SINGLE

Technical Data Book

Console 5.2kW, Ceiling 5.2/7.1kW (for EU)

SAMSUNG

Index

1 Nomenclature

Indoor Units

Model Names

AC	026	H	B	M	D	E	H	/	EU
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		Buyer

(1) Classification

AC	CAC

(2) Capacity

x 1/10 kW (3 digits)

(3) Version

E	2012
F	2013
H	2014

(4) Product Type

B	Indoor Unit
C	Outdoor Unit

(5) Product Notation

1	1Way Cassette
N	4Way Cassette S (600 X 600)
4	4Way Cassette S
L	LSP Duct
M	MSP Duct
C	Ceiling
J	Console
A	Wall-Mounted

(6) Feature

F	Flagship
S	Standard
D	Deluxe
P	Premium

(7) Rating Voltage

E	1Ø, 220~240V, 50Hz
G	3Ø, 380~415V, 50Hz
K	1Ø, 220~240V, 50/60Hz

(8) Mode

H	Heat Pump(R410A)
C	Cooling Only(R410A)
E	Heat Pump(R22)
D	Cooling Only(R22)

1 Nomenclature

Outdoor Units

Model Names

AC	026	H	C	B	D	E	H	/	EU
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		Buyer

(1) Classification

AC	CAC

(2) Capacity

x 1/10 kW (3 digits)

(3) Version

E	2012
F	2013
H	2014

(4) Product Type

B	Indoor Unit
C	Outdoor Unit

(5) Feature1

A	Inv+Side+General Temp
B	Non Inv+Side+General Temp

(6) Feature2

F	Standrad+Tropical+Non Module
S	Standard
D	Deluxe
P	Premium

(7) Rating Voltage

E	1Ø, 220~240V, 50Hz
G	3Ø, 380~415V, 50Hz
K	1Ø, 220~240V, 50/60Hz
N	3Ø, 380~415V, 50/60Hz

(8) Mode

H	Heat Pump(R410A)
C	Cooling Only(R410A)
E	Heat Pump(R22)
D	Cooling Only(R22)

2 Specifications

Console

Type						Console
Model Name		Indoor Unit				AC052HBJDEH/EU
		Outdoor Unit				AC052FCADEH/EU
System	Mode				-	Heat Pump
	Capacity	Cooling(Min/Std/Max)			kW	1.90 / 5.00 / 5.50
					Btu/h	6,500 / 17,100 / 18,800
		Heating(Min/Std/Max)			kW	1.50 / 5.60 / 6.50
					Btu/h	5,100 / 19,100 / 22,200
	Power	Power Input (Nominal)	Cooling(Min/Std/Max)		kW	0.25 / 1.78 / 2.20
			Heating(Min/Std/Max)			0.25 / 1.92 / 2.50
		Current Input (Nominal)	Cooling(Min/Std/Max)		A	2.60 / 8.00 / 10.00
			Heating(Min/Std/Max)			2.30 / 8.70 / 14.00
		MCA			A	10.80 (MCA)
		MFA			A	13.13
	Energy Efficiency	EER (Nominal Cooling)			-	2.81
		COP (Nominal Heating)			-	2.92
		Energy Grade			-	SEER 5.40 (A)
					-	SCOP 3.80 (A)
	Piping Connections	Liquid Pipe			Ø, mm	6.35
					Ø, inch	1/4"
		Gas Pipe			Ø, mm	12.70
					Ø, inch	1/2"
		Installation Limitation	Max. Length		m	30 (35)
			Max. Height		m	20 (20)
	Field Wiring	Power Source Wire			Ø, mm	2.00
		Transmission Cable			Ø, mm	0.75 ~ 1.25
	Refrigerant	Type			-	R410A
		Control Method			-	-
		Factory Charging			kg	1.40
Indoor Unit	Power Supply				Ø, #, V, Hz	1,2,220-240,50
	Fan	Type			-	Turbo Fan/BLDC
		Motor		Output	W	35 x 1
		Air Flow Rate		High/Mid/Low	CMM	13.00 / 11.50 / 10.00
					l/s	216.67 / 191.67 / 166.67
		External Static Pressure		Min/Std/Max	mmAq	-
					Pa	-
	Drain	Drain Pipe			Ø,mm	ID18 HOSE
	Sound	Pressure	High/Mid/Low		dB(A)	44.0 / 34.5 / 25.0
		Power	Cooling			60.0
	External Dimension	Net Weight			kg	15.20
		Shipping Weight			kg	20.30
		Net Dimensions (WxHxD)			mm	720 x 620 x 199
		Shipping Dimensions (WxHxD)			mm	810 x 710 x 299
	Panel Size	Panel model			-	-
		Panel Net Weight			kg	-
		Shipping Weight			kg	-
		Net Dimensions (WxHxD)			mm	-
		Shipping Dimensions (WxHxD)			mm	-
	Additional Accessories	Drain pump	Drain pump		-	-
			Max. Lifting		mm/liter/h	-
		Air Filter			-	-
Outdoor Unit	Power Supply				Ø, #, V, Hz	1,2,220-240,50
	Compressor	Type			-	Twin BLDC Rotary
		Model			-	UG4T150FUDJQDO
		Output			kW	1.37
		Oil	Type		-	POE
	Fan	Air Flow Rate	Cooling		CMM	33.00
					l/s	550.00
	Sound	Pressure	Cooling/Heating		dB(A)	49.0 / 49.0
		Power	Cooling			64.0
	External Dimension	Net Weight			kg	38.50
		Shipping Weight			kg	42.50
		Net Dimensions (WxHxD)			mm	790 x 548 x 285
		Shipping Dimensions (WxHxD)			mm	926 x 655 x 382
	Operating Temp. Range	Cooling			ºC	-15.0 ~ 46.0
		Heating			ºC	-15.0 ~ 24.0

* All figures comply with EN14511

1. Cooling capacity is based on 27°CDB / 19°CWB (indoor temperature), 35°CDB (outdoor temperature).
2. Heating capacity is based on 20°CDB (indoor temperature), 7°CDB/6°CWB (outdoor temperature).
3. The above is the value for connecting with the following indoor units. - 2000, 2500, 3500W class: Wall Mounted [only for AR**FSSEDWUN, AR**FSFPESNN, AR**FSFPDGMN]
4. Capacities are based on the following conditions : - Corresponding refrigerant piping length : 5m / - Level difference : 0m
5. The total ability of connected a indoor unit is up to 6.0kW
6. It is impossible to connect the indoor unit for one room only.
7. This data is reference data for temperature capacity trend.

2 Specifications

Ceiling

Type						Ceiling	Ceiling
Model Name		Indoor Unit				AC052HBCDEH/EU	AC071HBCDEH/EU
		Outdoor Unit				AC052FCADEH/EU	AC071FCADEH/EU
System	Mode				-	Heat Pump	Heat Pump
	Capacity	Cooling(Min/Std/Max)			kW	1.70 / 5.00 / 5.60	2.20 / 7.10 / 8.00
					Btu/h	5,800 / 17,100 / 19,100	7,500 / 24,200 / 27,300
		Heating(Min/Std/Max)			kW	1.70 / 6.00 / 7.70	1.90 / 8.00 / 9.00
					Btu/h	5,800 / 20,500 / 26,300	6,500 / 27,300 / 30,700
	Power	Power Input (Nominal)	Cooling(Min/Std/Max)		kW	0.48 / 1.66 / 1.90	0.35 / 2.36 / 4.00
			Heating(Min/Std/Max)			0.43 / 1.87 / 3.05	0.35 / 2.75 / 4.00
		Current Input (Nominal)	Cooling(Min/Std/Max)		A	2.80 / 7.80 / 9.00	2.00 / 10.50 / 21.00
			Heating(Min/Std/Max)			2.40 / 8.80 / 14.50	2.00 / 12.60 / 21.00
		MCA			A	10.80 (MCA)	20.30 (MCA)
		MFA			A	13.13	25.00
	Energy Efficiency	EER (Nominal Cooling)			-	3.01	3.01
		COP (Nominal Heating)			-	3.21	2.91
		Energy Grade			-	SEER 5.90 (A+)	SEER 5.30 (A)
					-	SCOP 3.80 (A)	SCOP 3.80 (A)
	Piping Connections	Liquid Pipe			Ø, mm	6.35	6.35
					Ø, inch	1/4"	1/4"
		Gas Pipe			Ø, mm	12.70	15.88
					Ø, inch	1/2"	5/8"
		Installation Limitation	Max. Length		m	30 (35)	50 (55)
			Max. Height		m	20 (20)	30 (30)
	Field Wiring	Power Source Wire			Ø, mm	2.00	2.50 ~ 4.00
		Transmission Cable			Ø, mm	0.75 ~ 1.25	0.75 ~ 1.25
	Refrigerant	Type			-	R410A	R410A
		Control Method			-	-	-
		Factory Charging			kg	1.40	1.80
Indoor Unit	Power Supply				Ø, #, V, Hz	1,2,220-240,50	1,2,220-240,50
	Fan	Type			-	Blower	Blower
		Motor		Output	W	40 x 2	40 x 2
		Air Flow Rate		High/Mid/Low	CMM	13.50 / 12.50 / 11.50	16.50 / 15.00 / 14.00
					l/s	225.00 / 208.33 / 191.67	275.00 / 250.00 / 233.33
		External Static Pressure		Min/Std/Max	mmAq	-	-
					Pa	-	-
	Drain	Drain Pipe			Ø,mm	ID18 HOSE	ID18 HOSE
	Sound	Pressure	High/Mid/Low		dB(A)	41.0 / 39.0 / 37.0	46.0 / 44.0 / 42.0
		Power	Cooling			60.0	64.0
	External Dimension	Net Weight			kg	20.00	22.50
		Shipping Weight			kg	26.00	26.50
		Net Dimensions (WxHxD)			mm	1,000 x 200 x 650	1,000 x 200 x 650
		Shipping Dimensions (WxHxD)			mm	1,080 x 300 x 730	1,080 x 300 x 730
	Panel Size	Panel model			-	-	-
		Panel Net Weight			kg	-	-
		Shipping Weight			kg	-	-
		Net Dimensions (WxHxD)			mm	-	-
		Shipping Dimensions (WxHxD)			mm	-	-
	Additional Accessories	Drain pump	Drain pump		-	-	-
			Max. Lifting		mm/liter/h	-	-
		Air Filter			-	-	-
Outdoor Unit	Power Supply				Ø, #, V, Hz	1,2,220-240,50	1,2,220-240,50
	Compressor	Type			-	Twin BLDC Rotary	Twin BLDC Rotary
		Model			-	UG4T150FUDJQDO	UG4T200FUAE4
		Output			kW	1.37	1.79
		Oil	Type		-	POE	POE
	Fan	Air Flow Rate	Cooling		CMM	33.00	52.00
					l/s	550.00	866.67
	Sound	Pressure	Cooling/Heating		dB(A)	49.0 / 49.0	49.0 / 51.0
		Power	Cooling			64.0	66.0
	External Dimension	Net Weight			kg	38.50	55.00
		Shipping Weight			kg	42.50	59.00
		Net Dimensions (WxHxD)			mm	790 x 548 x 285	880 x 798 x 310
		Shipping Dimensions (WxHxD)			mm	926 x 655 x 382	1,024 x 920 x 414
	Operating Temp. Range	Cooling			ºC	-15.0 ~ 46.0	-15.0 ~ 46.0
		Heating			ºC	-15.0 ~ 24.0	-20.0 ~ 24.0

* All figures comply with EN14511

1. Cooling capacity is based on 27°CDB / 19°CWB (indoor temperature), 35°CDB (outdoor temperature).
2. Heating capacity is based on 20°CDB (indoor temperature), 7°CDB/6°CWB (outdoor temperature).
3. The above is the value for connecting with the following indoor units. - 2000, 2500, 3500W class: Wall Mounted [only for AR**FSSEDWUN, AR**FSFPESNN, AR**FSFPDGMN]
4. Capacities are based on the following conditions : - Corresponding refrigerant piping length : 5m / - Level difference : 0m
5. The total ability of connected a indoor unit is up to 6.0kW
6. It is impossible to connect the indoor unit for one room only.
7. This data is reference data for temperature capacity trend.

3 Capacity table

Console

AC052HBJDEH/EU + AC052FCADEH/EU

Cooling

TC(Total Capacity), SHC(Sensible Heat Capacity), PI(Power Input)

Outdoor temperature (ºC, DB)	Indoor temperature (ºC, WB)																	
	14.0			16.0			18.0			19.0			22.0			24.0		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-15.0	5.37	4.03	0.91	5.51	4.13	0.93	5.64	4.23	0.96	5.78	4.34	0.98	5.92	4.44	1.00	6.06	4.55	1.03
21.0	5.46	4.09	1.25	5.59	4.19	1.28	5.73	4.30	1.31	5.87	4.40	1.34	6.01	4.51	1.37	6.16	4.62	1.41
35.0	4.65	3.49	1.65	4.76	3.57	1.70	4.88	3.66	1.74	5.00	3.75	1.78	5.12	3.84	1.82	5.24	3.93	1.87
46.0	4.26	3.19	2.18	4.36	3.27	2.24	4.47	3.35	2.29	4.58	3.44	2.35	4.69	3.52	2.41	4.80	3.60	2.46

Heating

TC : Total Capacity, PI: Power Input

Outdoor temperature (ºC, DB)	Indoor temperature (ºC, DB)											
	16.0		18.0		20.0		21.0		22.0		24.0	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-15.0	3.86	2.30	3.82	2.27	3.78	2.25	3.74	2.23	3.70	2.21	3.67	2.18
-10.0	5.07	2.54	5.02	2.51	4.97	2.49	4.92	2.47	4.87	2.44	4.82	2.42
7.0	5.71	1.96	5.66	1.94	5.60	1.92	5.54	1.90	5.49	1.88	5.43	1.86
24.0	6.38	1.82	6.31	1.80	6.25	1.78	6.19	1.76	6.13	1.74	6.06	1.73

- Capacities are based on following conditions;

. Cooling mode indoor air temperature (°C, DB/WB) : 20/14, 22/16, 25/18, 27/19, 30/22, 32/24

. Heating mode outdoor air : 85%RH. However, the condition rated capacity is 7°C DB / 6°C WB.

. Refrigerant piping length : 5m

. Level difference : 0m.

3 Capacity table

Ceiling

AC052HBCDEH/EU + AC052FCADEH/EU

Cooling

TC(Total Capacity), SHC(Sensible Heat Capacity), PI(Power Input)

Outdoor temperature (ºC, DB)	Indoor temperature (ºC, WB)																	
	14.0			16.0			18.0			19.0			22.0			24.0		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-15.0	5.15	3.86	1.40	5.28	3.96	1.44	5.41	4.06	1.47	5.54	4.16	1.51	5.67	4.25	1.55	5.81	4.36	1.58
21.0	5.20	3.90	1.39	5.32	3.99	1.42	5.46	4.09	1.45	5.59	4.19	1.49	5.72	4.29	1.53	5.86	4.40	1.56
35.0	4.65	3.49	1.54	4.76	3.57	1.58	4.88	3.66	1.62	5.00	3.75	1.66	5.12	3.84	1.70	5.24	3.93	1.74
46.0	4.00	3.00	2.14	4.10	3.07	2.19	4.20	3.15	2.24	4.30	3.23	2.30	4.40	3.30	2.36	4.51	3.38	2.41

Heating

TC : Total Capacity, PI: Power Input

Outdoor temperature (ºC, DB)	Indoor temperature (ºC, DB)											
	16.0		18.0		20.0		21.0		22.0		24.0	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-15.0	3.95	2.14	3.91	2.12	3.87	2.10	3.83	2.08	3.79	2.06	3.76	2.04
-10.0	4.90	2.25	4.85	2.23	4.80	2.21	4.75	2.19	4.70	2.17	4.66	2.14
7.0	6.12	1.91	6.06	1.89	6.00	1.87	5.94	1.85	5.88	1.83	5.82	1.81
24.0	7.75	1.88	7.68	1.86	7.60	1.84	7.52	1.82	7.45	1.80	7.37	1.79

AC071HBCDEH/EU + AC071FCADEH/EU

Cooling

TC(Total Capacity), SHC(Sensible Heat Capacity), PI(Power Input)

Outdoor temperature (ºC, DB)	Indoor temperature (ºC, WB)																	
	14.0			16.0			18.0			19.0			22.0			24.0		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-15.0	6.83	5.47	1.16	7.00	5.60	1.19	7.17	5.74	1.22	7.35	5.88	1.25	7.53	6.02	1.28	7.71	6.17	1.31
21.0	6.70	5.36	1.58	6.87	5.49	1.62	7.04	5.63	1.66	7.21	5.77	1.70	7.38	5.91	1.74	7.56	6.05	1.78
35.0	6.60	5.28	2.19	6.76	5.41	2.25	6.93	5.54	2.30	7.10	5.68	2.36	7.27	5.82	2.42	7.44	5.96	2.47
43.0	5.37	4.30	2.48	5.51	4.40	2.54	5.64	4.51	2.61	5.78	4.62	2.67	5.92	4.73	2.73	6.06	4.85	2.80
50.0	4.76	3.81	2.58	4.88	3.90	2.65	5.00	4.00	2.71	5.12	4.10	2.78	5.24	4.19	2.85	5.37	4.29	2.92

Heating

TC : Total Capacity PI: Power Input

Outdoor temperature (ºC, DB)	Indoor temperature (ºC, DB)											
	16.0		18.0		20.0		21.0		22.0		24.0	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
-15.0	5.34	3.11	5.28	3.08	5.23	3.05	5.18	3.02	5.13	2.99	5.07	2.96
-10.0	6.88	2.93	6.81	2.90	6.74	2.87	6.67	2.84	6.61	2.81	6.54	2.78
7.0	8.16	2.81	8.08	2.78	8.00	2.75	7.92	2.72	7.84	2.70	7.76	2.67
24.0	8.61	2.90	8.52	2.87	8.44	2.84	8.36	2.81	8.27	2.78	8.19	2.76

- Capacities are based on following conditions;

. Cooling mode indoor air temperature (°C, DB/WB) : 20/14, 22/16, 25/18, 27/19, 30/22, 32/24

. Heating mode outdoor air : 85%RH. However, the condition rated capacity is 7°C DB / 6°C WB.

. Refrigerant piping length : 5m

. Level difference : 0m.

4 Dimensional drawing

Console

AC052HBJDEH/EU

Units : mm / inches

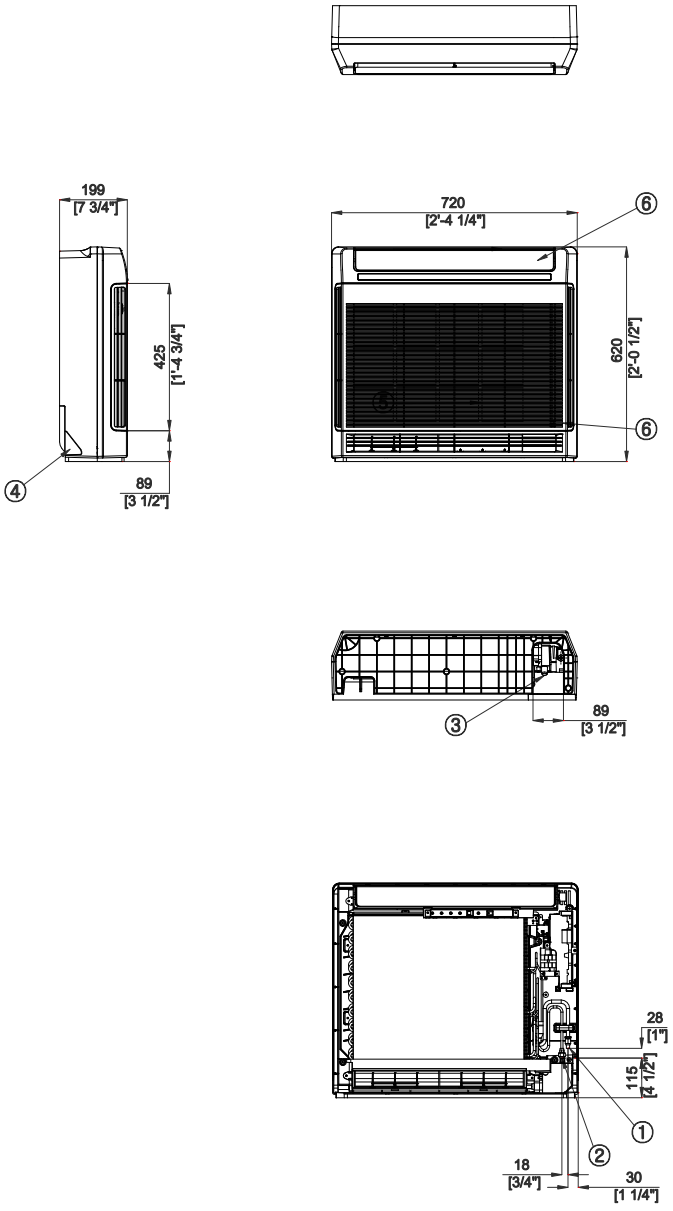
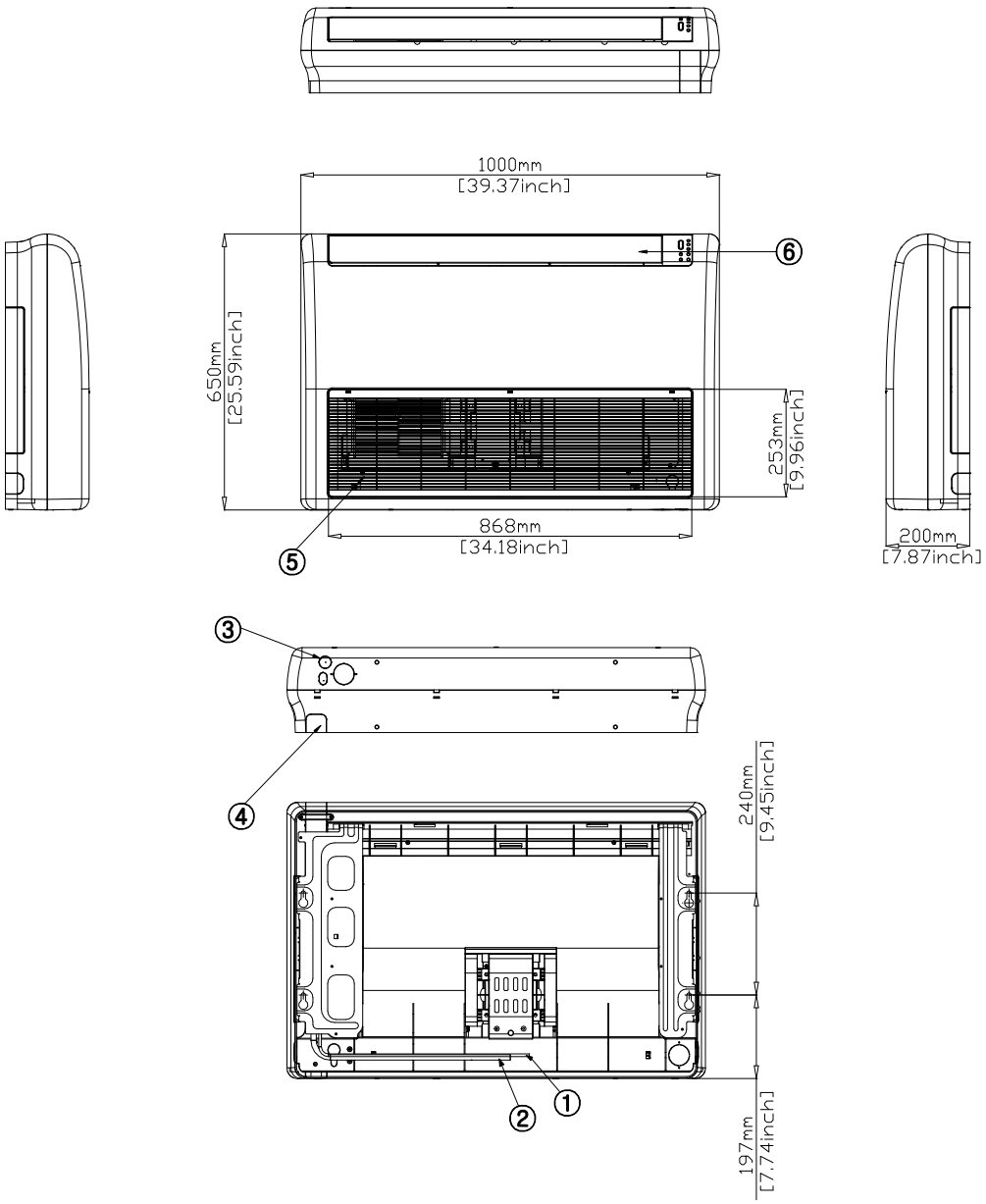


Table of descriptions			
1	Refrigerant gas pipe	7	
2	Refrigerant liquid pipe	8	
3	Condensate drain	9	
4	Power & Comm. wiring conduits	10	
5	Air Inlet grille	11	
6	Air Outlet grille	12	

4 Dimensional drawing

Ceiling

AC052HBCDEH/EU, AC071HBCDEH/EU

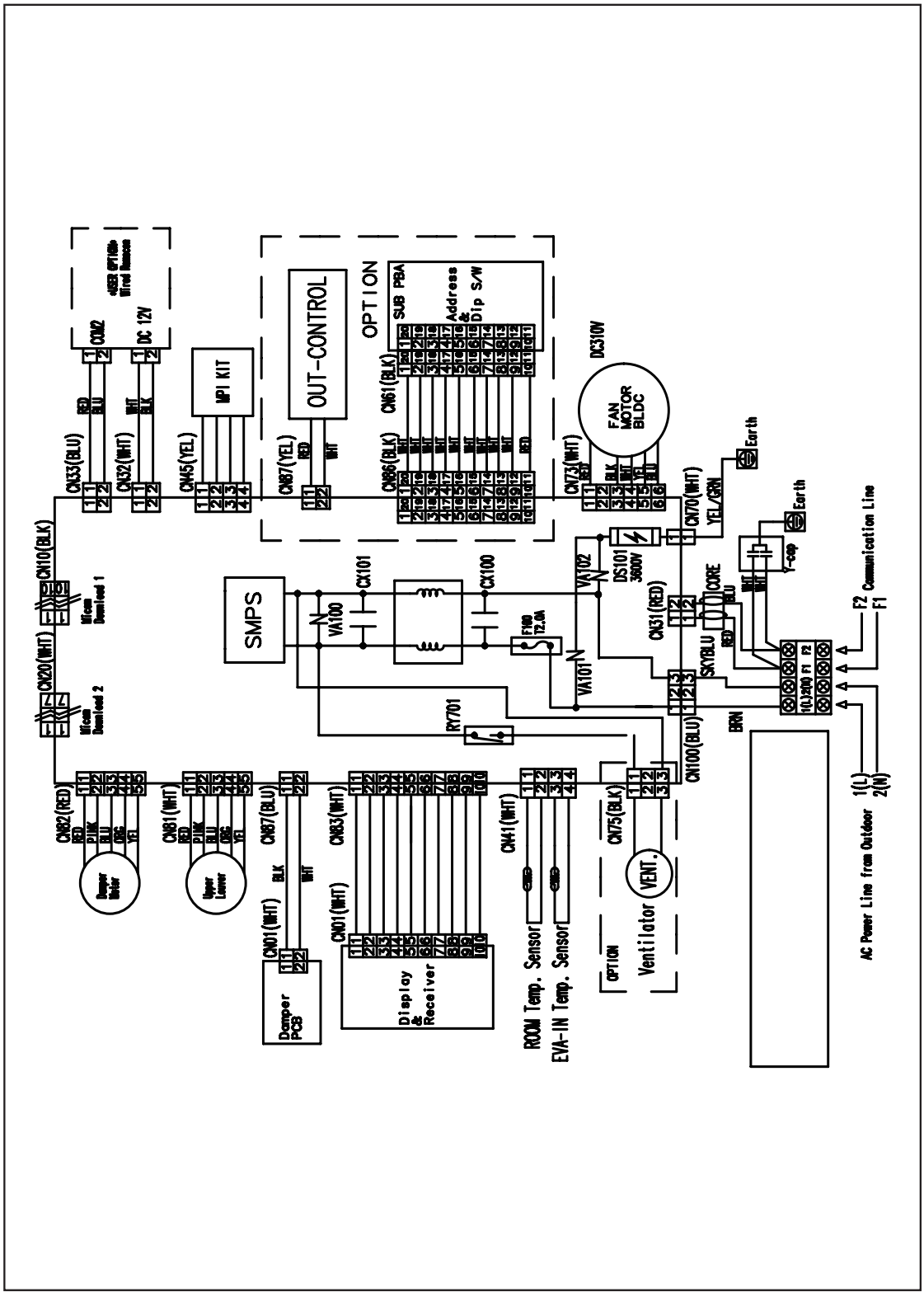


No.	Name
①	Liquid Ref. Pipe
②	Gas Ref. Pipe
③	Drain pipe connection
④	Power & Communication Wiring Conduit
⑤	Air inlet grile
⑥	Air outlet louver

5 Electrical wiring diagram

Console

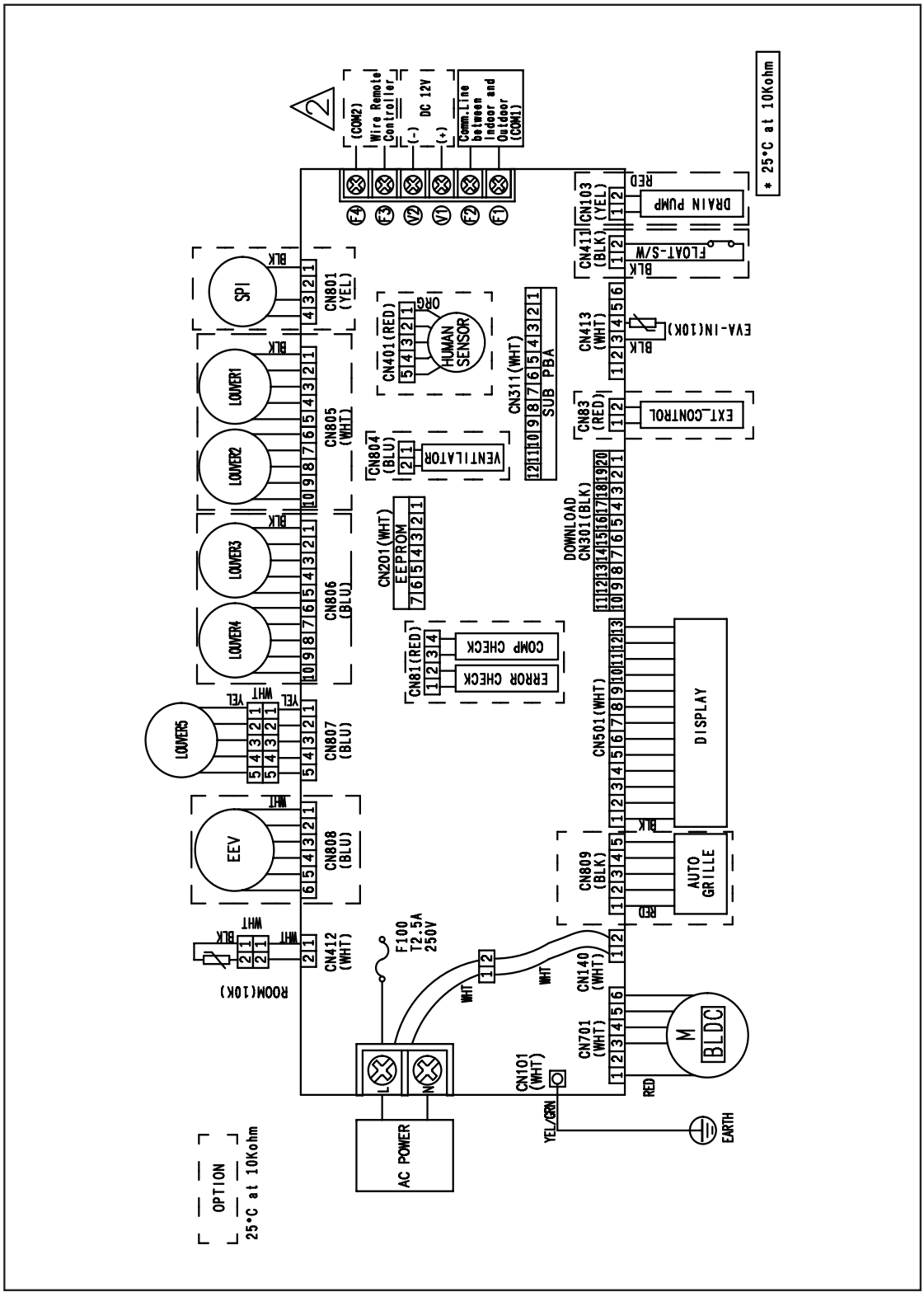
AC052HBJDEH/EU



5 Electrical wiring diagram

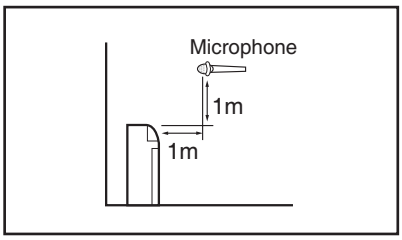
Ceiling

AC052HBCDEH/EU, AC071HBCDEH/EU



6 Sound pressure level

Console



Unit: dB(A)

Model	High	Low
AC052HBJDEH/EU (ODU : AC052FCADEH/EU)	44.0	25.0

Note

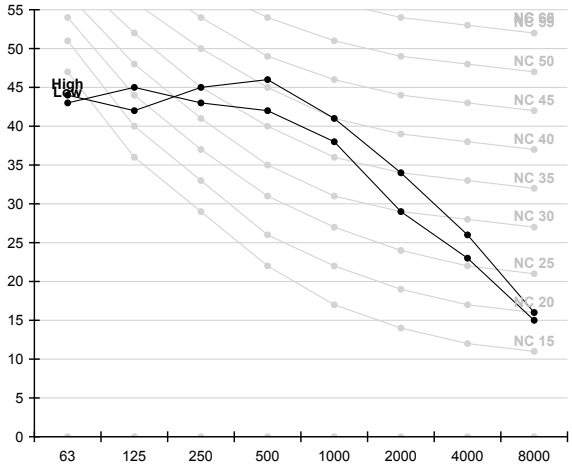
> Measuring place: Anechoic chamber (conversion value)

> These operation values were obtained in an anechoic room. Sound pressure level will vary depending on a range of factors such as the construction of the particular room where the equipment is installed.

> Operation sound level may differ depending on operation and ambient conditions.)

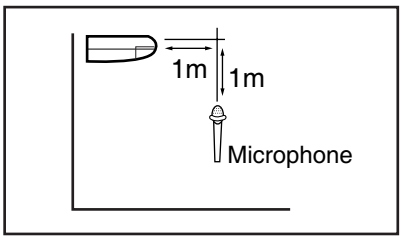
NC curve

1) AC052HBJDEH/EU (ODU : AC052FCADEH/EU)



6 Sound pressure level

Ceiling



Unit: dB(A)

Model	High	Low
AC052HBCDEH/EU (ODU : AC052FCADEH/EU)	41.0	37.0
AC071HBCDEH/EU (ODU : AC071FCADEH/EU)	46.0	42.0

Note

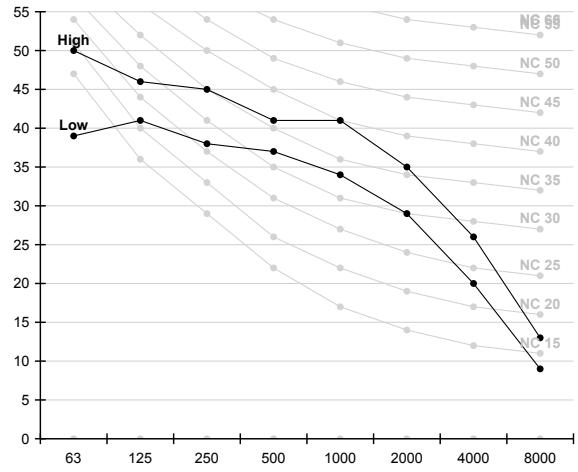
> Measuring place: Anechoic chamber (conversion value)

> These operation values were obtained in an anechoic room. Sound pressure level will vary depending on a range of factors such as the construction of the particular room where the equipment is installed.

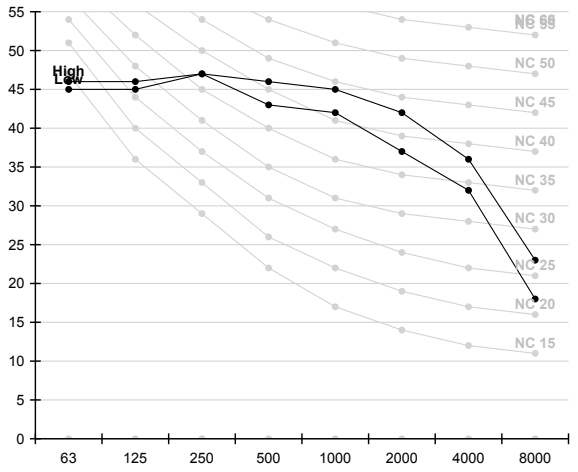
> Operation sound level may differ depending on operation and ambient conditions.)

NC curve

1) AC052HBCDEH/EU (ODU : AC052FCADEH/EU)



2) AC071HBCDEH/EU (ODU : AC071FCADEH/EU)



7 Sound power level

Console

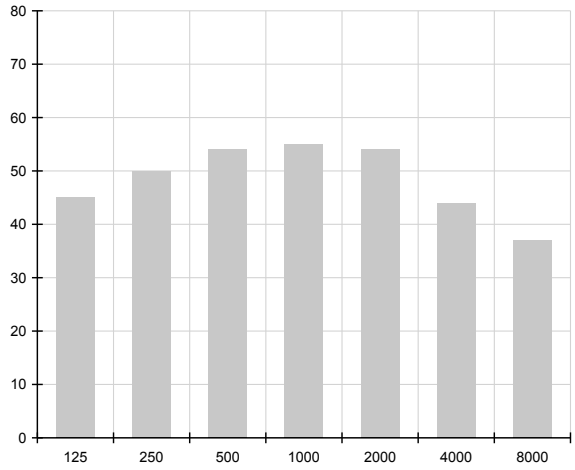
Note

dBA = A-weighted sound power level.
Reference power : 1pW.
Measured according to ISO 3741.

Unit: dB(A)

Model	Power
AC052HBJDEH/EU (ODU : AC052FCADEH/EU)	60.0

1) AC052HBJDEH/EU (ODU : AC052FCADEH/EU)



7 Sound power level

Ceiling

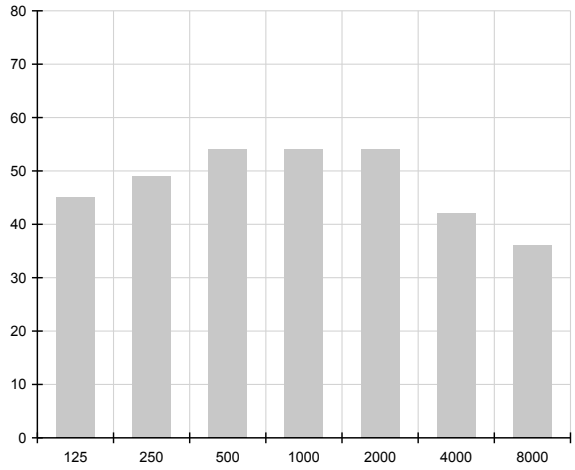
Note

dBA = A-weighted sound power level.
Reference power : 1pW.
Measured according to ISO 3741.

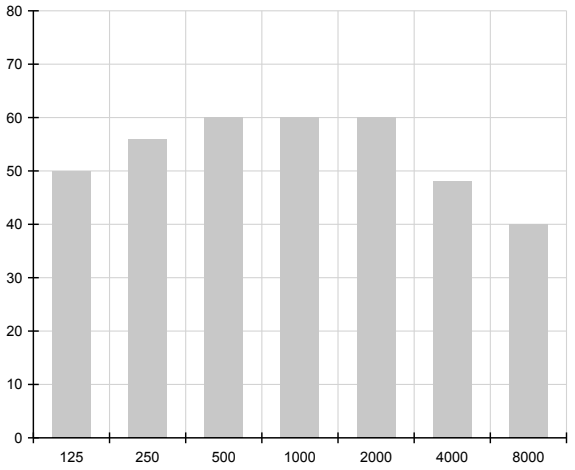
Unit: dB(A)

Model	Power
AC052HBCDEH/EU (ODU : AC052FCADEH/EU)	60.0
AC071HBCDEH/EU (ODU : AC071FCADEH/EU)	64.0

1) AC052HBCDEH/EU (ODU : AC052FCADEH/EU)



2) AC071HBCDEH/EU (ODU : AC071FCADEH/EU)



8 Sound power level

Outdoor

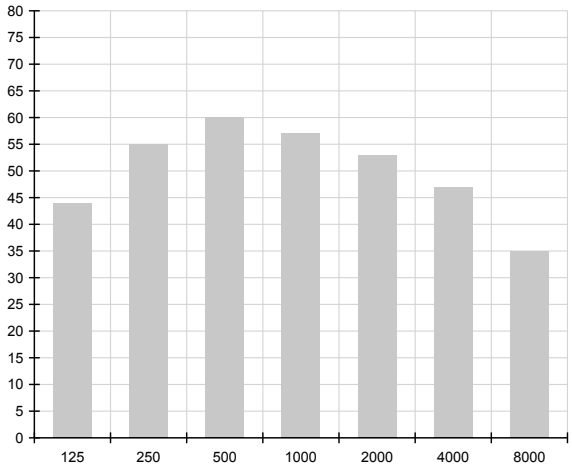
Note

dBA = A-weighted sound power level.
Reference power : 1pW.
Measured according to ISO 3741.

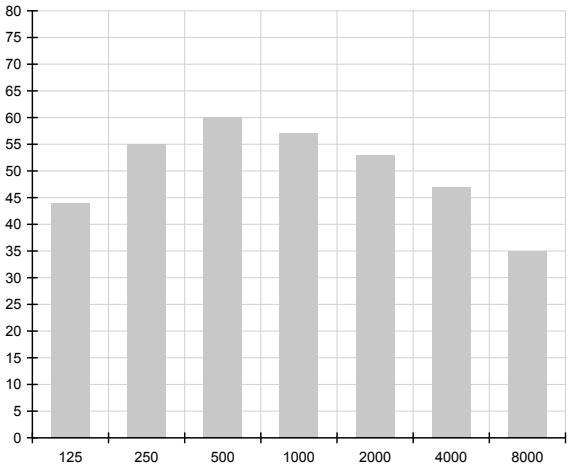
Unit: dB(A)

Model	Power
AC052FCADEH/EU (IDU : AC052HBCDEH/EU)	64.0
AC052FCADEH/EU (IDU : AC052HBJDEH/EU)	64.0
AC071FCADEH/EU (IDU : AC071HBCDEH/EU)	66.0

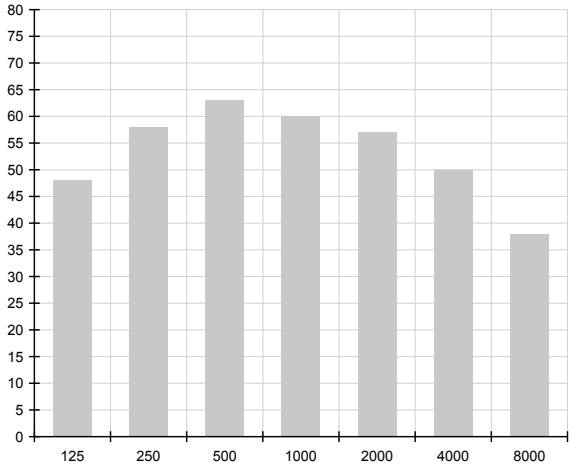
1) AC052FCADEH/EU (IDU : AC052HBCDEH/EU)



2) AC052FCADEH/EU (IDU : AC052HBJDEH/EU)



3) AC071FCADEH/EU (IDU : AC071HBCDEH/EU)



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