	/	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	2026

(4) Product Type

C	Outdoor Unit
E	Indoor Unit

(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

S	Heat Recovery (R32)

Nomenclature

Indoor Unit

Model Name

AE	015	H	E	A	D	K	G	/	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

D	2024
H	2026

(4) Product Type

E	Indoor Unit
N	Indoor Unit

(5) Product Notation

A	Wall mounted
V	Wall mounted
L	LSP Duct
M	MSP Duct
1	WindFree 1Way

(6) Feature

D	Deluxe
P	Premium

(7) Rating Voltage

K	220~240V, 50/60Hz, 1Φ

(8) Mode

G	Heat Pump (R32)

Nomenclature

Hydro Unit

Model Name

AE	200	D	N	W	M	P	K	/	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 Liter (3 digits)

(3) Version

D	2024

(4) Product Type

N	Indoor Unit
X	Outdoor Unit

(5) Product Notation

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

(6) Feature

M	Mono

(7) Rating Voltage

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

(8) Mode

K	Heat Pump

Contents

1. Line-up

1-1. Outdoor Units

Capacity		12.5 kW	16 kW
Image			
Model	1phase	AE125HCTPES/EU	AE160HCTPES/EU
	3phase	AE125HCTPGS/EU	AE160HCTPGS/EU

1-2. Indoor units

Type \ Capacity	1.5(1.7) kW	2.2 kW	2.8 kW	3.6 kW	5.6 kW	7.1 kW	9 kW
RAC							
WindFree 1Way							
LSP Duct							
MSP Duct							

1. Line-up

1-3. Hydro units

Capacity / Type	200 L	200 L
Model	AE200DNXMPK/EU	AE200DNWMPK/EU
ClimateHub		
Capacity / Type	12.5~16 kW	12.5~16 kW
Model	AE160DNZMPK/EU	AE160DNYMPK/EU
Hydro Unit		

Model	MIM-E03FN
Control Kit	

2. Outdoor Units

2-1. Specifications

System	Model Code	Indoor Unit			-	AE200DNWMPK/EU	AE200DNWMPK/EU	AE200DNWMPK/EU
		Outdoor Unit			-	AE125HCTPES/EU	AE160HCTPES/EU	AE125HCTPGS/EU
	Mode				-	Heat Pump (A2W)	Heat Pump (A2W)	Heat Pump (A2W)
	Performance	Capacity	Cooling	A35/W18	kW	12.5	14.5	12.5
					Btu/h	42,650	49,480	42,650
				A35/W7	kW	9.5	10.5	9.5
			Heating	A7/W35	kW	12.5	16.0	12.5
					Btu/h	42,650	54,590	42,650
				A7/W45	kW	12.1	15.5	12.1
				A7/W55	kW	12.1	12.5	12.1
				A2/W35	kW	12.5	16.0	12.5
				A-7/W35	kW	12.5	16.0	12.5
				A-10/W35	kW	12.5	16.0	12.5
				A7/W35 @TA-LARM	kW	7.5	9.6	7.5
			Heat Recovery (A2A Cooling+A2W Heating)	A2W W45	W	9,700(Cooling) 12,100 (Heating)	12,500Cooling) 15,500 (Heating)	9,700(Cooling) 12,100 (Heating)
				A2W W55	W	8,000(Cooling) 12,100 (Heating)	10,000(Cooling) 12,500 (Heating)	8,000(Cooling) 12,100 (Heating)
	Power	Power Input	Cooling	A35/W18	kW	3.12	3.77	3.12
				A35/W7	kW	3.17	3.56	3.17
			Heating	A7/W35	kW	2.68	3.62	2.68
				A7/W45	kW	3.32	4.43	3.32
				A7/W55	kW	4.17	4.36	4.17
				A2/W35	kW	3.18	4.34	3.18
				A-7/W35	kW	4.33	5.73	4.33
		Current Input	Cooling	A35/W18	A	14.74	17.82	4.89
				A35/W7	A	14.98	16.82	4.97
			Heating	A7/W35	A	12.67	17.11	4.20
				A7/W45	A	15.69	20.94	5.21
		Current	MCA		A	32.0	32.0	16.1
			MFA		A	35	35	18
	Efficiency	Cooling	EER	A35/W18	W/W	4.01	3.85	4.01
				A35/W7	W/W	3.00	2.95	3.00
			SEER		-	4.95	4.93	4.95
		Heating	COP	A7/W35	W/W	4.66	4.42	4.66
				A7/W45	W/W	3.64	3.50	3.64
				A7/W55	W/W	2.90	2.87	2.90
				A2/W35	W/W	3.93	3.69	3.93
				A-7/W35	W/W	2.89	2.79	2.89
				A-10/W35	W/W	2.74	2.63	2.74
				A7/W35 @TA-LARM	W/W	4.55	4.50	4.55
		Heat Recovery (A2A Cooling+A2W Heating)	COP	A2W W45	W/W	8.20	8.10	8.20
				A2W W55	W/W	6.30	6.20	6.30
		Heating	SCOP	LWT 35℃	-	4.67	4.64	4.67
				LWT 55℃	-	3.32	3.31	3.32
			SCOP Class	LWT 35℃	-	A+++	A+++	A+++
				LWT 55℃	-	A++	A++	A++
			PdesignH - Average	LWT 35℃	kW	10.50	11.50	10.50
				LWT 55℃	kW	12.10	12.50	12.10
			PdesignH - Warmer	LWT 35℃	kW	12.50	12.70	12.50
				LWT 55℃	kW	12.10	12.30	12.10
			PdesignH - Colder	LWT 35℃	kW	12.50	13.50	12.50
				LWT 55℃	kW	12.10	12.50	12.10
		Tank Efficiency(Only Tank Integrated Hydro Unit)	Heating up time		h/min	00:53	00:53	00:53

2. Outdoor Units

2-1. Specifications

System	Model Code	Indoor Unit			-	AE200DNWMPK/EU	AE200DNWMPK/EU	AE200DNWMPK/EU
		Outdoor Unit			-	AE125HCTPES/EU	AE160HCTPES/EU	AE125HCTPGS/EU
	Efficiency	Tank Efficiency(Only Tank Integrated Hydro Unit)	Water Heating	Declared load profile	-	L	L	L
				ηwh(water heating efficiency	%	148	148	148
				Energy efficiency Class	-	A+	A+	A+
	Water Side Heat Exchanger	Water Flow Rate	Cooling	Std.	LPM	36.0	42.0	36.0
			Heating	Min	LPM	7.0	7.0	7.0
				Std.	LPM	36.0	46.0	36.0
				Max.	LPM	58.0	58.0	58.0
		Max Operating Pressure			bar	3.00	3.00	3.00
		Pipe connection	Inlet	Diameter	mm	28	28	28
			Outlet	Diameter	mm	28	28	28
		DHW		Max	℃	55	55	55
		Leaving Water Temperature	Cooling	Min ~ Max	℃	5 ~ 25	5 ~ 25	5 ~ 25
			Heating	Min ~ Max	℃	15 ~ 65	15 ~ 65	15 ~ 65
	Piping Connections	Liquid Pipe	Type		-	Flaring	Flaring	Flaring
			Diameter		mm	9.52	9.52	9.52
		Gas Pipe	Type		-	Flaring	Flaring	Flaring
			Diameter		mm	15.88	15.88	15.88
		Piping length (ODU-IDU)		Max.	m	70	70	70
		Level difference (ODU-IDU)		Max.	m	30	30	30
	Refrigerant	Type			-	R32	R32	R32
		Factory Charge			kg	2.7	2.7	2.7
					tCO2e	1.82	1.82	1.82
		Control Type			-	EEV	EEV	EEV
	Operating rate.	Convert to Time Division Multi		Exceed	%	130	130	130
Outdoor Unit	Model Code	Outdoor Unit			-	AE125HCTPES/EU	AE160HCTPES/EU	AE125HCTPGS/EU
	Power Supply				Φ|#|V|Hz	1|2|220-240|50	1|2|220-240|50	3|4|380-415|50
	Performance	kW				12.5	16.0	12.5
	Casing	Color	Body		-	Shadow Gray	Shadow Gray	Shadow Gray
		Material	Body		-	GI-SGCC	GI-SGCC	GI-SGCC
	Heat Exchanger	Type			-	Fin & Tube	Fin & Tube	Fin & Tube
		Fin Treatment			-	Anti-salt	Anti-salt	Anti-salt
		Fin	Type		-	Corrugate	Corrugate	Corrugate
			Fin Pitch		mm	1.50	1.50	1.50
		Tube	Type		-	Φ7	Φ7	Φ7
			Length		mm	1058/1029/1001	1058/1029/1001	1058/1029/1001
		Rows	Quantity		EA	3	3	3
		Stages	Quantity		EA	38	38	38
		Face Area			m²	0.84	0.84	0.84
	Compressor	Model Name			-	UB5TD8450FJX	UB5TD8450FJX	UB5TD8450FJX
		Quantity			EA	1	1	1
		Type			-	ROTARY_INVERTER	ROTARY_INVERTER	ROTARY_INVERTER
		Output			kW	4.05	4.05	4.05
		Oil	Type		-	POE	POE	POE
			Initial Charge		cc	1,500	1,500	1,500
		Starting method			-	Inverter driven	Inverter driven	Inverter driven
	Fan	Type			-	Propeller	Propeller	Propeller
		Discharge direction			-	Horizontal	Horizontal	Horizontal
		Quantity			EA	1	1	1
		Air Flow Rate	Cooling		CMM	70	81	70
			Heating		CMM	87	87	87

2. Outdoor Units

2-1. Specifications

System	Model Code	Indoor Unit			-	AE200DNWMPK/EU	AE200DNWMPK/EU	AE200DNWMPK/EU
		Outdoor Unit			-	AE125HCTPES/EU	AE160HCTPES/EU	AE125HCTPGS/EU
Outdoor Unit	Fan Motor	Quantity			EA	1	1	1
		Output			W	122	122	122
		Model			-	SIC-88FWJ-F1122-1	SIC-88FWJ-F1122-1	SIC-88FWJ-F1122-1
		Drive			-	Direct drive	Direct drive	Direct drive
		Speed	Heating		RPM	640	640	640
			Cooling		RPM	530	600	530
	Sound Level	Sound Pressure Level	Cooling		dB(A)	51	55	51
			Heating		dB(A)	49	49	49
			Cooling	Quiet 35dB(A) (5m)	dB(A)	35	35	35
			Heating	Quiet 35dB(A) (5m)	dB(A)	35	35	35
		Sound Power Level	Heating		dB(A)	62	62	62
	Packing	Material			-	EPS/BOX	EPS/BOX	EPS/BOX
		Weight			kg	13.0	13.0	13.0
	External Dimension	Net Weight			kg	126.5	126.5	126.5
		Shipping Weight			kg	139.5	139.5	139.5
		Net Dimensions		W x H x D	mm	1270 x 850 x 500	1270 x 850 x 500	1270 x 850 x 500
		Shipping Dimensions		W x H x D	mm	1330 x 1018 x 630	1330 x 1018 x 630	1330 x 1018 x 630
	Operating Temp. Range (A2W)	Cooling		Min. ~ Max.	℃	10 ~ 46	10 ~ 46	10 ~ 46
		Heating		Min. ~ Max.	℃	-25 ~ 43	-25 ~ 43	-25 ~ 43
		Hot Water (HP)		Min. ~ Max.	℃	-25 ~ 43	-25 ~ 43	-25 ~ 43
		Lowest Ambient Temperature	100% Rated Capacity	Min.	℃	-10	-10	-10
			Max LWT	Min.	℃	-5	-5	-5
	Operating Temp. Range (A2A)	Cooling		Min. ~ Max.	℃	10 ~ 43	10 ~ 43	10 ~ 43
		Heating		Min. ~ Max.	℃	-25 ~ 24	-25 ~ 24	-25 ~ 24
	Operating Temp. Range (Heat Recovery)	A2W Heating + A2A Cooling		Min. ~ Max.	℃	10 ~ 43	10 ~ 43	10 ~ 43
		A2W Cooling + A2A Heating		Min. ~ Max.	℃	10 ~ 24	10 ~ 24	10 ~ 24
	Others	4-Way Valve	Model		-	SHF-20D-46	SHF-20D-46	SHF-20D-46
		Base Heater	Power Input		W	150	150	150

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 #3 : (Heating) Water In/Out 47℃/55℃, Outdoor Air 7℃[DB]/6℃[WB]
  4)* A2W Condition : (A2W35) Water In/Out -/35℃, Outdoor Air 2℃[DB]/1℃[WB] (※ Peak Capacity)
  ; (A-7/W35) Water In/Out -/35℃, Outdoor Air -7℃[DB]/- (※ Peak Capacity)
  ; (A-10/W35) Water In/Out -/35℃, Outdoor Air -10℃[DB]/- (※ Peak Capacity)
  5)* Heat Recovery Condition: A2A Indoor Air 27℃[DB]/19℃[WB] , Outdoor Air 35℃[DB] /24 ℃[WB]
- Select wire size based on the value of MCA
- Sound pressure level is obtained in an anechoic room.
  - Sound pressure level is a relative value, depending on the distance and acoustic environment.
  - Sound pressure level may differ depending on operation condition.
  - dBA = A-weighted sound pressure level
  - Reference acoustic pressure 0 dB = 20uPa
- Sound power level is an absolute value that a sound source generates.
  - dBA = A-weighted Sound power level
  - Reference power : 1pW
  - Measured according to ISO 3741
- These products contain R32 (GWP=675)/R410A (GWP=2088) which is fluorinated greenhouse gas.
- The system is operated in (-25℃ ≤ Outdoor temp. < -20℃) condition, but no guarantee of capacity.
- Heat Recovery System is only possible with WATER(Hydro)-A2A indoor units, and is not possible with A2A indoor units.

2. Outdoor Units

2-1. Specifications

System	Model Code	Indoor Unit			-	AE200DNWMPK/EU	AE200DNXMPK/EU	AE200DNXMPK/EU
		Outdoor Unit			-	AE160HCTPGS/EU	AE125HCTPES/EU	AE160HCTPES/EU
	Mode				-	Heat Pump (A2W)	Heat Pump (A2W)	Heat Pump (A2W)
	Performance	Capacity	Cooling	A35/W18	kW	14.5	12.5	14.5
					Btu/h	49,480	42,650	49,480
				A35/W7	kW	10.5	9.5	10.5
			Heating	A7/W35	kW	16.0	12.5	16.0
					Btu/h	54,590	42,650	54,590
				A7/W45	kW	15.5	12.1	15.5
				A7/W55	kW	12.5	12.1	12.5
				A2/W35	kW	16.0	12.5	16.0
				A-7/W35	kW	16.0	12.5	16.0
				A-10/W35	kW	16.0	12.5	16.0
				A7/W35 @TA-LARM	kW	9.6	7.5	9.6
			Heat Recovery (A2A Cooling+A2W Heating)	A2W W45	W	12,500Cooling) 15,500 (Heating)	9,700(Cooling) 12,100 (Heating)	12,500Cooling) 15,500 (Heating)
				A2W W55	W	10,000(Cooling) 12,500 (Heating)	8,000(Cooling) 12,100 (Heating)	10,000(Cooling) 12,500 (Heating)
	Power	Power Input	Cooling	A35/W18	kW	3.77	3.12	3.77
				A35/W7	kW	3.56	3.17	3.56
			Heating	A7/W35	kW	3.62	2.68	3.62
				A7/W45	kW	4.43	3.32	4.43
				A7/W55	kW	4.36	4.17	4.36
				A2/W35	kW	4.34	3.18	4.34
				A-7/W35	kW	5.73	4.33	5.73
		Current Input	Cooling	A35/W18	A	5.91	14.74	17.82
				A35/W7	A	5.59	14.98	16.82
			Heating	A7/W35	A	5.68	12.67	17.11
				A7/W45	A	6.95	15.69	20.94
		Current	MCA		A	16.1	32.0	32.0
			MFA		A	18	35	35
	Efficiency	Cooling	EER	A35/W18	W/W	3.85	4.01	3.85
				A35/W7	W/W	2.95	3.00	2.95
			SEER		-	4.93	4.95	4.93
		Heating	COP	A7/W35	W/W	4.42	4.66	4.42
				A7/W45	W/W	3.50	3.64	3.50
				A7/W55	W/W	2.87	2.90	2.87
				A2/W35	W/W	3.69	3.93	3.69
				A-7/W35	W/W	2.79	2.89	2.79
				A-10/W35	W/W	2.63	2.74	2.63
				A7/W35 @TA-LARM	W/W	4.50	4.55	4.50
		Heat Recovery (A2A Cooling+A2W Heating)	COP	A2W W45	W/W	8.10	8.20	8.10
				A2W W55	W/W	6.20	6.30	6.20
		Heating	SCOP	LWT 35℃	-	4.64	4.67	4.64
				LWT 55℃	-	3.31	3.32	3.31
			SCOP Class	LWT 35℃	-	A+++	A+++	A+++
				LWT 55℃	-	A++	A++	A++
			PdesignH - Average	LWT 35℃	kW	11.50	10.50	11.50
				LWT 55℃	kW	12.50	12.10	12.50
			PdesignH - Warmer	LWT 35℃	kW	12.70	12.50	12.70
				LWT 55℃	kW	12.30	12.10	12.30
			PdesignH - Colder	LWT 35℃	kW	13.50	12.50	13.50
				LWT 55℃	kW	12.50	12.10	12.50
		Tank Efficiency(Only Tank Integrated Hydro Unit)	Heating up time		h/min	00:53	00:53	00:53

2. Outdoor Units

2-1. Specifications

System	Model Code	Indoor Unit			-	AE200DNWMPK/EU	AE200DNXMPK/EU	AE200DNXMPK/EU
		Outdoor Unit			-	AE160HCTPGS/EU	AE125HCTPES/EU	AE160HCTPES/EU
	Efficiency	Tank Efficiency(Only Tank Integrated Hydro Unit)	Water Heating	Declared load profile	-	L	L	L
				ηwh(water heating efficiency	%	148	148	148
				Energy efficiency Class	-	A+	A+	A+
	Water Side Heat Exchanger	Water Flow Rate	Cooling	Std.	LPM	42.0	36.0	42.0
			Heating	Min	LPM	7.0	7.0	7.0
				Std.	LPM	46.0	36.0	46.0
				Max.	LPM	58.0	58.0	58.0
		Max Operating Pressure			bar	3.00	3.00	3.00
		Pipe connection	Inlet	Diameter	mm	28	28	28
			Outlet	Diameter	mm	28	28	28
		DHW		Max	℃	55	55	55
		Leaving Water Temperature	Cooling	Min ~ Max	℃	5 ~ 25	5 ~ 25	5 ~ 25
			Heating	Min ~ Max	℃	15 ~ 65	15 ~ 65	15 ~ 65
	Piping Connections	Liquid Pipe	Type		-	Flaring	Flaring	Flaring
			Diameter		mm	9.52	9.52	9.52
		Gas Pipe	Type		-	Flaring	Flaring	Flaring
			Diameter		mm	15.88	15.88	15.88
		Piping length (ODU-IDU)		Max.	m	70	70	70
		Level difference (ODU-IDU)		Max.	m	30	30	30
	Refrigerant	Type			-	R32	R32	R32
		Factory Charge			kg	2.7	2.7	2.7
					tCO2e	1.82	1.82	1.82
		Control Type			-	EEV	EEV	EEV
	Operating rate.	Convert to Time Division Multi		Exceed	%	130	130	130
Outdoor Unit	Model Code	Outdoor Unit			-	AE160HCTPGS/EU	AE125HCTPES/EU	AE160HCTPES/EU
	Power Supply				Φ|#|V|Hz	3|4|380-415|50	1|2|220-240|50	1|2|220-240|50
	Performance	kW				16.0	12.5	16.0
	Casing	Color	Body		-	Shadow Gray	Shadow Gray	Shadow Gray
		Material	Body		-	GI-SGCC	GI-SGCC	GI-SGCC
	Heat Exchanger	Type			-	Fin & Tube	Fin & Tube	Fin & Tube
		Fin Treatment			-	Anti-salt	Anti-salt	Anti-salt
		Fin	Type		-	Corrugate	Corrugate	Corrugate
			Fin Pitch		mm	1.50	1.50	1.50
		Tube	Type		-	Φ7	Φ7	Φ7
			Length		mm	1058/1029/1001	1058/1029/1001	1058/1029/1001
		Rows	Quantity		EA	3	3	3
		Stages	Quantity		EA	38	38	38
		Face Area			m²	0.84	0.84	0.84
	Compressor	Model Name			-	UB5TD8450FJX	UB5TD8450FJX	UB5TD8450FJX
		Quantity			EA	1	1	1
		Type			-	ROTARY_INVERTER	ROTARY_INVERTER	ROTARY_INVERTER
		Output			kW	4.05	4.05	4.05
		Oil	Type		-	POE	POE	POE
			Initial Charge		cc	1,500	1,500	1,500
		Starting method			-	Inverter driven	Inverter driven	Inverter driven
	Fan	Type			-	Propeller	Propeller	Propeller
		Discharge direction			-	Horizontal	Horizontal	Horizontal
		Quantity			EA	1	1	1
		Air Flow Rate	Cooling		CMM	81	70	81
			Heating		CMM	87	87	87

2. Outdoor Units

2-1. Specifications

System	Model Code					-	AE200DNWMPK/EU	AE200DNXMPK/EU	AE200DNXMPK/EU
		Outdoor Unit				-	AE160HCTPGS/EU	AE125HCTPES/EU	AE160HCTPES/EU
Outdoor Unit	Fan Motor	Quantity				EA	1	1	1
		Output				W	122	122	122
		Model				-	SIC-88FWJ-F1122-1	SIC-88FWJ-F1122-1	SIC-88FWJ-F1122-1
		Drive				-	Direct drive	Direct drive	Direct drive
		Speed	Heating			RPM	640	640	640
			Cooling			RPM	600	530	600
	Sound Level	Sound Pressure Level	Cooling			dB(A)	55	51	55
			Heating			dB(A)	49	49	49
			Cooling	Quiet 35dB(A) (5m)		dB(A)	35	35	35
			Heating	Quiet 35dB(A) (5m)		dB(A)	35	35	35
		Sound Power Level	Heating			dB(A)	62	62	62
	Packing	Material				-	EPS/BOX	EPS/BOX	EPS/BOX
		Weight				kg	13.0	13.0	13.0
	External Dimension	Net Weight				kg	126.5	126.5	126.5
		Shipping Weight				kg	139.5	139.5	139.5
		Net Dimensions			W x H x D	mm	1270 x 850 x 500	1270 x 850 x 500	1270 x 850 x 500
		Shipping Dimensions			W x H x D	mm	1330 x 1018 x 630	1330 x 1018 x 630	1330 x 1018 x 630
	Operating Temp. Range (A2W)	Cooling			Min. ~ Max.	°C	10 ~ 46	10 ~ 46	10 ~ 46
		Heating			Min. ~ Max.	°C	-25 ~ 43	-25 ~ 43	-25 ~ 43
		Hot Water (HP)			Min. ~ Max.	°C	-25 ~ 43	-25 ~ 43	-25 ~ 43
		Lowest Ambient Temperature	100% Rated Capacity		Min.	°C	-10	-10	-10
			Max LWT		Min.	°C	-5	-5	-5
	Operating Temp. Range (A2A)	Cooling			Min. ~ Max.	°C	10 ~ 43	10 ~ 43	10 ~ 43
		Heating			Min. ~ Max.	°C	-25 ~ 24	-25 ~ 24	-25 ~ 24
	Operating Temp. Range (Heat Recovery)	A2W Heating + A2A Cooling			Min. ~ Max.	°C	10 ~ 43	10 ~ 43	10 ~ 43
		A2W Cooling + A2A Heating			Min. ~ Max.	°C	10 ~ 24	10 ~ 24	10 ~ 24
	Others	4-Way Valve	Model			-	SHF-20D-46	SHF-20D-46	SHF-20D-46
		Base Heater	Power Input			W	150	150	150

NOTE

- Specifications may be subject to change without prior notice.
  1)* A2W Condition #1 : (Heating) Water In/Out 30°C/35°C, Outdoor Air 7°C[DB]/6°C[WB]; (Cooling) Water In/Out 23°C/18°C, Outdoor Air 35°C[DB]
  2)* A2W Condition #2 : (Heating) Water In/Out 40°C/45°C, Outdoor Air 7°C[DB]/6°C[WB] ; (Cooling) Water In/Out 12°C/7°C, Outdoor Air 35°C[DB]
  3)* A2W Condition #3 : (Heating) Water In/Out 47°C/55°C, Outdoor Air 7°C[DB]/6°C[WB]
  4)* A2W Condition : (A2W35) Water In/Out -/35°C, Outdoor Air 2°C[DB]/1°C[WB] (※ Peak Capacity)
  ; (A-7/W35) Water In/Out -/35°C, Outdoor Air -7°C[DB]/- (※ Peak Capacity)
  ; (A-10/W35) Water In/Out -/35°C, Outdoor Air -10°C[DB]/- (※ Peak Capacity)
  5)* Heat Recovery Condition: A2A Indoor Air 27°C[DB]/19°C[WB] , Outdoor Air 35°C[DB] /24 °C[WB]
- Select wire size based on the value of MCA
- Sound pressure level is obtained in an anechoic room.
  - Sound pressure level is a relative value, depending on the distance and acoustic environment.
  - Sound pressure level may differ depending on operation condition.
  - dBA = A-weighted sound pressure level
  - Reference acoustic pressure 0 dB = 20uPa
- Sound power level is an absolute value that a sound source generates.
  - dBA = A-weighted Sound power level
  - Reference power : 1pW
  - Measured according to ISO 3741
- These products contain R32 (GWP=675)/R410A (GWP=2088) which is fluorinated greenhouse gas.
- The system is operated in (-25°C ≤ Outdoor temp. < -20°C) condition, but no guarantee of capacity.
- Heat Recovery System is only possible with WATER(Hydro)-A2A indoor units, and is not possible with A2A indoor units.

2. Outdoor Units

2-1. Specifications

System	Model Code	Indoor Unit			-	AE200DNXMPK/EU	AE200DNXMPK/EU	AE160DNYMPK/EU
		Outdoor Unit			-	AE125HCTPGS/EU	AE160HCTPGS/EU	AE125HCTPES/EU
	Mode				-	Heat Pump (A2W)	Heat Pump (A2W)	Heat Pump (A2W)
	Performance	Capacity	Cooling	A35/W18	kW	12.5	14.5	12.5
					Btu/h	42,650	49,480	42,650
				A35/W7	kW	9.5	10.5	9.5
			Heating	A7/W35	kW	12.5	16.0	12.5
					Btu/h	42,650	54,590	42,650
				A7/W45	kW	12.1	15.5	12.1
				A7/W55	kW	12.1	12.5	12.1
				A2/W35	kW	12.5	16.0	12.5
				A-7/W35	kW	12.5	16.0	12.5
				A-10/W35	kW	12.5	16.0	12.5
				A7/W35 @TA-LARM	kW	7.5	9.6	7.5
			Heat Recovery (A2A Cooling+A2W Heating)	A2W W45	W	9,700(Cooling) 12,100 (Heating)	12,500Cooling) 15,500 (Heating)	9,700(Cooling) 12,100 (Heating)
				A2W W55	W	8,000(Cooling) 12,100 (Heating)	10,000(Cooling) 12,500 (Heating)	8,000(Cooling) 12,100 (Heating)
	Power	Power Input	Cooling	A35/W18	kW	3.12	3.77	3.12
				A35/W7	kW	3.17	3.56	3.17
			Heating	A7/W35	kW	2.68	3.62	2.68
				A7/W45	kW	3.32	4.43	3.32
				A7/W55	kW	4.17	4.36	4.17
				A2/W35	kW	3.18	4.34	3.18
				A-7/W35	kW	4.33	5.73	4.33
		Current Input	Cooling	A35/W18	A	4.89	5.91	14.74
				A35/W7	A	4.97	5.59	14.98
			Heating	A7/W35	A	4.20	5.68	12.67
				A7/W45	A	5.21	6.95	15.69
		Current	MCA		A	16.1	16.1	32.0
			MFA		A	18	18	35
	Efficiency	Cooling	EER	A35/W18	W/W	4.01	3.85	4.01
				A35/W7	W/W	3.00	2.95	3.00
			SEER		-	4.95	4.93	4.95
		Heating	COP	A7/W35	W/W	4.66	4.42	4.66
				A7/W45	W/W	3.64	3.50	3.64
				A7/W55	W/W	2.90	2.87	2.90
				A2/W35	W/W	3.93	3.69	3.93
				A-7/W35	W/W	2.89	2.79	2.89
				A-10/W35	W/W	2.74	2.63	2.74
				A7/W35 @TA-LARM	W/W	4.55	4.50	4.55
		Heat Recovery (A2A Cooling+A2W Heating)	COP	A2W W45	W/W	8.20	8.10	8.20
				A2W W55	W/W	6.30	6.20	6.30
		Heating	SCOP	LWT 35℃	-	4.67	4.64	4.67
				LWT 55℃	-	3.32	3.31	3.32
			SCOP Class	LWT 35℃	-	A+++	A+++	A+++
				LWT 55℃	-	A++	A++	A++
			PdesignH - Average	LWT 35℃	kW	10.50	11.50	10.50
				LWT 55℃	kW	12.10	12.50	12.10
			PdesignH - Warmer	LWT 35℃	kW	12.50	12.70	12.50
				LWT 55℃	kW	12.10	12.30	12.10
			PdesignH - Colder	LWT 35℃	kW	12.50	13.50	12.50
				LWT 55℃	kW	12.10	12.50	12.10
		Tank Efficiency(Only Tank Integrated Hydro Unit)	Heating up time		h/min	00:53	00:53	00:53

2. Outdoor Units

2-1. Specifications

System	Model Code	Indoor Unit			-	AE200DNXMPK/EU	AE200DNXMPK/EU	AE160DNYMPK/EU
		Outdoor Unit			-	AE125HCTPGS/EU	AE160HCTPGS/EU	AE125HCTPES/EU
	Efficiency	Tank Efficiency(Only Tank Integrated Hydro Unit)	Water Heating	Declared load profile	-	L	L	L
				ηwh(water heating efficiency	%	148	148	148
				Energy efficiency Class	-	A+	A+	A+
	Water Side Heat Exchanger	Water Flow Rate	Cooling	Std.	LPM	36.0	42.0	36.0
			Heating	Min	LPM	7.0	7.0	7.0
				Std.	LPM	36.0	46.0	36.0
				Max.	LPM	58.0	58.0	58.0
		Max Operating Pressure			bar	3.00	3.00	3.00
		Pipe connection	Inlet	Diameter	mm	28	28	28
			Outlet	Diameter	mm	28	28	28
		DHW		Max	℃	55	55	55
		Leaving Water Temperature	Cooling	Min ~ Max	℃	5 ~ 25	5 ~ 25	5 ~ 25
			Heating	Min ~ Max	℃	15 ~ 65	15 ~ 65	15 ~ 65
	Piping Connections	Liquid Pipe	Type		-	Flaring	Flaring	Flaring
			Diameter		mm	9.52	9.52	9.52
		Gas Pipe	Type		-	Flaring	Flaring	Flaring
			Diameter		mm	15.88	15.88	15.88
		Piping length (ODU-IDU)		Max.	m	70	70	70
		Level difference (ODU-IDU)		Max.	m	30	30	30
	Refrigerant	Type			-	R32	R32	R32
		Factory Charge			kg	2.7	2.7	2.7
					tCO2e	1.82	1.82	1.82
		Control Type			-	EEV	EEV	EEV
	Operating rate.	Convert to Time Division Multi		Exceed	%	130	130	130
Outdoor Unit	Model Code	Outdoor Unit			-	AE125HCTPGS/EU	AE160HCTPGS/EU	AE125HCTPES/EU
	Power Supply				Φ|#|V|Hz	3|4|380-415|50	3|4|380-415|50	1|2|220-240|50
	Performance	kW				12.5	16.0	12.5
	Casing	Color	Body		-	Shadow Gray	Shadow Gray	Shadow Gray
		Material	Body		-	GI-SGCC	GI-SGCC	GI-SGCC
	Heat Exchanger	Type			-	Fin & Tube	Fin & Tube	Fin & Tube
		Fin Treatment			-	Anti-salt	Anti-salt	Anti-salt
		Fin	Type		-	Corrugate	Corrugate	Corrugate
			Fin Pitch		mm	1.50	1.50	1.50
		Tube	Type		-	Φ7	Φ7	Φ7
			Length		mm	1058/1029/1001	1058/1029/1001	1058/1029/1001
		Rows	Quantity		EA	3	3	3
		Stages	Quantity		EA	38	38	38
		Face Area			m²	0.84	0.84	0.84
	Compressor	Model Name			-	UB5TD8450FJX	UB5TD8450FJX	UB5TD8450FJX
		Quantity			EA	1	1	1
		Type			-	ROTARY_INVERTER	ROTARY_INVERTER	ROTARY_INVERTER
		Output			kW	4.05	4.05	4.05
		Oil	Type		-	POE	POE	POE
			Initial Charge		cc	1,500	1,500	1,500
		Starting method			-	Inverter driven	Inverter driven	Inverter driven
	Fan	Type			-	Propeller	Propeller	Propeller
		Discharge direction			-	Horizontal	Horizontal	Horizontal
		Quantity			EA	1	1	1
		Air Flow Rate	Cooling		CMM	70	81	70
			Heating		CMM	87	87	87

2. Outdoor Units

2-1. Specifications

System	Model Code	Indoor Unit			-	AE200DNXMPK/EU	AE200DNXMPK/EU	AE160DNYMPK/EU
		Outdoor Unit			-	AE125HCTPGS/EU	AE160HCTPGS/EU	AE125HCTPES/EU
Outdoor Unit	Fan Motor	Quantity			EA	1	1	1
		Output			W	122	122	122
		Model			-	SIC-88FWJ-F1122-1	SIC-88FWJ-F1122-1	SIC-88FWJ-F1122-1
		Drive			-	Direct drive	Direct drive	Direct drive
		Speed	Heating		RPM	640	640	640
			Cooling		RPM	530	600	530
	Sound Level	Sound Pressure Level	Cooling		dB(A)	51	55	51
			Heating		dB(A)	49	49	49
			Cooling	Quiet 35dB(A) (5m)	dB(A)	35	35	35
			Heating	Quiet 35dB(A) (5m)	dB(A)	35	35	35
		Sound Power Level	Heating		dB(A)	62	62	62
	Packing	Material			-	EPS/BOX	EPS/BOX	EPS/BOX
		Weight			kg	13.0	13.0	13.0
	External Dimension	Net Weight			kg	126.5	126.5	126.5
		Shipping Weight			kg	139.5	139.5	139.5
		Net Dimensions		W x H x D	mm	1270 x 850 x 500	1270 x 850 x 500	1270 x 850 x 500
		Shipping Dimensions		W x H x D	mm	1330 x 1018 x 630	1330 x 1018 x 630	1330 x 1018 x 630
	Operating Temp. Range (A2W)	Cooling		Min. ~ Max.	℃	10 ~ 46	10 ~ 46	10 ~ 46
		Heating		Min. ~ Max.	℃	-25 ~ 43	-25 ~ 43	-25 ~ 43
		Hot Water (HP)		Min. ~ Max.	℃	-25 ~ 43	-25 ~ 43	-25 ~ 43
		Lowest Ambient Temperature	100% Rated Capacity	Min.	℃	-10	-10	-10
			Max LWT	Min.	℃	-5	-5	-5
	Operating Temp. Range (A2A)	Cooling		Min. ~ Max.	℃	10 ~ 43	10 ~ 43	10 ~ 43
		Heating		Min. ~ Max.	℃	-25 ~ 24	-25 ~ 24	-25 ~ 24
	Operating Temp. Range (Heat Recovery)	A2W Heating + A2A Cooling		Min. ~ Max.	℃	10 ~ 43	10 ~ 43	10 ~ 43
		A2W Cooling + A2A Heating		Min. ~ Max.	℃	10 ~ 24	10 ~ 24	10 ~ 24
	Others	4-Way Valve	Model		-	SHF-20D-46	SHF-20D-46	SHF-20D-46
		Base Heater	Power Input		W	150	150	150

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 #3 : (Heating) Water In/Out 47℃/55℃, Outdoor Air 7℃[DB]/6℃[WB]
  4)* A2W Condition : (A2W35) Water In/Out -/35℃, Outdoor Air 2℃[DB]/1℃[WB] (※ Peak Capacity)
  ; (A-7/W35) Water In/Out -/35℃, Outdoor Air -7℃[DB]/- (※ Peak Capacity)
  ; (A-10/W35) Water In/Out -/35℃, Outdoor Air -10℃[DB]/- (※ Peak Capacity)
  5)* Heat Recovery Condition: A2A Indoor Air 27℃[DB]/19℃[WB] , Outdoor Air 35℃[DB] /24 ℃[WB]
- Select wire size based on the value of MCA
- Sound pressure level is obtained in an anechoic room.
  - Sound pressure level is a relative value, depending on the distance and acoustic environment.
  - Sound pressure level may differ depending on operation condition.
  - dBA = A-weighted sound pressure level
  - Reference acoustic pressure 0 dB = 20uPa
- Sound power level is an absolute value that a sound source generates.
  - dBA = A-weighted Sound power level
  - Reference power : 1pW
  - Measured according to ISO 3741
- These products contain R32 (GWP=675)/R410A (GWP=2088) which is fluorinated greenhouse gas.
- The system is operated in (-25℃ ≤ Outdoor temp. < -20℃) condition, but no guarantee of capacity.
- Heat Recovery System is only possible with WATER(Hydro)-A2A indoor units, and is not possible with A2A indoor units.

2. Outdoor Units

2-1. Specifications

System	Model Code	Indoor Unit			-	AE160DNYMPK/EU	AE160DNYMPK/EU	AE160DNYMPK/EU
		Outdoor Unit			-	AE160HCTPES/EU	AE125HCTPGS/EU	AE160HCTPGS/EU
	Mode				-	Heat Pump (A2W)	Heat Pump (A2W)	Heat Pump (A2W)
	Performance	Capacity	Cooling	A35/W18	kW	14.5	12.5	14.5
					Btu/h	49,480	42,650	49,480
				A35/W7	kW	10.5	9.5	10.5
			Heating	A7/W35	kW	16.0	12.5	16.0
					Btu/h	54,590	42,650	54,590
				A7/W45	kW	15.5	12.1	15.5
				A7/W55	kW	12.5	12.1	12.5
				A2/W35	kW	16.0	12.5	16.0
				A-7/W35	kW	16.0	12.5	16.0
				A-10/W35	kW	16.0	12.5	16.0
				A7/W35 @TA-LARM	kW	9.6	7.5	9.6
			Heat Recovery (A2A Cooling+A2W Heating)	A2W W45	W	12,500Cooling) 15,500 (Heating)	9,700(Cooling) 12,100 (Heating)	12,500Cooling) 15,500 (Heating)
				A2W W55	W	10,000(Cooling) 12,500 (Heating)	8,000(Cooling) 12,100 (Heating)	10,000(Cooling) 12,500 (Heating)
	Power	Power Input	Cooling	A35/W18	kW	3.77	3.12	3.77
				A35/W7	kW	3.56	3.17	3.56
			Heating	A7/W35	kW	3.62	2.68	3.62
				A7/W45	kW	4.43	3.32	4.43
				A7/W55	kW	4.36	4.17	4.36
				A2/W35	kW	4.34	3.18	4.34
				A-7/W35	kW	5.73	4.33	5.73
		Current Input	Cooling	A35/W18	A	17.82	4.89	5.91
				A35/W7	A	16.82	4.97	5.59
			Heating	A7/W35	A	17.11	4.20	5.68
				A7/W45	A	20.94	5.21	6.95
		Current	MCA		A	32.0	16.1	16.1
			MFA		A	35	18	18
	Efficiency	Cooling	EER	A35/W18	W/W	3.85	4.01	3.85
				A35/W7	W/W	2.95	3.00	2.95
			SEER		-	4.93	4.95	4.93
		Heating	COP	A7/W35	W/W	4.42	4.66	4.42
				A7/W45	W/W	3.50	3.64	3.50
				A7/W55	W/W	2.87	2.90	2.87
				A2/W35	W/W	3.69	3.93	3.69
				A-7/W35	W/W	2.79	2.89	2.79
				A-10/W35	W/W	2.63	2.74	2.63
				A7/W35 @TA-LARM	W/W	4.50	4.55	4.50
		Heat Recovery (A2A Cooling+A2W Heating)	COP	A2W W45	W/W	8.10	8.20	8.10
				A2W W55	W/W	6.20	6.30	6.20
		Heating	SCOP	LWT 35℃	-	4.64	4.67	4.64
				LWT 55℃	-	3.31	3.32	3.31
			SCOP Class	LWT 35℃	-	A+++	A+++	A+++
				LWT 55℃	-	A++	A++	A++
			PdesignH - Average	LWT 35℃	kW	11.50	10.50	11.50
				LWT 55℃	kW	12.50	12.10	12.50
			PdesignH - Warmer	LWT 35℃	kW	12.70	12.50	12.70
				LWT 55℃	kW	12.30	12.10	12.30
			PdesignH - Colder	LWT 35℃	kW	13.50	12.50	13.50
				LWT 55℃	kW	12.50	12.10	12.50
		Tank Efficiency(Only Tank Integrated Hydro Unit)	Heating up time		h/min	00:53	00:53	00:53

2. Outdoor Units

2-1. Specifications

System	Model Code	Indoor Unit			-	AE160DNYMPK/EU	AE160DNYMPK/EU	AE160DNYMPK/EU
		Outdoor Unit			-	AE160HCTPES/EU	AE125HCTPGS/EU	AE160HCTPGS/EU
	Efficiency	Tank Efficiency(Only Tank Integrated Hydro Unit)	Water Heating	Declared load profile	-	L	L	L
				ηwh(water heating efficiency	%	148	148	148
				Energy efficiency Class	-	A+	A+	A+
	Water Side Heat Exchanger	Water Flow Rate	Cooling	Std.	LPM	42.0	36.0	42.0
			Heating	Min	LPM	7.0	7.0	7.0
				Std.	LPM	46.0	36.0	46.0
				Max.	LPM	58.0	58.0	58.0
		Max Operating Pressure			bar	3.00	3.00	3.00
		Pipe connection	Inlet	Diameter	mm	28	28	28
			Outlet	Diameter	mm	28	28	28
		DHW		Max	℃	55	55	55
		Leaving Water Temperature	Cooling	Min ~ Max	℃	5 ~ 25	5 ~ 25	5 ~ 25
			Heating	Min ~ Max	℃	15 ~ 65	15 ~ 65	15 ~ 65
	Piping Connections	Liquid Pipe	Type		-	Flaring	Flaring	Flaring
			Diameter		mm	9.52	9.52	9.52
		Gas Pipe	Type		-	Flaring	Flaring	Flaring
			Diameter		mm	15.88	15.88	15.88
		Piping length (ODU-IDU)		Max.	m	70	70	70
		Level difference (ODU-IDU)		Max.	m	30	30	30
	Refrigerant	Type			-	R32	R32	R32
		Factory Charge			kg	2.7	2.7	2.7
					tCO2e	1.82	1.82	1.82
		Control Type			-	EEV	EEV	EEV
	Operating rate.	Convert to Time Division Multi		Exceed	%	130	130	130
Outdoor Unit	Model Code	Outdoor Unit			-	AE160HCTPES/EU	AE125HCTPGS/EU	AE160HCTPGS/EU
	Power Supply				Φ|#|V|Hz	1|2|220-240|50	3|4|380-415|50	3|4|380-415|50
	Performance	kW				16.0	12.5	16.0
	Casing	Color	Body		-	Shadow Gray	Shadow Gray	Shadow Gray
		Material	Body		-	GI-SGCC	GI-SGCC	GI-SGCC
	Heat Exchanger	Type			-	Fin & Tube	Fin & Tube	Fin & Tube
		Fin Treatment			-	Anti-salt	Anti-salt	Anti-salt
		Fin	Type		-	Corrugate	Corrugate	Corrugate
			Fin Pitch		mm	1.50	1.50	1.50
		Tube	Type		-	Φ7	Φ7	Φ7
			Length		mm	1058/1029/1001	1058/1029/1001	1058/1029/1001
		Rows	Quantity		EA	3	3	3
		Stages	Quantity		EA	38	38	38
		Face Area			m²	0.84	0.84	0.84
	Compressor	Model Name			-	UB5TD8450FJX	UB5TD8450FJX	UB5TD8450FJX
		Quantity			EA	1	1	1
		Type			-	ROTARY_INVERTER	ROTARY_INVERTER	ROTARY_INVERTER
		Output			kW	4.05	4.05	4.05
		Oil	Type		-	POE	POE	POE
			Initial Charge		cc	1,500	1,500	1,500
		Starting method			-	Inverter driven	Inverter driven	Inverter driven
	Fan	Type			-	Propeller	Propeller	Propeller
		Discharge direction			-	Horizontal	Horizontal	Horizontal
		Quantity			EA	1	1	1
		Air Flow Rate	Cooling		CMM	81	70	81
			Heating		CMM	87	87	87

2. Outdoor Units

2-1. Specifications

System	Model Code					-	AE160DNYMPK/EU	AE160DNYMPK/EU	AE160DNYMPK/EU
		Outdoor Unit				-	AE160HCTPES/EU	AE125HCTPGS/EU	AE160HCTPGS/EU
Outdoor Unit	Fan Motor	Quantity				EA	1	1	1
		Output				W	122	122	122
		Model				-	SIC-88FWJ-F1122-1	SIC-88FWJ-F1122-1	SIC-88FWJ-F1122-1
		Drive				-	Direct drive	Direct drive	Direct drive
		Speed	Heating			RPM	640	640	640
			Cooling			RPM	600	530	600
	Sound Level	Sound Pressure Level	Cooling			dB(A)	55	51	55
			Heating			dB(A)	49	49	49
			Cooling	Quiet 35dB(A) (5m)		dB(A)	35	35	35
			Heating	Quiet 35dB(A) (5m)		dB(A)	35	35	35
		Sound Power Level	Heating			dB(A)	62	62	62
	Packing	Material				-	EPS/BOX	EPS/BOX	EPS/BOX
		Weight				kg	13.0	13.0	13.0
	External Dimension	Net Weight				kg	126.5	126.5	126.5
		Shipping Weight				kg	139.5	139.5	139.5
		Net Dimensions			W x H x D	mm	1270 x 850 x 500	1270 x 850 x 500	1270 x 850 x 500
		Shipping Dimensions			W x H x D	mm	1330 x 1018 x 630	1330 x 1018 x 630	1330 x 1018 x 630
	Operating Temp. Range (A2W)	Cooling			Min. ~ Max.	°C	10 ~ 46	10 ~ 46	10 ~ 46
		Heating			Min. ~ Max.	°C	-25 ~ 43	-25 ~ 43	-25 ~ 43
		Hot Water (HP)			Min. ~ Max.	°C	-25 ~ 43	-25 ~ 43	-25 ~ 43
		Lowest Ambient Temperature	100% Rated Capacity		Min.	°C	-10	-10	-10
			Max LWT		Min.	°C	-5	-5	-5
	Operating Temp. Range (A2A)	Cooling			Min. ~ Max.	°C	10 ~ 43	10 ~ 43	10 ~ 43
		Heating			Min. ~ Max.	°C	-25 ~ 24	-25 ~ 24	-25 ~ 24
	Operating Temp. Range (Heat Recovery)	A2W Heating + A2A Cooling			Min. ~ Max.	°C	10 ~ 43	10 ~ 43	10 ~ 43
		A2W Cooling + A2A Heating			Min. ~ Max.	°C	10 ~ 24	10 ~ 24	10 ~ 24
	Others	4-Way Valve	Model			-	SHF-20D-46	SHF-20D-46	SHF-20D-46
		Base Heater	Power Input			W	150	150	150

NOTE

- Specifications may be subject to change without prior notice.
  1)* A2W Condition #1 : (Heating) Water In/Out 30°C/35°C, Outdoor Air 7°C[DB]/6°C[WB]; (Cooling) Water In/Out 23°C/18°C, Outdoor Air 35°C[DB]
  2)* A2W Condition #2 : (Heating) Water In/Out 40°C/45°C, Outdoor Air 7°C[DB]/6°C[WB] ; (Cooling) Water In/Out 12°C/7°C, Outdoor Air 35°C[DB]
  3)* A2W Condition #3 : (Heating) Water In/Out 47°C/55°C, Outdoor Air 7°C[DB]/6°C[WB]
  4)* A2W Condition : (A2W35) Water In/Out -/35°C, Outdoor Air 2°C[DB]/1°C[WB] (※ Peak Capacity)
  ; (A-7/W35) Water In/Out -/35°C, Outdoor Air -7°C[DB]/- (※ Peak Capacity)
  ; (A-10/W35) Water In/Out -/35°C, Outdoor Air -10°C[DB]/- (※ Peak Capacity)
  5)* Heat Recovery Condition: A2A Indoor Air 27°C[DB]/19°C[WB] , Outdoor Air 35°C[DB] /24 °C[WB]
- Select wire size based on the value of MCA
- Sound pressure level is obtained in an anechoic room.
  - Sound pressure level is a relative value, depending on the distance and acoustic environment.
  - Sound pressure level may differ depending on operation condition.
  - dBA = A-weighted sound pressure level
  - Reference acoustic pressure 0 dB = 20uPa
- Sound power level is an absolute value that a sound source generates.
  - dBA = A-weighted Sound power level
  - Reference power : 1pW
  - Measured according to ISO 3741
- These products contain R32 (GWP=675)/R410A (GWP=2088) which is fluorinated greenhouse gas.
- The system is operated in (-25°C ≤ Outdoor temp. < -20°C) condition, but no guarantee of capacity.
- Heat Recovery System is only possible with WATER(Hydro)-A2A indoor units, and is not possible with A2A indoor units.

2. Outdoor Units

2-1. Specifications

System	Model Code	Indoor Unit			-	AE160DNZMPK/EU	AE160DNZMPK/EU	AE160DNZMPK/EU
		Outdoor Unit			-	AE125HCTPES/EU	AE160HCTPES/EU	AE125HCTPGS/EU
	Mode				-	Heat Pump (A2W)	Heat Pump (A2W)	Heat Pump (A2W)
	Performance	Capacity	Cooling	A35/W18	kW	12.5	14.5	12.5
					Btu/h	42,650	49,480	42,650
				A35/W7	kW	9.5	10.5	9.5
			Heating	A7/W35	kW	12.5	16.0	12.5
					Btu/h	42,650	54,590	42,650
				A7/W45	kW	12.1	15.5	12.1
				A7/W55	kW	12.1	12.5	12.1
				A2/W35	kW	12.5	16.0	12.5
				A-7/W35	kW	12.5	16.0	12.5
				A-10/W35	kW	12.5	16.0	12.5
				A7/W35 @TA-LARM	kW	7.5	9.6	7.5
			Heat Recovery (A2A Cooling+A2W Heating)	A2W W45	W	9,700(Cooling) 12,100 (Heating)	12,500Cooling) 15,500 (Heating)	9,700(Cooling) 12,100 (Heating)
				A2W W55	W	8,000(Cooling) 12,100 (Heating)	10,000(Cooling) 12,500 (Heating)	8,000(Cooling) 12,100 (Heating)
	Power	Power Input	Cooling	A35/W18	kW	3.12	3.77	3.12
				A35/W7	kW	3.17	3.56	3.17
			Heating	A7/W35	kW	2.68	3.62	2.68
				A7/W45	kW	3.32	4.43	3.32
				A7/W55	kW	4.17	4.36	4.17
				A2/W35	kW	3.18	4.34	3.18
				A-7/W35	kW	4.33	5.73	4.33
		Current Input	Cooling	A35/W18	A	14.74	17.82	4.89
				A35/W7	A	14.98	16.82	4.97
			Heating	A7/W35	A	12.67	17.11	4.20
				A7/W45	A	15.69	20.94	5.21
		Current	MCA		A	32.0	32.0	16.1
			MFA		A	35	35	18
	Efficiency	Cooling	EER	A35/W18	W/W	4.01	3.85	4.01
				A35/W7	W/W	3.00	2.95	3.00
			SEER		-	4.95	4.93	4.95
		Heating	COP	A7/W35	W/W	4.66	4.42	4.66
				A7/W45	W/W	3.64	3.50	3.64
				A7/W55	W/W	2.90	2.87	2.90
				A2/W35	W/W	3.93	3.69	3.93
				A-7/W35	W/W	2.89	2.79	2.89
				A-10/W35	W/W	2.74	2.63	2.74
				A7/W35 @TA-LARM	W/W	4.55	4.50	4.55
		Heat Recovery (A2A Cooling+A2W Heating)	COP	A2W W45	W/W	8.20	8.10	8.20
				A2W W55	W/W	6.30	6.20	6.30
		Heating	SCOP	LWT 35℃	-	4.67	4.64	4.67
				LWT 55℃	-	3.32	3.31	3.32
			SCOP Class	LWT 35℃	-	A+++	A+++	A+++
				LWT 55℃	-	A++	A++	A++
			PdesignH - Average	LWT 35℃	kW	10.50	11.50	10.50
				LWT 55℃	kW	12.10	12.50	12.10
			PdesignH - Warmer	LWT 35℃	kW	12.50	12.70	12.50
				LWT 55℃	kW	12.10	12.30	12.10
			PdesignH - Colder	LWT 35℃	kW	12.50	13.50	12.50
				LWT 55℃	kW	12.10	12.50	12.10
		Tank Efficiency(Only Tank Integrated Hydro Unit)	Heating up time		h/min	00:53	00:53	00:53

2. Outdoor Units

2-1. Specifications

System	Model Code	Indoor Unit			-	AE160DNZMPK/EU	AE160DNZMPK/EU	AE160DNZMPK/EU
		Outdoor Unit			-	AE125HCTPES/EU	AE160HCTPES/EU	AE125HCTPGS/EU
	Efficiency	Tank Efficiency(Only Tank Integrated Hydro Unit)	Water Heating	Declared load profile	-	L	L	L
				ηwh(water heating efficiency	%	148	148	148
				Energy efficiency Class	-	A+	A+	A+
	Water Side Heat Exchanger	Water Flow Rate	Cooling	Std.	LPM	36.0	42.0	36.0
			Heating	Min	LPM	7.0	7.0	7.0
				Std.	LPM	36.0	46.0	36.0
				Max.	LPM	58.0	58.0	58.0
		Max Operating Pressure			bar	3.00	3.00	3.00
		Pipe connection	Inlet	Diameter	mm	28	28	28
			Outlet	Diameter	mm	28	28	28
		DHW		Max	℃	55	55	55
		Leaving Water Temperature	Cooling	Min ~ Max	℃	5 ~ 25	5 ~ 25	5 ~ 25
			Heating	Min ~ Max	℃	15 ~ 65	15 ~ 65	15 ~ 65
	Piping Connections	Liquid Pipe	Type		-	Flaring	Flaring	Flaring
			Diameter		mm	9.52	9.52	9.52
		Gas Pipe	Type		-	Flaring	Flaring	Flaring
			Diameter		mm	15.88	15.88	15.88
		Piping length (ODU-IDU)		Max.	m	70	70	70
		Level difference (ODU-IDU)		Max.	m	30	30	30
	Refrigerant	Type			-	R32	R32	R32
		Factory Charge			kg	2.7	2.7	2.7
					tCO2e	1.82	1.82	1.82
		Control Type			-	EEV	EEV	EEV
	Operating rate.	Convert to Time Division Multi		Exceed	%	130	130	130
Outdoor Unit	Model Code	Outdoor Unit			-	AE125HCTPES/EU	AE160HCTPES/EU	AE125HCTPGS/EU
	Power Supply				Φ|#|V|Hz	1|2|220-240|50	1|2|220-240|50	3|4|380-415|50
	Performance	kW				12.5	16.0	12.5
	Casing	Color	Body		-	Shadow Gray	Shadow Gray	Shadow Gray
		Material	Body		-	GI-SGCC	GI-SGCC	GI-SGCC
	Heat Exchanger	Type			-	Fin & Tube	Fin & Tube	Fin & Tube
		Fin Treatment			-	Anti-salt	Anti-salt	Anti-salt
		Fin	Type		-	Corrugate	Corrugate	Corrugate
			Fin Pitch		mm	1.50	1.50	1.50
		Tube	Type		-	Φ7	Φ7	Φ7
			Length		mm	1058/1029/1001	1058/1029/1001	1058/1029/1001
		Rows	Quantity		EA	3	3	3
		Stages	Quantity		EA	38	38	38
		Face Area			m²	0.84	0.84	0.84
	Compressor	Model Name			-	UB5TD8450FJX	UB5TD8450FJX	UB5TD8450FJX
		Quantity			EA	1	1	1
		Type			-	ROTARY_INVERTER	ROTARY_INVERTER	ROTARY_INVERTER
		Output			kW	4.05	4.05	4.05
		Oil	Type		-	POE	POE	POE
			Initial Charge		cc	1,500	1,500	1,500
		Starting method			-	Inverter driven	Inverter driven	Inverter driven
	Fan	Type			-	Propeller	Propeller	Propeller
		Discharge direction			-	Horizontal	Horizontal	Horizontal
		Quantity			EA	1	1	1
		Air Flow Rate	Cooling		CMM	70	81	70
			Heating		CMM	87	87	87

2. Outdoor Units

2-1. Specifications

System	Model Code	Indoor Unit			-	AE160DNZMPK/EU	AE160DNZMPK/EU	AE160DNZMPK/EU
		Outdoor Unit			-	AE125HCTPES/EU	AE160HCTPES/EU	AE125HCTPGS/EU
Outdoor Unit	Fan Motor	Quantity			EA	1	1	1
		Output			W	122	122	122
		Model			-	SIC-88FWJ-F1122-1	SIC-88FWJ-F1122-1	SIC-88FWJ-F1122-1
		Drive			-	Direct drive	Direct drive	Direct drive
		Speed	Heating		RPM	640	640	640
			Cooling		RPM	530	600	530
	Sound Level	Sound Pressure Level	Cooling		dB(A)	51	55	51
			Heating		dB(A)	49	49	49
			Cooling	Quiet 35dB(A) (5m)	dB(A)	35	35	35
			Heating	Quiet 35dB(A) (5m)	dB(A)	35	35	35
		Sound Power Level	Heating		dB(A)	62	62	62
	Packing	Material			-	EPS/BOX	EPS/BOX	EPS/BOX
		Weight			kg	13.0	13.0	13.0
	External Dimension	Net Weight			kg	126.5	126.5	126.5
		Shipping Weight			kg	139.5	139.5	139.5
		Net Dimensions		W x H x D	mm	1270 x 850 x 500	1270 x 850 x 500	1270 x 850 x 500
		Shipping Dimensions		W x H x D	mm	1330 x 1018 x 630	1330 x 1018 x 630	1330 x 1018 x 630
	Operating Temp. Range (A2W)	Cooling		Min. ~ Max.	℃	10 ~ 46	10 ~ 46	10 ~ 46
		Heating		Min. ~ Max.	℃	-25 ~ 43	-25 ~ 43	-25 ~ 43
		Hot Water (HP)		Min. ~ Max.	℃	-25 ~ 43	-25 ~ 43	-25 ~ 43
		Lowest Ambient Temperature	100% Rated Capacity	Min.	℃	-10	-10	-10
			Max LWT	Min.	℃	-5	-5	-5
	Operating Temp. Range (A2A)	Cooling		Min. ~ Max.	℃	10 ~ 43	10 ~ 43	10 ~ 43
		Heating		Min. ~ Max.	℃	-25 ~ 24	-25 ~ 24	-25 ~ 24
	Operating Temp. Range (Heat Recovery)	A2W Heating + A2A Cooling		Min. ~ Max.	℃	10 ~ 43	10 ~ 43	10 ~ 43
		A2W Cooling + A2A Heating		Min. ~ Max.	℃	10 ~ 24	10 ~ 24	10 ~ 24
	Others	4-Way Valve	Model		-	SHF-20D-46	SHF-20D-46	SHF-20D-46
		Base Heater	Power Input		W	150	150	150

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 #3 : (Heating) Water In/Out 47℃/55℃, Outdoor Air 7℃[DB]/6℃[WB]
  4)* A2W Condition : (A2W35) Water In/Out -/35℃, Outdoor Air 2℃[DB]/1℃[WB] (※ Peak Capacity)
  ; (A-7/W35) Water In/Out -/35℃, Outdoor Air -7℃[DB]/- (※ Peak Capacity)
  ; (A-10/W35) Water In/Out -/35℃, Outdoor Air -10℃[DB]/- (※ Peak Capacity)
  5)* Heat Recovery Condition: A2A Indoor Air 27℃[DB]/19℃[WB] , Outdoor Air 35℃[DB] /24 ℃[WB]
- Select wire size based on the value of MCA
- Sound pressure level is obtained in an anechoic room.
  - Sound pressure level is a relative value, depending on the distance and acoustic environment.
  - Sound pressure level may differ depending on operation condition.
  - dBA = A-weighted sound pressure level
  - Reference acoustic pressure 0 dB = 20uPa
- Sound power level is an absolute value that a sound source generates.
  - dBA = A-weighted Sound power level
  - Reference power : 1pW
  - Measured according to ISO 3741
- These products contain R32 (GWP=675)/R410A (GWP=2088) which is fluorinated greenhouse gas.
- The system is operated in (-25℃ ≤ Outdoor temp. < -20℃) condition, but no guarantee of capacity.
- Heat Recovery System is only possible with WATER(Hydro)-A2A indoor units, and is not possible with A2A indoor units.

2. Outdoor Units

2-1. Specifications

System	Model Code	Indoor Unit			-	AE160DNZMPK/EU
		Outdoor Unit			-	AE160HCTPGS/EU
	Mode				-	Heat Pump (A2W)
	Performance	Capacity	Cooling	A35/W18	kW	14.5
					Btu/h	49,480
				A35/W7	kW	10.5
			Heating	A7/W35	kW	16.0
					Btu/h	54,590
				A7/W45	kW	15.5
				A7/W55	kW	12.5
				A2/W35	kW	16.0
				A-7/W35	kW	16.0
				A-10/W35	kW	16.0
				A7/W35 @TA-LARM	kW	9.6
			Heat Recovery (A2A Cooling+A2W Heating)	A2W W45	W	12,500Cooling) 15,500 (Heating)
				A2W W55	W	10,000(Cooling) 12,500 (Heating)
	Power	Power Input	Cooling	A35/W18	kW	3.77
				A35/W7	kW	3.56
			Heating	A7/W35	kW	3.62
				A7/W45	kW	4.43
				A7/W55	kW	4.36
				A2/W35	kW	4.34
				A-7/W35	kW	5.73
		Current Input	Cooling	A35/W18	A	5.91
				A35/W7	A	5.59
			Heating	A7/W35	A	5.68
				A7/W45	A	6.95
		Current	MCA		A	16.1
			MFA		A	18
	Efficiency	Cooling	EER	A35/W18	W/W	3.85
				A35/W7	W/W	2.95
			SEER		-	4.93
		Heating	COP	A7/W35	W/W	4.42
				A7/W45	W/W	3.50
				A7/W55	W/W	2.87
				A2/W35	W/W	3.69
				A-7/W35	W/W	2.79
				A-10/W35	W/W	2.63
				A7/W35 @TA-LARM	W/W	4.50
		Heat Recovery (A2A Cooling+A2W Heating)	COP	A2W W45	W/W	8.10
				A2W W55	W/W	6.20
		Heating	SCOP	LWT 35℃	-	4.64
				LWT 55℃	-	3.31
			SCOP Class	LWT 35℃	-	A+++
				LWT 55℃	-	A++
			PdesignH - Average	LWT 35℃	kW	11.50
				LWT 55℃	kW	12.50
			PdesignH - Warmer	LWT 35℃	kW	12.70
				LWT 55℃	kW	12.30
			PdesignH - Colder	LWT 35℃	kW	13.50
				LWT 55℃	kW	12.50
		Tank Efficiency(Only Tank Integrated Hydro Unit)	Heating up time		h/min	00:53

2. Outdoor Units

2-1. Specifications

System	Model Code	Indoor Unit			-	AE160DNZMPK/EU
		Outdoor Unit			-	AE160HCTPGS/EU
	Efficiency	Tank Efficiency(Only Tank Integrated Hydro Unit)	Water Heating	Declared load profile	-	L
				ηwh(water heating efficiency	%	148
				Energy efficiency Class	-	A+
	Water Side Heat Exchanger	Water Flow Rate	Cooling	Std.	LPM	42.0
			Heating	Min	LPM	7.0
				Std.	LPM	46.0
				Max.	LPM	58.0
		Max Operating Pressure			bar	3.00
		Pipe connection	Inlet	Diameter	mm	28
			Outlet	Diameter	mm	28
		DHW		Max	℃	55
		Leaving Water Temperature	Cooling	Min ~ Max	℃	5 ~ 25
			Heating	Min ~ Max	℃	15 ~ 65
	Piping Connections	Liquid Pipe	Type		-	Flaring
			Diameter		mm	9.52
		Gas Pipe	Type		-	Flaring
			Diameter		mm	15.88
		Piping length (ODU-IDU)		Max.	m	70
		Level difference (ODU-IDU)		Max.	m	30
	Refrigerant	Type			-	R32
		Factory Charge			kg	2.7
					tCO2e	1.82
		Control Type			-	EEV
	Operating rate.	Convert to Time Division Multi		Exceed	%	130
Outdoor Unit	Model Code	Outdoor Unit			-	AE160HCTPGS/EU
	Power Supply				Φ|#|V|Hz	3|4|380-415|50
	Performance	kW				16.0
	Casing	Color	Body		-	Shadow Gray
		Material	Body		-	GI-SGCC
	Heat Exchanger	Type			-	Fin & Tube
		Fin Treatment			-	Anti-salt
		Fin	Type		-	Corrugate
			Fin Pitch		mm	1.50
		Tube	Type		-	Φ7
			Length		mm	1058/1029/1001
		Rows	Quantity		EA	3
		Stages	Quantity		EA	38
		Face Area			m²	0.84
	Compressor	Model Name			-	UB5TD8450FJX
		Quantity			EA	1
		Type			-	ROTARY_INVERTER
		Output			kW	4.05
		Oil	Type		-	POE
			Initial Charge		cc	1,500
		Starting method			-	Inverter driven
	Fan	Type			-	Propeller
		Discharge direction			-	Horizontal
		Quantity			EA	1
		Air Flow Rate	Cooling		CMM	81
			Heating		CMM	87

2. Outdoor Units

2-1. Specifications

System	Model Code	Indoor Unit			-	AE160DNZMPK/EU
		Outdoor Unit			-	AE160HCTPGS/EU
Outdoor Unit	Fan Motor	Quantity			EA	1
		Output			W	122
		Model			-	SIC-88FWJ-F1122-1
		Drive			-	Direct drive
		Speed	Heating		RPM	640
			Cooling		RPM	600
	Sound Level	Sound Pressure Level	Cooling		dB(A)	55
			Heating		dB(A)	49
			Cooling	Quiet 35dB(A) (5m)	dB(A)	35
			Heating	Quiet 35dB(A) (5m)	dB(A)	35
		Sound Power Level	Heating		dB(A)	62
	Packing	Material			-	EPS/BOX
		Weight			kg	13.0
	External Dimension	Net Weight			kg	126.5
		Shipping Weight			kg	139.5
		Net Dimensions		W x H x D	mm	1270 x 850 x 500
		Shipping Dimensions		W x H x D	mm	1330 x 1018 x 630
	Operating Temp. Range (A2W)	Cooling		Min. ~ Max.	°C	10 ~ 46
		Heating		Min. ~ Max.	°C	-25 ~ 43
		Hot Water (HP)		Min. ~ Max.	°C	-25 ~ 43
		Lowest Ambient Temperature	100% Rated Capacity	Min.	°C	-10
			Max LWT	Min.	°C	-5
	Operating Temp. Range (A2A)	Cooling		Min. ~ Max.	°C	10 ~ 43
		Heating		Min. ~ Max.	°C	-25 ~ 24
	Operating Temp. Range (Heat Recovery)	A2W Heating + A2A Cooling		Min. ~ Max.	°C	10 ~ 43
		A2W Cooling + A2A Heating		Min. ~ Max.	°C	10 ~ 24
	Others	4-Way Valve	Model		-	SHF-20D-46
		Base Heater	Power Input		W	150

NOTE

- Specifications may be subject to change without prior notice.
  1)* A2W Condition #1 : (Heating) Water In/Out 30°C/35°C, Outdoor Air 7°C[DB]/6°C[WB]; (Cooling) Water In/Out 23°C/18°C, Outdoor Air 35°C[DB]
  2)* A2W Condition #2 : (Heating) Water In/Out 40°C/45°C, Outdoor Air 7°C[DB]/6°C[WB] ; (Cooling) Water In/Out 12°C/7°C, Outdoor Air 35°C[DB]
  3)* A2W Condition #3 : (Heating) Water In/Out 47°C/55°C, Outdoor Air 7°C[DB]/6°C[WB]
  4)* A2W Condition : (A2W35) Water In/Out -/35°C, Outdoor Air 2°C[DB]/1°C[WB] (※ Peak Capacity)
  ; (A-7/W35) Water In/Out -/35°C, Outdoor Air -7°C[DB]/- (※ Peak Capacity)
  ; (A-10/W35) Water In/Out -/35°C, Outdoor Air -10°C[DB]/- (※ Peak Capacity)
  5)* Heat Recovery Condition: A2A Indoor Air 27°C[DB]/19°C[WB] , Outdoor Air 35°C[DB] /24 °C[WB]
- Select wire size based on the value of MCA
- Sound pressure level is obtained in an anechoic room.
  - Sound pressure level is a relative value, depending on the distance and acoustic environment.
  - Sound pressure level may differ depending on operation condition.
  - dBA = A-weighted sound pressure level
  - Reference acoustic pressure 0 dB = 20uPa
- Sound power level is an absolute value that a sound source generates.
  - dBA = A-weighted Sound power level
  - Reference power : 1pW
  - Measured according to ISO 3741
- These products contain R32 (GWP=675)/R410A (GWP=2088) which is fluorinated greenhouse gas.
- The system is operated in (-25°C ≤ Outdoor temp. < -20°C) condition, but no guarantee of capacity.
- Heat Recovery System is only possible with WATER(Hydro)-A2A indoor units, and is not possible with A2A indoor units.

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
12.5	AE125HCTPES/EU	1	2	50	220~240	198	264	14.74	12.67	32.0	35.2
12.5	AE125HCTPGS/EU	3	4	50	380~415	342	456	4.89	4.20	16.1	17.7
16.0	AE160HCTPES/EU	1	2	50	220~240	198	264	17.82	17.11	32.0	35.2
16.0	AE160HCTPGS/EU	3	4	50	380~415	342	456	5.91	5.68	16.1	17.7

NOTE

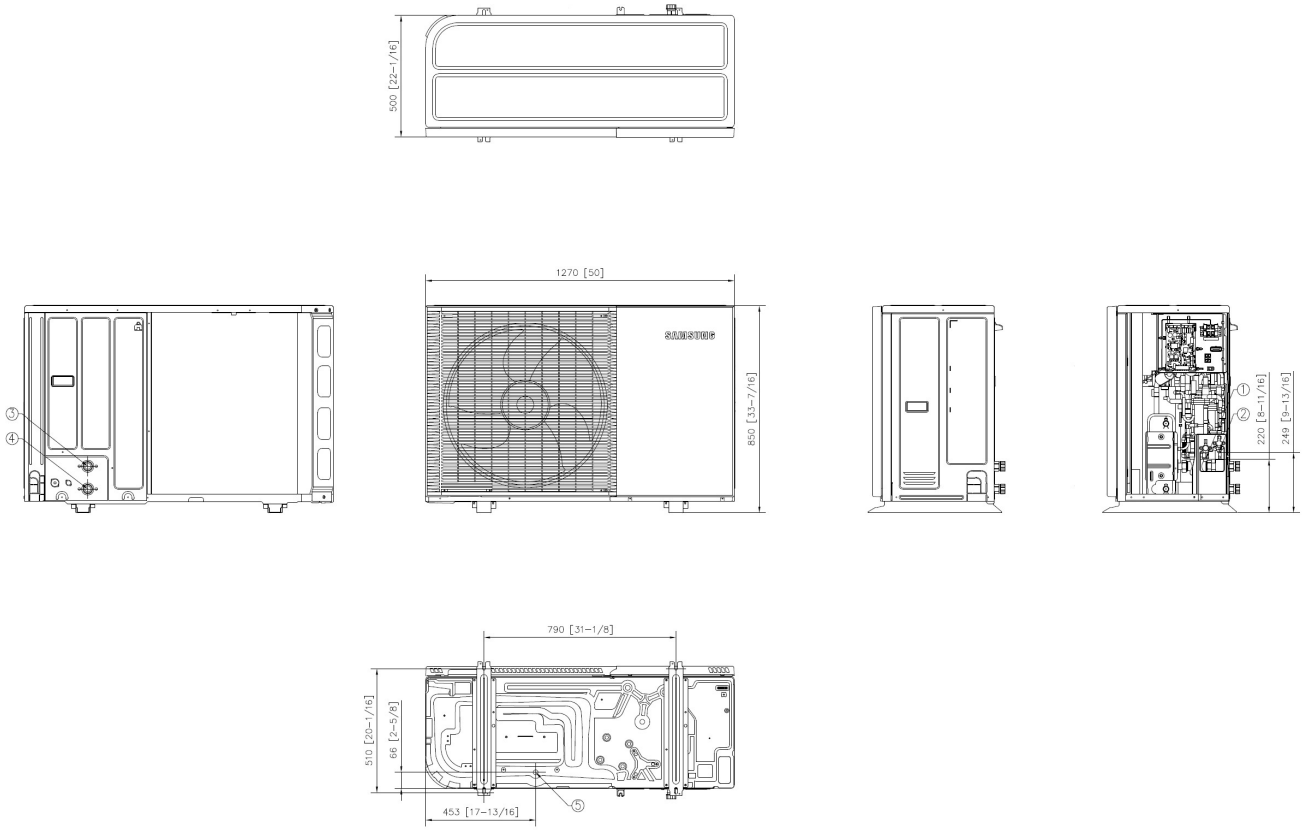
- MCA : Mimium circuit amperes
- MFA : Maximum fuse amperes
- Select wire size based on the value of MCA

2. Outdoor Units

2-3. Dimensional drawing

AE125HCTPES/EU, AE125HCTPGS/EU, AE160HCTPES/EU, AE160HCTPGS/EU

Unit: mm [inch]

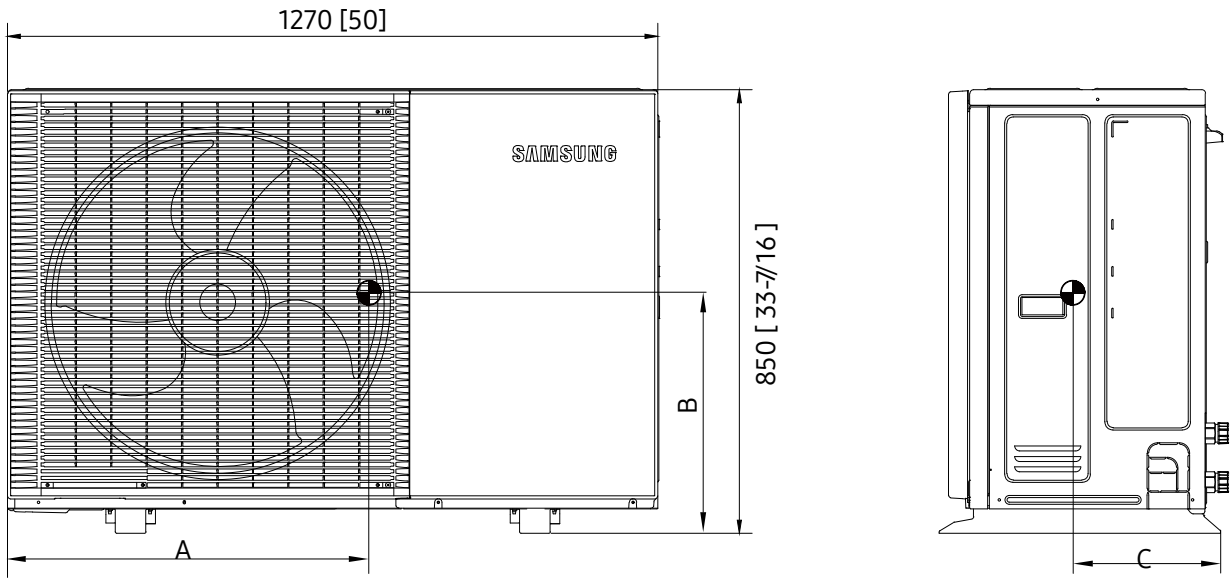


No.	Name	Description
1	Gas pipe connection	Φ15.88
2	Liquid pipe connection	Φ9.52
3	Water outlet pipe connection	Φ28
4	Water inlet pipe connection	Φ28
5	Drain hole	-

2. Outdoor Units

2-4. Center of Gravity

Units : mm [inches]

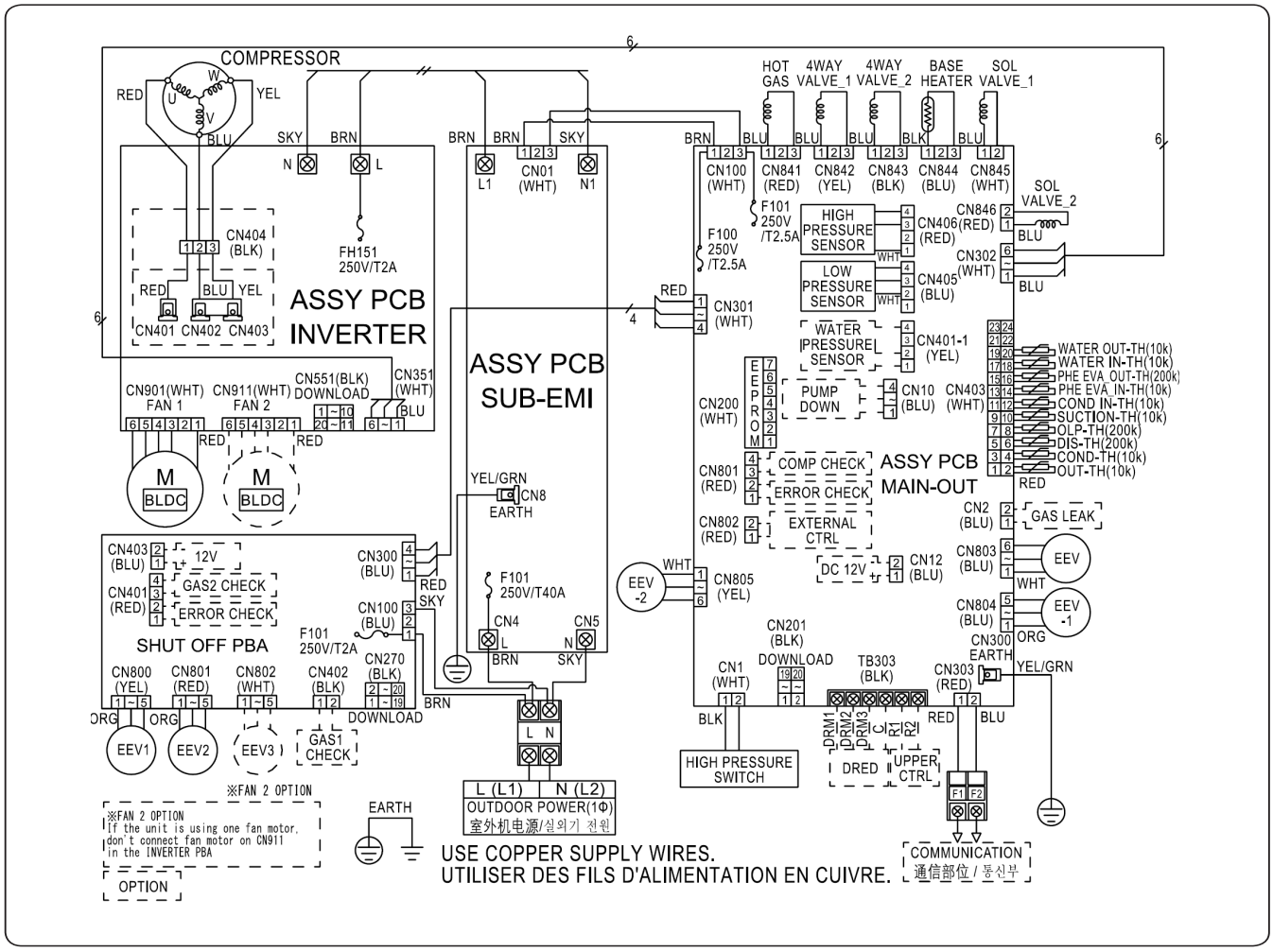


A	B	C
557 [21-15/16]	396 [15-9/16]	303 [11-15/16]

2. Outdoor Units

2-5. Electrical wiring diagram

AE125HCTPES/EU, AE160HCTPES/EU



ASSY PCB MAIN-OUT	Printed circuit board(MAIN)	ASSY PCB INVERTER	Printed circuit board(INVERTER)	ASSY PCB SUB-EMI	Printed circuit board(EMI)
SHUT OFF PBA	Printed circuit board(SHUT OFF)	250V T40A	FUSE	250V T2.5A	FUSE
250V T2A	FUSE	M(BLDC)	Outdoor BLDC Fan	F1,F2(COMMUNICATION)	Communication between Indoor and Outdoor
EEV	Electronic Expansion Valve - Main	EEV-1	Electronic Expansion Valve - Liquid Bypass EEV	EEV-2	Electronic Expansion Valve - PHE EEV
OUT-TH	Thermistor - Ambient (10KΩ @25℃)	COND-TH	Thermistor - COND. Out (10KΩ @25℃)	DIS-TH	Thermistor - Discharge pipe (200KΩ @25℃)
OLP-TH	Thermistor - Compressor Top (200KΩ @25℃)	SUCTION-TH	Thermistor - Suction pipe (10KΩ @25℃)	COND IN-TH	Thermistor - COND. Out (10KΩ @25℃)
PHE EVA IN	Thermistor - PHE EVA IN (10KΩ @25℃)	PHE EVA OUT	Thermistor - PHE EVA OUT (200KΩ @25℃)	WATER IN-TH	Thermistor - WATER IN (10KΩ @25℃)
WATER OUT-TH	Thermistor - WATER OUT (10KΩ @25℃)	HOT GAS	Solenoid valve - Hot Gas Bypass	4WAY VALVE_1	Solenoid valve - 4Way VALVE_1
4WAY VALVE_2	Solenoid valve - 4Way VALVE_2	BASE HEATER	BASE HEATER	SOL VALVE_1	Solenoid valve - Cooling Sol Valve
SOL VALVE_2	Solenoid valve - Heating Sol Valve	EEV1	Electronic Expansion Valve - SHUT OFF EEV1	EEV2	Electronic Expansion Valve - SHUT OFF EEV2

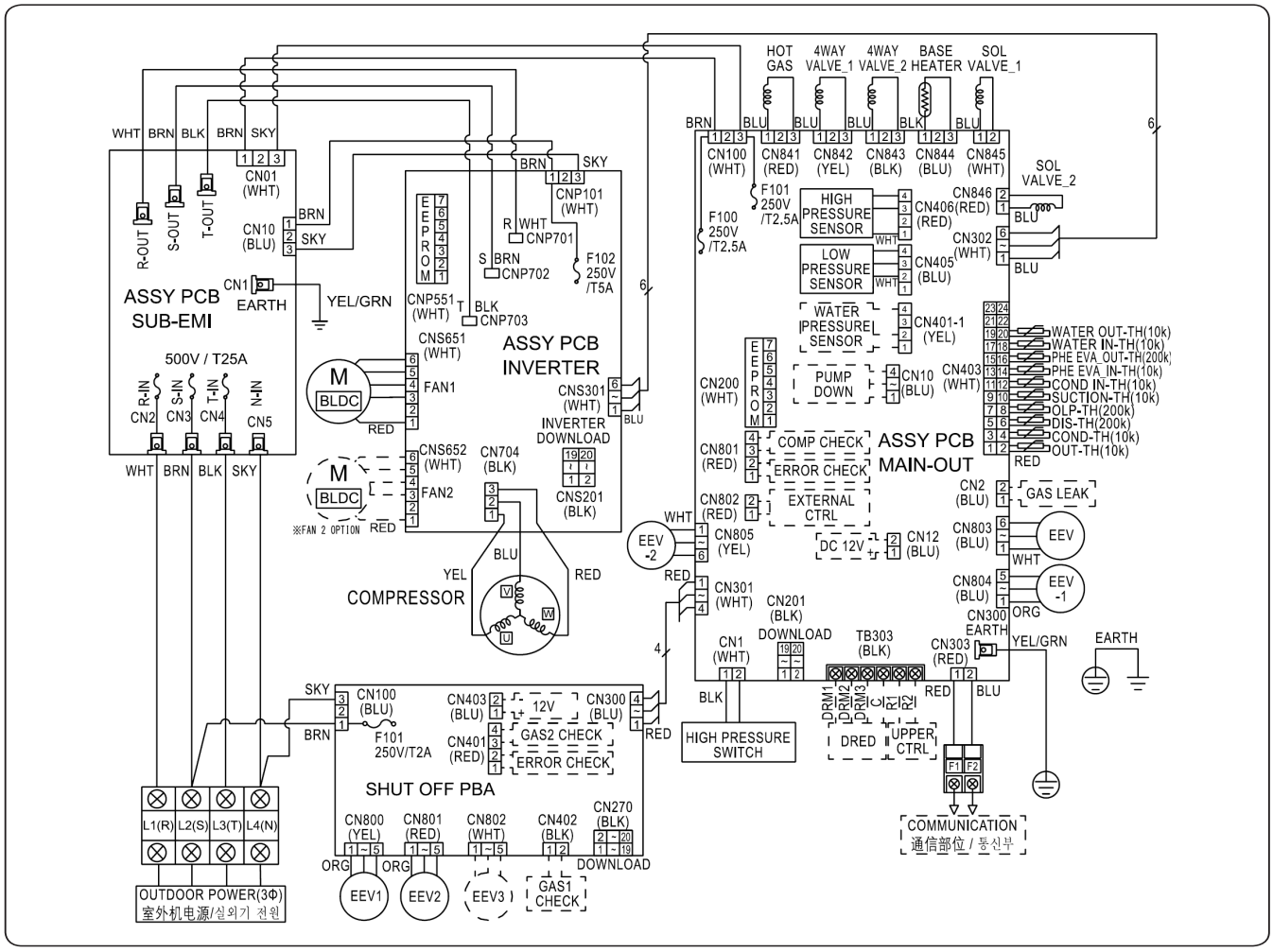
NOTES

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

2-5. Electrical wiring diagram

AE125HCTPGS/EU, AE160HCTPGS/EU



ASSY PCB MAIN-OUT	Printed circuit board(MAIN)	ASSY PCB INVERTER	Printed circuit board(INVERTER)	ASSY PCB SUB-EMI	Printed circuit board(EMI)
SHUT OFF PBA	Printed circuit board(SHUT OFF)	250V T25A	FUSE	250V T2.5A	FUSE
250V T2A	FUSE	M(BLDC)	Outdoor BLDC Fan	F1,F2(COMMUNICATION)	Communication between Indoor and Outdoor
EEV	Electronic Expansion Valve - Main	EEV-1	Electronic Expansion Valve - Liquid Bypass EEV	EEV-2	Electronic Expansion Valve - PHE EEV
OUT-TH	Thermistor - Ambient (10KΩ @25℃)	COND-TH	Thermistor - COND. Out (10KΩ @25℃)	DIS-TH	Thermistor - Discharge pipe (200KΩ @25℃)
OLP-TH	Thermistor - Compressor Top (200KΩ @25℃)	SUCTION-TH	Thermistor - Suction pipe (10KΩ @25℃)	COND IN-TH	Thermistor - COND. Out (10KΩ @25℃)
PHE EVA IN	Thermistor - PHE EVA IN (10KΩ @25℃)	PHE EVA OUT	Thermistor - PHE EVA OUT (200KΩ @25℃)	WATER IN-TH	Thermistor - WATER IN (10KΩ @25℃)
WATER OUT-TH	Thermistor - WATER OUT (10KΩ @25℃)	HOT GAS	Solenoid valve - Hot Gas Bypass	4WAY VALVE_1	Solenoid valve - 4Way VALVE_1
4WAY VALVE_2	Solenoid valve - 4Way VALVE_2	BASE HEATER	BASE HEATER	SOL VALVE_1	Solenoid valve - Cooling Sol Valve
SOL VALVE_2	Solenoid valve - Heating Sol Valve	EEV1	Electronic Expansion Valve - SHUT OFF EEV1	EEV2	Electronic Expansion Valve - SHUT OFF EEV2

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)

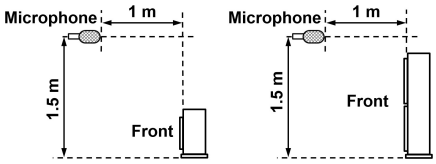
2. Outdoor Units

2-6. Sound data

Sound Pressure Level

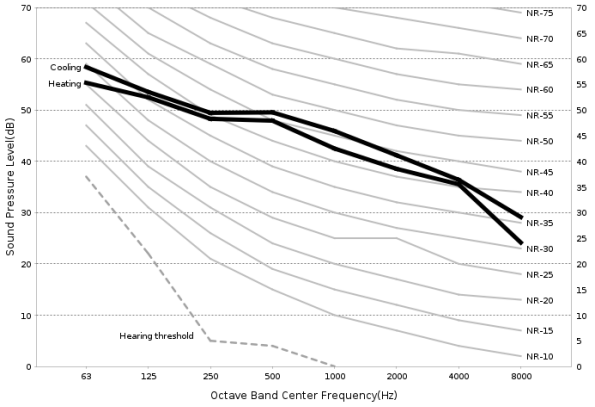
Unit : dB(A)

Model	Cooling	Heating
AE125HCTPES/EU	51	49
AE125HCTPGS/EU	51	49
AE160HCTPES/EU	55	49
AE160HCTPGS/EU	55	49

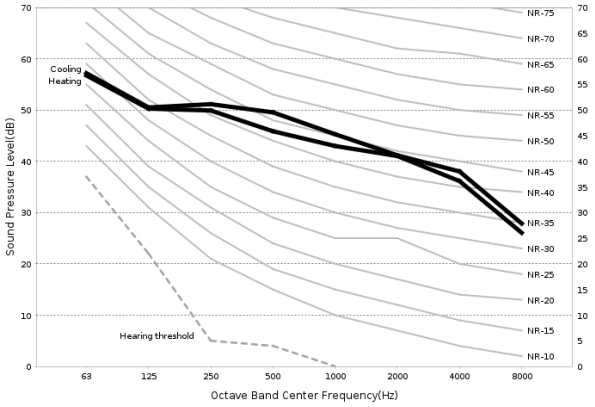


- **NR CURVE**

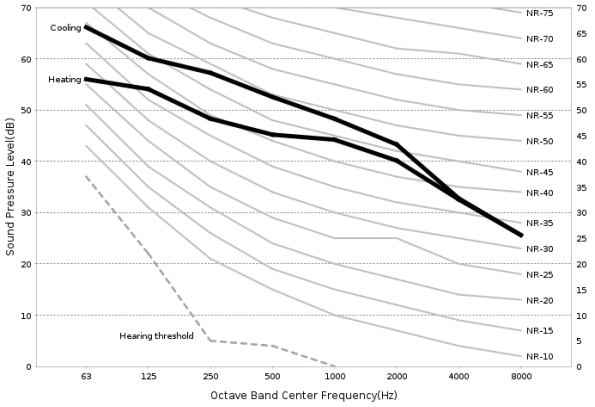
(1) AE125HCTPES/EU



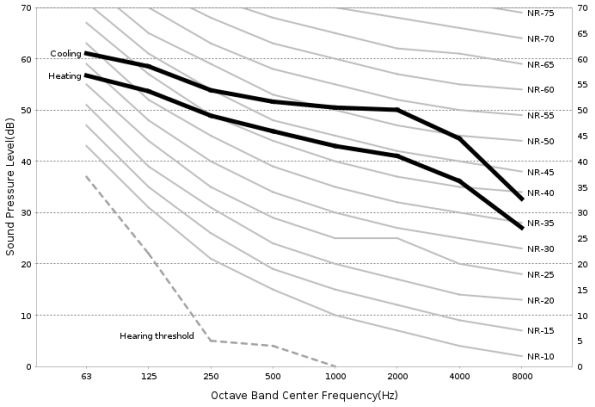
(2) AE125HCTPGS/EU



(3) AE160HCTPES/EU



(4) AE160HCTPGS/EU



NOTE

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- - 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

2. Outdoor Units

2-6. Sound data

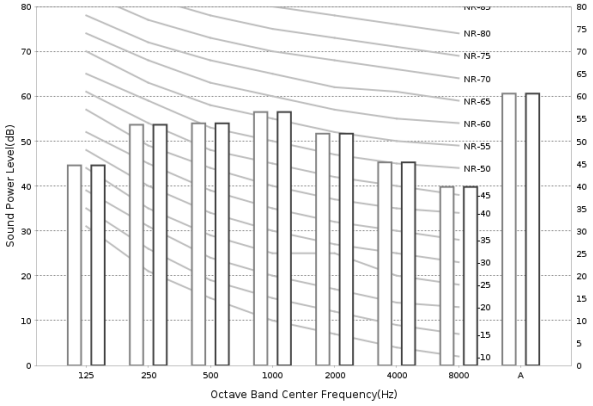
Sound Power Level

Unit : dB(A)

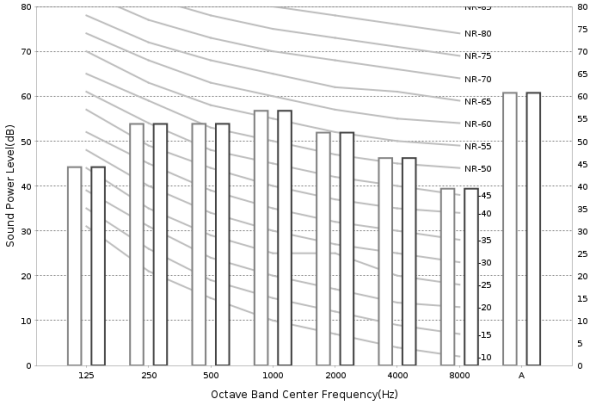
Model	Cooling	Heating
AE125HCTPES/EU	62	62
AE125HCTPGS/EU	62	62
AE160HCTPES/EU	62	62
AE160HCTPGS/EU	66	66

- **NR CURVE**

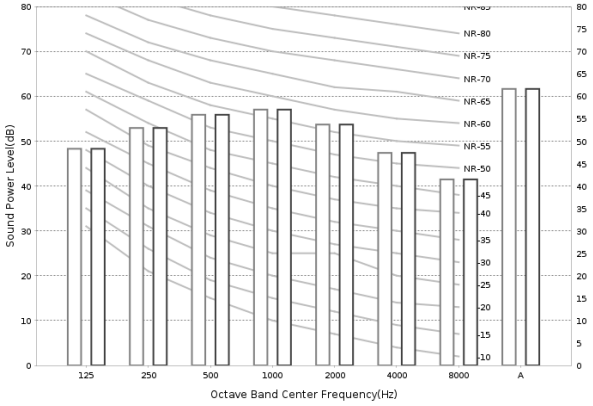
(1) AE125HCTPES/EU



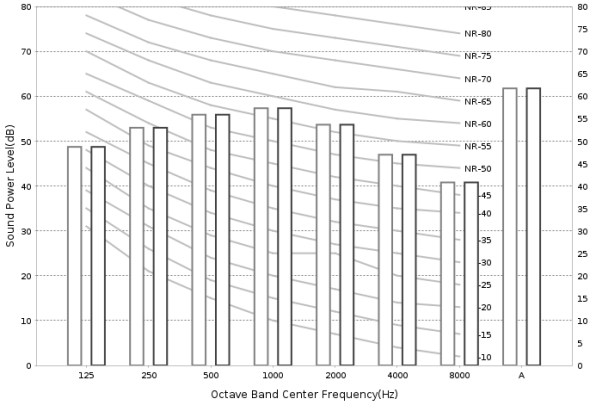
(2) AE125HCTPGS/EU



(3) AE160HCTPES/EU



(4) AE160HCTPGS/EU



NOTE

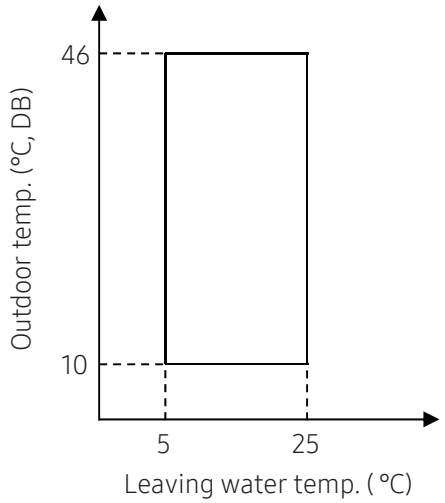
- Specifications may be subject to change without prior notice.
- - Sound pressure level is obtained in an anechoic room.
- - Sound pressure level is a relative value, depending on the distance and acoustic environment.
- - Sound pressure level may differ depending on operation condition.
- - dBA = A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

2. Outdoor Units

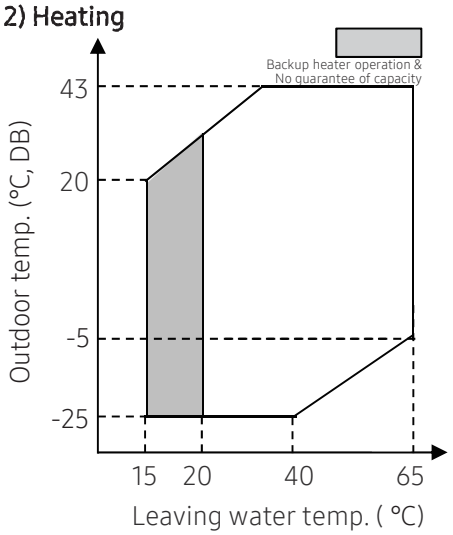
2-7. Operation range

Air to Water

1) Cooling



2) Heating

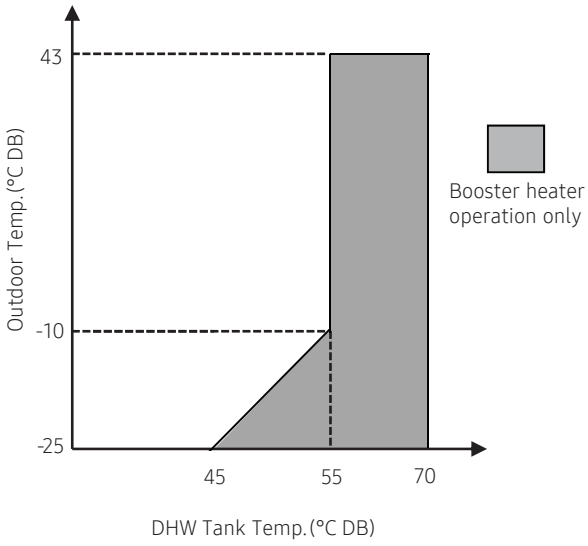


Split Outdoor Unit		Water Temp. (°C)			Water Flow Rates (LPM)			Air Temp. (°C, DB/WB)		
		Min	Std	Max	Min	Std	Max	Min	Std	Max
Controller	Cooling	5	-	25						
	Heating	15	-	65						
Cooling	Inlet	-	23 (12*1)	30	12	Δ 5°C	58	10/-	35/24	46/28
	Outlet	5	18 (7*1)	25						
Heating	Inlet	5	30 (40*1)	-				-25/-	7/6	43/34.5
	Outlet	25 (15*2)	35 (45*1)	65						

*1) Eurovent Test Condition #2

*2) Back up heater operation.

3) DHW (Domestic Hot Water Tank)

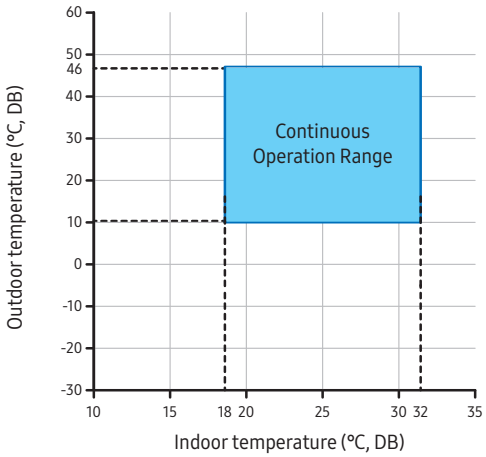


2. Outdoor Units

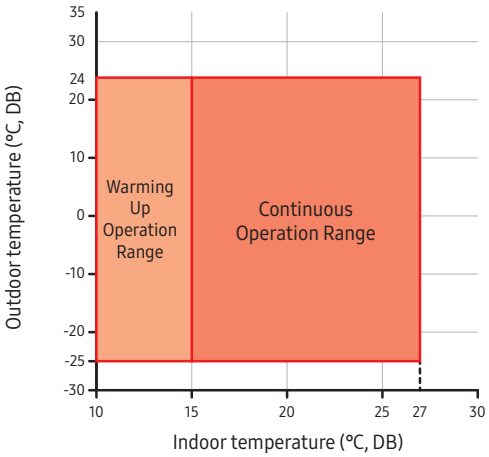
2-7. Operation range

Air to Air

1) Cooling



2) Heating

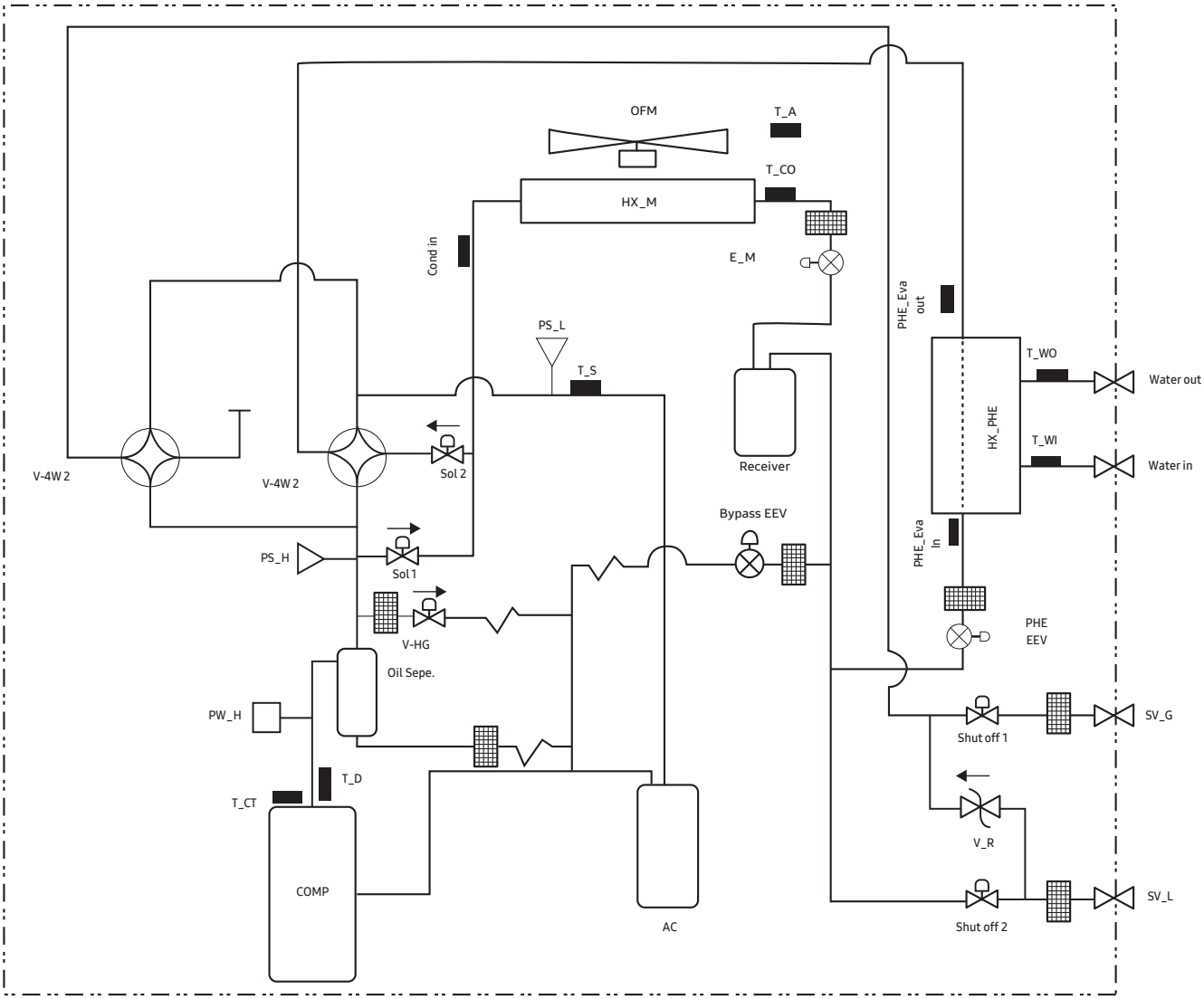


NOTE

- In case of heating mode, operating is possible under warming up operation range. However continuous opearting is impossible due to a protection control.

2. Outdoor Units

2-8. Piping diagram



2. Outdoor Units

2-9. Capacity table (A2W)

1) Maximum Heating Capacity (Peak Value)

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

Model	Tamb	Leaving Water Temp. (℃)																										
		25.0			30.0			35.0			40.0			45.0			50.0			55.0			60.0			65.0		
	DB	HC	PI	WFR	HC	PI	WFR	HC	PI	WFR	HC	PI	WFR	HC	PI	WFR	HC	PI	WFR	HC	PI	WFR	HC	PI	WFR	HC	PI	WFR
	℃	kW	kW	LPM	kW	kW	LPM	kW	kW	LPM	kW	kW	LPM	kW	kW	LPM	kW	kW	LPM	kW	kW	LPM	kW	kW	LPM	kW	kW	LPM
AE125HCTPES/EU	-25.0	8.8	4.19	25.40	9.1	4.77	26.30	9.3	5.34	26.80	9.2	5.65	26.70															
	-20.0	11.5	4.94	33.10	11.3	5.41	32.50	11.1	5.67	32.00	10.8	5.98	31.10	10.5	6.27	30.40												
	-15.0	12.6	4.84	36.40	12.6	5.55	36.10	12.5	5.76	36.00	12.2	6.03	35.30	11.9	6.31	34.50	11.6	6.43	33.60									
	-10.0	13.2	4.27	38.00	12.8	4.63	36.90	12.5	4.56	36.00	12.3	5.01	35.50	12.1	5.35	35.00	12.1	5.75	35.10	12.1	6.03	21.90						
	-7.0	13.2	3.99	38.00	12.8	4.48	36.90	12.5	4.33	36.00	12.3	4.72	35.50	12.1	5.03	35.00	12.1	5.42	35.10	12.1	5.75	21.90	11.9	6.81	21.60			
	-2.0	13.2	3.32	38.00	12.8	3.77	36.90	12.5	3.96	36.00	12.3	4.11	35.50	12.1	4.42	35.00	12.1	4.85	35.10	12.1	5.06	21.90	12.1	5.81	22.00	11.4	6.82	16.60
	2.0	13.2	2.81	38.00	12.8	3.10	36.90	12.5	3.18	36.00	12.3	3.54	35.50	12.1	3.85	35.00	12.1	4.28	35.10	12.1	4.55	21.90	12.1	5.09	22.00	12.1	6.09	17.60
	7.0	13.2	2.30	38.00	12.8	2.56	36.90	12.5	2.68	36.00	12.3	2.97	35.50	12.1	3.32	35.00	12.1	3.76	35.10	12.1	4.17	21.90	12.1	4.69	22.00	12.1	5.52	17.60
	12.0	15.2	2.48	43.70	14.8	2.68	42.60	14.5	2.86	41.70	14.1	3.11	40.70	13.8	3.39	39.80	13.5	3.74	39.10	13.4	4.13	24.20	13.2	4.43	24.00	13.0	5.16	19.00
	15.0	16.4	2.51	47.20	16.0	2.74	46.00	15.6	2.94	45.00	15.1	3.14	43.70	14.7	3.40	42.50	14.2	3.67	41.10	13.9	4.01	25.20	13.7	4.29	24.80	13.6	5.17	19.70
	20.0	17.6	2.62	50.50	17.1	2.88	49.30	16.7	3.10	48.20	16.2	3.32	46.80	15.7	3.56	45.50	15.2	3.81	44.00	14.9	4.18	27.00	14.6	4.46	26.60	14.4	5.28	21.00
	25.0	18.5	2.65	53.30	18.1	2.94	52.00	17.6	3.15	50.90	17.1	3.36	49.40	16.6	3.59	48.00	16.0	3.79	46.50	15.7	4.17	28.50	15.4	4.42	28.10	15.2	4.98	22.10
	30.0	19.5	2.60	56.20	19.0	2.92	54.80	18.6	3.08	53.60	18.0	3.27	52.00	17.5	3.48	50.60	16.9	3.67	49.00	16.6	4.05	30.00	16.3	4.38	29.60	16.0	4.69	23.30
	35.0	20.5	2.34	58.00	19.9	2.65	57.40	19.5	2.88	56.10	18.9	3.05	54.40	18.3	3.24	52.90	17.9	3.47	51.80	17.5	3.82	31.70	16.5	4.09	30.00	14.5	4.12	21.10
AE125HCTPGS/EU	-25.0	8.8	4.19	25.40	9.1	4.77	26.30	9.3	5.34	26.80	9.2	5.65	26.70															
	-20.0	11.5	4.94	33.10	11.3	5.41	32.50	11.1	5.67	32.00	10.8	5.98	31.10	10.5	6.27	30.40												
	-15.0	12.6	4.84	36.40	12.6	5.55	36.10	12.5	5.76	36.00	12.2	6.03	35.30	11.9	6.31	34.50	11.6	6.43	33.60									
	-10.0	13.2	4.27	38.00	12.8	4.63	36.90	12.5	4.56	36.00	12.3	5.01	35.50	12.1	5.35	35.00	12.1	5.75	35.10	12.1	6.03	21.90						
	-7.0	13.2	3.99	38.00	12.8	4.48	36.90	12.5	4.33	36.00	12.3	4.72	35.50	12.1	5.03	35.00	12.1	5.42	35.10	12.1	5.75	21.90	11.9	6.81	21.60			
	-2.0	13.2	3.32	38.00	12.8	3.77	36.90	12.5	3.96	36.00	12.3	4.11	35.50	12.1	4.42	35.00	12.1	4.85	35.10	12.1	5.06	21.90	12.1	5.81	22.00	12.1	7.24	17.60
	2.0	13.2	2.81	38.00	12.8	3.10	36.90	12.5	3.18	36.00	12.3	3.54	35.50	12.1	3.85	35.00	12.1	4.28	35.10	12.1	4.55	21.90	12.1	5.09	22.00	12.1	6.09	17.60
	7.0	13.2	2.30	38.00	12.8	2.56	36.90	12.5	2.68	36.00	12.3	2.97	35.50	12.1	3.32	35.00	12.1	3.76	35.10	12.1	4.17	21.90	12.1	4.69	22.00	12.1	5.52	17.60
	12.0	15.2	2.48	43.70	14.8	2.68	42.60	14.5	2.86	41.70	14.1	3.11	40.70	13.8	3.39	39.80	13.5	3.74	39.10	13.4	4.13	24.20	13.2	4.43	24.00	13.0	5.16	19.00
	15.0	16.4	2.51	47.20	16.0	2.74	46.00	15.6	2.94	45.00	15.1	3.14	43.70	14.7	3.40	42.50	14.2	3.67	41.10	13.9	4.01	25.20	13.7	4.29	24.80	13.6	5.17	19.70
	20.0	17.6	2.62	50.50	17.1	2.88	49.30	16.7	3.10	48.20	16.2	3.32	46.80	15.7	3.56	45.50	15.2	3.81	44.00	14.9	4.18	27.00	14.6	4.46	26.60	14.4	5.28	21.00
	25.0	18.5	2.65	53.30	18.1	2.94	52.00	17.6	3.15	50.90	17.1	3.36	49.40	16.6	3.59	48.00	16.0	3.79	46.50	15.7	4.17	28.50	15.4	4.42	28.10	15.2	4.98	22.10
	30.0	19.5	2.60	56.20	19.0	2.92	54.80	18.6	3.08	53.60	18.0	3.27	52.00	17.5	3.48	50.60	16.9	3.67	49.00	16.6	4.05	30.00	16.3	4.38	29.60	16.0	4.69	23.30
	35.0	20.5	2.34	58.00	19.9	2.65	57.40	19.5	2.88	56.10	18.9	3.05	54.40	18.3	3.24	52.90	17.9	3.47	51.80	17.5	3.82	31.70	17.2	4.27	31.30	16.9	4.80	24.60
AE160HCTPES/EU	-25.0	8.8	4.11	25.40	9.2	4.75	26.50	9.6	5.53	27.80	9.5	5.95	27.50															
	-20.0	12.0	5.15	34.50	11.8	5.66	34.00	11.6	5.92	33.40	11.4	6.46	32.90	11.1	6.85	32.10												
	-15.0	13.6	5.36	39.20	13.4	5.99	38.70	13.2	6.13	38.10	13.0	6.53	37.50	12.3	6.82	35.70	12.1	6.85	35.10									
	-10.0	16.0	5.32	46.00	16.0	6.06	46.10	16.0	6.08	46.00	15.9	6.78	45.80	14.5	6.83	42.05	14.0	6.84	40.60	12.5	6.29	22.70						
	-7.0	16.0	5.00	46.00	16.0	5.71	46.10	16.0	5.73	46.00	15.9	6.38	45.80	15.5	6.86	44.80	14.0	6.41	40.60	12.5	5.94	22.70	12.0	6.83	21.80			
	-2.0	16.1	4.29	46.30	16.0	4.87	46.20	16.0	5.24	46.00	15.9	5.56	45.80	15.5	6.03	44.80	14.0	5.73	40.60	12.5	5.22	22.70	12.3	5.87	22.40	11.5	6.81	16.70
	2.0	16.2	3.67	46.60	16.1	4.05	46.40	16.0	4.34	46.00	15.9	4.79	45.80	15.5	5.26	44.80	14.0	5.05	40.60	12.5	4.69	22.70	12.4	5.22	22.50	12.3	6.19	17.90
	7.0	16.3	3.04	46.90	16.1	3.32	46.50	16.0	3.62	46.00	15.9	4.03	45.80	15.5	4.43	44.80	14.0	4.50	40.60	12.5	4.36	22.70	12.4	4.84	22.50	12.3	5.64	17.90
	12.0	17.5	2.94	50.40	17.3	3.21	49.70	17.0	3.52	49.10	16.8	3.89	48.50	16.5	4.33	47.60	15.1	4.34	43.80	14.1	4.41	25.60	13.8	4.65	25.00	13.6	5.51	19.90
	15.0	18.3	2.87	52.50	17.9	3.16	51.70	17.6	3.45	50.80	17.4	3.79	50.20	17.0	4.18	49.30	15.8	4.22	45.70	15.3	4.45	27.70	14.8	4.68	26.80	14.3	5.64	20.90
	20.0	19.5	2.98	56.00	19.1	3.30	54.90	18.6	3.59	53.80	18.4	3.92	53.00	18.0	4.31	52.10	16.9	4.38	48.90	16.5	4.67	29.90	16.1	4.97	29.40	15.5	5.67	22.60
	25.0	20.7	3.04	58.00	20.2	3.38	58.00	19.7	3.64	56.70	19.3	3.95	55.80	19.0	4.33	54.90	18.0	4.40	52.00	17.5	4.70	31.80	16.2	4.68	29.50	15.7	5.14	22.90
	30.0	21.9	3.01	58.00	21.3	3.36	58.00	20.7	3.55	58.00	20.3	3.84	58.00	19.9	4.18	57.70	19.0	4.29	55.20	18.4	4.54	33.40	16.3	4.38	29.60	16.0	4.69	23.30
	35.0	23.1	2.72	58.00	22.4	3.07	58.00	21.7	3.34	58.00	21.3	3.57	58.00	20.9	3.89	58.00	20.1	4.03	58.00	18.6	4.12	33.70	16.5	4.09	30.00	14.5	4.12	21.10
AE160HCTPGS/EU	-25.0	8.8	4.11	25.40	9.2	4.75	26.50	9.6	5.53	27.80	9.5	5.95	27.50															
	-20.0	12.0	5.15	34.50	11.8	5.66	34.00	11.6	5.92	33.40	11.4	6.46	32.90	11.1	6.85	32.10												
	-15.0	13.6	5.36	39.20	13.4	5.99	38.70	13.2	6.13	38.10	13.0	6.53	37.50	12.8	7.07	36.90	12.5	7.08	36.20									
	-10.0	16.0	5.32	46.00	16.0	6.06	46.10	16.0	6.08	46.00	15.9	6.78	45.80	15.5	7.30	44.80	14.0	6.84	40.60	12.5	6.29	22.70						
	-7.0	16.0	5.00	46.00	16.0	5.71	46.10	16.0	5.73	46.00	15.9	6.38	45.80	15.5	6.86	44.80	14.0	6.41	40.60	12.5	5.94	22.70	12.1	6.89	22.00			
	-2.0	16.1	4.29	46.30	16.0	4.87	46.20	16.0	5.24	46.00	15.9	5.56	45.80	15.5	6.03	44.80	14.0	5.73	40.60	12.5	5.22	22.70	12.3	5.87	22.40	12.1	7.18	17.60
	2.0	16.2	3.67	46.60	16.1	4.05	46.40	16.0	4.34	46.00	15.9	4.79	45.80	15.5	5.26	44.80	14.0	5.05	40.60	12.5	4.69	22.70	12.4	5.22	22.50	12.3	6.19	17.90
	7.0	16.3	3.04	46.90	16.1	3.32	46.50	16.0	3.62	46.00	15.9	4.03	45.80	15.5	4.43	44.80	14.0	4.50	40.60	12.5	4.36	22.70	12.4	4.84	22.50	12.3	5.64	17.90
	12.0	17.5	2.94	50.40	17.3	3.21	49.70	17.0	3.52	49.10	16.8	3.89	48.50	16.5	4.33	47.60	15.1	4.34	43.80	14.1	4.41	25.60	13.8	4.65	25.00	13.6	5.51	19.90
	15.0	18.3	2.87	52.50	17.9	3.16	51.70	17.6	3.45	50.80	17.4	3.79	50.20	17.0	4.18	49.30	15.8	4.22	45.70	15.3	4.45	27.70	14.8	4.68	26.80	14.3	5.64	20.90
	20.0	19.5	2.98	56.00	19.1	3.30	54.90	18.6	3.59	53.80	18.4	3.92	53.00	18.0	4.31	52.10	16.9	4.38	48.90	16.5	4.67	29.90	16.1	4.97	29.40	15.7	5.74	22.90
	25.0	20.7	3.04	58.00	20.2	3.38	58.00	19.7	3.64	56.70	19.3	3.95	55.80	19.0	4.33	54.90	18.0	4.40	52.00	17.5	4.70	31.80	17.2	4.98	31.30	16.7	5.47	24.30
	30.0	21.9	3.01	58.00	21.3	3.36	58.00	20.7	3.55	58.00	20.3	3.84	58.00	19.9	4.18	57.70	19.0	4.29	55.20	18.4	4.54	33.40	18.0	4.90	32.80	17.6	5.15	25.60
	35.0	23.1	2.72	58.00	22.4	3.07	58.00	21.7	3.34	58.00	21.3	3.57	58.00	20.9	3.89	58.00	20.1	4.03	58.00	19.4	4.31	35.20	18.5	4.64	33.60	17.6	4.97	25.60

NOTE

1. Heating capacity - Capacity is according to EN14511. - Valid for heated water range (ΔT = Leaving water temperature - Entering water temperature) : If LWT≤50℃, ΔT=5℃ or 50℃<LWT≤60℃ , ΔT=8℃ or LWT>60℃, ΔT=10℃, within the minimum ~ maximum water flow rate.2. Cooling capacity - Capacity is according to EN14511. - Valid for Cooli ng water range (ΔT =Entering water temperature - Leaving water temperature) : ΔT=5℃, within the minimum ~ maximum water flow rate.3. Power input : Power input is acc ording to EN14511.4. Peak value : Tested without defrost operation in accordance with EN14511.※ The real capacity would be changed according to the install environment.

2. Outdoor Units

2-9. Capacity table (A2W)

2) Maximum Heating Capacity (Integrated Value)

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

Model	Tamb	Leaving Water Temp.(℃)																										
		25.0			30.0			35.0			40.0			45.0			50.0			55.0			60.0			65.0		
	DB	HC	PI	WFR	HC	PI	WFR	HC	PI	WFR	HC	PI	WFR	HC	PI	WFR	HC	PI	WFR	HC	PI	WFR	HC	PI	WFR	HC	PI	WFR
	℃	kW	kW	LPM	kW	kW	LPM	kW	kW	LPM	kW	kW	LPM	kW	kW	LPM	kW	kW	LPM	kW	kW	LPM	kW	kW	LPM	kW	kW	LPM
AE125HCTPES/EU	-25.0	8.8	4.19	25.40	9.1	4.77	26.30	9.3	5.34	26.80	9.2	5.65	26.70															
	-20.0	11.5	4.94	33.10	11.3	5.41	32.50	11.1	5.67	32.00	10.8	5.98	31.10	10.5	6.27	30.40												
	-15.0	12.6	4.84	36.40	12.6	5.55	36.10	12.5	5.76	36.00	12.2	6.03	35.30	11.9	6.31	34.50	11.6	6.43	33.60									
	-10.0	12.8	4.50	36.70	12.6	4.90	36.30	12.4	5.30	35.90	12.3	5.50	35.40	12.1	5.80	34.90	12.1	6.37	34.90	11.6	6.84	21.00						
	-7.0	12.8	4.23	36.70	12.6	4.49	36.30	12.4	4.78	35.90	12.3	4.95	35.40	12.1	5.33	34.90	12.1	5.94	34.90	12.1	6.64	21.90	10.6	6.82	19.30			
	-2.0	12.1	3.48	34.70	12.2	3.94	35.10	12.4	4.43	35.90	12.3	4.55	35.40	12.1	4.84	34.90	12.1	5.44	34.90	12.1	5.97	21.90	12.1	6.75	21.90	10.6	6.87	15.40
	2.0	11.4	2.87	32.80	11.9	3.48	34.30	12.4	4.06	35.90	12.3	4.27	35.40	12.1	4.49	34.90	12.1	4.96	34.90	12.1	5.45	21.90	12.1	6.18	21.90	11.2	6.72	16.30
	7.0	13.2	2.30	38.00	12.8	2.56	36.90	12.5	2.68	36.00	12.3	2.97	35.50	12.1	3.32	35.00	12.1	3.76	35.10	12.1	4.17	21.90	12.1	4.69	22.00	12.1	5.52	17.60
	12.0	15.2	2.48	43.70	14.8	2.68	42.60	14.5	2.86	41.70	14.1	3.11	40.70	13.8	3.39	39.80	13.5	3.74	39.10	13.4	4.13	24.20	13.2	4.43	24.00	13.0	5.16	19.00
	15.0	16.4	2.51	47.20	16.0	2.74	46.00	15.6	2.94	45.00	15.1	3.14	43.70	14.7	3.40	42.50	14.2	3.67	41.10	13.9	4.01	25.20	13.7	4.29	24.80	13.6	5.17	19.70
	20.0	17.6	2.62	50.50	17.1	2.88	49.30	16.7	3.10	48.20	16.2	3.32	46.80	15.7	3.56	45.50	15.2	3.81	44.00	14.9	4.18	27.00	14.6	4.46	26.60	14.4	5.28	21.00
	25.0	18.5	2.65	53.30	18.1	2.94	52.00	17.6	3.15	50.90	17.1	3.36	49.40	16.6	3.59	48.00	16.0	3.79	46.50	15.7	4.17	28.50	15.4	4.42	28.10	15.2	4.98	22.10
	30.0	19.5	2.60	56.20	19.0	2.92	54.80	18.6	3.08	53.60	18.0	3.27	52.00	17.5	3.48	50.60	16.9	3.67	49.00	16.6	4.05	30.00	16.3	4.38	29.60	16.0	4.69	23.30
	35.0	20.5	2.34	58.00	19.9	2.65	57.40	19.5	2.88	56.10	18.9	3.05	54.40	18.3	3.24	52.90	17.9	3.47	51.80	17.5	3.82	31.70	16.5	4.09	30.00	14.5	4.12	21.10
AE125HCTPGS/EU	-25.0	8.8	4.19	25.40	9.1	4.77	26.30	9.3	5.34	26.80	9.2	5.65	26.70															
	-20.0	11.5	4.94	33.10	11.3	5.41	32.50	11.1	5.67	32.00	10.8	5.98	31.10	10.5	6.27	30.40												
	-15.0	12.6	4.84	36.40	12.6	5.55	36.10	12.5	5.76	36.00	12.2	6.03	35.30	11.9	6.31	34.50	11.6	6.43	33.60									
	-10.0	12.8	4.50	36.70	12.6	4.90	36.30	12.4	5.30	35.90	12.3	5.50	35.40	12.1	5.80	34.90	12.1	6.37	34.90	12.1	7.14	21.90						
	-7.0	12.8	4.23	36.70	12.6	4.49	36.30	12.4	4.78	35.90	12.3	4.95	35.40	12.1	5.33	34.90	12.1	5.94	34.90	12.1	6.64	21.90	11.8	7.63	21.40			
	-2.0	12.1	3.48	34.70	12.2	3.94	35.10	12.4	4.43	35.90	12.3	4.55	35.40	12.1	4.84	34.90	12.1	5.44	34.90	12.1	5.97	21.90	12.1	6.75	21.90	12.1	7.99	17.50
	2.0	11.4	2.87	32.80	11.9	3.48	34.30	12.4	4.06	35.90	12.3	4.27	35.40	12.1	4.49	34.90	12.1	4.96	34.90	12.1	5.45	21.90	12.1	6.18	21.90	12.1	7.34	17.50
	7.0	13.2	2.30	38.00	12.8	2.56	36.90	12.5	2.68	36.00	12.3	2.97	35.50	12.1	3.32	35.00	12.1	3.76	35.10	12.1	4.17	21.90	12.1	4.69	22.00	12.1	5.52	17.60
	12.0	15.2	2.48	43.70	14.8	2.68	42.60	14.5	2.86	41.70	14.1	3.11	40.70	13.8	3.39	39.80	13.5	3.74	39.10	13.4	4.13	24.20	13.2	4.43	24.00	13.0	5.16	19.00
	15.0	16.4	2.51	47.20	16.0	2.74	46.00	15.6	2.94	45.00	15.1	3.14	43.70	14.7	3.40	42.50	14.2	3.67	41.10	13.9	4.01	25.20	13.7	4.29	24.80	13.6	5.17	19.70
	20.0	17.6	2.62	50.50	17.1	2.88	49.30	16.7	3.10	48.20	16.2	3.32	46.80	15.7	3.56	45.50	15.2	3.81	44.00	14.9	4.18	27.00	14.6	4.46	26.60	14.4	5.28	21.00
	25.0	18.5	2.65	53.30	18.1	2.94	52.00	17.6	3.15	50.90	17.1	3.36	49.40	16.6	3.59	48.00	16.0	3.79	46.50	15.7	4.17	28.50	15.4	4.42	28.10	15.2	4.98	22.10
	30.0	19.5	2.60	56.20	19.0	2.92	54.80	18.6	3.08	53.60	18.0	3.27	52.00	17.5	3.48	50.60	16.9	3.67	49.00	16.6	4.05	30.00	16.3	4.38	29.60	16.0	4.69	23.30
	35.0	20.5	2.34	58.00	19.9	2.65	57.40	19.5	2.88	56.10	18.9	3.05	54.40	18.3	3.24	52.90	17.9	3.47	51.80	17.5	3.82	31.70	17.2	4.27	31.30	16.9	4.80	24.60
AE160HCTPES/EU	-25.0	8.8	4.11	25.40	9.2	4.75	26.50	9.6	5.53	27.80	9.5	5.95	27.50															
	-20.0	12.0	5.15	34.50	11.8	5.66	34.00	11.6	5.92	33.40	11.4	6.46	32.90	11.1	6.85	32.10												
	-15.0	13.6	5.36	39.20	13.4	5.99	38.70	13.2	6.13	38.10	13.0	6.53	37.50	12.3	6.82	35.70	12.1	6.85	35.10									
	-10.0	13.8	4.96	39.70	13.6	5.33	39.30	13.5	5.75	38.90	13.3	6.13	38.50	13.1	6.58	38.00	12.9	6.86	37.30	11.9	6.82	21.60						
	-7.0	13.8	4.66	39.50	13.5	4.83	38.90	13.3	5.19	38.30	13.1	5.43	37.90	13.0	5.96	37.50	12.8	6.34	37.10	12.4	6.84	22.50	10.6	6.75	19.30			
	-2.0	12.7	3.73	36.50	12.8	4.12	36.90	12.9	4.67	37.30	12.8	4.86	37.10	12.7	5.28	36.80	12.6	5.75	36.50	12.3	6.10	22.30	12.2	6.80	22.20	10.6	6.80	15.40
	2.0	11.7	3.04	33.60	12.3	3.57	35.40	12.7	4.12	36.60	12.6	4.43	36.40	12.5	4.77	36.20	12.4	5.15	35.90	12.3	5.56	22.30	12.4	6.30	22.40	11.2	6.65	16.30
	7.0	16.3	3.04	46.90	16.1	3.32	46.50	16.0	3.62	46.00	15.9	4.03	45.80	15.5	4.43	44.80	14.0	4.50	40.60	12.5	4.36	22.70	12.4	4.84	22.50	12.3	5.64	17.90
	12.0	17.5	2.94	50.40	17.3	3.21	49.70	17.0	3.52	49.10	16.8	3.89	48.50	16.5	4.33	47.60	15.1	4.34	43.80	14.1	4.41	25.60	13.8	4.65	25.00	13.6	5.51	19.90
	15.0	18.3	2.87	52.50	17.9	3.16	51.70	17.6	3.45	50.80	17.4	3.79	50.20	17.0	4.18	49.30	15.8	4.22	45.70	15.3	4.45	27.70	14.8	4.68	26.80	14.3	5.64	20.90
	20.0	19.5	2.98	56.00	19.1	3.30	54.90	18.6	3.59	53.80	18.4	3.92	53.00	18.0	4.31	52.10	16.9	4.38	48.90	16.5	4.67	29.90	16.1	4.97	29.40	15.5	5.67	22.60
	25.0	20.7	3.04	58.00	20.2	3.38	58.00	19.7	3.64	56.70	19.3	3.95	55.80	19.0	4.33	54.90	18.0	4.40	52.00	17.5	4.70	31.80	16.2	4.68	29.50	15.7	5.14	22.90
	30.0	21.9	3.01	58.00	21.3	3.36	58.00	20.7	3.55	58.00	20.3	3.84	58.00	19.9	4.18	57.70	19.0	4.29	55.20	18.4	4.54	33.40	16.3	4.38	29.60	16.0	4.69	23.30
	35.0	23.1	2.72	58.00	22.4	3.07	58.00	21.7	3.34	58.00	21.3	3.57	58.00	20.9	3.89	58.00	20.1	4.03	58.00	18.6	4.12	33.70	16.5	4.09	30.00	14.5	4.12	21.10
AE160HCTPGS/EU	-25.0	8.8	4.11	25.40	9.2	4.75	26.50	9.6	5.53	27.80	9.5	5.95	27.50															
	-20.0	12.0	5.15	34.50	11.8	5.66	34.00	11.6	5.92	33.40	11.4	6.46	32.90	11.1	6.85	32.10												
	-15.0	13.6	5.36	39.20	13.4	5.99	38.70	13.2	6.13	38.10	13.0	6.53	37.50	12.8	7.07	36.90	12.5	7.08	36.20									
	-10.0	13.8	4.96	39.70	13.6	5.33	39.30	13.5	5.75	38.90	13.3	6.13	38.50	13.1	6.58	38.00	12.9	6.95	37.50	12.4	7.33	22.60						
	-7.0	13.8	4.66	39.50	13.5	4.83	38.90	13.3	5.19	38.30	13.1	5.43	37.90	13.0	5.96	37.50	12.8	6.34	37.10	12.4	6.84	22.50	12.1	7.76	21.90			
	-2.0	12.7	3.73	36.50	12.8	4.12	36.90	12.9	4.67	37.30	12.8	4.86	37.10	12.7	5.28	36.80	12.6	5.75	36.50	12.3	6.10	22.30	12.3	6.83	22.30	12.1	7.93	17.60
	2.0	11.7	3.04	33.60	12.3	3.57	35.40	12.7	4.12	36.60	12.6	4.43	36.40	12.5	4.77	36.20	12.4	5.15	35.90	12.3	5.56	22.30	12.4	6.30	22.40	12.3	7.43	17.80
	7.0	16.3	3.04	46.90	16.1	3.32	46.50	16.0	3.62	46.00	15.9	4.03	45.80	15.5	4.43	44.80	14.0	4.50	40.60	12.5	4.36	22.70	12.4	4.84	22.50	12.3	5.64	17.90
	12.0	17.5	2.94	50.40	17.3	3.21	49.70	17.0	3.52	49.10	16.8	3.89	48.50	16.5	4.33	47.60	15.1	4.34	43.80	14.1	4.41	25.60	13.8	4.65	25.00	13.6	5.51	19.90
	15.0	18.3	2.87	52.50	17.9	3.16	51.70	17.6	3.45	50.80	17.4	3.79	50.20	17.0	4.18	49.30	15.8	4.22	45.70	15.3	4.45	27.70	14.8	4.68	26.80	14.3	5.64	20.90
	20.0	19.5	2.98	56.00	19.1	3.30	54.90	18.6	3.59	53.80	18.4	3.92	53.00	18.0	4.31	52.10	16.9	4.38	48.90	16.5	4.67	29.90	16.1	4.97	29.40	15.7	5.74	22.90
	25.0	20.7	3.04	58.00	20.2	3.38	58.00	19.7	3.64	56.70	19.3	3.95	55.80	19.0	4.33	54.90	18.0	4.40	52.00	17.5	4.70	31.80	17.2	4.98	31.30	16.7	5.47	24.30
	30.0	21.9	3.01	58.00	21.3	3.36	58.00	20.7	3.55	58.00	20.3	3.84	58.00	19.9	4.18	57.70	19.0	4.29	55.20	18.4	4.54	33.40	18.0	4.90	32.80	17.6	5.15	25.60
	35.0	23.1	2.72	58.00	22.4	3.07	58.00	21.7	3.34	58.00	21.3	3.57	58.00	20.9	3.89	58.00	20.1	4.03	58.00	19.4	4.31	35.20	18.5	4.64	33.60	17.6	4.97	25.60

NOTE

1. Heating capacity - Capacity is according to EN14511. - Valid for heated water range (ΔT = Leaving water temperature - Entering water temperature) : If LWT≤50℃, ΔT=5℃ or 50℃<LWT≤60℃ , ΔT=8℃ or LWT>60℃, ΔT=10℃, within the minimum ~ maximum water flow rate.2. Cooling capacity - Capacity is according to EN14511. - Valid for Cooli ng water range (ΔT =Entering water temperature - Leaving water temperature) : ΔT=5℃, within the minimum ~ maximum water flow rate.3. Power input : Power input is acc ording to EN14511.4. Peak value : Tested without defrost operation in accordance with EN14511. ※ The real capacity would be changed according to the install environment.

2. Outdoor Units

2-9. Capacity table (A2W)

3) Cooling Capacity

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

Model	Tamb	Leaving Water Temp. (℃)																	
		7.0			10.0			13.0			15.0			18.0			25.0		
	DB	CC	PI	WFR	CC	PI	WFR	CC	PI	WFR	CC	PI	WFR	CC	PI	WFR	CC	PI	WFR
	℃	kW	kW	LPM	kW	kW	LPM	kW	kW	LPM	kW	kW	LPM	kW	kW	LPM	kW	kW	LPM
AE125HCTPES/EU	10.0	10.6	1.81	30.30	10.7	1.77	30.90	11.6	1.85	33.40	12.4	1.93	35.70	13.5	2.02	38.90	14.3	2.03	41.20
	20.0	10.2	2.05	29.30	10.3	1.98	29.50	11.1	2.06	31.90	11.9	2.14	34.10	13.3	2.32	38.30	14.1	2.30	40.60
	30.0	9.8	2.64	28.20	10.1	2.57	29.10	11.0	2.63	31.50	11.7	2.70	33.70	13.1	2.86	37.70	14.0	2.78	40.30
	35.0	9.5	3.17	27.30	9.9	3.04	28.40	10.6	3.00	30.50	11.3	3.03	32.60	12.5	3.12	36.00	13.5	2.88	38.80
	46.0	7.1	4.08	20.50	7.7	3.92	22.10	8.5	3.88	24.30	8.9	3.81	25.70	9.2	3.59	26.50	11.2	3.67	32.30
AE125HCTPGS/EU	10.0	10.6	1.81	30.30	10.7	1.77	30.90	11.6	1.85	33.40	12.4	1.93	35.70	13.5	2.02	38.90	14.3	2.03	41.20
	20.0	10.2	2.05	29.30	10.3	1.98	29.50	11.1	2.06	31.90	11.9	2.14	34.10	13.3	2.32	38.30	14.1	2.30	40.60
	30.0	9.8	2.64	28.20	10.1	2.57	29.10	11.0	2.63	31.50	11.7	2.70	33.70	13.1	2.86	37.70	14.0	2.78	40.30
	35.0	9.5	3.17	27.30	9.9	3.04	28.40	10.6	3.00	30.50	11.3	3.03	32.60	12.5	3.12	36.00	13.5	2.88	38.80
	46.0	7.1	4.08	20.50	7.7	3.92	22.10	8.5	3.88	24.30	8.9	3.81	25.70	9.2	3.59	26.50	11.2	3.67	32.30
AE160HCTPES/EU	10.0	11.7	2.05	33.60	12.5	2.13	35.90	13.6	2.27	39.20	14.7	2.40	42.20	16.4	2.62	47.20	18.0	2.73	51.80
	20.0	11.3	2.32	32.50	12.1	2.39	34.60	13.2	2.54	37.80	14.2	2.68	40.70	15.8	2.92	45.50	17.4	3.00	50.00
	30.0	10.9	2.99	31.30	11.6	3.02	33.30	12.7	3.15	36.40	13.6	3.29	39.20	15.2	3.52	43.90	16.7	3.51	48.20
	35.0	10.5	3.56	30.20	11.1	3.46	31.80	12.0	3.48	34.40	12.9	3.57	37.00	14.5	3.77	42.00	15.8	3.57	45.50
	46.0	7.5	4.36	21.60	8.2	4.27	23.60	9.2	4.33	26.30	9.8	4.36	28.30	10.3	4.21	29.50	12.5	4.31	36.10
AE160HCTPGS/EU	10.0	11.7	2.05	33.60	12.5	2.13	35.90	13.6	2.27	39.20	14.7	2.40	42.20	16.4	2.62	47.20	18.0	2.73	51.80
	20.0	11.3	2.32	32.50	12.1	2.39	34.60	13.2	2.54	37.80	14.2	2.68	40.70	15.8	2.92	45.50	17.4	3.00	50.00
	30.0	10.9	2.99	31.30	11.6	3.02	33.30	12.7	3.15	36.40	13.6	3.29	39.20	15.2	3.52	43.90	16.7	3.51	48.20
	35.0	10.5	3.56	30.20	11.1	3.46	31.80	12.0	3.48	34.40	12.9	3.57	37.00	14.5	3.77	42.00	15.8	3.57	45.50
	46.0	7.5	4.36	21.60	8.2	4.27	23.60	9.2	4.33	26.30	9.8	4.36	28.30	10.3	4.21	29.50	12.5	4.31	36.10

NOTE

1. Heating capacity - Capacity is according to EN14511. - Valid for heated water range (ΔT = Leaving water temperature - Entering water temperature) : If LWT≤50℃, ΔT=5℃ or 50℃<LWT≤60℃ , ΔT=8℃ or LWT>60℃, ΔT=10℃, within the minimum ~ maximum water flow rate.2. Cooling capacity - Capacity is according to EN14511. - Valid for Cooling water range (ΔT =Entering water temperature - Leaving water temperature) : ΔT=5℃, within the minimum ~ maximum water flow rate.3. Power input : Power input is according to EN14511.4. Peak value : Tested without defrost operation in accordance with EN14511. ※ The real capacity would be changed according to the install environment.

2. Outdoor Units

2-9. Capacit table (A2A)

AE125HCTPES/EU

A2A : Heating

TC : Total Capacity, PI : Power Input

Combination Ratio	Outdoor Temperature		Indoor Temperature (°C, DB)											
			16.0		18.0		20.0		21.0		22.0		24.0	
	DB	WB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
%	°C	°C	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100	-20.0	-	10.9	4.94	10.7	5.10	10.7	5.20	10.7	5.30	10.7	5.30	10.7	5.40
	-19.0	-	11.2	5.03	11.2	5.14	11.1	5.34	11.1	5.34	11.1	5.45	11.1	5.55
	-17.0	-	11.8	5.13	11.8	5.34	11.7	5.44	11.7	5.44	11.7	5.54	11.7	5.64
	-15.0	-	12.4	5.43	12.4	5.53	12.4	5.64	12.3	5.74	12.3	5.74	11.7	5.44
	-13.0	-	13.1	5.53	13.1	5.63	12.8	5.73	13.0	5.73	12.6	5.53	11.7	5.03
	-11.0	-	13.7	5.62	13.7	5.73	13.0	5.63	13.0	5.43	12.6	5.22	11.7	4.72
	-10.0	-11.0	14.0	5.42	14.0	5.52	13.0	5.22	13.0	5.02	12.6	4.81	11.7	4.52
	-9.0	-10.0	14.3	5.52	14.2	5.52	13.0	5.12	13.0	4.91	12.6	4.71	11.7	4.41
	-7.0	-8.0	14.8	5.51	14.2	5.31	13.0	4.91	13.0	4.71	12.6	4.51	11.7	4.11
	-5.0	-6.0	15.0	5.41	14.2	5.01	13.0	4.71	13.0	4.50	12.6	4.30	11.7	3.90
	-3.0	-4.0	15.0	4.90	14.2	4.60	13.0	4.30	13.0	3.99	12.6	3.89	11.7	3.59
	0	-1.0	15.0	4.59	14.2	4.29	13.0	3.89	13.0	3.79	12.6	3.59	11.7	3.28
	3.0	2.0	15.0	4.29	14.2	3.88	13.0	3.69	13.0	3.48	12.6	3.38	11.7	3.18
	5.0	4.0	15.0	3.98	14.2	3.78	13.0	3.48	13.0	3.38	12.6	3.28	11.7	2.98
	7.0	6.0	15.0	3.88	14.2	3.58	13.0	3.38	13.0	3.28	12.6	3.07	11.7	2.87
	9.0	8.0	15.0	3.67	14.2	3.47	13.3	3.17	13.0	3.07	12.6	2.97	11.7	2.77
	11.0	10.0	15.0	3.57	14.2	3.27	13.3	3.07	13.0	2.97	12.6	2.87	11.7	2.67
	13.0	12.0	15.0	3.37	14.2	3.17	13.3	2.97	13.0	2.87	12.6	2.77	11.7	2.46
	15.0	14.0	15.0	3.27	14.2	3.06	13.3	2.86	13.0	2.76	12.6	2.66	11.7	2.36
90	-20.0	-	10.7	5.71	10.7	5.81	10.7	6.01	10.7	6.11	10.7	6.11	10.5	6.12
	-19.0	-	11.1	5.76	11.1	5.86	11.1	6.17	11.1	6.17	11.1	6.27	10.5	5.81
	-17.0	-	11.7	5.85	11.7	6.16	11.7	6.26	11.7	6.26	11.3	6.06	10.5	5.40
	-15.0	-	12.4	6.25	12.3	6.36	12.1	6.26	11.7	6.06	11.3	5.65	10.5	5.20
	-13.0	-	13.1	6.35	12.9	6.35	12.1	5.74	11.7	5.54	11.3	5.34	10.5	4.89
	-11.0	-	13.6	6.44	12.9	5.84	12.1	5.43	11.7	5.23	11.3	5.03	10.5	4.59
	-10.0	-11.0	13.6	6.03	12.9	5.53	12.1	5.13	11.7	4.93	11.3	4.73	10.5	4.28
	-9.0	-10.0	13.6	5.73	12.9	5.32	12.1	5.02	11.7	4.82	11.3	4.62	10.5	4.28
	-7.0	-8.0	13.6	5.52	12.9	5.12	12.1	4.82	11.7	4.62	11.3	4.42	10.5	3.98
	-5.0	-6.0	13.6	5.22	12.9	4.91	12.1	4.51	11.7	4.41	11.3	4.11	10.5	3.77
	-3.0	-4.0	13.6	4.81	12.9	4.40	12.1	4.10	11.7	3.90	11.3	3.80	10.5	3.47
	0	-1.0	13.6	4.40	12.9	4.10	12.1	3.79	11.7	3.69	11.3	3.49	10.5	3.26
	3.0	2.0	13.6	4.09	12.9	3.79	12.1	3.59	11.7	3.39	11.3	3.29	10.5	3.06
	5.0	4.0	13.6	3.89	12.9	3.69	12.1	3.38	11.7	3.28	11.3	3.18	10.5	2.96
	7.0	6.0	13.6	3.78	12.9	3.48	12.1	3.28	11.7	3.18	11.3	3.08	10.5	2.85
	9.0	8.0	13.6	3.58	12.9	3.38	12.1	3.18	11.7	2.98	11.3	2.98	10.5	2.65
	11.0	10.0	13.6	3.48	12.9	3.28	12.1	3.08	11.7	2.98	11.3	2.88	10.5	2.65
	13.0	12.0	13.6	3.37	12.9	3.17	12.1	2.97	11.7	2.87	11.3	2.77	10.5	2.45
	15.0	14.0	13.6	3.27	12.9	3.07	12.1	2.87	11.7	2.77	11.3	2.67	10.5	2.34
80	-20.0	-	10.7	6.01	10.7	6.11	10.7	6.22	10.4	6.02	10.0	5.71	9.3	5.21
	-19.0	-	11.1	6.17	11.1	6.27	10.7	6.01	10.4	5.71	10.0	5.51	9.3	5.01
	-17.0	-	11.7	6.26	11.4	6.16	10.7	5.50	10.4	5.30	10.0	5.10	9.3	4.70
	-15.0	-	12.1	6.26	11.4	5.75	10.7	5.30	10.4	5.10	10.0	4.90	9.3	4.50
	-13.0	-	12.1	5.84	11.4	5.44	10.7	4.99	10.4	4.79	10.0	4.59	9.3	4.29
	-11.0	-	12.1	5.43	11.4	5.14	10.7	4.69	10.4	4.59	10.0	4.39	9.3	3.99
	-10.0	-11.0	12.1	5.13	11.4	4.83	10.7	4.38	10.4	4.28	10.0	3.98	9.3	3.68
	-9.0	-10.0	12.1	5.02	11.4	4.72	10.7	4.28	10.4	4.08	10.0	3.88	9.3	3.58
	-7.0	-8.0	12.1	4.82	11.4	4.52	10.7	4.08	10.4	3.87	10.0	3.78	9.3	3.47
	-5.0	-6.0	12.1	4.61	11.4	4.31	10.7	3.87	10.4	3.77	10.0	3.57	9.3	3.37
	-3.0	-4.0	12.1	4.10	11.4	3.80	10.7	3.57	10.4	3.36	10.0	3.27	9.3	3.07
	0	-1.0	12.1	3.79	11.4	3.59	10.7	3.26	10.4	3.16	10.0	3.06	9.3	2.86
	3.0	2.0	12.1	3.59	11.4	3.39	10.7	3.16	10.4	2.96	10.0	2.86	9.3	2.66
	5.0	4.0	12.1	3.49	11.4	3.18	10.7	2.96	10.4	2.85	10.0	2.76	9.3	2.66
	7.0	6.0	12.1	3.28	11.4	3.08	10.7	2.85	10.4	2.75	10.0	2.65	9.3	2.45
	9.0	8.0	12.1	3.18	11.4	2.98	10.7	2.75	10.4	2.65	10.0	2.45	9.3	2.35
	11.0	10.0	12.1	3.08	11.4	2.88	10.7	2.65	10.4	2.45	10.0	2.35	9.3	2.25
	13.0	12.0	12.1	2.97	11.4	2.77	10.7	2.45	10.4	2.35	10.0	2.35	9.3	2.15
	15.0	14.0	12.1	2.87	11.4	2.67	10.7	2.45	10.4	2.35	10.0	2.24	9.3	2.15

2. Outdoor Units

2-9. Capacit table (A2A)

AE125HCTPES/EU

A2A : Heating

TC : Total Capacity, PI : Power Input

Combination Ratio	Outdoor Temperature		Indoor Temperature (°C, DB)											
			16.0		18.0		20.0		21.0		22.0		24.0	
	DB	WB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
%	°C	°C	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70	-20.0	-	10.6	6.22	10.0	5.61	9.3	5.21	9.0	5.11	8.7	4.91	8.2	4.51
	-19.0	-	10.6	5.81	10.0	5.41	9.3	5.11	9.0	4.91	8.7	4.71	8.2	4.31
	-17.0	-	10.6	5.40	10.0	5.10	9.3	4.70	9.0	4.60	8.7	4.40	8.2	4.00
	-15.0	-	10.6	5.20	10.0	4.90	9.3	4.60	9.0	4.40	8.7	4.09	8.2	3.79
	-13.0	-	10.6	4.89	10.0	4.59	9.3	4.29	9.0	4.09	8.7	3.89	8.2	3.59
	-11.0	-	10.6	4.69	10.0	4.39	9.3	3.99	9.0	3.78	8.7	3.68	8.2	3.38
	-10.0	-11.0	10.6	4.38	10.0	3.98	9.3	3.68	9.0	3.58	8.7	3.48	8.2	3.18
	-9.0	-10.0	10.6	4.28	10.0	3.88	9.3	3.68	9.0	3.48	8.7	3.38	8.2	3.18
	-7.0	-8.0	10.6	3.98	10.0	3.78	9.3	3.47	9.0	3.38	8.7	3.28	8.2	3.08
	-5.0	-6.0	10.6	3.77	10.0	3.57	9.3	3.37	9.0	3.27	8.7	3.07	8.2	2.87
	-3.0	-4.0	10.6	3.47	10.0	3.27	9.3	3.07	9.0	2.97	8.7	2.87	8.2	2.67
	0	-1.0	10.6	3.26	10.0	3.06	9.3	2.86	9.0	2.76	8.7	2.66	8.2	2.36
	3.0	2.0	10.6	3.06	10.0	2.86	9.3	2.76	9.0	2.66	8.7	2.46	8.2	2.26
	5.0	4.0	10.6	2.96	10.0	2.76	9.3	2.66	9.0	2.45	8.7	2.35	8.2	2.15
	7.0	6.0	10.6	2.85	10.0	2.65	9.3	2.45	9.0	2.35	8.7	2.25	8.2	2.05
	9.0	8.0	10.6	2.75	10.0	2.45	9.3	2.35	9.0	2.25	8.7	2.15	8.2	2.05
	11.0	10.0	10.6	2.65	10.0	2.35	9.3	2.25	9.0	2.15	8.7	2.05	8.2	1.95
	13.0	12.0	10.6	2.45	10.0	2.35	9.3	2.15	9.0	2.15	8.7	2.05	8.2	1.85
	15.0	14.0	10.6	2.34	10.0	2.24	9.3	2.15	9.0	2.05	8.7	1.94	8.2	1.85
60	-20.0	-	9.0	5.11	8.5	4.71	8.0	4.41	7.8	4.11	7.5	4.01	7.0	3.71
	-19.0	-	9.0	4.91	8.5	4.61	8.0	4.31	7.8	4.00	7.5	3.90	7.0	3.60
	-17.0	-	9.0	4.60	8.5	4.30	8.0	3.90	7.8	3.80	7.5	3.60	7.0	3.40
	-15.0	-	9.0	4.40	8.5	3.99	8.0	3.79	7.8	3.59	7.5	3.49	7.0	3.19
	-13.0	-	9.0	3.99	8.5	3.79	8.0	3.59	7.8	3.39	7.5	3.29	7.0	3.09
	-11.0	-	9.0	3.78	8.5	3.58	8.0	3.38	7.8	3.28	7.5	3.18	7.0	2.88
	-10.0	-11.0	9.0	3.58	8.5	3.38	8.0	3.18	7.8	3.08	7.5	2.98	7.0	2.78
	-9.0	-10.0	9.0	3.48	8.5	3.28	8.0	3.08	7.8	2.98	7.5	2.88	7.0	2.68
	-7.0	-8.0	9.0	3.38	8.5	3.17	8.0	2.97	7.8	2.87	7.5	2.77	7.0	2.47
	-5.0	-6.0	9.0	3.27	8.5	3.07	8.0	2.87	7.8	2.77	7.5	2.67	7.0	2.37
	-3.0	-4.0	9.0	2.97	8.5	2.77	8.0	2.46	7.8	2.46	7.5	2.36	7.0	2.16
	0	-1.0	9.0	2.76	8.5	2.66	8.0	2.36	7.8	2.26	7.5	2.16	7.0	2.06
	3.0	2.0	9.0	2.66	8.5	2.36	8.0	2.26	7.8	2.16	7.5	2.05	7.0	1.96
	5.0	4.0	9.0	2.45	8.5	2.25	8.0	2.15	7.8	2.05	7.5	2.05	7.0	1.85
	7.0	6.0	9.0	2.35	8.5	2.15	8.0	2.05	7.8	2.05	7.5	1.95	7.0	1.85
	9.0	8.0	9.0	2.25	8.5	2.15	8.0	1.95	7.8	1.95	7.5	1.85	7.0	1.75
	11.0	10.0	9.0	2.15	8.5	2.05	8.0	1.95	7.8	1.85	7.5	1.85	7.0	1.65
	13.0	12.0	9.0	2.15	8.5	1.95	8.0	1.85	7.8	1.85	7.5	1.75	7.0	1.65
	15.0	14.0	9.0	2.05	8.5	1.95	8.0	1.85	7.8	1.74	7.5	1.75	7.0	1.65
50	-20.0	-	7.6	4.01	7.1	3.81	6.7	3.50	6.4	3.35	6.2	3.25	5.8	3.05
	-19.0	-	7.6	3.90	7.1	3.60	6.7	3.40	6.4	3.25	6.2	3.15	5.8	2.95
	-17.0	-	7.6	3.59	7.1	3.40	6.7	3.20	6.4	3.05	6.2	2.95	5.8	2.75
	-15.0	-	7.6	3.49	7.1	3.29	6.7	3.09	6.4	2.95	6.2	2.85	5.8	2.65
	-13.0	-	7.6	3.29	7.1	3.09	6.7	2.89	6.4	2.74	6.2	2.74	5.8	2.44
	-11.0	-	7.6	3.18	7.1	2.98	6.7	2.78	6.4	2.64	6.2	2.44	5.8	2.34
	-10.0	-11.0	7.6	2.98	7.1	2.78	6.7	2.47	6.4	2.44	6.2	2.34	5.8	2.14
	-9.0	-10.0	7.6	2.88	7.1	2.78	6.7	2.47	6.4	2.34	6.2	2.24	5.8	2.14
	-7.0	-8.0	7.6	2.77	7.1	2.68	6.7	2.37	6.4	2.23	6.2	2.24	5.8	2.04
	-5.0	-6.0	7.6	2.67	7.1	2.47	6.7	2.27	6.4	2.13	6.2	2.13	5.8	1.93
	-3.0	-4.0	7.6	2.36	7.1	2.26	6.7	2.06	6.4	2.03	6.2	1.93	5.8	1.83
	0	-1.0	7.6	2.26	7.1	2.06	6.7	1.96	6.4	1.93	6.2	1.83	5.8	1.73
	3.0	2.0	7.6	2.05	7.1	1.96	6.7	1.86	6.4	1.83	6.2	1.73	5.8	1.63
	5.0	4.0	7.6	2.05	7.1	1.96	6.7	1.86	6.4	1.73	6.2	1.73	5.8	1.63
	7.0	6.0	7.6	1.95	7.1	1.85	6.7	1.75	6.4	1.63	6.2	1.63	5.8	1.53
	9.0	8.0	7.6	1.85	7.1	1.75	6.7	1.65	6.4	1.63	6.2	1.52	5.8	1.42
	11.0	10.0	7.6	1.85	7.1	1.75	6.7	1.65	6.4	1.52	6.2	1.52	5.8	1.42
	13.0	12.0	7.6	1.75	7.1	1.65	6.7	1.55	6.4	1.52	6.2	1.42	5.8	1.42
	15.0	14.0	7.6	1.75	7.1	1.65	6.7	1.55	6.4	1.52	6.2	1.42	5.8	1.32

2. Outdoor Units

2-9. Capacit table (A2A)

AE125HCTPES/EU

A2A : Cooling

TC : Total Capacity, PI : Power Input

Combination Ratio	Outdoor Temperature	Indoor Temperature (°C, DB / WB)													
		14.0		16.0		18.0		19.0		20.0		22.0		24.0	
	DB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
%	°C	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100	10.0	8.6	1.26	10.2	1.64	12.0	1.90	12.7	2.02	13.5	2.14	15.2	2.53	16.7	2.77
	12.0	8.6	1.40	10.1	1.64	11.9	1.90	12.7	2.02	13.5	2.27	15.2	2.53	16.7	2.90
	14.0	8.6	1.40	10.1	1.64	11.9	1.90	12.6	2.15	13.5	2.27	15.2	2.53	16.7	2.90
	16.0	8.6	1.40	10.1	1.64	11.9	2.03	12.6	2.15	13.4	2.27	15.2	2.66	16.7	3.03
	18.0	8.5	1.40	10.1	1.64	11.9	2.03	12.6	2.15	13.4	2.39	15.1	2.78	16.7	3.28
	20.0	8.5	1.40	10.1	1.76	11.9	2.15	12.6	2.27	13.4	2.53	15.1	3.04	16.6	3.54
	21.0	8.5	1.40	10.1	1.76	11.9	2.15	12.6	2.40	13.4	2.65	15.1	3.16	16.6	3.66
	23.0	8.5	1.52	10.1	1.90	11.9	2.28	12.6	2.53	13.4	2.77	15.1	3.29	16.5	3.91
	25.0	8.5	1.52	10.1	2.02	11.9	2.54	12.6	2.78	13.4	3.03	15.1	3.55	16.3	4.03
	27.0	8.5	1.65	10.1	2.14	11.9	2.66	12.6	2.90	13.4	3.15	15.1	3.80	16.1	4.17
	29.0	8.5	1.77	10.1	2.27	11.9	2.78	12.6	3.16	13.4	3.40	15.1	4.04	15.8	4.30
	31.0	8.5	1.91	10.1	2.39	11.7	3.04	12.5	3.29	13.3	3.66	15.1	4.43	15.6	4.55
	33.0	8.5	2.03	10.0	2.53	11.7	3.17	12.5	3.54	13.3	3.91	15.0	4.69	15.2	4.68
	35.0	8.5	2.16	10.0	2.77	11.7	3.42	12.5	3.79	13.3	4.17	14.8	4.81	15.0	4.93
	37.0	8.2	2.28	9.7	2.90	11.4	3.68	12.2	4.04	12.8	4.42	13.9	5.03	14.3	5.07
	39.0	8.1	2.41	9.6	3.16	11.2	3.93	11.9	4.30	12.6	4.80	13.5	5.17	13.8	5.17
	42.0	6.1	1.77	7.2	2.26	8.5	2.91	12.5	4.55	9.6	3.54	10.0	3.66	10.2	3.78
	44.0	6.1	1.90	7.2	2.39	8.5	3.05	12.5	4.80	9.6	3.66	9.9	3.78	10.1	3.91
	46.0	8.5	3.17	10.0	4.03	11.7	5.06	12.5	5.56	13.3	6.05	13.5	6.17	13.8	6.30
90	10.0	7.7	1.13	9.2	1.40	10.7	1.64	11.5	1.77	12.2	1.90	13.6	2.14	15.2	2.53
	12.0	7.7	1.13	9.2	1.40	10.7	1.64	11.4	1.77	12.1	2.03	13.6	2.27	15.2	2.53
	14.0	7.7	1.25	9.2	1.52	10.6	1.76	11.4	1.91	12.1	2.03	13.6	2.27	15.2	2.53
	16.0	7.7	1.25	9.2	1.52	10.6	1.76	11.4	1.91	12.1	2.03	13.5	2.27	15.2	2.66
	18.0	7.7	1.25	9.2	1.52	10.6	1.76	11.4	1.91	12.1	2.15	13.5	2.39	15.1	2.78
	20.0	7.7	1.25	9.2	1.52	10.6	1.76	11.4	2.03	12.1	2.15	13.5	2.52	15.1	3.04
	21.0	7.7	1.25	9.2	1.52	10.6	1.89	11.4	2.03	12.1	2.28	13.5	2.65	15.1	3.04
	23.0	7.7	1.25	9.2	1.64	10.6	2.02	11.4	2.16	12.1	2.40	13.5	2.77	15.1	3.29
	25.0	7.5	1.39	9.2	1.77	10.6	2.14	11.4	2.40	12.1	2.53	13.5	3.03	15.1	3.55
	27.0	7.5	1.51	9.2	1.90	10.6	2.26	11.4	2.54	12.1	2.78	13.5	3.28	15.1	3.80
	29.0	7.5	1.51	9.2	2.03	10.6	2.39	11.4	2.66	12.1	2.91	13.5	3.53	15.1	4.04
	31.0	7.5	1.63	9.1	2.15	10.6	2.52	11.3	2.91	12.0	3.17	13.4	3.66	15.1	4.43
	33.0	7.5	1.76	9.1	2.28	10.5	2.77	11.3	3.05	12.0	3.29	13.4	3.91	15.0	4.69
	35.0	7.5	1.89	9.1	2.40	10.5	2.89	11.3	3.30	12.0	3.55	13.4	4.29	14.8	4.81
	37.0	7.3	2.02	8.8	2.54	10.1	3.15	10.9	3.39	11.6	3.80	12.9	4.54	13.9	5.03
	39.0	7.2	2.14	8.6	2.66	9.9	3.28	10.7	3.65	11.4	4.05	12.7	4.80	13.5	5.17
	42.0	7.2	2.26	8.6	2.91	9.9	3.54	10.7	3.90	11.4	4.31	12.7	5.18	13.3	5.30
	44.0	7.2	2.39	8.6	3.05	9.9	3.66	10.7	4.16	11.4	4.56	12.7	5.43	13.0	5.55
	46.0	7.5	2.64	9.1	3.41	10.5	4.28	11.3	4.70	12.0	5.19	13.4	6.17	13.5	6.17
80	10.0	6.8	1.01	8.2	1.27	9.5	1.52	10.1	1.52	10.8	1.64	12.2	1.90	13.5	2.14
	12.0	6.8	1.01	8.2	1.27	9.5	1.52	10.1	1.64	10.8	1.76	12.1	2.03	13.5	2.27
	14.0	6.8	1.01	8.2	1.27	9.5	1.52	10.1	1.64	10.8	1.76	12.1	2.03	13.5	2.27
	16.0	6.8	1.13	8.2	1.27	9.5	1.52	10.1	1.64	10.8	1.76	12.1	2.03	13.4	2.27
	18.0	6.8	1.13	8.2	1.40	9.5	1.52	10.1	1.64	10.7	1.76	12.1	2.03	13.4	2.39
	20.0	6.8	1.13	8.2	1.40	9.5	1.64	10.0	1.76	10.7	1.89	12.1	2.15	13.4	2.53
	21.0	6.8	1.13	8.2	1.40	9.5	1.64	10.0	1.76	10.7	1.89	12.1	2.28	13.4	2.65
	23.0	6.8	1.13	8.2	1.40	9.4	1.64	10.0	1.90	10.7	2.02	12.1	2.40	13.4	2.77
	25.0	6.8	1.13	8.2	1.53	9.4	1.77	10.0	2.02	10.7	2.14	12.1	2.53	13.4	3.03
	27.0	6.8	1.26	8.2	1.65	9.4	1.90	10.0	2.14	10.7	2.26	12.1	2.78	13.4	3.15
	29.0	6.8	1.39	8.1	1.65	9.4	2.02	10.0	2.27	10.7	2.52	12.1	2.91	13.4	3.40
	31.0	6.8	1.39	8.1	1.78	9.4	2.15	10.0	2.39	10.7	2.64	12.0	3.17	13.3	3.66
	33.0	6.8	1.51	8.1	1.91	9.4	2.27	10.0	2.53	10.7	2.77	12.0	3.29	13.3	3.91
	35.0	6.8	1.64	8.1	2.04	9.4	2.53	10.0	2.77	10.6	3.03	12.0	3.55	13.3	4.17
	37.0	6.6	1.76	7.9	2.16	9.1	2.66	9.7	2.90	10.3	3.15	11.6	3.80	12.8	4.42
	39.0	6.4	1.77	7.5	2.26	8.9	2.78	9.5	3.04	10.1	3.40	11.4	4.05	12.6	4.68
	42.0	6.4	1.90	7.5	2.38	8.9	2.91	9.5	3.28	10.1	3.54	11.4	4.31	12.6	5.05
	44.0	6.4	2.02	7.5	2.52	8.9	3.17	9.5	3.41	10.1	3.78	11.4	4.56	12.6	5.31
	46.0	6.8	2.27	8.1	2.92	9.4	3.54	10.0	4.03	10.6	4.28	12.0	5.19	13.3	6.05

2. Outdoor Units

2-9. Capacit table (A2A)

AE125HCTPES/EU

A2A : Cooling

TC : Total Capacity, PI : Power Input

Combination Ratio	Outdoor Temperature	Indoor Temperature (°C, DB / WB)													
		14.0		16.0		18.0		19.0		20.0		22.0		24.0	
	DB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
%	°C	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70	10.0	6.0	0.89	7.1	1.13	8.3	1.27	8.9	1.40	9.5	1.52	10.6	1.64	11.9	1.90
	12.0	6.0	0.89	7.1	1.13	8.3	1.27	8.8	1.40	9.5	1.52	10.6	1.64	11.7	1.91
	14.0	6.0	0.89	7.1	1.13	8.3	1.27	8.8	1.40	9.5	1.52	10.6	1.76	11.7	1.91
	16.0	6.0	1.01	7.1	1.13	8.3	1.40	8.8	1.40	9.5	1.52	10.6	1.76	11.7	2.03
	18.0	5.9	1.01	7.1	1.13	8.3	1.40	8.8	1.52	9.4	1.52	10.6	1.76	11.7	2.03
	20.0	5.9	1.01	7.1	1.13	8.3	1.40	8.8	1.52	9.4	1.64	10.6	1.76	11.7	2.03
	21.0	5.9	1.01	7.1	1.13	8.3	1.40	8.8	1.52	9.4	1.64	10.6	1.89	11.7	2.15
	23.0	5.9	1.01	7.1	1.26	8.3	1.40	8.8	1.52	9.4	1.64	10.5	2.02	11.7	2.28
	25.0	5.9	1.01	7.1	1.26	8.3	1.53	8.8	1.65	9.4	1.77	10.5	2.14	11.7	2.40
	27.0	5.9	1.14	7.0	1.39	8.3	1.65	8.8	1.77	9.4	1.90	10.5	2.26	11.7	2.66
	29.0	5.9	1.14	7.0	1.39	8.3	1.77	8.8	1.90	9.4	2.02	10.5	2.39	11.7	2.79
	31.0	5.9	1.26	7.0	1.51	8.3	1.77	8.8	2.03	9.4	2.15	10.5	2.52	11.6	3.05
	33.0	5.9	1.26	7.0	1.64	8.3	1.91	8.8	2.15	9.4	2.27	10.5	2.77	11.6	3.17
	35.0	5.9	1.40	7.0	1.64	8.2	2.03	8.7	2.28	9.4	2.53	10.5	2.89	11.6	3.42
	37.0	5.7	1.52	6.8	1.76	8.0	2.16	8.5	2.40	9.1	2.66	10.1	3.03	11.3	3.68
	39.0	5.6	1.52	6.7	1.90	7.9	2.29	8.3	2.54	8.8	2.78	9.9	3.28	11.1	3.81
	42.0	5.6	1.65	6.7	2.02	7.9	2.41	8.3	2.67	8.8	2.91	9.9	3.54	11.1	4.06
	44.0	5.6	1.65	6.7	2.14	7.9	2.55	8.3	2.92	8.8	3.17	9.9	3.66	11.1	4.32
	46.0	5.9	1.90	7.0	2.39	8.2	2.92	8.7	3.29	9.4	3.54	10.5	4.28	11.6	4.94
60	10.0	5.2	0.76	6.1	0.89	7.1	1.13	7.5	1.13	8.2	1.27	9.2	1.40	10.0	1.52
	12.0	5.2	0.76	6.1	1.01	7.1	1.13	7.5	1.13	8.2	1.27	9.1	1.40	10.0	1.64
	14.0	5.2	0.76	6.1	1.01	7.1	1.13	7.5	1.13	8.2	1.27	9.1	1.40	10.0	1.64
	16.0	5.2	0.89	6.1	1.01	7.1	1.13	7.5	1.25	8.1	1.27	9.1	1.52	10.0	1.64
	18.0	5.2	0.89	6.1	1.01	7.0	1.13	7.5	1.25	8.1	1.27	9.1	1.52	10.0	1.64
	20.0	5.2	0.89	6.1	1.01	7.0	1.13	7.5	1.25	8.1	1.40	9.1	1.52	10.0	1.76
	21.0	5.2	0.89	6.1	1.01	7.0	1.13	7.5	1.25	8.1	1.40	9.1	1.52	10.0	1.76
	23.0	5.2	0.89	6.1	1.01	7.0	1.26	7.5	1.25	8.1	1.40	9.1	1.64	10.0	1.90
	25.0	5.2	0.89	6.0	1.01	7.0	1.26	7.5	1.39	8.1	1.53	9.1	1.77	10.0	2.02
	27.0	5.2	0.89	6.0	1.14	7.0	1.39	7.5	1.39	8.1	1.53	9.1	1.77	10.0	2.14
	29.0	5.2	1.02	6.0	1.14	7.0	1.39	7.5	1.51	8.1	1.65	9.1	1.90	9.9	2.27
	31.0	5.2	1.02	6.0	1.26	7.0	1.51	7.4	1.63	8.1	1.78	9.1	2.03	9.9	2.39
	33.0	5.2	1.14	6.0	1.40	7.0	1.64	7.4	1.76	8.1	1.91	9.1	2.15	9.9	2.53
	35.0	5.1	1.14	6.0	1.40	7.0	1.64	7.4	1.89	8.1	2.04	8.9	2.40	9.9	2.65
	37.0	5.0	1.27	5.8	1.52	6.8	1.76	7.2	2.02	7.7	2.14	8.7	2.54	9.6	2.90
	39.0	4.8	1.27	5.7	1.65	6.7	1.90	7.1	2.02	7.5	2.26	8.5	2.66	9.5	3.04
	42.0	4.8	1.41	5.7	1.65	6.7	2.02	7.1	2.14	7.5	2.38	8.5	2.79	9.5	3.28
	44.0	4.8	1.41	5.7	1.77	6.7	2.14	7.1	2.26	7.5	2.52	8.5	2.91	9.5	3.41
	46.0	5.1	1.65	6.0	2.03	7.0	2.52	7.4	2.64	8.1	2.92	8.9	3.42	9.9	3.91
50	10.0	4.2	0.62	5.2	0.76	5.9	0.89	6.4	1.01	6.7	1.01	7.5	1.13	8.4	1.27
	12.0	4.2	0.75	5.2	0.76	5.9	0.89	6.4	1.01	6.7	1.01	7.5	1.13	8.4	1.27
	14.0	4.2	0.75	5.2	0.76	5.9	0.89	6.4	1.01	6.7	1.01	7.5	1.13	8.4	1.27
	16.0	4.2	0.75	5.2	0.89	5.9	1.01	6.4	1.01	6.7	1.13	7.5	1.25	8.4	1.40
	18.0	4.2	0.75	5.2	0.89	5.9	1.01	6.4	1.01	6.7	1.13	7.5	1.25	8.4	1.40
	20.0	4.2	0.75	5.2	0.89	5.9	1.01	6.4	1.01	6.7	1.13	7.5	1.25	8.4	1.40
	21.0	4.2	0.75	5.2	0.89	5.9	1.01	6.4	1.01	6.7	1.13	7.5	1.25	8.4	1.40
	23.0	4.2	0.75	5.1	0.90	5.9	1.01	6.3	1.14	6.7	1.13	7.4	1.25	8.4	1.40
	25.0	4.2	0.75	5.1	0.90	5.9	1.01	6.3	1.14	6.7	1.13	7.4	1.39	8.4	1.52
	27.0	4.2	0.75	5.1	0.90	5.9	1.14	6.3	1.14	6.7	1.26	7.4	1.39	8.4	1.65
	29.0	4.2	0.75	5.1	1.02	5.9	1.14	6.3	1.26	6.7	1.39	7.4	1.51	8.4	1.77
	31.0	4.2	0.88	5.1	1.02	5.9	1.26	6.3	1.26	6.7	1.39	7.4	1.63	8.3	1.91
	33.0	4.2	0.88	5.1	1.14	5.9	1.26	6.3	1.39	6.7	1.52	7.4	1.76	8.3	2.03
	35.0	4.2	1.00	5.1	1.14	5.8	1.40	6.3	1.52	6.7	1.64	7.4	1.89	8.3	2.16
	37.0	4.1	1.00	5.0	1.27	5.7	1.40	6.0	1.52	6.5	1.64	7.2	1.89	8.1	2.28
	39.0	4.0	1.01	4.8	1.27	5.6	1.52	5.9	1.65	6.4	1.77	7.1	2.02	7.9	2.41
	42.0	4.0	1.13	4.8	1.41	5.6	1.65	5.9	1.77	6.4	1.90	7.1	2.14	7.9	2.55
	44.0	4.0	1.13	4.8	1.41	5.6	1.65	5.9	1.90	6.4	2.02	7.1	2.26	7.9	2.67
	46.0	4.0	1.13	4.8	1.41	5.6	1.65	5.9	1.90	6.4	2.02	7.1	2.26	7.9	2.67

2. Outdoor Units

2-9. Capacit table (A2A)

AE160HCTPES/EU

A2A : Heating

TC : Total Capacity, PI : Power Input

Combination Ratio	Outdoor Temperature		Indoor Temperature (°C, DB)											
			16.0		18.0		20.0		21.0		22.0		24.0	
	DB	WB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
%	°C	°C	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100	-20.0	-	10.9	3.60	10.9	3.80	10.9	4.00	10.9	4.10	10.9	4.20	10.9	4.40
	-19.0	-	11.2	3.70	11.0	3.90	10.9	4.10	11.0	4.20	11.0	4.30	10.9	4.40
	-17.0	-	11.8	3.90	11.8	4.10	11.7	4.30	11.8	4.30	11.8	4.40	11.8	4.60
	-15.0	-	12.3	4.20	12.2	4.40	12.2	4.50	12.3	4.60	12.3	4.70	12.3	4.80
	-13.0	-	13.0	4.40	12.8	4.50	12.6	4.70	13.0	4.70	13.0	4.80	12.8	5.00
	-11.0	-	13.6	4.50	13.6	4.60	13.3	4.80	13.6	4.90	13.4	4.90	13.4	5.00
	-10.0	-11.0	13.9	4.40	14.2	4.50	13.6	4.60	13.8	4.70	13.8	4.80	13.8	4.90
	-9.0	-10.0	14.1	4.40	14.4	4.60	13.8	4.70	14.1	4.80	14.1	4.80	13.9	5.00
	-7.0	-8.0	14.6	4.50	14.6	4.60	13.9	4.80	14.4	4.80	14.4	4.90	14.4	5.00
	-5.0	-6.0	15.0	4.60	14.9	4.70	14.6	4.90	15.0	4.90	15.0	5.00	14.9	5.00
	-3.0	-4.0	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	-1.0	16.1	4.60	16.0	4.70	15.6	4.80	15.9	4.80	15.4	4.60	14.4	4.20
	3.0	2.0	17.0	4.70	17.0	4.80	16.0	4.70	15.9	4.50	15.4	4.30	14.4	3.90
	5.0	4.0	17.6	4.80	17.5	4.90	16.0	4.50	15.9	4.30	15.4	4.10	14.4	3.80
	7.0	6.0	18.1	4.80	17.6	4.60	16.0	4.30	15.9	4.10	15.4	3.90	14.4	3.60
	9.0	8.0	18.6	4.70	17.6	4.40	16.2	4.00	15.9	3.90	15.4	3.70	14.4	3.50
	11.0	10.0	18.6	4.50	17.6	4.20	16.2	3.90	15.9	3.70	15.4	3.60	14.4	3.40
	13.0	12.0	18.6	4.40	17.6	4.00	16.2	3.70	15.9	3.60	15.4	3.50	14.4	3.20
	15.0	14.0	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	-20.0	-	10.9	4.00	10.9	4.10	10.9	4.30	10.9	4.40	10.9	4.40	10.9	4.60
	-19.0	-	11.0	4.00	11.0	4.20	11.0	4.40	10.9	4.40	10.9	4.50	10.9	4.70
	-17.0	-	11.8	4.20	11.8	4.40	11.8	4.50	11.8	4.60	11.8	4.70	11.8	4.80
	-15.0	-	12.3	4.50	12.3	4.60	12.3	4.80	12.3	4.90	12.3	4.90	12.2	5.00
	-13.0	-	13.0	4.60	13.0	4.80	13.0	4.90	12.8	5.00	12.8	5.00	12.8	5.10
	-11.0	-	13.6	4.70	13.6	4.90	13.4	5.00	13.4	5.00	13.4	5.00	13.4	5.20
	-10.0	-11.0	13.8	4.60	13.8	4.70	13.8	4.90	13.8	4.90	13.8	5.00	13.6	5.00
	-9.0	-10.0	14.1	4.70	14.1	4.80	14.1	4.90	13.9	5.00	13.9	5.00	13.6	4.90
	-7.0	-8.0	14.4	4.70	14.4	4.90	14.4	5.00	14.4	5.00	14.4	5.00	13.4	4.70
	-5.0	-6.0	15.0	4.80	15.0	4.90	15.0	5.00	14.9	5.00	14.4	4.80	13.4	4.40
	-3.0	-4.0	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	-1.0	16.0	4.80	15.7	4.80	14.8	4.40	14.4	4.20	14.0	4.00	12.9	3.70
	3.0	2.0	16.7	4.80	15.7	4.40	14.8	4.10	14.4	3.90	14.0	3.80	12.9	3.50
	5.0	4.0	16.7	4.60	15.7	4.20	14.8	3.90	14.4	3.80	14.0	3.60	12.9	3.40
	7.0	6.0	16.7	4.30	15.7	4.00	14.8	3.70	14.4	3.60	14.0	3.50	12.9	3.20
	9.0	8.0	16.7	4.10	15.7	3.80	14.8	3.60	14.4	3.50	14.0	3.40	12.9	3.10
	11.0	10.0	16.7	4.00	15.7	3.70	14.8	3.50	14.4	3.40	14.0	3.20	12.9	3.00
	13.0	12.0	16.7	3.80	15.7	3.60	14.8	3.40	14.4	3.20	14.0	3.10	12.9	2.90
	15.0	14.0	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	-20.0	-	10.9	4.30	10.9	4.40	10.9	4.60	10.9	4.60	10.7	4.70	10.7	4.90
	-19.0	-	11.0	4.40	10.9	4.50	10.9	4.60	10.9	4.70	10.9	4.80	10.9	4.90
	-17.0	-	11.8	4.50	11.8	4.60	11.8	4.80	11.8	4.80	11.7	4.90	11.7	5.00
	-15.0	-	12.3	4.80	12.3	4.90	12.2	5.00	12.2	5.00	12.2	5.10	12.2	5.20
	-13.0	-	13.0	4.90	12.8	5.00	12.8	5.00	12.8	5.10	12.8	5.20	12.2	4.90
	-11.0	-	13.4	5.00	13.4	5.00	13.4	5.10	13.3	5.20	13.0	5.00	12.2	4.60
	-10.0	-11.0	13.8	4.90	13.8	5.00	13.8	5.00	13.3	4.90	13.0	4.70	12.2	4.30
	-9.0	-10.0	14.1	4.90	13.9	5.00	13.8	5.00	13.3	4.80	13.0	4.60	12.2	4.20
	-7.0	-8.0	14.4	5.00	14.4	5.00	13.6	4.80	13.1	4.60	12.8	4.40	12.0	4.00
	-5.0	-6.0	15.0	5.00	14.6	4.90	13.6	4.50	13.1	4.30	12.8	4.20	12.0	3.80
	-3.0	-4.0	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	-1.0	14.9	4.40	14.0	4.10	13.2	3.80	12.7	3.60	12.4	3.60	11.5	3.30
	3.0	2.0	14.9	4.10	14.0	3.80	13.2	3.60	12.7	3.50	12.4	3.30	11.5	3.10
	5.0	4.0	14.9	3.90	14.0	3.70	13.2	3.50	12.7	3.30	12.4	3.20	11.5	3.00
	7.0	6.0	14.9	3.70	14.0	3.60	13.2	3.30	12.7	3.20	12.4	3.10	11.5	2.80
	9.0	8.0	14.9	3.60	14.0	3.40	13.2	3.20	12.7	3.00	12.4	2.90	11.5	2.70
	11.0	10.0	14.9	3.50	14.0	3.30	13.2	3.00	12.7	2.90	12.4	2.80	11.5	2.60
	13.0	12.0	14.9	3.40	14.0	3.20	13.2	2.90	12.7	2.80	12.4	2.70	11.5	2.50
	15.0	14.0	14.9	3.30	14.0	3.10	13.2	2.80	12.7	2.70	12.4	2.60	11.5	2.40

2. Outdoor Units

2-9. Capacit table (A2A)

AE160HCTPES/EU

A2A : Heating

TC : Total Capacity, PI : Power Input

Combination Ratio	Outdoor Temperature		Indoor Temperature (°C, DB)											
			16.0		18.0		20.0		21.0		22.0		24.0	
	DB	WB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
%	°C	°C	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70	-20.0	-	10.7	4.70	10.7	4.80	10.6	4.90	10.6	5.00	10.4	4.90	9.8	4.40
	-19.0	-	10.7	4.80	10.7	4.90	10.7	5.00	10.6	4.90	10.2	4.70	9.6	4.20
	-17.0	-	11.7	4.90	11.5	5.00	11.0	4.70	10.7	4.50	10.4	4.30	9.8	3.90
	-15.0	-	12.0	5.00	11.5	4.90	10.9	4.50	10.6	4.30	10.2	4.10	9.6	3.80
	-13.0	-	12.2	4.90	11.5	4.60	10.9	4.20	10.6	4.00	10.2	3.90	9.6	3.60
	-11.0	-	12.2	4.60	11.5	4.30	10.9	3.90	10.6	3.80	10.2	3.60	9.6	3.40
	-10.0	-11.0	12.2	4.30	11.5	4.00	10.9	3.70	10.6	3.60	10.2	3.50	9.6	3.20
	-9.0	-10.0	12.2	4.20	11.5	3.90	10.9	3.60	10.6	3.50	10.2	3.40	9.6	3.10
	-7.0	-8.0	12.0	4.00	11.4	3.70	10.7	3.50	10.4	3.40	10.1	3.30	9.4	3.00
	-5.0	-6.0	12.0	3.80	11.4	3.60	10.7	3.30	10.4	3.20	10.1	3.10	9.4	2.80
	-3.0	-4.0	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	-1.0	11.6	3.30	10.9	3.00	10.2	2.80	9.9	2.70	9.6	2.60	9.0	2.40
	3.0	2.0	11.6	3.00	10.9	2.80	10.2	2.60	9.9	2.50	9.6	2.40	9.0	2.20
	5.0	4.0	11.6	2.90	10.9	2.70	10.2	2.50	9.9	2.40	9.6	2.30	9.0	2.20
	7.0	6.0	11.6	2.80	10.9	2.60	10.2	2.40	9.9	2.30	9.6	2.20	9.0	2.20
	9.0	8.0	11.6	2.60	10.9	2.50	10.2	2.30	9.9	2.20	9.6	2.20	9.0	2.10
	11.0	10.0	11.6	2.50	10.9	2.40	10.2	2.20	9.9	2.20	9.6	2.10	9.0	2.00
	13.0	12.0	11.6	2.50	10.9	2.30	10.2	2.20	9.9	2.10	9.6	2.10	9.0	1.90
	15.0	14.0	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	-20.0	-	9.8	5.00	9.3	4.70	8.8	4.30	8.5	4.10	8.2	4.00	7.6	3.60
	-19.0	-	9.9	4.90	9.3	4.50	8.8	4.20	8.5	4.00	8.2	3.80	7.6	3.60
	-17.0	-	9.9	4.50	9.3	4.20	8.8	3.80	8.5	3.70	8.2	3.60	7.6	3.30
	-15.0	-	9.9	4.30	9.3	4.00	8.8	3.70	8.5	3.60	8.2	3.50	7.6	3.20
	-13.0	-	9.9	4.00	9.3	3.70	8.8	3.60	8.5	3.40	8.2	3.30	7.6	3.00
	-11.0	-	9.9	3.80	9.3	3.60	8.8	3.40	8.5	3.20	8.2	3.10	7.6	2.80
	-10.0	-11.0	9.9	3.60	9.3	3.40	8.8	3.10	8.5	3.00	8.2	2.90	7.6	2.70
	-9.0	-10.0	9.9	3.50	9.3	3.30	8.8	3.00	8.5	2.90	8.2	2.80	7.6	2.60
	-7.0	-8.0	9.9	3.40	9.3	3.10	8.8	2.90	8.5	2.80	8.2	2.70	7.6	2.50
	-5.0	-6.0	9.9	3.20	9.3	3.00	8.8	2.80	8.5	2.70	8.2	2.60	7.6	2.40
	-3.0	-4.0	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	-1.0	9.9	2.70	9.3	2.50	8.8	2.30	8.5	2.30	8.2	2.20	7.6	2.10
	3.0	2.0	9.9	2.50	9.3	2.40	8.8	2.20	8.5	2.20	8.2	2.10	7.6	2.00
	5.0	4.0	9.9	2.40	9.3	2.30	8.8	2.20	8.5	2.10	8.2	2.10	7.6	1.90
	7.0	6.0	9.9	2.30	9.3	2.20	8.8	2.10	8.5	2.00	8.2	2.00	7.6	1.80
	9.0	8.0	9.9	2.20	9.3	2.20	8.8	2.00	8.5	2.00	8.2	1.90	7.6	1.70
	11.0	10.0	9.9	2.20	9.3	2.10	8.8	2.00	8.5	1.90	8.2	1.80	7.6	1.70
	13.0	12.0	9.9	2.10	9.3	2.00	8.8	1.90	8.5	1.80	8.2	1.80	7.6	1.60
	15.0	14.0	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	-20.0	-	8.3	4.00	7.8	3.70	7.3	3.50	7.1	3.40	6.8	3.20	6.4	3.00
	-19.0	-	8.3	3.80	7.8	3.60	7.3	3.40	7.1	3.30	6.8	3.10	6.4	2.90
	-17.0	-	8.3	3.60	7.8	3.40	7.3	3.20	7.1	3.00	6.8	2.90	6.4	2.70
	-15.0	-	8.3	3.50	7.8	3.30	7.3	3.00	7.1	2.90	6.8	2.80	6.4	2.60
	-13.0	-	8.3	3.30	7.8	3.10	7.3	2.90	7.1	2.70	6.8	2.60	6.4	2.40
	-11.0	-	8.3	3.10	7.8	2.90	7.3	2.70	7.1	2.60	6.8	2.50	6.4	2.30
	-10.0	-11.0	8.3	2.90	7.8	2.70	7.3	2.50	7.1	2.40	6.8	2.30	6.4	2.20
	-9.0	-10.0	8.3	2.80	7.8	2.60	7.3	2.50	7.1	2.40	6.8	2.30	6.4	2.20
	-7.0	-8.0	8.3	2.70	7.8	2.50	7.3	2.40	7.1	2.30	6.8	2.20	6.4	2.10
	-5.0	-6.0	8.3	2.60	7.8	2.40	7.3	2.20	7.1	2.20	6.8	2.20	6.4	2.00
	-3.0	-4.0	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	-1.0	8.3	2.20	7.8	2.10	7.3	2.00	7.1	1.90	6.8	1.90	6.4	1.70
	3.0	2.0	8.3	2.10	7.8	2.00	7.3	1.90	7.1	1.80	6.8	1.80	6.4	1.60
	5.0	4.0	8.3	2.10	7.8	1.90	7.3	1.80	7.1	1.80	6.8	1.70	6.4	1.60
	7.0	6.0	8.3	2.00	7.8	1.90	7.3	1.70	7.1	1.70	6.8	1.60	6.4	1.50
	9.0	8.0	8.3	1.90	7.8	1.80	7.3	1.70	7.1	1.60	6.8	1.50	6.4	1.40
	11.0	10.0	8.3	1.80	7.8	1.70	7.3	1.60	7.1	1.60	6.8	1.50	6.4	1.40
	13.0	12.0	8.3	1.80	7.8	1.70	7.3	1.60	7.1	1.50	6.8	1.50	6.4	1.40
	15.0	14.0	8.3	1.70	7.8	1.60	7.3	1.50	7.1	1.50	6.8	1.40	6.4	1.30

2. Outdoor Units

2-9. Capacit table (A2A)

AE160HCTPES/EU

A2A : Cooling

TC : Total Capacity, PI : Power Input

Combination Ratio	Outdoor Temperature	Indoor Temperature (°C, DB / WB)													
		14.0		16.0		18.0		19.0		20.0		22.0		24.0	
	DB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
%	°C	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100	10.0	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
	12.0	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
	14.0	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
	16.0	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
	18.0	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
	20.0	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
	21.0	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
	23.0	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
	25.0	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
	27.0	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
	29.0	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
	31.0	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
	33.0	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
	35.0	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
	37.0	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
	39.0	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
	42.0	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
	44.0	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
	46.0	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	10.0	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
	12.0	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
	14.0	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
	16.0	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
	18.0	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
	20.0	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
	21.0	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
	23.0	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
	25.0	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
	27.0	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
	29.0	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
	31.0	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
	33.0	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
	35.0	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
	37.0	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
	39.0	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
	42.0	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
	44.0	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
	46.0	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	10.0	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
	12.0	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
	14.0	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
	16.0	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
	18.0	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
	20.0	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
	21.0	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
	23.0	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
	25.0	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
	27.0	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
	29.0	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
	31.0	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
	33.0	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
	35.0	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
	37.0	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
	39.0	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
	42.0	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
	44.0	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
	46.0	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

2-9. Capacit table (A2A)

AE160HCTPES/EU

A2A : Cooling

TC : Total Capacity, PI : Power Input

Combination Ratio	Outdoor Temperature	Indoor Temperature (°C, DB / WB)													
		14.0		16.0		18.0		19.0		20.0		22.0		24.0	
	DB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
%	°C	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70	10.0	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
	12.0	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
	14.0	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
	16.0	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
	18.0	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
	20.0	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
	21.0	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
	23.0	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
	25.0	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
	27.0	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
	29.0	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
	31.0	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
	33.0	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
	35.0	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
	37.0	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
	39.0	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
	42.0	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
	44.0	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
	46.0	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	10.0	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
	12.0	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
	14.0	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
	16.0	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
	18.0	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
	20.0	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
	21.0	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
	23.0	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
	25.0	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
	27.0	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
	29.0	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
	31.0	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
	33.0	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
	35.0	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
	37.0	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
	39.0	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
	42.0	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
	44.0	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
	46.0	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	10.0	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
	12.0	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
	14.0	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
	16.0	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
	18.0	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
	20.0	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
	21.0	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
	23.0	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
	25.0	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
	27.0	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
	29.0	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
	31.0	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
	33.0	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
	35.0	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
	37.0	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
	39.0	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
	42.0	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
	44.0	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
	46.0	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. Capacit table (A2A)

AE125HCTPGS/EU

A2A : Heating

TC : Total Capacity, PI : Power Input

Combination Ratio	Outdoor Temperature		Indoor Temperature (°C, DB)											
			16.0		18.0		20.0		21.0		22.0		24.0	
	DB	WB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
%	°C	°C	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100	-20.0	-	10.9	4.94	10.7	5.10	10.7	5.20	10.7	5.30	10.7	5.30	10.7	5.40
	-19.0	-	11.2	5.03	11.2	5.14	11.1	5.34	11.1	5.34	11.1	5.45	11.1	5.55
	-17.0	-	11.8	5.13	11.8	5.34	11.7	5.44	11.7	5.44	11.7	5.54	11.7	5.64
	-15.0	-	12.4	5.43	12.4	5.53	12.4	5.64	12.3	5.74	12.3	5.74	11.7	5.44
	-13.0	-	13.1	5.53	13.1	5.63	12.8	5.73	13.0	5.73	12.6	5.53	11.7	5.03
	-11.0	-	13.7	5.62	13.7	5.73	13.0	5.63	13.0	5.43	12.6	5.22	11.7	4.72
	-10.0	-11.0	14.0	5.42	14.0	5.52	13.0	5.22	13.0	5.02	12.6	4.81	11.7	4.52
	-9.0	-10.0	14.3	5.52	14.2	5.52	13.0	5.12	13.0	4.91	12.6	4.71	11.7	4.41
	-7.0	-8.0	14.8	5.51	14.2	5.31	13.0	4.91	13.0	4.71	12.6	4.51	11.7	4.11
	-5.0	-6.0	15.0	5.41	14.2	5.01	13.0	4.71	13.0	4.50	12.6	4.30	11.7	3.90
	-3.0	-4.0	15.0	4.90	14.2	4.60	13.0	4.30	13.0	3.99	12.6	3.89	11.7	3.59
	0	-1.0	15.0	4.59	14.2	4.29	13.0	3.89	13.0	3.79	12.6	3.59	11.7	3.28
	3.0	2.0	15.0	4.29	14.2	3.88	13.0	3.69	13.0	3.48	12.6	3.38	11.7	3.18
	5.0	4.0	15.0	3.98	14.2	3.78	13.0	3.48	13.0	3.38	12.6	3.28	11.7	2.98
	7.0	6.0	15.0	3.88	14.2	3.58	13.0	3.38	13.0	3.28	12.6	3.07	11.7	2.87
	9.0	8.0	15.0	3.67	14.2	3.47	13.3	3.17	13.0	3.07	12.6	2.97	11.7	2.77
	11.0	10.0	15.0	3.57	14.2	3.27	13.3	3.07	13.0	2.97	12.6	2.87	11.7	2.67
	13.0	12.0	15.0	3.37	14.2	3.17	13.3	2.97	13.0	2.87	12.6	2.77	11.7	2.46
	15.0	14.0	15.0	3.27	14.2	3.06	13.3	2.86	13.0	2.76	12.6	2.66	11.7	2.36
90	-20.0	-	10.7	5.71	10.7	5.81	10.7	6.01	10.7	6.11	10.7	6.11	10.5	6.12
	-19.0	-	11.1	5.76	11.1	5.86	11.1	6.17	11.1	6.17	11.1	6.27	10.5	5.81
	-17.0	-	11.7	5.85	11.7	6.16	11.7	6.26	11.7	6.26	11.3	6.06	10.5	5.40
	-15.0	-	12.4	6.25	12.3	6.36	12.1	6.26	11.7	6.06	11.3	5.65	10.5	5.20
	-13.0	-	13.1	6.35	12.9	6.35	12.1	5.74	11.7	5.54	11.3	5.34	10.5	4.89
	-11.0	-	13.6	6.44	12.9	5.84	12.1	5.43	11.7	5.23	11.3	5.03	10.5	4.59
	-10.0	-11.0	13.6	6.03	12.9	5.53	12.1	5.13	11.7	4.93	11.3	4.73	10.5	4.28
	-9.0	-10.0	13.6	5.73	12.9	5.32	12.1	5.02	11.7	4.82	11.3	4.62	10.5	4.28
	-7.0	-8.0	13.6	5.52	12.9	5.12	12.1	4.82	11.7	4.62	11.3	4.42	10.5	3.98
	-5.0	-6.0	13.6	5.22	12.9	4.91	12.1	4.51	11.7	4.41	11.3	4.11	10.5	3.77
	-3.0	-4.0	13.6	4.81	12.9	4.40	12.1	4.10	11.7	3.90	11.3	3.80	10.5	3.47
	0	-1.0	13.6	4.40	12.9	4.10	12.1	3.79	11.7	3.69	11.3	3.49	10.5	3.26
	3.0	2.0	13.6	4.09	12.9	3.79	12.1	3.59	11.7	3.39	11.3	3.29	10.5	3.06
	5.0	4.0	13.6	3.89	12.9	3.69	12.1	3.38	11.7	3.28	11.3	3.18	10.5	2.96
	7.0	6.0	13.6	3.78	12.9	3.48	12.1	3.28	11.7	3.18	11.3	3.08	10.5	2.85
	9.0	8.0	13.6	3.58	12.9	3.38	12.1	3.18	11.7	2.98	11.3	2.98	10.5	2.65
	11.0	10.0	13.6	3.48	12.9	3.28	12.1	3.08	11.7	2.98	11.3	2.88	10.5	2.65
	13.0	12.0	13.6	3.37	12.9	3.17	12.1	2.97	11.7	2.87	11.3	2.77	10.5	2.45
	15.0	14.0	13.6	3.27	12.9	3.07	12.1	2.87	11.7	2.77	11.3	2.67	10.5	2.34
80	-20.0	-	10.7	6.01	10.7	6.11	10.7	6.22	10.4	6.02	10.0	5.71	9.3	5.21
	-19.0	-	11.1	6.17	11.1	6.27	10.7	6.01	10.4	5.71	10.0	5.51	9.3	5.01
	-17.0	-	11.7	6.26	11.4	6.16	10.7	5.50	10.4	5.30	10.0	5.10	9.3	4.70
	-15.0	-	12.1	6.26	11.4	5.75	10.7	5.30	10.4	5.10	10.0	4.90	9.3	4.50
	-13.0	-	12.1	5.84	11.4	5.44	10.7	4.99	10.4	4.79	10.0	4.59	9.3	4.29
	-11.0	-	12.1	5.43	11.4	5.14	10.7	4.69	10.4	4.59	10.0	4.39	9.3	3.99
	-10.0	-11.0	12.1	5.13	11.4	4.83	10.7	4.38	10.4	4.28	10.0	3.98	9.3	3.68
	-9.0	-10.0	12.1	5.02	11.4	4.72	10.7	4.28	10.4	4.08	10.0	3.88	9.3	3.58
	-7.0	-8.0	12.1	4.82	11.4	4.52	10.7	4.08	10.4	3.87	10.0	3.78	9.3	3.47
	-5.0	-6.0	12.1	4.61	11.4	4.31	10.7	3.87	10.4	3.77	10.0	3.57	9.3	3.37
	-3.0	-4.0	12.1	4.10	11.4	3.80	10.7	3.57	10.4	3.36	10.0	3.27	9.3	3.07
	0	-1.0	12.1	3.79	11.4	3.59	10.7	3.26	10.4	3.16	10.0	3.06	9.3	2.86
	3.0	2.0	12.1	3.59	11.4	3.39	10.7	3.16	10.4	2.96	10.0	2.86	9.3	2.66
	5.0	4.0	12.1	3.49	11.4	3.18	10.7	2.96	10.4	2.85	10.0	2.76	9.3	2.66
	7.0	6.0	12.1	3.28	11.4	3.08	10.7	2.85	10.4	2.75	10.0	2.65	9.3	2.45
	9.0	8.0	12.1	3.18	11.4	2.98	10.7	2.75	10.4	2.65	10.0	2.45	9.3	2.35
	11.0	10.0	12.1	3.08	11.4	2.88	10.7	2.65	10.4	2.45	10.0	2.35	9.3	2.25
	13.0	12.0	12.1	2.97	11.4	2.77	10.7	2.45	10.4	2.35	10.0	2.35	9.3	2.15
	15.0	14.0	12.1	2.87	11.4	2.67	10.7	2.45	10.4	2.35	10.0	2.24	9.3	2.15

2. Outdoor Units

2-9. Capacit table (A2A)

AE125HCTPGS/EU

A2A : Heating

TC : Total Capacity, PI : Power Input

Combination Ratio	Outdoor Temperature		Indoor Temperature (°C, DB)											
			16.0		18.0		20.0		21.0		22.0		24.0	
	DB	WB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
%	°C	°C	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70	-20.0	-	10.6	6.22	10.0	5.61	9.3	5.21	9.0	5.11	8.7	4.91	8.2	4.51
	-19.0	-	10.6	5.81	10.0	5.41	9.3	5.11	9.0	4.91	8.7	4.71	8.2	4.31
	-17.0	-	10.6	5.40	10.0	5.10	9.3	4.70	9.0	4.60	8.7	4.40	8.2	4.00
	-15.0	-	10.6	5.20	10.0	4.90	9.3	4.60	9.0	4.40	8.7	4.09	8.2	3.79
	-13.0	-	10.6	4.89	10.0	4.59	9.3	4.29	9.0	4.09	8.7	3.89	8.2	3.59
	-11.0	-	10.6	4.69	10.0	4.39	9.3	3.99	9.0	3.78	8.7	3.68	8.2	3.38
	-10.0	-11.0	10.6	4.38	10.0	3.98	9.3	3.68	9.0	3.58	8.7	3.48	8.2	3.18
	-9.0	-10.0	10.6	4.28	10.0	3.88	9.3	3.68	9.0	3.48	8.7	3.38	8.2	3.18
	-7.0	-8.0	10.6	3.98	10.0	3.78	9.3	3.47	9.0	3.38	8.7	3.28	8.2	3.08
	-5.0	-6.0	10.6	3.77	10.0	3.57	9.3	3.37	9.0	3.27	8.7	3.07	8.2	2.87
	-3.0	-4.0	10.6	3.47	10.0	3.27	9.3	3.07	9.0	2.97	8.7	2.87	8.2	2.67
	0	-1.0	10.6	3.26	10.0	3.06	9.3	2.86	9.0	2.76	8.7	2.66	8.2	2.36
	3.0	2.0	10.6	3.06	10.0	2.86	9.3	2.76	9.0	2.66	8.7	2.46	8.2	2.26
	5.0	4.0	10.6	2.96	10.0	2.76	9.3	2.66	9.0	2.45	8.7	2.35	8.2	2.15
	7.0	6.0	10.6	2.85	10.0	2.65	9.3	2.45	9.0	2.35	8.7	2.25	8.2	2.05
	9.0	8.0	10.6	2.75	10.0	2.45	9.3	2.35	9.0	2.25	8.7	2.15	8.2	2.05
	11.0	10.0	10.6	2.65	10.0	2.35	9.3	2.25	9.0	2.15	8.7	2.05	8.2	1.95
	13.0	12.0	10.6	2.45	10.0	2.35	9.3	2.15	9.0	2.15	8.7	2.05	8.2	1.85
	15.0	14.0	10.6	2.34	10.0	2.24	9.3	2.15	9.0	2.05	8.7	1.94	8.2	1.85
60	-20.0	-	9.0	5.11	8.5	4.71	8.0	4.41	7.8	4.11	7.5	4.01	7.0	3.71
	-19.0	-	9.0	4.91	8.5	4.61	8.0	4.31	7.8	4.00	7.5	3.90	7.0	3.60
	-17.0	-	9.0	4.60	8.5	4.30	8.0	3.90	7.8	3.80	7.5	3.60	7.0	3.40
	-15.0	-	9.0	4.40	8.5	3.99	8.0	3.79	7.8	3.59	7.5	3.49	7.0	3.19
	-13.0	-	9.0	3.99	8.5	3.79	8.0	3.59	7.8	3.39	7.5	3.29	7.0	3.09
	-11.0	-	9.0	3.78	8.5	3.58	8.0	3.38	7.8	3.28	7.5	3.18	7.0	2.88
	-10.0	-11.0	9.0	3.58	8.5	3.38	8.0	3.18	7.8	3.08	7.5	2.98	7.0	2.78
	-9.0	-10.0	9.0	3.48	8.5	3.28	8.0	3.08	7.8	2.98	7.5	2.88	7.0	2.68
	-7.0	-8.0	9.0	3.38	8.5	3.17	8.0	2.97	7.8	2.87	7.5	2.77	7.0	2.47
	-5.0	-6.0	9.0	3.27	8.5	3.07	8.0	2.87	7.8	2.77	7.5	2.67	7.0	2.37
	-3.0	-4.0	9.0	2.97	8.5	2.77	8.0	2.46	7.8	2.46	7.5	2.36	7.0	2.16
	0	-1.0	9.0	2.76	8.5	2.66	8.0	2.36	7.8	2.26	7.5	2.16	7.0	2.06
	3.0	2.0	9.0	2.66	8.5	2.36	8.0	2.26	7.8	2.16	7.5	2.05	7.0	1.96
	5.0	4.0	9.0	2.45	8.5	2.25	8.0	2.15	7.8	2.05	7.5	2.05	7.0	1.85
	7.0	6.0	9.0	2.35	8.5	2.15	8.0	2.05	7.8	2.05	7.5	1.95	7.0	1.85
	9.0	8.0	9.0	2.25	8.5	2.15	8.0	1.95	7.8	1.95	7.5	1.85	7.0	1.75
	11.0	10.0	9.0	2.15	8.5	2.05	8.0	1.95	7.8	1.85	7.5	1.85	7.0	1.65
	13.0	12.0	9.0	2.15	8.5	1.95	8.0	1.85	7.8	1.85	7.5	1.75	7.0	1.65
	15.0	14.0	9.0	2.05	8.5	1.95	8.0	1.85	7.8	1.74	7.5	1.75	7.0	1.65
50	-20.0	-	7.6	4.01	7.1	3.81	6.7	3.50	6.4	3.35	6.2	3.25	5.8	3.05
	-19.0	-	7.6	3.90	7.1	3.60	6.7	3.40	6.4	3.25	6.2	3.15	5.8	2.95
	-17.0	-	7.6	3.59	7.1	3.40	6.7	3.20	6.4	3.05	6.2	2.95	5.8	2.75
	-15.0	-	7.6	3.49	7.1	3.29	6.7	3.09	6.4	2.95	6.2	2.85	5.8	2.65
	-13.0	-	7.6	3.29	7.1	3.09	6.7	2.89	6.4	2.74	6.2	2.74	5.8	2.44
	-11.0	-	7.6	3.18	7.1	2.98	6.7	2.78	6.4	2.64	6.2	2.44	5.8	2.34
	-10.0	-11.0	7.6	2.98	7.1	2.78	6.7	2.47	6.4	2.44	6.2	2.34	5.8	2.14
	-9.0	-10.0	7.6	2.88	7.1	2.78	6.7	2.47	6.4	2.34	6.2	2.24	5.8	2.14
	-7.0	-8.0	7.6	2.77	7.1	2.68	6.7	2.37	6.4	2.23	6.2	2.24	5.8	2.04
	-5.0	-6.0	7.6	2.67	7.1	2.47	6.7	2.27	6.4	2.13	6.2	2.13	5.8	1.93
	-3.0	-4.0	7.6	2.36	7.1	2.26	6.7	2.06	6.4	2.03	6.2	1.93	5.8	1.83
	0	-1.0	7.6	2.26	7.1	2.06	6.7	1.96	6.4	1.93	6.2	1.83	5.8	1.73
	3.0	2.0	7.6	2.05	7.1	1.96	6.7	1.86	6.4	1.83	6.2	1.73	5.8	1.63
	5.0	4.0	7.6	2.05	7.1	1.96	6.7	1.86	6.4	1.73	6.2	1.73	5.8	1.63
	7.0	6.0	7.6	1.95	7.1	1.85	6.7	1.75	6.4	1.63	6.2	1.63	5.8	1.53
	9.0	8.0	7.6	1.85	7.1	1.75	6.7	1.65	6.4	1.63	6.2	1.52	5.8	1.42
	11.0	10.0	7.6	1.85	7.1	1.75	6.7	1.65	6.4	1.52	6.2	1.52	5.8	1.42
	13.0	12.0	7.6	1.75	7.1	1.65	6.7	1.55	6.4	1.52	6.2	1.42	5.8	1.42
	15.0	14.0	7.6	1.75	7.1	1.65	6.7	1.55	6.4	1.52	6.2	1.42	5.8	1.32

2. Outdoor Units

2-9. Capacit table (A2A)

AE125HCTPGS/EU

A2A : Cooling

TC : Total Capacity, PI : Power Input

Combination Ratio	Outdoor Temperature	Indoor Temperature (°C, DB / WB)													
		14.0		16.0		18.0		19.0		20.0		22.0		24.0	
	DB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
%	°C	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100	10.0	8.6	1.26	10.2	1.64	12.0	1.90	12.7	2.02	13.5	2.14	15.2	2.53	16.7	2.77
	12.0	8.6	1.40	10.1	1.64	11.9	1.90	12.7	2.02	13.5	2.27	15.2	2.53	16.7	2.90
	14.0	8.6	1.40	10.1	1.64	11.9	1.90	12.6	2.15	13.5	2.27	15.2	2.53	16.7	2.90
	16.0	8.6	1.40	10.1	1.64	11.9	2.03	12.6	2.15	13.4	2.27	15.2	2.66	16.7	3.03
	18.0	8.5	1.40	10.1	1.64	11.9	2.03	12.6	2.15	13.4	2.39	15.1	2.78	16.7	3.28
	20.0	8.5	1.40	10.1	1.76	11.9	2.15	12.6	2.27	13.4	2.53	15.1	3.04	16.6	3.54
	21.0	8.5	1.40	10.1	1.76	11.9	2.15	12.6	2.40	13.4	2.65	15.1	3.16	16.6	3.66
	23.0	8.5	1.52	10.1	1.90	11.9	2.28	12.6	2.53	13.4	2.77	15.1	3.29	16.5	3.91
	25.0	8.5	1.52	10.1	2.02	11.9	2.54	12.6	2.78	13.4	3.03	15.1	3.55	16.3	4.03
	27.0	8.5	1.65	10.1	2.14	11.9	2.66	12.6	2.90	13.4	3.15	15.1	3.80	16.1	4.17
	29.0	8.5	1.77	10.1	2.27	11.9	2.78	12.6	3.16	13.4	3.40	15.1	4.04	15.8	4.30
	31.0	8.5	1.91	10.1	2.39	11.7	3.04	12.5	3.29	13.3	3.66	15.1	4.43	15.6	4.55
	33.0	8.5	2.03	10.0	2.53	11.7	3.17	12.5	3.54	13.3	3.91	15.0	4.69	15.2	4.68
	35.0	8.5	2.16	10.0	2.77	11.7	3.42	12.5	3.79	13.3	4.17	14.8	4.81	15.0	4.93
	37.0	8.2	2.28	9.7	2.90	11.4	3.68	12.2	4.04	12.8	4.42	13.9	5.03	14.3	5.07
	39.0	8.1	2.41	9.6	3.16	11.2	3.93	11.9	4.30	12.6	4.80	13.5	5.17	13.8	5.17
	42.0	6.1	1.77	7.2	2.26	8.5	2.91	12.5	4.55	9.6	3.54	10.0	3.66	10.2	3.78
	44.0	6.1	1.90	7.2	2.39	8.5	3.05	12.5	4.80	9.6	3.66	9.9	3.78	10.1	3.91
	46.0	8.5	3.17	10.0	4.03	11.7	5.06	12.5	5.56	13.3	6.05	13.5	6.17	13.8	6.30
90	10.0	7.7	1.13	9.2	1.40	10.7	1.64	11.5	1.77	12.2	1.90	13.6	2.14	15.2	2.53
	12.0	7.7	1.13	9.2	1.40	10.7	1.64	11.4	1.77	12.1	2.03	13.6	2.27	15.2	2.53
	14.0	7.7	1.25	9.2	1.52	10.6	1.76	11.4	1.91	12.1	2.03	13.6	2.27	15.2	2.53
	16.0	7.7	1.25	9.2	1.52	10.6	1.76	11.4	1.91	12.1	2.03	13.5	2.27	15.2	2.66
	18.0	7.7	1.25	9.2	1.52	10.6	1.76	11.4	1.91	12.1	2.15	13.5	2.39	15.1	2.78
	20.0	7.7	1.25	9.2	1.52	10.6	1.76	11.4	2.03	12.1	2.15	13.5	2.52	15.1	3.04
	21.0	7.7	1.25	9.2	1.52	10.6	1.89	11.4	2.03	12.1	2.28	13.5	2.65	15.1	3.04
	23.0	7.7	1.25	9.2	1.64	10.6	2.02	11.4	2.16	12.1	2.40	13.5	2.77	15.1	3.29
	25.0	7.5	1.39	9.2	1.77	10.6	2.14	11.4	2.40	12.1	2.53	13.5	3.03	15.1	3.55
	27.0	7.5	1.51	9.2	1.90	10.6	2.26	11.4	2.54	12.1	2.78	13.5	3.28	15.1	3.80
	29.0	7.5	1.51	9.2	2.03	10.6	2.39	11.4	2.66	12.1	2.91	13.5	3.53	15.1	4.04
	31.0	7.5	1.63	9.1	2.15	10.6	2.52	11.3	2.91	12.0	3.17	13.4	3.66	15.1	4.43
	33.0	7.5	1.76	9.1	2.28	10.5	2.77	11.3	3.05	12.0	3.29	13.4	3.91	15.0	4.69
	35.0	7.5	1.89	9.1	2.40	10.5	2.89	11.3	3.30	12.0	3.55	13.4	4.29	14.8	4.81
	37.0	7.3	2.02	8.8	2.54	10.1	3.15	10.9	3.39	11.6	3.80	12.9	4.54	13.9	5.03
	39.0	7.2	2.14	8.6	2.66	9.9	3.28	10.7	3.65	11.4	4.05	12.7	4.80	13.5	5.17
	42.0	7.2	2.26	8.6	2.91	9.9	3.54	10.7	3.90	11.4	4.31	12.7	5.18	13.3	5.30
	44.0	7.2	2.39	8.6	3.05	9.9	3.66	10.7	4.16	11.4	4.56	12.7	5.43	13.0	5.55
	46.0	7.5	2.64	9.1	3.41	10.5	4.28	11.3	4.70	12.0	5.19	13.4	6.17	13.5	6.17
80	10.0	6.8	1.01	8.2	1.27	9.5	1.52	10.1	1.52	10.8	1.64	12.2	1.90	13.5	2.14
	12.0	6.8	1.01	8.2	1.27	9.5	1.52	10.1	1.64	10.8	1.76	12.1	2.03	13.5	2.27
	14.0	6.8	1.01	8.2	1.27	9.5	1.52	10.1	1.64	10.8	1.76	12.1	2.03	13.5	2.27
	16.0	6.8	1.13	8.2	1.27	9.5	1.52	10.1	1.64	10.8	1.76	12.1	2.03	13.4	2.27
	18.0	6.8	1.13	8.2	1.40	9.5	1.52	10.1	1.64	10.7	1.76	12.1	2.03	13.4	2.39
	20.0	6.8	1.13	8.2	1.40	9.5	1.64	10.0	1.76	10.7	1.89	12.1	2.15	13.4	2.53
	21.0	6.8	1.13	8.2	1.40	9.5	1.64	10.0	1.76	10.7	1.89	12.1	2.28	13.4	2.65
	23.0	6.8	1.13	8.2	1.40	9.4	1.64	10.0	1.90	10.7	2.02	12.1	2.40	13.4	2.77
	25.0	6.8	1.13	8.2	1.53	9.4	1.77	10.0	2.02	10.7	2.14	12.1	2.53	13.4	3.03
	27.0	6.8	1.26	8.2	1.65	9.4	1.90	10.0	2.14	10.7	2.26	12.1	2.78	13.4	3.15
	29.0	6.8	1.39	8.1	1.65	9.4	2.02	10.0	2.27	10.7	2.52	12.1	2.91	13.4	3.40
	31.0	6.8	1.39	8.1	1.78	9.4	2.15	10.0	2.39	10.7	2.64	12.0	3.17	13.3	3.66
	33.0	6.8	1.51	8.1	1.91	9.4	2.27	10.0	2.53	10.7	2.77	12.0	3.29	13.3	3.91
	35.0	6.8	1.64	8.1	2.04	9.4	2.53	10.0	2.77	10.6	3.03	12.0	3.55	13.3	4.17
	37.0	6.6	1.76	7.9	2.16	9.1	2.66	9.7	2.90	10.3	3.15	11.6	3.80	12.8	4.42
	39.0	6.4	1.77	7.5	2.26	8.9	2.78	9.5	3.04	10.1	3.40	11.4	4.05	12.6	4.68
	42.0	6.4	1.90	7.5	2.38	8.9	2.91	9.5	3.28	10.1	3.54	11.4	4.31	12.6	5.05
	44.0	6.4	2.02	7.5	2.52	8.9	3.17	9.5	3.41	10.1	3.78	11.4	4.56	12.6	5.31
	46.0	6.8	2.27	8.1	2.92	9.4	3.54	10.0	4.03	10.6	4.28	12.0	5.19	13.3	6.05

2. Outdoor Units

2-9. Capacit table (A2A)

AE125HCTPGS/EU

A2A : Cooling

TC : Total Capacity, PI : Power Input

Combination Ratio	Outdoor Temperature	Indoor Temperature (°C, DB / WB)													
		14.0		16.0		18.0		19.0		20.0		22.0		24.0	
	DB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
%	°C	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70	10.0	6.0	0.89	7.1	1.13	8.3	1.27	8.9	1.40	9.5	1.52	10.6	1.64	11.9	1.90
	12.0	6.0	0.89	7.1	1.13	8.3	1.27	8.8	1.40	9.5	1.52	10.6	1.64	11.7	1.91
	14.0	6.0	0.89	7.1	1.13	8.3	1.27	8.8	1.40	9.5	1.52	10.6	1.76	11.7	1.91
	16.0	6.0	1.01	7.1	1.13	8.3	1.40	8.8	1.40	9.5	1.52	10.6	1.76	11.7	2.03
	18.0	5.9	1.01	7.1	1.13	8.3	1.40	8.8	1.52	9.4	1.52	10.6	1.76	11.7	2.03
	20.0	5.9	1.01	7.1	1.13	8.3	1.40	8.8	1.52	9.4	1.64	10.6	1.76	11.7	2.03
	21.0	5.9	1.01	7.1	1.13	8.3	1.40	8.8	1.52	9.4	1.64	10.6	1.89	11.7	2.15
	23.0	5.9	1.01	7.1	1.26	8.3	1.40	8.8	1.52	9.4	1.64	10.5	2.02	11.7	2.28
	25.0	5.9	1.01	7.1	1.26	8.3	1.53	8.8	1.65	9.4	1.77	10.5	2.14	11.7	2.40
	27.0	5.9	1.14	7.0	1.39	8.3	1.65	8.8	1.77	9.4	1.90	10.5	2.26	11.7	2.66
	29.0	5.9	1.14	7.0	1.39	8.3	1.77	8.8	1.90	9.4	2.02	10.5	2.39	11.7	2.79
	31.0	5.9	1.26	7.0	1.51	8.3	1.77	8.8	2.03	9.4	2.15	10.5	2.52	11.6	3.05
	33.0	5.9	1.26	7.0	1.64	8.3	1.91	8.8	2.15	9.4	2.27	10.5	2.77	11.6	3.17
	35.0	5.9	1.40	7.0	1.64	8.2	2.03	8.7	2.28	9.4	2.53	10.5	2.89	11.6	3.42
	37.0	5.7	1.52	6.8	1.76	8.0	2.16	8.5	2.40	9.1	2.66	10.1	3.03	11.3	3.68
	39.0	5.6	1.52	6.7	1.90	7.9	2.29	8.3	2.54	8.8	2.78	9.9	3.28	11.1	3.81
	42.0	5.6	1.65	6.7	2.02	7.9	2.41	8.3	2.67	8.8	2.91	9.9	3.54	11.1	4.06
	44.0	5.6	1.65	6.7	2.14	7.9	2.55	8.3	2.92	8.8	3.17	9.9	3.66	11.1	4.32
	46.0	5.9	1.90	7.0	2.39	8.2	2.92	8.7	3.29	9.4	3.54	10.5	4.28	11.6	4.94
60	10.0	5.2	0.76	6.1	0.89	7.1	1.13	7.5	1.13	8.2	1.27	9.2	1.40	10.0	1.52
	12.0	5.2	0.76	6.1	1.01	7.1	1.13	7.5	1.13	8.2	1.27	9.1	1.40	10.0	1.64
	14.0	5.2	0.76	6.1	1.01	7.1	1.13	7.5	1.13	8.2	1.27	9.1	1.40	10.0	1.64
	16.0	5.2	0.89	6.1	1.01	7.1	1.13	7.5	1.25	8.1	1.27	9.1	1.52	10.0	1.64
	18.0	5.2	0.89	6.1	1.01	7.0	1.13	7.5	1.25	8.1	1.27	9.1	1.52	10.0	1.64
	20.0	5.2	0.89	6.1	1.01	7.0	1.13	7.5	1.25	8.1	1.40	9.1	1.52	10.0	1.76
	21.0	5.2	0.89	6.1	1.01	7.0	1.13	7.5	1.25	8.1	1.40	9.1	1.52	10.0	1.76
	23.0	5.2	0.89	6.1	1.01	7.0	1.26	7.5	1.25	8.1	1.40	9.1	1.64	10.0	1.90
	25.0	5.2	0.89	6.0	1.01	7.0	1.26	7.5	1.39	8.1	1.53	9.1	1.77	10.0	2.02
	27.0	5.2	0.89	6.0	1.14	7.0	1.39	7.5	1.39	8.1	1.53	9.1	1.77	10.0	2.14
	29.0	5.2	1.02	6.0	1.14	7.0	1.39	7.5	1.51	8.1	1.65	9.1	1.90	9.9	2.27
	31.0	5.2	1.02	6.0	1.26	7.0	1.51	7.4	1.63	8.1	1.78	9.1	2.03	9.9	2.39
	33.0	5.2	1.14	6.0	1.40	7.0	1.64	7.4	1.76	8.1	1.91	9.1	2.15	9.9	2.53
	35.0	5.1	1.14	6.0	1.40	7.0	1.64	7.4	1.89	8.1	2.04	8.9	2.40	9.9	2.65
	37.0	5.0	1.27	5.8	1.52	6.8	1.76	7.2	2.02	7.7	2.14	8.7	2.54	9.6	2.90
	39.0	4.8	1.27	5.7	1.65	6.7	1.90	7.1	2.02	7.5	2.26	8.5	2.66	9.5	3.04
	42.0	4.8	1.41	5.7	1.65	6.7	2.02	7.1	2.14	7.5	2.38	8.5	2.79	9.5	3.28
	44.0	4.8	1.41	5.7	1.77	6.7	2.14	7.1	2.26	7.5	2.52	8.5	2.91	9.5	3.41
	46.0	5.1	1.65	6.0	2.03	7.0	2.52	7.4	2.64	8.1	2.92	8.9	3.42	9.9	3.91
50	10.0	4.2	0.62	5.2	0.76	5.9	0.89	6.4	1.01	6.7	1.01	7.5	1.13	8.4	1.27
	12.0	4.2	0.75	5.2	0.76	5.9	0.89	6.4	1.01	6.7	1.01	7.5	1.13	8.4	1.27
	14.0	4.2	0.75	5.2	0.76	5.9	0.89	6.4	1.01	6.7	1.01	7.5	1.13	8.4	1.27
	16.0	4.2	0.75	5.2	0.89	5.9	1.01	6.4	1.01	6.7	1.13	7.5	1.25	8.4	1.40
	18.0	4.2	0.75	5.2	0.89	5.9	1.01	6.4	1.01	6.7	1.13	7.5	1.25	8.4	1.40
	20.0	4.2	0.75	5.2	0.89	5.9	1.01	6.4	1.01	6.7	1.13	7.5	1.25	8.4	1.40
	21.0	4.2	0.75	5.2	0.89	5.9	1.01	6.4	1.01	6.7	1.13	7.5	1.25	8.4	1.40
	23.0	4.2	0.75	5.1	0.90	5.9	1.01	6.3	1.14	6.7	1.13	7.4	1.25	8.4	1.40
	25.0	4.2	0.75	5.1	0.90	5.9	1.01	6.3	1.14	6.7	1.13	7.4	1.39	8.4	1.52
	27.0	4.2	0.75	5.1	0.90	5.9	1.14	6.3	1.14	6.7	1.26	7.4	1.39	8.4	1.65
	29.0	4.2	0.75	5.1	1.02	5.9	1.14	6.3	1.26	6.7	1.39	7.4	1.51	8.4	1.77
	31.0	4.2	0.88	5.1	1.02	5.9	1.26	6.3	1.26	6.7	1.39	7.4	1.63	8.3	1.91
	33.0	4.2	0.88	5.1	1.14	5.9	1.26	6.3	1.39	6.7	1.52	7.4	1.76	8.3	2.03
	35.0	4.2	1.00	5.1	1.14	5.8	1.40	6.3	1.52	6.7	1.64	7.4	1.89	8.3	2.16
	37.0	4.1	1.00	5.0	1.27	5.7	1.40	6.0	1.52	6.5	1.64	7.2	1.89	8.1	2.28
	39.0	4.0	1.01	4.8	1.27	5.6	1.52	5.9	1.65	6.4	1.77	7.1	2.02	7.9	2.41
	42.0	4.0	1.13	4.8	1.41	5.6	1.65	5.9	1.77	6.4	1.90	7.1	2.14	7.9	2.55
	44.0	4.0	1.13	4.8	1.41	5.6	1.65	5.9	1.90	6.4	2.02	7.1	2.26	7.9	2.67
	46.0	4.0	1.13	4.8	1.41	5.6	1.65	5.9	1.90	6.4	2.02	7.1	2.26	7.9	2.67

2. Outdoor Units

2-9. Capacit table (A2A)

AE160HCTPGS/EU

A2A : Heating

TC : Total Capacity, PI : Power Input

Combination Ratio	Outdoor Temperature		Indoor Temperature (°C, DB)											
			16.0		18.0		20.0		21.0		22.0		24.0	
	DB	WB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
%	°C	°C	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100	-20.0	-	10.9	3.60	10.9	3.80	10.9	4.00	10.9	4.10	10.9	4.20	10.9	4.40
	-19.0	-	11.2	3.70	11.0	3.90	10.9	4.10	11.0	4.20	11.0	4.30	10.9	4.40
	-17.0	-	11.8	3.90	11.8	4.10	11.7	4.30	11.8	4.30	11.8	4.40	11.8	4.60
	-15.0	-	12.3	4.20	12.2	4.40	12.2	4.50	12.3	4.60	12.3	4.70	12.3	4.80
	-13.0	-	13.0	4.40	12.8	4.50	12.6	4.70	13.0	4.70	13.0	4.80	12.8	5.00
	-11.0	-	13.6	4.50	13.6	4.60	13.3	4.80	13.6	4.90	13.4	4.90	13.4	5.00
	-10.0	-11.0	13.9	4.40	14.2	4.50	13.6	4.60	13.8	4.70	13.8	4.80	13.8	4.90
	-9.0	-10.0	14.1	4.40	14.4	4.60	13.8	4.70	14.1	4.80	14.1	4.80	13.9	5.00
	-7.0	-8.0	14.6	4.50	14.6	4.60	13.9	4.80	14.4	4.80	14.4	4.90	14.4	5.00
	-5.0	-6.0	15.0	4.60	14.9	4.70	14.6	4.90	15.0	4.90	15.0	5.00	14.9	5.00
	-3.0	-4.0	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	-1.0	16.1	4.60	16.0	4.70	15.6	4.80	15.9	4.80	15.4	4.60	14.4	4.20
	3.0	2.0	17.0	4.70	17.0	4.80	16.0	4.70	15.9	4.50	15.4	4.30	14.4	3.90
	5.0	4.0	17.6	4.80	17.5	4.90	16.0	4.50	15.9	4.30	15.4	4.10	14.4	3.80
	7.0	6.0	18.1	4.80	17.6	4.60	16.0	4.30	15.9	4.10	15.4	3.90	14.4	3.60
	9.0	8.0	18.6	4.70	17.6	4.40	16.2	4.00	15.9	3.90	15.4	3.70	14.4	3.50
	11.0	10.0	18.6	4.50	17.6	4.20	16.2	3.90	15.9	3.70	15.4	3.60	14.4	3.40
	13.0	12.0	18.6	4.40	17.6	4.00	16.2	3.70	15.9	3.60	15.4	3.50	14.4	3.20
	15.0	14.0	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	-20.0	-	10.9	4.00	10.9	4.10	10.9	4.30	10.9	4.40	10.9	4.40	10.9	4.60
	-19.0	-	11.0	4.00	11.0	4.20	11.0	4.40	10.9	4.40	10.9	4.50	10.9	4.70
	-17.0	-	11.8	4.20	11.8	4.40	11.8	4.50	11.8	4.60	11.8	4.70	11.8	4.80
	-15.0	-	12.3	4.50	12.3	4.60	12.3	4.80	12.3	4.90	12.3	4.90	12.2	5.00
	-13.0	-	13.0	4.60	13.0	4.80	13.0	4.90	12.8	5.00	12.8	5.00	12.8	5.10
	-11.0	-	13.6	4.70	13.6	4.90	13.4	5.00	13.4	5.00	13.4	5.00	13.4	5.20
	-10.0	-11.0	13.8	4.60	13.8	4.70	13.8	4.90	13.8	4.90	13.8	5.00	13.6	5.00
	-9.0	-10.0	14.1	4.70	14.1	4.80	14.1	4.90	13.9	5.00	13.9	5.00	13.6	4.90
	-7.0	-8.0	14.4	4.70	14.4	4.90	14.4	5.00	14.4	5.00	14.4	5.00	13.4	4.70
	-5.0	-6.0	15.0	4.80	15.0	4.90	15.0	5.00	14.9	5.00	14.4	4.80	13.4	4.40
	-3.0	-4.0	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	-1.0	16.0	4.80	15.7	4.80	14.8	4.40	14.4	4.20	14.0	4.00	12.9	3.70
	3.0	2.0	16.7	4.80	15.7	4.40	14.8	4.10	14.4	3.90	14.0	3.80	12.9	3.50
	5.0	4.0	16.7	4.60	15.7	4.20	14.8	3.90	14.4	3.80	14.0	3.60	12.9	3.40
	7.0	6.0	16.7	4.30	15.7	4.00	14.8	3.70	14.4	3.60	14.0	3.50	12.9	3.20
	9.0	8.0	16.7	4.10	15.7	3.80	14.8	3.60	14.4	3.50	14.0	3.40	12.9	3.10
	11.0	10.0	16.7	4.00	15.7	3.70	14.8	3.50	14.4	3.40	14.0	3.20	12.9	3.00
	13.0	12.0	16.7	3.80	15.7	3.60	14.8	3.40	14.4	3.20	14.0	3.10	12.9	2.90
	15.0	14.0	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	-20.0	-	10.9	4.30	10.9	4.40	10.9	4.60	10.9	4.60	10.7	4.70	10.7	4.90
	-19.0	-	11.0	4.40	10.9	4.50	10.9	4.60	10.9	4.70	10.9	4.80	10.9	4.90
	-17.0	-	11.8	4.50	11.8	4.60	11.8	4.80	11.8	4.80	11.7	4.90	11.7	5.00
	-15.0	-	12.3	4.80	12.3	4.90	12.2	5.00	12.2	5.00	12.2	5.10	12.2	5.20
	-13.0	-	13.0	4.90	12.8	5.00	12.8	5.00	12.8	5.10	12.8	5.20	12.2	4.90
	-11.0	-	13.4	5.00	13.4	5.00	13.4	5.10	13.3	5.20	13.0	5.00	12.2	4.60
	-10.0	-11.0	13.8	4.90	13.8	5.00	13.8	5.00	13.3	4.90	13.0	4.70	12.2	4.30
	-9.0	-10.0	14.1	4.90	13.9	5.00	13.8	5.00	13.3	4.80	13.0	4.60	12.2	4.20
	-7.0	-8.0	14.4	5.00	14.4	5.00	13.6	4.80	13.1	4.60	12.8	4.40	12.0	4.00
	-5.0	-6.0	15.0	5.00	14.6	4.90	13.6	4.50	13.1	4.30	12.8	4.20	12.0	3.80
	-3.0	-4.0	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	-1.0	14.9	4.40	14.0	4.10	13.2	3.80	12.7	3.60	12.4	3.60	11.5	3.30
	3.0	2.0	14.9	4.10	14.0	3.80	13.2	3.60	12.7	3.50	12.4	3.30	11.5	3.10
	5.0	4.0	14.9	3.90	14.0	3.70	13.2	3.50	12.7	3.30	12.4	3.20	11.5	3.00
	7.0	6.0	14.9	3.70	14.0	3.60	13.2	3.30	12.7	3.20	12.4	3.10	11.5	2.80
	9.0	8.0	14.9	3.60	14.0	3.40	13.2	3.20	12.7	3.00	12.4	2.90	11.5	2.70
	11.0	10.0	14.9	3.50	14.0	3.30	13.2	3.00	12.7	2.90	12.4	2.80	11.5	2.60
	13.0	12.0	14.9	3.40	14.0	3.20	13.2	2.90	12.7	2.80	12.4	2.70	11.5	2.50
	15.0	14.0	14.9	3.30	14.0	3.10	13.2	2.80	12.7	2.70	12.4	2.60	11.5	2.40

2. Outdoor Units

2-9. Capacit table (A2A)

AE160HCTPGS/EU

A2A : Heating

TC : Total Capacity, PI : Power Input

Combination Ratio	Outdoor Temperature		Indoor Temperature (°C, DB)											
			16.0		18.0		20.0		21.0		22.0		24.0	
	DB	WB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
%	°C	°C	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70	-20.0	-	10.7	4.70	10.7	4.80	10.6	4.90	10.6	5.00	10.4	4.90	9.8	4.40
	-19.0	-	10.7	4.80	10.7	4.90	10.7	5.00	10.6	4.90	10.2	4.70	9.6	4.20
	-17.0	-	11.7	4.90	11.5	5.00	11.0	4.70	10.7	4.50	10.4	4.30	9.8	3.90
	-15.0	-	12.0	5.00	11.5	4.90	10.9	4.50	10.6	4.30	10.2	4.10	9.6	3.80
	-13.0	-	12.2	4.90	11.5	4.60	10.9	4.20	10.6	4.00	10.2	3.90	9.6	3.60
	-11.0	-	12.2	4.60	11.5	4.30	10.9	3.90	10.6	3.80	10.2	3.60	9.6	3.40
	-10.0	-11.0	12.2	4.30	11.5	4.00	10.9	3.70	10.6	3.60	10.2	3.50	9.6	3.20
	-9.0	-10.0	12.2	4.20	11.5	3.90	10.9	3.60	10.6	3.50	10.2	3.40	9.6	3.10
	-7.0	-8.0	12.0	4.00	11.4	3.70	10.7	3.50	10.4	3.40	10.1	3.30	9.4	3.00
	-5.0	-6.0	12.0	3.80	11.4	3.60	10.7	3.30	10.4	3.20	10.1	3.10	9.4	2.80
	-3.0	-4.0	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	-1.0	11.6	3.30	10.9	3.00	10.2	2.80	9.9	2.70	9.6	2.60	9.0	2.40
	3.0	2.0	11.6	3.00	10.9	2.80	10.2	2.60	9.9	2.50	9.6	2.40	9.0	2.20
	5.0	4.0	11.6	2.90	10.9	2.70	10.2	2.50	9.9	2.40	9.6	2.30	9.0	2.20
	7.0	6.0	11.6	2.80	10.9	2.60	10.2	2.40	9.9	2.30	9.6	2.20	9.0	2.20
	9.0	8.0	11.6	2.60	10.9	2.50	10.2	2.30	9.9	2.20	9.6	2.20	9.0	2.10
	11.0	10.0	11.6	2.50	10.9	2.40	10.2	2.20	9.9	2.20	9.6	2.10	9.0	2.00
	13.0	12.0	11.6	2.50	10.9	2.30	10.2	2.20	9.9	2.10	9.6	2.10	9.0	1.90
	15.0	14.0	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	-20.0	-	9.8	5.00	9.3	4.70	8.8	4.30	8.5	4.10	8.2	4.00	7.6	3.60
	-19.0	-	9.9	4.90	9.3	4.50	8.8	4.20	8.5	4.00	8.2	3.80	7.6	3.60
	-17.0	-	9.9	4.50	9.3	4.20	8.8	3.80	8.5	3.70	8.2	3.60	7.6	3.30
	-15.0	-	9.9	4.30	9.3	4.00	8.8	3.70	8.5	3.60	8.2	3.50	7.6	3.20
	-13.0	-	9.9	4.00	9.3	3.70	8.8	3.60	8.5	3.40	8.2	3.30	7.6	3.00
	-11.0	-	9.9	3.80	9.3	3.60	8.8	3.40	8.5	3.20	8.2	3.10	7.6	2.80
	-10.0	-11.0	9.9	3.60	9.3	3.40	8.8	3.10	8.5	3.00	8.2	2.90	7.6	2.70
	-9.0	-10.0	9.9	3.50	9.3	3.30	8.8	3.00	8.5	2.90	8.2	2.80	7.6	2.60
	-7.0	-8.0	9.9	3.40	9.3	3.10	8.8	2.90	8.5	2.80	8.2	2.70	7.6	2.50
	-5.0	-6.0	9.9	3.20	9.3	3.00	8.8	2.80	8.5	2.70	8.2	2.60	7.6	2.40
	-3.0	-4.0	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	-1.0	9.9	2.70	9.3	2.50	8.8	2.30	8.5	2.30	8.2	2.20	7.6	2.10
	3.0	2.0	9.9	2.50	9.3	2.40	8.8	2.20	8.5	2.20	8.2	2.10	7.6	2.00
	5.0	4.0	9.9	2.40	9.3	2.30	8.8	2.20	8.5	2.10	8.2	2.10	7.6	1.90
	7.0	6.0	9.9	2.30	9.3	2.20	8.8	2.10	8.5	2.00	8.2	2.00	7.6	1.80
	9.0	8.0	9.9	2.20	9.3	2.20	8.8	2.00	8.5	2.00	8.2	1.90	7.6	1.70
	11.0	10.0	9.9	2.20	9.3	2.10	8.8	2.00	8.5	1.90	8.2	1.80	7.6	1.70
	13.0	12.0	9.9	2.10	9.3	2.00	8.8	1.90	8.5	1.80	8.2	1.80	7.6	1.60
	15.0	14.0	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	-20.0	-	8.3	4.00	7.8	3.70	7.3	3.50	7.1	3.40	6.8	3.20	6.4	3.00
	-19.0	-	8.3	3.80	7.8	3.60	7.3	3.40	7.1	3.30	6.8	3.10	6.4	2.90
	-17.0	-	8.3	3.60	7.8	3.40	7.3	3.20	7.1	3.00	6.8	2.90	6.4	2.70
	-15.0	-	8.3	3.50	7.8	3.30	7.3	3.00	7.1	2.90	6.8	2.80	6.4	2.60
	-13.0	-	8.3	3.30	7.8	3.10	7.3	2.90	7.1	2.70	6.8	2.60	6.4	2.40
	-11.0	-	8.3	3.10	7.8	2.90	7.3	2.70	7.1	2.60	6.8	2.50	6.4	2.30
	-10.0	-11.0	8.3	2.90	7.8	2.70	7.3	2.50	7.1	2.40	6.8	2.30	6.4	2.20
	-9.0	-10.0	8.3	2.80	7.8	2.60	7.3	2.50	7.1	2.40	6.8	2.30	6.4	2.20
	-7.0	-8.0	8.3	2.70	7.8	2.50	7.3	2.40	7.1	2.30	6.8	2.20	6.4	2.10
	-5.0	-6.0	8.3	2.60	7.8	2.40	7.3	2.20	7.1	2.20	6.8	2.20	6.4	2.00
	-3.0	-4.0	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	-1.0	8.3	2.20	7.8	2.10	7.3	2.00	7.1	1.90	6.8	1.90	6.4	1.70
	3.0	2.0	8.3	2.10	7.8	2.00	7.3	1.90	7.1	1.80	6.8	1.80	6.4	1.60
	5.0	4.0	8.3	2.10	7.8	1.90	7.3	1.80	7.1	1.80	6.8	1.70	6.4	1.60
	7.0	6.0	8.3	2.00	7.8	1.90	7.3	1.70	7.1	1.70	6.8	1.60	6.4	1.50
	9.0	8.0	8.3	1.90	7.8	1.80	7.3	1.70	7.1	1.60	6.8	1.50	6.4	1.40
	11.0	10.0	8.3	1.80	7.8	1.70	7.3	1.60	7.1	1.60	6.8	1.50	6.4	1.40
	13.0	12.0	8.3	1.80	7.8	1.70	7.3	1.60	7.1	1.50	6.8	1.50	6.4	1.40
	15.0	14.0	8.3	1.70	7.8	1.60	7.3	1.50	7.1	1.50	6.8	1.40	6.4	1.30

2. Outdoor Units

2-9. Capacit table (A2A)

AE160HCTPGS/EU

A2A : Cooling

TC : Total Capacity, PI : Power Input

Combination Ratio	Outdoor Temperature	Indoor Temperature (°C, DB / WB)													
		14.0		16.0		18.0		19.0		20.0		22.0		24.0	
	DB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
%	°C	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100	10.0	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
	12.0	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
	14.0	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
	16.0	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
	18.0	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
	20.0	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
	21.0	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
	23.0	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
	25.0	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
	27.0	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
	29.0	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
	31.0	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
	33.0	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
	35.0	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
	37.0	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
	39.0	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
	42.0	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
	44.0	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
	46.0	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	10.0	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
	12.0	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
	14.0	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
	16.0	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
	18.0	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
	20.0	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
	21.0	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
	23.0	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
	25.0	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
	27.0	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
	29.0	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
	31.0	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
	33.0	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
	35.0	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
	37.0	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
	39.0	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
	42.0	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
	44.0	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
	46.0	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	10.0	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
	12.0	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
	14.0	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
	16.0	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
	18.0	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
	20.0	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
	21.0	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
	23.0	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
	25.0	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
	27.0	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
	29.0	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
	31.0	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
	33.0	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
	35.0	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
	37.0	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
	39.0	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
	42.0	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
	44.0	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
	46.0	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

2-9. Capacit table (A2A)

AE160HCTPGS/EU

A2A : Cooling

TC : Total Capacity, PI : Power Input

Combination Ratio	Outdoor Temperature	Indoor Temperature (°C, DB / WB)													
		14.0		16.0		18.0		19.0		20.0		22.0		24.0	
	DB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
%	°C	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70	10.0	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
	12.0	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
	14.0	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
	16.0	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
	18.0	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
	20.0	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
	21.0	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
	23.0	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
	25.0	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
	27.0	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
	29.0	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
	31.0	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
	33.0	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
	35.0	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
	37.0	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
	39.0	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
	42.0	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
	44.0	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
	46.0	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	10.0	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
	12.0	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
	14.0	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
	16.0	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
	18.0	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
	20.0	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
	21.0	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
	23.0	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
	25.0	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
	27.0	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
	29.0	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
	31.0	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
	33.0	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
	35.0	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
	37.0	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
	39.0	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
	42.0	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
	44.0	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
	46.0	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	10.0	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
	12.0	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
	14.0	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
	16.0	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
	18.0	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
	20.0	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
	21.0	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
	23.0	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
	25.0	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
	27.0	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
	29.0	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
	31.0	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
	33.0	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
	35.0	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
	37.0	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
	39.0	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
	42.0	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
	44.0	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
	46.0	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

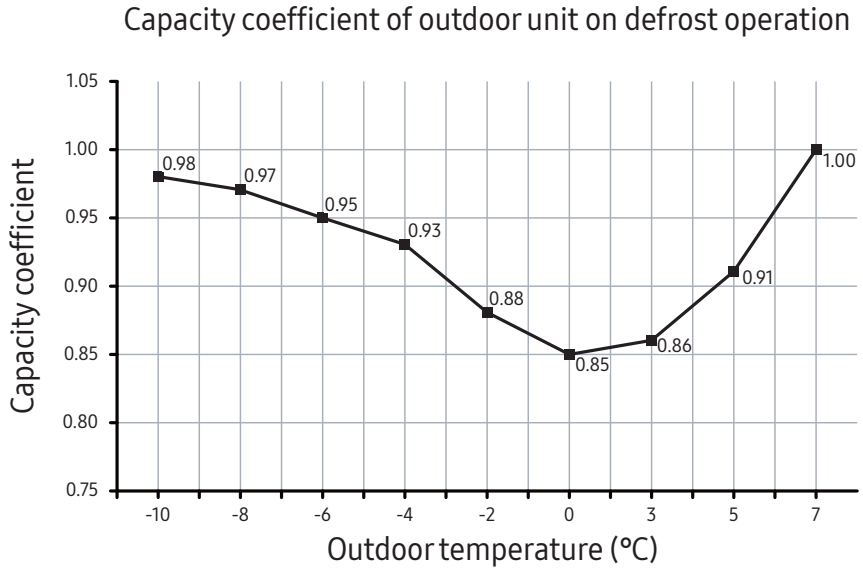
2-9. Capacity correction (Air to Air)

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

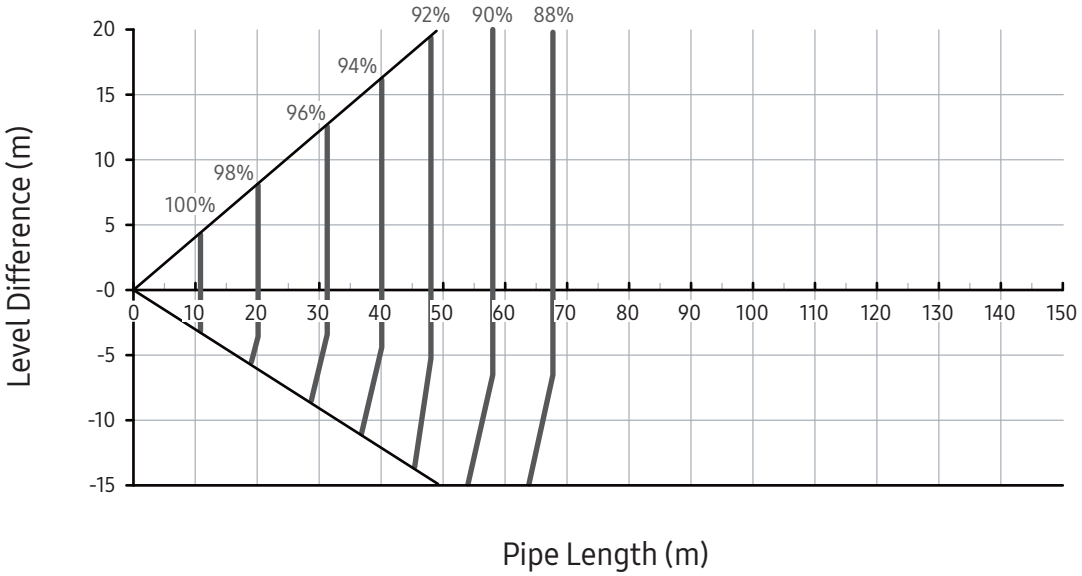
Corrected Heating Capacity = heating Capacity X Capacity coefficient



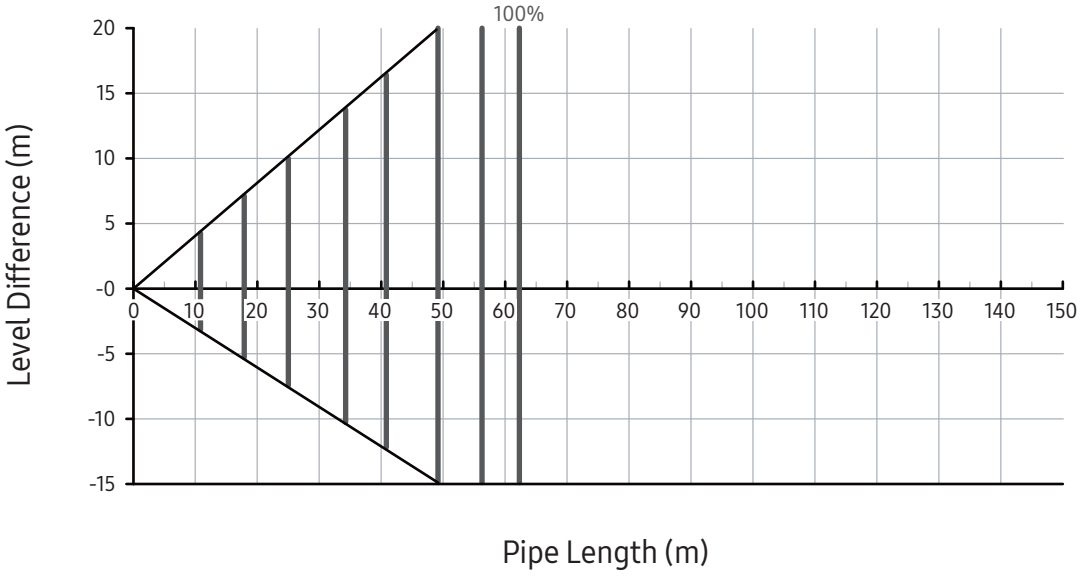
2. Outdoor Units

2-9. Capacity correction

1) Cooling



2) Heating



2. Outdoor Units

2-9. Silent mode corrections

Heating

Silent Function	Outdoor Air Temperature(°C DB)			
	-15	2	7	15
Level 1	0.92	0.87	0.94	0.94
Level 2	0.82	0.78	0.84	0.84
Level 3	0.68	0.64	0.69	0.69
Low-noise	0.70	0.60	0.69	0.69

Cooling

Silent Function	Outdoor Air Temperature(°C DB)			
	10	20	35	45
Level 1	1.00	1.00	0.92	0.92
Level 2	0.98	0.89	0.83	0.83
Level 3	0.81	0.74	0.68	0.68

3. Hydro Units

3-1. Specifications

ClimateHub, 2 Zone

Model Name		Indoor Unit		AE200DNXMPK/EU	AE200DNXMPK/EU
		Outdoor Unit		AE125HCTPES/EU	AE160HCTPES/EU
Mode			-	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply			Φ, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50
Power input	Cooling (Nominal)		kW	0.3	0.3
	Heating (Nominal)		kW	0.3	0.3
	Cooling (Max)		kW	0.3	0.3
	Heating (Max)		kW	4.3	4.3
Current Input	Cooling (Nominal)		A	1.3	1.3
	Heating (Nominal)		A	1.3	1.3
	Cooling (Max)		A	1.3	1.3
	Heating (Max)		A	18.7	18.7
Field Wiring	MCA		A	18.7	18.7
	MFA		A	23.4	23.4
Heating up time			hh:mm	00:53	00:53
Water Heating	Declared load profile		-	L	L
	Energy efficiency Class		-	A+	A+
Connections	Water Flow Rate (Std)	Heating	LPM	34.6	46.2
		Cooling	LPM	34.6	40.4
	Water Flow Rate	Min	LPM	7	7
		Max	LPM	58	58
	Water Pressure (Max)		bar	3.0	3.0
	Water pipe (To outdoor unit)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 1)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 2)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (DHW)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	22	22
		Outlet	Φ, mm	22	22
	Water pipe (Secondary water	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	22	22
	Leaving Water Temperature	Heating Min.	°C	15	15
		Heating Max.	°C	65	65
		Cooling Min.	°C	5	5
		Cooling Max.	°C	25	25
DHW Tank	Nominal Water Volume		liter	200	200
	Net Water Volume		liter	194	194
	Material		-	SUS 316L	SUS 316L
	Max. water pressure		bar	10	10
	Max. water temperature		°C	70	70
	Insulation		-	Inner EPP+VIP+Outer EPS	Inner EPP+VIP+Outer EPS

3. Hydro Units

3-1. Specifications

ClimateHub, 2 Zone

Model Name		Indoor Unit		AE200DNXMPK/EU	AE200DNXMPK/EU
		Outdoor Unit		AE125HCTPES/EU	AE160HCTPES/EU
Water Pump	Type		-	BLDC Inv	BLDC Inv
	Motor Input		W	95	95
	Number of Unit		EA	2	2
	Max static pressure		mAq	9.0	9.0
Backup Heater	Power		kW	1Φ 2/4kW	1Φ 2/4kW
	Thermostat (Thermal Fuse)		℃	98 +0 -5	98 +0 -5
Safety device	Pressure relief valve		bar	2.9	2.9
	Flow Sensor		LPM	5~60	5~60
	Temperature & Pressure relief valve		bar, ℃	10bar, 90℃	10bar, 90℃
Expansion vessel	Internal water volume		liter	10	10
	Max. Working pressure		Mpa	0.3	0.3
	Initial Charging pressure		Mpa	0.12	0.12
IP Class			-	IPX1	IPX1
Air Purge Valve			Φ, inch	BSPP male 3/8"	BSPP male 3/8"
Sound Level	Sound Pressure Level	Heating	dB(A)	30	30
		Cooling	dB(A)	30	30
	Sound Power Level	Heating	dB(A)	44	44
Casing	Color		-	GREIGE	GREIGE
	Material		-	PCM	PCM
Packing	Material		-	EPS/BOX/Pallet	EPS/BOX/Pallet
	Packing Weight		kg	9.6	9.6
External Dimension	Net Weight		kg	139.0	139.0
	Shipping Weight		kg	150.5	150.5
	Net Dimensions	Width	mm	598	598
		Height	mm	1,850	1,850
		Depth	mm	600	600
	Shipping Dimensions	Width	mm	676	676
		Height	mm	2,050	2,050
		Depth	mm	740	740

NOTE

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

3. Hydro Units

3-1. Specifications

ClimateHub, 2 Zone

Model Name		Indoor Unit		AE200DNXMPK/EU	AE200DNXMPK/EU
		Outdoor Unit		AE125HCTPGS/EU	AE160HCTPGS/EU
Mode			-	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply			Φ, #, V, Hz	3, 4, 380-415, 50	3, 4, 380-415, 50
Power input	Cooling (Nominal)		kW	3Φ - / 1Φ 0.3	3Φ - / 1Φ 0.3
	Heating (Nominal)		kW	3Φ - / 1Φ 0.3	3Φ - / 1Φ 0.3
	Cooling (Max)		kW	3Φ - / 1Φ 0.3	3Φ - / 1Φ 0.3
	Heating (Max)		kW	3Φ 6.0 / 1Φ 0.3	3Φ 6.0 / 1Φ 0.3
Current Input	Cooling (Nominal)		A	3Φ - / 1Φ 1.3	3Φ - / 1Φ 1.3
	Heating (Nominal)		A	3Φ - / 1Φ 1.3	3Φ - / 1Φ 1.3
	Cooling (Max)		A	3Φ - / 1Φ 1.3	3Φ - / 1Φ 1.3
	Heating (Max)		A	3Φ 8.7 / 1Φ 1.3	3Φ 8.7 / 1Φ 1.3
Field Wiring	MCA		A	3Φ 8.7 / 1Φ 1.3	3Φ 8.7 / 1Φ 1.3
	MFA		A	3Φ 10.9 / 1Φ 1.6	3Φ 10.9 / 1Φ 1.6
Heating up time			hh:mm	00:53	00:53
Water Heating	Declared load profile		-	L	L
	Energy efficiency Class		-	A+	A+
Connections	Water Flow Rate (Std)	Heating	LPM	34.6	46.2
		Cooling	LPM	34.6	40.4
	Water Flow Rate	Min	LPM	7	7
		Max	LPM	58	58
	Water Pressure (Max)		bar	3.0	3.0
	Water pipe (To outdoor unit)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 1)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 2)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (DHW)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	22	22
		Outlet	Φ, mm	22	22
	Water pipe (Secondary water	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	22	22
	Leaving Water Temperature	Heating Min.	°C	15	15
		Heating Max.	°C	65	65
		Cooling Min.	°C	5	5
		Cooling Max.	°C	25	25
DHW Tank	Nominal Water Volume		liter	200	200
	Net Water Volume		liter	194	194
	Material		-	SUS 316L	SUS 316L
	Max. water pressure		bar	10	10
	Max. water temperature		°C	70	70
	Insulation		-	Inner EPP+VIP+Outer EPS	Inner EPP+VIP+Outer EPS

3. Hydro Units

3-1. Specifications

ClimateHub, 2 Zone

Model Name		Indoor Unit		AE200DNXMPK/EU	AE200DNXMPK/EU
		Outdoor Unit		AE125HCTPGS/EU	AE160HCTPGS/EU
Water Pump	Type		-	BLDC Inv	BLDC Inv
	Motor Input		W	95	95
	Number of Unit		EA	2	2
	Max static pressure		mAq	9.0	9.0
Backup Heater	Power		kW	3Φ 6kW	3Φ 6kW
	Thermostat (Thermal Fuse)		℃	98 +0 -5	98 +0 -5
Safety device	Pressure relief valve		bar	2.9	2.9
	Flow Sensor		LPM	5~60	5~60
	Temperature & Pressure relief valve		bar, ℃	10bar, 90℃	10bar, 90℃
Expansion vessel	Internal water volume		liter	10	10
	Max. Working pressure		MPa	0.3	0.3
	Initial Charging pressure		MPa	0.12	0.12
IP Class			-	IPX1	IPX1
Air Purge Valve			Φ, inch	BSPP male 3/8"	BSPP male 3/8"
Sound Level	Sound Pressure Level	Heating	dB(A)	30	30
		Cooling	dB(A)	30	30
	Sound Power Level	Heating	dB(A)	44	44
Casing	Color		-	GREIGE	GREIGE
	Material		-	PCM	PCM
Packing	Material		-	EPS/BOX/Pallet	EPS/BOX/Pallet
	Packing Weight		kg	9.6	9.6
External Dimension	Net Weight		kg	139.0	139.0
	Shipping Weight		kg	150.5	150.5
	Net Dimensions	Width	mm	598	598
		Height	mm	1,850	1,850
		Depth	mm	600	600
	Shipping Dimensions	Width	mm	676	676
		Height	mm	2,050	2,050
		Depth	mm	740	740

NOTE

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

3. Hydro Units

3-1. Specifications

ClimateHub

Model Name		Indoor Unit		AE200DNWMPK/EU	AE200DNWMPK/EU
		Outdoor Unit		AE125HCTPES/EU	AE160HCTPES/EU
Mode			-	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply			Φ, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50
Power input	Cooling (Nominal)		kW	0.2	0.2
	Heating (Nominal)		kW	0.2	0.2
	Cooling (Max)		kW	0.2	0.2
	Heating (Max)		kW	4.2	4.2
Current Input	Cooling (Nominal)		A	0.9	0.9
	Heating (Nominal)		A	0.9	0.9
	Cooling (Max)		A	0.9	0.9
	Heating (Max)		A	18.3	18.3
Field Wiring	MCA		A	18.3	18.3
	MFA		A	22.9	22.9
Heating up time			hh:mm	00:53	00:53
Water Heating	Declared load profile		-	L	L
	Energy efficiency Class		-	A+	A+
Connections	Water Flow Rate (Std)	Heating	LPM	34.6	46.2
		Cooling	LPM	34.6	40.4
	Water Flow Rate	Min	LPM	7	7
		Max	LPM	58	58
	Water Pressure (Max)		bar	3.0	3.0
	Water pipe (To outdoor unit)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 1)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (DHW)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	22	22
		Outlet	Φ, mm	22	22
	Water pipe (Secondary water	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	22	22
	Leaving Water Temperature	Heating Min.	°C	15	15
		Heating Max.	°C	65	65
		Cooling Min.	°C	5	5
		Cooling Max.	°C	25	25
DHW Tank	Nominal Water Volume		liter	200	200
	Net Water Volume		liter	194	194
	Material		-	SUS 316L	SUS 316L
	Max. water pressure		bar	10	10
	Max. water temperature		°C	70	70
	Insulation		-	Inner EPP+VIP+Outer EPS	Inner EPP+VIP+Outer EPS
Water Pump	Type		-	BLDC Inv	BLDC Inv
	Motor Input		W	95	95
	Number of Unit		EA	1	1
	Max static pressure		mAq	9.0	9.0
Backup Heater	Power		kW	1Φ 2/4kW	1Φ 2/4kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5	98 +0 -5

3. Hydro Units

3-1. Specifications

ClimateHub

Model Name		Indoor Unit		AE200DNWMPK/EU	AE200DNWMPK/EU
		Outdoor Unit		AE125HCTPES/EU	AE160HCTPES/EU
Safety device	Pressure relief valve		bar	2.9	2.9
	Flow Sensor		LPM	5~60	5~60
	Temperature & Pressure relief valve		bar, ℃	10bar, 90℃	10bar, 90℃
Expansion vessel	Internal water volume		liter	10	10
	Max. Working pressure		MPa	0.3	0.3
	Initial Charging pressure		MPa	0.12	0.12
IP Class			-	IPX1	IPX1
Air Purge Valve			Φ, inch	BSPP male 3/8"	BSPP male 3/8"
Sound Level	Sound Pressure Level	Heating	dB(A)	28	28
		Cooling	dB(A)	28	28
	Sound Power Level	Heating	dB(A)	42	42
Casing	Color		-	GREIGE	GREIGE
	Material		-	PCM	PCM
Packing	Material		-	EPS/BOX/Pallet	EPS/BOX/Pallet
	Packing Weight		kg	9.6	9.6
External Dimension	Net Weight		kg	132.0	132.0
	Shipping Weight		kg	144.0	144.0
	Net Dimensions	Width	mm	598	598
		Height	mm	1,850	1,850
		Depth	mm	600	600
	Shipping Dimensions	Width	mm	676	676
		Height	mm	2,050	2,050
		Depth	mm	740	740

NOTE

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

3. Hydro Units

3-1. Specifications

ClimateHub

Model Name		Indoor Unit		AE200DNWMPK/EU	AE200DNWMPK/EU
		Outdoor Unit		AE125HCTPGS/EU	AE160HCTPGS/EU
Mode			-	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply			Φ, #, V, Hz	3, 4, 380-415, 50	3, 4, 380-415, 50
Power input	Cooling (Nominal)		kW	3Φ - / 1Φ 0.2	3Φ - / 1Φ 0.2
	Heating (Nominal)		kW	3Φ - / 1Φ 0.2	3Φ - / 1Φ 0.2
	Cooling (Max)		kW	3Φ - / 1Φ 0.2	3Φ - / 1Φ 0.2
	Heating (Max)		kW	3Φ 6.0 / 1Φ 0.2	3Φ 6.0 / 1Φ 0.2
Current Input	Cooling (Nominal)		A	3Φ - / 1Φ 0.9	3Φ - / 1Φ 0.9
	Heating (Nominal)		A	3Φ - / 1Φ 0.9	3Φ - / 1Φ 0.9
	Cooling (Max)		A	3Φ - / 1Φ 0.9	3Φ - / 1Φ 0.9
	Heating (Max)		A	3Φ 8.7 / 1Φ 0.9	3Φ 8.7 / 1Φ 0.9
Field Wiring	MCA		A	3Φ 8.7 / 1Φ 0.9	3Φ 8.7 / 1Φ 0.9
	MFA		A	3Φ 10.9 / 1Φ 1.2	3Φ 10.9 / 1Φ 1.2
Heating up time			hh:mm	00:53	00:53
Water Heating	Declared load profile		-	L	L
	Energy efficiency Class		-	A+	A+
Connections	Water Flow Rate (Std)	Heating	LPM	34.6	46.2
		Cooling	LPM	34.6	40.4
	Water Flow Rate	Min	LPM	7	7
		Max	LPM	58	58
	Water Pressure (Max)		bar	3.0	3.0
	Water pipe (To outdoor unit)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 1)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (DHW)	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	22	22
		Outlet	Φ, mm	22	22
	Water pipe (Secondary water	Type	-	Straight pipe	Straight pipe
		Inlet	Φ, mm	22	22
	Leaving Water Temperature	Heating Min.	°C	15	15
		Heating Max.	°C	65	65
		Cooling Min.	°C	5	5
		Cooling Max.	°C	25	25
DHW Tank	Nominal Water Volume		liter	200	200
	Net Water Volume		liter	194	194
	Material		-	SUS 316L	SUS 316L
	Max. water pressure		bar	10	10
	Max. water temperature		°C	70	70
	Insulation		-	Inner EPP+VIP+Outer EPS	Inner EPP+VIP+Outer EPS
Water Pump	Type		-	BLDC Inv	BLDC Inv
	Motor Input		W	95	95
	Number of Unit		EA	1	1
	Max static pressure		mAq	9.0	9.0
Backup Heater	Power		kW	3Φ 6kW	3Φ 6kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5	98 +0 -5

3. Hydro Units

3-1. Specifications

ClimateHub

Model Name		Indoor Unit		AE200DNWMPK/EU	AE200DNWMPK/EU
		Outdoor Unit		AE125HCTPGS/EU	AE160HCTPGS/EU
Safety device	Pressure relief valve		bar	2.9	2.9
	Flow Sensor		LPM	5~60	5~60
	Temperature & Pressure relief valve		bar, ℃	10bar, 90℃	10bar, 90℃
Expansion vessel	Internal water volume		liter	10	10
	Max. Working pressure		MPa	0.3	0.3
	Initial Charging pressure		MPa	0.12	0.12
IP Class			-	IPX1	IPX1
Air Purge Valve			Φ, inch	BSPP male 3/8"	BSPP male 3/8"
Sound Level	Sound Pressure Level	Heating	dB(A)	28	28
		Cooling	dB(A)	28	28
	Sound Power Level	Heating	dB(A)	42	42
Casing	Color		-	GREIGE	GREIGE
	Material		-	PCM	PCM
Packing	Material		-	EPS/BOX/Pallet	EPS/BOX/Pallet
	Packing Weight		kg	9.6	9.6
External Dimension	Net Weight		kg	132.0	132.0
	Shipping Weight		kg	144.0	144.0
	Net Dimensions	Width	mm	598	598
		Height	mm	1,850	1,850
		Depth	mm	600	600
	Shipping Dimensions	Width	mm	676	676
		Height	mm	2,050	2,050
		Depth	mm	740	740

NOTE

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

3. Hydro Units

3-1. Specifications

Hydro Unit, 2 zone

Model Name		Indoor Unit		AE160DNZMPK/EU	AE160DNZMPK/EU
		Outdoor Unit		AE125HCTPES/EU	AE160HCTPES/EU
Mode			-	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply			Φ, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50
Power input	Cooling (Nominal)		kW	0.3	0.3
	Heating (Nominal)		kW	0.3	0.3
	Cooling (Max)		kW	0.3	0.3
	Heating (Max)		kW	4.3	4.3
Current Input	Cooling (Nominal)		A	1.3	1.3
	Heating (Nominal)		A	1.3	1.3
	Cooling (Max)		A	1.3	1.3
	Heating (Max)		A	18.7	18.7
Field Wiring	MCA		A	18.7	18.7
	MFA		A	23.4	23.4
Connections	Water Flow Rate (Std)	Heating	LPM	34.6	46.2
		Cooling	LPM	34.6	40.4
	Water Flow Rate	Min	LPM	7	7
		Max	LPM	58	58
	Water Pressure (Max)		bar	3.0	3.0
	Water pipe (To outdoor unit)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 1)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 2)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Tank)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Leaving Water Temperature	Heating Min.	°C	15	15
		Heating Max.	°C	65	65
		Cooling Min.	°C	5	5
		Cooling Max.	°C	25	25
Water Pump	Type		-	BLDC Inv	BLDC Inv
	Motor Input		W	95	95
	Number of Unit		EA	2	2
	Max static pressure		mAq	9	9
Backup Heater	Power		kW	1Φ 2/4kW	1Φ 2/4kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5	98 +0 -5
Safety device	Pressure relief valve		bar	2.9	2.9
	Flow Sensor		LPM	5~60	5~60
Expansion vessel	Internal water volume		liter	10	10
	Max. Working pressure		MPa	0.3	0.3
	Initial Charging pressure		MPa	0.12	0.12
Air Purge Valve			Φ, inch	BSPP male 3/8"	BSPP male 3/8"
Service Valve			Φ, inch	BSPP male 1 1/4	BSPP male 1 1/4

3. Hydro Units

3-1. Specifications

Hydro Unit, 2 zone

Model Name		Indoor Unit		AE160DNZMPK/EU	AE160DNZMPK/EU
		Outdoor Unit		AE125HCTPES/EU	AE160HCTPES/EU
Sound Level	Sound Pressure Level	Heating	dB(A)	30	30
		Cooling	dB(A)	30	30
	Sound Power Level	Heating	dB(A)	44	44
Casing	Color		-	GREIGE	GREIGE
	Material		-	PCM	PCM
Packing	Material		-	EPS/BOX	EPS/BOX
	Packing Weight		kg	3.7	3.7
External Dimension	Net Weight		kg	54.0	54.0
	Shipping Weight		kg	61.0	61.0
	Net Dimensions	Width	mm	530	530
		Height	mm	840	840
		Depth	mm	350	350
	Shipping Dimensions	Width	mm	602	602
		Height	mm	1,032	1,032
		Depth	mm	435	435

NOTE

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

3. Hydro Units

3-1. Specifications

Hydro Unit, 2 zone

Model Name		Indoor Unit		AE160DNZMPK/EU	AE160DNZMPK/EU
		Outdoor Unit		AE125HCTPGS/EU	AE160HCTPGS/EU
Mode			-	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply			Φ, #, V, Hz	3, 4, 380-415, 50	3, 4, 380-415, 50
Power input	Cooling (Nominal)		kW	3Φ - / 1Φ 0.3	3Φ - / 1Φ 0.3
	Heating (Nominal)		kW	3Φ - / 1Φ 0.3	3Φ - / 1Φ 0.3
	Cooling (Max)		kW	3Φ - / 1Φ 0.3	3Φ - / 1Φ 0.3
	Heating (Max)		kW	3Φ 6.0 / 1Φ 0.3	3Φ 6.0 / 1Φ 0.3
Current Input	Cooling (Nominal)		A	3Φ - / 1Φ 1.3	3Φ - / 1Φ 1.3
	Heating (Nominal)		A	3Φ - / 1Φ 1.3	3Φ - / 1Φ 1.3
	Cooling (Max)		A	3Φ - / 1Φ 1.3	3Φ - / 1Φ 1.3
	Heating (Max)		A	3Φ 8.7 / 1Φ 1.3	3Φ 8.7 / 1Φ 1.3
Field Wiring	MCA		A	3Φ 8.7 / 1Φ 1.3	3Φ 8.7 / 1Φ 1.3
	MFA		A	3Φ 10.9 / 1Φ 1.6	3Φ 10.9 / 1Φ 1.6
Connections	Water Flow Rate (Std)	Heating	LPM	34.6	46.2
		Cooling	LPM	34.6	40.4
	Water Flow Rate	Min	LPM	7	7
		Max	LPM	58	58
	Water Pressure (Max)		bar	3.0	3.0
	Water pipe (To outdoor unit)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 1)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 2)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Tank)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Leaving Water Temperature	Heating Min.	°C	15	15
		Heating Max.	°C	65	65
		Cooling Min.	°C	5	5
		Cooling Max.	°C	25	25
Water Pump	Type		-	BLDC Inv	BLDC Inv
	Motor Input		W	95	95
	Number of Unit		EA	2	2
	Max static pressure		mAq	9	9
Backup Heater	Power		kW	3Φ 6kW	3Φ 6kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5	98 +0 -5
Safety device	Pressure relief valve		bar	2.9	2.9
	Flow Sensor		LPM	5~60	5~60
Expansion vessel	Internal water volume		liter	10	10
	Max. Working pressure		MPa	0.3	0.3
	Initial Charging pressure		MPa	0.12	0.12
Air Purge Valve			Φ, inch	BSPP male 3/8"	BSPP male 3/8"
Service Valve			Φ, inch	BSPP male 1 1/4	BSPP male 1 1/4

3. Hydro Units

3-1. Specifications

Hydro Unit, 2 zone

Model Name		Indoor Unit		AE160DNZMPK/EU	AE160DNZMPK/EU
		Outdoor Unit		AE125HCTPGS/EU	AE160HCTPGS/EU
Sound Level	Sound Pressure Level	Heating	dB(A)	30	30
		Cooling	dB(A)	30	30
	Sound Power Level	Heating	dB(A)	44	44
Casing	Color		-	GREIGE	GREIGE
	Material		-	PCM	PCM
Packing	Material		-	EPS/BOX	EPS/BOX
	Packing Weight		kg	3.7	3.7
External Dimension	Net Weight		kg	54.0	54.0
	Shipping Weight		kg	61.0	61.0
	Net Dimensions	Width	mm	530	530
		Height	mm	840	840
		Depth	mm	350	350
	Shipping Dimensions	Width	mm	602	602
		Height	mm	1,032	1,032
		Depth	mm	435	435

NOTE

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

3. Hydro Units

3-1. Specifications

Hydro Unit

Model Name		Indoor Unit		AE160DNYMPK/EU	AE160DNYMPK/EU
		Outdoor Unit		AE125HCTPES/EU	AE160HCTPES/EU
Mode			-	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply			Φ, #, V, Hz	1, 2, 220-240, 50	1, 2, 220-240, 50
Power input	Cooling (Nominal)		kW	0.2	0.2
	Heating (Nominal)		kW	0.2	0.2
	Cooling (Max)		kW	0.2	0.2
	Heating (Max)		kW	4.2	4.2
Current Input	Cooling (Nominal)		A	0.9	0.9
	Heating (Nominal)		A	0.9	0.9
	Cooling (Max)		A	0.9	0.9
	Heating (Max)		A	18.3	18.3
Field Wiring	MCA		A	18.3	18.3
	MFA		A	22.9	22.9
Connections	Water Flow Rate (Std)	Heating	LPM	34.6	46.2
		Cooling	LPM	34.6	40.4
	Water Flow Rate	Min	LPM	7	7
		Max	LPM	58	58
	Water Pressure (Max)		bar	3.0	3.0
	Water pipe (To outdoor unit)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 1)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Tank)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Leaving Water Temperature	Heating Min.	°C	15	15
		Heating Max.	°C	65	65
		Cooling Min.	°C	5	5
		Cooling Max.	°C	25	25
Water Pump	Type		-	BLDC Inv	BLDC Inv
	Motor Input		W	95	95
	Number of Unit		EA	1	1
	Max static pressure		mAq	9	9
Backup Heater	Power		kW	1Φ 2/4kW	1Φ 2/4kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5	98 +0 -5
Safety device	Pressure relief valve		bar	2.9	2.9
	Flow Sensor		LPM	5~60	5~60
Expansion vessel	Internal water volume		liter	10	10
	Max. Working pressure		MPa	0.3	0.3
	Initial Charging pressure		MPa	0.12	0.12
Air Purge Valve			Φ, inch	BSPP male 3/8"	BSPP male 3/8"
Service Valve			Φ, inch	BSPP male 1 1/4	BSPP male 1 1/4

3. Hydro Units

3-1. Specifications

Hydro Unit

Model Name		Indoor Unit		AE160DNYMPK/EU	AE160DNYMPK/EU
		Outdoor Unit		AE125HCTPES/EU	AE160HCTPES/EU
Sound Level	Sound Pressure Level	Heating	dB(A)	28	28
		Cooling	dB(A)	28	28
	Sound Power Level	Heating	dB(A)	42	42
Casing	Color		-	GREIGE	GREIGE
	Material		-	PCM	PCM
Packing	Material		-	EPS/BOX	EPS/BOX
	Packing Weight		kg	3.7	3.7
External Dimension	Net Weight		kg	43.0	43.0
	Shipping Weight		kg	50.0	50.0
	Net Dimensions	Width	mm	530	530
		Height	mm	840	840
		Depth	mm	350	350
	Shipping Dimensions	Width	mm	602	602
		Height	mm	1,032	1,032
		Depth	mm	435	435

NOTE

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

3. Hydro Units

3-1. Specifications

Hydro Unit

Model Name		Indoor Unit		AE160DNYMPK/EU	AE160DNYMPK/EU
		Outdoor Unit		AE125HCTPGS/EU	AE160HCTPGS/EU
Mode			-	Heat Pump (A2W)	Heat Pump (A2W)
Power Supply			Φ, #, V, Hz	3, 4, 380-415, 50	3, 4, 380-415, 50
Power input	Cooling (Nominal)		kW	3Φ - / 1Φ 0.2	3Φ - / 1Φ 0.2
	Heating (Nominal)		kW	3Φ - / 1Φ 0.2	3Φ - / 1Φ 0.2
	Cooling (Max)		kW	3Φ - / 1Φ 0.2	3Φ - / 1Φ 0.2
	Heating (Max)		kW	3Φ 6.0 / 1Φ 0.2	3Φ 6.0 / 1Φ 0.2
Current Input	Cooling (Nominal)		A	3Φ - / 1Φ 0.9	3Φ - / 1Φ 0.9
	Heating (Nominal)		A	3Φ - / 1Φ 0.9	3Φ - / 1Φ 0.9
	Cooling (Max)		A	3Φ - / 1Φ 0.9	3Φ - / 1Φ 0.9
	Heating (Max)		A	3Φ 8.7 / 1Φ 0.9	3Φ 8.7 / 1Φ 0.9
Field Wiring	MCA		A	3Φ 8.7 / 1Φ 0.9	3Φ 8.7 / 1Φ 0.9
	MFA		A	3Φ 10.9 / 1Φ 1.2	3Φ 10.9 / 1Φ 1.2
Connections	Water Flow Rate (Std)	Heating	LPM	34.6	46.2
		Cooling	LPM	34.6	40.4
	Water Flow Rate	Min	LPM	7	7
		Max	LPM	58	58
	Water Pressure (Max)		bar	3.0	3.0
	Water pipe (To outdoor unit)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Space heating) (Zone 1)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Water pipe (Tank)	Type	-	BSPP Female 1 1/4	BSPP Female 1 1/4
		Inlet	Φ, mm	28	28
		Outlet	Φ, mm	28	28
	Leaving Water Temperature	Heating Min.	°C	15	15
		Heating Max.	°C	65	65
		Cooling Min.	°C	5	5
		Cooling Max.	°C	25	25
Water Pump	Type		-	BLDC Inv	BLDC Inv
	Motor Input		W	95	95
	Number of Unit		EA	1	1
	Max static pressure		mAq	9	9
Backup Heater	Power		kW	3Φ 6kW	3Φ 6kW
	Thermostat (Thermal Fuse)		°C	98 +0 -5	98 +0 -5
Safety device	Pressure relief valve		bar	2.9	2.9
	Flow Sensor		LPM	5~60	5~60
Expansion vessel	Internal water volume		liter	10	10
	Max. Working pressure		MPa	0.3	0.3
	Initial Charging pressure		MPa	0.12	0.12
Air Purge Valve			Φ, inch	BSPP male 3/8"	BSPP male 3/8"
Service Valve			Φ, inch	BSPP male 1 1/4	BSPP male 1 1/4

3. Hydro Units

3-1. Specifications

Hydro Unit

Model Name		Indoor Unit		AE160DNYMPK/EU	AE160DNYMPK/EU
		Outdoor Unit		AE125HCTPGS/EU	AE160HCTPGS/EU
Sound Level	Sound Pressure Level	Heating	dB(A)	28	28
		Cooling	dB(A)	28	28
	Sound Power Level	Heating	dB(A)	42	42
Casing	Color		-	GREIGE	GREIGE
	Material		-	PCM	PCM
Packing	Material		-	EPS/BOX	EPS/BOX
	Packing Weight		kg	3.7	3.7
External Dimension	Net Weight		kg	43.0	43.0
	Shipping Weight		kg	50.0	50.0
	Net Dimensions	Width	mm	530	530
		Height	mm	840	840
		Depth	mm	350	350
	Shipping Dimensions	Width	mm	602	602
		Height	mm	1,032	1,032
		Depth	mm	435	435

NOTE

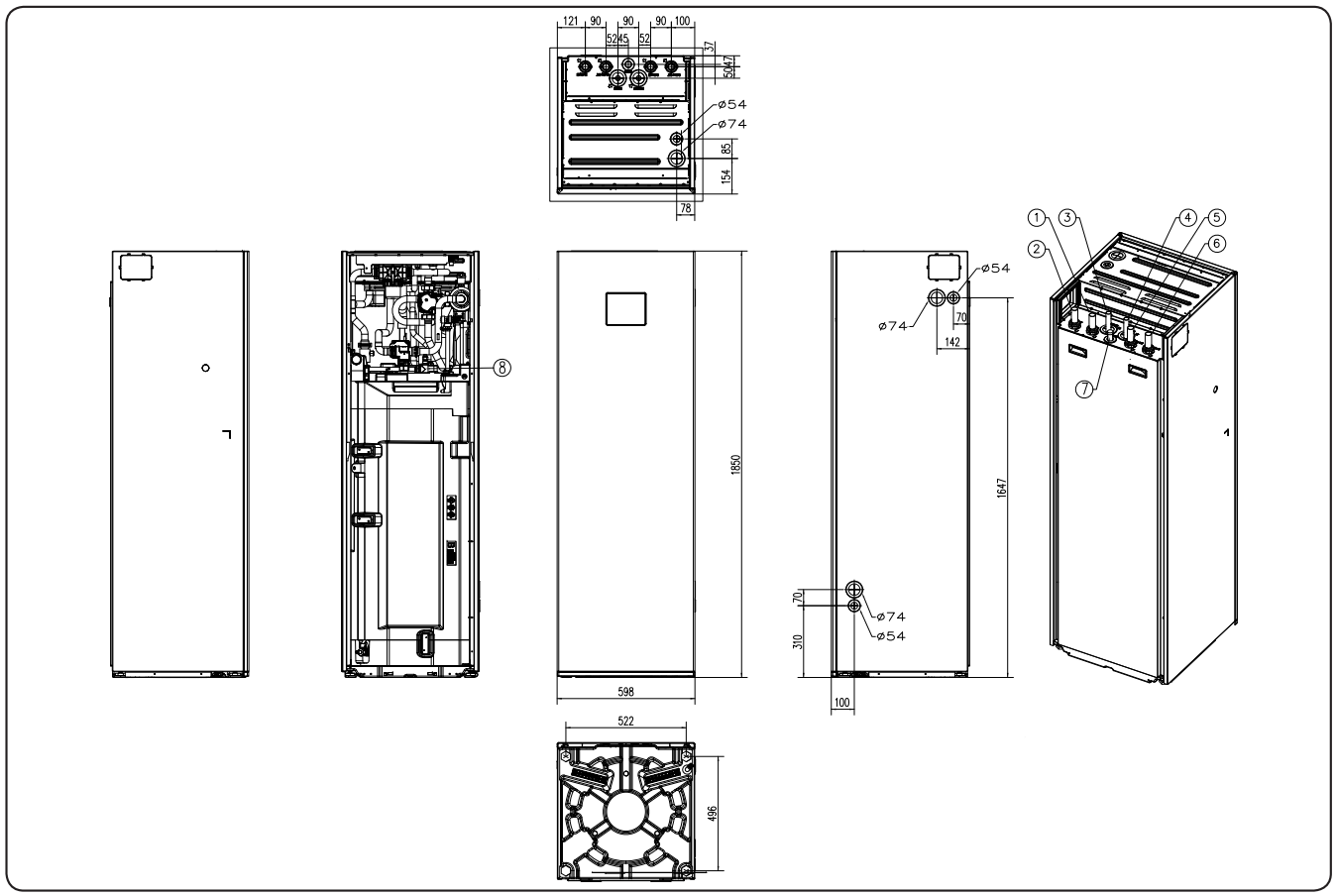
- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA

3. Hydro Units

3-2. Dimensional drawing

AE200DNWMPK/EU

Unit : mm



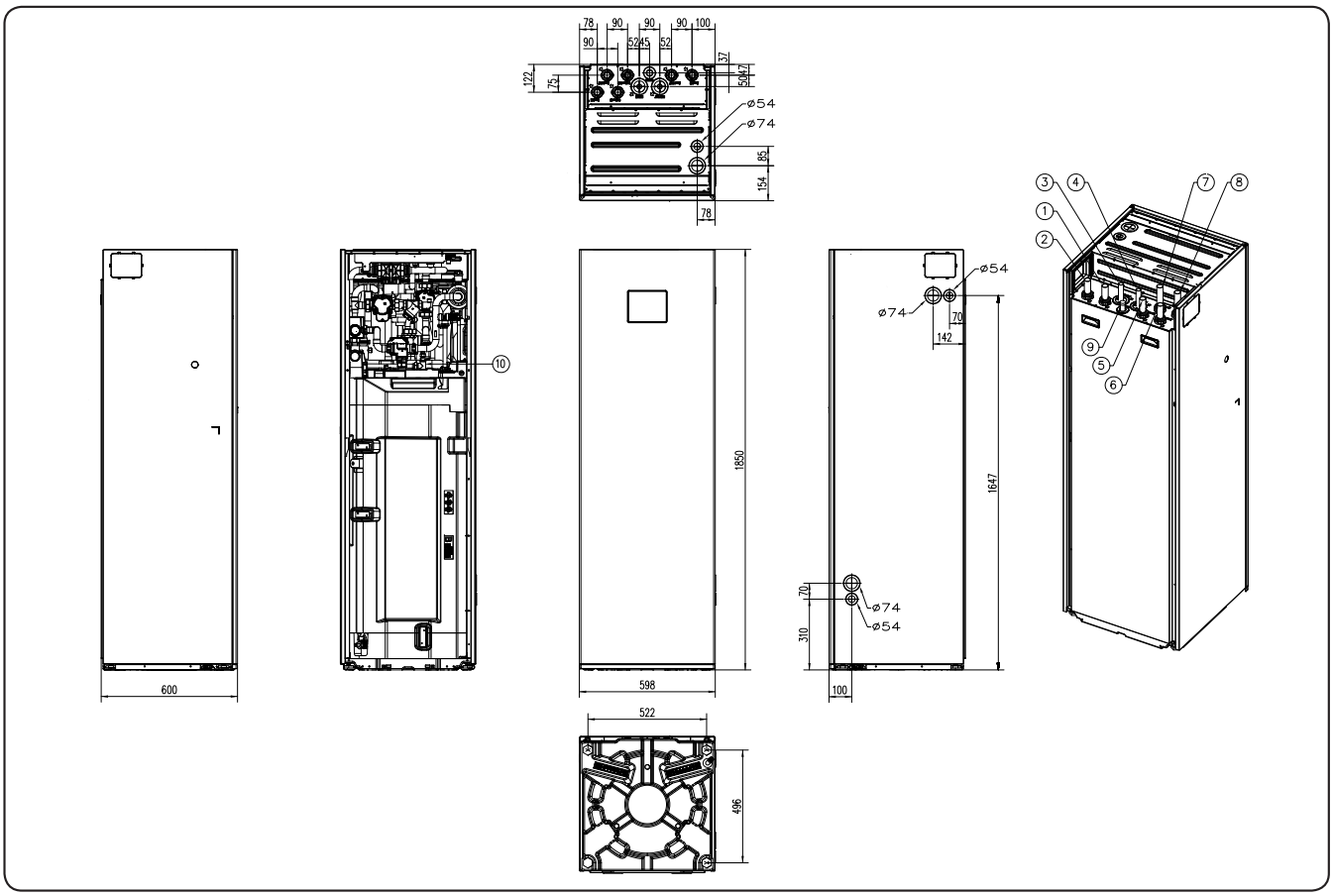
NO	Name	Description
01	Outdoor inlet (From Outdoor Unit)	ø28, Straight pipe
02	Outdoor outlet (To Outdoor Unit)	ø28, Straight pipe
03	DHW outlet (Hot Water)	ø22, Straight pipe
04	DHW inlet (Cold Water)	ø22, Straight pipe
05	Heating Outlet (To Zone)	ø28, Straight pipe
06	Heating inlet (From Zone)	ø28,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

3. Hydro Units

3-2. Dimensional drawing

AE200DNXMPK/EU

Unit : mm



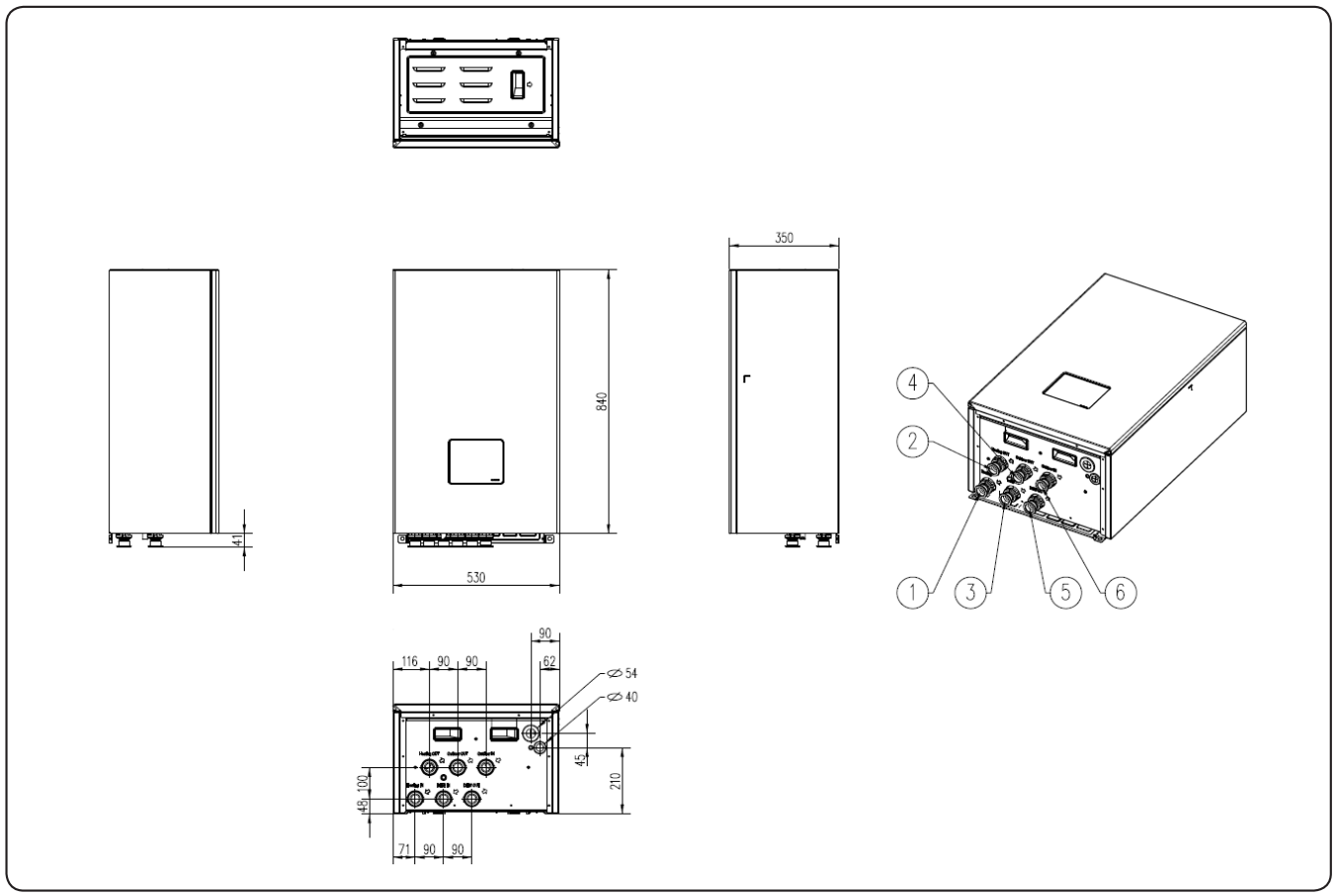
NO	Name	Description
01	Heating Outlet (Zone 1) (To Zone 1)	ø28, Straight pipe
02	Heating inlet (Zone 1) (From Zone 1)	ø28, Straight pipe
03	DHW outlet (Hot Water)	ø22, Straight pipe
04	DHW inlet (Cold Water)	ø22, Straight pipe
05	Outdoor outlet (To Outdoor Unit)	ø28, Straight pipe
06	Heating Outlet (Zone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

3. Hydro Units

3-2. Dimensional drawing

AE160DNYMPK/EU

Unit : mm



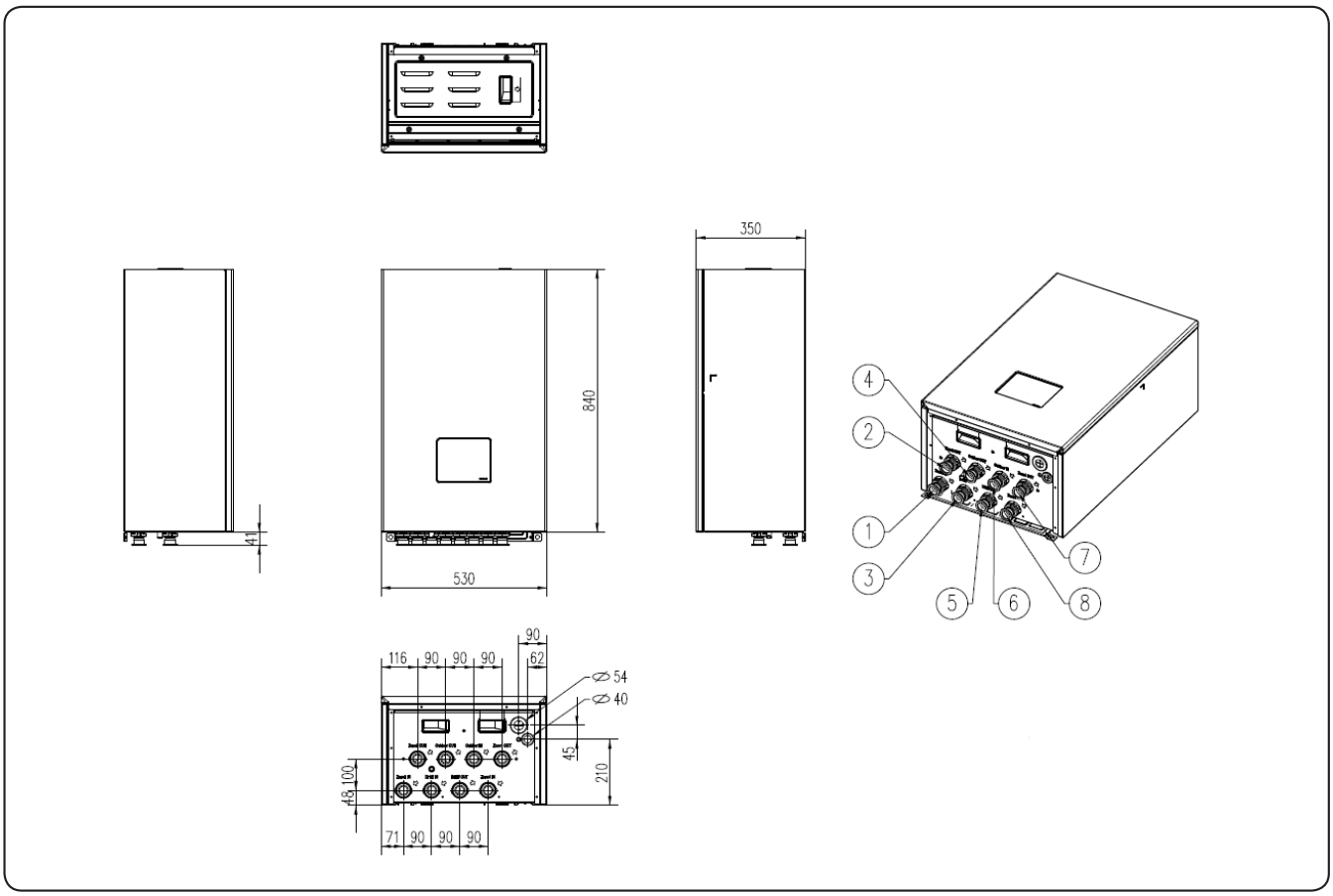
NO	Name	Description
01	Heating inlet (From zone)	BSPP female, 1-1/4"
02	Heating outlet (To zone)	BSPP female, 1-1/4"
03	DHW inlet (Cold water)	BSPP female, 1-1/4"
04	Outdoor outlet (To outdoor unit)	BSPP female, 1-1/4"
05	DHW outlet (Hot water)	BSPP female, 1-1/4"
06	Outdoor inlet (From outdoor unit)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

3. Hydro Units

3-2. Dimensional drawing

AE160DNZMPK/EU

Unit : mm



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

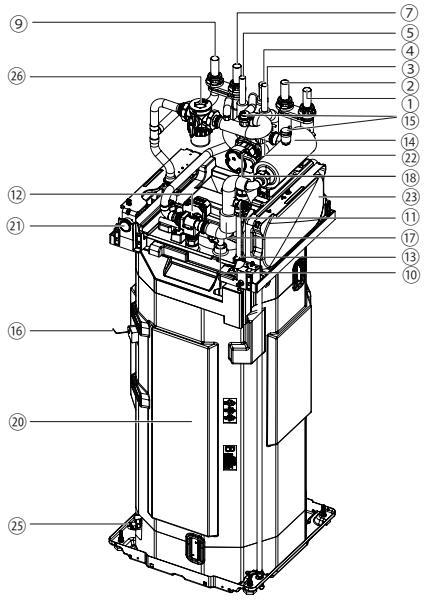
3. Hydro Units

3-2. Dimensional drawing

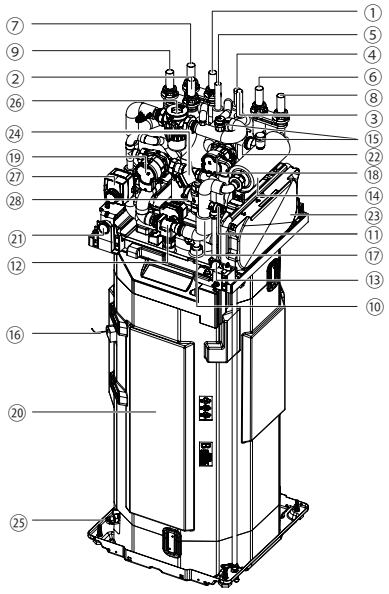
ClimateHub

Main components

✻ AE200DNWMPK



✻ AE200DNXMPK



No.	Part name	Note
①	Outdoor outlet	ø28, Straight pipe
②	Outdoor inlet	ø28, Straight pipe
③	DHW outlet	ø22, Straight pipe
④	DHW return	Φ22, Straight pipe
⑤	DHW inlet	ø22, Straight pipe
⑥	Heating outlet (Zone 1)	ø28, Straight pipe
⑦	Heating outlet (Zone 2)	ø28, Straight pipe
⑧	Heating inlet (Zone 1)	ø28, Straight pipe
⑨	Heating inlet (Zone 2)	ø28, Straight pipe
⑩	T/P valve	10bar, 90 ℃
⑪	Pressure relief valve	3bar, BSPP 1/2"
⑫	3way valve	
⑬	Anode bar	BSPP 1"
⑭	Back-up heater	
⑮	Air vent	BSPP 3/8"

No.	Part name	Note
⑯	Tank thermistor	
⑰	Heater thermistor	
⑱	Water Pump (Zone 2)	
⑲	Water pump (Zone 1)	
⑳	Water tank	200L
㉑	Manometer	0~4bar
㉒	Flow sensor	
㉓	Expansion vessel	10L, Pre-charge gas: 1.2 bar 90 ℃, N2, BSPP 3/8"
㉔	Strainer	
㉕	Tank drain valve	
㉖	Magnetic filter	
㉗	Mixing valve	
㉘	Check valve	

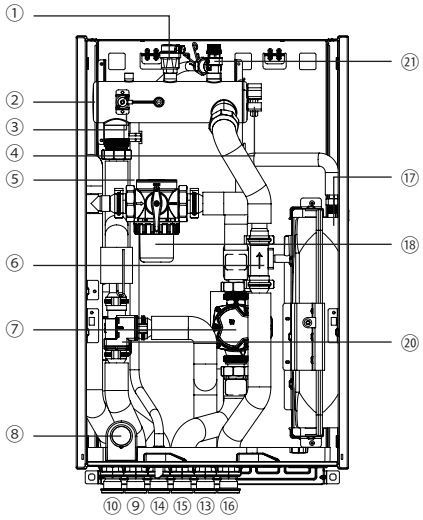
3. Hydro Units

3-2. Dimensional drawing

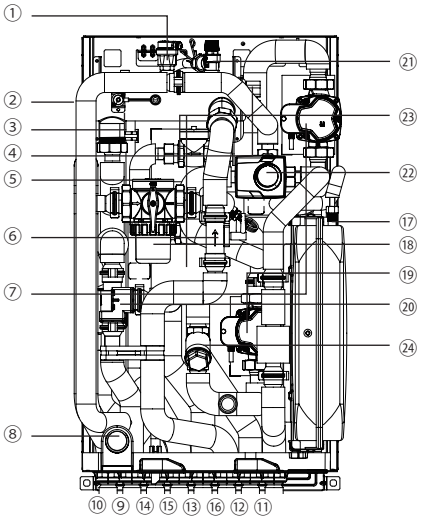
Hydro Unit

Main components

✻ AE160DNYMPK



✻ AE160DNZMPK



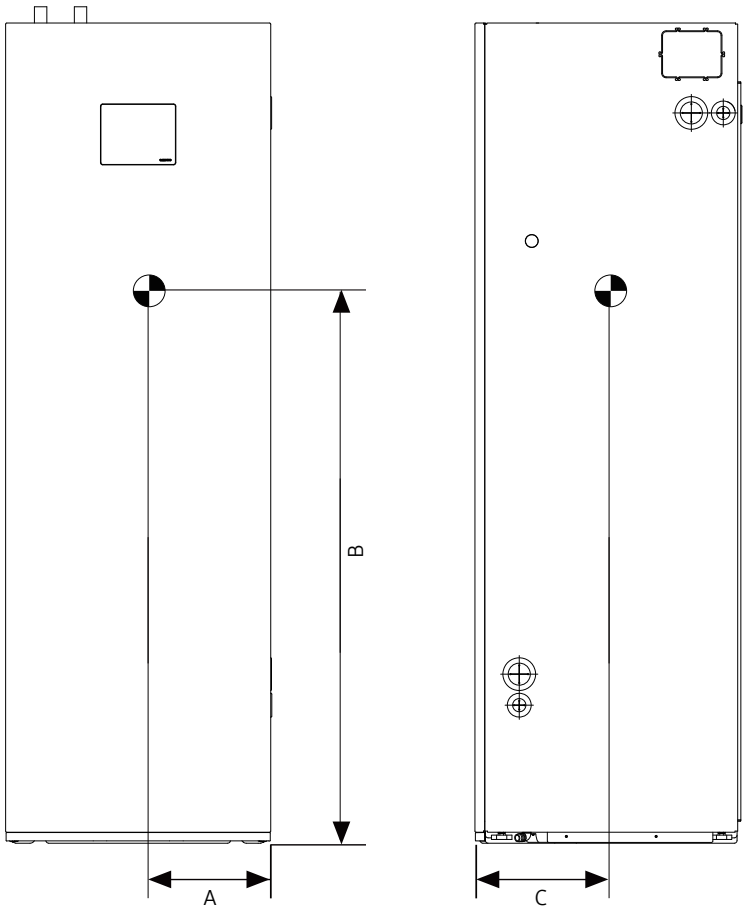
No.	Name	Note
①	Air vent 3/8"	BSPP male 3/8"
②	Backup heater thermal fuse	Thermal cut out 98 ℃ (+0,-5 ℃)
③	Backup heater thermostat	Disc. 65 ℃ ±4 ℃
④	Backup heater element	2, 4 kW: 1Φ AC 230V 50Hz / 6 kW: 3Φ AC 400V 50Hz
⑤	Drain hose	
⑥	Flow sensor	5~80L/min
⑦	Water pump	1P-230 V-50 Hz, 46 LPM x 54 kPa
⑧	Manometer	ø48, 0~4bar
⑨	Heating outlet(To zone) for AE160DNYMPK Heating outlet(Zone 2) (To zone 2) for AE160DNZMPK	BSPP female, 1-1/4"
⑩	Heating inlet(From zone) for AE160DNYMPK Heating inlet(Zone 2) (From zone 2) for AE160DNZMPK	BSPP female, 1-1/4"
⑪	Heating outlet(Zone 1) (To zone 1) for AE160DNZMPK	BSPP female, 1-1/4"
⑫	Heating inlet(Zone 1) (From zone 1) for AE160DNZMPK	BSPP female, 1-1/4"
⑬	DHW outlet (Hot water)	BSPP female, 1-1/4"
⑭	DHW inlet (Cold water)	BSPP female, 1-1/4"
⑮	Outdoor outlet (To outdoor unit)	BSPP female, 1-1/4"
⑯	Outdoor inlet (From outdoor unit)	BSPP female, 1-1/4"
⑰	Expansion vessel	10L, Pre-charge gas: 1.2 bar 90 ℃, N_2, BSPP 3/8"
⑱	Magnetic filter	
⑲	Water pump (Zone 1)	
⑳	3way valve	
㉑	Pressure relief valve	2.9 bar, BSPP 1/2"
㉒	Mixing valve	
㉓	Check valve	
㉔	Strainer	

3. Hydro Units

3-3. Center of Gravity

ClimateHub

Units : mm [inches]



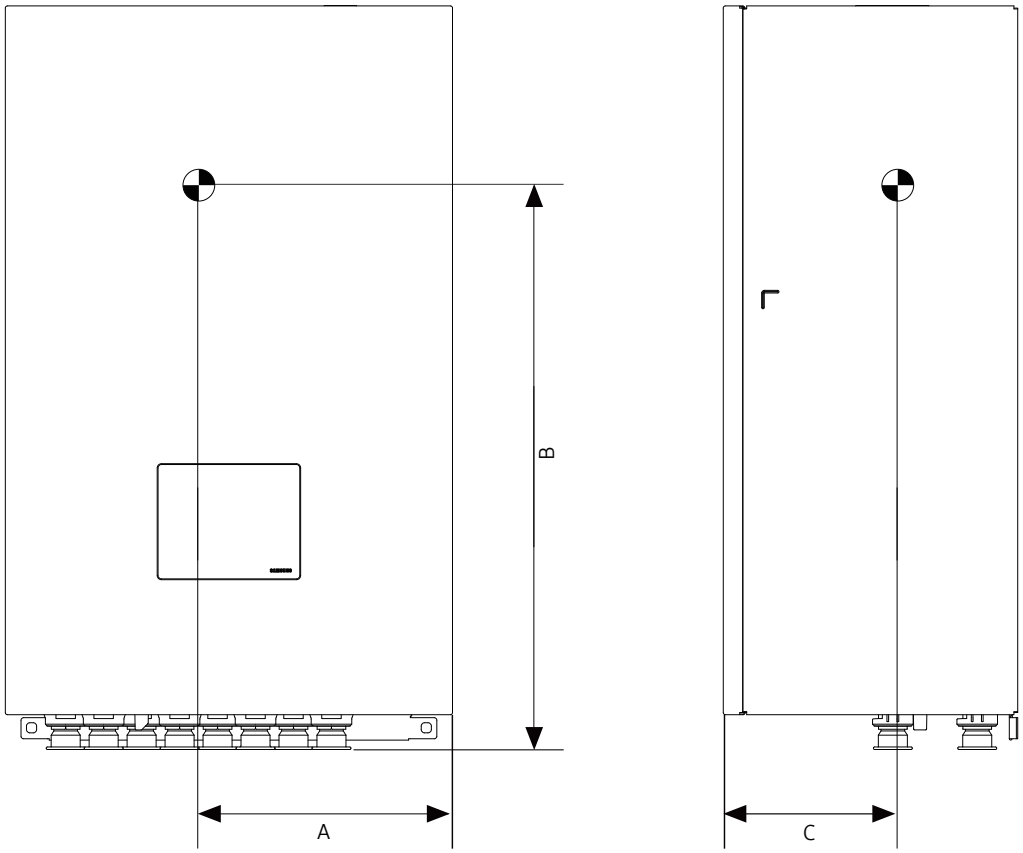
Model	A	B	C
AE200DN*MPK/EU	268 [10-9/16]	1,210 [47-5/8]	367 [14-7/16]

3. Hydro Units

3-3. Center of Gravity

Hydro Unit

Units : mm [inches]

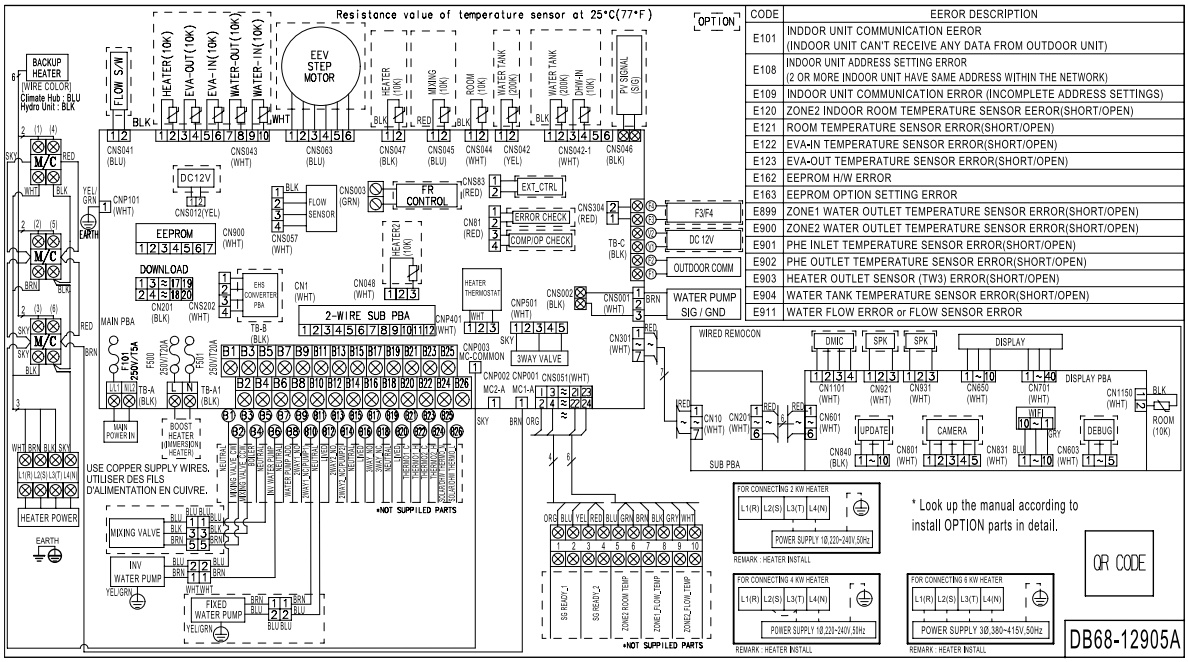


Model	A	B	C
AE160DN*MPK/EU	339 [13-3/8]	605 [23-13/16]	130 [5-1/8]

3. Hydro Units

3-4. Electrical wiring diagram

ClimateHub/Hydro Unit



MAIN PBA	Printed Circuit Board(MAIN)	PV SIGNAL (S/G)	Photo Voltaic Signal
SUB PBA	Printed circuit board(SUB)	HEATER(10K)	Thermistor (Heater_10Kohm)
M/C	Magnetic Contactor	EVA-OUT(10K)	Thermistor (Eva out_10Kohm)
MIXING VALVE_CW	Mixing Valve_Clockwise	EVA-IN(10K)	Thermistor (Eva in_10Kohm)
MIXING VALVE_CCW	Mixing Valve_Counterclockwise	WATER-OUT(10K)	Thermistor (Water-Out_10Kohm)
INV WATER PUMP	Inverter Water Pump	WATER-IN(10K)	Thermistor (Water-In_10Kohm)
2WAY1_NO	2way Valve1_Normal Open	MIXING(10K)	Thermistor (Mixing_10Kohm)
2WAY1_NC	2way Valve1_Normal Close	ROOM(10K)	Thermistor (Room_10Kohm)
2WAY2_NO	2way Valve2_Normal Open	WATER TANK(200K)	Thermistor (Water Tank_200Kohm)
2WAY2_NC	2way Valve2_Normal Close	DHW-IN(10K)	Thermistor (Domestic Hot Water_10Kohm)
3WAY_NO	3way Valve_Normal Open	EEV STEP MOTOR	Electronic Expansion Valve Step Motor
3WAY_NC	3way Valve_Normal Close	FLOW S/W	Flow Switch
THERMO1_C	Thermostat1_Cooling	SG READY	Smartgrid Ready
THERMO1_H	Thermostat1_Heating	ZONE1_FLOW_TEMP	Zone1_Flow_Temperature
THERMO2_C	Thermostat2_Cooling	ZONE2_FLOW_TEMP	Zone2_Flow_Temperature
THERMO2_H	Thermostat2_Heating	ZONE2 ROOM TEMP	Zone2_Room_Temperature
WATER PUMP SIG / GND	Water Pump Signal / Ground	SOLAR/DHW THERMO_N	Solar/Domestic Hot Water Thermostat_Neutral
OUTDOOR COMM	Outdoor Communication	SOLAR/DHW THERMO_L	Solar/Domestic Hot Water Thermostat_Live
COMP/OP CHECK	Compressor/Operation Check	DMIC	Digital Microphone
EXT_CTRL	External Control	SPK	Speaker

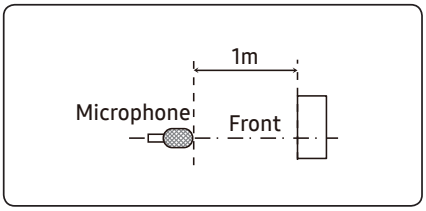
NOTES

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

3-5. Sound data

Sound Pressure level

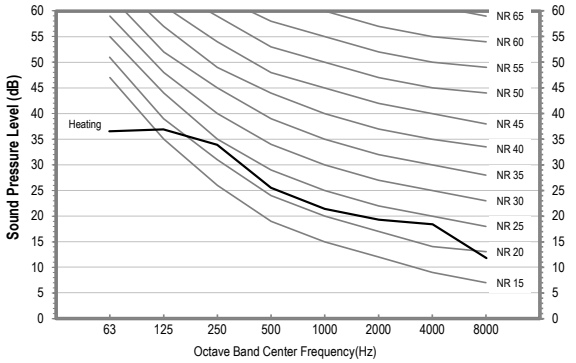


Unit: dB(A)

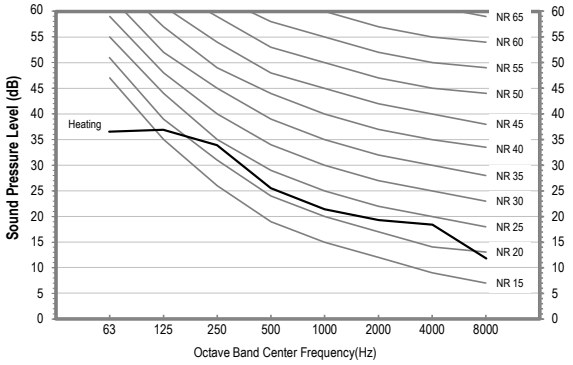
Model	Heating
AE125HCTP*S/EU + AE200DNXMPK/EU	30
AE160HCTP*S/EU + AE200DNXMPK/EU	30
AE125HCTP*S/EU + AE200DNWMPK/EU	28
AE160HCTP*S/EU + AE200DNWMPK/EU	28

- NR Curve

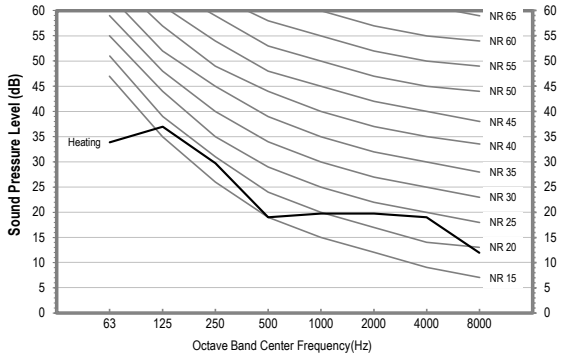
1) AE125HCTP*S/EU + AE200DNXMPK/EU



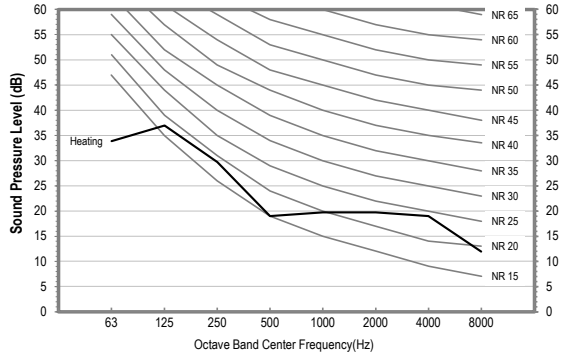
2) AE160HCTP*S/EU + AE200DNXMPK/EU



3) AE125HCTP*S/EU + AE200DNWMPK/EU



4) AE160HCTP*S/EU + AE200DNWMPK/EU



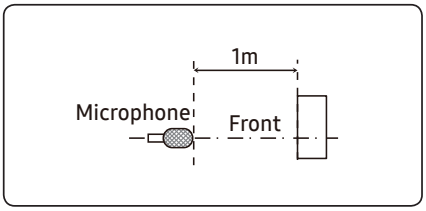
NOTE

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

3. Hydro Units

3-5. Sound data

Sound Pressure level

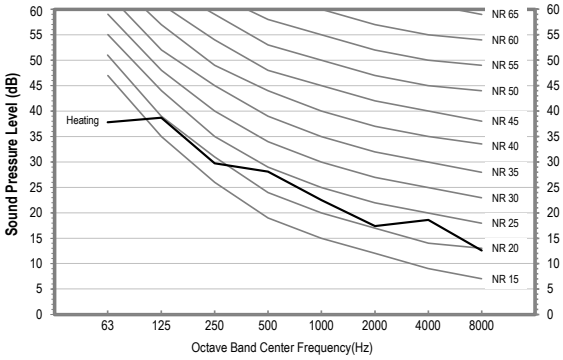


Unit: dB(A)

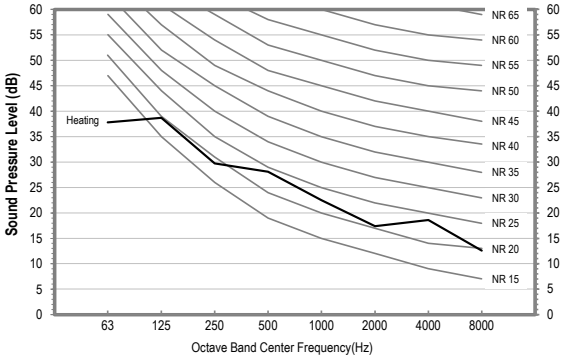
Model	Heating
AE125HCTP*S/EU + AE160DNZMPK/EU	30
AE160HCTP*S/EU + AE160DNZMPK/EU	30
AE125HCTP*S/EU + AE160DNYMPK/EU	28
AE160HCTP*S/EU + AE160DNYMPK/EU	28

- NR Curve

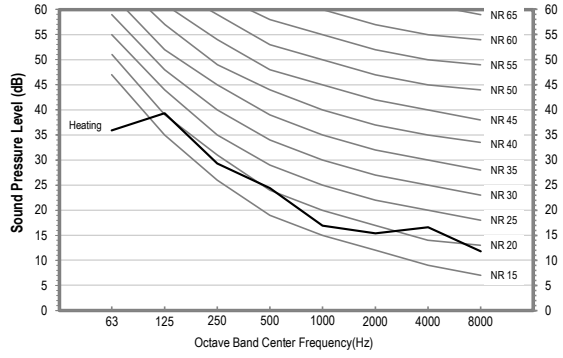
1) AE125HCTP*S/EU + AE160DNZMPK/EU



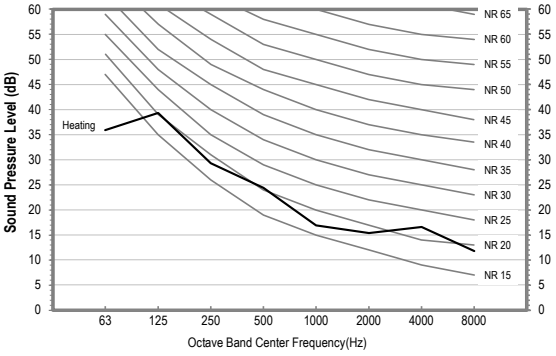
2) AE160HCTP*S/EU + AE160DNZMPK/EU



3) AE125HCTP*S/EU + AE160DNYMPK/EU



4) AE160HCTP*S/EU + AE160DNYMPK/EU



NOTE

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

3. Hydro Units

3-5. Sound data

Sound Power level

NOTE

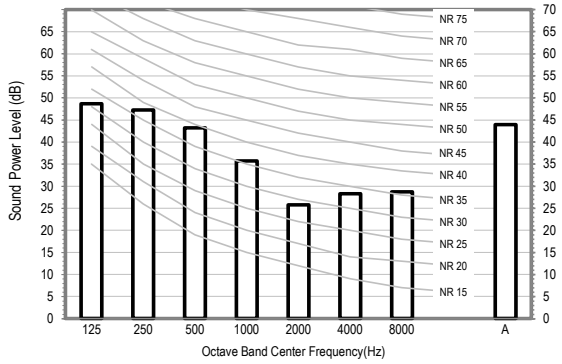
- Specifications may be subject to change without prior notice
  - Sound power level is an absolute value that a sound source generates.
  - dBA = A-weighted sound power level.
  - Reference power : 1pW.
  - Measured according to ISO 3741.

Unit: dB(A)

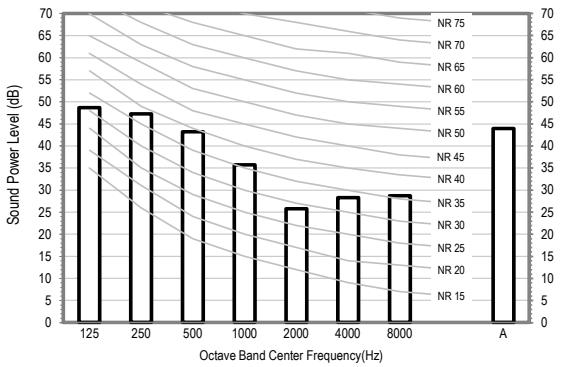
Model	Heating
AE125HCTP*S/EU + AE200DNXMPK/EU	44
AE160HCTP*S/EU + AE200DNXMPK/EU	44
AE125HCTP*S/EU + AE200DNWMPK/EU	42
AE160HCTP*S/EU + AE200DNWMPK/EU	42

- NR Curve

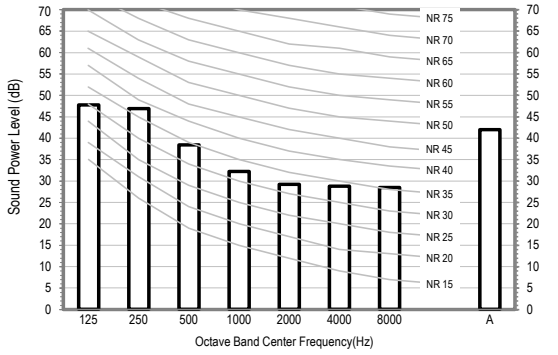
1) AE125HCTP*S/EU + AE200DNXMPK/EU



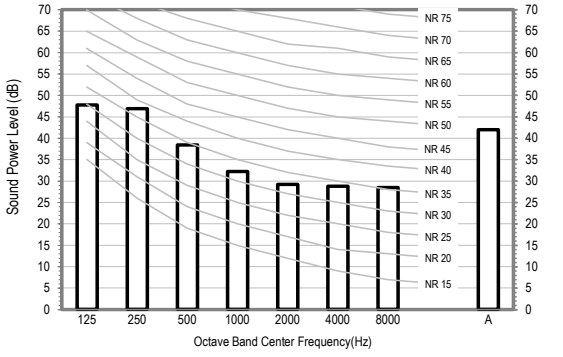
2) AE160HCTP*S/EU + AE200DNXMPK/EU



3) AE125HCTP*S/EU + AE200DNWMPK/EU



4) AE160HCTP*S/EU + AE200DNWMPK/EU



3. Hydro Units

3-5. Sound data

Sound Power level

NOTE

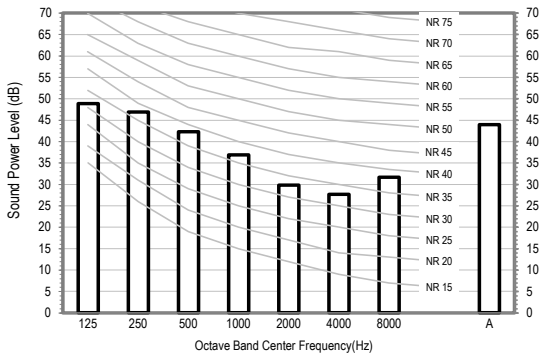
- Specifications may be subject to change without prior notice
  - Sound power level is an absolute value that a sound source generates.
  - dBA = A-weighted sound power level.
  - Reference power : 1pW.
  - Measured according to ISO 3741.

Unit: dB(A)

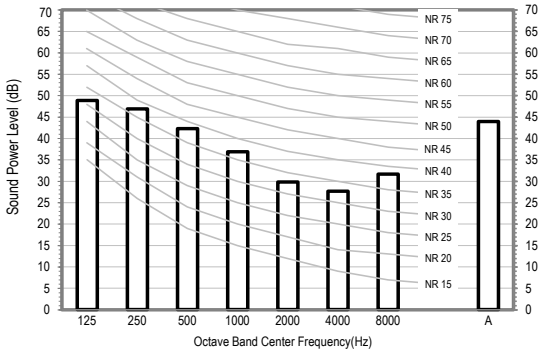
Model	Heating
AE125HCTP*S/EU + AE160DNZMPK/EU	44
AE160HCTP*S/EU + AE160DNZMPK/EU	44
AE125HCTP*S/EU + AE160DNYMPK/EU	42
AE160HCTP*S/EU + AE160DNYMPK/EU	42

- NR Curve

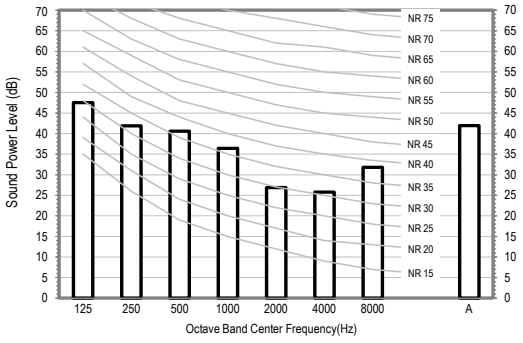
1) AE125HCTP*S/EU + AE160DNZMPK/EU



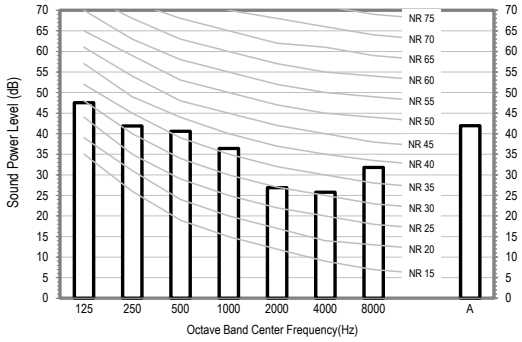
2) AE160HCTP*S/EU + AE160DNZMPK/EU



3) AE125HCTP*S/EU + AE160DNYMPK/EU



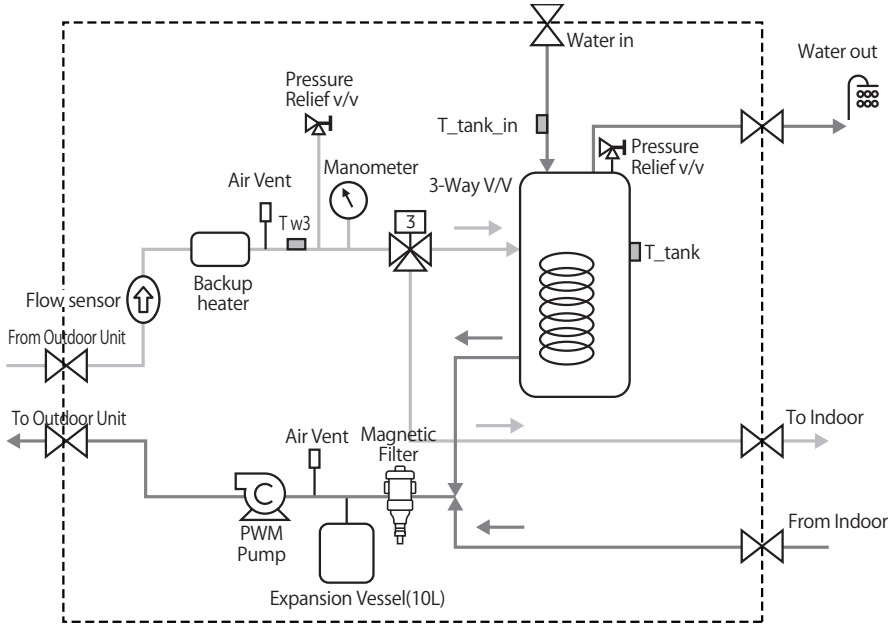
4) AE160HCTP*S/EU + AE160DNYMPK/EU



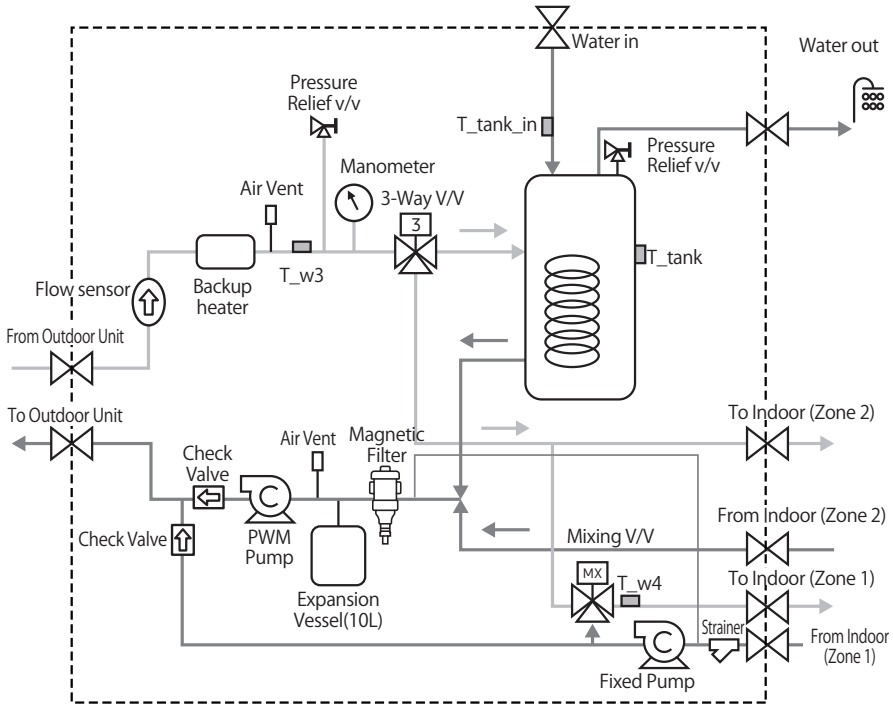
3. Hydro Units

3-6. Piping diagram

AE200DNWMPK/EU (Standard)



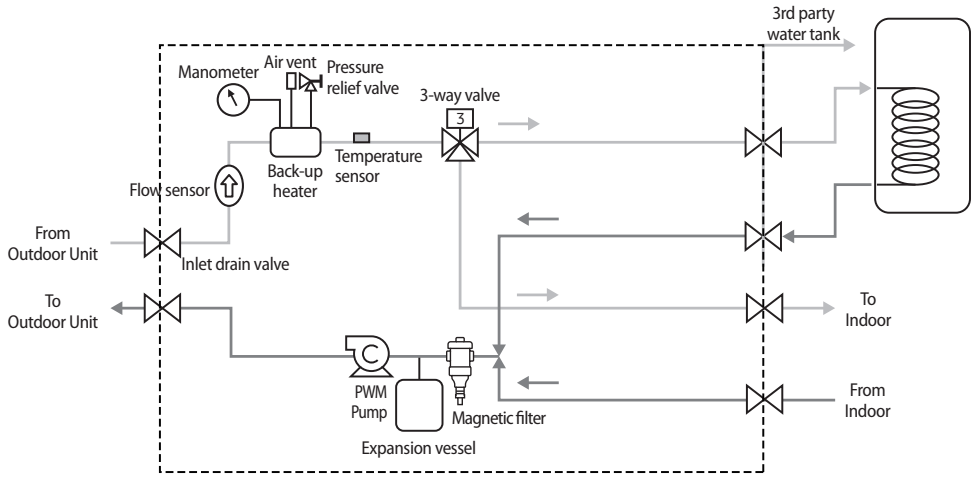
AE200DNXMPK/EU (Standard + 2 Zone kit)



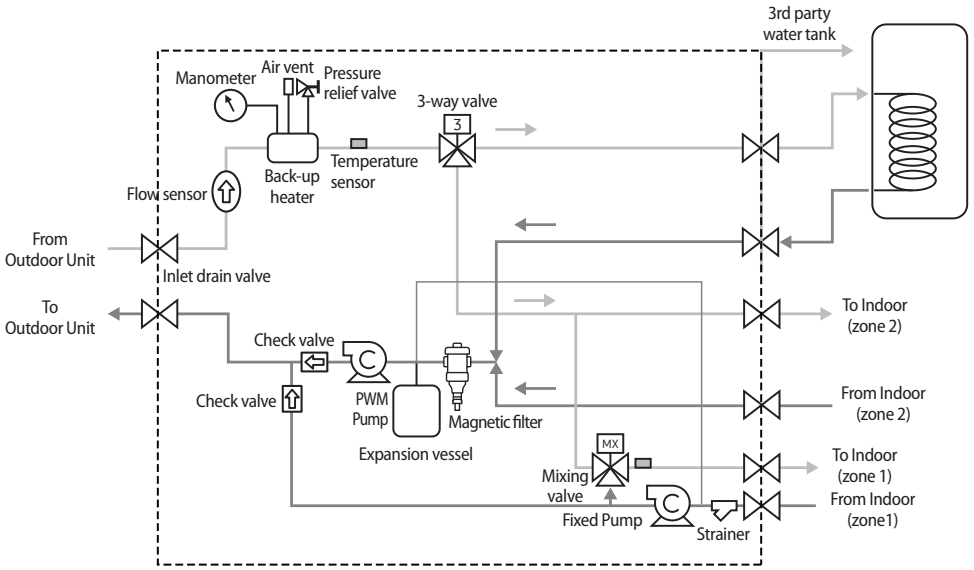
3. Hydro Units

3-6. Piping diagram

AE016DNYMPK/EU (Standard)



AE016DNZMPK/EU (Standard + 2 Zone kit)



4. Indoor Units

4-1. Specifications

RAC

Model Name					AE015HEADKG/EU	AE022HEADKG/EU	AE028HEADKG/EU
Power Supply				Φ | # | V | Hz	1 | 2 | 220-240 | 50/60	1 | 2 | 220-240 | 50/60	1 | 2 | 220-240 | 50/60
Performance	Capacity	Cooling		kW	1.5	2.2	2.8
				Btu/h	5100	7500	9600
		Heating		kW	1.7	2.5	3.2
				Btu/h	5800	8500	10900
Power	Power Input	Cooling	Nominal	W	20	24	30
		Heating	Nominal	W	20	24	30
	Current Input	Cooling	Nominal	A	0.13	0.16	0.2
		Heating	Nominal	A	0.13	0.16	0.2
	Current	MCA		A	0.16	0.2	0.25
		MFA		A	15	15	15
Heat Exchanger	Type			-	Fin & Tube	Fin & Tube	Fin & Tube
	Material	Fin	Fin	-	Al	Al	Al
		Tube	Tube	-	Cu	Cu	Cu
	Fin Treatment			-	Green Hydrophile	Green Hydrophile	Green Hydrophile
Fan	Type			-	Crossflow	Crossflow	Crossflow
	Quantity			EA	1	1	1
	Air Flow Rate		High/Mid/Low	CMM	6.1 / 5.8 / 5.5	6.8 / 6.1 / 5.5	8.5 / 7.7 / 6.9
Fan Motor	Type			-	BLDC	BLDC	BLDC
	Quantity			EA	1	1	1
	Output			W	27	27	27
Piping Connections	Liquid Pipe	Type		-	Flaring	Flaring	Flaring
		Diameter		mm	6.35	6.35	6.35
				in	1/4	1/4	1/4
	Gas Pipe	Type		-	Flaring	Flaring	Flaring
		Diameter		mm	12.7	12.7	12.7
				in	1/2	1/2	1/2
Drain	Drain Pipe		Diameter	-	VP25	VP25	ID18 HOSE
Wiring connections	Transmission Cable	Min.	Min.	㎟	0.75	0.75	0.75
		Remark	Remark	-	F1, F2	F1, F2	F1, F2
Refrigerant	Type			-	R32	R32	R32
	Control Type			-	EEV EXCLUDED	EEV EXCLUDED	EEV EXCLUDED
Sound Level	Sound Pressure Level		High/Mid/Low	dB(A)	31 / 30 / 29	33 / 31 / 29	34 / 33 / 31
	Sound Power Level		Cooling	dB(A)	50	51	50
External Dimension	Net Weight			kg	7.8	7.8	9.2
	Shipping Weight			kg	9.6	9.6	11.1
	Net Dimensions (WxHxD)			mm	682 × 299 × 215	682 × 299 × 215	820 × 299 × 215
	Shipping Dimensions (WxHxD)			mm	742 × 290 × 375	742 × 290 × 375	880 × 290 × 375

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

Model Name					AE036HEADKG/EU	AM056DNVDKG/EU	AM071DNVDKG/EU
Power Supply				Φ | # | V | Hz	1 | 2 | 220-240 | 50/60	1 | 2 | 220-240 | 50/60	1 | 2 | 220-240 | 50/60
Performance	Capacity	Cooling		kW	3.6	5.6	6.8
				Btu/h	12300	19100	23200
		Heating		kW	4	6.3	7.0
				Btu/h	13600	21500	23900
Power	Power Input	Cooling	Nominal	W	37	52	60
		Heating	Nominal	W	37	52	60
	Current Input	Cooling	Nominal	A	0.25	0.35	0.4
		Heating	Nominal	A	0.25	0.35	0.4
	Current	MCA		A	0.31	0.44	0.5
		MFA		A	15	15	15
Heat Exchanger	Type			-	Fin & Tube	Fin & Tube	Fin & Tube
	Material	Fin	Fin	-	Al	Al	Al
		Tube	Tube	-	Cu	Cu	Cu
	Fin Treatment			-	Green Hydrophile	Green Hydrophile	Green Hydrophile
Fan	Type			-	Crossflow	Crossflow	Crossflow
	Quantity			EA	1	1	1
	Air Flow Rate		High/Mid/Low	CMM	10.3 / 9.1 / 8.3	15.7 / 13.8 / 12	16.8 / 15 / 13.2
Fan Motor	Type			-	BLDC	BLDC	BLDC
	Quantity			EA	1	1	1
	Output			W	27	27	27
Piping Connections	Liquid Pipe	Type		-	Flaring	Flaring	Flaring
		Diameter		mm	6.35	6.35	9.52
				in	1/4	1/4	3/8
	Gas Pipe	Type		-	Flaring	Flaring	Flaring
		Diameter		mm	12.7	12.7	15.88
				in	1/2	1/2	5/8
Drain	Drain Pipe		Diameter	-	ID18 HOSE	VP18	VP18
Wiring connections	Transmission Cable	Min.	Min.	㎟	0.75	0.75	0.75
		Remark	Remark	-	F1, F2	F1, F2	F1, F2
Refrigerant	Type			-	R32	R32	R32
	Control Type			-	EEV EXCLUDED	EEV INCLUDED	EEV INCLUDED
Sound Level	Sound Pressure Level		High/Mid/Low	dB(A)	39 / 36 / 33	40 / 37 / 34	43 / 40 / 37
	Sound Power Level		Cooling	dB(A)	56	58	62
External Dimension	Net Weight			kg	9.2	12	12
	Shipping Weight			kg	11.1	14	14
	Net Dimensions (WxHxD)			mm	820 × 299 × 215	1055 × 299 × 215	1055 × 299 × 215
	Shipping Dimensions (WxHxD)			mm	880 × 290 × 375	1115 × 375 × 290	1115 × 375 × 290

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

WindFree 1Way

Model Name				AM017DN1DKG/EU	AM022DN1DKG/EU	AM028DN1DKG/EU
Power Supply			Φ, #, V, Hz	1,2,220-240,50/60	1,2,220-240,50/60	1,2,220-240,50/60
Performance	Capacity	Cooling	kW	1.70	2.20	2.80
			Btu/h	5,800	7,500	9,600
		Heating	kW	1.90	2.50	3.20
			Btu/h	6,500	8,500	10,900
Power	Power Input	Cooling	W	24.00	25.00	50.00
		Heating		24.00	25.00	50.00
	Current Input	Cooling	A	0.14	0.15	0.23
		Heating		0.14	0.15	0.23
	Current	MCA	A	0.18	0.18	0.29
		MFA		15	15	15
Heat exchanger	Type		-	Fin & Tube	Fin & Tube	Fin & Tube
	Material	Fin	-	Al	Al	Al
		Tube	-	Cu	Cu	Cu
	Fin Treatment		-	Green Hydrophile	Green Hydrophile	Green Hydrophile
Fan	Type		-	Crossflow Fan	Crossflow Fan	Crossflow Fan
	Quantity		ea	1	1	1
	Air Flow Rate	H/M/L	m^3/min	4.80/4.30/4.10	5.10/4.60/4.30	7.00/6.00/5.00
			l/s	80.00/71.67/68.33	85.00/76.67/71.67	116.67/100.00/83.33
Fan Motor	Model		-	BLDC Motor	BLDC Motor	AC Motor
	Output x n		W	27 x 1	27 x 1	23 x 1
Piping Connections	Liquid Pipe		Type	Flare Connection	Flare Connection	Flare Connection
			Φ, mm	6.35	6.35	6.35
			Φ, inch	1/4	1/4	1/4
	Gas Pipe		Type	Flare Connection	Flare Connection	Flare Connection
			Φ, mm	12.7	12.7	12.7
			Φ, inch	1/2	1/2	1/2
	Drain Pipe		Φ, mm	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Wiring connections	Communication	Minimum	mm^2	0.75	0.75	0.75
		Remark	-	F1, F2	F1, F2	F1, F2
Refrigerant	Type		-	R32	R32	R32
	Electronic Expansion Valve		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Sound	Sound Pressure	High/Mid/Low /WindFree	dB(A)	28 / 26 / 24 / 24	29 / 26 / 24 / 24	32 / 28 / 24 / 24
	Sound Power	Cooling		46	47	50
Dimension	Net Weight		kg	8.0	8.0	10.0
	Shipping Weight		kg	10.5	10.5	12.8
	Net Dimensions (WxHxD)		mm	740 x 135 x 360	740 x 135 x 360	970 x 135 x 410
	Shipping Dimensions (WxHxD)		mm	895 x 223 x 435	895 x 223 x 435	1,173 x 231 x 487

4. Indoor Units

4-1. Specifications

WindFree 1Way

Model Name			AM017DN1DKG/EU	AM022DN1DKG/EU	AM028DN1DKG/EU
Casing	Material	-	ABS	ABS	ABS
Panel	Model Name	-	PC1MWFMANW	PC1MWFMANW	PC1NWFMANW
	Type	-	Wind Free	Wind Free	Wind Free
	Material	-	HIPS	HIPS	HIPS
	Color	-	White	White	White
	Net Weight	kg	2.6	2.6	4.3
	Shipping Weight	kg	3.8	3.8	6.3
	Net Dimensions (W×H×D)	mm	960 x 34 x 420	960 x 34 x 420	1,198 x 34 x 500
	Shipping Dimensions (W×H×D)	mm	1,003 x 112 x 482	1,003 x 112 x 482	1,262 x 122 x 566
Drain pump		-	INCLUDED	INCLUDED	INCLUDED
	Max. lifting Height / Displacement	mm / Liter/h	750 / 24	750 / 24	750 / 24

NOTE

- Cooling : Indoor temperature 27°C DB / 19°C WB, Outdoor temperature 35°C DB/24°C WB, Refrigerant pipe length 7.5m, Level difference 0m.
- Heating : Indoor temperature 20°C DB / 15°C WB, Outdoor temperature 7°C DB / 6°C WB, Refrigerant pipe length 7.5m, Level difference 0m.
- Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.
- These products contain R32 (GWP=675) which is fluorinated greenhouse gas.
- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA
- Drain pump included (check valve included)

4. Indoor Units

4-1. Specifications

WindFree 1Way

Model Name				AM036DN1DKG/EU	AM056DN1DKG/EU
Power Supply			Φ, #, V, Hz	1,2,220-240,50/60	1,2,220-240,50/60
Performance	Capacity	Cooling	kW	3.60	5.60
			Btu/h	12,300	19,100
		Heating	kW	4.00	6.30
			Btu/h	13,600	21,500
Power	Power Input	Cooling	W	50.00	55.00
		Heating		50.00	55.00
	Current Input	Cooling	A	0.25	0.28
		Heating		0.25	0.28
	Current	MCA	A	0.31	0.35
		MFA		15	15
Heat exchanger	Type		-	Fin & Tube	Fin & Tube
	Material	Fin	-	Al	Al
		Tube	-	Cu	Cu
	Fin Treatment		-	Green Hydrophile	Green Hydrophile
Fan	Type		-	Crossflow Fan	Crossflow Fan
	Quantity		ea	1	1
	Air Flow Rate	H/M/L	m^3/min	8.00/7.00/6.00	16.00/14.00/12.50
			l/s	133.33/116.67/100.00	266.67/233.33/208.33
Fan Motor	Model		-	AC Motor	BLDC Motor
	Output x n		W	23 x 1	54 x 1
Piping Connections	Liquid Pipe		Type	Flare Connection	Flare Connection
			Φ, mm	6.35	6.35
			Φ, inch	1/4	1/4
	Gas Pipe		Type	Flare Connection	Flare Connection
			Φ, mm	12.7	12.70
			Φ, inch	1/2	1/2
	Drain Pipe		Φ, mm	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Wiring connections	Communication	Minimum	mm^2	0.75	0.75
		Remark	-	F1, F2	F1, F2
Refrigerant	Type		-	R32	R32
	Electronic Expansion Valve		-	EEV INCLUDED	EEV INCLUDED
Sound	Sound Pressure	High/Mid/Low /WindFree	dB(A)	37 / 33 / 30 / 30	41 / 38 / 35 / 30
	Sound Power	Cooling		55	59
Dimension	Net Weight		kg	10.0	13.5
	Shipping Weight		kg	12.8	17.3
	Net Dimensions (WxHxD)		mm	970 x 135 x 410	1,200 x 138 x 450
	Shipping Dimensions (WxHxD)		mm	1,173 x 231 x 487	1,435 x 224 x 525

4. Indoor Units

4-1. Specifications

WindFree 1Way

Model Name			AM036DN1DKG/EU	AM056DN1DKG/EU
Casing	Material	-	ABS	ABS
Panel	Model Name	-	PC1NWFMANW	PC1BWFMANW
	Type	-	Wind Free	Wind Free
	Material	-	HIPS	HIPS
	Color	-	White	White
	Net Weight	kg	4.3	5.0
	Shipping Weight	kg	6.3	7.0
	Net Dimensions (W×H×D)	mm	1,198 x 34 x 500	1,410 x 34 x 500
	Shipping Dimensions (W×H×D)	mm	1,262 x 122 x 566	1,474 x 122 x 566
Drain pump		-	INCLUDED	INCLUDED
	Max. lifting Height / Displacement	mm / Liter/h	750 / 24	750 / 24

NOTE

- Cooling : Indoor temperature 27°C DB / 19°C WB, Outdoor temperature 35°C DB/24°C WB, Refrigerant pipe length 7.5m, Level difference 0m.
- Heating : Indoor temperature 20°C DB / 15°C WB, Outdoor temperature 7°C DB / 6°C WB, Refrigerant pipe length 7.5m, Level difference 0m.
- Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.
- These products contain R32 (GWP=675) which is fluorinated greenhouse gas.
- Specifications may be subject to change without prior notice.
- Select wire size based on the value of MCA
- Drain pump included (check valve included)

4. Indoor Units

4-1. Specifications

LSP Duct

Model Name				AM022DNLDKG/EU	AM028DNLDKG/EU
Power Supply			Φ, #, V, Hz	1,2,220~240,50/60	1,2,220~240,50/60
Performance	Capacity	Cooling	kW	2.2	2.8
			Btu/h	7,500	9,600
		Heating	kW	2.5	3.2
			Btu/h	8,500	10,900
Power	Power Input	Cooling	W	30.0	34.0
		Heating		30.0	36.0
	Current Input	Cooling	A	0.25	0.28
		Heating		0.25	0.30
	Current	MCA	A	0.38	0.45
		MFA		15	15
Heat exchanger	Type		-	Fin & Tube	Fin & Tube
	Material	Fin	-	Al	Al
		Tube	-	Cu	Cu
	Fin Treatment		-	hydrophilic	hydrophilic
Fan	Type		-	Sirocco Fan	Sirocco Fan
	Quantity		EA	2	2
	Air Flow Rate	H/M/L	m³/min	6 / 4.9 / 3.8	7.05 / 5.15 / 4.35
			l/s	100 / 82 / 63	118 / 86 / 73
	External Pressure	Min/Std/Max	mmAq	0 / 1 / 3	0 / 1 / 3
			Pa	0 / 9.81 / 29.42	0 / 9.81 / 29.42
Fan Motor	Type		-	BLDC	BLDC
	Output x n		W	69	69
Piping Connections	Liquid Pipe		Type	Flare connection	Flare connection
			Φ, mm (inch)	6.35 (1/4)	6.35 (1/4)
	Gas Pipe		Type	Flare connection	Flare connection
			Φ, mm (inch)	12.7 (1/2)	12.7 (1/2)
	Drain Pipe		Φ,inch	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Wiring connections	Communication (Min.)		㎟	0.75	0.75
			-	F1, F2	F1, F2
Refrigerant	Type		-	R32	R32
	Control Method		-	EEV	EEV
Sound	Sound Pressure Level	H/M/L	dB(A)	26 / 23 / 19	28 / 24 / 19
	Sound Power Level	Cooling		42	44
External Dimension	Net Weight		kg	15.9	15.9
	Shipping Weight		kg	19.2	19.2
	Net Dimensions (W×H×D)		mm	700 x 199 x 440	700 x 199 x 440
	Shipping Dimensions (W×H×D)		mm	949 x 280 x 544	949 x 280 x 544
Casing	Material		-	Steel	Steel
Additional Accessories	Drain pump	External Model	-	-	-
		Internal Model	-	Built in	Built in
		Max. lifting	mm / Liter/h	750 / 24	750 / 24
	Air Filter		-	-	-

4. Indoor Units

4-1. Specifications

LSP Duct

Model Name				AM036DNLDKG/EU	AM056DNLDKG/EU
Power Supply			Φ, #, V, Hz	1,2,220~240,50/60	1,2,220~240,50/60
Performance	Capacity	Cooling	kW	3.6	5.6
			Btu/h	12,300	19,100
		Heating	kW	4.0	6.3
			Btu/h	13,600	21,500
Power	Power Input	Cooling	W	40.0	73.0
		Heating		42.0	68.0
	Current Input	Cooling	A	0.33	0.62
		Heating		0.35	0.58
	Current	MCA	A	0.53	0.92
		MFA		15	15
Heat exchanger	Type		-	Fin & Tube	Fin & Tube
	Material	Fin	-	Al	Al
		Tube	-	Cu	Cu
	Fin Treatment		-	hydrophilic	hydrophilic
Fan	Type		-	Sirocco Fan	Sirocco Fan
	Quantity		EA	2	2
	Air Flow Rate	H/M/L	m³/min	8.2 / 6.5 / 4.9	15.5 / 12.5 / 9.5
			l/s	137 / 108 / 82	258 / 208 / 158
	External Pressure	Min/Std/Max	mmAq	0 / 1 / 3	0 / 2 / 4
			Pa	0 / 9.81 / 29.42	0 / 19.61 / 39.23
Fan Motor	Type		-	BLDC	BLDC
	Output x n		W	69	84
Piping Connections	Liquid Pipe		Type	Flare connection	Flare connection
			Φ, mm (inch)	6.35 (1/4)	6.35 (1/4)
	Gas Pipe		Type	Flare connection	Flare connection
			Φ, mm (inch)	12.7 (1/2)	12.7 (1/2)
	Drain Pipe		Φ,inch	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Wiring connections	Communication (Min.)		㎟	0.75	0.75
			-	F1, F2	F1, F2
Refrigerant	Type		-	R32	R32
	Control Method		-	EEV	EEV
Sound	Sound Pressure Level	H/M/L	dB(A)	31 / 26 / 20	34 / 30 / 26
	Sound Power Level	Cooling		46	49
External Dimension	Net Weight		kg	16.3	19.3
	Shipping Weight		kg	19.6	22.8
	Net Dimensions (W×H×D)		mm	700 x 199 x 440	900 x 199 x 440
	Shipping Dimensions (W×H×D)		mm	949 x 280 x 544	1,151 x 280 x 544
Casing	Material		-	Steel	Steel
Additional Accessories	Drain pump	External Model	-	-	-
		Internal Model	-	Built in	Built in
		Max. lifting	mm / Liter/h	750 / 24	750 / 24
	Air Filter		-	-	-

4. Indoor Units

4-1. Specifications

MSP Duct

Model Name				AM036DNMDKG/EU	AM056DNMDKG/EU
Power Supply			Φ, #, V, Hz	1,2,220~240,50/60	1,2,220~240,50/60
Performance	Capacity	Cooling	kW	3.6	5.6
			Btu/h	12,300	19,100
		Heating	kW	4.0	6.3
			Btu/h	13,600	21,500
Power	Power Input	Cooling	W	45.0	70.0
		Heating		45.0	70.0
	Current Input	Cooling	A	0.4	0.6
		Heating		0.4	0.6
	Current	MCA	A	0.81	1.08
		MFA		15	15
Heat exchanger	Type		-	Fin & Tube	Fin & Tube
	Material	Fin	-	Al	Al
		Tube	-	Cu	Cu
	Fin Treatment		-	hydrophilic	hydrophilic
Fan	Type		-	Sirocco Fan	Sirocco Fan
	Quantity		EA	2	2
	Air Flow Rate	H/M/L	m^3/min	12 / 9.5 / 7.5	16 / 13.5 / 9
			l/s	208 / 158 / 125	267 / 225 / 150
	External Pressure	Min/Std/Max	mmAq	0 / 2.5 / 15	0 / 3 / 15
			Pa	0 / 24.52 / 147.1	0 / 29.42 / 147.1
Fan Motor	Type		-	BLDC	BLDC
	Output x n		W	153	153
Piping Connections	Liquid Pipe		Type	Flare connection	Flare connection
			Φ, mm (inch)	6.35 (1/4)	6.35 (1/4)
	Gas Pipe		Type	Flare connection	Flare connection
			Φ, mm (inch)	12.7 (1/2)	12.7 (1/2)
	Drain Pipe		Φ,inch	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Wiring connections	Communication (Min.)		㎟	0.75	0.75
			-	F1, F2	F1, F2
Refrigerant	Type		-	R32	R32
	Control Method		-	EEV	EEV
Sound	Sound Pressure Level	H/M/L	dB(A)	30 / 27 / 24	32 / 29 / 25
	Sound Power Level	Cooling		53	57
External Dimension	Net Weight		kg	27.0	27.0
	Shipping Weight		kg	30.5	30.5
	Net Dimensions (W×H×D)		mm	850 x 250 x 700	850 x 250 x 700
	Shipping Dimensions (W×H×D)		mm	1,064 x 320 x 784	1,064 x 320 x 784
Casing	Material		-	Steel	Steel
Additional Accessories	Drain pump	External Model	-	-	-
		Internal Model	-	Built in	Built in
		Max. lifting	mm / Liter/h	750 / 24	750 / 24
	Air Filter		-	-	-

4. Indoor Units

4-1. Specifications

MSP Duct

Model Name				AM071DNMDKG/EU	AM090DNMDKG/EU
Power Supply			Φ, #, V, Hz	1,2,220~240,50/60	1,2,220~240,50/60
Performance	Capacity	Cooling	kW	7.1	9.0
			Btu/h	24,200	30,700
		Heating	kW	8.0	10.0
			Btu/h	27,300	34,100
Power	Power Input	Cooling	W	110.0	135.0
		Heating		110.0	135.0
	Current Input	Cooling	A	1.0	1.2
		Heating		1.0	1.2
	Current	MCA	A	1.48	1.78
		MFA		15	15
Heat exchanger	Type		-	Fin & Tube	Fin & Tube
	Material	Fin	-	Al	Al
		Tube	-	Cu	Cu
	Fin Treatment		-	hydrophilic	hydrophilic
Fan	Type		-	Sirocco Fan	Sirocco Fan
	Quantity		EA	2	3
	Air Flow Rate	H/M/L	m³/min	21 / 18 / 13	27 / 22 / 16
			l/s	350 / 300 / 217	450 / 367 / 267
	External Pressure	Min/Std/Max	mmAq	0 / 3 / 15	0 / 4 / 15
			Pa	0 / 29.42 / 147.1	0 / 39.23 / 147.1
Fan Motor	Type		-	BLDC	BLDC
	Output x n		W	153	153
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,inch	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Wiring connections	Communication (Min.)		㎟	0.75	0.75
			-	F1, F2	F1, F2
Refrigerant	Type		-	R32	R32
	Control Method		-	EEV	EEV
Sound	Sound Pressure Level	H/M/L	dB(A)	36 / 32 / 27	37 / 33 / 29
	Sound Power Level	Cooling		60	61
External Dimension	Net Weight		kg	27.0	34.2
	Shipping Weight		kg	30.5	38.9
	Net Dimensions (W×H×D)		mm	850 x 250 x 700	1,200 x 250 x 700
	Shipping Dimensions (W×H×D)		mm	1,064 x 320 x 784	1,429 x 320 x 779
Casing	Material		-	Steel	Steel
Additional Accessories	Drain pump	External Model	-	-	-
		Internal Model	-	Built in	Built in
		Max. lifting	mm / Liter/h	750 / 24	750 / 24
	Air Filter		-	-	-

4. Indoor Units

4-2. Capacity Table

Cooling

TC : Total Capacity, SHC : Sensible Heat Capacity

Model	Outdoor Temperature (°C, DB)	Indoor Temperature (°C, DB / WB)													
		20.0/14.0		23.0/16.0		26.0/18.0		27.0/19.0		28.0/20.0		30.0/22.0		32.0/24.0	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
AE015HEADKG/EU	35.0	1.0	0.9	1.2	1.0	1.4	1.0	1.5	1.0	1.6	1.0	1.6	1.1	1.8	1.0
AE022HEADKG/EU	35.0	1.5	1.3	1.8	1.5	2.1	1.5	2.2	1.5	2.3	1.5	2.4	1.5	2.6	1.4
AE028HEADKG/EU	35.0	1.9	1.6	2.3	1.8	2.6	2.0	2.8	1.9	2.9	1.9	3.1	1.9	3.3	1.8
AE036HEADKG/EU	35.0	2.5	2.1	2.9	2.2	3.4	2.3	3.6	2.4	3.7	2.4	4.0	2.4	4.2	2.3
AM056DNVDKG/EU	35.0	3.9	3.0	4.6	3.4	5.3	3.7	5.6	3.8	5.8	3.8	6.2	3.8	6.6	3.5
AM071DNVDKG/EU	35.0	4.5	4.1	5.4	4.6	6.3	4.6	6.8	4.6	7.3	4.6	7.3	5.1	8.2	4.6
AM017DN1DKG/EU	35.0	1.2	1.0	1.4	1.1	1.6	1.2	1.7	1.2	1.8	1.2	1.8	1.2	2.0	1.1
AM022DN1DKG/EU	35.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.3	1.5	2.4	1.5	2.6	1.4
AM028DN1DKG/EU	35.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	2.9	1.9	3.1	1.9	3.3	1.8
AM036DN1DKG/EU	35.0	2.5	2.2	2.9	2.4	3.4	2.4	3.6	2.6	3.7	2.6	4.0	2.6	4.2	2.4
AM056DN1DKG/EU	35.0	3.9	3.3	4.6	3.8	5.3	4.1	5.6	4.2	5.8	4.2	6.2	4.2	6.6	4.0
AM022DNLDKG/EU	35.0	1.5	1.2	1.8	1.4	2.1	1.6	2.2	1.6	2.3	1.6	2.4	1.6	2.6	1.5
AM028DNLDKG/EU	35.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	2.0	2.9	2.0	3.1	2.0	3.3	1.9
AM036DNLDKG/EU	35.0	2.5	2.0	2.9	2.3	3.4	2.5	3.6	2.6	3.7	2.6	4.0	2.6	4.2	2.4
AM056DNLDKG/EU	35.0	3.9	3.3	4.6	3.8	5.3	4.0	5.6	4.2	5.8	4.2	6.2	4.2	6.6	4.0
AM036DNMDKG/EU	35.0	2.5	2.0	2.9	2.3	3.4	2.5	3.6	2.6	3.7	2.6	4.0	2.6	4.2	2.4
AM056DNMDKG/EU	35.0	3.9	3.3	4.6	3.8	5.3	4.0	5.6	4.2	5.8	4.2	6.2	4.2	6.6	4.0
AM071DNMDKG/EU	35.0	4.9	4.3	5.8	5.0	6.7	5.2	7.1	5.4	7.4	5.6	7.9	5.6	8.4	5.3
AM090DNMDKG/EU	35.0	6.2	5.7	7.3	6.5	8.4	6.9	9.0	7.1	9.3	7.2	10.0	7.2	10.6	7.0

Heating

TC : Total Capacity

Model	Outdoor Temperature		Indoor Temperature (°C, DB)						
			14.0	16.0	18.0	20.0	22.0	24.0	27.0
	DB	WB	TC	TC	TC	TC	TC	TC	TC
	°C	°C	kW	kW	kW	kW	kW	kW	kW
AE015HEADKG/EU	7.0	6.0		1.9	1.8	1.7	1.6	1.5	
AE022HEADKG/EU	7.0	6.0		2.8	2.7	2.5	2.3	2.2	
AE028HEADKG/EU	7.0	6.0		3.3	3.2	3.2	3.0	2.7	
AE036HEADKG/EU	7.0	6.0		4.1	4.1	4.0	3.7	3.4	
AM056DNVDKG/EU	7.0	6.0	6.5	6.4	6.3	5.8	5.3		
AM071DNVDKG/EU	7.0	6.0	7.8	7.4	7.0	6.6	6.2		
AM017DN1DKG/EU	7.0	6.0	2.1	2.1	1.9	1.7	1.7		
AM022DN1DKG/EU	7.0	6.0	2.8	2.7	2.5	2.3	2.2		
AM028DN1DKG/EU	7.0	6.0	3.3	3.2	3.2	3.0	2.7		
AM036DN1DKG/EU	7.0	6.0	4.1	4.1	4.0	3.7	3.4		
AM056DN1DKG/EU	7.0	6.0	6.5	6.4	6.3	5.8	5.3		
AM022DNLDKG/EU	7.0	6.0		2.8	2.7	2.5	2.3	2.2	
AM028DNLDKG/EU	7.0	6.0		3.3	3.2	3.2	3.0	2.7	
AM036DNLDKG/EU	7.0	6.0		4.1	4.1	4.0	3.7	3.4	
AM056DNLDKG/EU	7.0	6.0		6.5	6.4	6.3	5.8	5.3	
AM036DNMDKG/EU	7.0	6.0	4.3	4.1	4.1	4.0	3.7	3.4	3.2
AM056DNMDKG/EU	7.0	6.0	6.9	6.5	6.4	6.3	5.8	5.3	4.9
AM071DNMDKG/EU	7.0	6.0	8.6	8.2	8.1	8.0	7.4	6.8	6.4
AM090DNMDKG/EU	7.0	6.0	10.9	10.3	10.1	10.0	9.2	8.4	7.8

NOTE

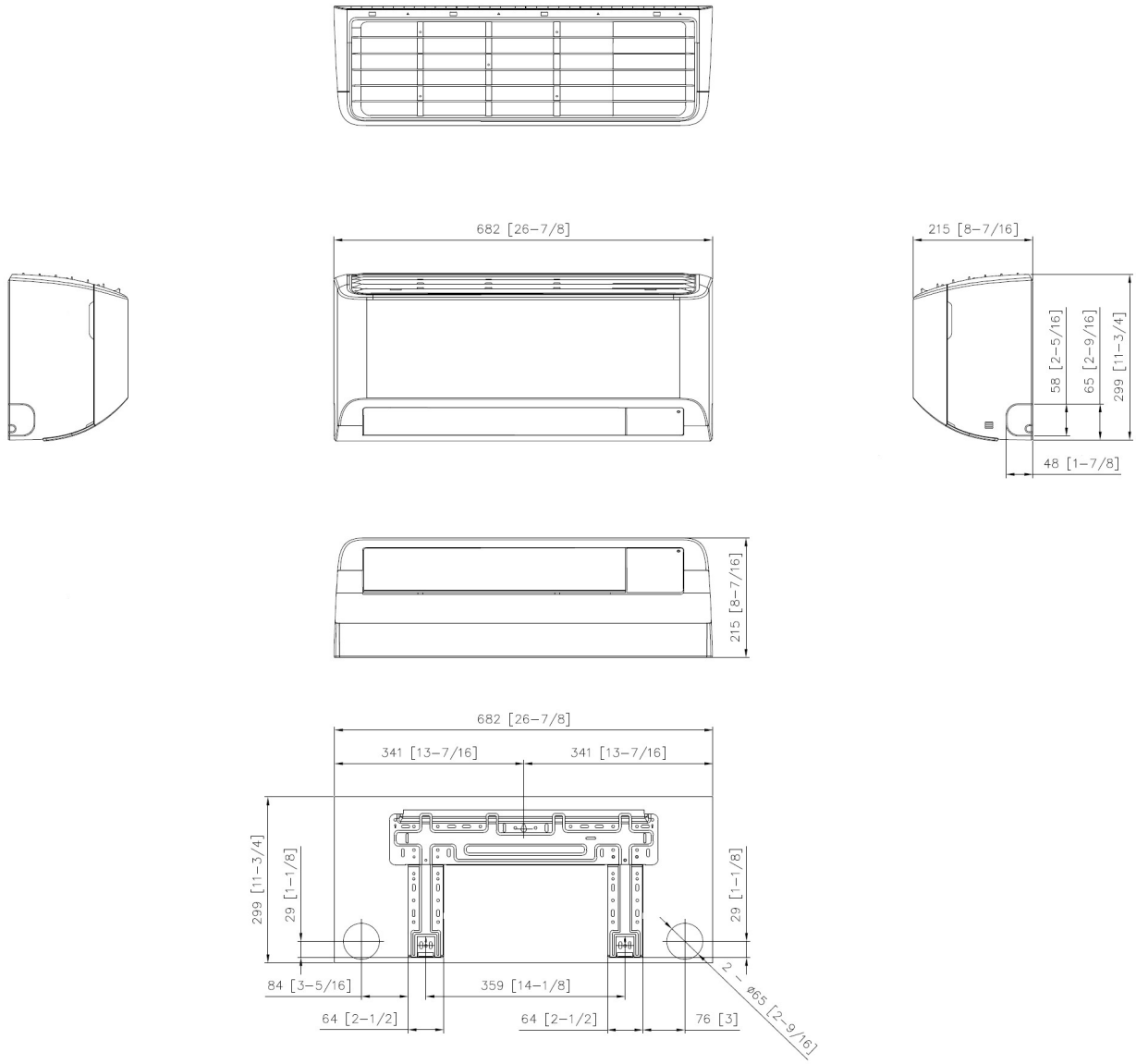
- The performance table shows the average value of each conditions.

4. Indoor Units

4-3. Dimensional drawing

RAC : AE015HEADKG/EU, AE022HEADKG/EU

Unit: mm [inch]

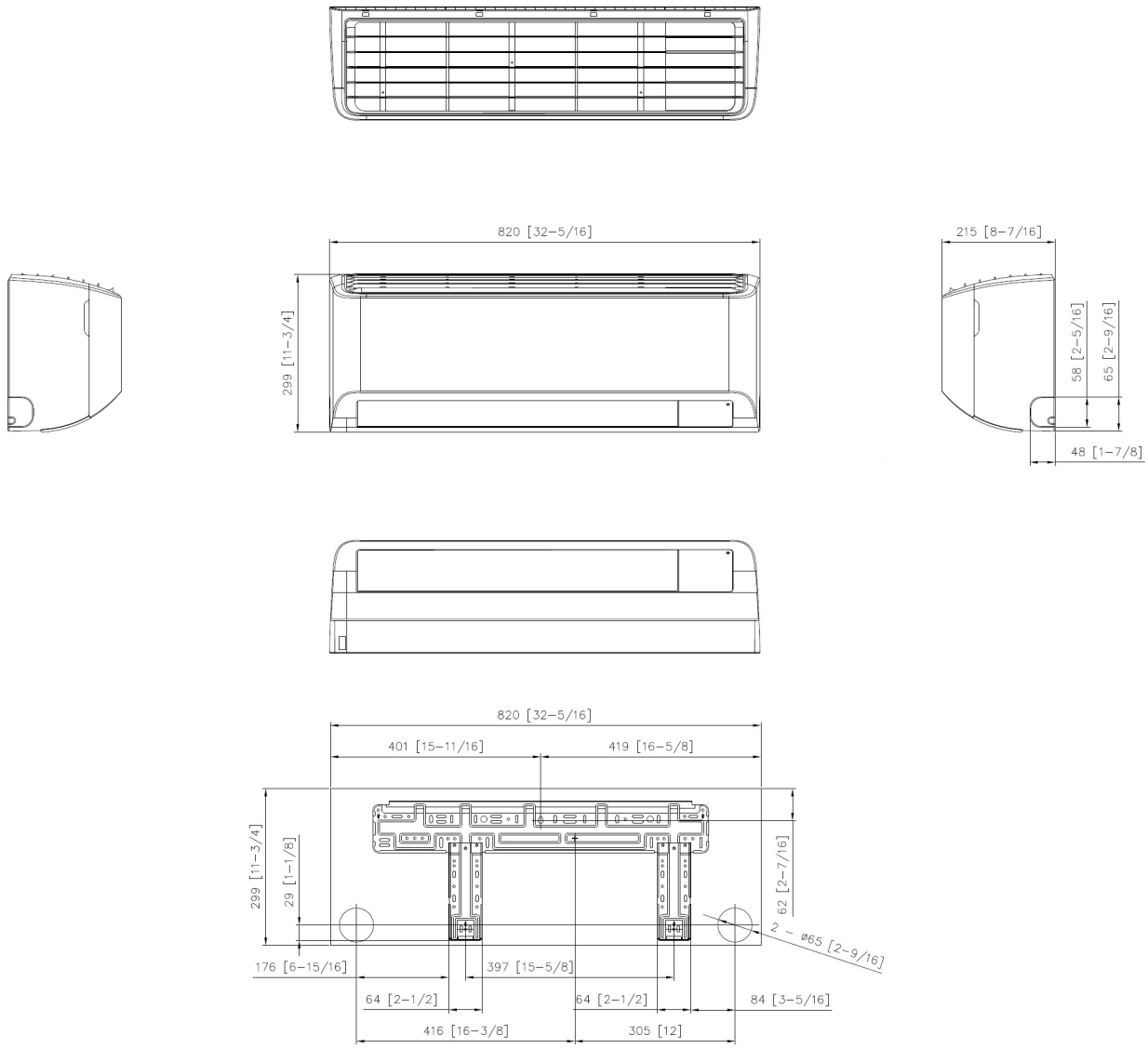


4. Indoor Units

4-3. Dimensional drawing

RAC : AE028HEADKG/EU, AE036HEADKG/EU

Unit: mm [inch]

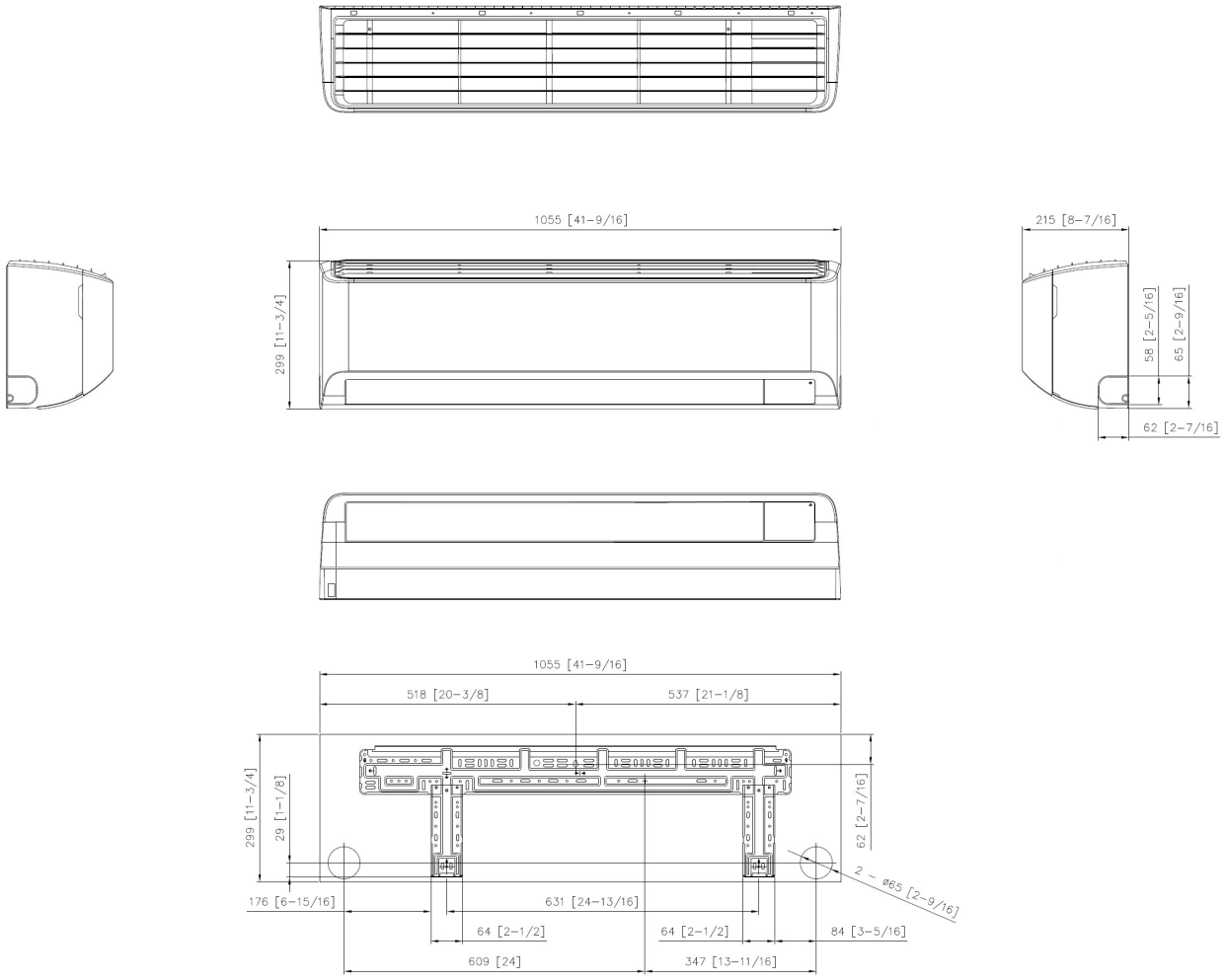


4. Indoor Units

4-3. Dimensional drawing

RAC : AM056DNVDKG/EU, AM071DNVDKG/EU

Unit: mm [inch]

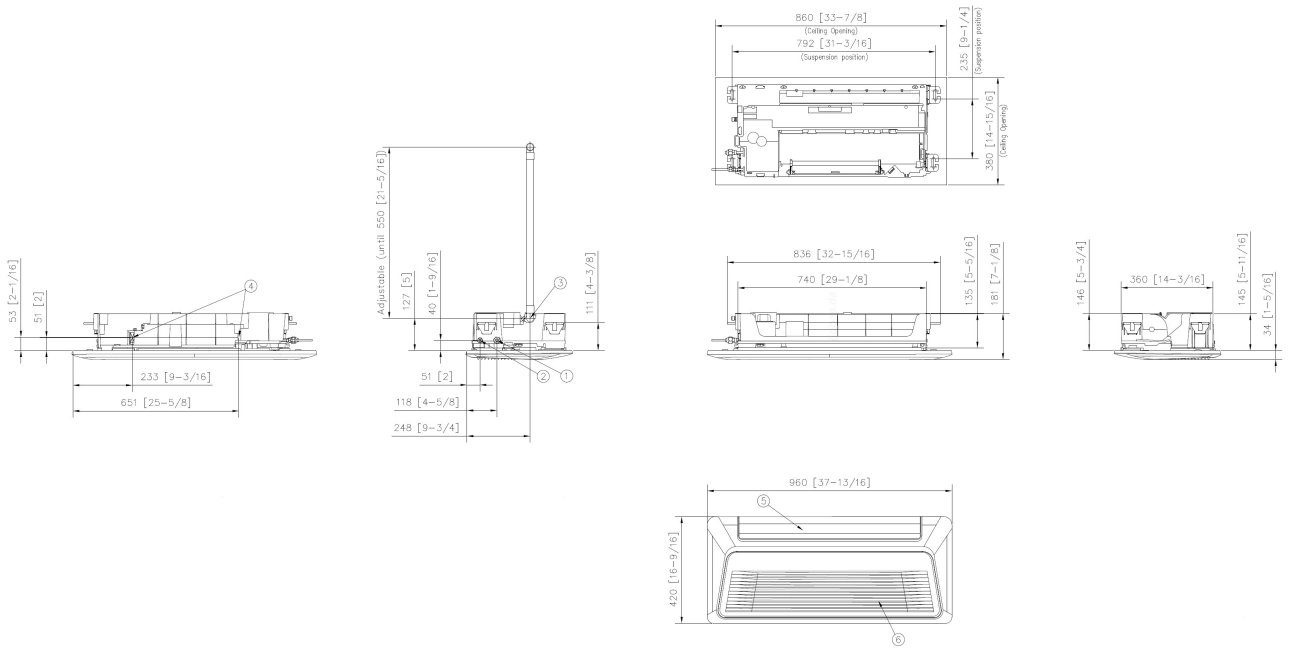


4. Indoor Units

4-3. Dimensional drawing

WindFree 1Way : AM017DN1DKG/EU, AM022DN1DKG/EU

Unit: mm [inch]



No.	Name	Description
1	Gas pipe connection	Φ 12.7 [1/2]
2	Liquid pipe connection	Φ 6.35 [1/4]
3	Drain pipe connection	VP-25(OD32, ID25)
4	Power supply & Communication wiring conduit	-
5	Air outlet louver	-
6	Air inlet grille	-

NOTE

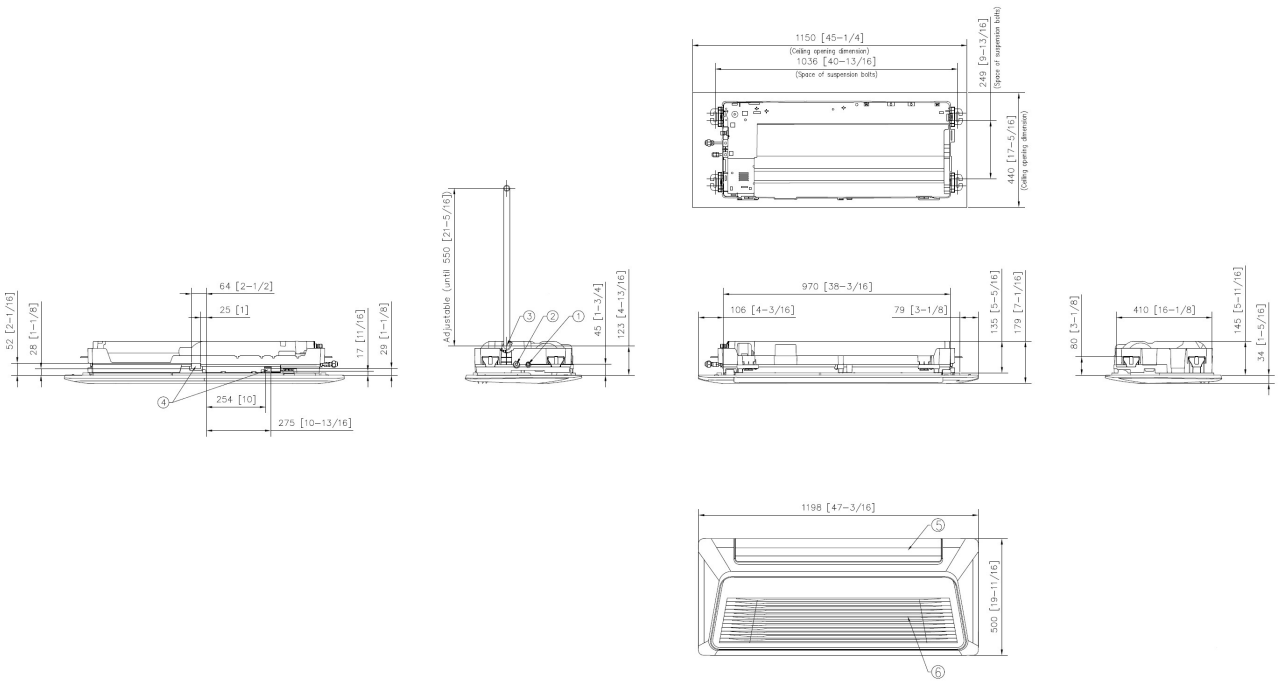
• As for suspension bolt, please use M8 ~ M10. (Procured at local site)

4. Indoor Units

4-3. Dimensional drawing

WindFree 1Way : AM028DN1DKG/EU, AM036DN1DKG/EU

Unit: mm [inch]



No.	Name	Description
1	Liquid pipe connection	Φ 6.35 [1/4]
2	Gas pipe connection	Φ 12.7 [1/2]
3	Drain pipe connection	VP-25(OD32, ID25)
4	Power supply & Communication wiring conduit	-
5	Air outlet louver	-
6	Air inlet grille	-

NOTE

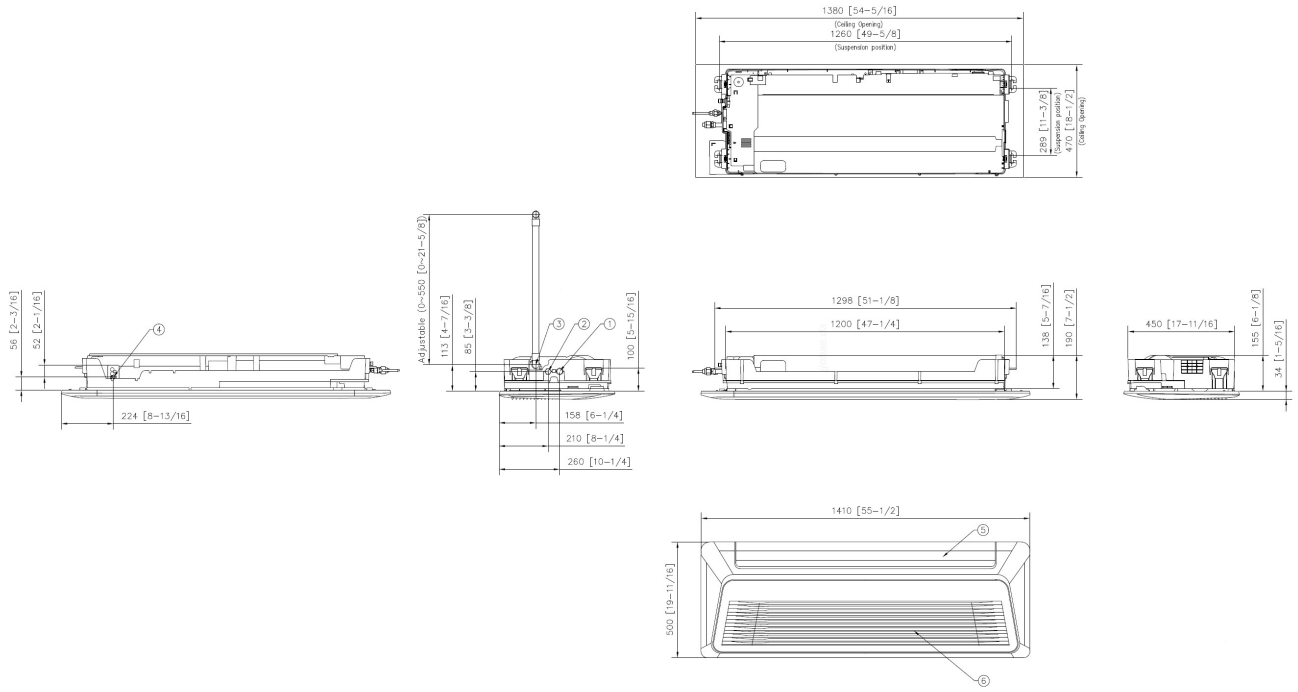
• As for suspension bolt, please use M8 ~ M10. (Procured at local site)

4. Indoor Units

4-3. Dimensional drawing

WindFree 1Way : AM056DN1DKG/EU

Unit: mm [inch]



No.	Name	Description
1	Gas pipe connection	Φ 12.7 [1/2]
2	Liquid pipe connection	Φ 6.35 [1/4]
3	Drain pipe connection	VP-25(OD32, ID25)
4	Power supply & Communication wiring conduit	-
5	Air outlet louver	-
6	Air inlet grille	-

NOTE

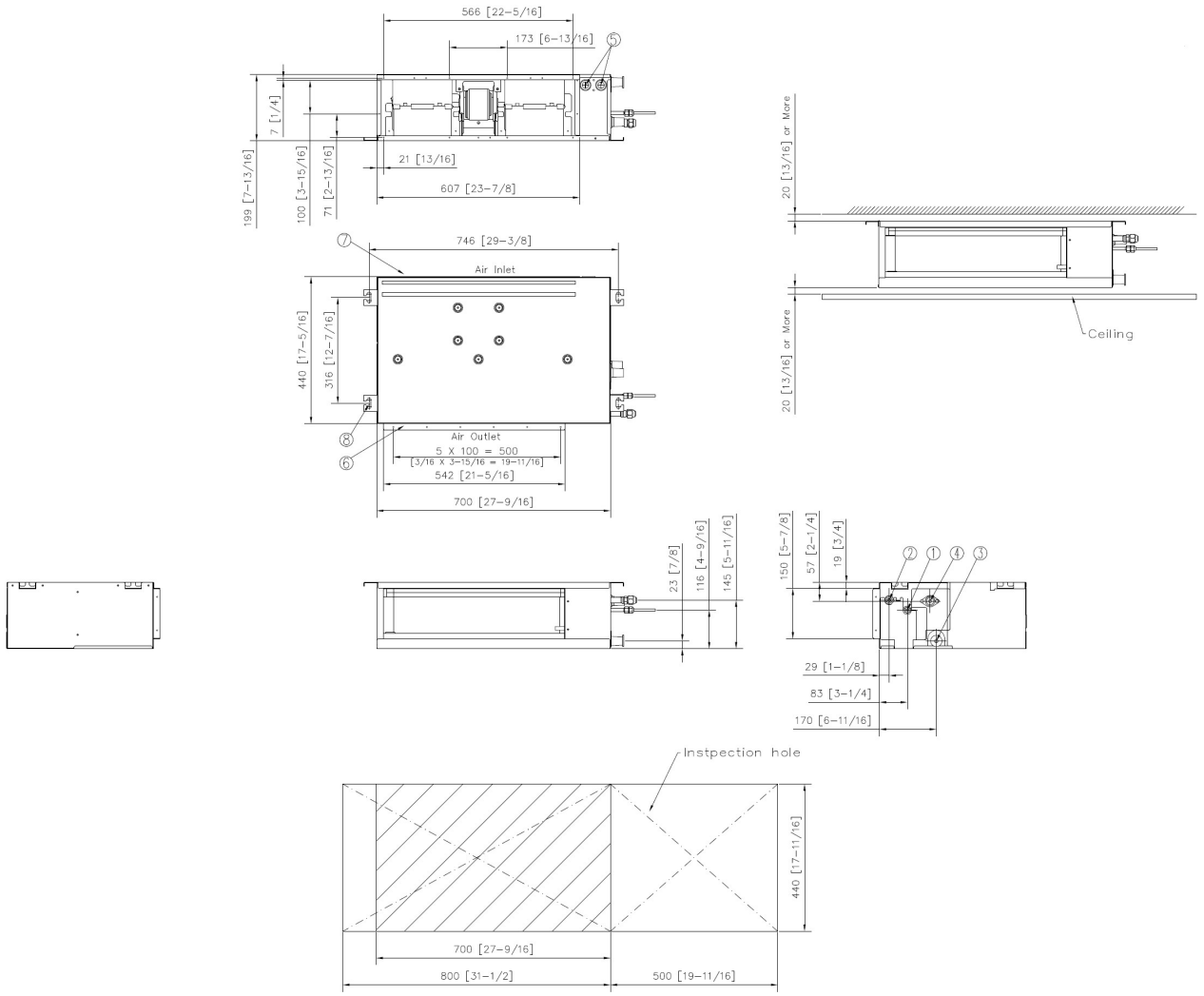
• As for suspension bolt, please use M8 ~ M10. (Procured at local site)

4. Indoor Units

4-3. Dimensional drawing

LSP Duct : AM022DNLDKG/EU, AM028DNLDKG/EU, AM036DNLDKG/EU

Unit: mm [inch]



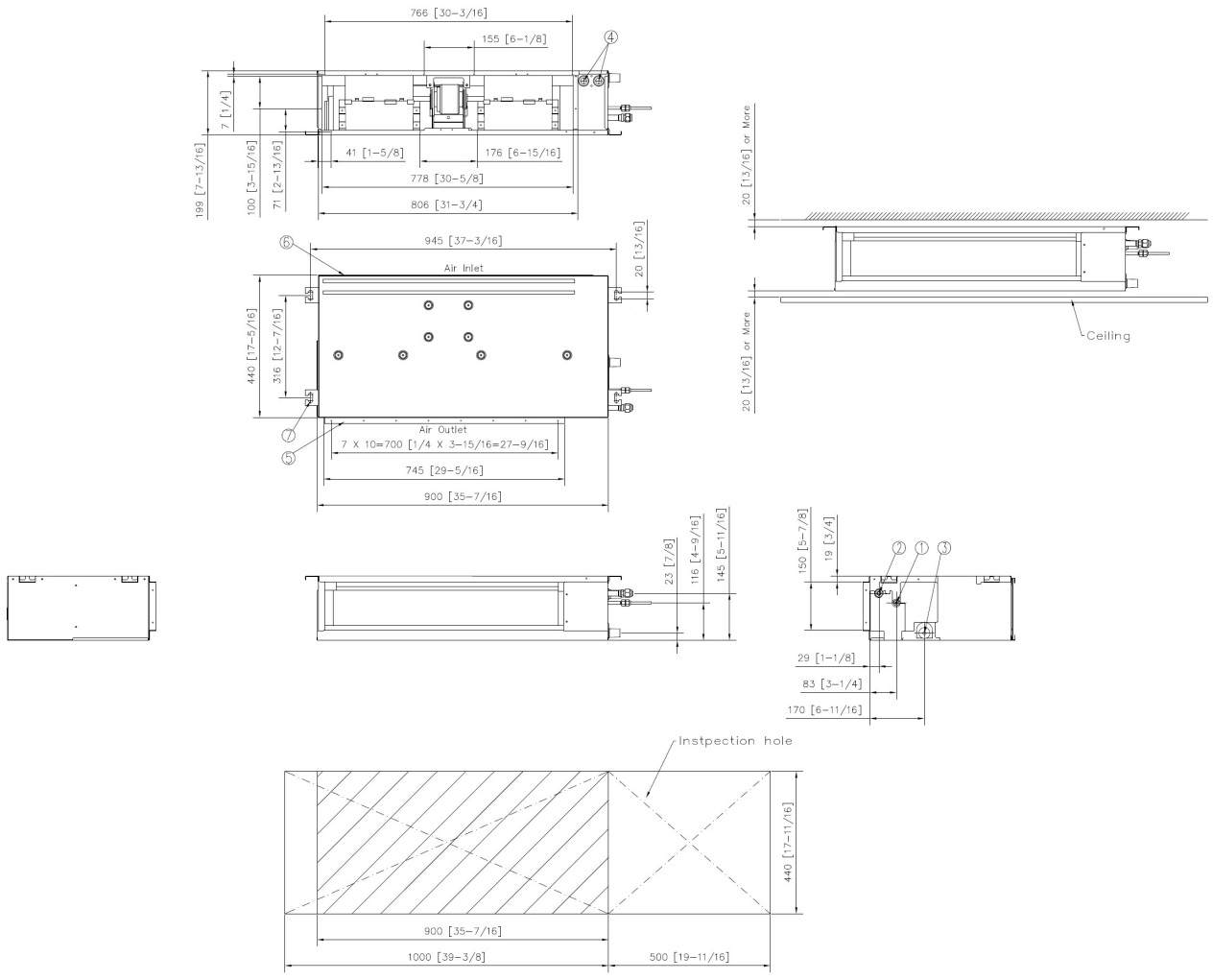
No.	Name	Description
①	Liquid pipe connection	Ø6.35 (1/4)
②	Gas pipe connection	Φ12.70 (1/2)
③	Drain pipe connection (Without drain pump)	VP25 (OD 32, ID 25)
④	Drain pipe connection (With drain pump)	-
⑤	Power & Communication Conduits	-
⑥	Air discharge grille flange	-
⑦	Return Air Side	-
⑧	Hook	Ø9.52 or M10

4. Indoor Units

4-3. Dimensional drawing

LSP Duct : AM056DNLDKG/EU

Unit: mm [inch]



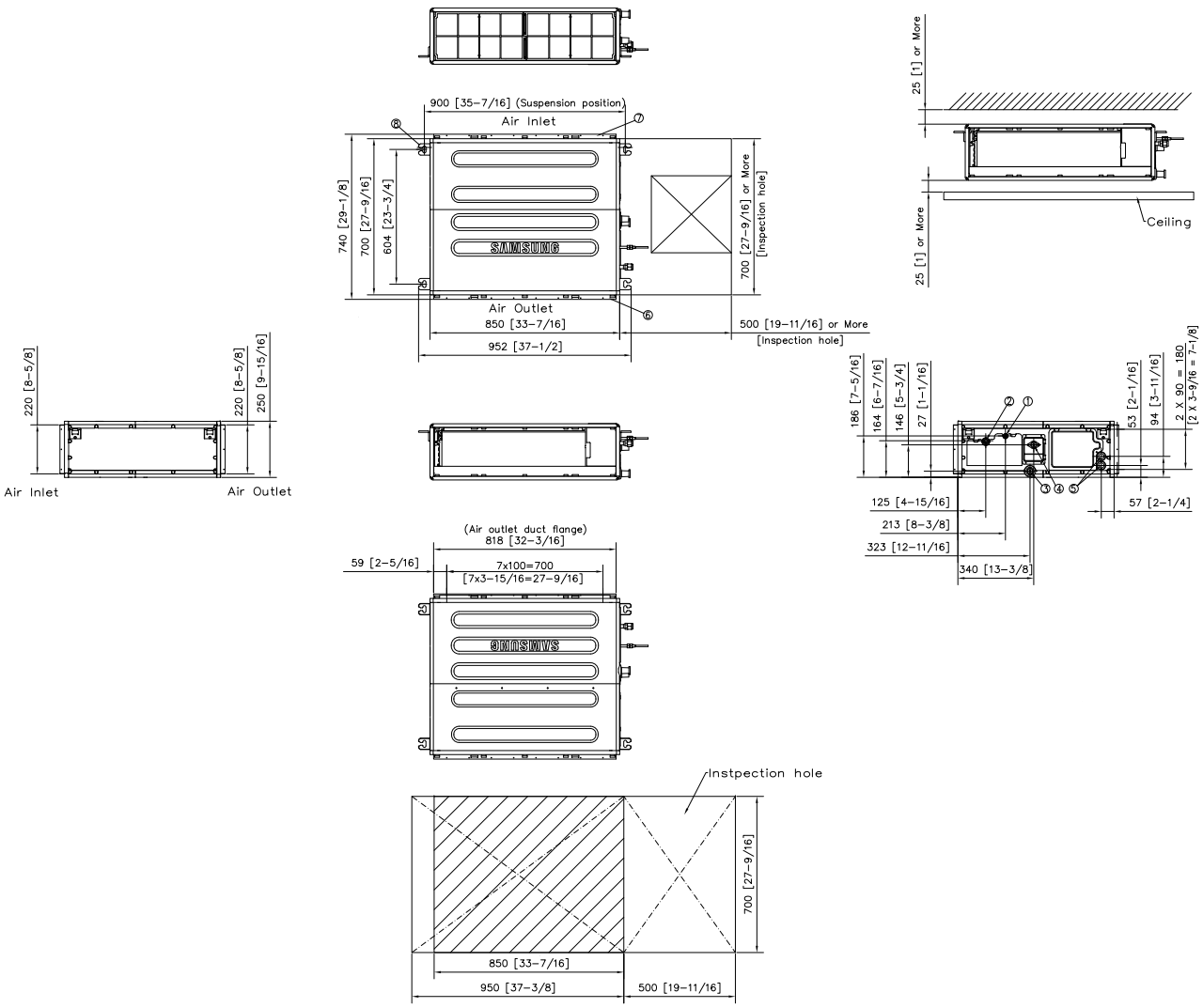
No.	Name	Description
①	Liquid pipe connection	Ø6.35 (1/4)
②	Gas pipe connection	Φ12.70 (1/2)
③	Drain pipe connection (Without drain pump)	VP25 (OD 32, ID 25)
④	Drain pipe connection (With drain pump)	-
⑤	Power & Communication Conduits	-
⑥	Air discharge grille flange	-
⑦	Return Air Side	-
⑧	Hook	Ø9.52 or M10

4. Indoor Units

4-3. Dimensional drawing

MSP Duct : AM036DNMDKG/EU, AM056DNMDKG/EU, AM071DNMDKG/EU

Unit: mm [inch]



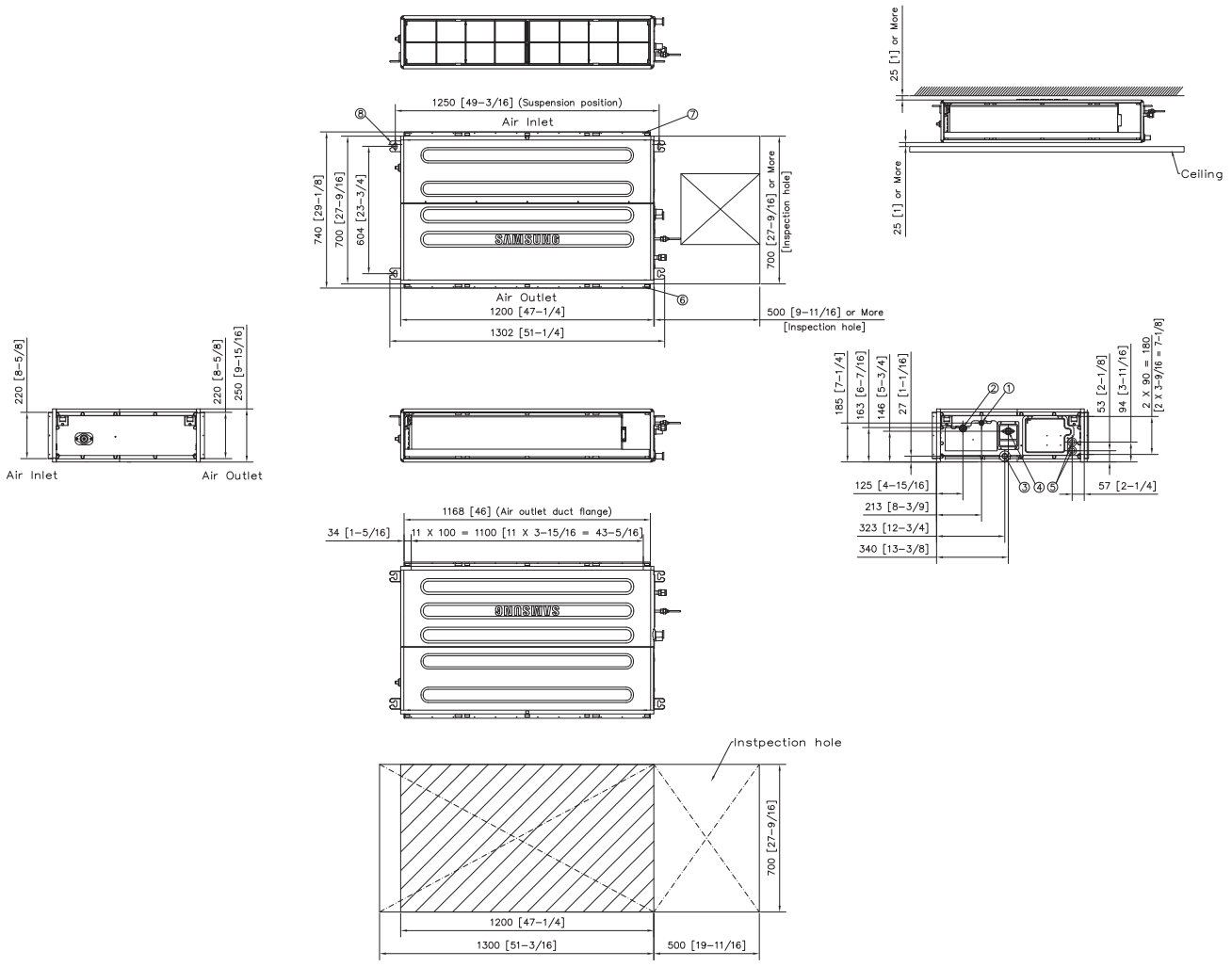
No.	Name	Description	
		AM036DNMDKG/EU AM056DNMDKG/EU	AM071DNMDKG/EU
①	Liquid pipe connection	Ø6.35 (1/4)	Ø9.52 (3/8)
②	Gas pipe connection	Φ12.70 (1/2)	Φ15.88 (5/8)
③	Drain pipe connection (Without drain pump)	VP25 (OD 32, ID 25)	
④	Drain pipe connection (With drain pump)	-	
⑤	Power & Communication Conduits	-	
⑥	Air discharge grille flange	-	
⑦	Return Air Side	-	
⑧	Hook	Ø9.52 or M10	

4. Indoor Units

4-3. Dimensional drawing

MSP Duct : AM090DNMDKG/EU

Unit: mm [inch]

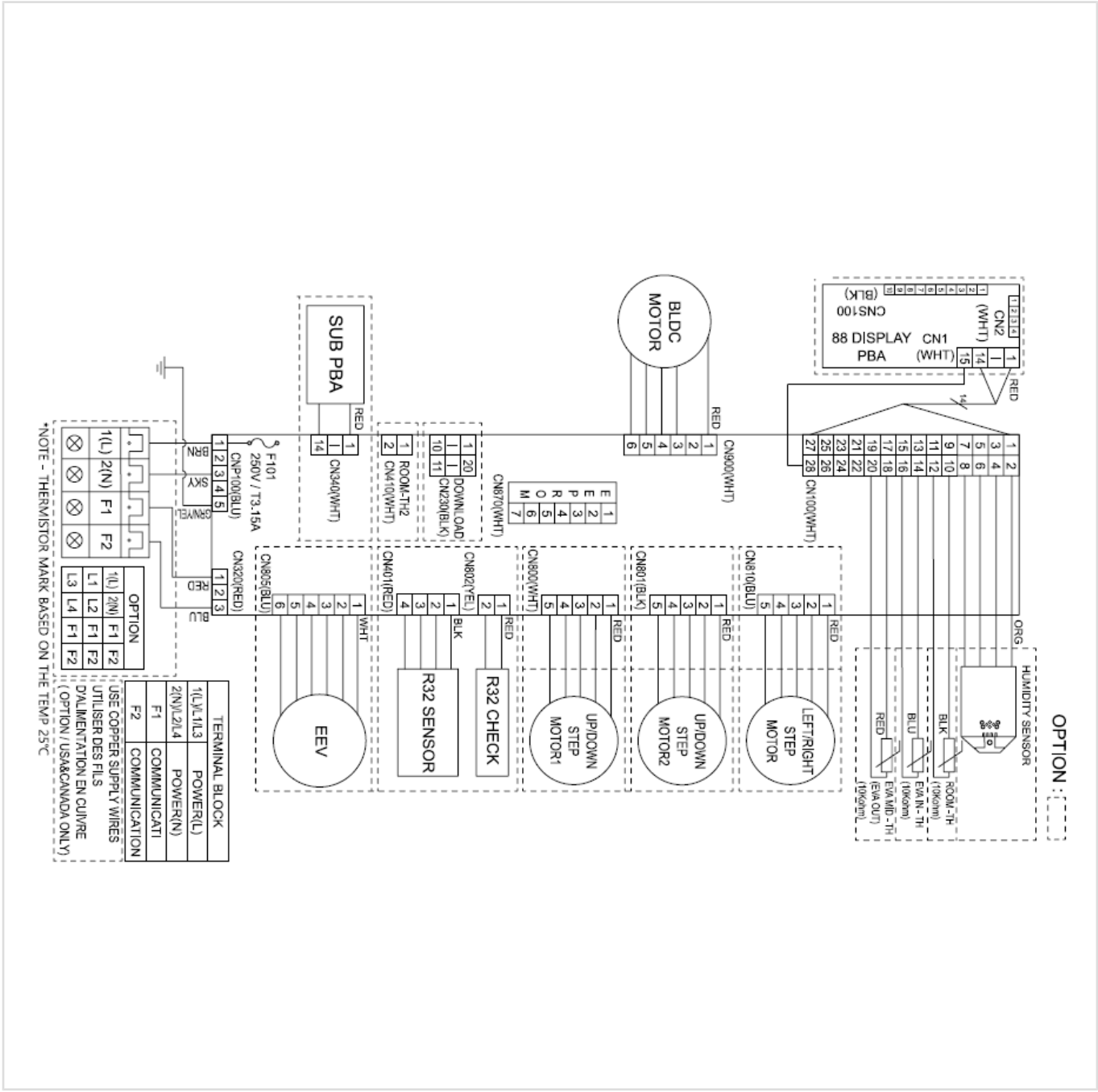


No.	Name	Description
①	Liquid pipe connection	Ø9.52 (3/8)
②	Gas pipe connection	Φ15.88 (5/8)
③	Drain pipe connection (Without drain pump)	VP25 (OD 32, ID 25)
④	Drain pipe connection (With drain pump)	-
⑤	Power & Communication Conduits	-
⑥	Air discharge grille flange	-
⑦	Return Air Side	-
⑧	Hook	Ø9.52 or M10

4. Indoor Units

4-4. Electrical wiring diagram

RAC



SUB PBA	Printed Circuit Board(SUB)	**ROOM(10K)**	Thermistor ROOM In(10K)
MOTOR	BLDC	**EVA-OUT(10K)**	Thermistor EVA OUT(10K)
EEV	Electronic expansion valve	**EVA-IN(10K)**	Thermistor EVA IN(10K)

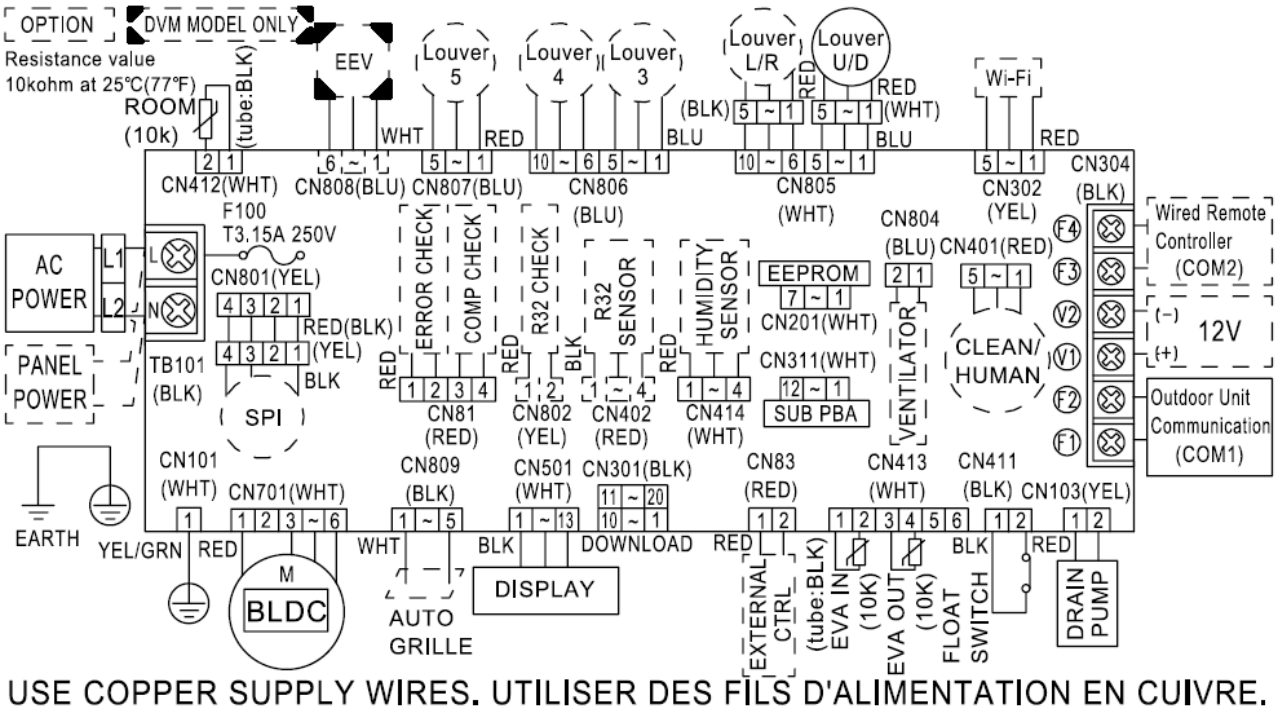
NOTE

• This wiring diagram applies only to the Indoor unit.• Symbols show as follow : BLK: black, RED: red, BLU: blue, WHT: white, YEL: yellow, BRN: brown, sky: sky blue, GRN: gre en• For connection wiring indoor-outdoor transmission F1-F2, indoor-wired remote controller transmission F3-F4.⏚ : Protective earth(screw)

4. Indoor Units

4-4. Electrical wiring diagram

WindFree 1Way



F100	FUSE	**EVA-IN(10K)**	Thermistor - IDU heat exchanger In
EEV	Electronic Expansion Valve	**EVA-OUT(10K)**	Thermistor - IDU heat exchanger Out
M-BLDC	Motor for Indoor Fan	**EXTERNAL CTRL**	External Control
ROOM(10K)	Thermistor - Indoor Room	**-**	-

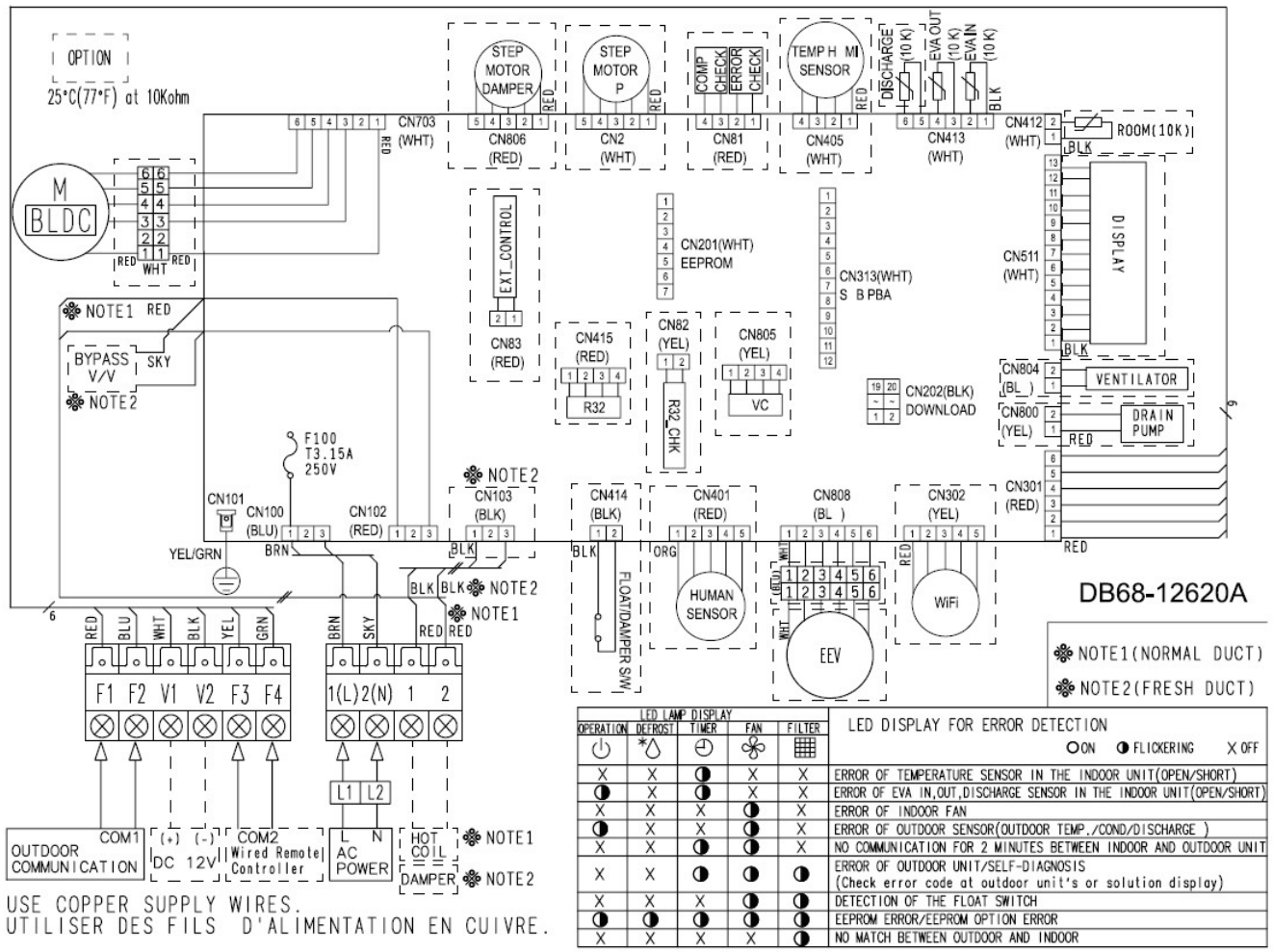
NOTE

• This wiring diagram applies only to the indoor unit.• Symbols show as follow : BLK: black, RED: red, BLU: blue, WHT: white, YEL: yellow, BRN: brown, SKY: sky blue, GRN: green• For connection wiring indoor-outdoor transmission F1-F2, indoor-wired remote controller transmission F3-F4.• ⏚ : Protective earth(screw), : Connector, : The wire quantity

4. Indoor Units

4-4. Electrical wiring diagram

LSP Duct



COMP CHECK	Contact output port for compressor operation check	**M-BLDC**	Motor for Indoor Fan
DISCHARGE TEMP	Thermistor (DISCHARGE_10Kohm)	**EEV**	Electronic Expansion Valve
DISPLAY	LED display	**VENTILATOR**	Contact output port for Ventilator control
EEPROM	EEPROM SUB PBA	**SUB PBA**	SUB PBA for wired remote control communication
ERROR CHECK	Contact output port for error check	**ROOM TEMP**	Thermistor (Room_10Kohm)
EVA IN TEMP	Thermistor (Eva in_10Kohm)	**DAMPER**	Contact output port for Damper control
EVA OUT TEMP	Thermistor (Eva out_10Kohm)	**HOT COIL**	Contact output port for Hot coil control
F100	FUSE	**EXTERNAL CTRL**	Input port for external contact control

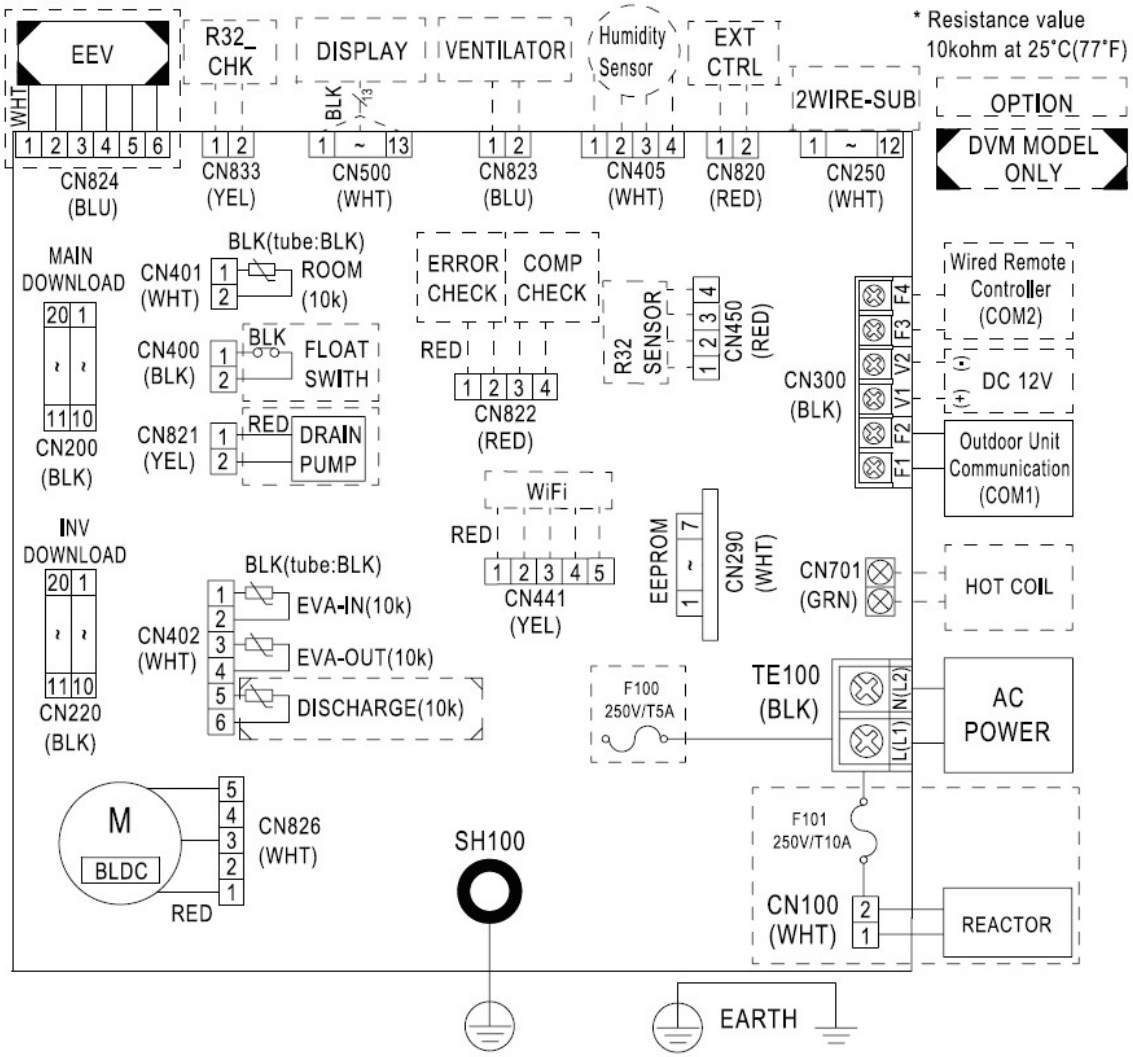
NOTE

• This wiring diagram applies only to the Indoor unit.• Symbols show as follow : BLK: black, RED: red, BLU: blue, WHT: white, YEL: yellow, GRN: green• For connection wiring in door-outdoor transmission F1-F2, indoor-wired remote controller transmission F3-F4.• ⏚ : Protective earth(screw), □□□□ : Connector, N : The wire quantity

4. Indoor Units

4-4. Electrical wiring diagram

MSP Duct



2WIRE-SUB	SUB PBA for wired remote control communication	**EVA IN TEMP**	Thermistor (Eva in_10Kohm)
COMP CHECK	Contact output port for compressor operation check	**EVA OUT TEMP**	Thermistor (Eva out_10Kohm)
DISCHARGE TEMP	Thermistor (DISCHARGE_10Kohm)	**EXTERNAL CTRL**	Input port for external contact control
DISPLAY	LED display	**F100/F101**	FUSE
EEPROM	EEPROM SUB PBA	**ROOM TEMP**	Thermistor (Room_10Kohm)
EEV	Electronic Expansion Valve	**M-BLDC**	Motor for Indoor Fan
ERROR CHECK	Contact output port for error check	**VENTILATOR**	Contact output port for Ventilator control

NOTE

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

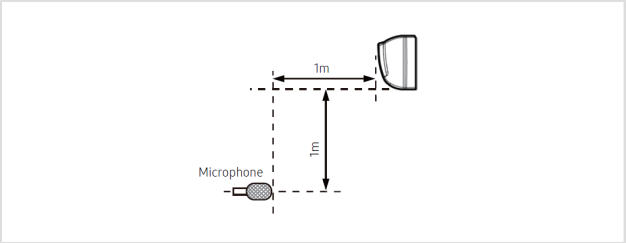
4. Indoor Units

4-5. Sound data

Sound Pressure Level

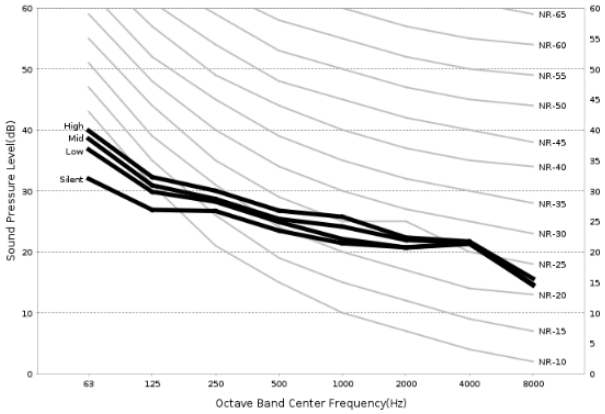
Unit : dB(A)

Model	High	Mid	Low
AE015HEADKG/EU	-	-	-
AE022HEADKG/EU	-	-	-
AE028HEADKG/EU	-	-	-
AE036HEADKG/EU	-	-	-

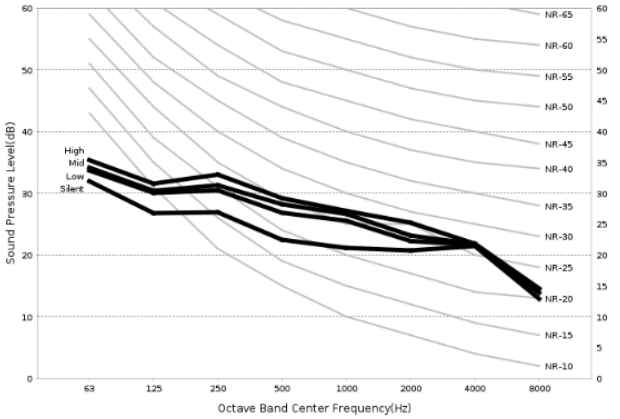


- **NR CURVE**

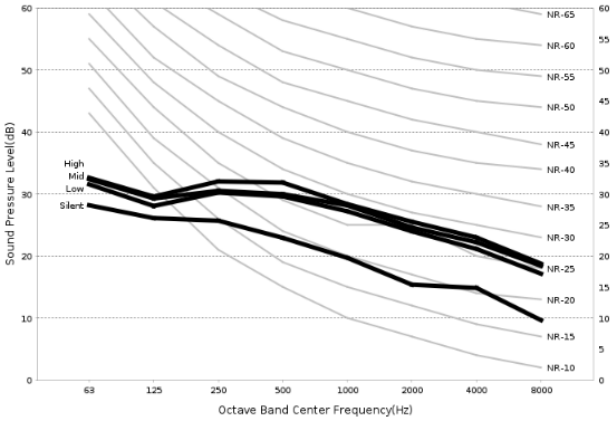
(1) AE015HEADKG/EU



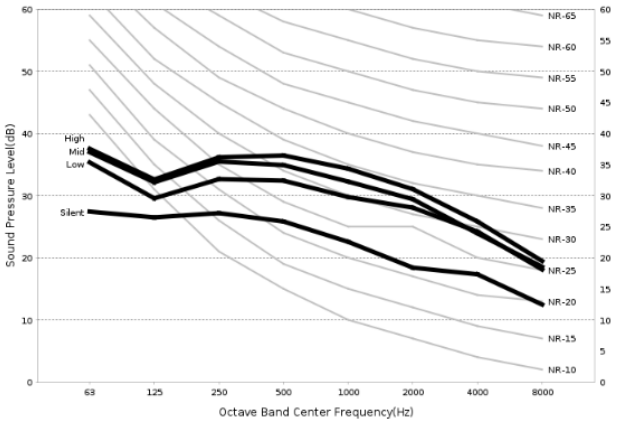
(2) AE022HEADKG/EU



(3) AE028HEADKG/EU



(4) AE036HEADKG/EU



NOTE

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

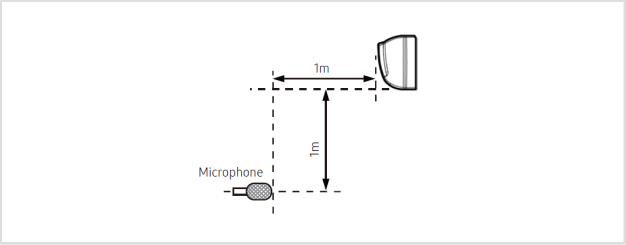
4. Indoor Units

4-5. Sound data

Sound Pressure Level

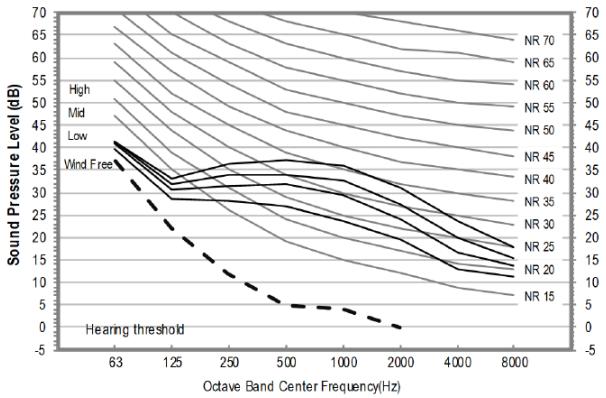
Unit : dB(A)

Model	High	Mid	Low
AM056DNVDKG/EU	-	-	-
AM071DNVDKG/EU	-	-	-

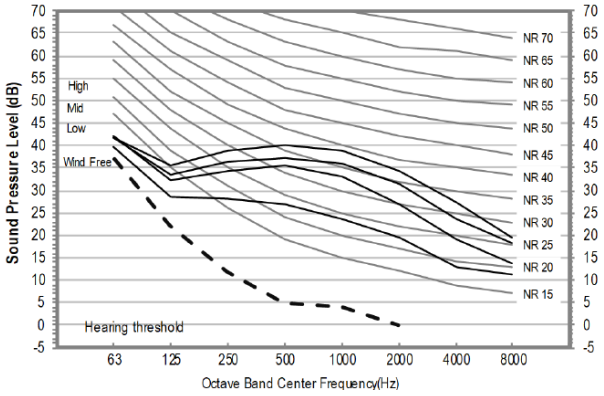


- **NR CURVE**

(1) AM056DNVDKG



(2) AM071DNVDKG



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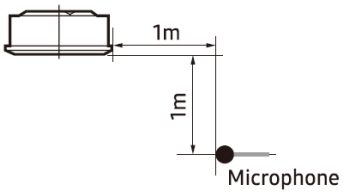
4. Indoor Units

4-5. Sound data

Sound Pressure Level

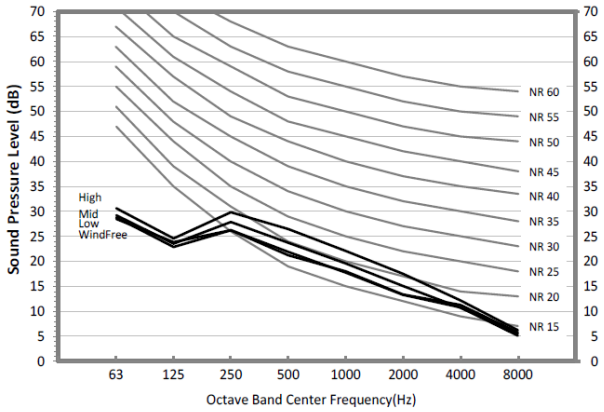
Unit : dB(A)

Model	High	Mid	Low	WindFree
AM017DN1DKG/EU	28	26	24	24
AM022DN1DKG/EU	29	26	24	24
AM028DN1DKG/EU	32	28	24	24
AM036DN1DKG/EU	37	33	30	30

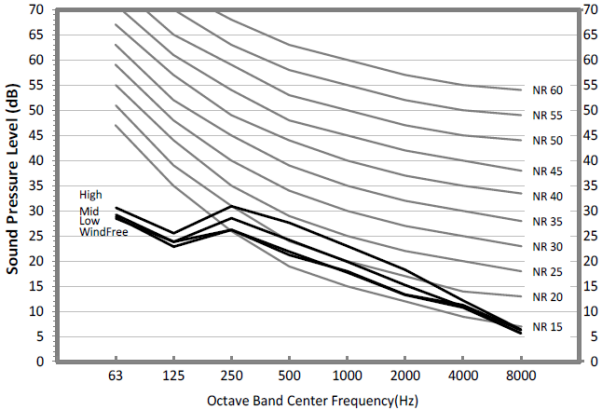


- **NR CURVE**

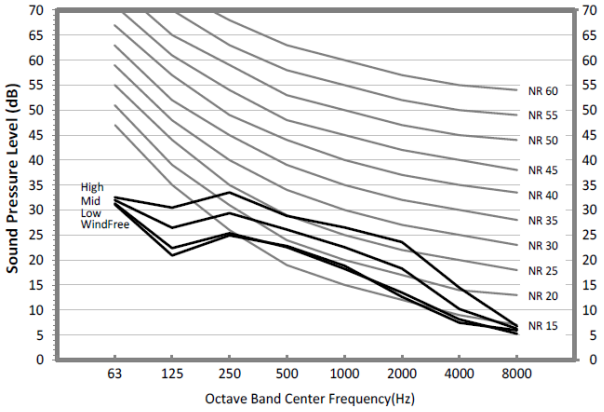
(1) AM017DN1DKG



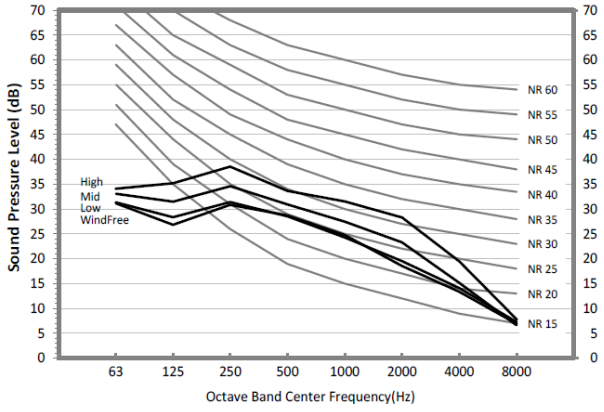
(2) AM022DN1DKG



(3) AM028DN1DKG



(4) AM036DN1DKG



NOTE

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  - Sound pressure level may differ depending on operation condition.
  - dBA = A - weighted sound pressure level
  - Reference acoustic pressure 0 dB = 20μPa

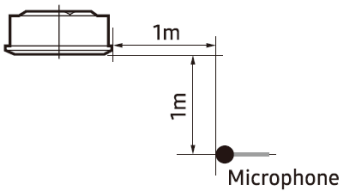
4. Indoor Units

4-5. Sound data

Sound Pressure Level

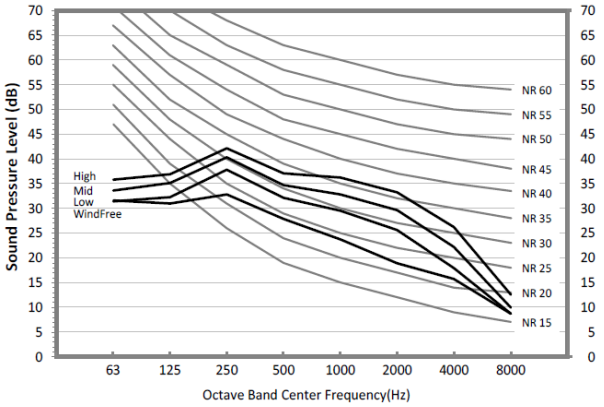
Unit : dB(A)

Model	High	Mid	Low	WindFree
AM056DN1DKG/EU	41	38	35	30



- **NR CURVE**

  (1) AM056DN1DKG



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  - Sound pressure level may differ depending on operation condition.
  - dBA = A - weighted sound pressure level
  - Reference acoustic pressure 0 dB = 20μPa

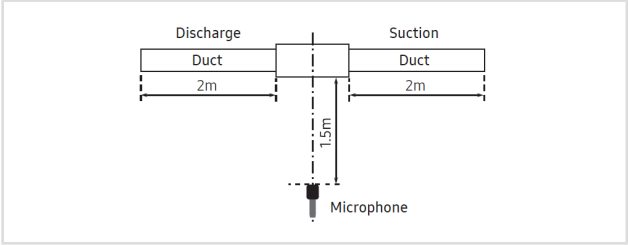
4. Indoor Units

4-5. Sound data

Sound Pressure Level

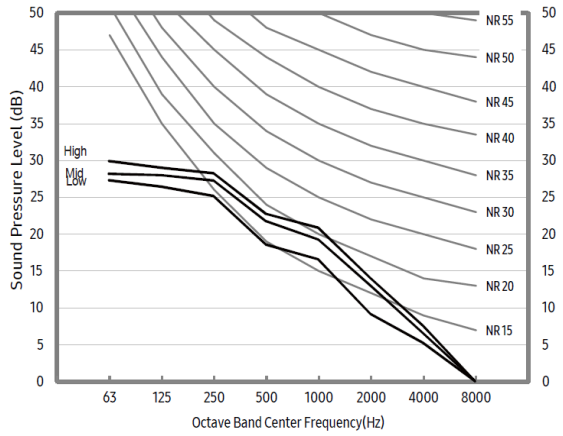
Unit : dB(A)

Model	High	Mid	Low
AM022DNLDKG/EU	26	23	19
AM028DNLDKG/EU	28	24	19
AM036DNLDKG/EU	31	26	20
AM056DNLDKG/EU	34	30	26

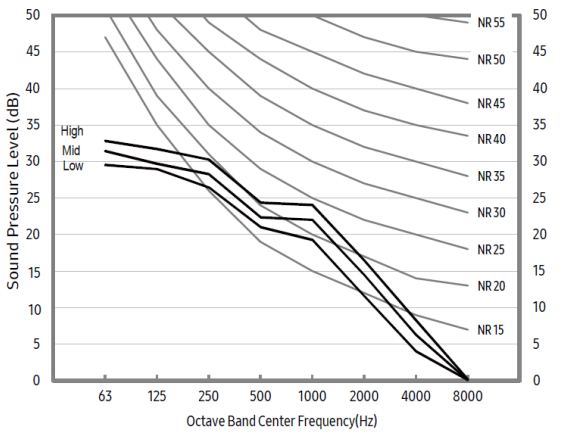


- **NR CURVE**

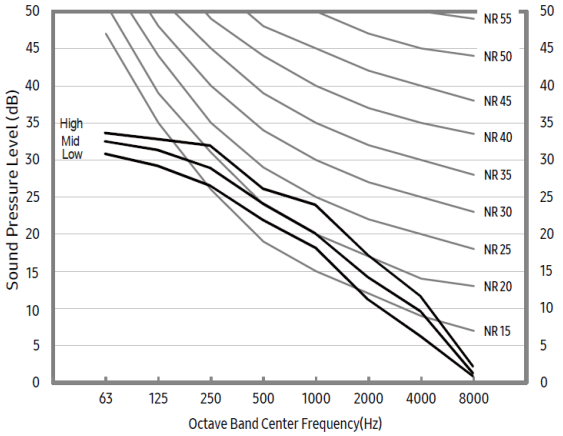
(1) AM022DNLDKG



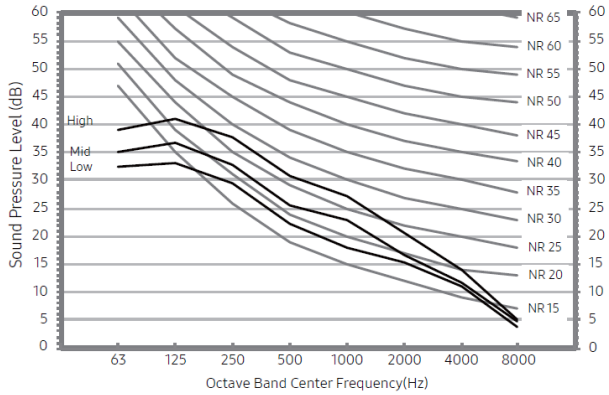
(2) AM028DNLDKG



(3) AM036DNLDKG



(4) AM056DNLDKG



NOTE

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  - dBA = A - weighted sound pressure level
  - Reference acoustic pressure 0 dB = 20μPa

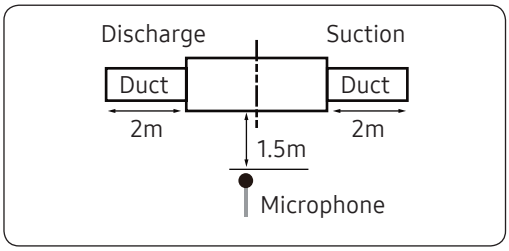
4. Indoor Units

4-5. Sound data

Sound Pressure Level

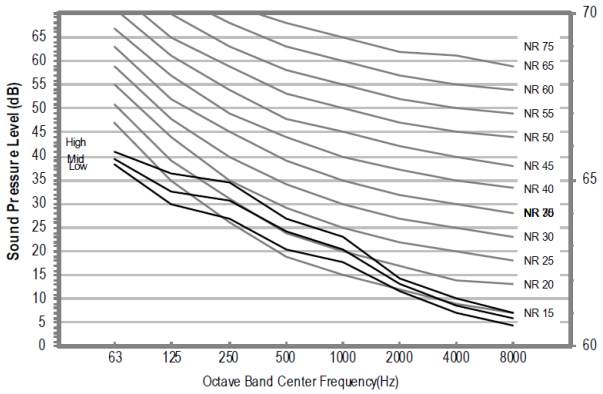
Unit : dB(A)

MODEL	High	Mid	Low
AM036DNMDKG/EU	30	27	24
AM056DNMDKG/EU	32	29	25
AM071DNMDKG/EU	36	32	27
AM090DNMDKG/EU	37	33	29

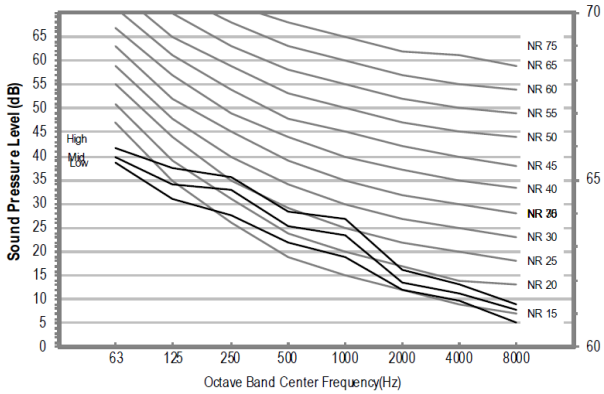


- **NR CURVE**

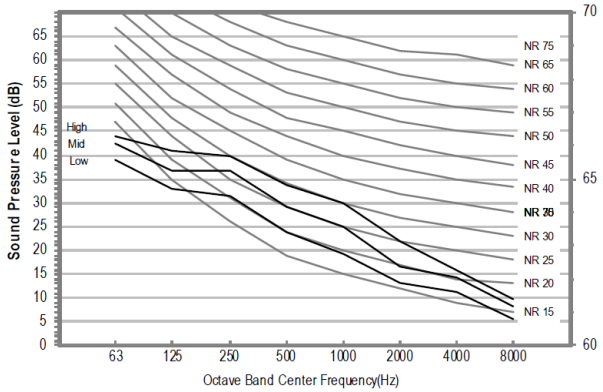
(1) AM036DNMDKG



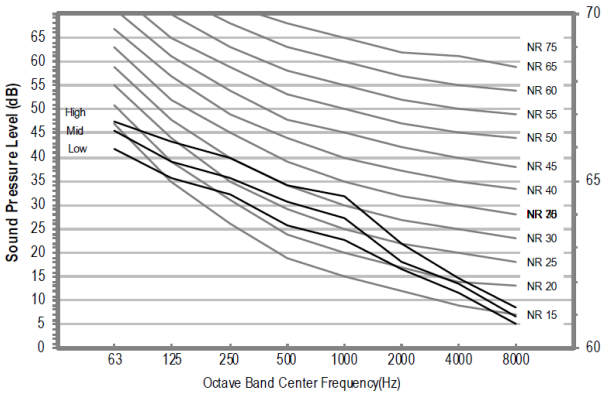
(2) AM056DNMDKG



(3) AM071DNMDKG



(4) AM090DNMDKG



NOTE

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  - Sound pressure level may differ depending on operation condition.
  - dBA = A - weighted sound pressure level
  - Reference acoustic pressure 0 dB = 20μPa

4. Indoor Units

4-5. Sound data

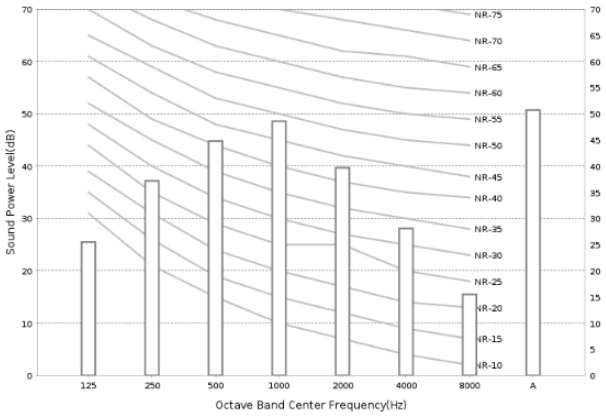
Sound Power Level

Unit : dB(A)

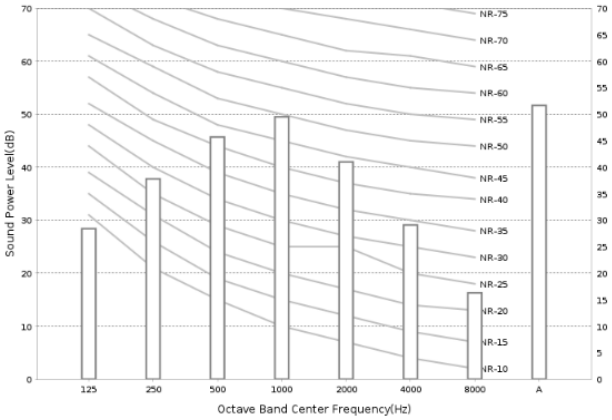
Model	Cooling	Heating
AE015HEADKG/EU	-	-
AE022HEADKG/EU	-	-
AE028HEADKG/EU	-	-
AE036HEADKG/EU	-	-

- **NR CURVE**

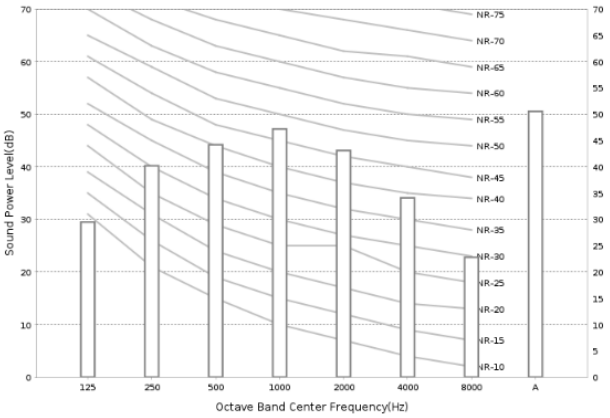
(1) AE015HEADKG/EU



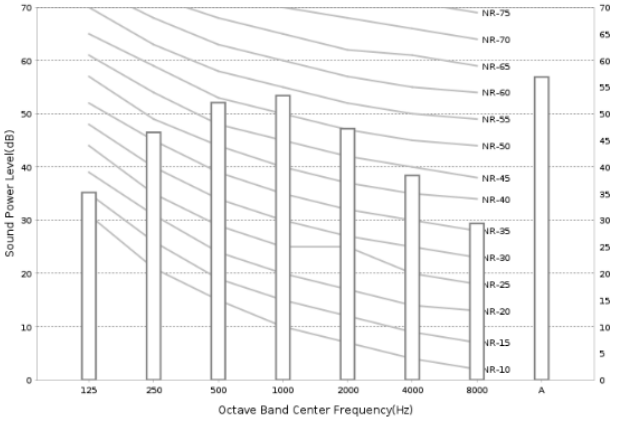
(2) AE022HEADKG/EU



(3) AE028HEADKG/EU



(4) AE036HEADKG/EU



4. Indoor Units

4-5. Sound data

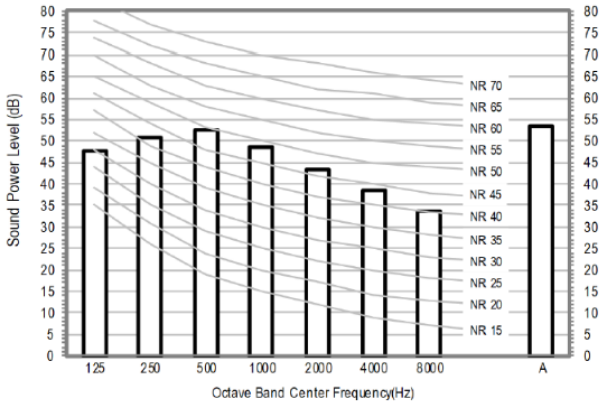
Sound Power Level

Unit : dB(A)

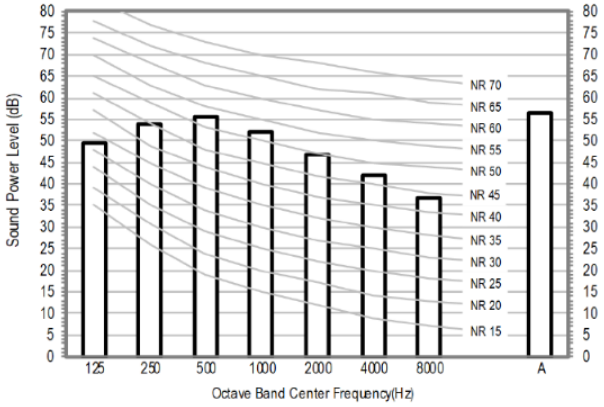
Model	Cooling	Heating
AM056DNVDKG/EU	-	-
AM071DNVDKG/EU	-	-

- **NR CURVE**

(1) AM056DNVDKG/EU



(2) AM071DNVDKG/EU



4. Indoor Units

4-5. Sound data

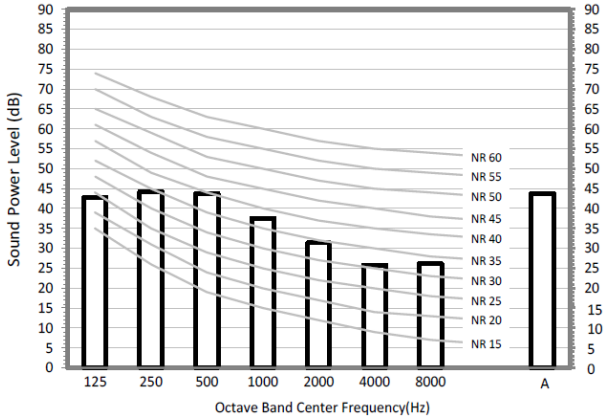
Sound Power Level

Unit : dB(A)

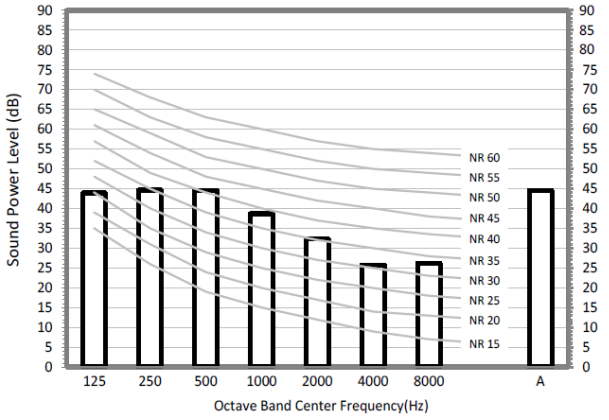
Model	Cooling
AM017DN1DKG/EU	46
AM022DN1DKG/EU	47
AM028DN1DKG/EU	50
AM036DN1DKG/EU	55

- **NR CURVE**

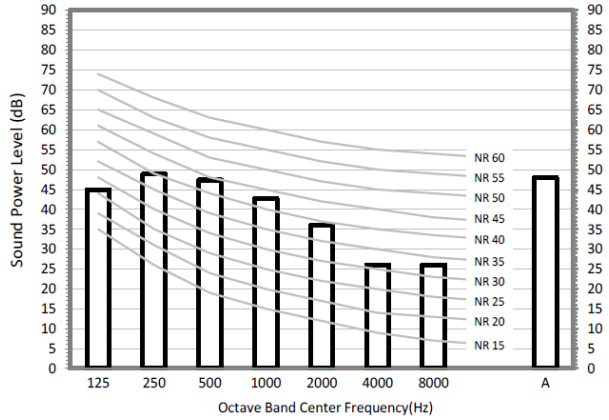
(1) AM017DN1DKG



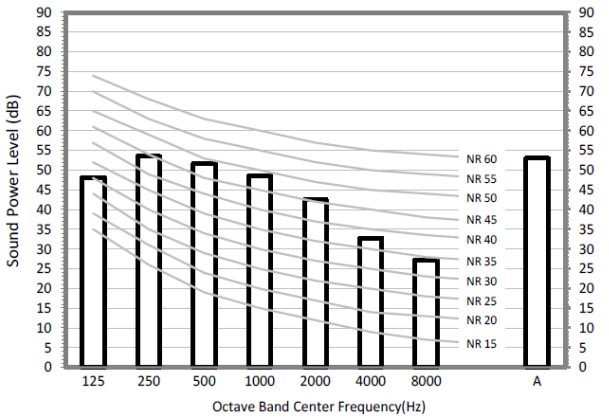
(2) AM022DN1DKG



(3) AM028DN1DKG



(4) AM036DN1DKG



4. Indoor Units

4-5. Sound data

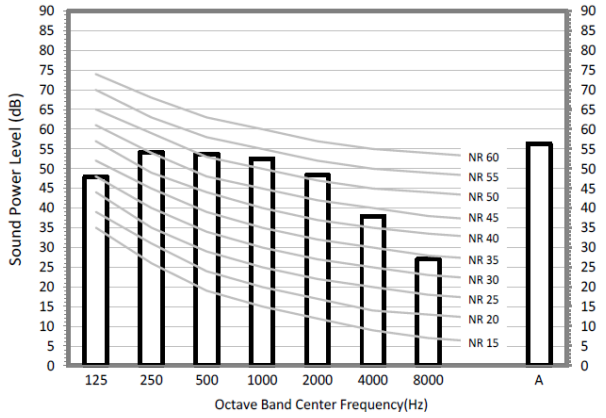
Sound Power Level

Unit : dB(A)

Model	Cooling
AM056DN1DKG/EU	59

- **NR CURVE**

  (1) AM056DN1DKG



4. Indoor Units

4-5. Sound data

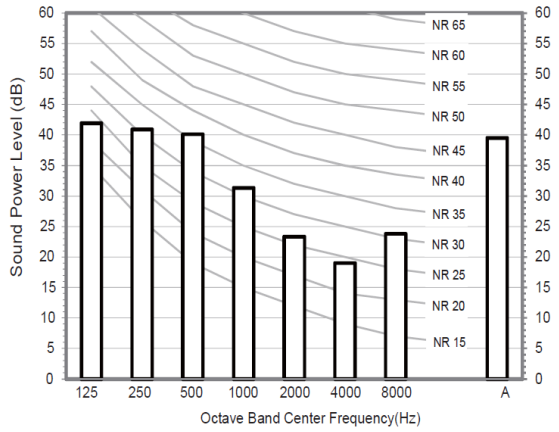
Sound Power Level

Unit : dB(A)

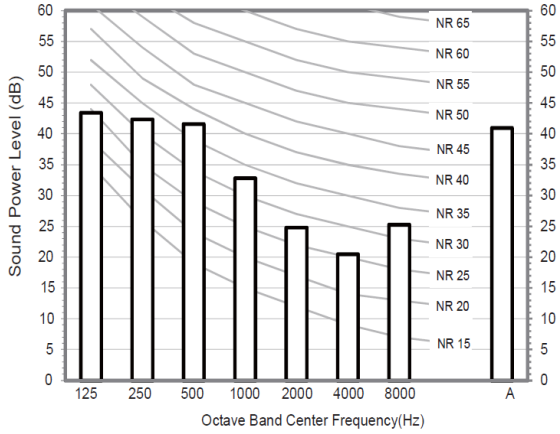
Model	Power
AM022DNLDKG/EU	42
AM028DNLDKG/EU	44
AM036DNLDKG/EU	46
AM056DNLDKG/EU	49

- **NR CURVE**

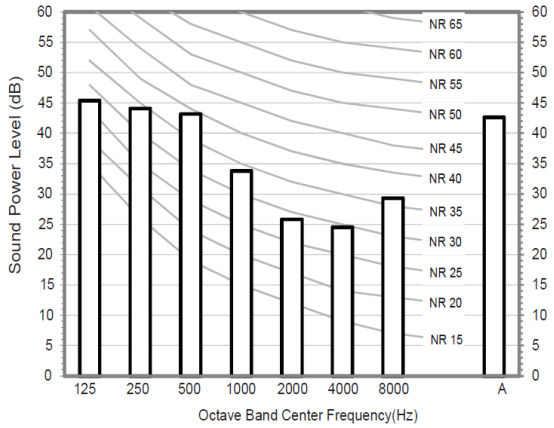
(1) AM022DNLDKG



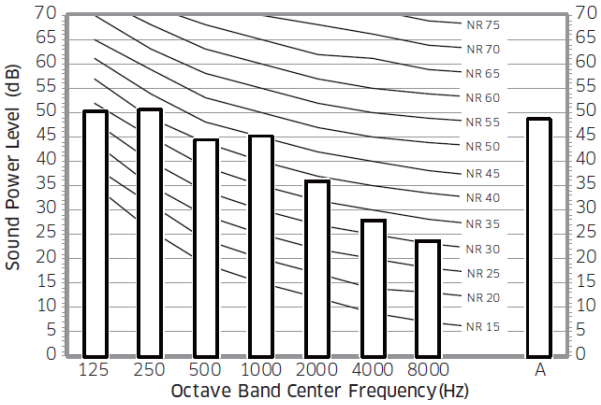
(2) AM028DNLDKG



(3) AM036DNLDKG



(4) AM056DNLDKG



4. Indoor Units

4-5. Sound data

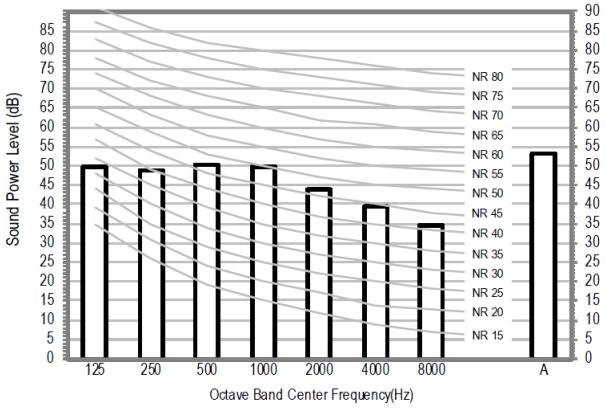
Sound Power Level

Unit : dB(A)

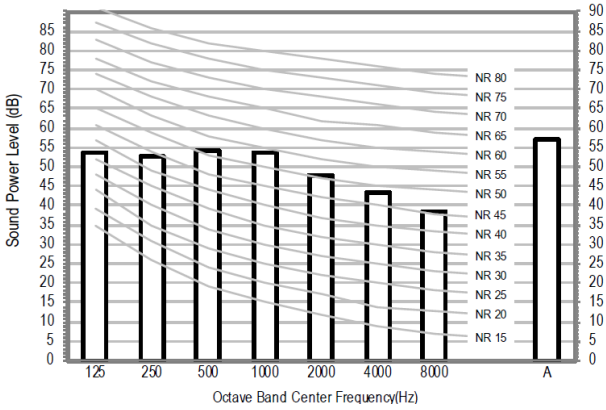
Model	Power
AM036DNMDKG/EU	53
AM056DNMDKG/EU	57
AM071DNMDKG/EU	60
AM090DNMDKG/EU	61

- **NR CURVE**

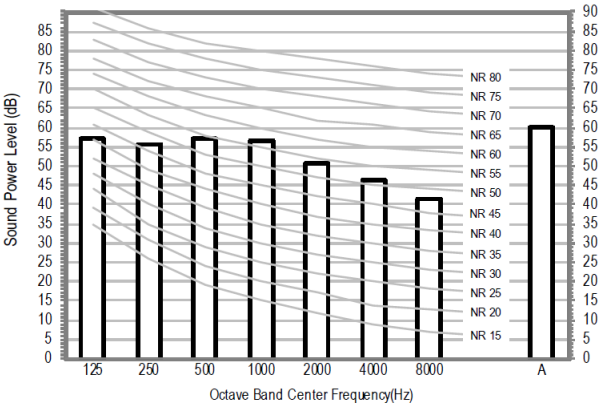
(1) AM036DNMDKG



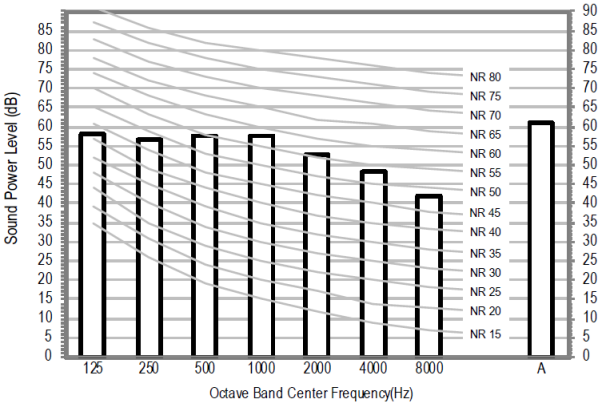
(2) AM056DNMDKG



(3) AM071DNMDKG



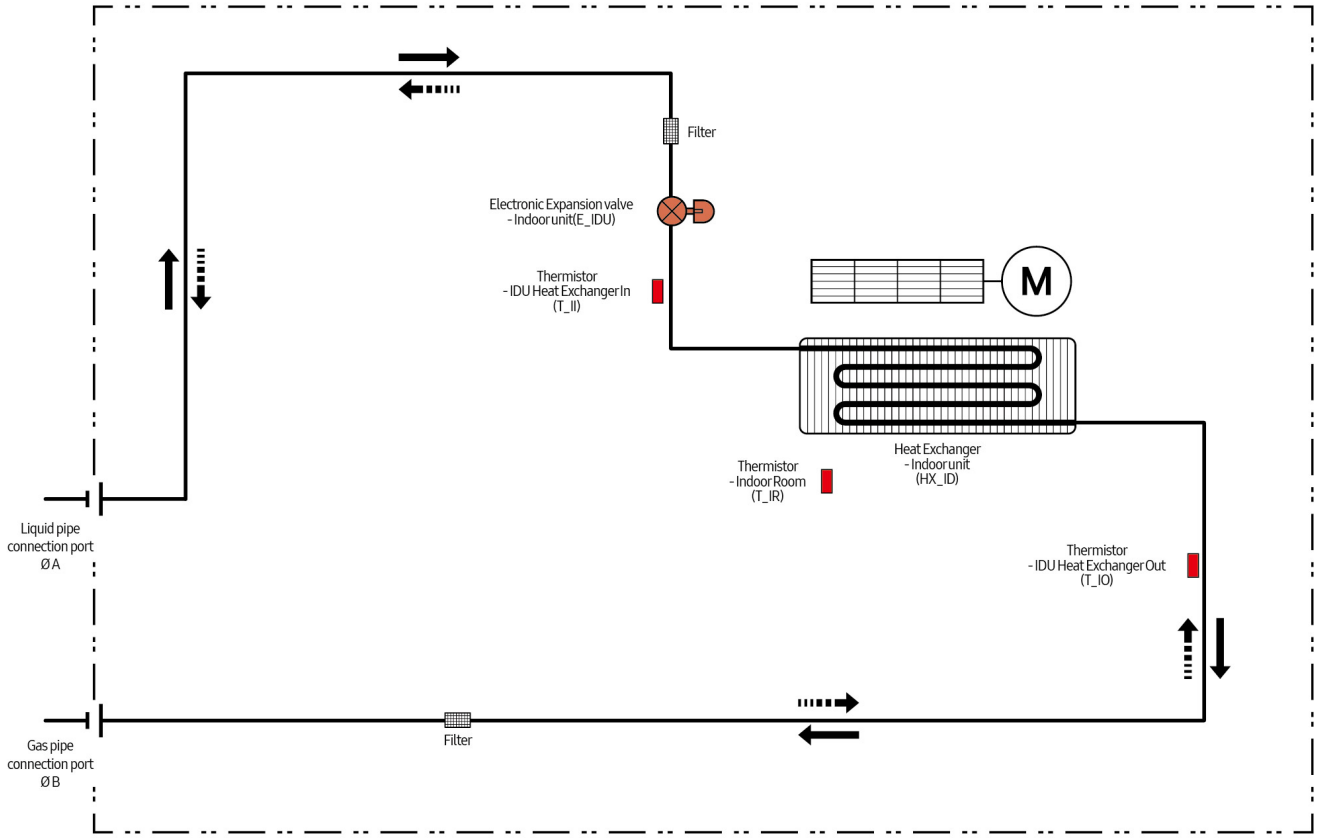
(4) AM090DNMDKG



4. Indoor Units

4-6. Piping diagram

RAC

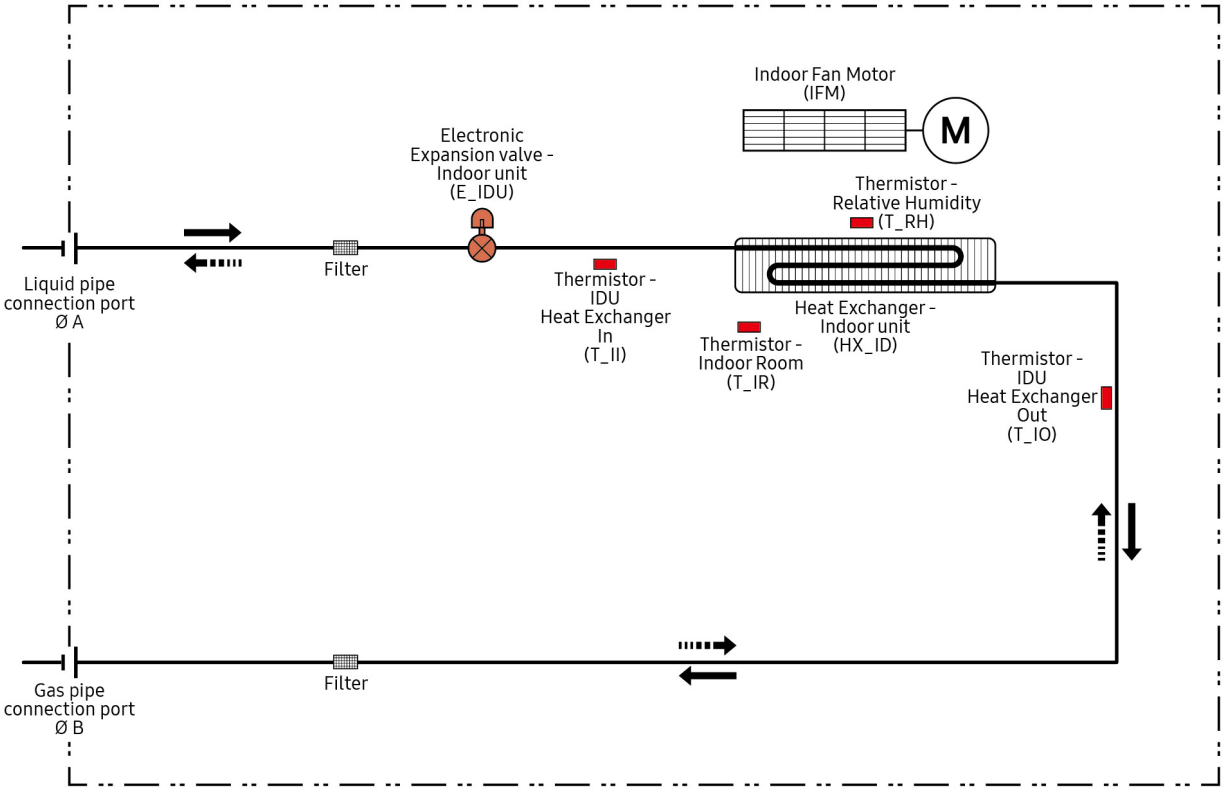


Refrigerant flow	
Cooling	Heating
→	⇢

4. Indoor Units

4-6. Piping diagram

WindFree 1Way

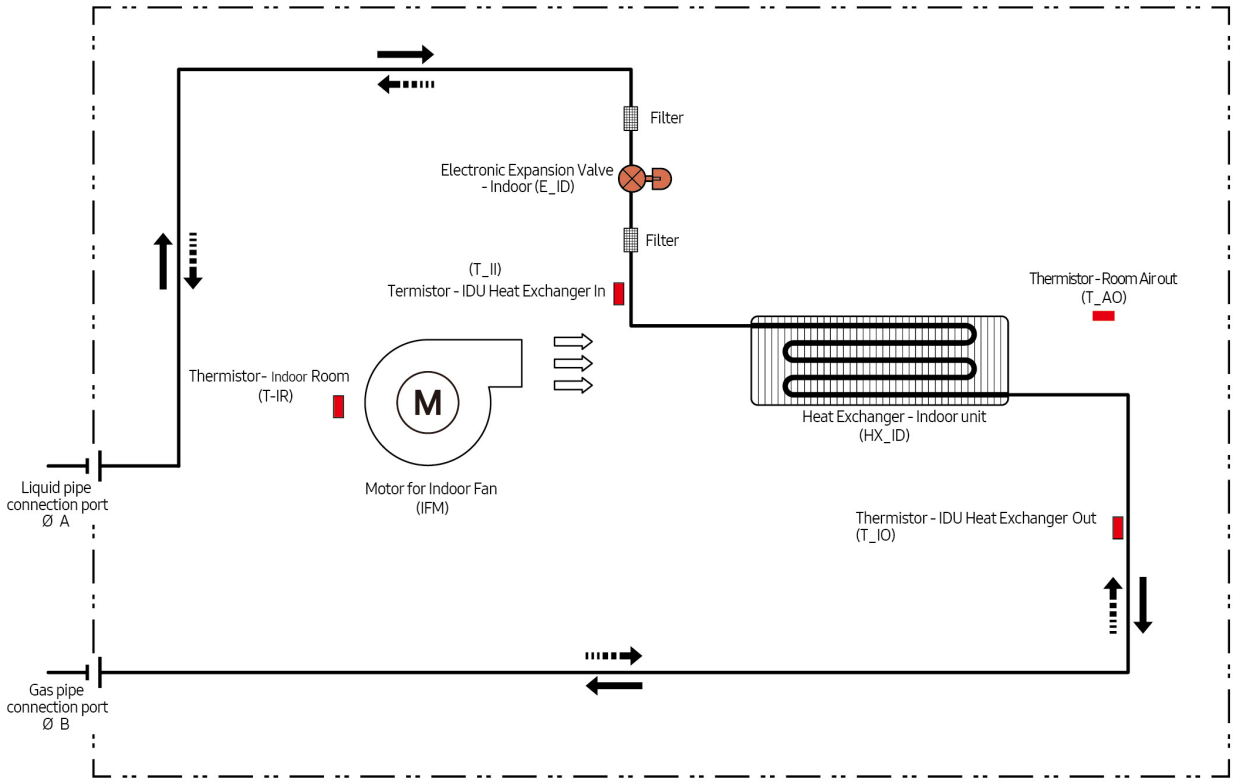


Refrigerant flow	
Cooling	Heating
→	→

4. Indoor Units

4-6. Piping diagram

Duct



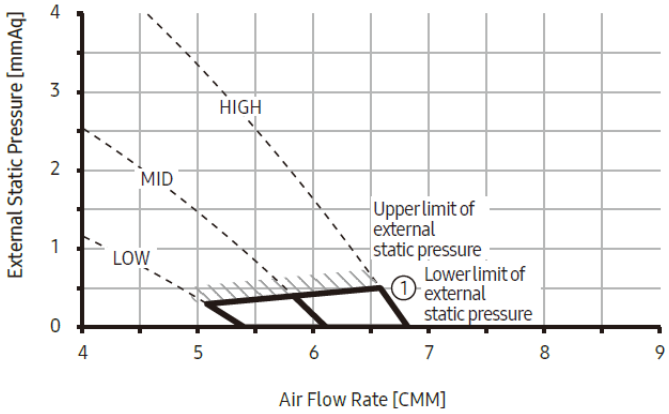
Refrigerant flow	
Cooling	Heating
→	⇢

4. Indoor Units

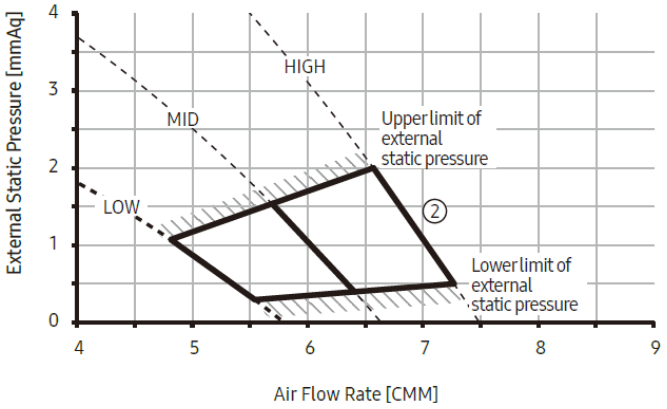
4-7. Fan characteristics (PQ curve)

AM022DNLDKG/EU

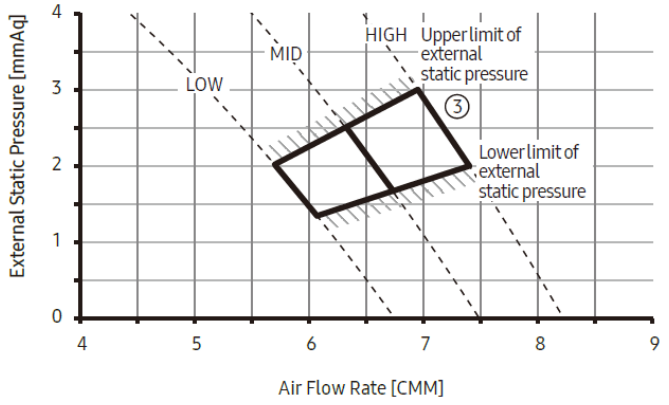
1	External Static Pressure(mmAq)	Option Code
	0 < SP≤0.5	010054-125A80-201616-331110



2	External Static Pressure(mmAq)	Option Code
	0.5 < SP≤2	010054-125AC3-201616-331110



3	External Static Pressure(mmAq)	Option Code
	2 < SP≤3	010054-125E08-201616-331110

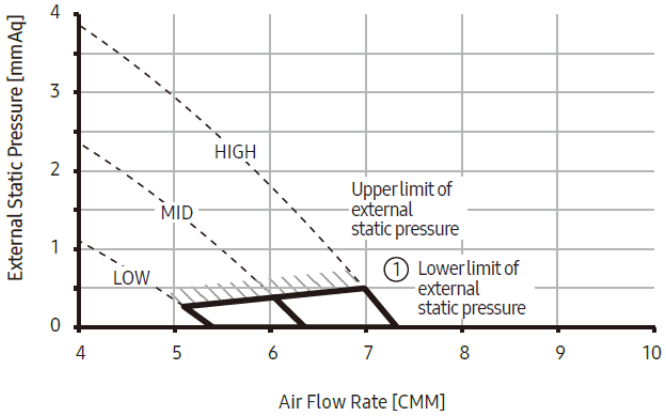


4. Indoor Units

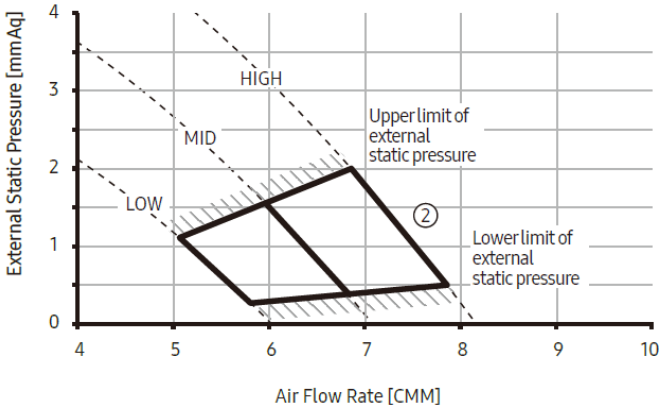
4-7. Fan characteristics (PQ curve)

AM028DNLDKG/EU

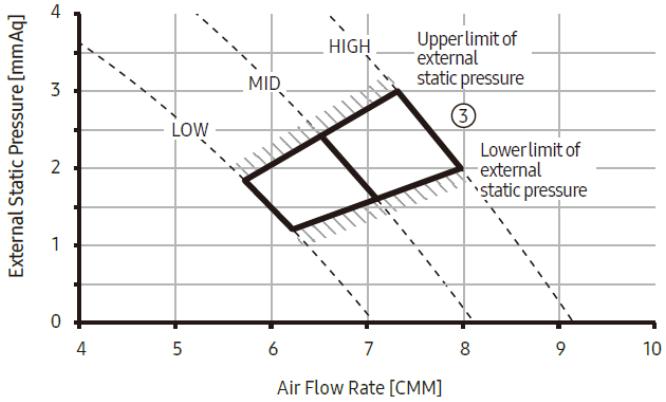
1	External Static Pressure(mmAq)	Option Code
	0 < SP≤0.5	010054-125AE2-201C1C-331110



2	External Static Pressure(mmAq)	Option Code
	0.5 < SP≤2	010054-125E15-201C1C-331110



3	External Static Pressure(mmAq)	Option Code
	2 < SP≤3	010054-125E7A-201C1C-331110

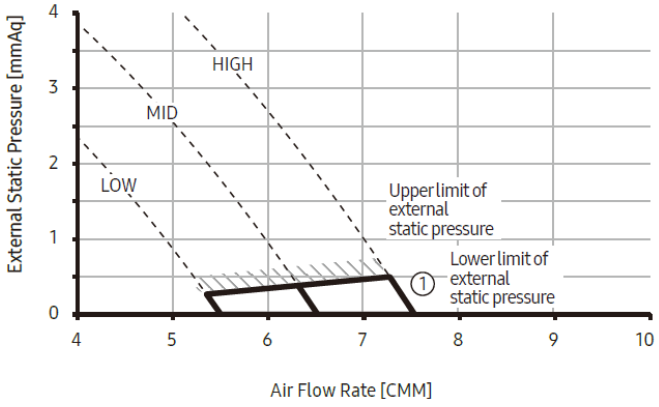


4. Indoor Units

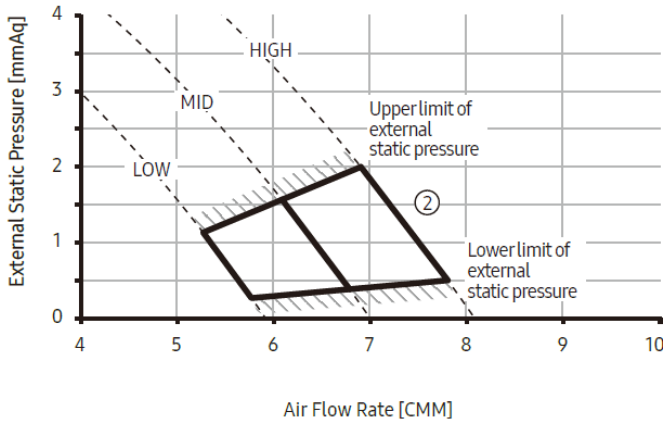
4-7. Fan characteristics (PQ curve)

AM036DNLDKG/EU

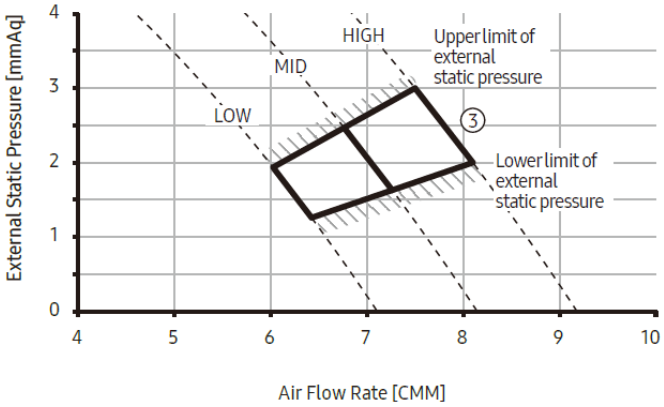
1	External Static Pressure(mmAq)	Option Code
	0 < SP≤0.5	010054-125E35-202424-331110



2	External Static Pressure(mmAq)	Option Code
	0.5 < SP≤2	010054-125E68-202424-331110



3	External Static Pressure(mmAq)	Option Code
	2 < SP≤3	010054-125ECD-202424-331110

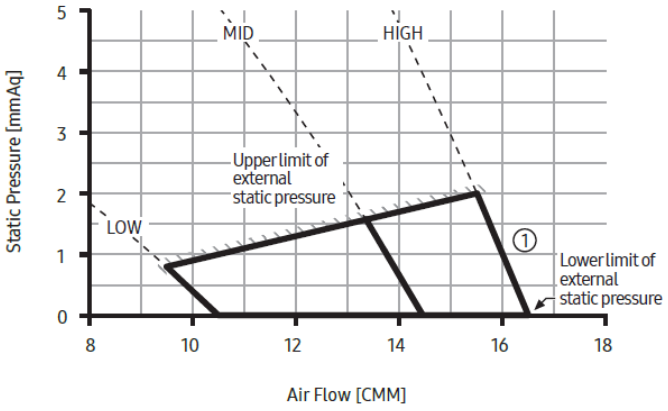


4. Indoor Units

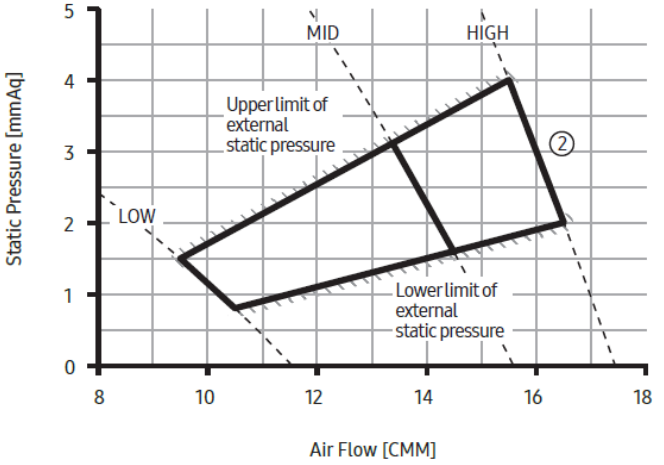
4-7. Fan characteristics (PQ curve)

AM056DNLDKG/EU

1	External Static Pressure(mmAq)	Option Code
	0 < P ≤ 2	010454-1C5950-203838-301110



2	External Static Pressure(mmAq)	Option Code
	2 < P ≤ 4	010454-1C59C4-203838-301110

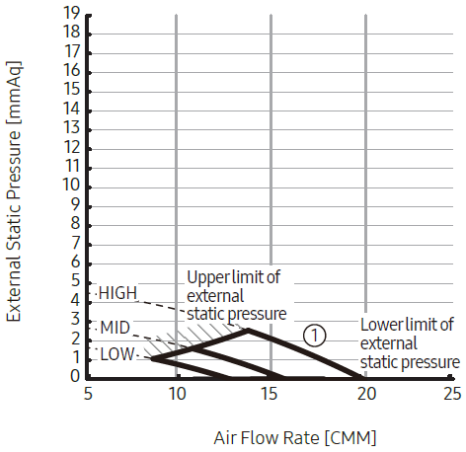


4. Indoor Units

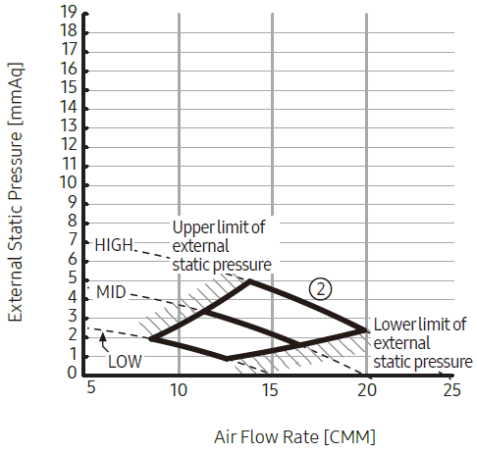
4-7. Fan characteristics (PQ curve)

AM036DNMDKG/EU

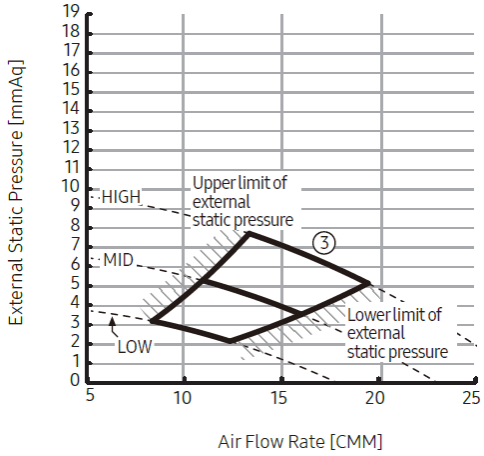
1	External Static Pressure(mmAq)	Option Code
	0≤SP≤2.5	010054-1E50B2-202424-331100



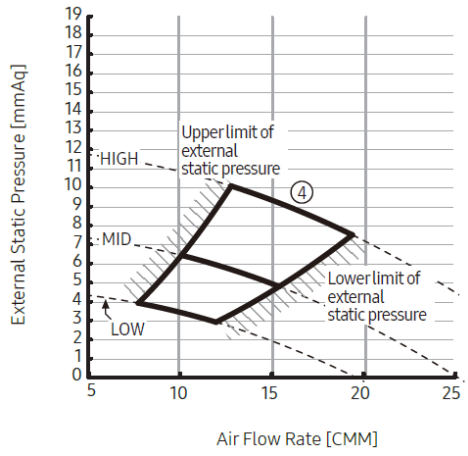
2	External Static Pressure(mmAq)	Option Code
	2.5<SP≤5	010054-1E5436-202424-331100



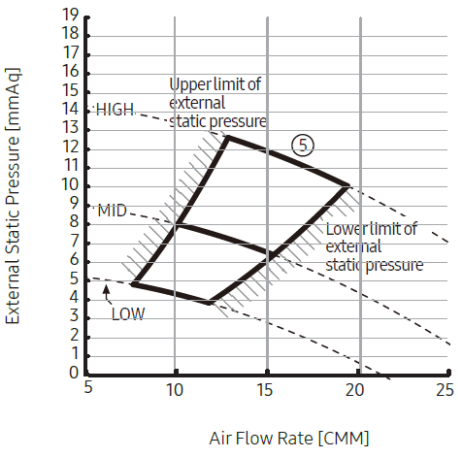
3	External Static Pressure(mmAq)	Option Code
	5<SP≤7.5	010054-1E5499-202424-331100



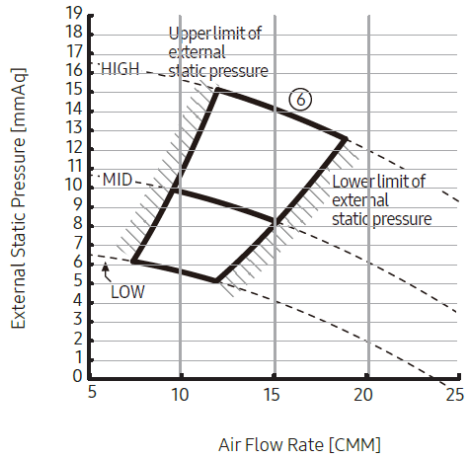
4	External Static Pressure(mmAq)	Option Code
	7.5<SP≤10	010054-1E54EB-202424-331100



5	External Static Pressure(mmAq)	Option Code
	10<SP≤12.5	010054-1E583E-202424-331100



6	External Static Pressure(mmAq)	Option Code
	12.5<SP≤15	010054-1E5972-202424-331100

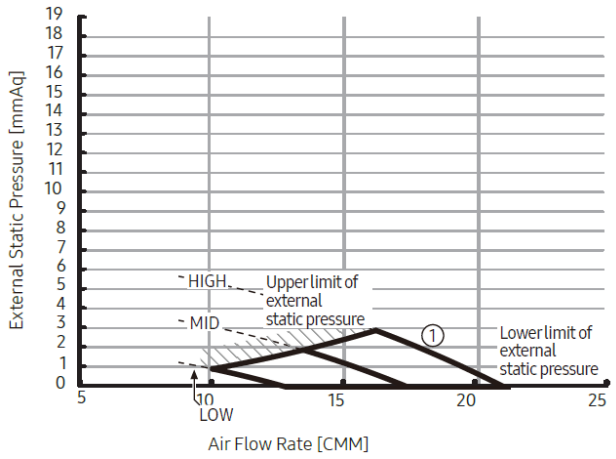


4. Indoor Units

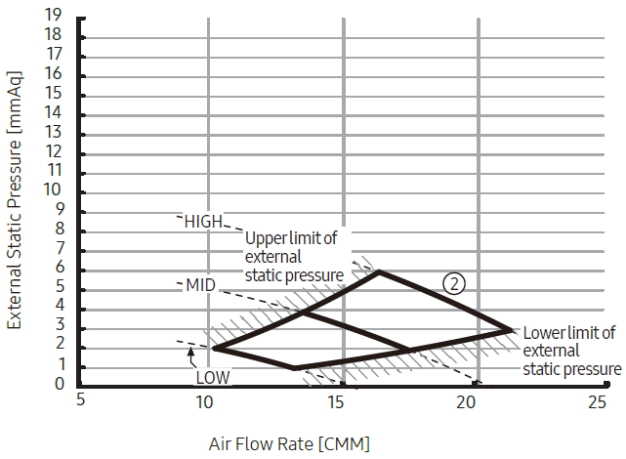
4-7. Fan characteristics (PQ curve)

AM056DNMDKG/EU

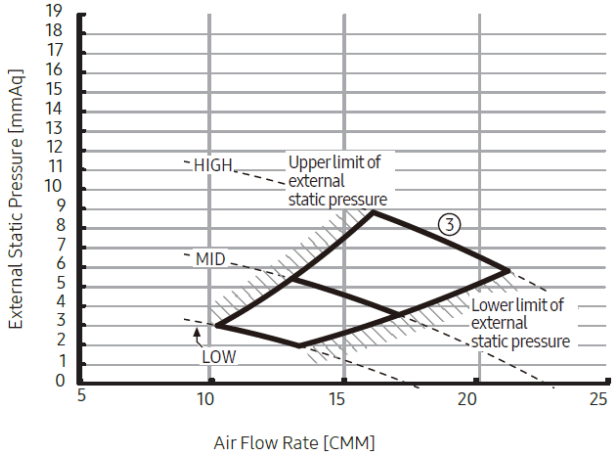
1	External Static Pressure(mmAq)	Option Code
	0≤SP≤3	010054-1E5413-203838-331100



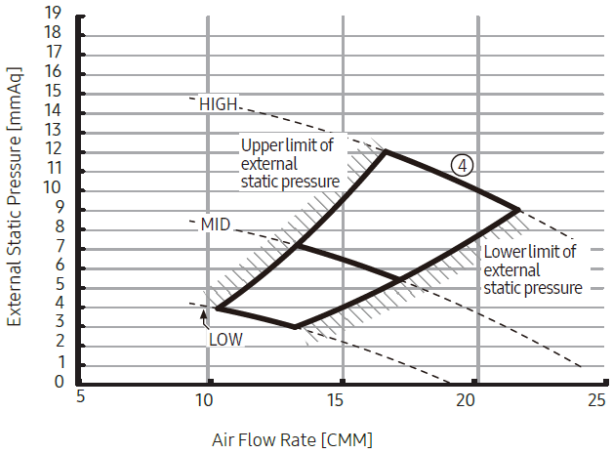
2	External Static Pressure(mmAq)	Option Code
	3<SP≤6	010054-1E5497-203838-331100



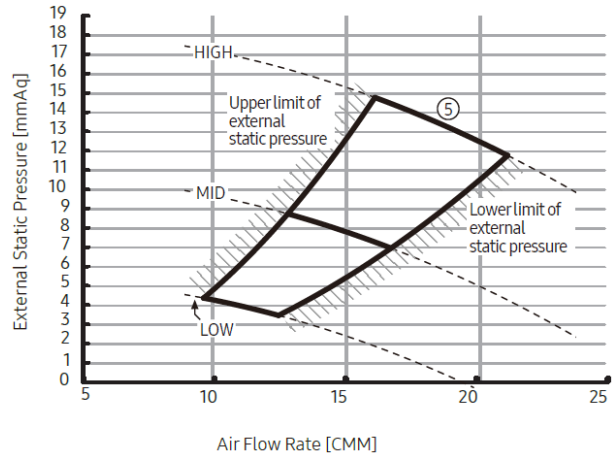
3	External Static Pressure(mmAq)	Option Code
	6<SP≤9	010054-1E54FA-203838-331100



4	External Static Pressure(mmAq)	Option Code
	9<SP≤12	010054-1E585C-203838-331100



5	External Static Pressure(mmAq)	Option Code
	12<SP≤15	010054-1E58AE-203838-331100

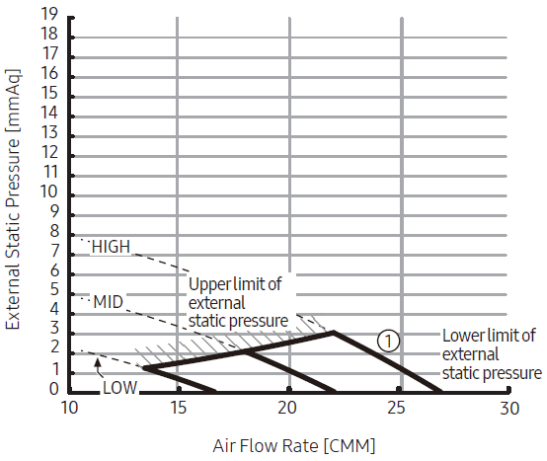


4. Indoor Units

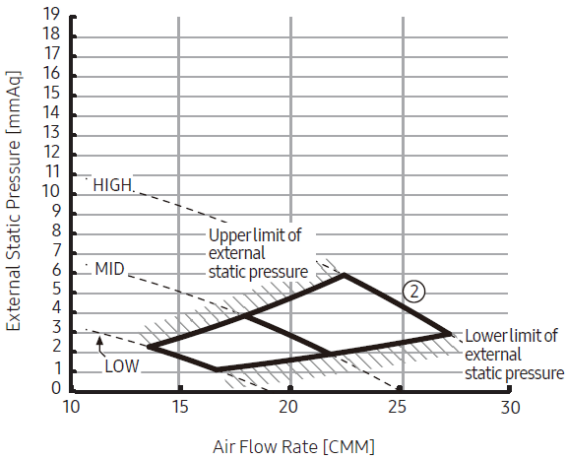
4-7. Fan characteristics (PQ curve)

AM071DNMDKG/EU

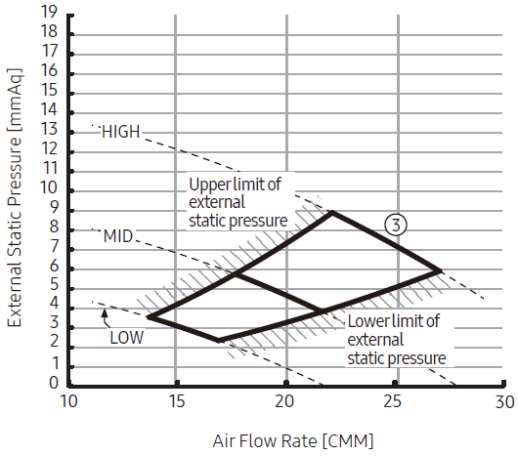
1	External Static Pressure(mmAq)	Option Code
	0≤SP≤3	010054-1E5488-204747-331100



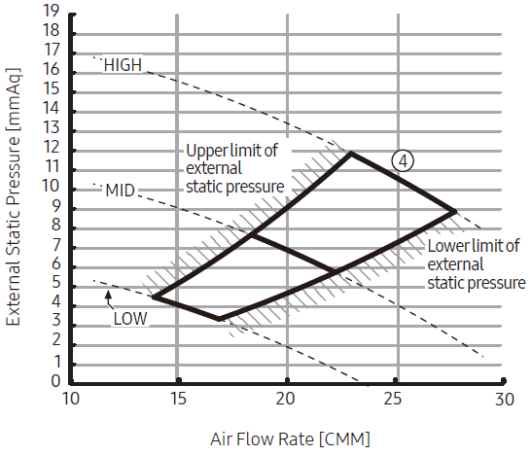
2	External Static Pressure(mmAq)	Option Code
	3<SP≤6	010054-1E54FB-204747-331100



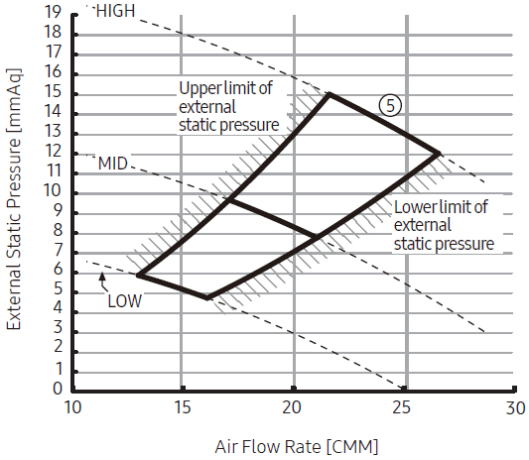
3	External Static Pressure(mmAq)	Option Code
	6<SP≤9	010054-1E584F-204747-331100



4	External Static Pressure(mmAq)	Option Code
	9<SP≤12	010054-1E59A2-204747-331100



5	External Static Pressure(mmAq)	Option Code
	12<SP≤15	010054-1E59E5-204747-331100

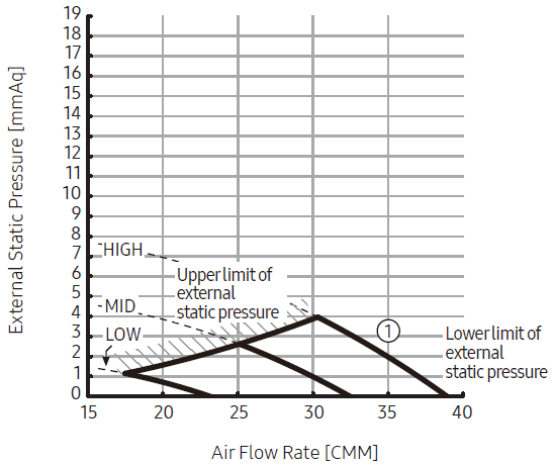


4. Indoor Units

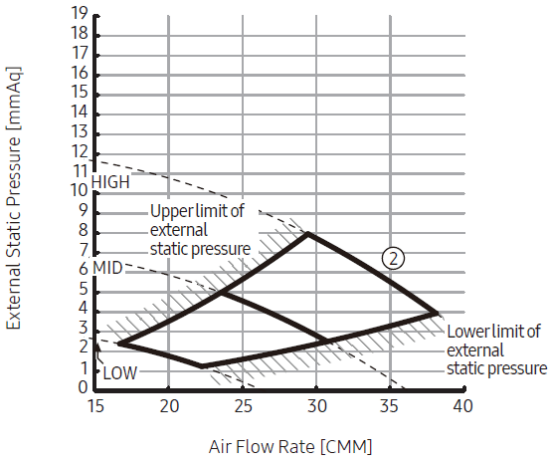
4-7. Fan characteristics (PQ curve)

AM090DNMDKG/EU

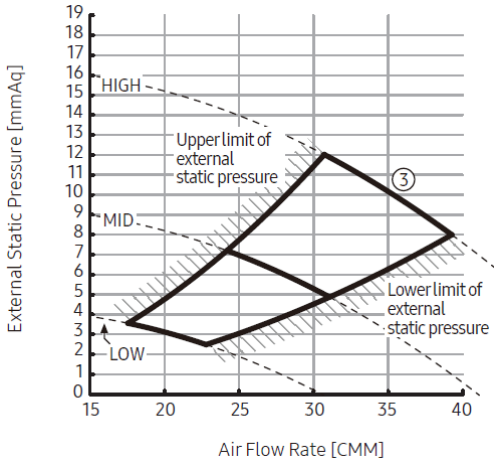
1	External Static Pressure(mmAq)	Option Code
	0≤SP≤4	010054-1E5477-205A5A-331110



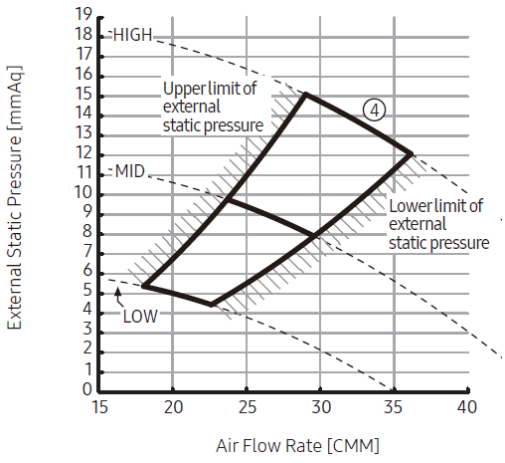
2	External Static Pressure(mmAq)	Option Code
	4<SP≤8	010054-1E580A-205A5A-331110



3	External Static Pressure(mmAq)	Option Code
	8<SP≤12	010054-1E588D-205A5A-331110



4	External Static Pressure(mmAq)	Option Code
	12<SP≤15	010054-1E59C2-205A5A-331110

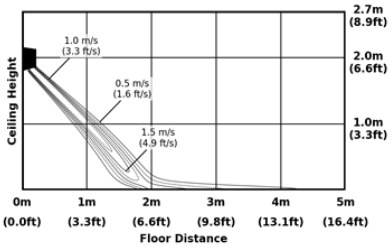


4. Indoor Units

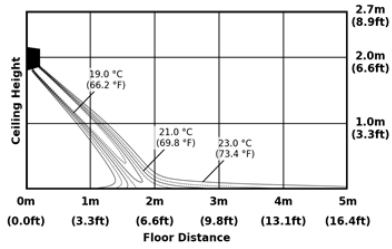
4-8. Temperature and air flow distribution

AE015HEADKG/EU (Ceiling Installation)

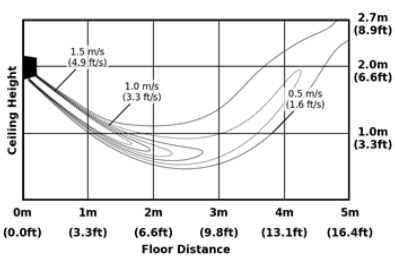
- **Cooling AirVelocity Distribution** (Discharge Angle : 20 degree)



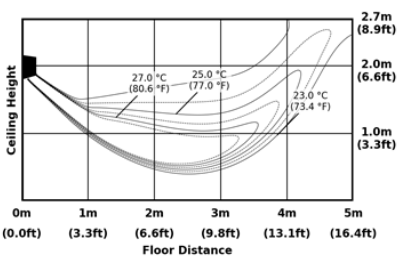
- **Cooling Temperature Distribution** (Discharge Angle : 20 degree)



- **Heating AirVelocity Distribution** (Discharge Angle : 30 degree)

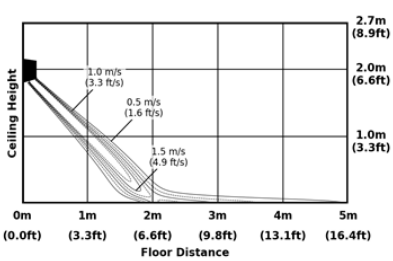


- **Heating Temperature Distribution** (Discharge Angle : 30 degree)

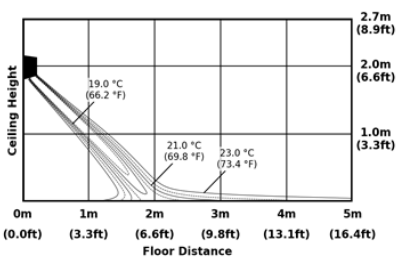


AE022HEADKG/EU (Ceiling Installation)

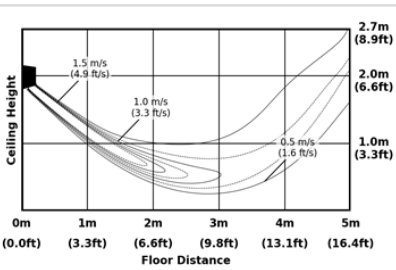
- **Cooling AirVelocity Distribution** (Discharge Angle : 20 degree)



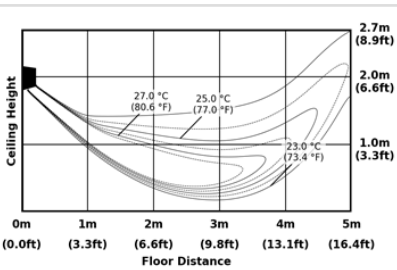
- **Cooling Temperature Distribution** (Discharge Angle : 20 degree)



- **Heating AirVelocity Distribution** (Discharge Angle : 30 degree)



- **Heating Temperature Distribution** (Discharge Angle : 30 degree)

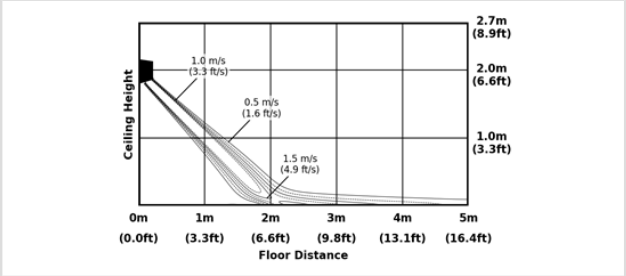


4. Indoor Units

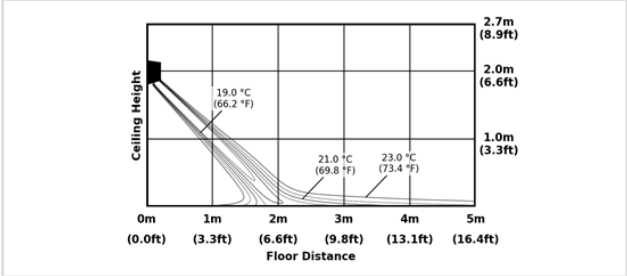
4-8. Temperature and air flow distribution

AE028HEADKG/EU (Ceiling Installation)

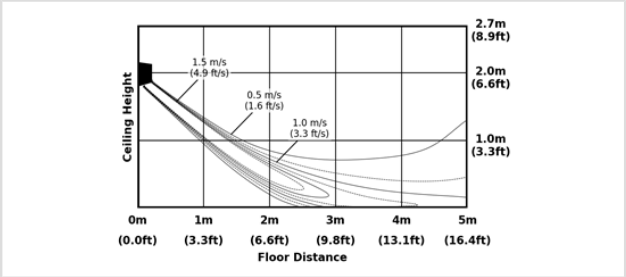
- **Cooling AirVelocity Distribution** (Discharge Angle : 20 degree)



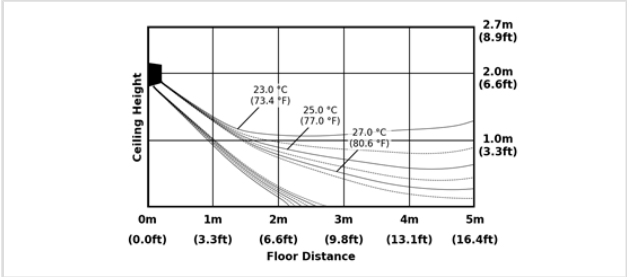
- **Cooling Temperature Distribution** (Discharge Angle : 20 degree)



- **Heating AirVelocity Distribution** (Discharge Angle : 30 degree)

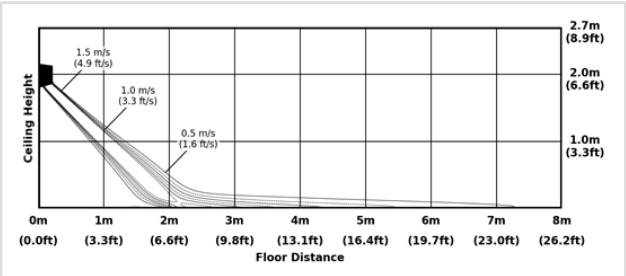


- **Heating Temperature Distribution** (Discharge Angle : 30 degree)

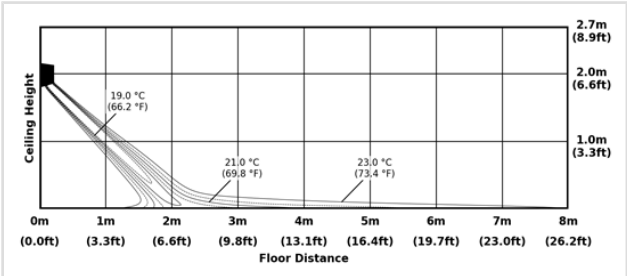


AE036HEADKG/EU (Ceiling Installation)

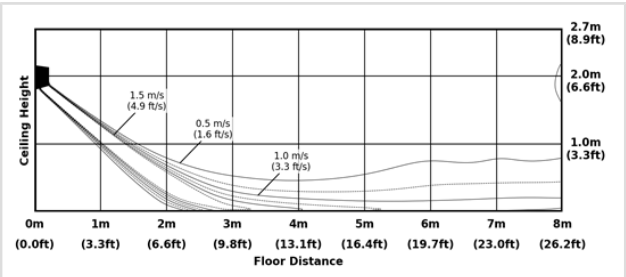
- **Cooling AirVelocity Distribution** (Discharge Angle : 20 degree)



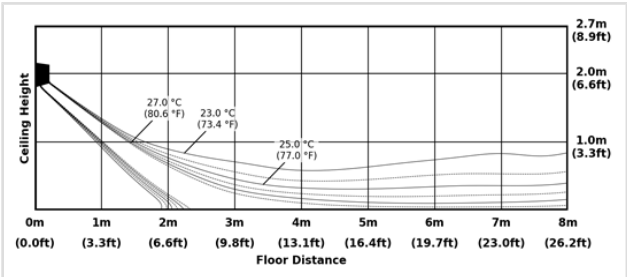
- **Cooling Temperature Distribution** (Discharge Angle : 20 degree)



- **Heating AirVelocity Distribution** (Discharge Angle : 30 degree)



- **Heating Temperature Distribution** (Discharge Angle : 30 degree)

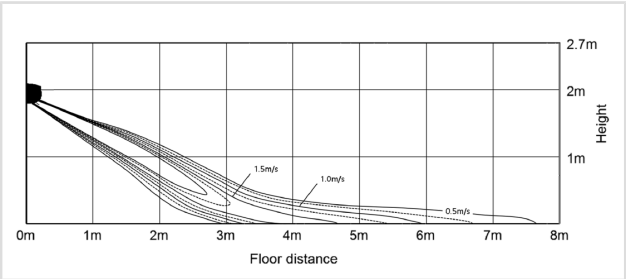


4. Indoor Units

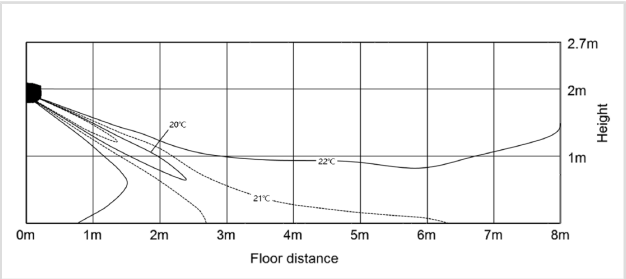
4-8. Temperature and air flow distribution

AM056DNVDKG/EU (Ceiling Installation)

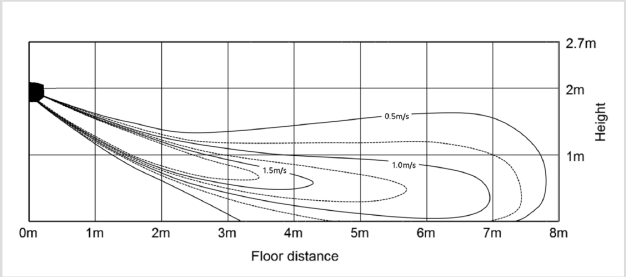
- **Cooling AirVelocity Distribution** (Discharge Angle : 20 degree)



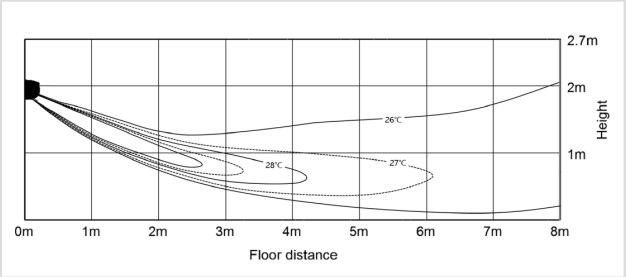
- **Cooling Temperature Distribution** (Discharge Angle : 20 degree)



- **Heating AirVelocity Distribution** (Discharge Angle : 30 degree)



- **Heating Temperature Distribution** (Discharge Angle : 30 degree)

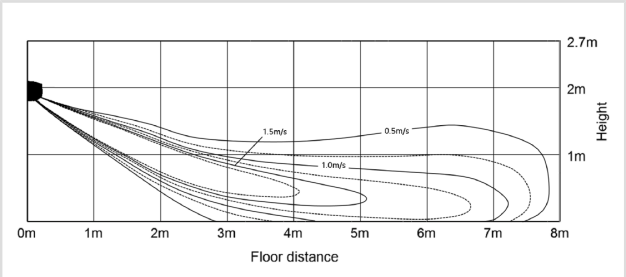


AM071DNVDKG/EU (Ceiling Installation)

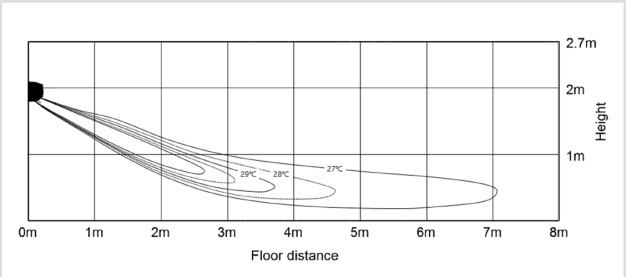
- **Cooling AirVelocity Distribution** (Discharge Angle : 20 degree)

- **Cooling Temperature Distribution** (Discharge Angle : 20 degree)

- **Heating AirVelocity Distribution** (Discharge Angle : 30 degree)



- **Heating Temperature Distribution** (Discharge Angle : 30 degree)

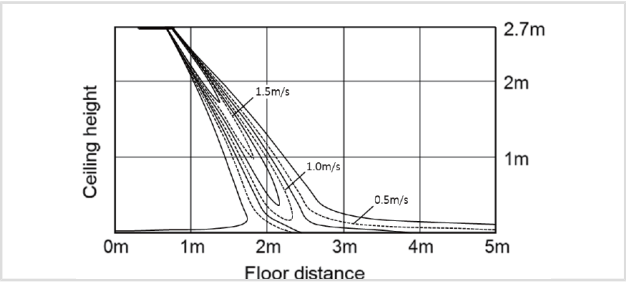


4. Indoor Units

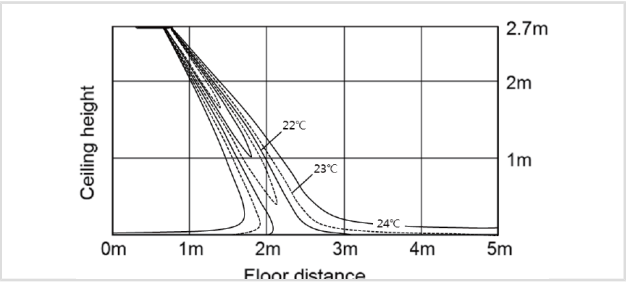
4-8. Temperature and air flow distribution

AM017DN1DKG/EU (Ceiling Installation)

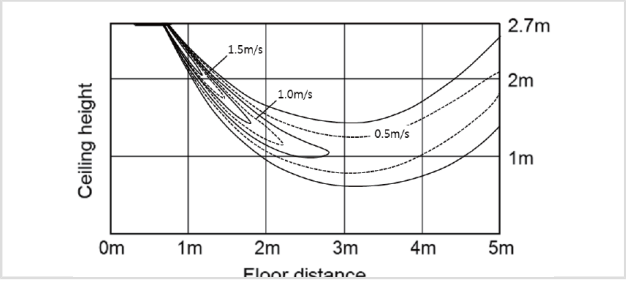
- **Cooling AirVelocity Distribution** (Discharge Angle : 60 degree)



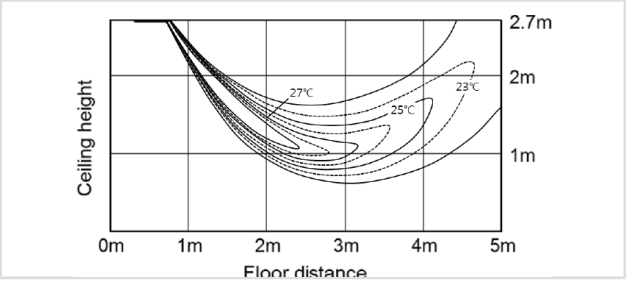
- **Cooling Temperature Distribution** (Discharge Angle : 60 degree)



- **Heating AirVelocity Distribution** (Discharge Angle : 60 degree)

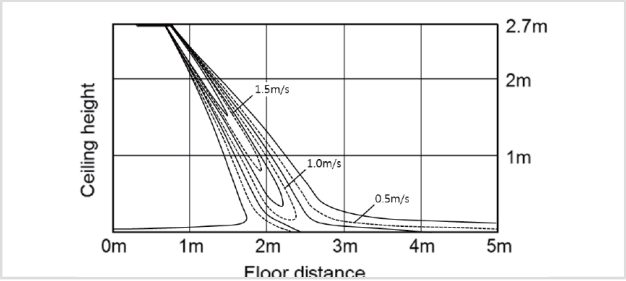


- **Heating Temperature Distribution** (Discharge Angle : 60 degree)

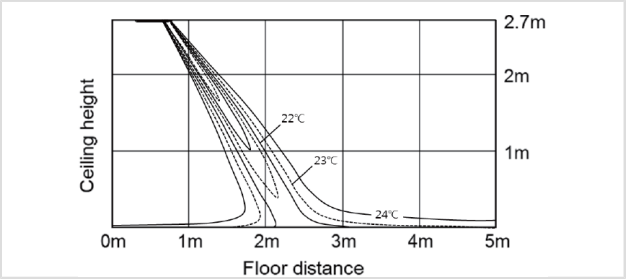


AM022DN1DKG/EU (Ceiling Installation)

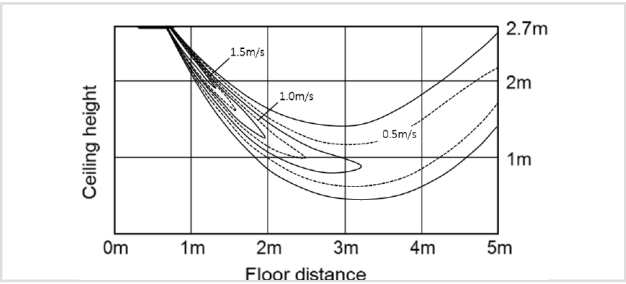
- **Cooling AirVelocity Distribution** (Discharge Angle : 60 degree)



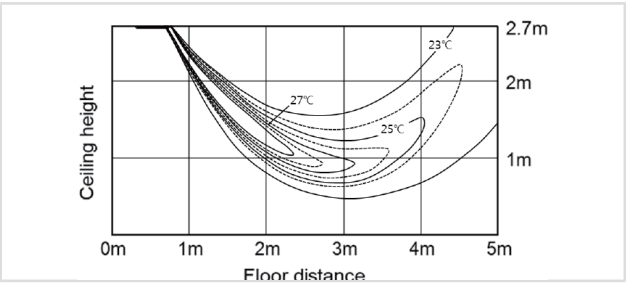
- **Cooling Temperature Distribution** (Discharge Angle : 60 degree)



- **Heating AirVelocity Distribution** (Discharge Angle : 60 degree)



- **Heating Temperature Distribution** (Discharge Angle : 60 degree)

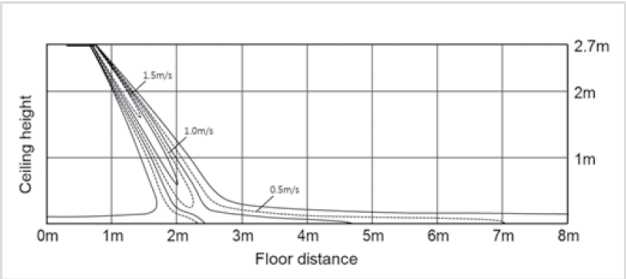


4. Indoor Units

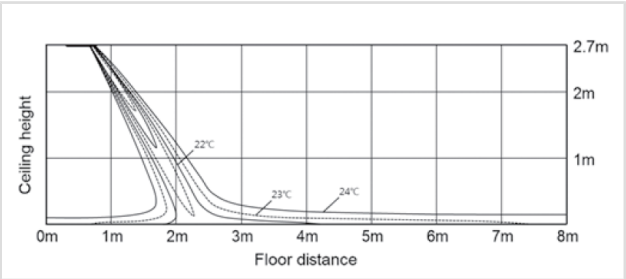
4-8. Temperature and air flow distribution

AM028DN1DKG/EU (Ceiling Installation)

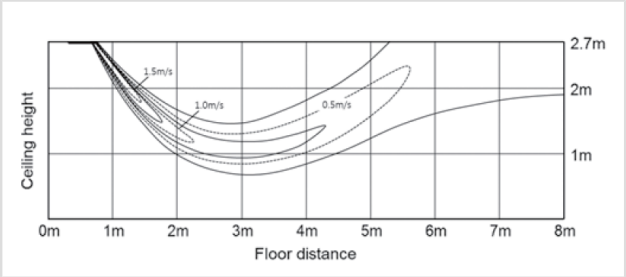
- **Cooling AirVelocity Distribution** (Discharge Angle : 60 degree)



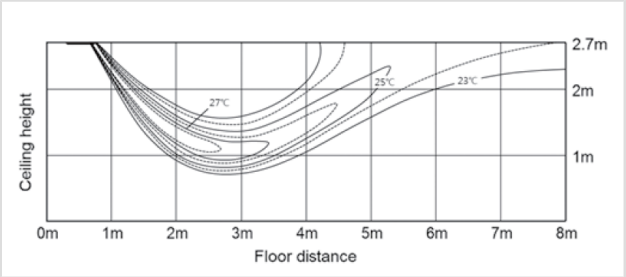
- **Cooling Temperature Distribution** (Discharge Angle : 60 degree)



- **Heating AirVelocity Distribution** (Discharge Angle : 60 degree)

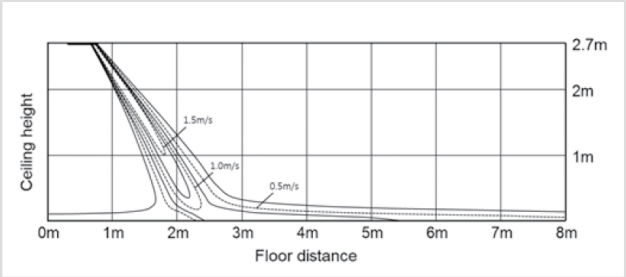


- **Heating Temperature Distribution** (Discharge Angle : 60 degree)

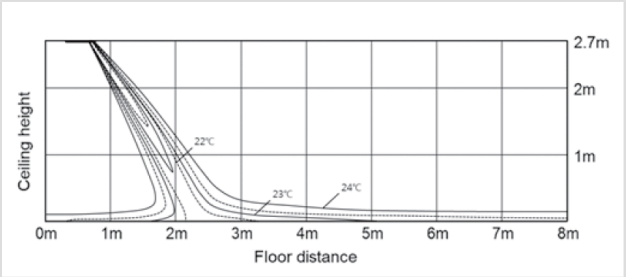


AM036DN1DKG/EU (Ceiling Installation)

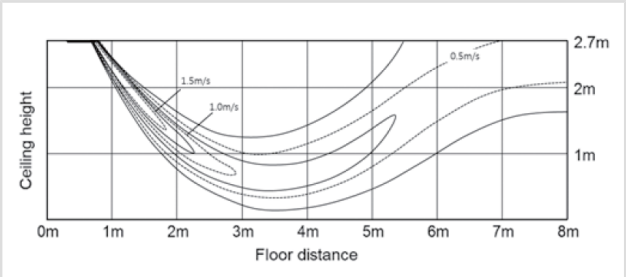
- **Cooling AirVelocity Distribution** (Discharge Angle : 60 degree)



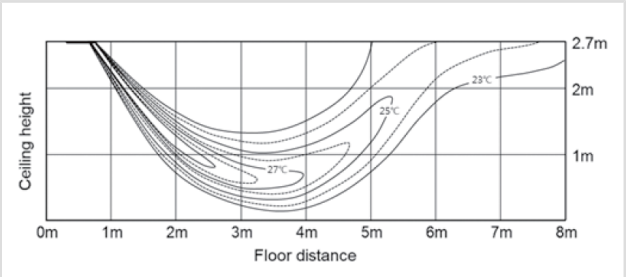
- **Cooling Temperature Distribution** (Discharge Angle : 60 degree)



- **Heating AirVelocity Distribution** (Discharge Angle : 60 degree)



- **Heating Temperature Distribution** (Discharge Angle : 60 degree)

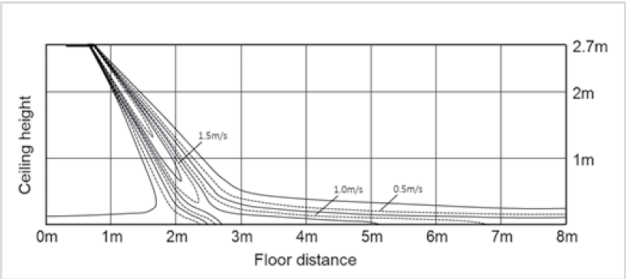


4. Indoor Units

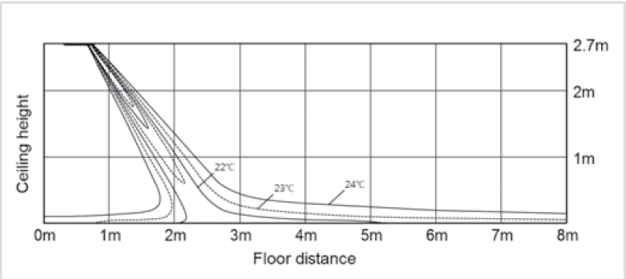
4-8. Temperature and air flow distribution

AM056DN1DKG/EU (Ceiling Installation)

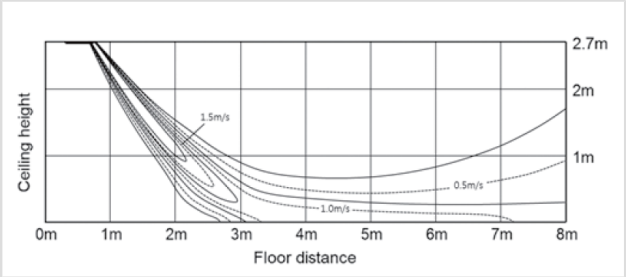
- **Cooling AirVelocity Distribution** (Discharge Angle : 60 degree)



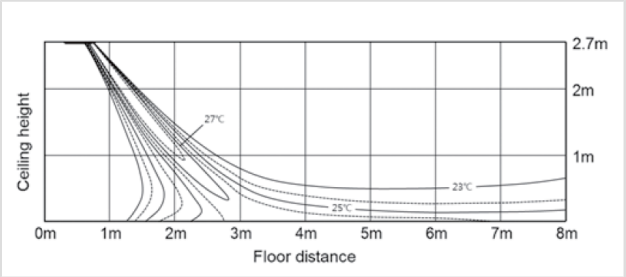
- **Cooling Temperature Distribution** (Discharge Angle : 60 degree)



- **Heating AirVelocity Distribution** (Discharge Angle : 60 degree)



- **Heating Temperature Distribution** (Discharge Angle : 60 degree)



※ Installation

Outdoor Unit

Installation location requirement of outdoor unit

- The outdoor unit shall be installed in an open space that is always ventilated.
- The local gas regulations shall be observed.
- For installation inside a building (this applies either to indoor or outdoor units installed inside) a minimum room floor area of space conditioned is mandatory according to IEC 60335-2-40: (see the reference table into either the indoor or outdoor unit installation manual).
- To handle, purge, and dispose the refrigerant, or break into the refrigerant circuit, the worker should have a certificate from an industry-accredited authority. In the European Union and UK, the field engineer must be F-GAS certified and adhere to the F-GAS regulations.
- Do not install the indoor unit if it has any drainage problem. Poor drainage can lead to excessive ice build-up during low ambient conditions and may cause disturbances in operation and failure of the product.

R-32 system arrangement requirements

Installing the outdoor unit

Make sure to install the outdoor unit outdoors. If the outdoor unit is installed indoors, additional measures may be required to comply with relevant regulations. A terminal for external output is available in the outdoor unit. This terminal can be used when additional measures should be taken. An external output signal occurs if the R-32 sensor in the indoor unit detects a refrigerant leak, or the sensor has a malfunction or short circuit. Based on this signal, safety measures required for the outdoor unit, such as ventilation system activation and alarm activation, can be taken.

Installing the indoor unit

For details on indoor unit installation, refer to the installation and user manual that came with the indoor unit. Outdoor units for the EHS R-32 Quint model are compatible with R-32-sensor-embedded indoor units only. See the table below for minimum indoor installation areas depending on the amount of refrigerant charging for the outdoor unit. The minimum installation area must be satisfied.
The indoor unit provides an additional output signal for external devices. This output signal occurs if the R-32 sensor in the indoor unit detects a refrigerant leak, or the R-32 sensor has a malfunction or short circuit. Based on this signal, an additional ventilation system or alarm can be activated. For details on this option, refer to the indoor unit installation manual.

Deciding on the required Safety Measures for indoor unit

- ▶ Step 1: Determine the system's total refrigerant charge. The total refrigerant charge of the system is determined by the sum of the refrigerant charged in the outdoor unit and the additional refrigerant required based on the piping length and indoor unit combination.
- ▶ Step 2: Determine the smallest area of the room the indoor units are installed in.
  It includes the room where the indoor unit is directly installed and the room served by the ducted indoor unit.
  Calculate the area of the room with walls, doors, and partitions excluded.
  Spaces connected by false ceilings, ducts, or similar connections are not considered a single space.
- ▶ Step 3: Referring to the refrigerant charge and room area determined at Steps 1 and 2, use the tables below to decide the necessary safety measures.

〈Table 1〉

m(kg)	Minimum required room area (A, m²)													
	No underground floor Installation Height (m)							Underground Floor Installation Height (m)						
	1.8	2.2	2.5	3	3.5	4	4.5	1.8	2.2	2.5	3	3.5	4	4.5
≤1.842	No requirement							No requirement						
2.2	4.3	4.3	3.8	3.2	2.7	1.8	1.6	5.3	4.3	3.8	3.2	2.7	2.4	2.1
2.4	4.7	4.7	4.2	3.5	3.0	2.0	1.8	5.8	4.7	4.2	3.5	3.0	2.6	2.3
2.6	5.1	5.1	4.5	3.8	3.2	2.2	1.9	6.4	5.1	4.5	3.8	3.2	2.8	2.5
2.8	5.5	5.5	4.9	4.1	3.5	2.3	2.1	7.4	5.5	4.9	4.1	3.5	3.0	2.7
3.0	5.9	5.9	5.2	4.3	3.7	2.5	2.2	8.5	5.9	5.2	4.3	3.7	3.3	2.9
3.2	6.3	6.3	5.6	4.6	4.0	2.7	2.4	9.5	6.5	5.6	4.6	4.0	3.5	3.1
3.4	6.7	6.7	5.9	4.8	4.1	2.8	2.5	10.1	7.3	5.9	4.9	4.2	3.7	3.3
3.6	7.1	6.9	6.1	5.0	4.2	3.0	2.7	10.7	8.2	6.4	5.2	4.5	3.9	3.5
3.8	7.3	7.2	6.3	5.1	4.3	3.2	2.8	11.3	9.1	7.1	5.5	4.7	4.1	3.7
4.0	7.6	7.4	6.5	5.3	4.4	3.3	3.0	11.8	10.1	7.8	5.8	5.0	4.3	3.9
4.2	7.8	7.6	6.6	5.4	4.5	3.5	3.1	12.4	11.2	8.6	6.0	5.2	4.6	4.1
4.4	8.0	7.8	6.8	5.6	4.6	3.7	3.3	13.0	12.3	9.5	6.6	5.5	4.8	4.2
4.6	8.1	7.9	7.0	5.7	4.8	3.8	3.4	13.6	13.4	10.4	7.2	5.7	5.0	4.4
4.8	8.3	8.1	7.1	5.9	4.9	4.0	3.6	14.2	14.2	11.3	7.8	6.0	5.2	4.6
5.0	8.4	8.2	7.3	6.1	5.1	4.2	3.7	14.8	14.8	12.3	8.5	6.3	5.4	4.8
5.2	8.5	8.3	7.5	6.2	5.3	4.3	3.9	15.4	15.4	13.6	9.2	6.8	5.6	5.0
5.4	8.7	8.4	7.6	6.4	5.4	4.5	4.0	16.0	16.0	14.1	9.9	7.3	5.9	5.2
5.6	8.8	8.6	7.8	6.6	5.6	4.7	4.1	16.6	16.6	14.6	10.7	7.8	6.1	5.4
5.8	8.9	8.7	7.9	6.7	5.7	4.8	4.3	17.2	17.2	15.1	11.5	8.4	6.4	5.6
6.0	9.0	8.8	8.1	6.9	5.9	5.0	4.4	17.8	17.8	15.6	12.3	9.0	6.9	5.8
6.2	9.2	9.0	8.4	7.1	6.0	5.2	4.6	18.4	18.4	16.2	13.1	9.6	7.4	6.0
6.4	9.3	9.1	8.7	7.3	6.2	5.3	4.7	19.0	19.0	16.7	13.9	10.2	7.8	6.2
6.6	9.4	9.2	8.9	7.5	6.4	5.5	4.9	19.5	19.5	17.2	14.3	10.9	8.3	6.6
6.8	9.6	9.4	9.2	7.6	6.5	5.7	5.0	20.1	20.1	17.7	14.8	11.6	8.9	7.0

※ Installation

Outdoor Unit

m(kg)	Minimum required room area (A, m²)													
	No underground floor Installation Height (m)							Underground Floor Installation Height (m)						
	1.8	2.2	2.5	3	3.5	4	4.5	1.8	2.2	2.5	3	3.5	4	4.5
7.0	9.7	9.6	9.5	7.8	6.7	5.8	5.2	20.7	20.7	18.2	15.2	12.3	9.4	7.4
7.2	9.9	9.8	9.7	8.0	6.9	6.0	5.3	21.3	21.3	18.8	15.6	13.0	9.9	7.8
7.4	10.1	10.0	9.9	8.2	7.1	6.2	5.5	21.9	21.9	19.3	16.1	13.7	10.5	8.3
7.6	10.3	10.2	10.1	8.4	7.2	6.3	5.6	22.5	22.5	19.8	16.5	14.1	11.1	8.7
7.8	10.5	10.4	10.4	8.6	7.4	6.5	5.8	23.1	23.1	20.3	16.9	14.5	11.7	9.2
8.0	10.7	10.7	10.6	8.8	7.6	6.7	5.9	23.7	23.7	20.8	17.4	14.9	12.3	9.7
8.2	11.0	10.9	10.9	9.0	7.8	6.8	6.1	24.3	24.3	21.4	17.8	15.3	12.9	10.2
8.4	11.3	11.2	11.2	9.2	8.0	7.0	6.2	24.9	24.9	21.9	18.2	15.6	13.5	10.7
8.6	11.6	11.5	11.5	9.5	8.1	7.2	6.4	25.5	25.5	22.4	18.7	16.0	14.0	11.2
8.8	11.9	11.8	11.7	9.7	8.3	7.3	6.5	26.1	26.1	22.9	19.1	16.4	14.3	11.7
9.0	12.2	12.2	11.9	9.9	8.5	7.5	6.7	26.7	26.7	23.5	19.5	16.8	14.7	12.3
9.2	12.5	12.5	12.1	10.1	8.7	7.7	6.8	27.2	27.2	24.0	20.0	17.1	15.0	12.8
9.4	12.9	12.9	12.5	10.3	8.9	7.8	7.0	27.8	27.8	24.5	20.4	17.5	15.3	13.4
9.6	13.3	13.3	12.7	10.6	9.1	8.0	7.1	28.4	28.4	25.0	20.8	17.9	15.6	13.9
9.8	13.7	13.7	13.0	10.8	9.3	8.2	7.3	29.0	29.0	25.5	21.3	18.2	16.0	14.2
10.0	14.1	14.1	13.3	11.0	9.5	8.3	7.4	29.6	29.6	26.1	21.7	18.6	16.3	14.5
10.2	14.7	14.7	13.6	11.3	9.7	8.5	7.6	30.2	30.2	26.6	22.1	19.0	16.6	14.8
10.4	15.3	15.3	14.1	11.6	9.9	8.7	7.9	30.8	30.8	27.1	22.6	19.4	16.9	15.1
10.6	15.9	15.9	14.6	12.1	10.4	8.9	8.3	31.4	31.4	27.6	23.0	19.7	17.3	15.3
10.8	16.5	16.5	15.1	12.6	10.8	9.3	8.6	32.0	32.0	28.1	23.5	20.1	17.6	15.6
11.0	17.1	17.1	15.6	13.1	11.3	9.7	9.0	32.6	32.6	28.7	23.9	20.5	17.9	15.9
11.2	17.7	17.7	16.1	13.6	11.7	10.2	9.3	33.2	33.2	29.2	24.3	20.8	18.2	16.2
11.4	18.3	18.3	16.6	14.1	12.2	10.6	9.7	33.8	33.8	29.7	24.8	21.2	18.6	16.5
11.6	18.9	18.9	17.1	14.6	12.6	11.0	10.0	34.4	34.4	30.2	25.2	21.6	18.9	16.8
11.8	19.5	19.5	17.6	15.1	13.1	11.4	10.4	34.9	34.9	30.7	25.6	22.0	19.2	17.1
12.0	20.1	20.1	18.1	15.6	13.5	11.8	10.7	35.5	35.5	31.3	26.1	22.3	19.5	17.4
12.2	20.7	20.7	18.6	16.1	14.0	12.3	11.1	36.1	36.1	31.8	26.5	22.7	19.9	17.7
12.4	21.3	21.3	19.1	16.6	14.4	12.7	11.4	36.7	36.7	32.3	26.9	23.1	20.2	18.0
12.6	21.9	21.9	19.6	17.1	14.9	13.1	11.8	37.3	37.3	32.8	27.4	23.5	20.5	18.2
12.8	22.5	22.5	20.1	17.6	15.3	13.5	12.1	37.9	37.9	33.4	27.8	23.8	20.8	18.5
13.0	23.1	23.1	20.6	18.1	15.8	13.9	12.5	38.5	38.5	33.9	28.2	24.2	21.2	18.8

m : Total refrigerant charge in the system

- A : Minimum required room area

► IMPORTANT: it's mandatory to consider either the table 1 or taking into consideration the local law regarding the minimum living space of the premises.

► Minimum installation height of indoor unit is 1.8 m for wall, 2.5 m for ceiling, 2.2 m for Ducted.

Wired remote control requirements

For details on wired remote control installation, refer to the installation manual and user manual that came with the wired remote control. For R-32 indoor unit, make sure to install at least one wired colour remote control (model name: MWR-WG01**) that doubles as a safety alarm device. This wired remote control serves as a visual/audible warning alarm device in the event of R-32 refrigerant leaks. Please follow the instructions below to connect a wired colour remote control:

- Make sure to install a dedicated R-32-capable wired remote control for indoor unit.

Make sure to use R-32-capable wired remote controls.The product will not operate if an R-32-capable wired remote control is not located in the vicinity or if users try to control the product dusing a common wired remote control.

※ E694:This error occurs if an installed R-32 indoor unit and R-32-capable wired remote control are not a correct combination. Use R-32-capable wired remote controls.

※ MWR-WG01*N

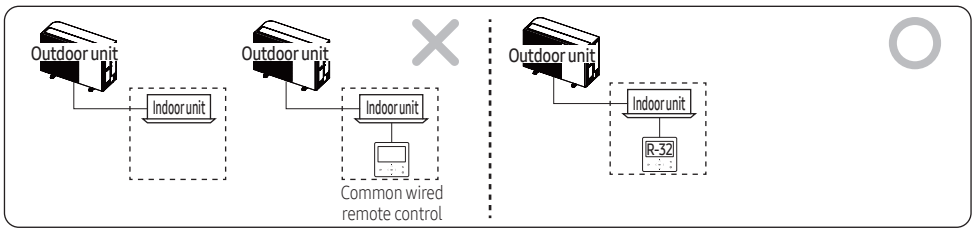
※ R-32-capable wired remote controls should be purchased separately.

※ Installation

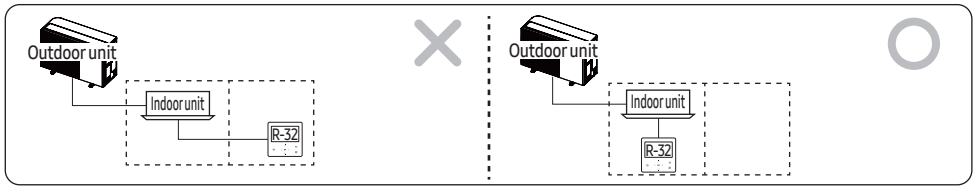
Outdoor Unit

⚠ WARNING

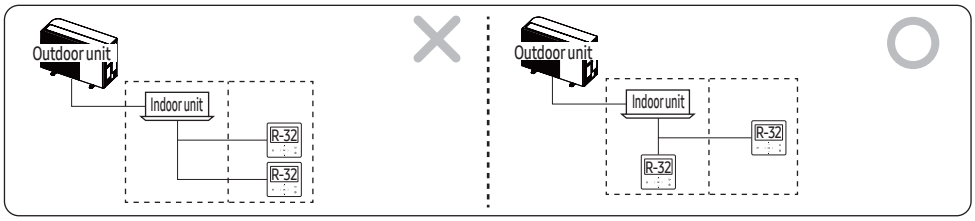
- Samsung Electronics is not responsible for any loss or damage to the product resulting from using anything but the specified wired remote control.



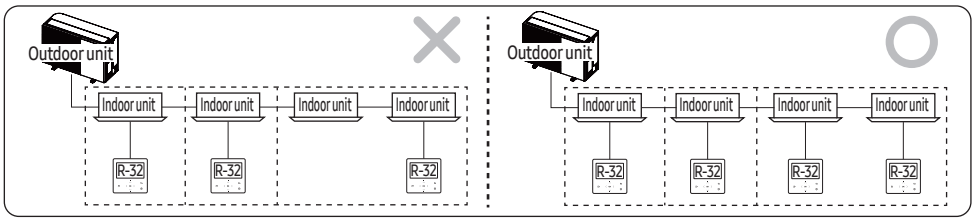
Make sure R-32-capable wired remote controls are located in the same room as the indoor units.

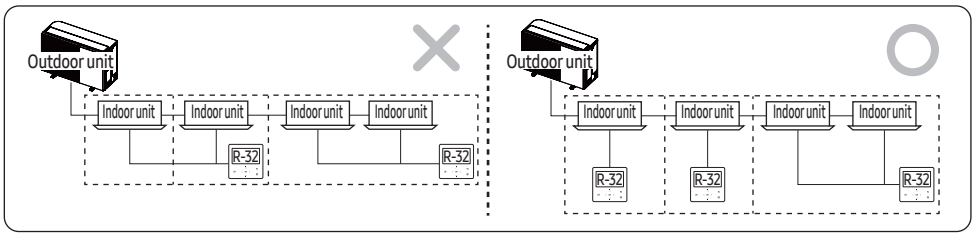


If using two or more R-32-capable wired remote controls, at least one of them must be placed in the same room as the indoor units.

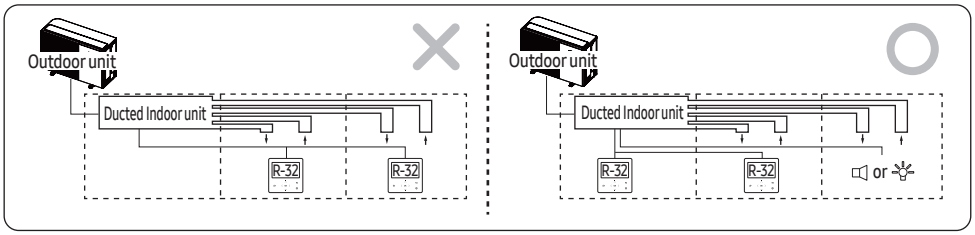


Be sure to connect all indoor units to R-32-capable wired remote controls.
If multiple indoor units are installed in the same room, each indoor unit must be connected to an R-32-capable wired remote control. Make sure that at least one R-32-capable wired remote control is installed in each room.





During grouped control, up to 16 indoor units can be connected to a single R-32 wired remote control.
During grouped control and individual control, each indoor unit can be connected to a maximum of two R-32 wired remote controls.



※ Installation

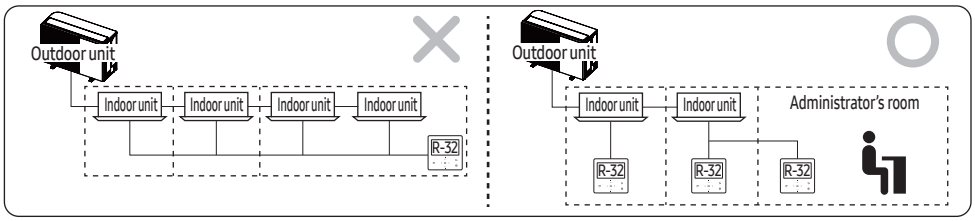
Outdoor Unit

In case a ducted indoor unit serves a different room than where it is installed, both supply and return air must be directly ducted to that room.

The room area and remote controller rules must be followed for both installed and served room.
If there are more than 3 rooms, install the lamp or alarm device using the indoor unit contact signal.
For the occupancy listed below, the safety alarm system shall also warn at a supervised location, such as the night porter's location, as well as the occupied space:

- rooms, parts of buildings, building where sleeping facilities are provided,
- rooms, parts of buildings, building where people are restricted in their movement,
- rooms, parts of buildings, building where an uncontrolled number of people are present, or
- rooms, parts of buildings, building to which any person has access without being personally acquainted with the necessarysafety precautions.

A wired remote control must be installed in the administrator's room, using wired remote control supervisor mode. For details on how to set wired remote control supervisor mode, refer to the wired remote control installation manual.



NOTE

- In case local regulations require temperature control per zone (or room), a ducted unit cannot be used for multiple rooms, unless controlled zone dampers are installed (third party).

Choosing the installation location

NOTE

- Read the precautions and requirements in the part "General safety information".
- The outdoor unit is designed for outdoor installation only, and for the following ambient temperatures:
  A2W
  - Space heating mode -25~43 °C
  - Domestic hot water mode -25~43 °C
  - Space cooling mode 10~46 °C

  A2A
  - Space heating mode -25~24 °C
  - Space cooling mode 10~46 °C

  Heat Recovery
  - A2W Heating (Domestic hot water mode) + A2A Cooling mode 10~43 °C
  - A2W Cooling + A2A Heating mode 10~24 °C

Decide the installation location regarding the following condition and obtain the user's approval.

- Choose a location that is dry and sunny, but not exposed to direct sunlight or strong winds.
- Do not block any passageways or thoroughfares.
- Choose a location where the noise of the air to water heat pump when running and the discharged air does not disturb any neighbours.
- Choose a position that enables the pipes and cables to be easily connected to the other hydraulic system.
- Install the outdoor unit on a flat, stable surface that can support its weight and does not generate any unnecessary noise and vibration.
- Position the outdoor unit so that the air flows directly towards the open area.
- Place the outdoor unit where there are no plants and animals because they may cause malfunction of outdoor unit.
- Maintain sufficient clearance around the outdoor unit, especially from a radio, computer, and stereo system.
- The outdoor unit shall be installed in an open space that is always ventilated.

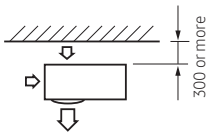
※ Installation

Outdoor Unit

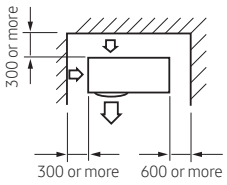
Unit installation

When installing 1 outdoor unit

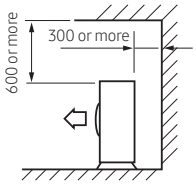
(Unit : mm)



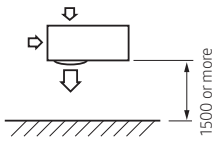
- When the air outlet is opposite the wall



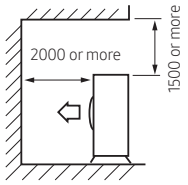
- When 3 sides of the outdoor unit are blocked by the wall



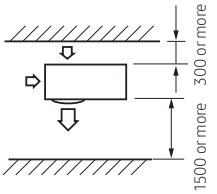
- The upper part of the outdoor unit and the air outlet is opposite the wall



- When the air outlet is towards the wall



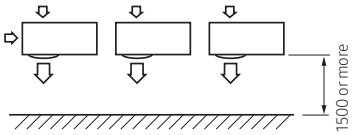
- The upper part of the outdoor unit and the air outlet is towards the wall



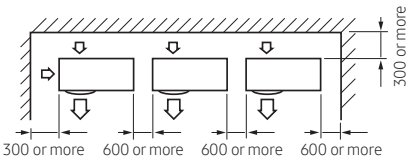
- When front and rear side of the outdoor unit is towards the wall

When installing more than 1 outdoor unit

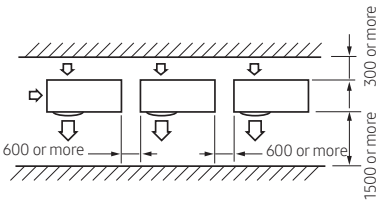
(Unit : mm)



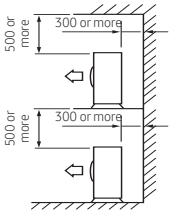
- When the air outlet is towards the wall



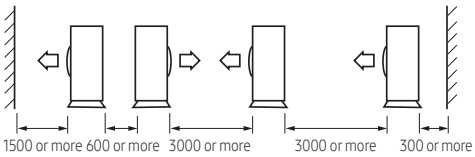
- When 3 sides of the outdoor unit are blocked by the wall



- When front and rear side of the outdoor unit is towards the wall



- The upper part of the outdoor unit and the air outlet is opposite the wall



- When front and rear side of the outdoor unit is towards the wall

⚠ CAUTION

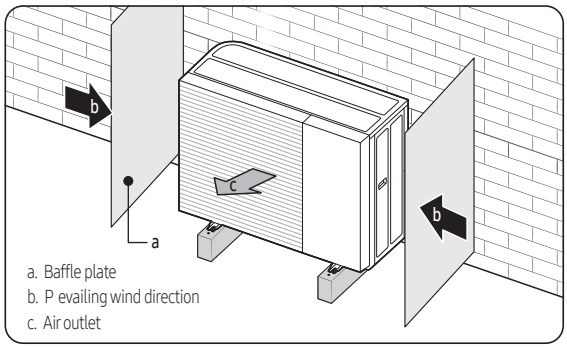
- The units must be installed according to distances declared, in order to permit accessibility from each side, to guarantee correct operation of maintenance or repairing of the products. The unit's parts must be accessible and serviceable under safe working conditions (for people or things).

※ Installation

Outdoor Unit

Installing the unit at a location with strong winds:

- Outdoor unit must be fixed firmly so that it can withstand the wind speed of the strong wind. If you cannot fix the outdoor unit on the base ground, fixate it sideways or use an extra support structure.
- To prevent exposure to (strong) wind, install a baffle plate on the air discharge side of the unit. (If there is a strong wind facing the outdoor air outlet, it causes a short circuit. This can lead to performance degradation, broken fan (motor), and acceleration of frost.)
- Install a wind protection shielding with anticipation of the dominant wind direction. If the direction of the air discharge part is pointing to the dominant direction of the wind, it could cause performance decrease and potential damage to the product.

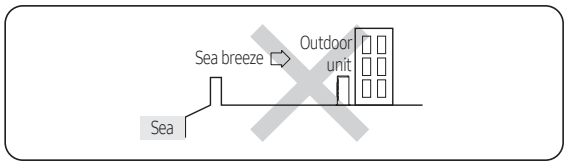


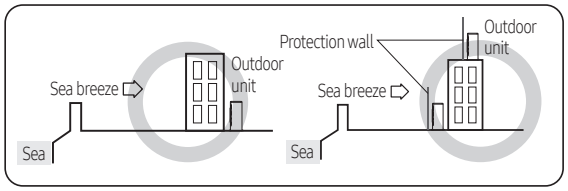
a. Baffle plate
b. P evailing wind direction
c. Air outlet

Installation guide at the seashore

Make sure to follow the below guides when installing at the seashore.

1 Do not install the product in a place where it is directly exposed to sea water and sea breeze.
   - Make sure to install the product behind a structure (such as a building) that can block sea breeze.





   - A protection wall should be constructed with a solid material that can block the sea breeze and the height and width of the wall should be 1.5 times larger than the size of the outdoor unit. (Please secure more than 700 mm of space between the protection wall and the outdoor unit for air circulation.)

2 Consider that the salt particles clinging to the external panels should be sufficiently washed off
   - When a product is installed at the seashore, periodically clean it with fresh water to remove attached salt deposits.

3 Make sure that the base of the unit is installed at water level and therefore has optimum drainage. Because trapped water at the bottom of the outdoor unit significantly promotes corrosion.
   - Prevent blockage of the drain hole by foreign substances, by cleaning adequately.
   - Make sure to clean the base plate adequately and regularly as dirt, sand and other substances stay moist and promote corrosion.

4 If the product is installed within 500 m of a seashore, special anticorrosion treatment (like special coating) is required.
   - Please contact your local Samsung representative for further details.

5 When the product is installed at a seashore, periodically clean it with water to remove attached salinity.

6 If the (protective) coating or galvanised steel of the product is damaged during the installation or maintenance, make sure to repair it.

7 Check the condition of the product periodically.
   - Check the installation site every 3 months and perform anticorrosion treatment.

※ Installation

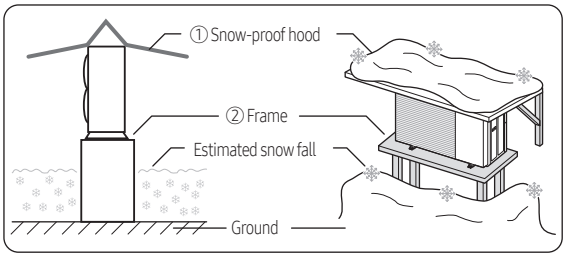
Outdoor Unit

Selecting a location in cold climates

NOTE

- When operating the unit in a low outdoor ambient temperature, be sure to follow the instructions described below.

In heavy snowfall areas it is very important to select an installation location where the snow will not affect the unit. If lateral snowfall is possible, make sure that the heat exchanger coil is not affected by the snow. (If necessary construct a lateral canopy)

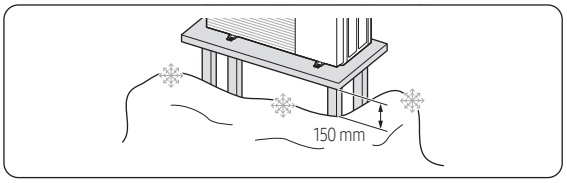


1 Construct a large canopy.
2 Construct a pedestal.
   - Install the unit high enough off the ground to prevent it from being buried under snow.

Heavy snow fall area

If the product is installed in a region of heavy snow, allow enough distance between the product and the ground (or piled up snow).

- In areas with heavy snow fall, piled snow could block the air intake. To avoid this, install a frame that is higher than estimated snow fall. In addition, install a snow-proof hood to avoid snow from piling on the outdoor unit.
- If ice accumulates on the base, it may cause critical damage to the product. (e.g., a lakeside in a cold area, the seashore, an alpine region, etc.)
- In a heavy snowfall area, do not install the drain plug and drain cap in the outdoor unit. And, it may cause frozen ground. Therefore, take appropriate measures to prevent it.
- Make a space more than 150 mm between the bottom of the outdoor unit and the ground for installation.
- Make sure that the product is located at least 150 mm above the maximum expected level of snow.



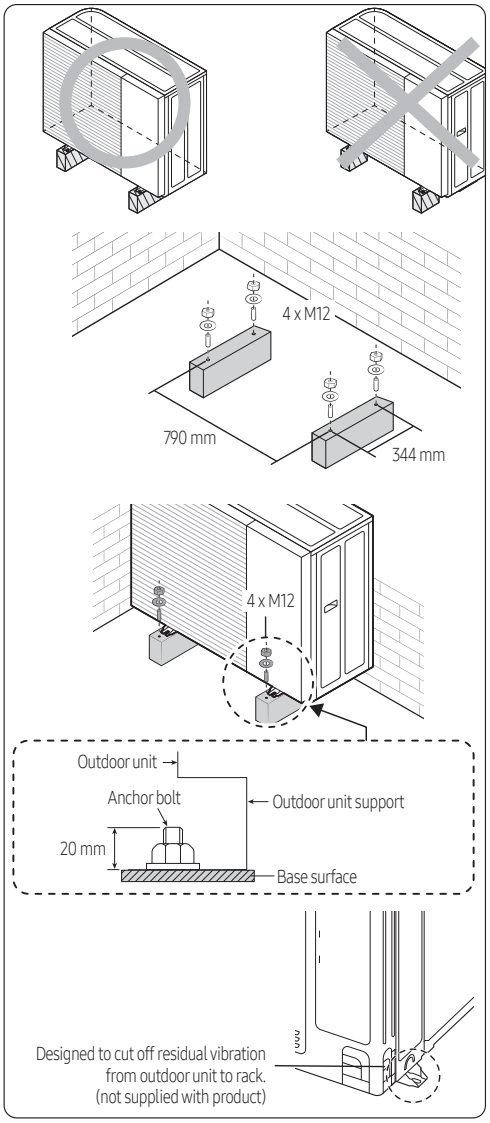
Mounting the outdoor unit

The outdoor unit must be installed on a rigid and stable base to avoid any increase in the noise level and vibration, particularly if the outdoor unit is to be installed in a location exposed to strong winds or at a height, the unit must be fixed to an appropriate support (wall or ground).

⚠ CAUTION

- When tightening the anchor bolt, tighten the rubber washer to prevent the outdoor unit bolt connection part from corroding.
- Make a drain outlet around the base for outdoor unit drainage.
- If the outdoor unit is installed on the roof, you have to check the ceiling strength and waterproof the unit.
- The anchor bolt must be 20 mm or higher from the base surface.

※ In order to prevent freezing of water drains, additional protection such as application of a heating cable may be required.



※ Installation

Outdoor Unit

Outdoor unit drain work

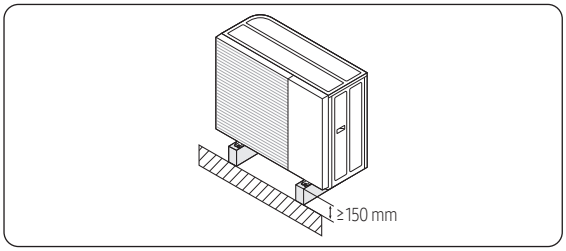
General area

While the air to water heat pump is operating in heating mode, ice can accumulate on the surface of the condenser.

To prevent ice from growing, the system occasionally enters a defrost mode and the ice on the surface thaws off.

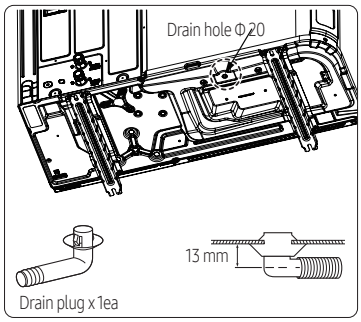
Water dripping from the condenser is guided through the drain holes to prevent ice formation inside the base plate at subzero temperatures.

- In case there is not enough space for natural drainage from the outdoor unit, additional drain work is required.
  Follow the description as per below:
  - Provide a minimum of 150 mm of free space to the floor.
  - Insert the drain plug into the hole at the bottom of the outdoor unit.
  - Connect the drain hose to the drain plug.
  - Make sure dirt and debris cannot block the drain (hose). Clean the base plate whenever needed.
  - For the remaining holes (that do not have the drain plug), insert the drain cap
  - Make sure that the water dripping from the drain hose runs away correctly and safely.

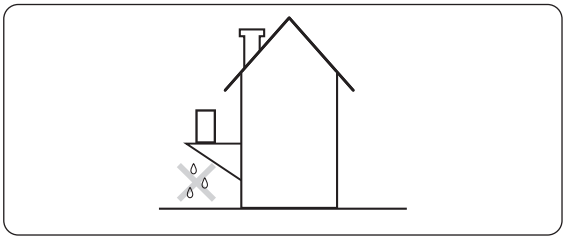


⚠ WARNING

- If the drainage is not adequate, it can lead to stagnant water and ice build-up, causing system performance issues and possible damages.



1 Prepare a water drainage channel around the foundation, to drain waste water from around the unit.
2 If the water drainage from the unit is inadequate, please raise the unit on construction concrete blocks, etc. (the height of the construction should be at least 150 mm).



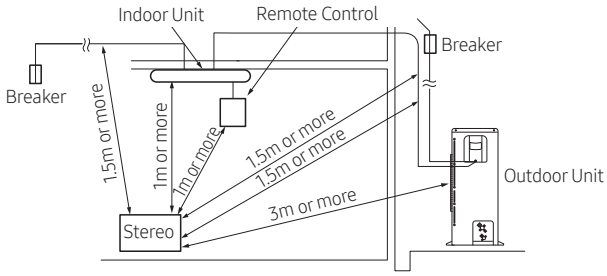
3 When installing the unit on a frame, please install a slanted waterproof plate within 150 mm of the underside of the unit to prevent water from plashing against the bottom plate from below.
4 When installing the unit in a place frequently exposed to snow, pay special attention to elevating the foundation as high as the average snow height plus the additional required 150 mm.
5 The installer must ensure proper drainage of thawed off water from the product's defrosting process. This should prevent potential slip hazards and rapid ice build-up below and around the unit.

※ Please securely mount the outdoor unit before connecting the water piping.

Space requirement for the indoor unit installation

⚠ CAUTION

- Install the indoor unit away from any interfering sources such as radio, computer, stereo equipment and also select a place where the electrical wiring work and an indoor unit installation are possible.
  - Especially keep the unit at least 3m away from the electrical equipment in an area where weak electromagnetic waves are generated and install the protection tube to protect the main power cable and communication cable.
  - Make sure that there is no equipment that genetrates electromagnetic waves. If so, malfunction of the control system may occur due to the effect of the electromagnetic wave. (For example: The remote control sensor of the indoor unit may not have good reception in an area with fluorescent lamp style lighting.)
- According to the condition of power supply, electric noise or unstable voltage can occur malfunction of electric parts or control system. (At the ship or places using power supply from electric generator... etc)



Combinations (Outdoor / indoor units)

Outdoor unit	Cooling capacity (kW)	Total capacity of connected indoor units (kW)
AE125HCTP*S	12.5	6.3~12.5
AE160HCTP*S	15.4	7.7~15.4

- When considering the system capacity of allowable indoor units, follow the table above.
- Maximum Number of Connected Air-to-Air (A2A) Units:
  For 12.5kW system is 8 / For 16kW system is 10, A2A indoor units.

  ※ Note: The maximum number of connected A2A units is subject to variation based on the capacity of the outdoor and indoor units. The total capacity of the connected indoor A2A units must not exceed 100% of the outdoor unit's capacity.

※ Installation

Outdoor Unit

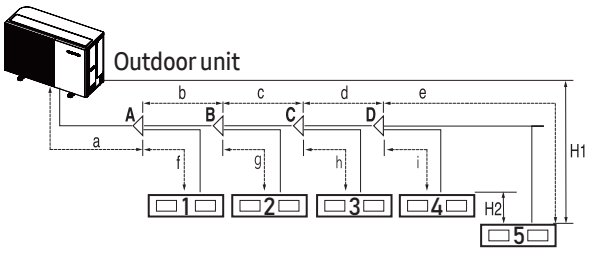
About the refrigerant piping work

- Install the refrigerant pipe within the maximum allowable length, difference in height and length of after the first branch pipe.
- The pressure of the R-32 is high. Use only rated refrigerant pipe and follow the installation method.
- Use clean refrigerant pipe without harmful ion, oxide, dust, iron content or moisture. Refrigerant pipes must stay capped off until installation.
- Use adequate tools and accessories for R-32.

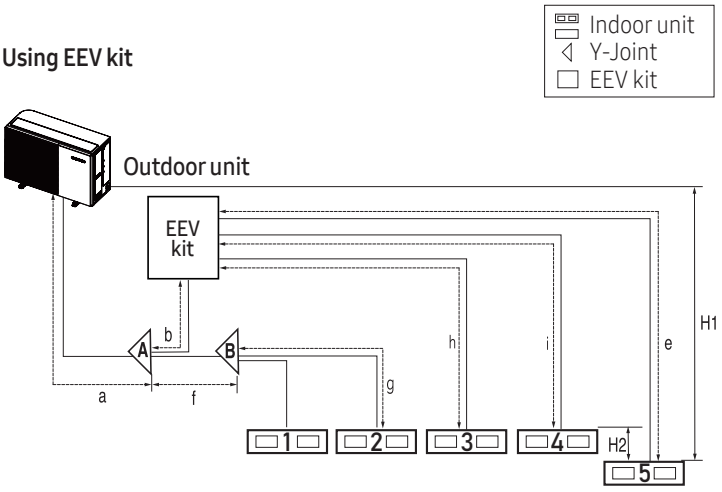
Manifold gauge	• Use manifold gauge only for R-32 to prevent the inflow of foreign substances.
Vacuum pump	• Use vacuum pump with check valve to prevent pump oil from flowing backward while the vacuum pump is stopped. • Use the vacuum pump that is capable to reach up to 5Torr. (-100.7kPa)
Flare nut	• Use only flare nut supplied with the product.

Allowable Length of the Refrigerant Pipe and the Installation Examples

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 : 2700g Additional charge by the piping length : 3/8" - 55g/m, 1/4" - 20g/m Additional charge by (A2A) Indoor : Refer to page 25 '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	20m or less	MXD-J24K200A	Up to 2 indoor units	Apply to products without EEV (AE015~036HEADKG)
			MXD-J24K300A	Up to 3 indoor units	

- Please refer to the EEV Kit manual.

※ Installation

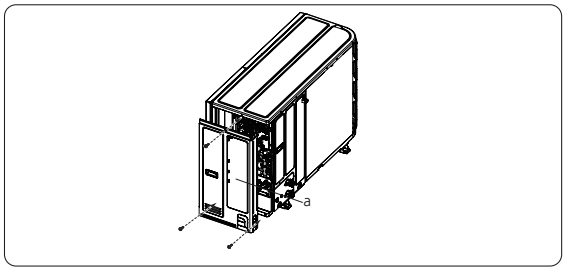
Outdoor Unit

Connecting the Outdoor Unit Pipe

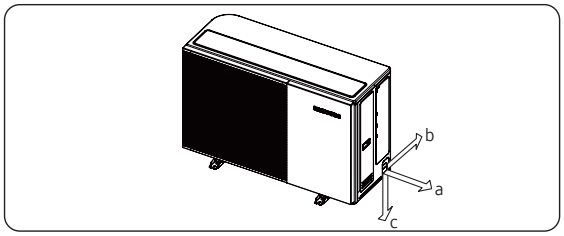
- Install pipe work within maximum allowable length, height and length after branching.
- Make sure there are no cracks on pipe bends.

To connect the refrigerant piping

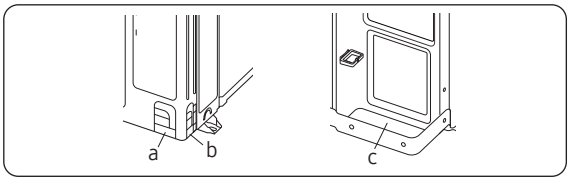
1. Remove the service cover (a)



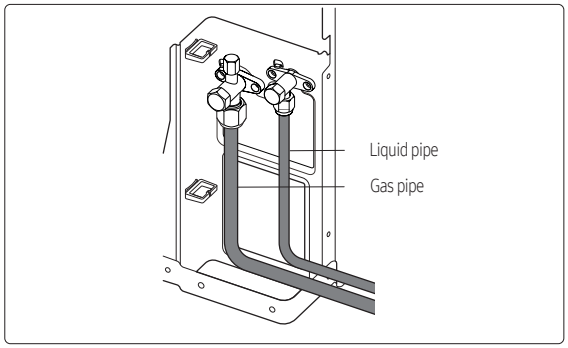
2. Choose a piping route (a, b, c)
   a Side
   b Rear
   c Bottom



3. remove the knock out hole. (a or b or c)
   a Side
   b Rear
   c Bottom (inner bottom surface)
   To remove knockout hole, use a flathead screw driver and hammer to pry it out.



4. Connect the liquid pipe (ø9.52) & gas pipe (ø15.88) to the service port.
   . Cover liquid & gas pipe with insulation.
   . keep the pipe out of contact with vibrating parts such as compressor.



5. Reassemble this service cover.
6. Seal the gaps to prevent snow or small animals from entering.

※ Installation

Outdoor Unit

Selecting additional refrigerant charging

► Basic refrigerant
The basic amount of additional refrigerant charged at a factory

Model	Factory charge(kg)
AE125HCTP*S	2.7
AE160HCTP*S	2.7

► Charging additional refrigerant

The amount of additional refrigerant charging	=	The amount of refrigerant charging for pipe + the amount of refrigerant for each indoor unit.

1. T e amount of additional refrigerant depending on the liquid pipe size(HP/HR).
   - Amount of additional refrigerant has to be calculated based on the sum of all liquid pipe length.

Size of liquid pipe (mm)	6.35	9.52	12.7	15.88
Additional amount (g/m)	20	55	115	165

Additional refrigerant charging calculation = The sum of total length of Ø 9.52 liquid pipe(m) x 55g + the sum of total length of Ø 6.35 liquid pipe(m) x 20g

Ex) a(Ø 9.52)=40m, b+c+d(Ø 9.52)=15m, e+f+g(Ø 6.35)=15m
The amount of additional refrigerant = 55m x 55g + 15m x 20g = 3325g

2. um of total amount of additional refrigerant and the basic amount of refrigerant should not exceed 8.5kg

► Amount of additional refrigerant for each indoor unit

Model	Capacity [kW]	Model name	Refrigerant amount [kg]
LSP Duct	2.2	AM022DNLDKG/EU	0.12
	2.8	AM028DNLDKG/EU	0.12
	3.6	AM036DNLDKG/EU	0.15
	5.6	AM056DNLDKG/EU	0.22
MSP Duct	3.6	AM036DNMDKG/EU	0.41
	5.6	AM056DNMDKG/EU	0.41
	7.1	AM071DNMDKG/EU	0.41
	9	AM090DNMDKG/EU	0.61
RAC	1.5	AE015HEADKG/EU	0.15
	2.2	AE022HEADKG/EU	0.15
	2.8	AE028HEADKG/EU	0.29
	3.6	AE036HEADKG/EU	0.29
	5.6	AM056DNVDKG/EU	0.43
	7.1	AM071DNVDKG/EU	0.43
1way cassette	1.7	AM017DN1DKG/EU	0.14
	2.2	AM022DN1DKG/EU	0.14
	2.8	AM028DN1DKG/EU	0.23
	3.6	AM036DN1DKG/EU	0.23
	5.6	AM056DN1DKG/EU	0.29

※ Installation

Outdoor Unit

Charging refrigerant

- ▶ The R-32 refrigerant is blended refrigerant. Add only liquid refrigerant.
- ▶ Measure the quantity of the refrigerant according to the length of the liquid side pipe. Add quantity of the refrigerant using a scale.

Important information: regulation regarding the refrigerant used

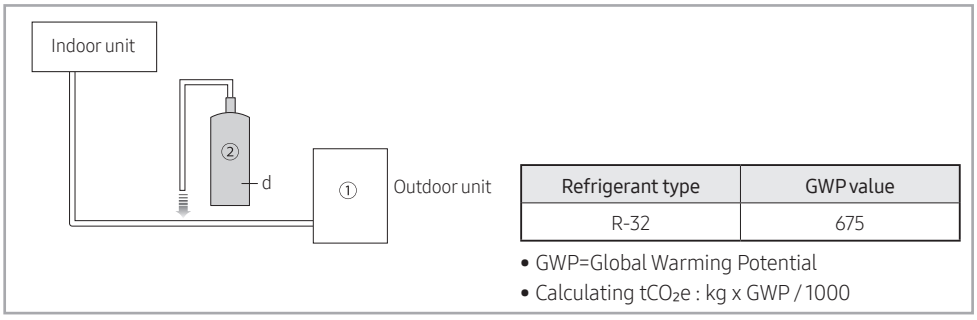
This product contains fluorinated greenhouse gases. Do not vent gases into the atmosphere.

⚠ CAUTION

- Inform user if the system contains 5tCO_2e or more fluorinated greenhouse gases. In this case, it must be checked for leakage at least once every 12 months, according to regulation No. 517/2014. This activity must be covered by qualified personnel only. In the case of the situation above, the installer (or authorized person with responsibility for final check) must provide a maintenance book, with all the information recorded, according to REGULATION (EU) No. 517/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 April 2014 on fluorinated greenhouse gases.

Please fill in the following with indelible ink on the refrigerant charge label supplied with this product and on this manual.

- ▶ ① : The factory refrigerant charge of the product.
- ▶ ② : The additional refrigerant amount charged in the field.
- ▶ ①+② : The total refrigerant charge.



Refrigerant type	GWP value
R-32	675

- GWP=Global Warming Potential
- Calculating tCO_2e : kg x GWP / 1000

NOTE

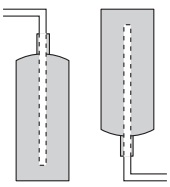
a Factory refrigerant charge of the product: see unit name plate.
b Additional refrigerant amount charged in the field. (Refer to the above information for the quantity of refrigerant replenishment.)
c Total refrigerant charge.
d Refrigerant cylinder and manifold for charging.

⚠ CAUTION

- The filled-out label must be adhered in the proximity of the product charging port.
  (ex. onto the inside of the stop valve cover.)

- ▶ Before charging, check whether the refrigerant cylinder has a siphon attached or not and position the cylinder accordingly.

Charging using a cylinder with a siphon attached
Charge the liquid refrigerant with the cylinder in upright position.



Charging using a cylinder without a siphon attached
Charge the liquid refrigerant with the cylinder in up-side-down position.

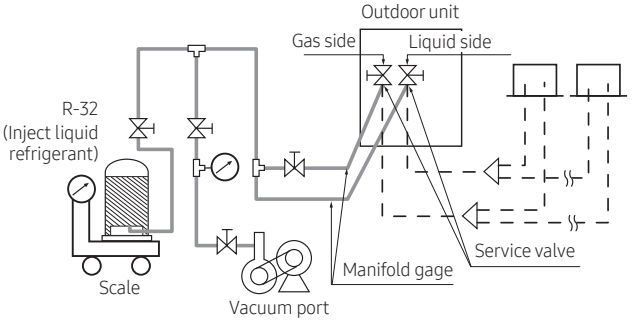
⚠ CAUTION

- The filled-out label must be adhered in the proximity of the product charging port (e.g. onto the inside of the stop valve cover).
- Make sure that the total refrigerant charge does not exceed (A), the maximum refrigerant charge, which is calculated in the following formula: Maximum refrigerant charge (A)= factory refrigerant charge (B) + maximum additional refrigerant charge due to piping extension (C).

※ Installation

Outdoor Unit

- ▶ Open the manifold gauge valve connected to the liquid side service valve and add the liquid refrigerant.
- ▶ If you cannot add the whole quantity of the refrigerant while the outdoor unit is stopped, open the gas side and liquid side service valve. Then, add remaining refrigerant by pressing the refrigerant adding button of the outdoor PCB.



⚠ CAUTION

- Open the gas side and liquid side service valve completely after charging the refrigerant. (If you operate the air conditioner with the service valve closed, the important parts may be damaged.)
- Put on safety equipment when charging refrigerant.
- Do not charge the refrigerant when you adjust or control other product such as indoor units or EEV kits.
- When the ambient temperature is low in winter time, do not heat the refrigerant container to speed up the charging process. There is risk of explosion.
- Beware for possibility of refrigerant leakage when you connect the manifold gauge to the charging port for heating.
- Close the valve of the refrigerant container immediately after charging the refrigerant. If not, there might be a change in entire amount of refrigerant.

Water piping work

About the water piping work

Water connections must be made in accordance with the Water Piping and Wiring diagram delivered with the unit, respecting the water inlet and outlet. If air, moisture or dust gets in the water circuit, problems may occur. Therefore, always take into account the following when connecting the water circuit:

- Use clean pipes only.
- Hold the pipe end downwards when removing burrs.
- Cover the pipe end when inserting it through a wall so that no dust and dirt enter.
- Use a good thread sealant for the sealing of the connections.
- The sealing must be able to withstand the pressures and temperatures of the system. When using non-brass metallic piping, make sure to insulate both materials from each other to prevent galvanic corrosion.
- Because brass is a soft material, use appropriate tooling for connecting the water circuit. Inappropriate tooling will cause damage to the pipes.

⚠ CAUTION

- Be careful not to deform the unit piping by using excessive force when connecting the piping. Deformation of the piping can cause the unit to malfunction.
- Always use two wrenches (spanners) for tightening or loosening the water connections, and tighten connections with a torque wrench as specified in the below table. If not, connections and parts can be damaged and leak.
- The unit is only to be used in a closed water system. If applications are in open water circuit, it will generate heat exchangers fouling, corrosion, and leak.

Name	Tightening torque	
BSPP1	350~380 kgf•cm	34~37 N•m

※ Installation

Outdoor Unit

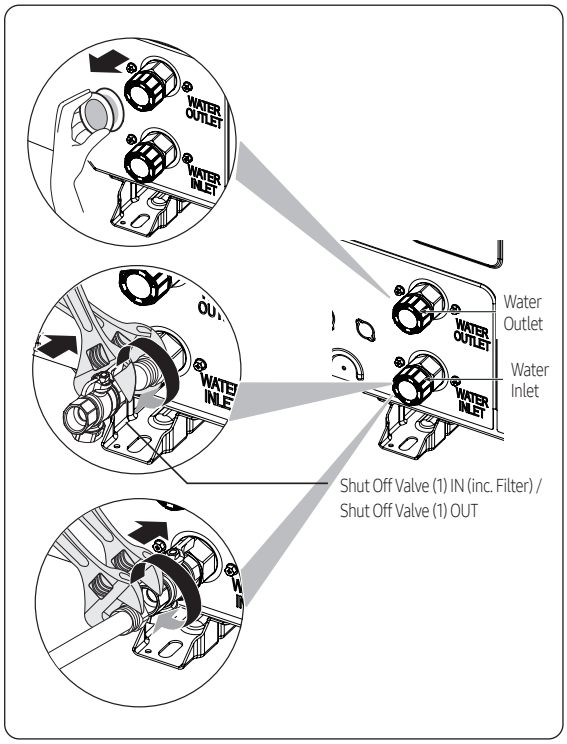
Connecting the water pipes

Connecting the water piping typically follows the below procedure:

1 Connect the water piping to the outdoor unit.
2 Connect the recirculation piping.
3 Connect the drain hose to the drain.
4 Fill the water circuit.
5 Fill the DHW tank.
6 Insulate the water piping.

NOTE

- Do not use excessive force when connecting the piping. Deformation of the piping can cause malfunctioning of the unit.
- Connect the shut-off valve (with integrated filter) to the outdoor unit water inlet, using the thread sealant. At this time, the filter should be directed downward so that impurities can be collected.
- Connect the field piping to the shut-off valve.
- Connect the shut-off valve to the outdoor unit water outlet, using the thread sealant.



NOTE

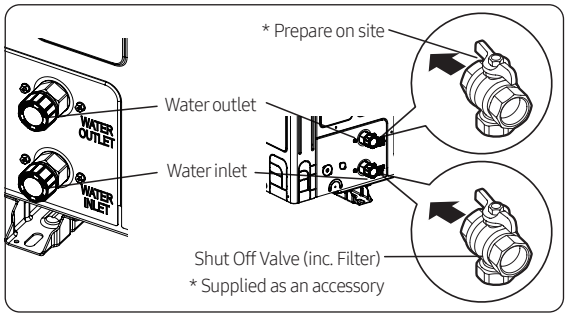
- About the shut-off valve with integrated filter:
  - The installation of the shut-off valve at the water inlet is mandatory.
  - Mind the flow direction of the valve.

※ Installation

Outdoor Unit

Water Charging

Fill water into the outdoor unit by opening the shut-off and drain valves.



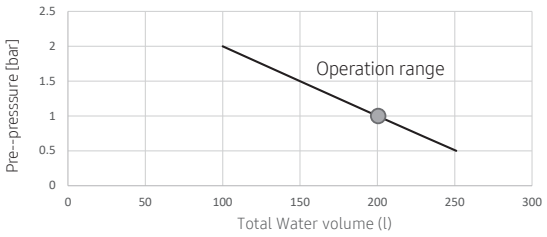
⚠ CAUTION

- The operating range of leaving water temperature is 15~65˚C at heating conditions and 5~25˚C at cooling conditions.
- The minimum required water flow for operation is 7 liters/min. At all times the required water flow-rates should remain. Otherwise, the unit can stop due to a lack of water.
- Water quality must be according to EN directive 98/83 EC. (Please refer to the reference guide for details.)
- Charge the water higher than pressure of 1.0 bar by using make-up water assembly(Field supply). (The water pressure indicated on the manometer will vary depending on the water temperature) The nominal water pressure in the system should remain about 1.0 bar at all times to avoid air entering the water system.

Setting capacity and 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.



Installation height difference[a]	Water volume	
	‹ 200 Litres	› 200 Litres
‹7m	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.
›7m	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.

Installation height difference:

Height difference(m) between the highest point of the water circuit. If the unit is located at the highest point of the installation, the installation height is considered 0m.

- When Expansion vessel has a capacity 10 liters and 1bar pre-charged. Water volume of total system for reliable performance is minimum 50 Liter (AE125/160HCTP*S).

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

※ Installation

Outdoor Unit

Protection of the water circuit freezing

To prevent the hydraulic components from freezing, it has a freezing protection function that includes activation of the pump at low temperatures.

However, in case of a power failure, these functions cannot guarantee protection.

To protect the water circuit from freezing, any one of the following acts shall be performed.

- Add glycol to water. Glycol lowers the freezing point of water.
- Install the anti-freeze valve. The anti-freeze valve discharges water from the system before it freezes.

Freeze protection by glycol

Freeze protection solutions must use propylene glycol with a toxicity rating of Class 1 as listed in Clinical Toxicology of Commercial Products, 5th Edition.

⚠ WARNING

- Ethylene glycol is toxic and must not be used in the primary water circuit in case of any cross-contamination of the portable circuit.
- If you add glycol to the water, do NOT install anti-freeze valve, to avoid Glycol leaking out of the anti-freeze valves into the environment.
- If an anti-freeze protection is used, it will result in increased pressure drop and it may also cause a slight capacity reduction.

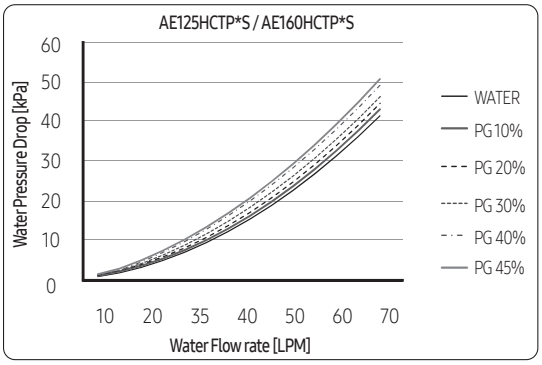
⚠ CAUTION

- Due to the presence of glycol, corrosion of the system is possible. Uninhibited glycol will turn acidic under the influence of oxygen. The acidic uninhibited glycol attacks metal surfaces and forms galvanic corrosion cells that cause severe damage to the system.
- A glycol with corrosion inhibitors is selected to counteract acids formed by the oxidation of glycols.
- No automotive glycol is used because their corrosion inhibitors have a limited lifetime and contain silicates which can foul or plug the system.
- Galvanized pipes are NOT used in glycol systems since the presence may lead to the precipitation of certain components in the glycol's corrosion inhibitor.

Unit resistance and PHE resistance by glycol concentrate

The unit is composed of water pipes and PHE basically.

To ensure correct operation and predict the expected performance, Flow and Resistance table can be used and Flow and resistance characteristic is dependent on Glycol concentration.



Changing Glycol concentration can cause the pressure drop of the system and it can lead to make flow rate slow.

Just in case of performance degradation, installer shall be careful of flow rate changes.

The required concentration of glycol depends on the lowest expected outdoor temperature, and on whether you want to protect the system from bursting or from freezing. To prevent the system from freezing, more glycol is required.

Add glycol according to the table below.

Freezing Points of Propylene Glycol - Water Mixtures		
Percent Propylene Glycol [wt.%]	Freezing Point [°F]	Freezing Point [°C]
0	32	0
10	26	-3
20	20	-7
30	10	-12
36	0	-18
40	-5	-20
43	-10	-23
48	-20	-29

Minimum active water volume

The minimum active water volume of the system is the amount of water which is always pumped around, even when all valves in the system are closed. The use of a buffer tank can increase the active volume and therefore the operation time between compressor start and stop.

Ideally, systems should be designed for around 12 to 15 minutes of operation, in order to meet with our declared efficiencies.

This time frame is based on a maximum of 4 On/Off cycles per hour.

The required minimum active water volume can be calculated via the below stated formula:

$$V_{min} = \frac{t_{min} \times \Phi_{min}}{C_{water} \times \Delta T}$$

V_{min} : Minimum active volume	[dm3]
t_{min} : Minimum allowed operation time is 12 min or 720 sec per cycle	[s, sec]
Φ_{min} : Minimum compressor output	[kW = kJ/s]
C_{water} : Specific heat of water (4,2)	[kJ/kg*K]
ΔT : Temperature increase (5-10 K)	[K]

※ Installation

Outdoor Unit

Electrical installation

Precautions when connecting the electrical wiring

⚠ WARNING

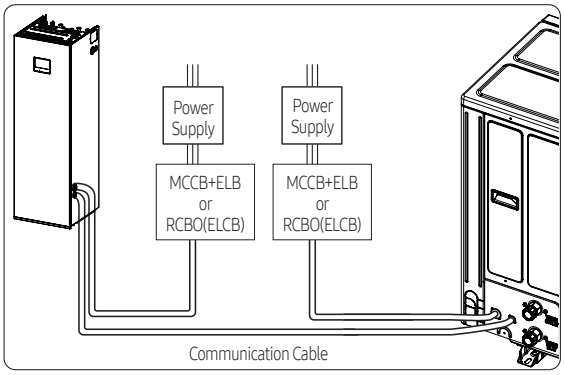
- Make sure first the water piping is connected before the electrical wiring work.
- When removing or relocating the equipment, power off first and then disconnect the electrical wiring.
- Connect the air to water heat pump to a protected earth (PE) before connecting the phase and neutral to the product.
- Follow the local installation standards and regulations when installing electrical wiring.
  Electrical wiring should be installed by a certified electrician or certified installer. Failing to comply, might lead to damaging the product, starting a fire and personal injury, electrocution or death.

- Make sure that wiring work must be done by an authorized electrician.
  The wiring materials and wiring work must comply with the applicable legislation.
- Always verify that a suitable grounding connection is available.
- Verify that the voltage and frequency of the power supply comply with the specifications and that the installed power is sufficient to ensure the operation of any other domestic appliance connected to the same electric lines.
- Always verify that the cut-off and protection switches are suitably dimensioned.
- Verify that the air to water heat pump is connected to the power supply in accordance with the instructions provided in the wiring diagram included in the manual.
- Always verify that electric connections (cable entry, the section of leads, protections...) comply with the electric specifications, local regulations and installation standards and with the instructions provided in the wiring scheme.
  Always verify that all connections comply with the standards applicable to the installation of air to water heat pumps.
- Depending on the condition of power supply, unstable power or voltage may cause malfunction of the parts or control system. (Avoid using power supply from an electric generator, like on a ship etc).

⚠ CAUTION

- Make sure that you earth the cables.
  - Do not connect the earth wire to the gas pipe, water pipe, lighting rod or telephone wire. If earthing is not complete, electric shock or fire may occur.
- Install the circuit breaker.
  - Failing to install a circuit breaking device may result in electric shock and fire occurrence.
- Install the power cable and communication cable of the indoor and outdoor unit according to IEC 60364-1 (Electrical installations and protection against electric shock).
- Be sure to install both an earth leakage detector and circuit breaker with specified capacity in accordance with relevant local and national regulations.
  - If it is not installed properly, it may cause electric shocks and fire.

Electrical wiring diagram



Specification of power cable

- 1 Phase
  - The power cables are not supplied with the air to water heat pump.
  - Power supply cords of parts of appliances for outdoor use shall not be thinner than polychloroprene sheathed flexible cord (Code designation IEC:60245 IEC 57 / CENELEC:H05RN-F)
  - This equipment complies with IEC 61000-3-12.

Outdoor unit	Rated		Voltage Range		MCA	MFA
	Hz	Volts	Min	Max	Min Circuit Amps.	Max Fuse Amps.
AE125HCTPES	50	220-240	198	264	32.0	35.2
AE160HCTPES	50	220-240	198	264	32.0	35.2

- 3 Phase
  - The power cables are not supplied with the air to water heat pump.
  - Power supply cords of parts of appliances for outdoor use shall not be lighter than polychloroprene sheathed flexible cord (Code designation IEC:60245 IEC 66 / CENELEC:H07RN-F)
  - This equipment complies with IEC 61000-3-12 provided that the short-circuit power (SSC) is greater than or equal to 3.3[MVA] at the interface point between the user's supply and the public system. It is the responsibility of the installer to ensure, by consultation with the energy company if necessary, that the equipment is connected only to a supply with a short-circuit power (SSC) greater than or equal to 3.3[MVA].

Outdoor unit	Rated		Voltage Range		MCA	MFA
	Hz	Volts	Min	Max	Min Circuit Amps.	Max Fuse Amps.
AE125HCTPGS	50	380-415	342	457	16.1	17.7
AE160HCTPGS	50	380-415	342	457	16.1	17.7

※ Installation

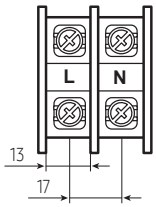
Outdoor Unit

Terminal block specification

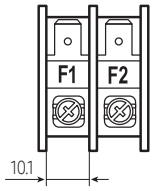
- 1 Phase

(Unit: mm)

AC power: M5 screw



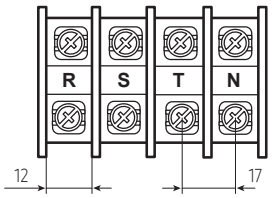
Communication: M4 screw



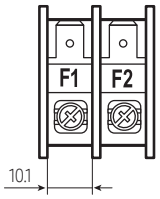
- 3 Phase

(Unit: mm)

AC power: M5 screw



Communication: M4 screw



Connecting the power terminal

- ▶ Connect the cables to the terminal board using the compressed ring terminal.
- ▶ Connect the rated cables only.
- ▶ Connect using a wrench which is able to apply the rated torque to the screws.
- ▶ If the terminal is loose, fire may occur caused by arc. If the terminal is connected too firmly, the terminal may be damaged.

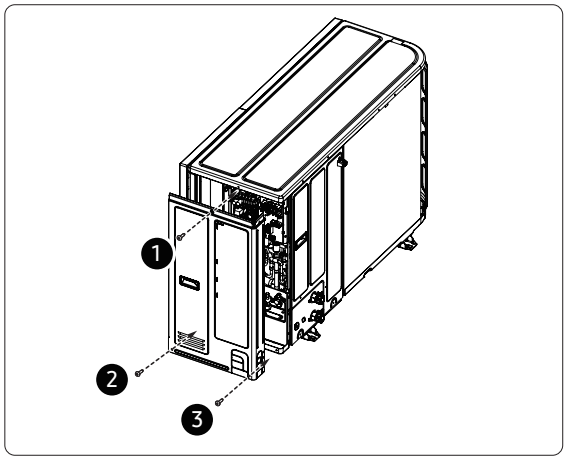
Tightening Torque (kgf.cm)	
M4	12~18
M5	20~30

⚠ CAUTION

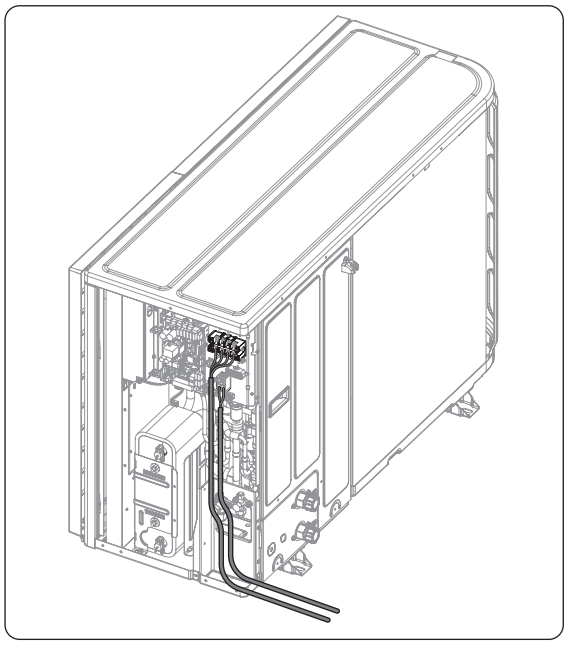
- For the product that uses the R-32 refrigerant, be cautious not to generate a spark by keeping the following requirements:
  - Do not remove the fuses with power on.
  - Do not disconnect the power plug from the wall outlet with power on.
  - It is recommended to locate the outlet in a high position. Place the cords so that they are not tangled.

Outdoor wiring

1 Open the side cover.



2 Insert the cable through the knockout hole and connect the communication and power line.



Power and communication cable configuration

- Power supply cable must be guided through the knock-out hole on the bottom-right or right side of the cabinet.
- Guide the communication cable through the designated knockout hole on the bottom-right side of the front part.
- Install the power and communication cable using a separate cable protection tubing.

※ Installation

Outdoor Unit

To connect the power supply

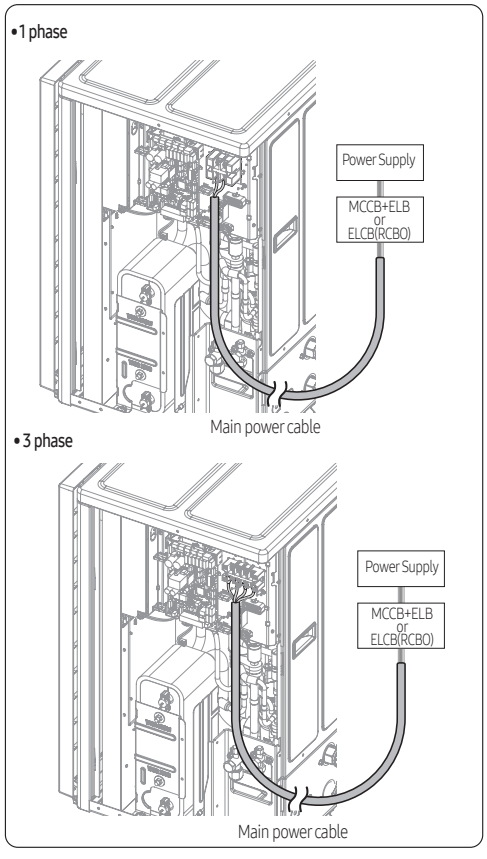
- Two cables must be connected to the outdoor unit
  - The communication cable between the indoor and outdoor unit.
  - The power cable between the outdoor unit and the auxiliary breaker.
- Especially for the Russian and European market, before installation, the supply authority should be consulted to determine the supply system impedance to ensure compliance.

⚠ CAUTION

- You should connect the power cable into the power cable terminal and fasten it with a clamp.
- The unbalanced power must be maintained within 2% of the supply rating.
  - If the power is unbalanced greatly, it may shorten the life of the electrical components.
- To protect the product from water and possible shock, keep the power cable and the connection cord of outdoor units within ducts (with appropriate IP rating and material selection for your application).
- Ensure that the main supply connection is made through a disconnection switch within your arm's reach, that disconnects all poles, with contact gap of a least 3 mm.

Route the cable through the frame

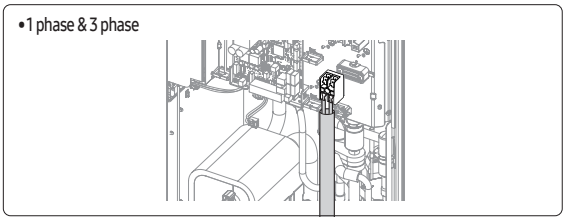
- Connect the wires to the terminal block and fix the cable with the cable tie.



- When installing electrical wiring: tension on the cable(s) must be avoided.
- Earth wire for the indoor unit and outdoor unit cables must be clamped to a suitable ring terminal clamp (not supplied)
- For the power cable, use the grade H07RN-F or H05RN-F materials.
- Power supply cords of parts of appliances for outdoor unit use shall not be thinner than polychloroprene sheathed flexible cord. (Code designation IEC:60245 IEC 57 / CENELEC: H05RN-F or IEC:60245 IEC 66 / CENELEC: H07RN-F)

To connect the communication cable

- The communication cable between the indoor and outdoor unit.
- Route the cable through the frame.
- Connect the wires to the terminal block and the earth screw (single side, the other end of the protective shield is not again connected to earth).
- Fix the cable with a cable tie.



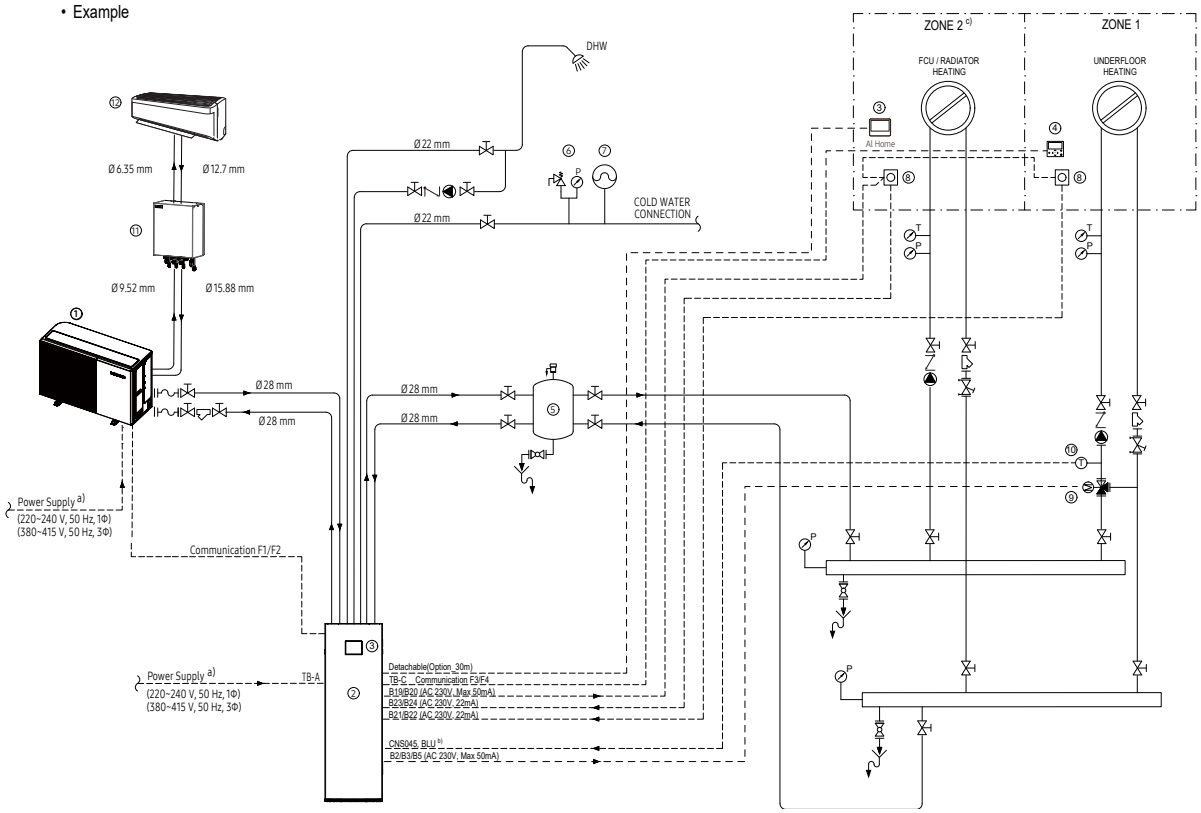
- Specification of communication cable

Communication cable	Specifications
0.75 mm², 2 wires shielded	LiYCY

※ Installation

Outdoor Unit

• Example



a) Samsung EHS ClimateHub is available in 1-phase and 3-phase version.

b) Mixing valve temperature sensor for floor heating comes with tank integrated hydro unit (15 m red cable, blue connector on PBA).

c) When both zones are simultaneously Thermo On, the operation is performed based on Zone 2. Set the zone with the higher set temperature to Zone 2.

d) Air vent included in tank integrated hydro unit. In case that the water piping would be located in a higher position than the air vent of the tank integrated hydro unit, it is necessary to add additional one at the highest position of the water circuit.

e) Pumps for radiator and floor heating can be regulated (on/off) by tank integrated hydro unit (terminals B10/B11 and B14/B15) or their own regulators. Based on the current logic only with two zones control with wired remote controller. Not with thermostat.

f) 200 L tank integrated hydro unit has six connection pipes (water inlet/outlet, space heating inlet/outlet and DHW inlet/outlet).

g) The 4-pipe structure buffer tank shown in this scheme is an example of the installation, and the buffer tank installation in the actual site can differ depending on the project requirements.

No.	Legend
①	Outdoor unit
②	EHS Mono ClimateHub (Standard)
③	AI Home (7" Full Touch Display)
④	(Option) Wired Remote Controller 4.3" Sub (MWR-WW10N)
⑤	Balancing vessel (Decoupler)
⑥	Safety group (Safety valve, Manometer)
⑦	Expansion vessel
⑧	Room thermostat (3rd party)
⑨	Mixing valve for floor heating (in case of combination with radiators)
⑩	Mixing valve temperature sensor b)
⑪	EEV Kit
⑫	RAC

Symbols	
	Circulation pump
	Shut off valve
	Ball valve
	Check valve
	Strainer
T	Temperature gauge
P	Pressure gauge
	Safety valve
	Mixing valve
	Regulation valve
T	Temperature sensor
	Air vent (apply when necessary) d)
R	Relay

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