

COMPACT CASSETTE TYPE AIR CONDITIONER

TECHNICAL MANUAL



FUJITSU GENERAL LIMITED

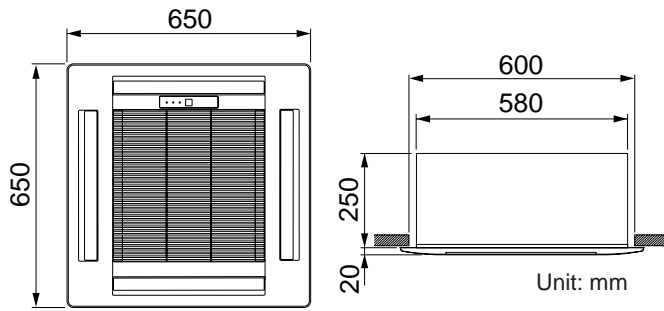
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1.FEATURE

● New Compact

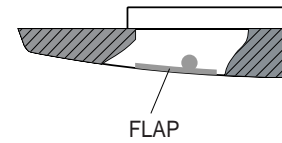
Fit to Ceiling Tiles(600mm x 600mm)



Dimensions (12,000 to 14,000 and 18,000 BTU)

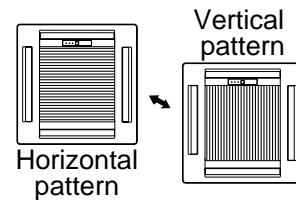
● Flat & Simple Design

Illustration of a closed flap



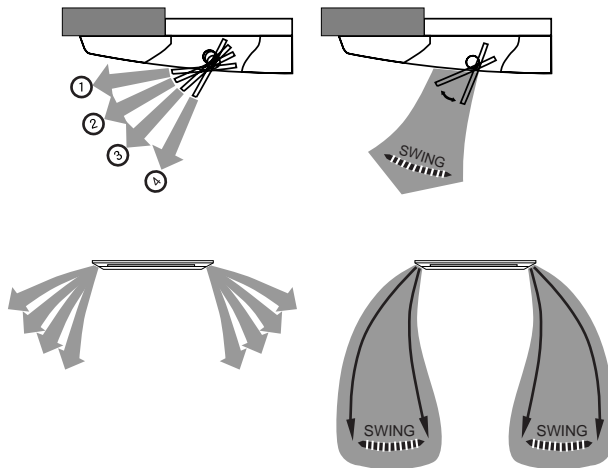
● Removable Mount Grill

Adjusting to the ceiling



□ PRODUCT FEATURES

● Auto Air Flow Direction & Auto Swing

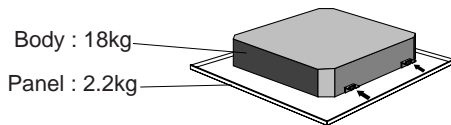


● 4-way Air Flow System

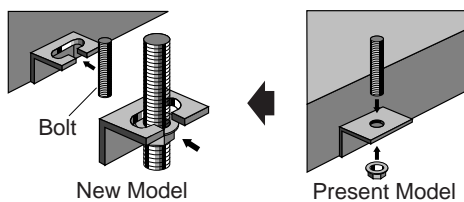
You can select 2-way, 3-way, 4-way air flow to suit your needs.



● Light Weight & Easy Installation



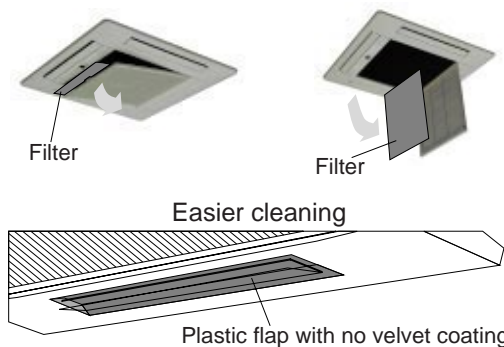
New hook design enable easier setting to the anchor bolt



● Easy Maintenance

Filter wide opening for easy maintenance

Removable and Washable



● Others

- Auto Restart
- Auto changeover operation(Heat & Cool Model)
- Auto Closed Louver

● Wireless Remote Controller (Wall Fixing/Handy Type)

SLEEP

Press to select SLEEP timer.

MASTER CONTROL Button

Press to select operating mode. (AUTO, COOL, DRY, FAN, HEAT)

SET TEMP.

Press to set the unit's thermostat.

SET TIME Buttons

Press to set the unit's clock.

AIR FLOW DIRECTION Button

Use to set the desired air flow direction & SWING function.

ENERGY SAVE Button

Set temperature is automatically changed to reduce power consumption.

CODE CHANGE (Slide Switch)

Switching the remote control unit code.(Max. 4 units)

Signal Transmitter

TIMER Button

Press to select the timer mode. (OFF TIMER, ON TIMER, PROGRAM TIMER, RESET)

FAN CONTROL Button

Press to select fan speed. (AUTO, HIGH, MED, LOW)

START / STOP Button

Press to start and stop operation.

TIME ADJUST Button

Set the current time.

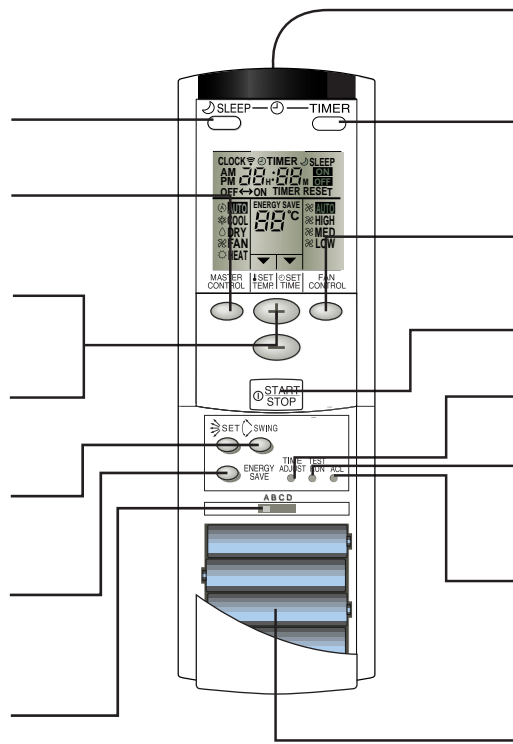
TEST RUN

This button is used when testing the air conditioner after installation.

ACL Button

This button is used when replacing batteries.

BATTERY:
R03/ LR03 x 4

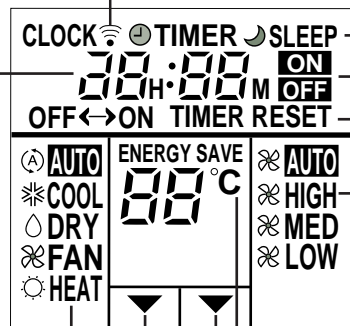


Remote Control Unit Display

Transmit Indicator

Clock Display

Operating Mode Display



Timer Mode Display

Fan Speed Display

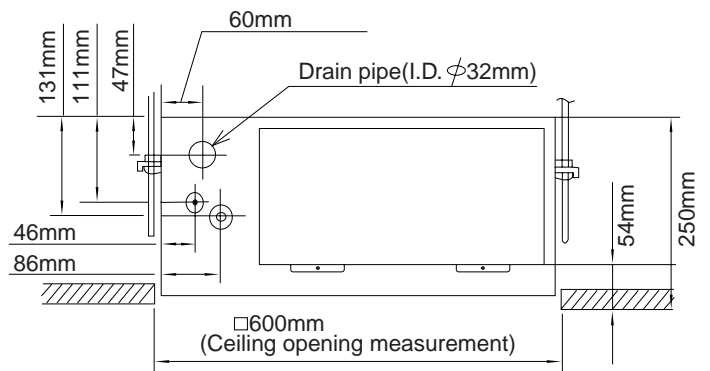
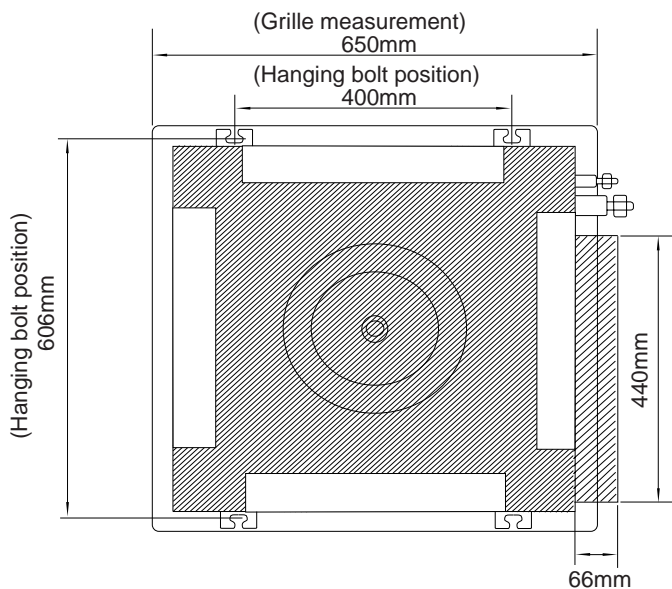
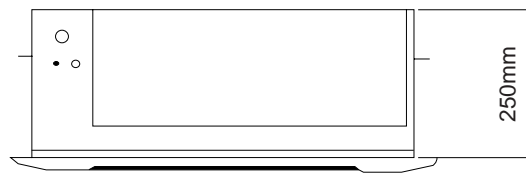
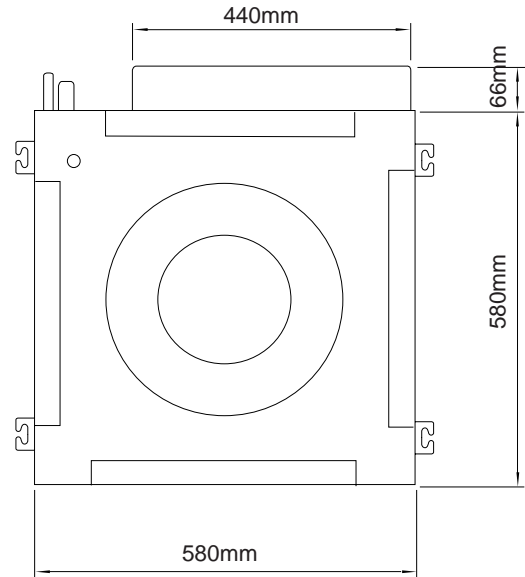
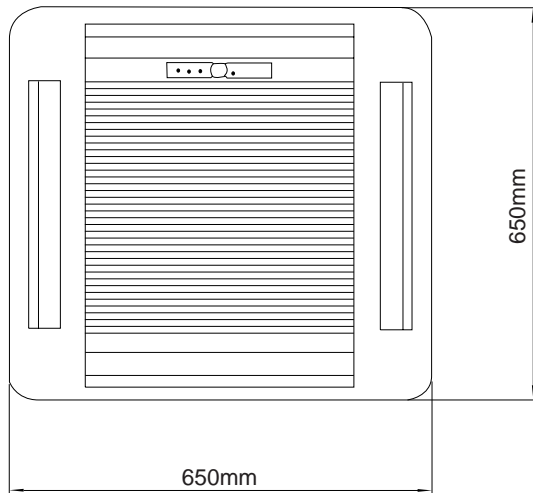
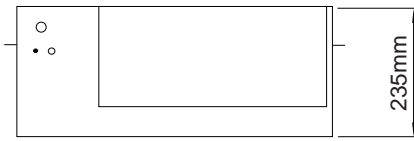
Temperature Set Display

Timer Set Indicator

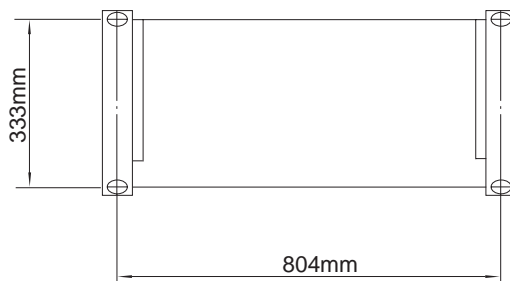
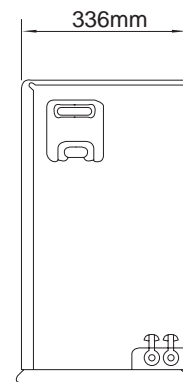
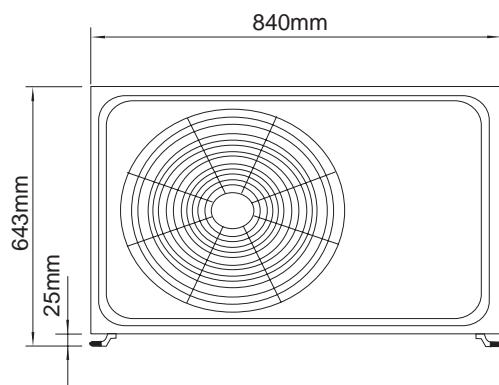
Temperature Set Indicator

2.OUTLINE AND DIMENSIONS

2. OUTLINE AND DIMENSIONS



2.2 OUTDOOR UNIT

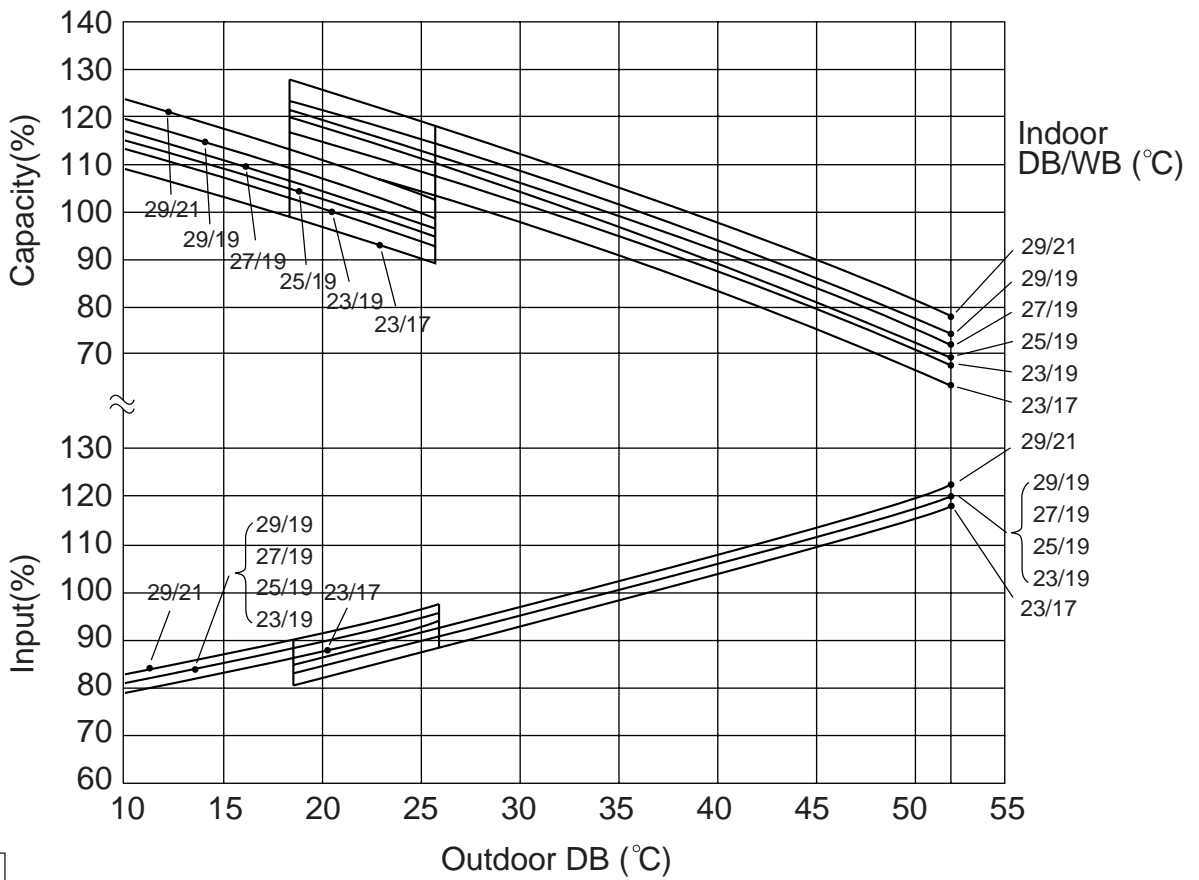


3. DATA

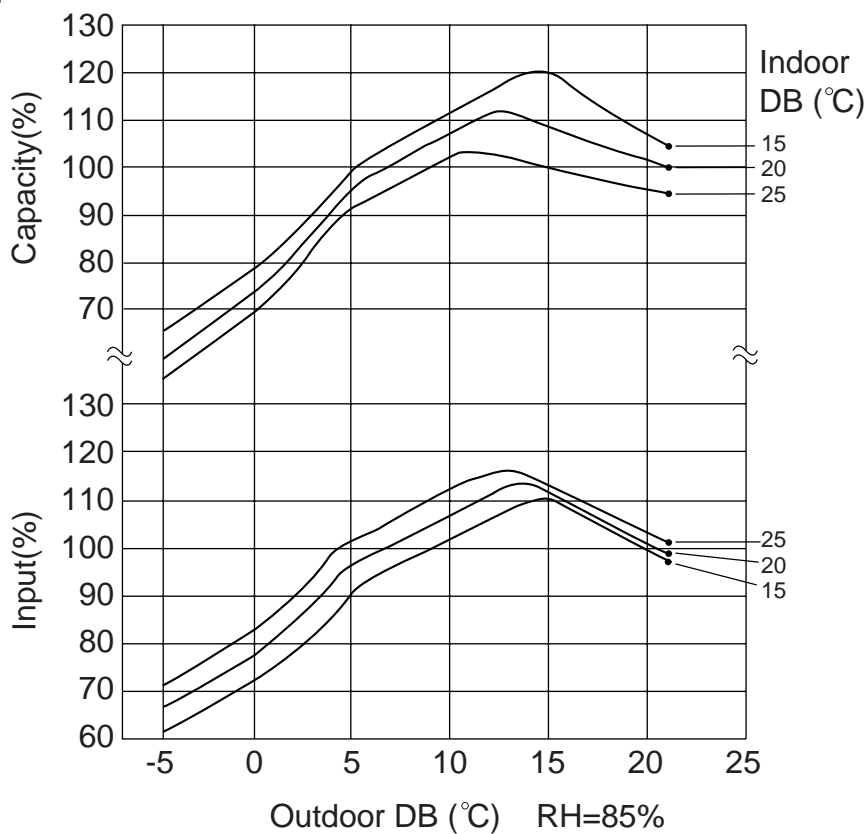
3.1 PERFORMANCE CURVE

APPLICATION MODELS : AU12A,14A,18A
AU12R,14R,18R

Cooling



Heating



3.2 TEMPRATURE RANGE

MODEL		TEMPERATURE RANGE	
		Indoor Unit	Outdoor Unit
AU12A/14A/18A	COOL	Approx. 18°C to 32°C	Approx. 10°C to 52°C
	DRY	Approx. 18°C to 32°C	Approx. 10°C to 52°C
AU12R/14R/18R	COOL	Approx. 18°C to 32°C	Approx. 10°C to 52°C
	DRY	Approx. 18°C to 32°C	Approx. 10°C to 52°C
	HEAT	Approx. 16°C to 30°C	Approx. -5°C to 21°C

3.3 REFRIGERANT CHARGING

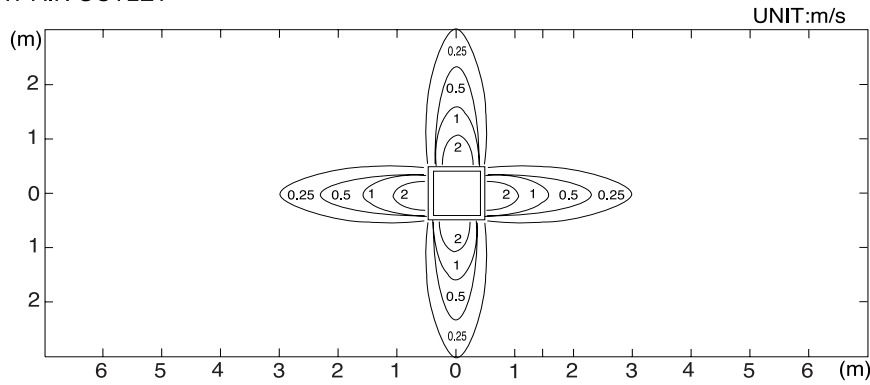
PIPE LENGTH		16ft (5m)	33ft (10m)	49ft (15m)	66ft (20m)	Additional refrigerant g/m
FULL CHARGE AMOUNT	12A	950 g (33.5oz)	1,000 g (35.3oz)	1,050 g (37.0oz)	1,100 g (38.8oz)	10 g (0.35oz)
	12R	1,000 g (35.3oz)	1,075 g (37.9oz)	1,150 g (40.6oz)	1,225 g (43.2oz)	15 g (0.53oz)
	14A	1,000 g (35.3oz)	1,050 g (37.0oz)	1,100 g (38.8oz)	1,150 g (40.6oz)	10 g (0.35oz)
	14R	1,000 g (35.3oz)	1,075 g (37.9oz)	1,150 g (40.6oz)	1,225 g (43.2oz)	15 g (0.53oz)
	18A	1,170 g (41.3oz)	1,245 g (43.9oz)	1,320 g (46.6oz)	1,395 g (49.2oz)	15 g (0.53oz)
	18R	1,800 g (63.5oz)	1,950 g (68.8oz)	2,100 g (74.1oz)	2,250 g (79.4oz)	30 g (1.06oz)

3.4 AIR VELOCITY DISTRIBUTION

3.4.1 AIR VELOCITY DISTRIBUTION

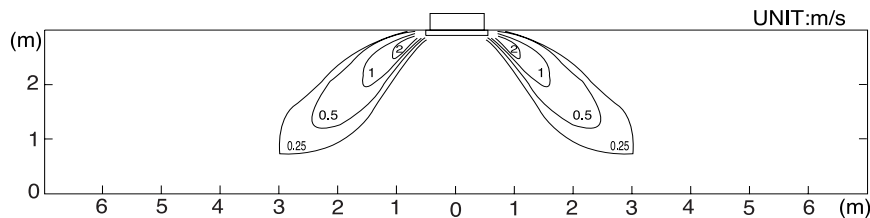
MODELS : AU12,AU14

4-WAY AIR OUTLET

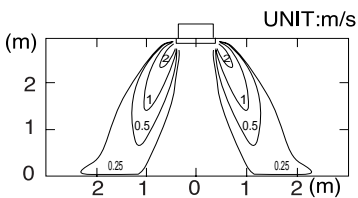


Note:
 Condition
 Fan speed: High
 Operation mode: FAN
 Voltage: 240V

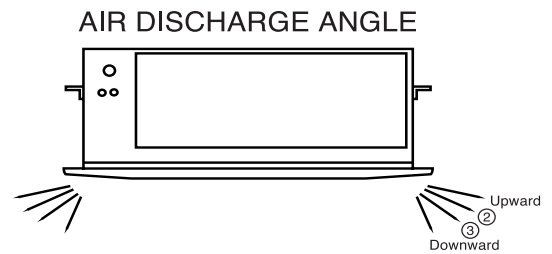
TOP VIEW
 HORIZONTAL LOUVER
 :Upward



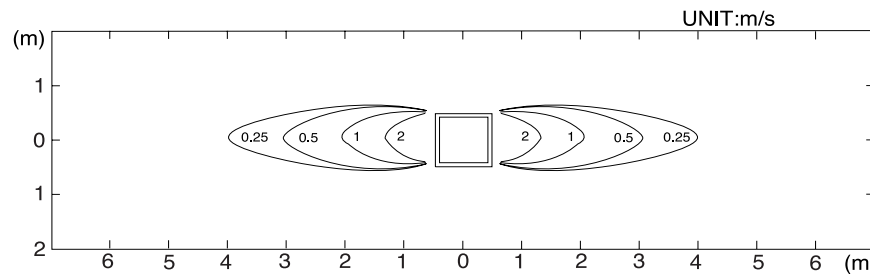
SIDE VIEW
 HORIZONTAL LOUVER
 :Upward



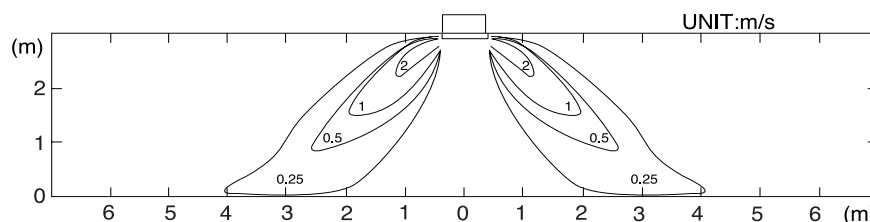
SIDE VIEW
 HORIZONTAL LOUVER
 :Downward



2-WAY AIR OUTLET



TOP VIEW
 HORIZONTAL LOUVER
 :Upward

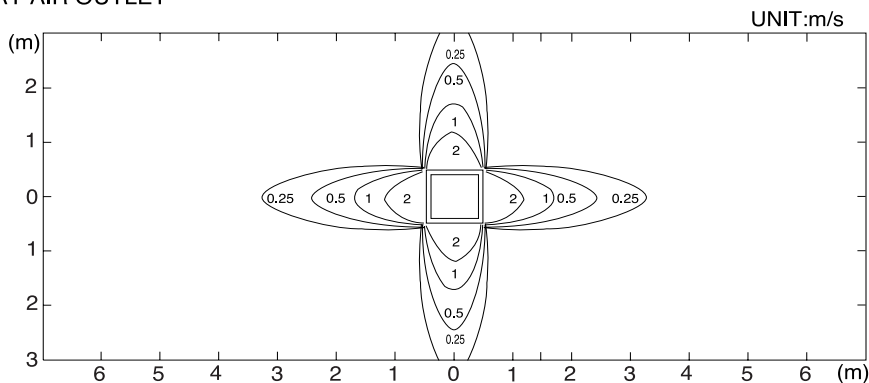


SIDE VIEW
 HORIZONTAL LOUVER
 :Upward

3.4.2 AIR VELOCITY DISTRIBUTION

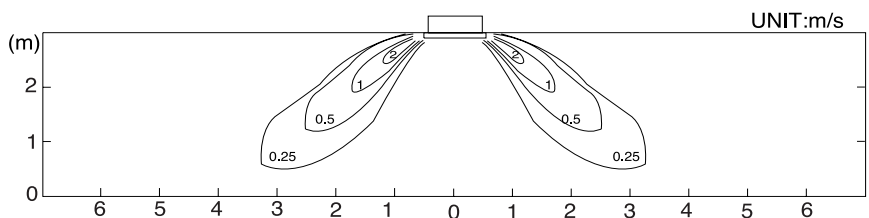
MODELS : AU18

4-WAY AIR OUTLET

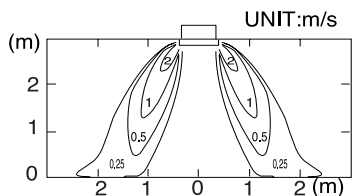


Note:
 Condition
 Fan speed: High
 Operation mode: FAN
 Voltage: 240V

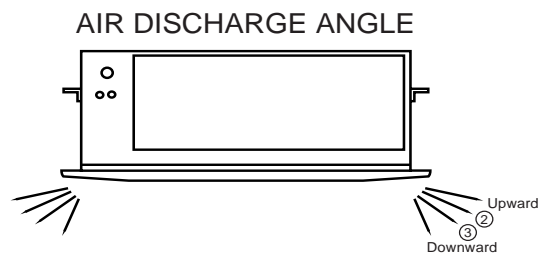
TOP VIEW
 HORIZONTAL LOUVER
 :Upward



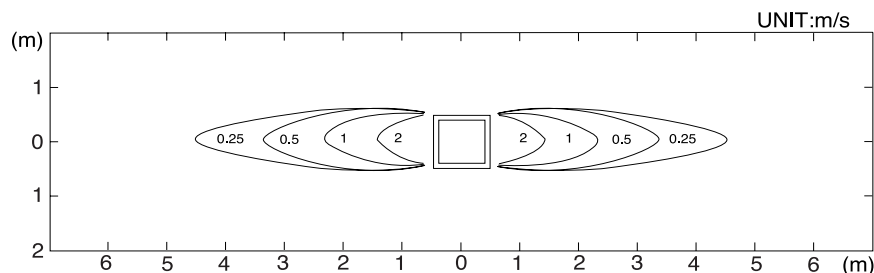
SIDE VIEW
 HORIZONTAL LOUVER
 :Upward



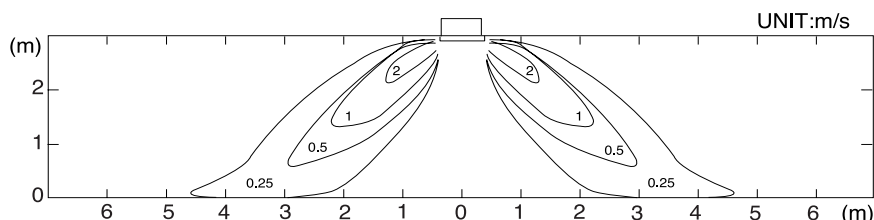
SIDE VIEW
 HORIZONTAL LOUVER
 :Downward



2-WAY AIR OUTLET



TOP VIEW
 HORIZONTAL LOUVER
 :Upward

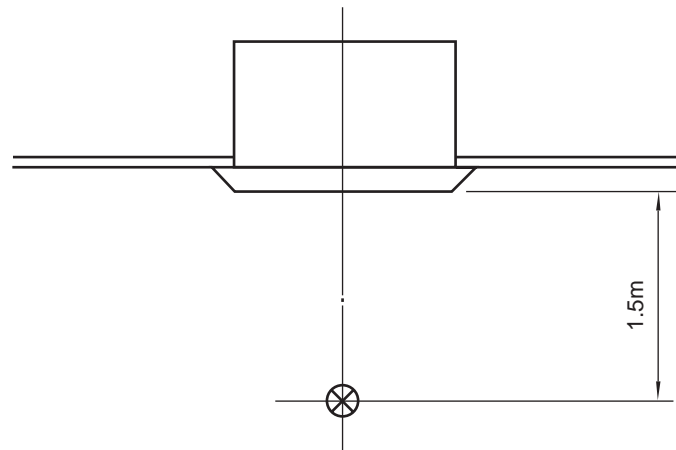


SIDE VIEW
 HORIZONTAL LOUVER
 :Upward

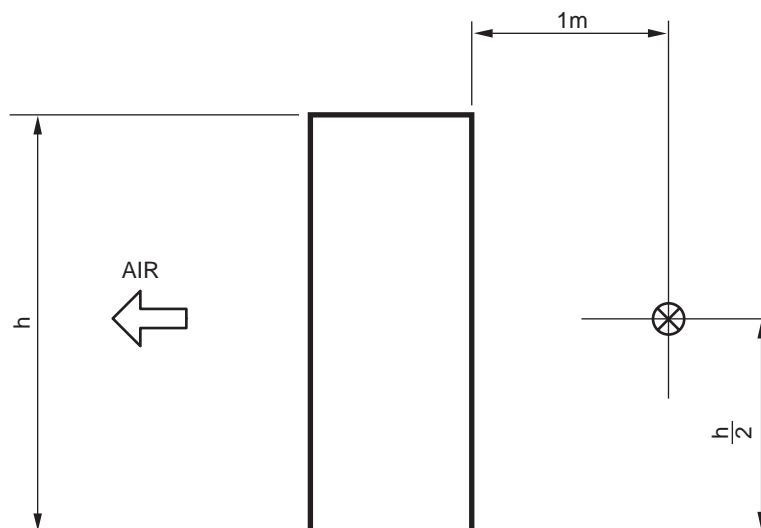
3.5 SOUND LEVEL MEASUREMENT

3.5.1 SOUND LEVEL CHECK POINTS

INDOOR UNIT

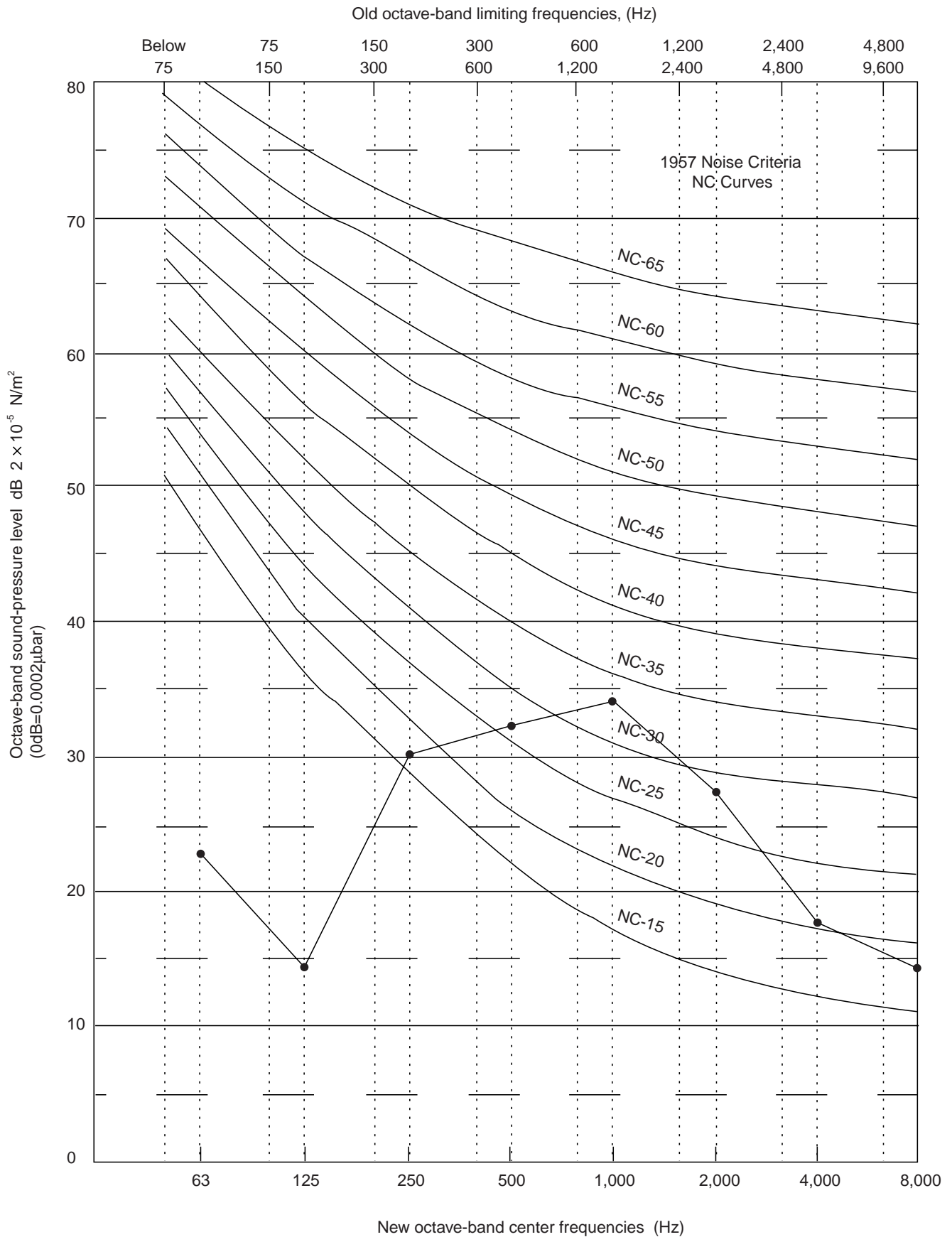


OUTDOOR UNIT



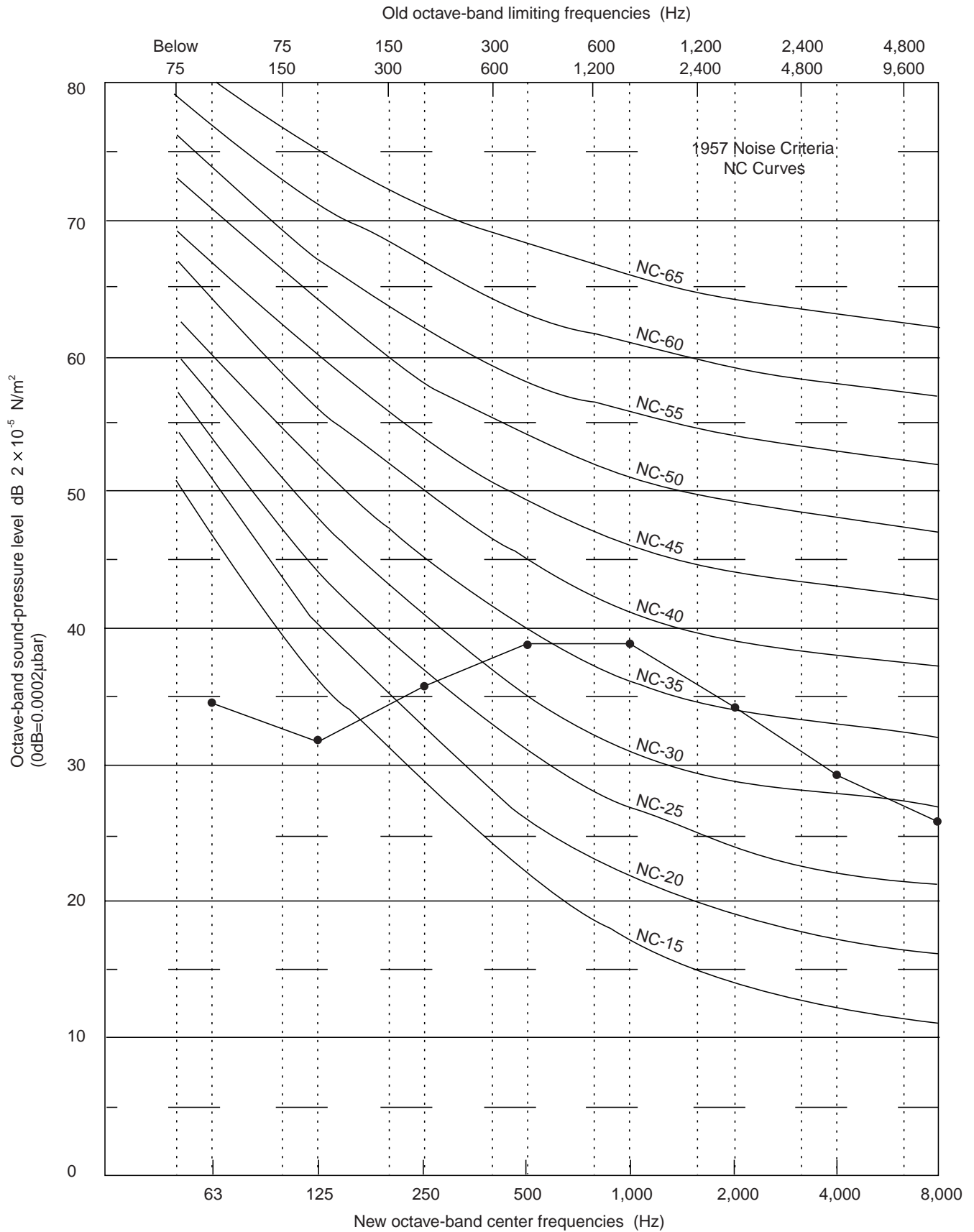
3.5.1 SOUND LEVEL CHECK POINTS

MODELS : AU12A/12R/14A/14R (INDOOR UNIT)



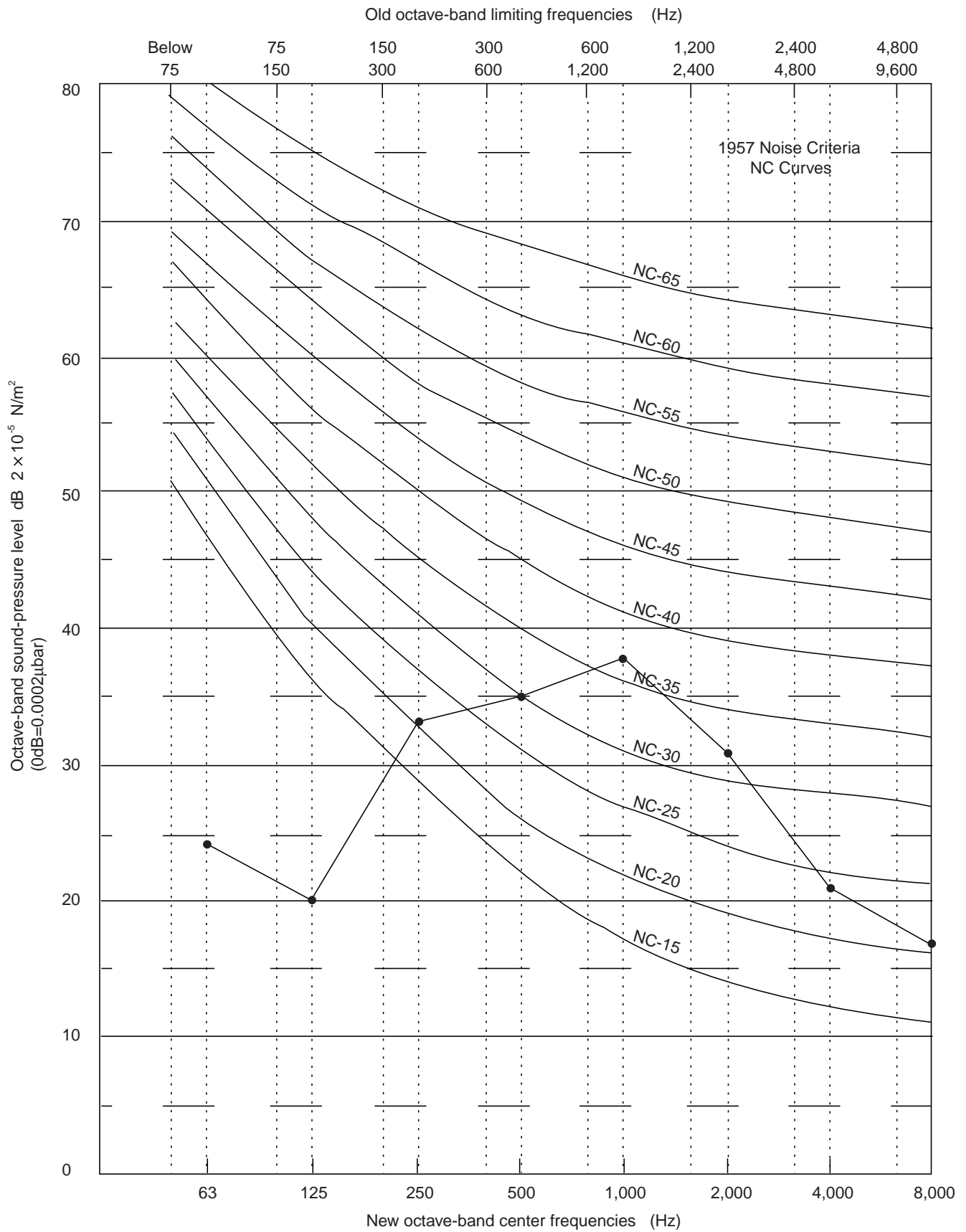
3.5.3 SOUND LEVEL CURVE

MODELS : AO12A/12R/14A/14R (OUTDOOR UNIT)



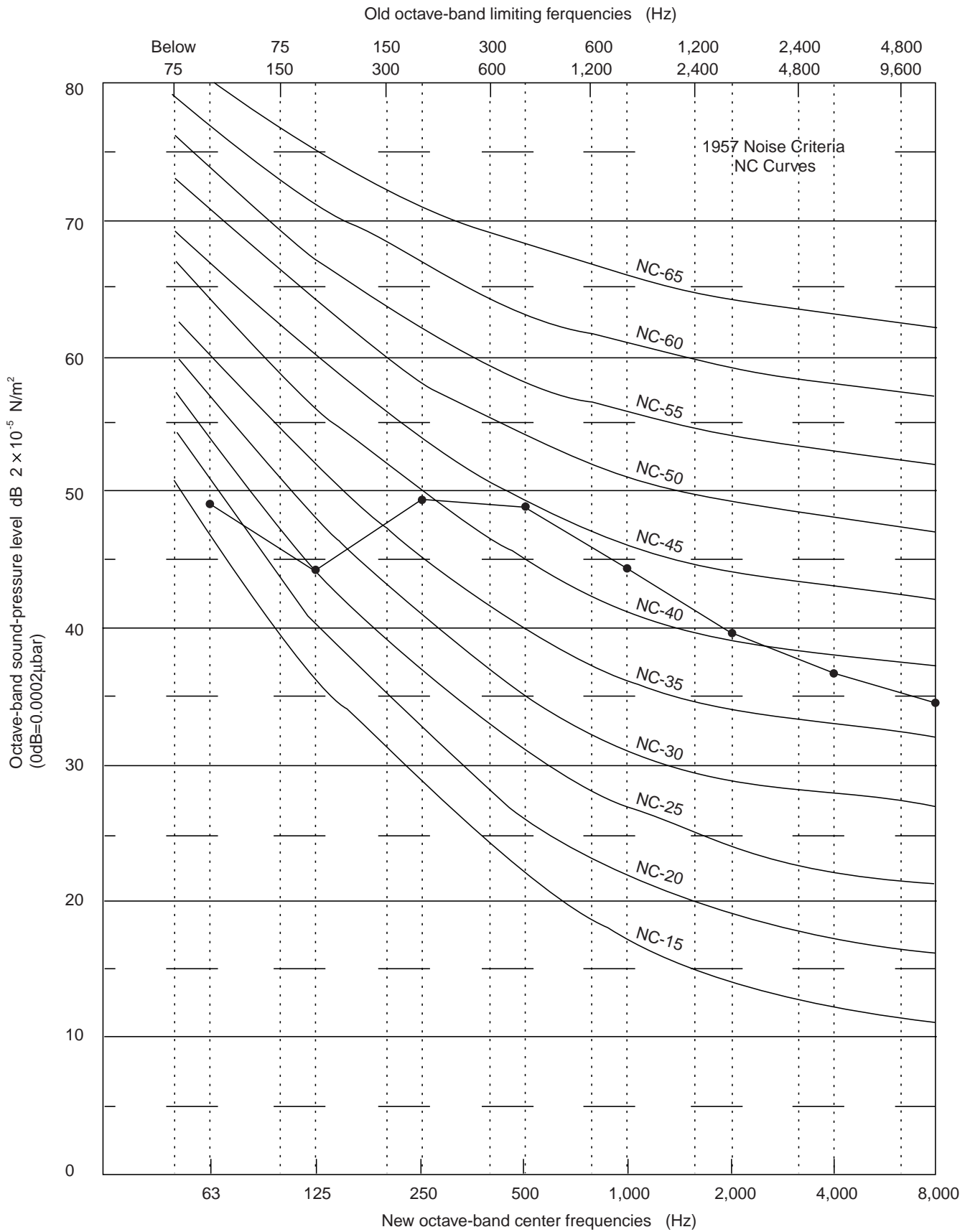
3.5.4 SOUND LEVEL CURVE

MODELS : AU18A/18R (INDOOR UNIT)

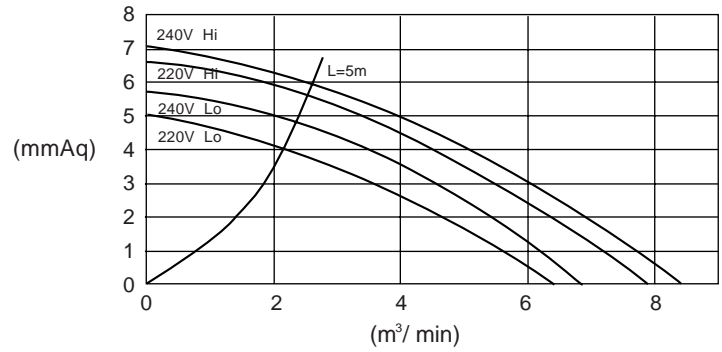
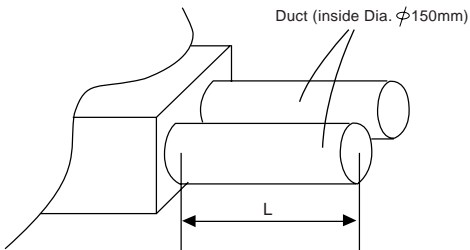
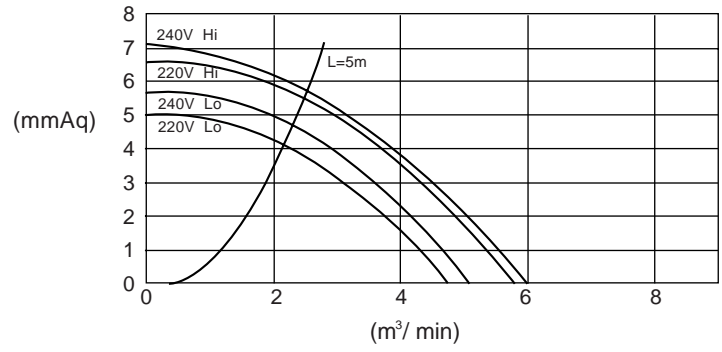
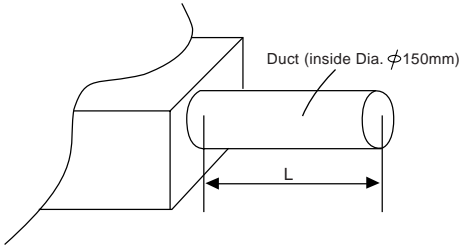


3.5.5 SOUND LEVEL CURVE

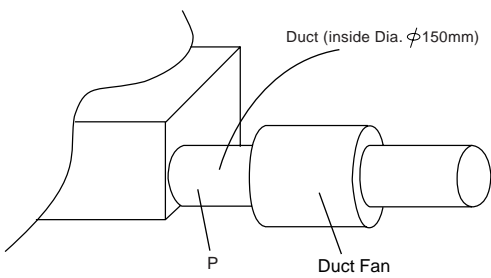
MODELS : AO18A/18R (OUTDOOR UNIT)



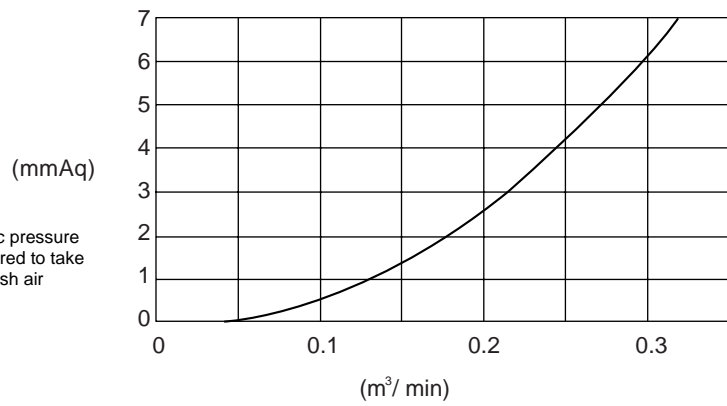
3.6 OUTLET AIR



3.7 FRESH AIR



Static pressure required to take in fresh air



4. SPECIFICATIONS

50Hz

Model		INDOOR UNIT	AU□12A	AU□12R	AU□14A	AU□14R	AU□18A	AU□18R	
		OUTDOOR UNIT	AO□12AZAL	AO□12RZAL	AO□14AZAL	AO□14RZAL	AO□18AZCL	AO□18AZCL	
		GRILLE	UTG-UDYA-W	UTG-UDYA-W	UTG-UDYA-W	UTG-UDYA-W	UTG-UDYA-W	UTG-UDYA-W	
Capacity	Cooling	(kW)	3.65 - 3.70	3.55 - 3.60	4.00 - 4.10	3.90 - 4.00	4.95 - 5.10	4.85 - 5.00	
	Heating	(kW)	—	4.00 - 4.10	—	4.35 - 4.50	—	5.30 - 5.45	
Electrical	Power supply	(V)	220 - 240	220 - 240	220 - 240	220 - 240	220 - 240	220 - 240	
	Frequency	(Hz)	50	50	50	50	50	50	
	Current	Cooling	(A)	6.3 - 6.3	6.3 - 6.3	7.4 - 7.4	7.4 - 7.4	9.2 - 9.1	8.8 - 8.6
		Heating	(A)	—	6.1 - 6.1	—	7.3 - 7.3	—	8.8 - 8.6
	Input	Cooling	(kW)	1.32 - 1.36	1.32 - 1.36	1.55 - 1.60	1.55 - 1.60	2.00 - 2.10	1.90 - 2.00
		Heating	(kW)	—	1.28 - 1.32	—	1.50 - 1.55	—	1.90 - 2.00
	Starting Current	(A)	40	40	45	45	50	50	
E.E.R.	Cooling	(kW/kW)	2.77 - 2.72	2.69 - 2.65	2.58 - 2.56	2.52 - 2.50	2.48 - 2.43	2.55 - 2.50	
	Heating	(kW/kW)	—	3.13 - 3.11	—	2.90 - 2.90	—	2.79 - 2.73	
Moisture Removal	(Q/hr)	1.6	1.6	1.8	1.8	2.1	2.1		
Refrigerant (R22)	(g)	950	1,000	1,000	1,000	1,170	1,800		
Fan Speed (r.p.m.)	Indoor	Hi	740	740	740	740	820	820	
		Med	660	660	660	660	740	740	
		Low	580	580	580	580	620	620	
	Outdoor	Hi / Lo	580 / 280	580 / 280	580 / 280	580 / 280	740 / 280	740 / 280	
Air Circulation (m ³ /h)	Indoor	Hi	550	550	550	550	650	650	
		Med	500	500	500	500	550	550	
		Low	440	440	440	440	490	490	
	Outdoor		2,500	2,500	2,500	2,500	2,800	2,800	
Noise (dBA)	Indoor	Hi	40.0	40.0	41.0	41.0	43.0	43.0	
		Med	38.0	38.0	38.0	38.0	40.0	40.0	
		Low	35.0	35.0	35.0	35.0	36.0	36.0	
	Outdoor		49.0	49.0	49.0	49.0	54.0	54.0	
Dimensions (H x W x D)	Net	Indoor (mm)	235 x 580 x 580 + 70						
		Outdoor (mm)	643 x 840 x 336						
		Grille (mm)	35 x 650 x 650						
	Gross	Indoor (mm)	280 x 710 x 750						
		Outdoor (mm)	750 x 959 x 429						
		Grille (mm)	70 x 720 x 720						
Weight	Net / Gross	Indoor (kg)	18 / 23	18 / 23	18 / 23	18 / 23	18 / 23	18 / 23	
		Outdoor (kg)	63 / 72	64 / 72	63 / 72	64 / 72	66 / 73	68 / 76	
		Grille (kg)	2.2 / 4.3						
Connection Pipe	Length (Max)	(m)	20						
	Height (Max)	(m)	8						
	Diameter Small/Large	(mm)	φ6.35 / φ12.7						
Compressor		Recipro	Recipro	Recipro	Recipro	Recipro	Recipro		
Operation Range	I : IN	Cooling (°C)	I:18~32, O:10~52	I:18~32, O:10~52	I:18~32, O:10~52	I:18~32, O:10~52	I:18~32, O:10~52	I:18~32, O:10~52	
	O : OUT	Heating (°C)	—	I:16~30, O: -5~21	—	I:16~30, O: -5~21	—	I:16~30, O: -5~21	
Remote Controller		Wireless	Wireless	Wireless	Wireless	Wireless	Wireless		
Auto Restart Function		Yes	Yes	Yes	Yes	Yes	Yes		

Cooling/heating capacities are based on the following conditions.

Models	Cooling	Heating
Y	Indoor temp. : 27°C DB/19°C WB	Indoor temp. : 20°C DB Outdoor temp. : 7°C DB/ 6°C WB
T	Outdoor temp. : 35°C DB/24°C WB	Indoor temp. : 21°C DB Outdoor temp. : 7°C DB/ 6°C WB

Note : In the above square, put the T or Y by a destination



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