



SPLIT-TYPE, HEAT PUMP AIR CONDITIONERS
SPLIT-TYPE, AIR CONDITIONERS

Changes for the Better

July 2007

No. OCS04

TECHNICAL DATA BOOK R410A INVERTER REVISED EDITION-C

<Indoor unit>

[Model names]

PLA-A·BA
PLA-A·AA
PKA-A·GA
PKA-A·GAL
PKA-A·FA
PKA-A·FAL
PCA-A·GA

Revision:

- PLA-A·BA are added and WIRING DIAGRAM of PLA/PCA/PKA are changed in REVISED EDITION-C.
- Some descriptions have been modified.

- Please void OCS04 REVISED EDITION-B.

<Outdoor unit>

[Model names]

PUZ-A18/24/30/36/42NHA
PUZ-A18/24/30/36/42NHA-BS
PUY-A12/18/24/30/36/42NHA
PUY-A12/18/24/30/36/42NHA-BS

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For information on service, please refer to the service manual as follows.

1-1. INDOOR UNIT

Model name	Service Ref.	Service Manual No.
PLA-A12/18/24/30/36/42BA	PLA-A12/18/24/30/36/42BA	OCH420 OCB420
PLA-A12/18/24/30/36/42AA	PLA-A12/18/24/30/36/42AA ₍₁₎	OC370
PCA-A24/30/36/42GA	PCA-A24/30/36/42GA ₍₁₎	OC368
PKA-A12/18GA PKA-A12/18GAL	PKA-A12/18GA ₍₁₎ PKA-A12/18GAL ₍₁₎	OC369
PKA-A24/30/36FA PKA-A24/30/36FAL	PKA-A24/30/36FA ₍₁₎ PKA-A24/30/36FAL ₍₁₎	

1-2. OUTDOOR UNIT

Model name	Service Ref.	Service Manual No.
PUZ-A18/24/30/36/42NHA PUZ-A18/24/30/36/42NHA-BS PUY-A12/18/24/30/36/42NHA PUY-A12/18/24/30/36/NHA ₁ PUY-A12/18/24/30/36/42NHA-BS	PUZ-A18/24/30/36/42NHA PUZ-A18/24/30/36/42NHA-BS PUY-A12/18/24/30/36/42NHA PUY-A12/18/24/30/36/NHA ₁ PUY-A12/18/24/30/36/42NHA-BS PUY-A12/18/24/30/36/NHA ₁ -BS	OC367

2-1. CEILING CASSETTE TYPE

Model name	Indoor unit		PLA-A12BA	PLA-A18BA	PLA-A24BA	PLA-A30BA	PLA-A36BA	PLA-A42BA	
	Outdoor unit		PUY-A12NHA	PUY-A18NHA	PUY-A24NHA	PUY-A30NHA	PUY-A36NHA	PUY-A42NHA	
			PUY-A12NHA-BS	PUY-A18NHA-BS	PUY-A24NHA-BS	PUY-A30NHA-BS	PUY-A36NHA-BS	PUY-A42NHA-BS	
Cooling	Max. Capacity	Btu/h	12,000	18,000	24,000	30,000	35,000	42,000	
	Rated Capacity	Btu/h	12,000	18,000	24,000	30,000	35,000	42,000	
	Min. Capacity	Btu/h	6,000	8,000	12,000	12,000	12,000	18,000	
	Total Input	W	1260	1940	2500	4100	4500	4600	
	EER	Btu/h/W	9.5	9.3	9.6	7.3	7.8	9.1	
	SEER	Btu/h/W	13.5	14.2	13.6	13.6	14.2	14.4	
	Moisture Removal	Pints/h	1.7	3.0	5.1	7.2	8.1	10.9	
	*1 SHF		0.84	0.81	0.76	0.73	0.74	0.71	
Heating	Max. Capacity	Btu/h	-	-	-	-	-	-	
	Rated Capacity	Btu/h	-	-	-	-	-	-	
	Min. Capacity	Btu/h	-	-	-	-	-	-	
	Total Input	W	-	-	-	-	-	-	
	COP	W/W	-	-	-	-	-	-	
	*1 HSPF (W/V)	Btu/h/W	-	-	-	-	-	-	
Heating at low ambient	Capacity	Btu/h	-	-	-	-	-	-	
	Total Input	W	-	-	-	-	-	-	
	*2 COP	W/W	-	-	-	-	-	-	
Power supply	Phase, Cycle, Voltage		1phase, 60Hz, 208/230V						
	Breaker size	A	15		25		30		
Voltage	Indoor - Outdoor S1-S2		AC 208 / 230V						
	Indoor - Outdoor S2-S3		DC24V						
	Indoor - Remote Controller		DC12V						
Indoor unit	MCA	A	1			2			
	MOCP	A	15						
	Fan Motor	F.L.A.	0.51				1.00		
	Fan Motor Output	W	50				120		
	Air flow DRY	CMM	11-12-13-15	12-14-16-18		14-16-18-21	20-23-26-30	22-25-28-31	
	(Lo-M2-M1-Hi) WET	CMM	10-11-12-14	11-13-15-17		13-15-17-20	19-22-25-29	21-24-27-30	
	Air flow DRY	CFM	390-420-460-530	420-490-570-640		490-570-640-740	710-810-920-1060	780-880-990-1090	
	(Lo-M2-M1-Hi) WET	CFM	350-390-420-490	390-460-530-600		460-530-600-710	670-770-880-1030	740-850-950-1060	
	External pressure	Pa	0						
	Sound level (Lo-M2-M1-Hi)	dB(A)	27-28-29-31	28-29-31-32		28-30-32-34	32-34-37-40	34-36-39-41	
	External finish (Panel)		White Munsell 6.4Y 8.9 / 0.4						
	Dimension	W : mm [inch]	840 (950) [33-1/16 (37-3/8)]						
	Unit (Panel)	D : mm [inch]	840 (950) [33-1/16 (37-3/8)]						
		H : mm [inch]	258 (35) [10-3/16 (1-3/8)]				298 (35) [11-3/4 (1-3/8)]		
	Weight	kg	22 (6)		23 (6)		25 (6)		
	Unit (Panel)	lbs	49 (13)		51 (13)		55 (13)		
	Field drain pipe size O.D.	mm [inch]	32 [1-1/4]						
	Remote Controller			Attached in Grille					
	Outdoor unit	MCA	A	13		18	25		26
MOCP		A	15	20	30	40			
Fan Motor		F.L.A.	0.35			0.75		0.4 + 0.4	
Fan Motor Output		W	40			75		86 + 86	
Compressor			SNB130FPBM1			TNB220FLDM			
		R.L.A	12			20			
		L.R.A.	14			17.5		27.5	
Air flow		CMM [CFM]	34 [1,200]		55 [1,940]			100 [3,530]	
Refrigerant Control			Linear Expansion Valve						
Defrost Method			-						
Sound level at cooling		dB(A)	46		48			51	
Sound level at heating		dB(A)	-		-			-	
External finish			Ivory Munsell 3Y 7.8/1.1						
Dimension		W : mm [inch]	800 [31-1/2]			950 [37-3/8]			
		D : mm [inch]	330+23 [13 + 7/8]			330+30 [13 + 1-3/16]			
		H : mm [inch]	600 [23-5/8]			943 [37-1/8]		1350 [53-1/8]	
Weight		kg [lbs]	41 [90]	44 [97]	74 [163]		120 [265]		
Refrigerant		Type		R410A					
		Charge	kg [lbs, oz]	1.3 [2 lbs 14 oz]	1.7 [3 lbs 12 oz]	2.7 [6 lbs]		4.5 [10 lbs]	
	Oil	L [oz]	0.65 (MEL56) [20]			0.87 (MEL56) [28]		1.4 (MEL56) [45]	
Refrigerant pipe size	Gas side O.D.	mm [inch]	12.7 [1/2]		15.88 [5/8]				
	Liquid side O.D.	mm [inch]	6.35 [1/4]		9.52 [3/8]				
Refrigerant pipe length	Height difference		Max. 30m [Max.100ft]						
	Length		Max. 30m [Max.100ft]		Max. 50 [Max.165ft]				
Refrigerant Piping			Not Supplied						
Connection Method			Flared						

NOTES : *1.Rating conditions (cooling)-Indoor : D.B. 26.7°C (80°F), W.B. 19.4°C (67°F)
(heating)-Indoor : D.B. 21.1°C (70°F), W.B. 15.6°C (60°F)

Outdoor : D.B. 35°C (95°F), W.B. 23.9°C (75°F)
Outdoor : D.B. 8.3°C (47°F), W.B. 6.1°C (43°F)

*2.Rating conditions (heating)-Indoor : D.B. 21.1°C (70°F), W.B. 15.6°C (60°F)

Outdoor : D.B. -8.3°C (17°F), W.B. -9.4°C (15°F)

Operating range

		Indoor intake air temperature		Outdoor intake air temperature	
Cooling	Maximum	D.B. 35°C (95°F), W.B. 21.7°C (71°F)		D.B. 46°C (115°F)	
	Minimum	D.B. 19.4°C (67°F), W.B. 13.9°C (57°F)		D.B. -18°C (0°F)*	
Heating	Maximum	D.B. 26.7°C (80°F), W.B. 19.4°C (67°F)		D.B. 21.1°C (70°F), W.B. 15°C (59°F)	
	Minimum	D.B. 21.1°C (70°F), W.B. 15.6°C (60°F)		D.B. -11.1°C (12°F), W.B. -12.2°C (10°F)	

* In case that the wind baffle is installed. (In case that the wind baffle is not installed, the minimum temperature will be -5°C (23°F)DB.)

Model name	Indoor unit Outdoor unit		PLA-A18BA PUZ-A18NHA PUZ-A18NHA-BS	PLA-A24BA PUZ-A24NHA PUZ-A24NHA-BS	PLA-A30BA PUZ-A30NHA PUZ-A30NHA-BS	PLA-A36BA PUZ-A36NHA PUZ-A36NHA-BS	PLA-A42BA PUZ-A42NHA PUZ-A42NHA-BS
Cooling	Max. Capacity	Btu/h	18,000	24,000	30,000	35,000	42,000
	Rated Capacity	Btu/h	18,000	24,000	30,000	35,000	42,000
	Min. Capacity	Btu/h	8,000	12,000	12,000	12,000	18,000
	Total Input	W	1940	2500	4100	4500	4600
	EER	Btu/h/W	9.3	9.6	7.3	7.8	9.1
	SEER	Btu/h/W	14.2	13.6	13.6	14.2	14.4
	Moisture Removal	Pints/h	3.0	5.1	7.2	8.1	10.9
	*1 SHF		0.81	0.76	0.73	0.74	0.71
Heating	Max. Capacity	Btu/h	20,000	28,000	34,000	38,000	48,000
	Rated Capacity	Btu/h	19,000	26,000	32,000	37,000	45,000
	Min. Capacity	Btu/h	8,000	12,000	12,000	12,000	18,000
	Total Input	W	1900	2570	3370	3300	4450
	COP	W/W	2.93	2.96	2.78	3.28	2.96
	*1 HSPF (I/V)	Btu/h/W	9.8 / 7.5	8.5 / 6.8	8.7 / 6.9	9.3 / 7.3	9.3 / 7.2
Heating at low ambient	Capacity	Btu/h	13,000	16,000	23,000	25,000	30,000
	Total Input	W	1590	2200	3050	3070	4300
	*2 COP	W/W	2.40	2.14	2.20	2.37	2.05
Power supply	Phase, Cycle, Voltage		1phase, 60Hz, 208/230V				
	Breaker size	A	15	25	30		
Voltage	Indoor - Outdoor S1-S2		AC 208 / 230V				
	Indoor - Outdoor S2-S3		DC24V				
	Indoor - Remote Controller		DC12V				
Indoor unit	MCA	A	1			2	
	MOCP	A	15				
	Fan Motor	F.L.A.	0.51			1.00	
	Fan Motor Output	W	50			120	
	Air flow DRY	CMM	12-14-16-18		14-16-18-21	20-23-26-30	22-25-28-31
	(Lo-M2-M1-Hi) WET	CMM	11-13-15-17		13-15-17-20	19-22-25-29	21-24-27-30
	Air flow DRY	CFM	420-490-570-640		490-570-640-740	710-810-920-1060	780-880-990-1090
	(Lo-M2-M1-Hi) WET	CFM	390-460-530-600		460-530-600-710	670-770-880-1030	740-850-950-1060
	External pressure	Pa	0				
	Sound level (Lo-M2-M1-Hi)	dB(A)	28-29-31-32		28-30-32-34	32-34-37-40	34-36-39-41
	External finish (Panel)		White Munsell 6.4Y 8.9 / 0.4				
	Dimension Unit (Panel)	W : mm [inch]	840 (950) [33-1/16 (37-3/8)]				
		D : mm [inch]	840 (950) [33-1/16 (37-3/8)]				
		H : mm [inch]	258 (35) [10-3/16 (1-3/8)]			298 (35) [11-3/4 (1-3/8)]	
	Weight	kg	22 (6)	23 (6)		25 (6)	
	Unit (Panel)	lbs	49 (13)	51 (13)		55 (13)	
Field drain pipe size O.D.		mm [inch]	32 [1-1/4]				
Remote Controller			Attached in Grille				
Outdoor unit	MCA	A	13	18	25		26
	MOCP	A	15	30	40		
	Fan Motor	F.L.A.	0.35	0.75			0.4 + 0.4
	Fan Motor Output	W	40	75			86 + 86
	Compressor		SNB130FPBM1	TNB220FLDM			ANV33FDDMT
		R.L.A.	12			20	
		L.R.A.	14			17.5	
	Air flow	CMM [CFM]	34 [1,200]	55 [1,940]			100 [3,530]
	Refrigerant Control		Linear Expansion Valve				
	Defrost Method		Reverse Cycle				
	Sound level at cooling	dB(A)	46	48			51
	Sound level at heating	dB(A)	47	50			55
	External finish		Ivory Munsell 3Y 7.8/1.1				
	Dimension	W : mm [inch]	800 [31-1/2]		950 [37-3/8]		
		D : mm [inch]	330+23 [13 + 7/8]		330+30 [13 + 1-3/16]		
		H : mm [inch]	600 [23-5/8]		943 [37-1/8]		1350 [53-1/8]
	Weight	kg [lbs]	45 [99]		75 [165]		121 [267]
Refrigerant	Type	R410A					
	Charge	kg [lbs, oz]	1.7 [3 lbs 12 oz]	2.7 [6 lbs]			4.5 [10 lbs]
	Oil	L [oz]	0.65 (MEL56) [20]	0.87 (MEL56) [28]			1.4 (MEL56) [45]
Refrigerant pipe size	Gas side O.D.	mm [inch]	12.7 [1/2]	15.88 [5/8]			
	Liquid side O.D.	mm [inch]	6.35 [1/4]	9.52 [3/8]			
Refrigerant pipe length	Height difference	Max. 30m [Max.100ft]					
	Length	Max. 30m [Max.100ft]		Max. 50 [Max.165ft]			
Refrigerant Piping			Not Supplied				
Connection Method			Flared				

NOTES : *1.Rating conditions (cooling)-Indoor : D.B. 26.7°C (80°F), W.B. 19.4°C (67°F) Outdoor : D.B. 35°C (95°F), W.B. 23.9°C (75°F)
(heating)-Indoor : D.B. 21.1°C (70°F), W.B. 15.6°C (60°F) Outdoor : D.B. 8.3°C (47°F), W.B. 6.1°C (43°F)
*2.Rating conditions (heating)-Indoor : D.B. 21.1°C (70°F), W.B. 15.6°C (60°F) Outdoor : D.B. -8.3°C (17°F), W.B. -9.4°C (15°F)

Operating range

		Indoor intake air temperature		Outdoor intake air temperature	
Cooling	Maximum	D.B. 35°C (95°F), W.B. 21.7°C (71°F)		D.B. 46°C (115°F)	
	Minimum	D.B. 19.4°C (67°F), W.B. 13.9°C (57°F)		D.B. -18°C (0°F)*	
Heating	Maximum	D.B. 26.7°C (80°F), W.B. 19.4°C (67°F)		D.B. 21.1°C (70°F), W.B. 15°C (59°F)	
	Minimum	D.B. 21.1°C (70°F), W.B. 15.6°C (60°F)		D.B. -11.1°C (12°F), W.B. -12.2°C (10°F)	

* In case that the wind baffle is installed. (In case that the wind baffle is not installed, the minimum temperature will be -5°C (23°F)DB.)

Model name	Indoor unit		PLA-A12AA		PLA-A18AA		PLA-A24AA		PLA-A30AA		PLA-A36AA		PLA-A42AA		
	Outdoor unit		PUY-A12NHA PUY-A12NHA-BS		PUY-A18NHA PUY-A18NHA-BS		PUY-A24NHA PUY-A24NHA-BS		PUY-A30NHA PUY-A30NHA-BS		PUY-A36NHA PUY-A36NHA-BS		PUY-A42NHA PUY-A42NHA-BS		
Cooling	Max. Capacity	Btu/h	12,000		18,000		24,000		30,000		35,000		42,000		
	Rated Capacity	Btu/h	12,000		18,000		24,000		30,000		35,000		42,000		
	Min. Capacity	Btu/h	6,000		8,000		12,000		12,000		12,000		18,000		
	Total Input	W	1260		1870		2500		4100		4510		4820		
	EER	Btu/h/W	9.5		9.6		9.6		7.3		7.8		8.7		
	SEER	Btu/h/W	13.0		13.2		13.4		13.0		13.1		13.1		
	Moisture Removal	Pints/h	1.8		1.5		5.0		8.1		7.2		10.9		
*1 SHF			0.83		0.89		0.77		0.70		0.77		0.71		
Heating	Max. Capacity	Btu/h	-		-		-		-		-		-		
	Rated Capacity	Btu/h	-		-		-		-		-		-		
	Min. Capacity	Btu/h	-		-		-		-		-		-		
	Total Input	W	-		-		-		-		-		-		
	COP	W/W	-		-		-		-		-		-		
	*1 HSPF (Ⅸ/V)	Btu/h/W	-		-		-		-		-		-		
Heating at low ambient	Capacity	Btu/h	-		-		-		-		-		-		
	Total Input	W	-		-		-		-		-		-		
	*2 COP	W/W	-		-		-		-		-		-		
Power supply	Phase, Cycle, Voltage		1phase , 60Hz , 208/230V												
	Breaker size	A	15				25		30						
Voltage	Indoor - Outdoor S1-S2		AC 208 / 230V												
	Indoor - Outdoor S2-S3		DC24V												
	Indoor - Remote Controller		DC12V												
Indoor unit	MCA	A	1						2						
	MOCP	A	15												
	Fan Motor	F.L.A.	0.79						1.25						
	Fan Motor Output	W	70						110						
	Air flow DRY	CMM	11-12-13-14				15-16-18-20				20-23-26-28				
	(Lo-M2-M1-Hi) WET	CMM	10-11-12-13				14-15-17-19				19-22-25-27				
	Air flow DRY	CFM	390-420-460-490				530-570-640-710				710-810-920-990				
	(Lo-M2-M1-Hi) WET	CFM	350-380-420-450				490-530-600-670				670-770-880-950				
	External pressure	Pa	0												
	Sound level (Lo-M2-M1-Hi)	dB(A)	27-28-29-31				28-30-32-34				33-36-39-41				
	External finish (Panel)		White Munsell 0.70Y 8.59/0.97												
	Dimension	W : mm [inch]	840 (950) [33-1/16 (37-3/8)]												
	Unit (Panel)	D : mm [inch]	840 (950) [33-1/16 (37-3/8)]												
		H : mm [inch]	258 (30) [10-3/16 (1-3/16)]						298 (30) [11-3/4(1-3/16)]						
	Weight	kg	22 (5)				24 (5)				30 (5)				
	Unit (Panel)	lbs	49 (11)				53 (11)				66 (11)				
	Field drain pipe size O.D.	mm [inch]	32 [1-1/4]												
Remote Controller			Attached in Grille												
Outdoor unit	MCA	A	13				18		25				26		
	MOCP	A	15				20		30		40				
	Fan Motor	F.L.A.	0.35				0.75				0.4 + 0.4				
	Fan Motor Output	W	40				75				86 + 86				
	Compressor	SNB130FPBM1						TNB220FLDM						ANV33FDDMT	
			R.L.A	12						20					
			L.R.A.	14						17.5					
	Air flow	CMM [CFM]	34 [1.200]				55 [1.940]				100 [3.530]				
	Refrigerant Control		Linear Expansion Valve												
	Defrost Method		-												
	Sound level at cooling	dB(A)	46				48				51				
	Sound level at heating	dB(A)	-				-				-				
	External finish		Ivory Munsell 3Y 7.8/1.1												
	Dimension	W : mm [inch]	800 [31-1/2]				950 [37-3/8]				1350 [53-1/8]				
		D : mm [inch]	330+23 [13 + 7/8]				330+30 [13 + 1-3/16]				120 [265]				
		H : mm [inch]	600 [23-5/8]				943 [37-1/8]				1350 [53-1/8]				
	Weight	kg [lbs]	41 [90]				44 [97]		74[163]				120 [265]		
	Refrigerant	Type	R410A												
		Charge	kg [lbs, oz]	1.3 [2 lbs 14 oz]		1.7 [3 lbs 12 oz]		2.7 [6 lbs]				4.5 [10 lbs]			
		Oil	L [oz]	0.65 (MEL56) [20]				0.87 (MEL56) [28]				1.4 (MEL56) [45]			
Refrigerant pipe size	Gas side O.D.	mm [inch]	12.7 [1/2]				15.88 [5/8]				9.52 [3/8]				
	Liquid side O.D.	mm [inch]	6.35 [1/4]												
Refrigerant pipe length	Height difference		Max. 30m [Max. 100ft]												
	Length		Max. 30m [Max. 100ft]				Max. 50m [Max. 165ft]								
Refrigerant Piping			Not Supplied												
Connection Method			Flared												

NOTES : *1.Rating conditions (cooling)-Indoor : D.B. 26.7°C (80°F), W.B. 19.4°C (67°F) Outdoor : D.B. 35°C (95°F), W.B. 23.9°C (75°F)
(heating)-Indoor : D.B. 21.1°C (70°F), W.B. 15.6°C (60°F) Outdoor : D.B. 8.3°C (47°F), W.B. 6.1°C (43°F)
*2.Rating conditions (heating)-Indoor : D.B. 21.1°C (70°F), W.B. 15.6°C (60°F) Outdoor : D.B. -8.3°C (17°F), W.B. -9.4°C (15°F)

Operating range

		Indoor intake air temperature		Outdoor intake air temperature	
Cooling	Maximum	D.B. 35°C (95°F), W.B. 21.7°C (71°F)		D.B. 46°C (115°F)	
	Minimum	D.B. 19.4°C (67°F), W.B. 13.9°C (57°F)		D.B. -18°C (0°F)*	
Heating	Maximum	D.B. 26.7°C (80°F), W.B. 19.4°C (67°F)		D.B. 21.1°C (70°F), W.B. 15°C (59°F)	
	Minimum	D.B. 21.1°C (70°F), W.B. 15.6°C (60°F)		D.B. -11.1°C (12°F), W.B. -12.2°C (10°F)	

* In case that the wind baffle is installed. (In case that the wind baffle is not installed, the minimum temperature will be -5°C (23°F)DB.)

Model name	Indoor unit Outdoor unit		PLA-A18AA PUZ-A18NHA PUZ-A18NHA-BS	PLA-A24AA PUZ-A24NHA PUZ-A24NHA-BS	PLA-A30AA PUZ-A30NHA PUZ-A30NHA-BS	PLA-A36AA PUZ-A36NHA PUZ-A36NHA-BS	PLA-A42AA PUZ-A42NHA PUZ-A42NHA-BS
Cooling	Max. Capacity	Btu/h	18,000	24,000	30,000	35,000	42,000
	Rated Capacity	Btu/h	18,000	24,000	30,000	35,000	42,000
	Min. Capacity	Btu/h	8,000	12,000	12,000	12,000	18,000
	Total Input	W	1870	2500	4100	4510	4820
	EER	Btu/h/W	9.6	9.6	7.3	7.8	8.7
	SEER	Btu/h/W	13.2	13.4	13.0	13.1	13.1
	Moisture Removal	Pints/h	1.5	5.0	8.1	7.2	10.9
Heating	*1 SHF		0.89	0.77	0.70	0.77	0.71
	Max. Capacity	Btu/h	20,000	28,000	34,000	38,000	48,000
	Rated Capacity	Btu/h	19,000	26,000	32,000	37,000	45,000
	Min. Capacity	Btu/h	8,000	12,000	12,000	12,000	18,000
	Total Input	W	1620	2570	3370	3490	5070
	COP	W/W	3.42	2.96	2.78	3.10	2.60
	*1 HSPF(Ⅳ/Ⅴ)	Btu/h/W	8.3 / 6.7	8.5 / 6.8	8.5 / 6.8	8.3 / 6.7	8.5 / 6.8
Heating at low ambient	Capacity	Btu/h	13,000	16,000	23,000	25,000	30,000
	Total Input	W	1400	2200	3050	3070	4300
	*2 COP	W/W	2.72	2.13	2.19	2.37	2.05
Power supply	Phase,Cycle,Voltage		1phase , 60Hz , 208/230V				
	Breaker size	A	15	25	30		
Voltage	Indoor - Outdoor S1-S2		AC 208 / 230V				
	Indoor - Outdoor S2-S3		DC24V				
	Indoor - Remote Controller		DC12V				
Indoor unit	MCA	A	1		2		
	MOCP	A	15				
	Fan Motor	F.L.A.	0.79		1.25		
	Fan Motor Output	W	70		110		
	Air flow DRY	CMM	15-16-18-20		20-23-26-28		
	(Lo-M2-M1-Hi) WET	CMM	14-15-17-19		19-22-25-27		
	Air flow DRY	CFM	530-570-640-710		710-810-920-990		
	(Lo-M2-M1-Hi) WET	CFM	490-530-600-670		670-770-880-950		
	External pressure	Pa	0				
	Sound level (Lo-M2-M1-Hi)	dB(A)	28-30-32-34		33-36-39-41		
	External finish (Panel)		White Munsell 0.70Y 8.59/0.97				
	Dimension	W : mm [inch]	840 (950) [33-1/16 (37-3/8)]				
	Unit (Panel)	D : mm [inch]	840 (950) [33-1/16 (37-3/8)]				
		H : mm [inch]	258 (30) [10-3/16 (1-3/16)]		298 (30) [11-3/4(1-3/16)]		
	Weight	kg	24 (5)		30 (5)		32 (5)
	Unit (Panel)	lbs	53 (11)		66 (11)		71 (11)
		Field drain pipe size O.D.	mm [inch]	32 [1-1/4]			
Remote Controller			Attached in Grille				
Outdoor unit	MCA	A	13	18	25		26
	MOCP	A	20	30	40		
	Fan Motor	F.L.A.	0.35	0.75		0.4 + 0.4	
	Fan Motor Output	W	40	75		86 + 86	
	Compressor		SNB130FPBM1	TNB220FLDM		ANV33FDDMT	
			R.L.A	12		20	
			L.R.A.	14		17.5	
	Air flow	CMM [CFM]	34 [1,200]	55 [1,940]		100 [3,530]	
	Refrigerant Control		Linear Expansion Valve				
	Defrost Method		Reverse Cycle				
	Sound level at cooling	dB(A)	46	48		51	
	Sound level at heating	dB(A)	47	50		55	
	External finish		Ivory Munsell 3Y 7.8/1.1				
	Dimension	W : mm [inch]	800 [31-1/2]	950 [37-3/8]			
		D : mm [inch]	330+23 [13 + 7/8]	330+30 [13 + 1-3/16]			
		H : mm [inch]	600 [23-5/8]	943 [37-1/8]		1350 [53-1/8]	
	Weight	kg [lbs]	45 [99]	75 [165]		121 [267]	
Refrigerant	Type		R410A				
	Charge	kg [lbs, oz]	1.7 [3 lbs 12 oz]	2.7 [6 lbs]		4.5 [10 lbs]	
	Oil	L [oz]	0.65 (MEL56) [20]	0.87 (MEL56) [28]		1.4 (MEL56) [45]	
Refrigerant pipe size	Gas side O.D.	mm [inch]	12.7 [1/2]	15.88 [5/8]			
	Liquid side O.D.	mm [inch]	6.35 [1/4]	9.52 [3/8]			
Refrigerant pipe length	Height difference		Max. 30m [Max.100ft]				
	Length		Max. 30m [Max.100ft]		Max. 50m [Max.165ft]		
Refrigerant Piping			Not Supplied				
Connection Method			Flared				

NOTES : *1.Rating conditions (cooling)-Indoor : D.B. 26.7°C (80°F), W.B. 19.4°C (67°F) Outdoor : D.B. 35°C (95°F), W.B. 23.9°C (75°F)
(heating)-Indoor : D.B. 21.1°C (70°F), W.B. 15.6°C (60°F) Outdoor : D.B. 8.3°C (47°F), W.B. 6.1°C (43°F)
*2.Rating conditions (heating)-Indoor : D.B. 21.1°C (70°F), W.B. 15.6°C (60°F) Outdoor : D.B. -8.3°C (17°F), W.B. -9.4°C (15°F)

Operating range

		Indoor intake air temperature		Outdoor intake air temperature	
Cooling	Maximum	D.B. 35°C (95°F), W.B. 21.7°C (71°F)		D.B. 46°C (115°F)	
	Minimum	D.B. 19.4°C (67°F), W.B. 13.9°C (57°F)		D.B. -18°C (0°F)*	
Heating	Maximum	D.B. 26.7°C (80°F), W.B. 19.4°C (67°F)		D.B. 21.1°C (70°F), W.B. 15°C (59°F)	
	Minimum	D.B. 21.1°C (70°F), W.B. 15.6°C (60°F)		D.B. -11.1°C (12°F), W.B. -12.2°C (10°F)	

* In case that the wind baffle is installed. (In case that the wind baffle is not installed, the minimum temperature will be -5°C (23°F)DB.)

2-2. WALL-MOUNTED TYPE

Model name	Indoor unit		PKA-A12GA PKA-A12GAL	PKA-A18GA PKA-A18GAL	PKA-A24FA PKA-A24FAL	PKA-A30FA PKA-A30FAL	PKA-A36FA PKA-A36FAL	
	Outdoor unit		PUY-A12NHA PUY-A12NHA-BS	PUY-A18NHA PUY-A18NHA-BS	PUY-A24NHA PUY-A24NHA-BS	PUY-A30NHA PUY-A30NHA-BS	PUY-A36NHA PUY-A36NHA-BS	
Cooling	Max. Capacity	Btu/h	12,000	18,000	24,000	30,000	34,200	
	Rated Capacity	Btu/h	12,000	18,000	24,000	30,000	34,200	
	Min. Capacity	Btu/h	6,000	8,000	12,000	12,000	12,000	
	Total Input	W	1210	2240	2650	4400	5030	
	EER	Btu/h/W	9.9	8.0	9.1	6.8	6.8	
	SEER	Btu/h/W	13.8	14.1	13.5	13.0	13.1	
	Moisture Removal	Pints/h	1.5	4.8	4.7	8.1	7.1	
	*1 SHF		0.86	0.70	0.78	0.70	0.77	
Heating	Max. Capacity	Btu/h	—	—	—	—	—	
	Rated Capacity	Btu/h	—	—	—	—	—	
	Min. Capacity	Btu/h	—	—	—	—	—	
	Total Input	W	—	—	—	—	—	
	COP	W/W	—	—	—	—	—	
	*1 HSPF (I/V)	Btu/h/W	—	—	—	—	—	
Heating at low ambient	Capacity	Btu/h	—	—	—	—	—	
	*2 Total Input	W	—	—	—	—	—	
	*2 COP	W/W	—	—	—	—	—	
Power supply	Phase, Cycle, Voltage		1phase , 60Hz , 208/230V					
	Breaker size	A	15		25	30		
Voltage	Indoor - Outdoor S1-S2		AC 208 / 230V					
	Indoor - Outdoor S2-S3		DC24V					
	Indoor - Remote Controller		DC12V : Wired type					
Indoor unit	MCA	A	1					
	MOCP	A	15					
	Fan Motor	F.L.A.	0.33		0.43		0.52	
	Fan Motor Output	W	30		45		70	
	Air flow DRY	CMM	9-10-11-12		15-20(Lo-Hi)		22-28(Lo-Hi)	
	(Lo-M2-M1-Hi) WET	CMM	8-9-10-11		14-18(Lo-Hi)		20-25(Lo-Hi)	
	Air flow DRY	CFM	320-350-390-425		530-705(Lo-Hi)		780-990(Lo-Hi)	
	(Lo-M2-M1-Hi) WET	CFM	290-315-350-380		480-635(Lo-Hi)		700-890(Lo-Hi)	
	External pressure	Pa	0					
	Sound level (Lo-M2-M1-Hi)	dB(A)	36-38-41-43		39-45(Lo-Hi)		46-49(Lo-Hi)	
	External finish (Panel)		White Munsell 0.70Y 8.59/0.97		White Munsell 3.4Y 7.7/0.8			
	Dimension	W : mm [inch]	990 [39]		1400 [55-1/8]		1680 [66-1/8]	
	Unit (Panel)	D : mm [inch]	235 [9-1/4]					
		H : mm [inch]	340 [13-3/8]					
	Weight	kg	16		24		28	
	Unit (Panel)	lbs	35		53		62	
		Field drain pipe size I.D.	mm [inch]	20 [13/16]				
	Remote Controller			Attached in Indoor Unit				
Outdoor unit	MCA	A	13		18	25		
	MOCP	A	15	20	30	40		
	Fan Motor	F.L.A.	0.35		0.75			
	Fan Motor Output	W	40		75			
	Compressor		SNB130FPBM1		TNB220FLDM			
		R.L.A.	12					
		L.R.A.	14		17.5			
	Air flow	CMM [CFM]	34 [1,200]		55 [1,940]			
	Refrigerant Control		Linear Expansion Valve					
	Defrost Method		—					
	Sound level at cooling	dB(A)	46		48			
	Sound level at heating	dB(A)	—		—			
	External finish		Ivory Munsell 3Y 7.8/1.1					
	Dimension	W : mm [inch]	800 [31-1/2]		950 [37-3/8]			
		D : mm [inch]	330+23 [13 + 7/8]		330+30 [13 + 1-3/16]			
		H : mm [inch]	600 [23-5/8]		943 [37-1/8]			
	Weight	kg [lbs]	41 [90]	44 [97]	74[163]			
	Refrigerant	Type		R410A				
Charge		kg [lbs, oz]	1.3 [2 lbs 14 oz]	1.7 [3 lbs 12 oz]	2.7 [6 lbs]			
Oil		L [oz]	0.65 (MEL56) [20]		0.87 (MEL56) [28]			
Refrigerant pipe size	Gas side O.D.	mm [inch]	12.7 [1/2]		15.88 [5/8]			
	Liquid side O.D.	mm [inch]	6.35 [1/4]		9.52 [3/8]			
Refrigerant pipe length	Height difference		Max. 30m [Max. 100ft]					
	Length		Max. 30m [Max. 100ft]		Max. 50m [Max. 165ft]			
Refrigerant Piping			Not Supplied					
Connection Method			Flared					

NOTES : *1.Rating conditions (cooling)-Indoor : D.B. 26.7°C (80°F), W.B. 19.4°C (67°F) Outdoor : D.B. 35°C (95°F), W.B. 23.9°C (75°F)
(heating)-Indoor : D.B. 21.1°C (70°F), W.B. 15.6°C (60°F) Outdoor : D.B. 8.3°C (47°F), W.B. 6.1°C (43°F)
*2.Rating conditions (heating)-Indoor : D.B. 21.1°C (70°F), W.B. 15.6°C (60°F) Outdoor : D.B. -8.3°C (17°F), W.B. -9.4°C (15°F)

Operating range

		Indoor intake air temperature		Outdoor intake air temperature	
Cooling	Maximum	D.B. 35°C (95°F), W.B. 21.7°C (71°F)		D.B. 46°C (115°F)	
	Minimum	D.B. 19.4°C (67°F), W.B. 13.9°C (57°F)		D.B. -18°C (0°F)*	
Heating	Maximum	D.B. 26.7°C (80°F), W.B. 19.4°C (67°F)		D.B. 21.1°C (70°F), W.B. 15°C (59°F)	
	Minimum	D.B. 21.1°C (70°F), W.B. 15.6°C (60°F)		D.B. -11.1°C (12°F), W.B. -12.2°C (10°F)	

* In case that the wind baffle is installed. (In case that the wind baffle is not installed, the minimum temperature will be -5°C (23°F)DB.)

Model name	Indoor unit		PKA-A18GA PKA-A18GAL	PKA-A24FA PKA-A24FAL	PKA-A30FA PKA-A30FAL	PKA-A36FA PKA-A36FAL
	Outdoor unit		PUZ-A18NHA PUZ-A18NHA-BS	PUZ-A24NHA PUZ-A24NHA-BS	PUZ-A30NHA PUZ-A30NHA-BS	PUZ-A36NHA PUZ-A36NHA-BS
Cooling	Max. Capacity	Btu/h	18,000	24,000	30,000	34,200
	Rated Capacity	Btu/h	18,000	24,000	30,000	34,200
	Min. Capacity	Btu/h	8,000	12,000	12,000	12,000
	Total Input	W	2240	2650	4400	5030
	EER	Btu/h/W	8.0	9.1	6.8	6.8
	SEER	Btu/h/W	14.1	13.5	13.0	13.1
	Moisture Removal	Pints/h	4.8	4.7	8.1	7.1
*1 SHF		0.70	0.78	0.70	0.77	
Heating	Max. Capacity	Btu/h	20,000	28,000	34,000	38,000
	Rated Capacity	Btu/h	19,000	26,000	32,000	37,000
	Min. Capacity	Btu/h	8,000	12,000	12,000	12,000
	Total Input	W	2130	2570	3660	3610
	COP	W/W	2.60	2.96	2.54	2.98
	*1 HSPF (I/V/V)	Btu/h/W	8.3 / 6.7	8.5 / 6.8	8.5 / 6.8	8.3 / 6.7
	Heating at low ambient	Capacity	Btu/h	13,000	16,000	23,000
Total Input		W	1670	2200	3050	3070
Power supply	*2 COP	W/W	2.28	2.13	2.19	2.37
	Phase, Cycle, Voltage		1phase , 60Hz , 208/230V			
Voltage	Breaker size	A	15	25	30	
	Indoor - Outdoor S1-S2		AC 208 / 230V			
	Indoor - Outdoor S2-S3		DC24V			
Indoor unit	Indoor - Remote Controller		DC12V : Wired type			
	MCA	A	1			
	MOCP	A	15			
	Fan Motor	F.L.A.	0.33	0.43	0.52	
	Fan Motor Output	W	30	45	70	
	Air flow DRY	CMM	9-10-11-12	15-20(Lo-Hi)	22-28(Lo-Hi)	
	(Lo-M2-M1-Hi) WET	CMM	8-9-10-11	14-18(Lo-Hi)	20-25(Lo-Hi)	
	Air flow DRY	CFM	320-350-390-425	530-705(Lo-Hi)	780-990(Lo-Hi)	
	(Lo-M2-M1-Hi) WET	CFM	290-315-350-380	480-635(Lo-Hi)	700-890(Lo-Hi)	
	External pressure	Pa	0			
	Sound level (Lo-M2-M1-Hi)	dB(A)	36-38-41-43	39-45	46-49	
	External finish (Panel)		White Munsell 0.70Y 8.59/0.97			
	Dimension	W : mm [inch]	990 [39]	1400 [55-1/8]	1680 [66-1/8]	
	Unit (Panel)	D : mm [inch]	235 [9-1/4]			
		H : mm [inch]	340 [13-3/8]			
		Weight	kg	16	24	28
	Unit (Panel)	lbs	35	53	62	
Field drain pipe size I.D.		mm [inch]	20 [13/16]			
Remote Controller			Attached in Indoor Unit			
Outdoor unit	MCA	A	13	18	25	
	MOCP	A	20	30	40	
	Fan Motor	F.L.A.	0.35	0.75		
	Fan Motor Output	W	40	75		
	Compressor		SNB130FPBM1	TNB220FLDM		
		R.L.A	12			
		L.R.A.	14	17.5		
	Air flow	CMM [CFM]	34 [1,200]	55 [1,940]		
	Refrigerant Control		Linear Expansion Valve			
	Defrost Method		Reverse Cycle			
	Sound level at cooling	dB(A)	46	48		
	Sound level at heating	dB(A)	47	50		
	External finish		Ivory Munsell 3Y 7.8/1.1			
	Dimension	W : mm [inch]	800 [31-1/2]	950 [37-3/8]		
		D : mm [inch]	330+23 [13 + 7/8]	330+30 [13 + 1-3/16]		
		H : mm [inch]	600 [23-5/8]	943 [37-1/8]		
	Weight	kg [lbs]	45 [99]	75 [165]		
Refrigerant	Type		R410A			
	Charge	kg [lbs, oz]	1.7 [3 lbs 12 oz]	2.7 [6 lbs]		
	Oil	L [oz]	0.65 (MEL56) [20]	0.87 (MEL56) [28]		
Refrigerant pipe size	Gas side O.D.	mm [inch]	12.7 [1/2]	15.88 [5/8]		
	Liquid side O.D.	mm [inch]	6.35 [1/4]	9.52 [3/8]		
Refrigerant pipe length	Height difference		Max. 30m [Max. 100ft]			
	Length		Max. 30m [Max. 100ft]	Max. 50m [Max. 165ft]		
Refrigerant Piping			Not Supplied			
Connection Method			Flared			

NOTES : *1.Rating conditions (cooling)-Indoor : D.B. 26.7°C (80°F), W.B. 19.4°C (67°F) Outdoor : D.B. 35°C (95°F), W.B. 23.9°C (75°F)
(heating)-Indoor : D.B. 21.1°C (70°F), W.B. 15.6°C (60°F) Outdoor : D.B. 8.3°C (47°F), W.B. 6.1°C (43°F)
*2.Rating conditions (heating)-Indoor : D.B. 21.1°C (70°F), W.B. 15.6°C (60°F) Outdoor : D.B. -8.3°C (17°F), W.B. -9.4°C (15°F)

Operating range

		Indoor intake air temperature		Outdoor intake air temperature	
Cooling	Maximum	D.B. 35°C (95°F), W.B. 21.7°C (71°F)		D.B. 46°C (115°F)	
	Minimum	D.B. 19.4°C (67°F), W.B. 13.9°C (57°F)		D.B. -18°C (0°F)*	
Heating	Maximum	D.B. 26.7°C (80°F), W.B. 19.4°C (67°F)		D.B. 21.1°C (70°F), W.B. 15°C (59°F)	
	Minimum	D.B. 21.1°C (70°F), W.B. 15.6°C (60°F)		D.B. -11.1°C (12°F), W.B. -12.2°C (10°F)	

* In case that the wind baffle is installed. (In case that the wind baffle is not installed, the minimum temperature will be -5°C (23°F)DB.)

2-3. CEILING-SUSPENDED TYPE

Model name	Indoor unit		PCA-A24GA	PCA-A30GA	PCA-A36GA	PCA-A42GA
	Outdoor unit		PUY-A24NHA PUY-A24NHA-BS	PUY-A30NHA PUY-A30NHA-BS	PUY-A36NHA PUY-A36NHA-BS	PUY-A42NHA PUY-A42NHA-BS
Cooling	Max. Capacity	Btu/h	24,000	30,000	35,000	42,000
	Rated Capacity	Btu/h	24,000	30,000	35,000	42,000
	Min. Capacity	Btu/h	12,000	12,000	12,000	18,000
	Total Input	W	2500	4100	4630	5070
	EER	Btu/h/W	9.6	7.3	7.6	8.3
	SEER	Btu/h/W	13.4	13.0	13.1	13.8
	Moisture Removal	Pints/h	5.4	8.3	8.2	11.7
Heating	*1 SHF		0.75	0.69	0.74	0.69
	Max. Capacity	Btu/h	-	-	-	-
	Rated Capacity	Btu/h	-	-	-	-
	Min. Capacity	Btu/h	-	-	-	-
	Total Input	W	-	-	-	-
	COP	W/W	-	-	-	-
	*1 HSPF (I/V)	Btu/h/W	-	-	-	-
Heating at low ambient	Capacity	Btu/h	-	-	-	-
	Total Input	W	-	-	-	-
	*2 COP	W/W	-	-	-	-
Power supply	Phase, Cycle, Voltage		1phase, 60Hz, 208/230V			
	Breaker size	A	25		30	
Voltage	Indoor - Outdoor S1-S2		AC 208 / 230V			
	Indoor - Outdoor S2-S3		DC24V			
	Indoor - Remote Controller		DC12V			
Indoor unit	MCA	A	1			
	MOCP	A	15			
	Fan Motor	F.L.A.	0.53		0.69	
	Fan Motor Output	W	70		90	
	Air flow DRY	CMM	14-15-16-18		20-21-23-25	
	(Lo-M2-M1-Hi) WET	CMM	13-14-15-16		18-19-21-22	
	Air flow DRY	CFM	495-530-565-635		705-740-810-880	
	(Lo-M2-M1-Hi) WET	CFM	445-480-510-570		635-670-730-790	
	External pressure	Pa	0			
	Sound level (Lo-M2-M1-Hi)	dB(A)	37-39-41-43		40-41-43-45	
	External finish (Panel)		White Munsell 0.70Y 8.59/0.97			
	Dimension	W : mm [inch]	1310 [51-9/16]			
	Unit (Panel)	D : mm [inch]	680 [26-3/4]			
		H : mm [inch]	210 [8-9/32]		270 [10-5/8]	
	Weight	kg	34		37	
	Unit (Panel)	lbs	75		82	
	Field drain pipe size O.D.	mm [inch]	26 [1-1/32]			
Remote Controller			Attached in Indoor Unit			
Outdoor unit	MCA	A	18	25		26
	MOCP	A	30	40		
	Fan Motor	F.L.A.		0.75		0.4 + 0.4
	Fan Motor Output	W		75		86 + 86
	Compressor		TNB220FLDM			ANV33FDDMT
		R.L.A.		12		20
		L.R.A.	14	17.5		27.5
	Air flow	CMM [CFM]		55 [1.940]		100 [3.530]
	Refrigerant Control		Linear Expansion Valve			
	Defrost Method		-			
	Sound level at cooling	dB(A)		48		51
	Sound level at heating	dB(A)		-		-
	External finish		Ivory Munsell 3Y 7.8/1.1			
	Dimension	W : mm [inch]	950 [37-3/8]			
		D : mm [inch]	330+30 [13 + 1-3/16]			
		H : mm [inch]	943 [37-1/8]		1350 [53-1/8]	
	Weight	kg [lbs]	74[163]		120 [265]	
Refrigerant	Type		R410A			
	Charge	kg [lbs]	2.7 [6 lbs]		4.5 [10 lbs]	
	Oil	L [oz]	0.87 (MEL56) [28]		1.4 (MEL56) [45]	
Refrigerant pipe size	Gas side O.D.	mm [inch]	15.88 [5/8]			
	Liquid side O.D.	mm [inch]	9.52 [3/8]			
Refrigerant pipe length	Height difference		Max. 30m [Max. 100ft]			
	Length		Max. 50m [Max. 165ft]			
Refrigerant Piping			Not Supplied			
Connection Method			Flared			

NOTES : *1.Rating conditions (cooling)-Indoor : D.B. 26.7°C (80°F), W.B. 19.4°C (67°F)
(heating)-Indoor : D.B. 21.1°C (70°F), W.B. 15.6°C (60°F)

Outdoor : D.B. 35°C (95°F), W.B. 23.9°C (75°F)
Outdoor : D.B. 8.3°C (47°F), W.B. 6.1°C (43°F)
Outdoor : D.B. -8.3°C (17°F), W.B. -9.4°C (15°F)

*2.Rating conditions (heating)-Indoor : D.B. 21.1°C (70°F), W.B. 15.6°C (60°F)

Operating range

		Indoor intake air temperature		Outdoor intake air temperature	
Cooling	Maximum	D.B. 35°C (95°F), W.B. 21.7°C (71°F)		D.B. 46°C (115°F)	
	Minimum	D.B. 19.4°C (67°F), W.B. 13.9°C (57°F)		D.B. -18°C (0°F)*	
Heating	Maximum	D.B. 26.7°C (80°F), W.B. 19.4°C (67°F)		D.B. 21.1°C (70°F), W.B. 15°C (59°F)	
	Minimum	D.B. 21.1°C (70°F), W.B. 15.6°C (60°F)		D.B. -11.1°C (12°F), W.B. -12.2°C (10°F)	

* In case that the wind baffle is installed. (In case that the wind baffle is not installed, the minimum temperature will be -5°C (23°F)DB.)

Model name	Indoor unit Outdoor unit		PCA-A24GA PUZ-A24NHA PUZ-A24NHA-BS	PCA-A30GA PUZ-A30NHA PUZ-A30NHA-BS	PCA-A36GA PUZ-A36NHA PUZ-A36NHA-BS	PCA-A42GA PUZ-A42NHA PUZ-A42NHA-BS	
Cooling	Max. Capacity	Btu/h	24,000	30,000	35,000	42,000	
	Rated Capacity	Btu/h	24,000	30,000	35,000	42,000	
	Min. Capacity	Btu/h	12,000	12,000	12,000	18,000	
	Total Input	W	2500	4100	4630	5070	
	EER	Btu/h/W	9.6	7.3	7.6	8.3	
	SEER	Btu/h/W	13.4	13.0	13.1	13.8	
	Moisture Removal	Pints/h	5.4	8.3	8.2	11.7	
Heating	*1 SHF		0.75	0.69	0.74	0.69	
	Max. Capacity	Btu/h	28,000	34,000	38,000	48,000	
	Rated Capacity	Btu/h	26,000	32,000	37,000	45,000	
	Min. Capacity	Btu/h	12,000	12,000	12,000	18,000	
	Total Input	W	2570	3390	3490	4850	
	COP	W/W	2.96	2.75	3.10	2.72	
	*1 HSPF (I/V/V)	Btu/h/W	8.5 / 6.8	8.5 / 6.8	8.3 / 6.7	8.5 / 6.8	
Heating at low ambient	Capacity	Btu/h	16,000	23,000	25,000	30,000	
	Total Input	W	2200	3050	3070	4300	
	*2 COP	W/W	2.13	2.19	2.37	2.05	
Power supply	Phase, Cycle, Voltage		1phase , 60Hz , 208/230V				
	Breaker size	A	25	30			
Voltage	Indoor - Outdoor S1-S2		AC 208 / 230V				
	Indoor - Outdoor S2-S3		DC24V				
	Indoor - Remote Controller		DC12V				
Indoor unit	MCA	A	1				
	MOCP	A	15				
	Fan Motor	F.L.A.	0.53		0.69		
	Fan Motor Output	W	70		90		
	Air flow DRY	CMM	14-15-16-18		20-21-23-25		
	(Lo-M2-M1-Hi) WET	CMM	13-14-15-16		18-19-21-22		
	Air flow DRY	CFM	495-530-565-635		705-740-810-880		
	(Lo-M2-M1-Hi) WET	CFM	445-480-510-570		635-670-730-790		
	External pressure	Pa	0				
	Sound level (Lo-M2-M1-Hi)	dB(A)	37-39-41-43		40-41-43-45		
	External finish (Panel)		White Munsell 0.70Y 8.59/0.97				
	Dimension	W : mm [inch]	1310 [51-9/16]				
	Unit (Panel)	D : mm [inch]	680 [26-3/4]				
		H : mm [inch]	210 [8-9/32]		270 [10-5/8]		
	Weight	kg	34		37		
	Unit (Panel)	lbs	75		82		
		Field drain pipe size O.D.	mm [inch]	26 [1-1/32]			
Remote Controller			Attached in Indoor Unit				
Outdoor unit	MCA	A	18	25	26		
	MOCP	A	30	40			
	Fan Motor	F.L.A.	0.75			0.4 + 0.4	
	Fan Motor Output	W	75			86 + 86	
	Compressor		TNB220FLDM			ANV33FDDMT	
		R.L.A.	12			20	
		L.R.A.	14	17.5		27.5	
	Air flow	CMM [CFM]	55 [1,940]			100 [3,530]	
	Refrigerant Control		Linear Expansion Valve				
	Defrost Method		Reverse Cycle				
	Sound level at cooling	dB(A)	48			51	
	Sound level at heating	dB(A)	50			55	
	External finish		Ivory Munsell 3Y 7.8/1.1				
	Dimension	W : mm [inch]	950 [37-3/8]				
		D : mm [inch]	330+30 [13 + 1-3/16]				
		H : mm [inch]	943 [37-1/8]			1350 [53-1/8]	
	Weight	kg [lbs]	75 [165]			121 [267]	
	Refrigerant	Type		R410A			
		Charge	kg [lbs]	2.7 [6 lbs]			4.5 [10 lbs]
		Oil	L [oz]	0.87 (MEL56) [28]			1.4 (MEL56) [45]
Refrigerant pipe size	Gas side O.D.	mm [inch]	15.88 [5/8]				
	Liquid side O.D.	mm [inch]	9.52 [3/8]				
Refrigerant pipe length	Height difference		Max. 30m [Max. 100ft]				
	Length		Max. 50m [Max. 165ft]				
Refrigerant Piping			Not Supplied				
Connection Method			Flared				

NOTES : *1.Rating conditions (cooling)-Indoor : D.B. 26.7°C (80°F), W.B. 19.4°C (67°F) Outdoor : D.B. 35°C (95°F), W.B. 23.9°C (75°F)
 (heating)-Indoor : D.B. 21.1°C (70°F), W.B. 15.6°C (60°F) Outdoor : D.B. 8.3°C (47°F), W.B. 6.1°C (43°F)
 *2.Rating conditions (heating)-Indoor : D.B. 21.1°C (70°F), W.B. 15.6°C (60°F) Outdoor : D.B. -8.3°C (17°F), W.B. -9.4°C (15°F)

Operating range

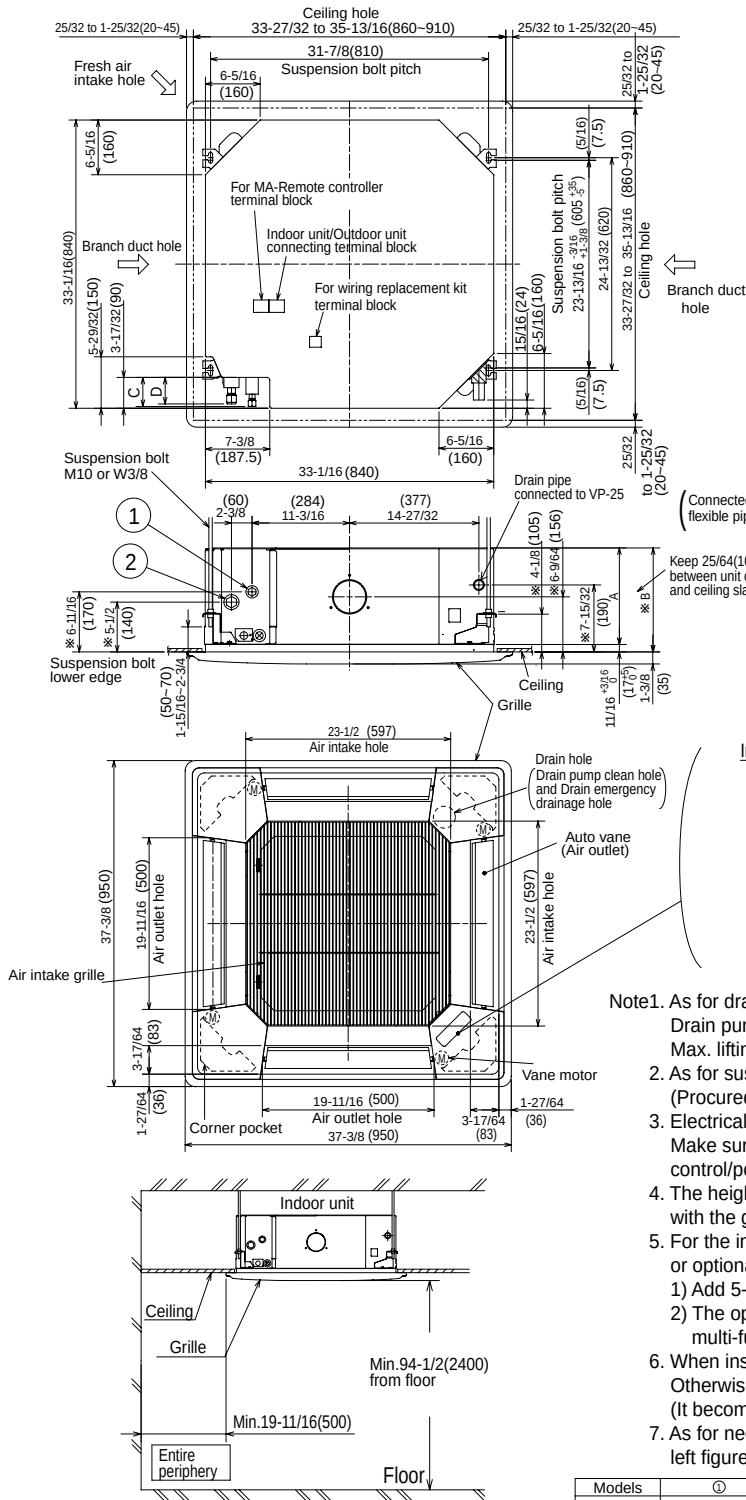
		Indoor intake air temperature		Outdoor intake air temperature	
Cooling	Maximum	D.B. 35°C (95°F), W.B. 21.7°C (71°F)		D.B. 46°C (115°F)	
	Minimum	D.B. 19.4°C (67°F), W.B. 13.9°C (57°F)		D.B. -18°C (0°F)*	
Heating	Maximum	D.B. 26.7°C (80°F), W.B. 19.4°C (67°F)		D.B. 21.1°C (70°F), W.B. 15°C (59°F)	
	Minimum	D.B. 21.1°C (70°F), W.B. 15.6°C (60°F)		D.B. -11.1°C (12°F), W.B. -12.2°C (10°F)	

* In case that the wind baffle is installed. (In case that the wind baffle is not installed, the minimum temperature will be -5°C (23°F)DB.)

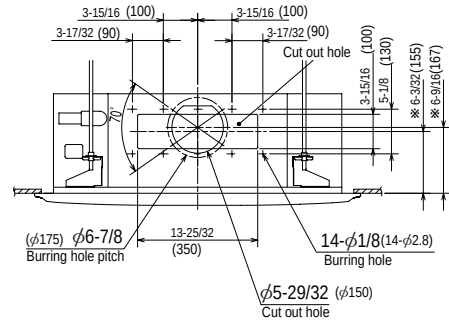
INDOOR UNIT

Unit : inch(mm)

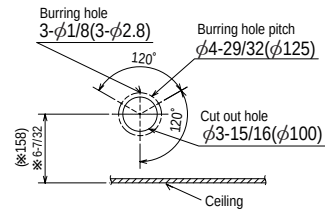
PLA-A12BA PLA-A18BA PLA-A24BA PLA-A30BA PLA-A36BA PLA-A42BA



Detail connecting of branch duct(Both aspects)



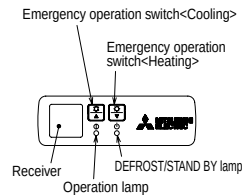
Detail drawing of fresh air intake hole



In case of standard grille



In case of wireless remote controller



Note1. As for drain pipe, please use VP-25(O.D. φ32 PVC TUBE).

Drain pump is included.

Max. lifting height is 70-7/18(850mm) from the ceiling.

2. As for suspension bolt, please use M10 or W3/8.
(Procured at local site)3. Electrical box may be removed for the service purpose.
Make sure to slack the electrical wire little bit for control/power wires connection.

4. The height of the indoor unit is able to be adjusted with the grille attached.

5. For the installation of the optional high efficiency filter or optional multi-functional casement.

1) Add 5-5/16(135mm) to the dimensions * marked on the figure.

2) The optional high efficiency filter becomes optional multi-functional casement and concomitant use.

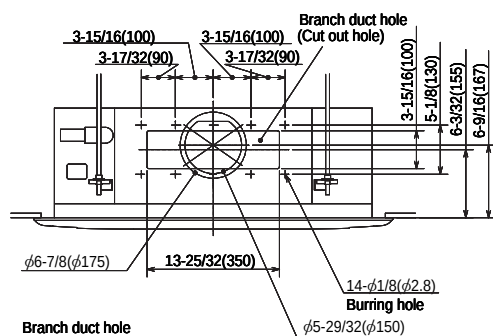
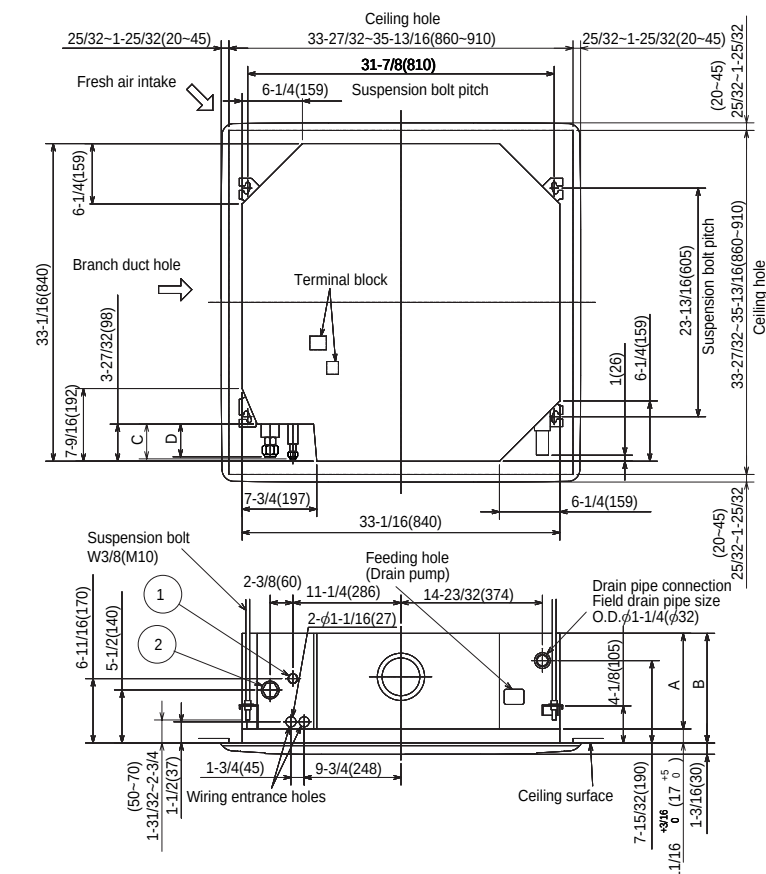
6. When installing the branch ducts, be sure to insulate adequately. Otherwise condensation and dripping may occur.
(It becomes the cause of dew drops/water dew.)

7. As for necessary installation/service space, please refer to the left figure.

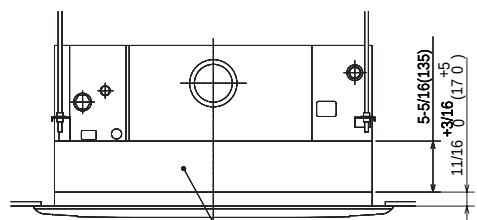
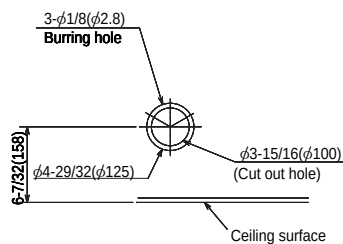
Models	①	②	A	B	C	D
PLA-A12BA PLA-A18BA	Refrigerant pipe ...φ6.35mm Flared connection ...1/4	Refrigerant pipe ...φ12.7mm Flared connection ...1/2	9-1/2 (241)	10-3/16 (258)	3-5/32 (80)	2-29/32 (74)
PLA-A24BA PLA-A30BA PLA-A36BA PLA-A42BA	Refrigerant pipe ...φ9.52mm Flared connection ...3/8	Refrigerant pipe ...φ15.88mm Flared connection ...5/8	11-1/16 (281)	11-3/4 (298)	3-11/32 (85)	3-1/32 (77)

PLA-A12AA PLA-A18AA PLA-A24AA PLA-A30AA PLA-A36AA PLA-A42AA

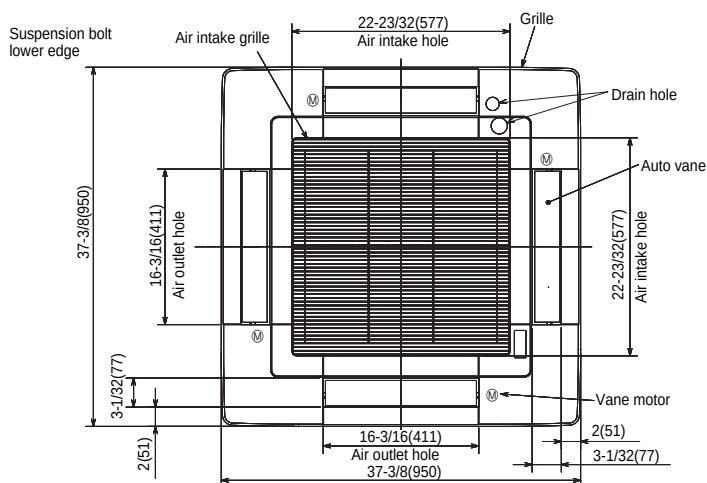
Unit : inch(mm)



Detail drawing of fresh air intake



High efficiency filter & Fresh air intake casement(option)

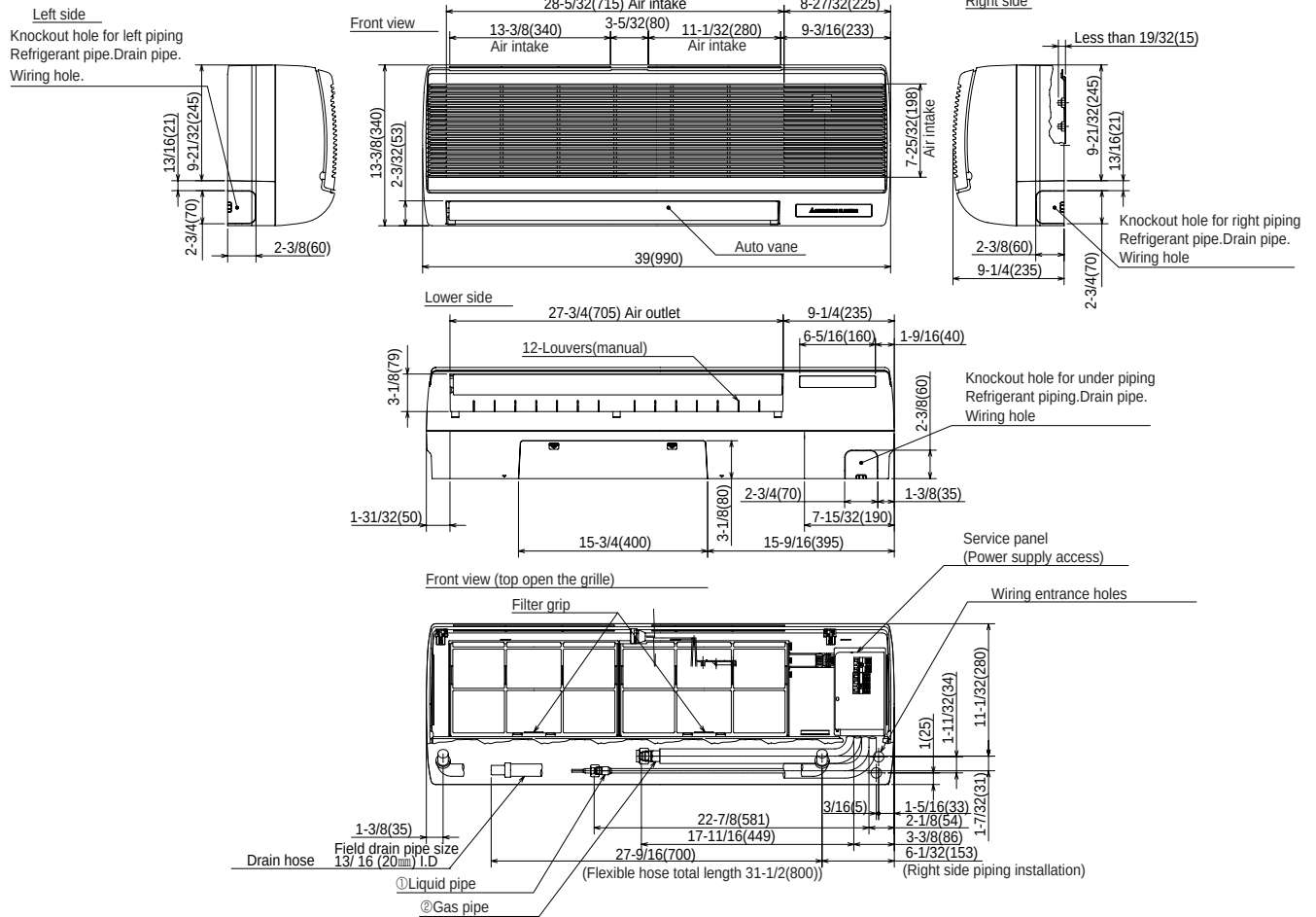


Models	A	B	C	D
PLA-A12/18/24/30AA	9-1/2 (241)	10-3/16 (258)	3-1/2 (89)	3-5/32 (80)
PLA-A36AA	11-1/16 (281)	11-3/4 (298)		3-5/16 (84)
PLA-A42AA				

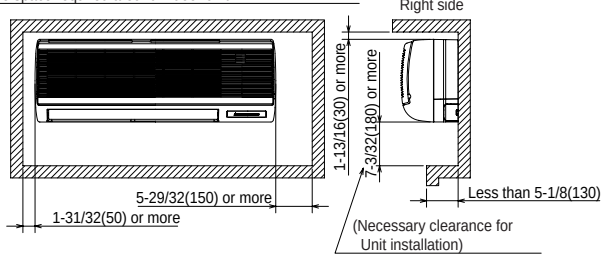
MODEL	12/18	24/30/36/42
①Liquid pipe	1/4	3/8
②Gas pipe	1/2	5/8

PKA-A12GA PKA-A12GAL PKA-A18GA PKA-A18GAL

Unit : inch(mm)



Service space required around indoor unit



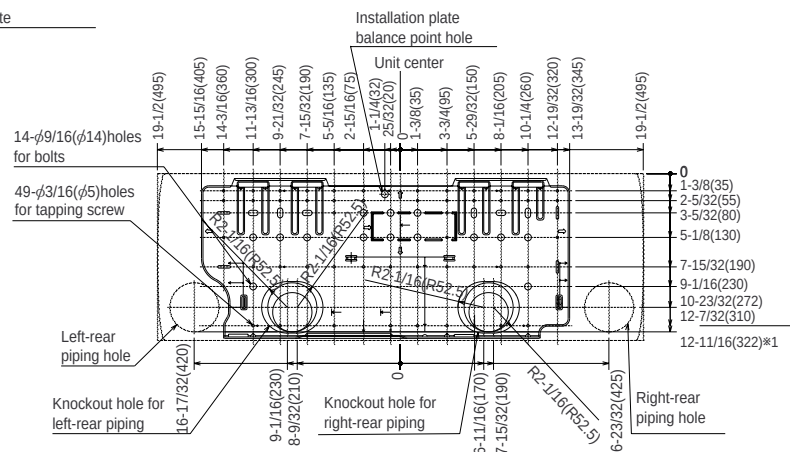
MODEL	12/18
①Liquid pipe	1/4
②Gas pipe	1/2

Sleeve *1	Through hole
ø2-15/16(ø75)	ø2-15/16~ø3-5/32 (ø75~ø80)

*1 Sleeves are available on the market.

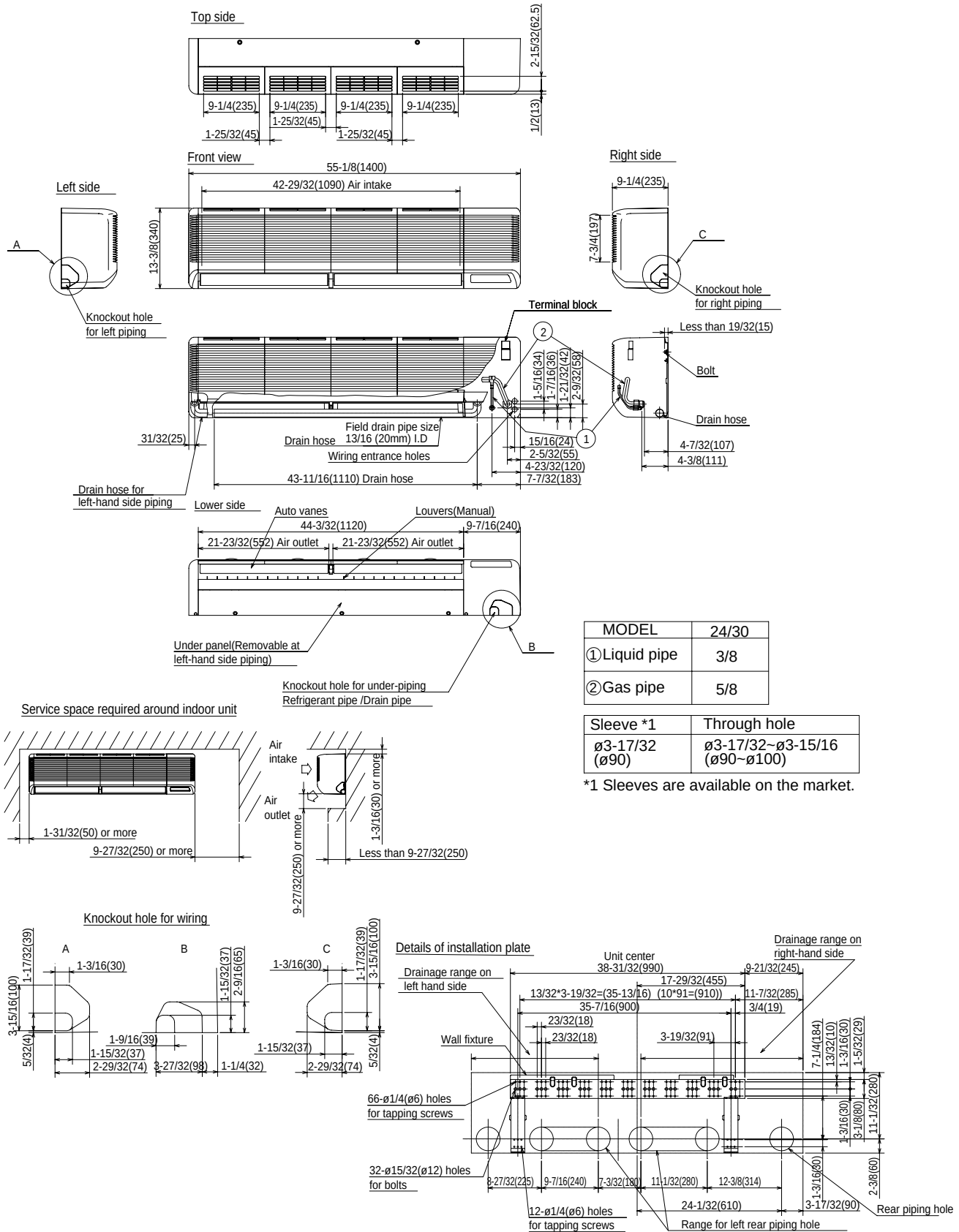
*2 This size shows the lower end of through hole.

Details of installation plate



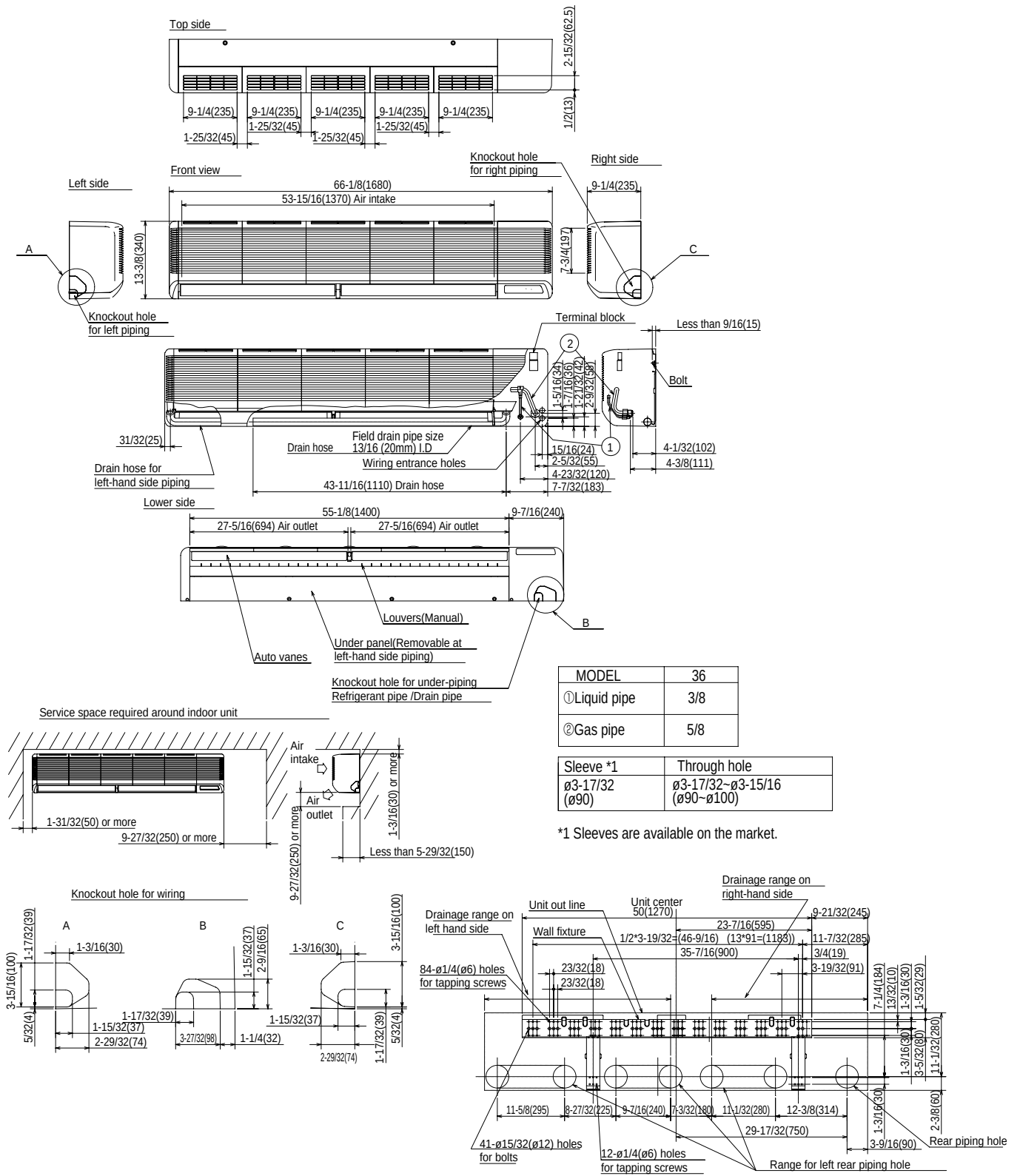
PKA-A24FA PKA-A24FAL PKA-A30FA PKA-A30FAL

Unit : inch(mm)



PKA-A36FA PKA-A36FAL

Unit : inch(mm)



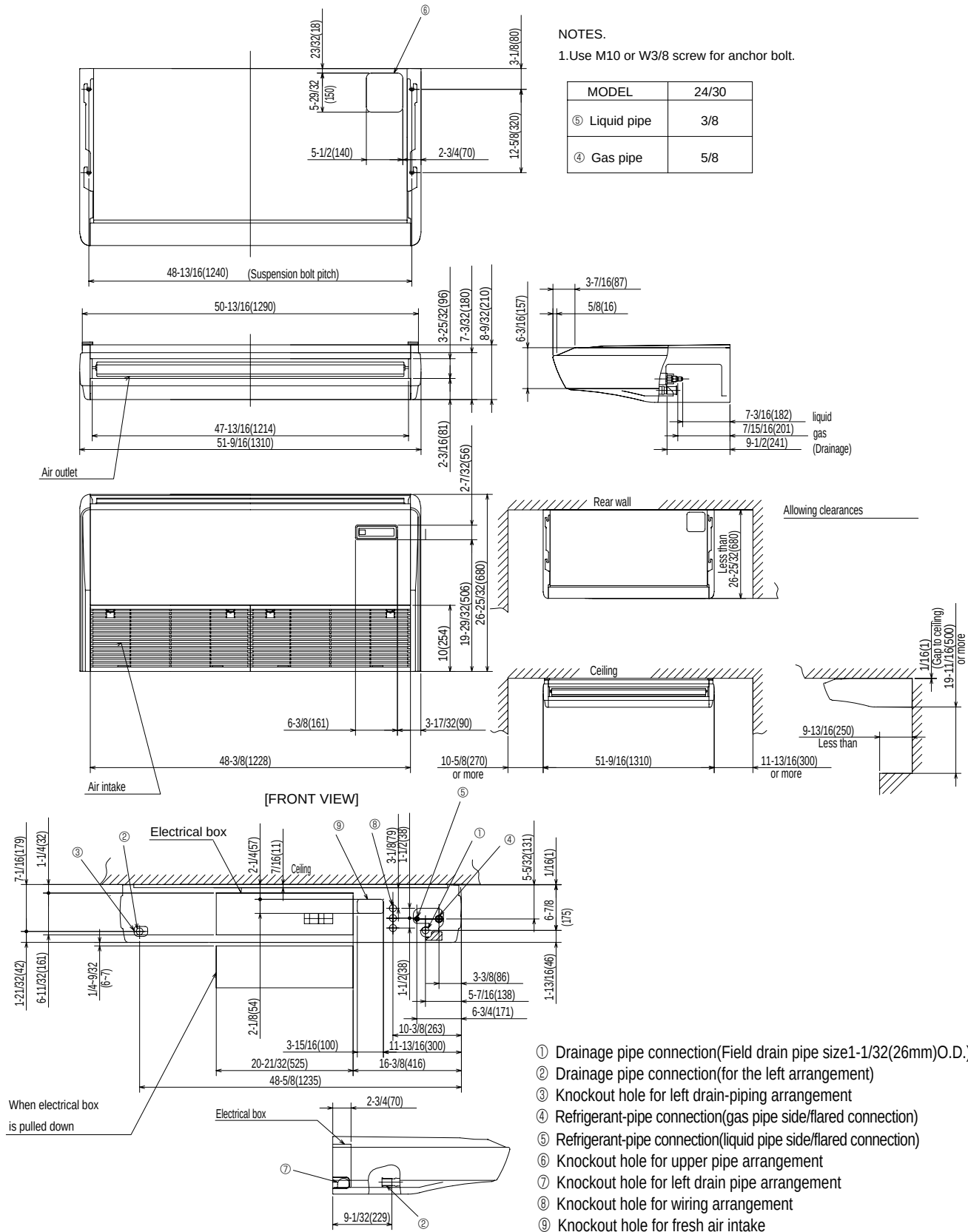
PCA-A24GA PCA-A30GA

Unit : inch(mm)

NOTES.

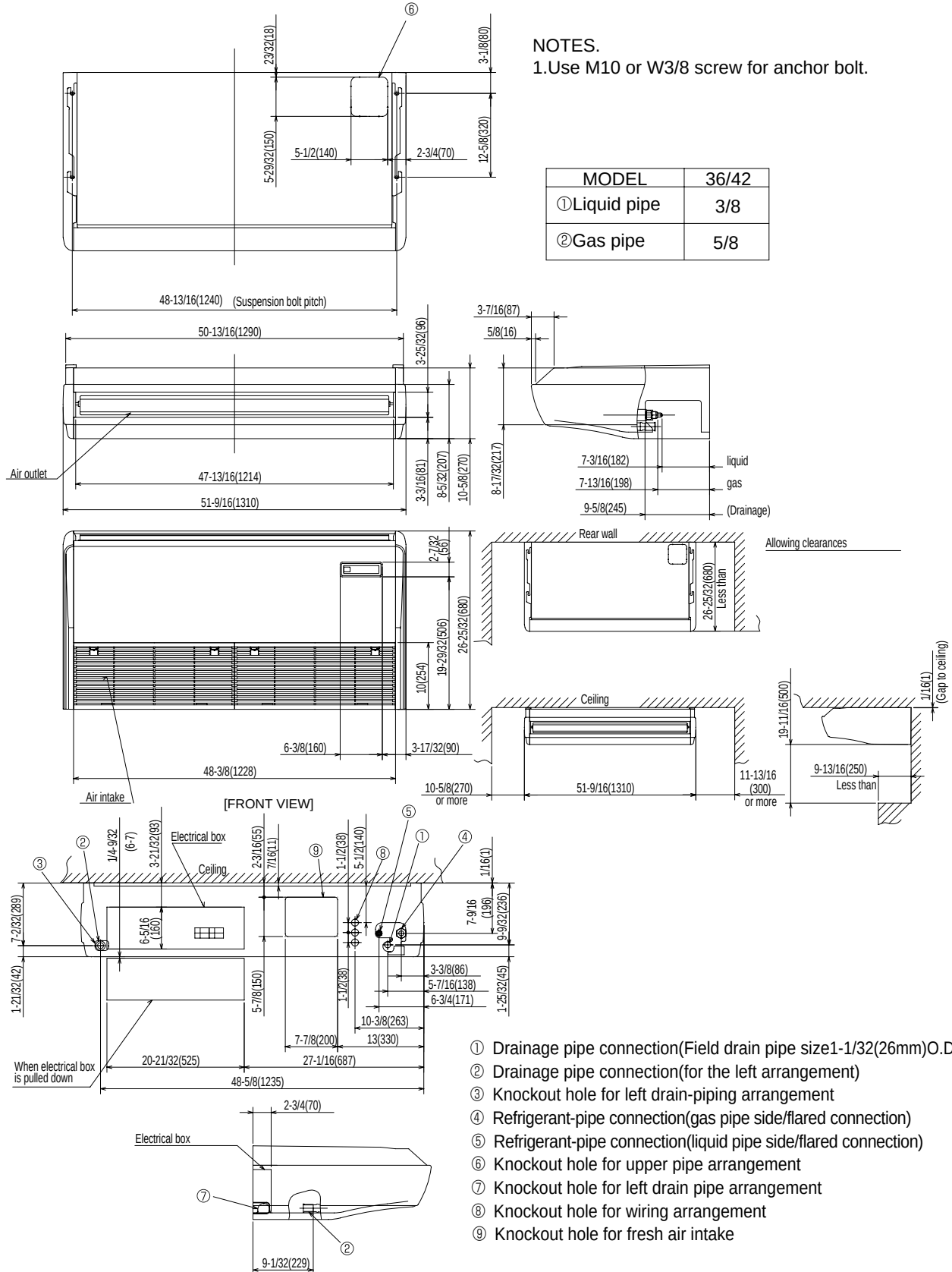
1. Use M10 or W3/8 screw for anchor bolt.

MODEL	24/30
⑤ Liquid pipe	3/8
④ Gas pipe	5/8



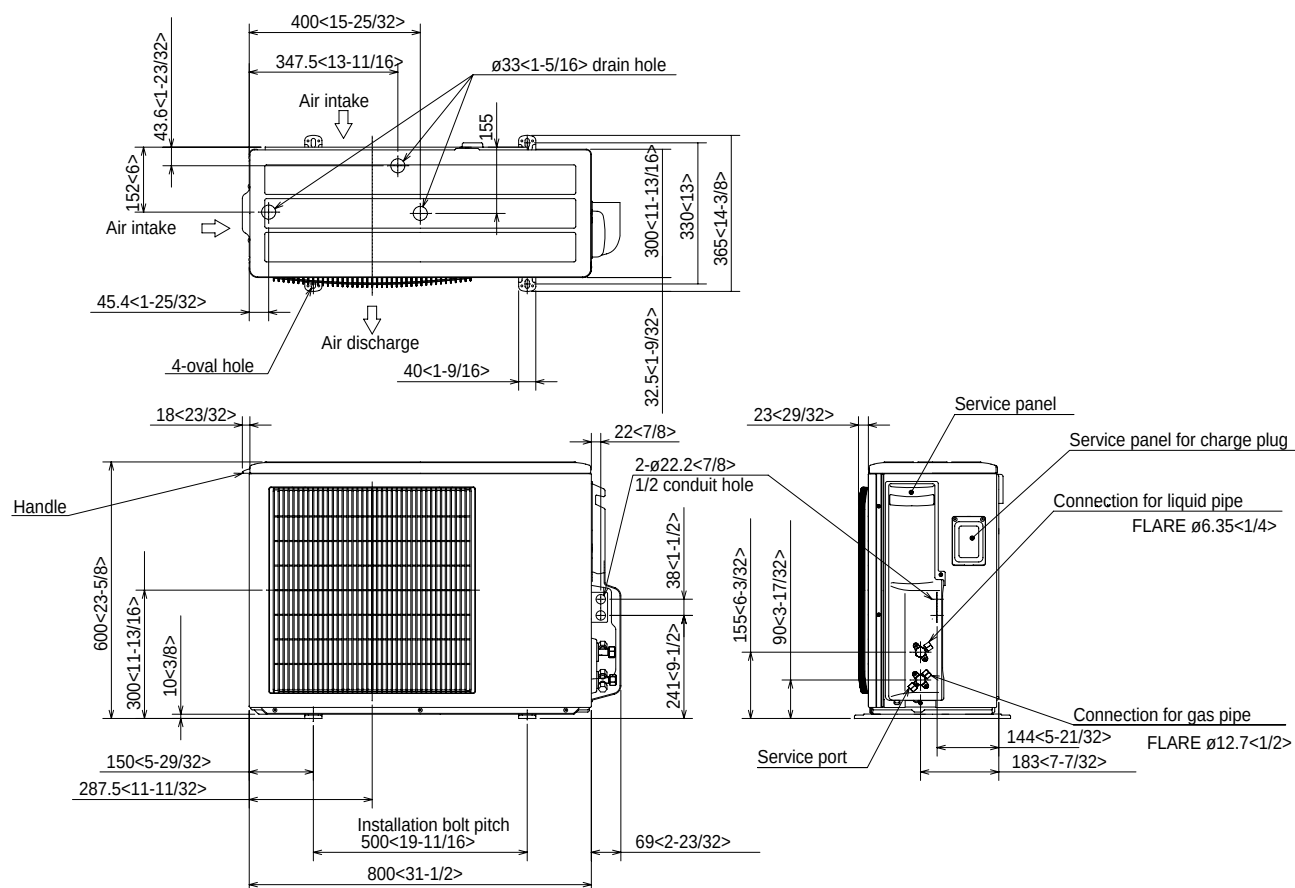
PCA-A36GA PCA-A42GA

Unit : inch(mm)

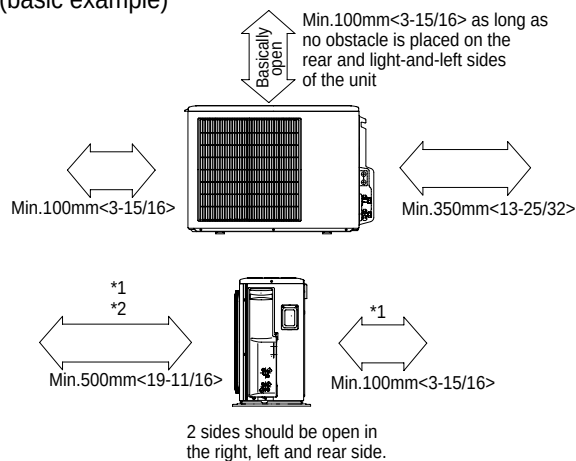


PUY-A12NHA(-BS) PUY-A18NHA(-BS) PUZ-A12NHA(-BS)

Unit : mm<inch>

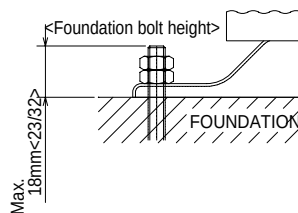


Free space around the outdoor unit (basic example)



FOUNDATION BOLTS

Please secure the unit firmly with 4 foundation M10<W3/8> bolts. (Bolts, washers and nut must be purchased locally.)



PIPING-WIRING DIRECTION

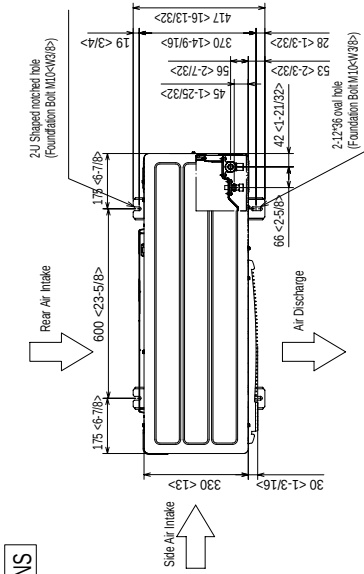
Piping and wiring connection can be made from the rear direction only.

Minimum installation space for outdoor unit

- *1 In the place where short cycle tends to occur, cooling and heating capacity and power consumption might get lowered 10%.
Air outlet guide (optional PAC-SG58SG-E) will help them improve.
- *2 If air discharges to the wall, the surface might get stained.

PUZ-A24NHA(-BS) PUY-A24NHA(-BS)
 PUZ-A30NHA(-BS) PUY-A30NHA(-BS)
 PUZ-A36NHA(-BS) PUY-A36NHA(-BS)

Unit : mm<inch>



4 PIPING-WIRING DIRECTIONS

Piping and wiring connections can be made from 4 directions: front, right, rear and below.

3 FOUNDATION BOLTS

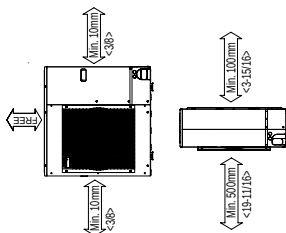
Please secure the unit firmly with 4 foundation (M10xW3/8) bolts. (Bolts and washers must be purchased locally.)

2 SERVICE SPACE

Dimensions of space needed for service access are shown in the below diagram.

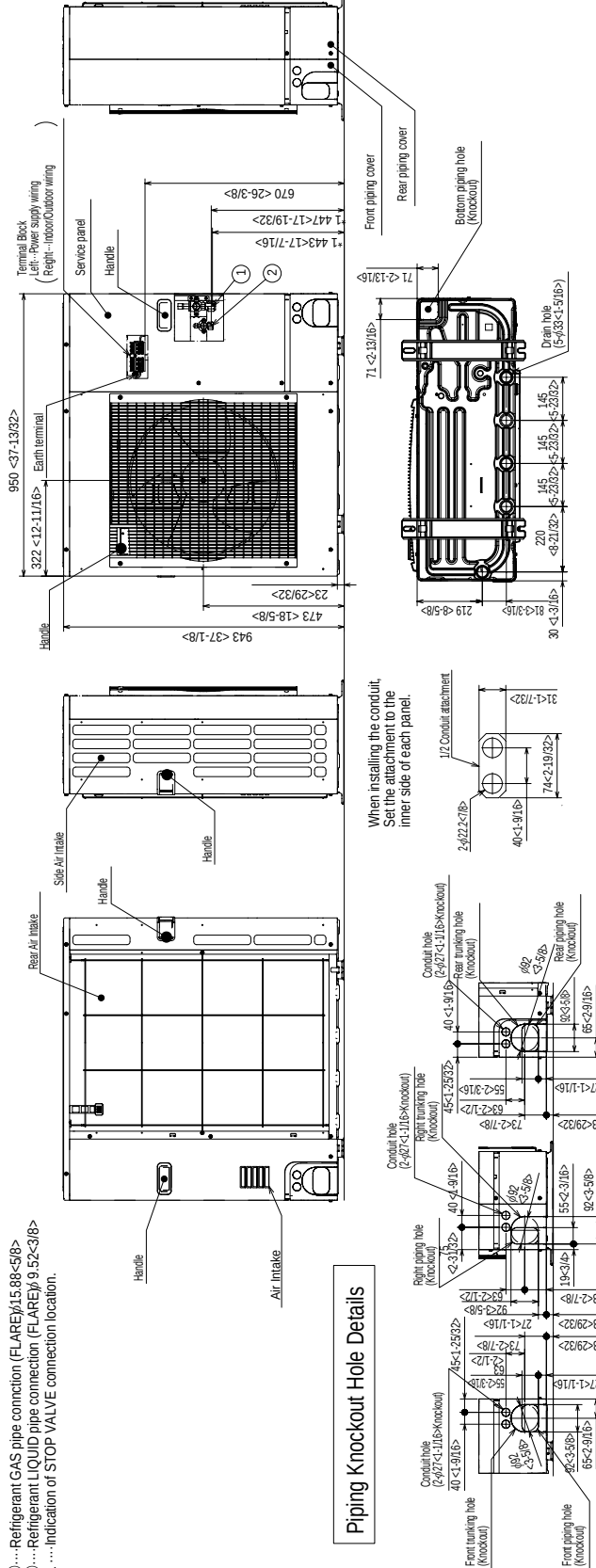
1 FREE SPACE (Around the unit)

The diagram below shows a basic example. Explanation of particular details are given in the installation manuals etc.



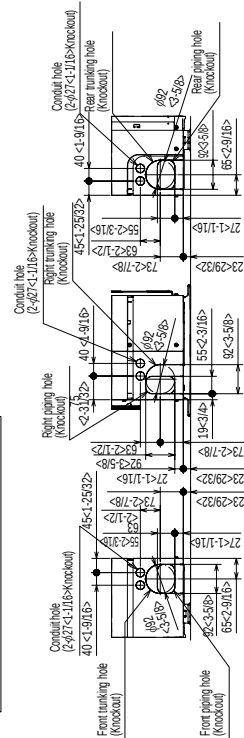
Example of Notes

- ①.....Refrigerant GAS pipe connection (FLARE)φ15.88<5/8>
- ②.....Refrigerant LIQUID pipe connection (FLARE)φ9.52<3/8>
- *1.....Indication of STOP VALVE connection location.



Piping Knockout Hole Details

When installing the conduit, Set the attachment to the inner side of each panel.

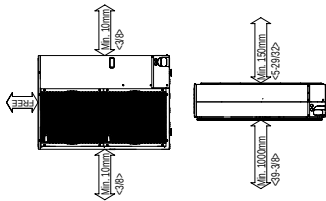


PUZ-A42NHA(-BS) PUY-A42NHA(-BS)

Unit : mm<inch>

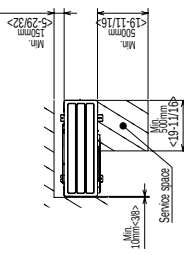
1 FREE SPACE (Around the unit)

The diagram below shows a basic example.
Explanation of particular details are given in the installation manuals etc.



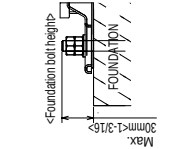
2 SERVICE SPACE

Dimensions of space needed for service access are shown in the below diagram.



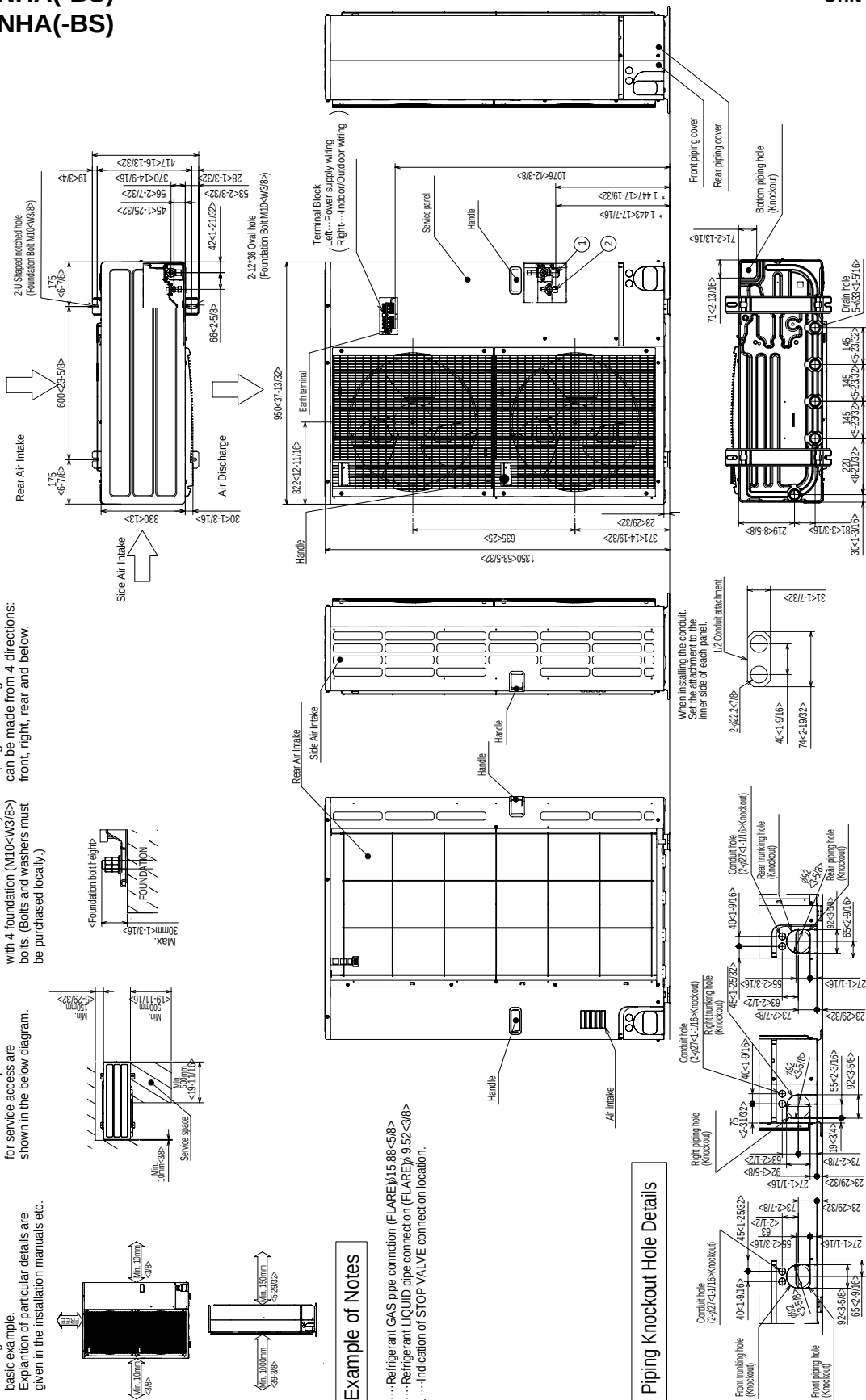
3 FOUNDATION BOLTS

Please secure the unit firmly with 4 foundation (M10×V3/8) bolts. (Bolts and washers must be purchased locally.)



4 PIPING-WIRING DIRECTIONS

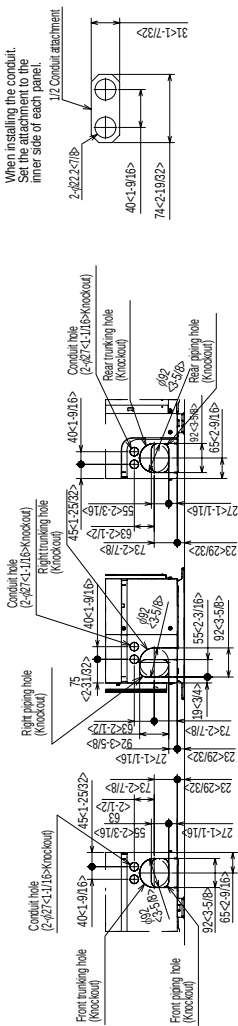
Piping and wiring connections can be made from 4 directions: front, right, rear and below.



Example of Notes

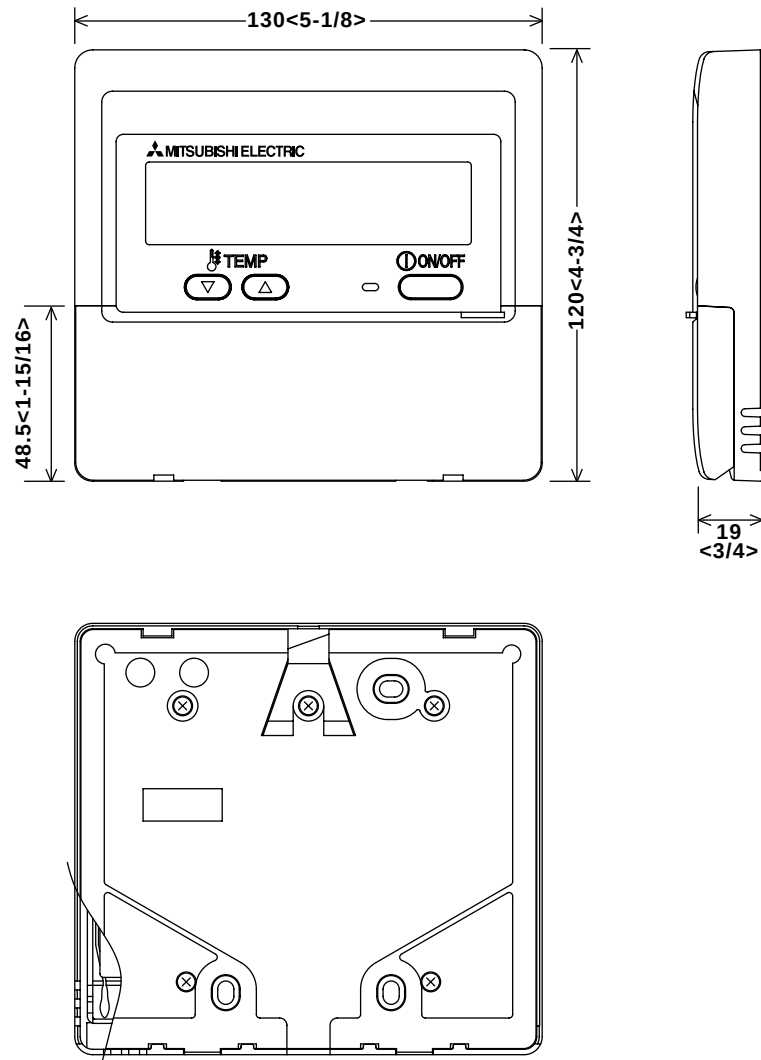
- ①...Refrigerant GAS pipe connection (FLARE) 15.88×5/8"
- ②...Refrigerant LIQUID pipe connection (FLARE) 9.52×3/8"
- *1...Indication of STOP VALVE connection location.

Piping Knockout Hole Details



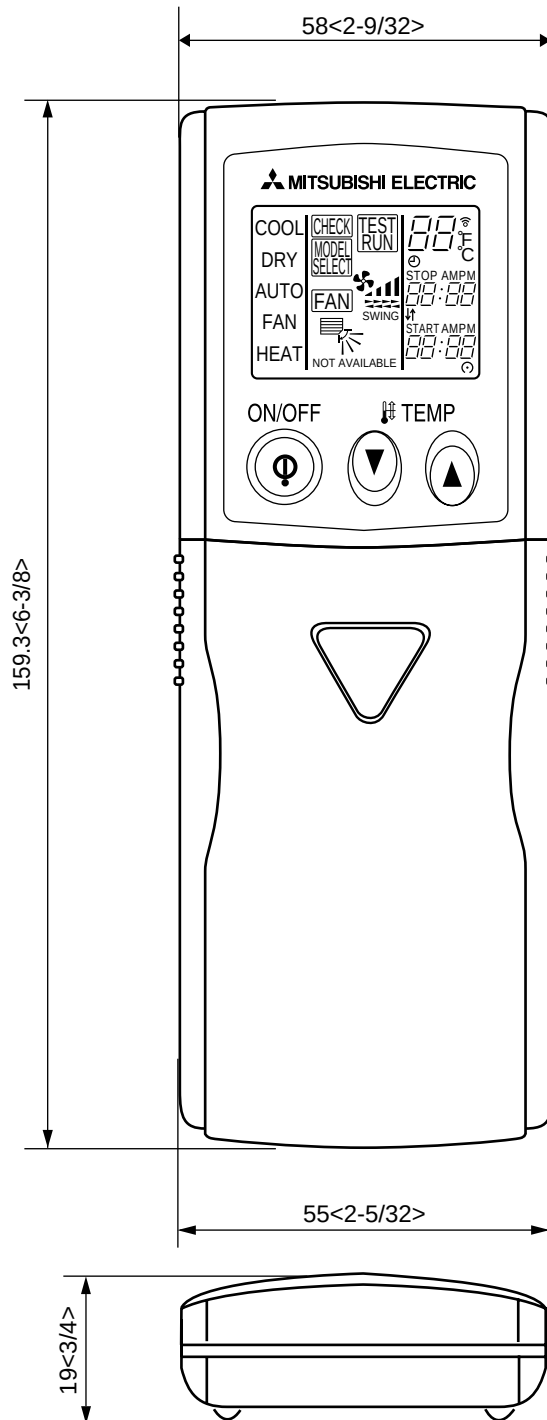
WIRED REMOTE CONTROLLER

Unit : mm<inch>



WIRELESS REMOTE CONTROLLER

Unit : mm<inch>



PLA-A12BA PLA-A18BA PLA-A24BA PLA-A30BA PLA-A36BA PLA-A42BA

[LEGEND]

SYMBOL		NAME		SYMBOL		NAME	
I.B		INDOOR CONTROLLER BOARD		MF		FAN MOTOR	
	CN2L	CONNECTOR (LOSSNAY)		MV		VANE MOTOR	
	CN32	CONNECTOR (REMOTE SWITCH)		TB4		TERMINAL BLOCK (INDOOR/OUTDOOR CONNECTING LINE)	
	CN41	CONNECTOR (HA TERMINAL-A)		TB5,TB6		TERMINAL BLOCK (REMOTE CONTROLLER TRANSMISSION LINE)	
	CN51	CONNECTOR (CENTRALLY CONTROL)					
	DSA	SURGE ABSORBER		TH1		ROOM TEMP. THERMISTOR (0°C / 15kΩ, 25°C / 5. 4kΩ DETECT)	
	FUSE	FUSE (T6.3AL250V)					
	LED1	POWER SUPPLY (I.B)		TH2		PIPE TEMP. THERMISTOR/LIQUID (0°C / 15kΩ, 25°C / 5. 4kΩ DETECT)	
	LED2	POWER SUPPLY (R.B)					
	LED3	TRANSMISSION (INDOOR-OUTDOOR)		TH5		COND. / EVA. TEMP. THERMISTOR (0°C / 15kΩ, 25°C / 5. 4kΩ DETECT)	
	SW1	SWITCH (MODEL SELECTION) *See table 1					
	SW2	SWITCH (CAPACITY CODE) *See table 2					
	SWE	CONNECTOR (EMERGENCY OPERATION)		OPTION PART			
X1	RELAY (DRAIN PUMP)		W.B		PCB FOR WIRELESS REMOTE CONTROLLER		
ZNR01,02	VARISTOR		BZ		BUZZER		
			LED1		LED (OPERATION INDICATION : GREEN)		
			LED2		LED (PREPARATION FOR HEATING : ORANGE)		
			RU		RECEIVING UNIT		
			SW1		EMERGENCY OPERATION (HEAT / DOWN)		
			SW2		EMERGENCY OPERATION (COOL / UP)		
DP	DRAIN-UP MACHINE						
FS	DRAIN FLOAT SWITCH						

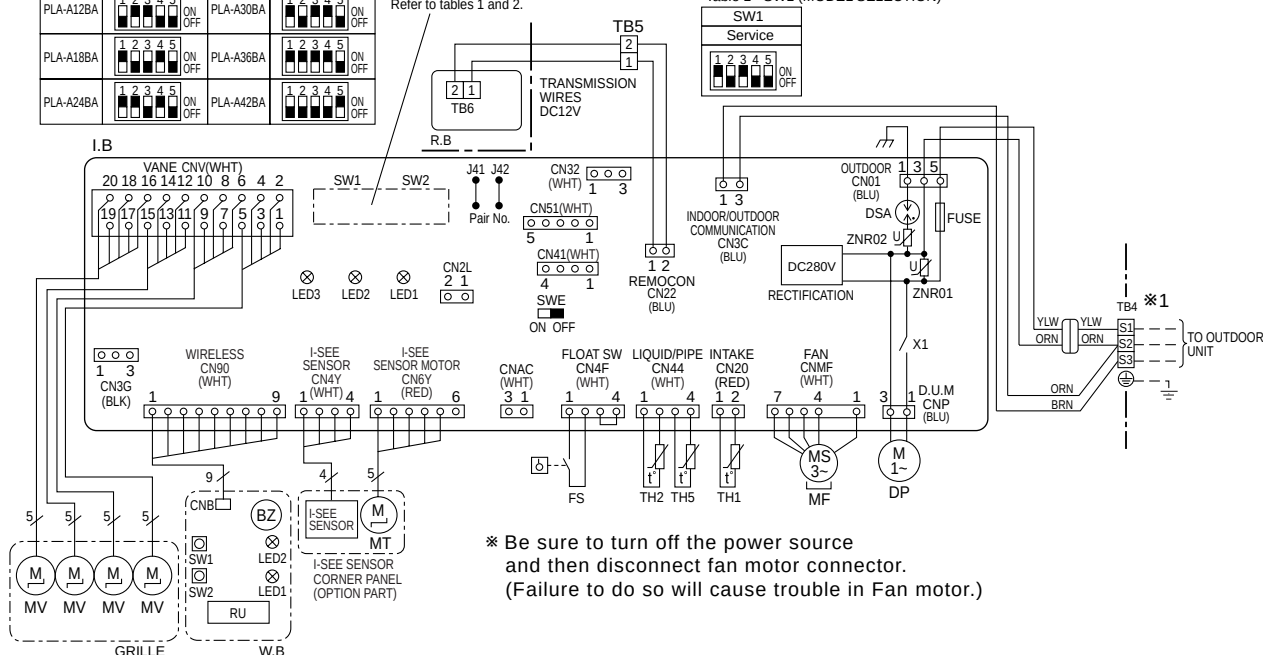
<Table 2> SW2 (CAPACITY CODE)

MODELS	Service	MODELS	Service
PLA-A12BA	1 2 3 4 5 ON OFF	PLA-A30BA	1 2 3 4 5 ON OFF
PLA-A18BA	1 2 3 4 5 ON OFF	PLA-A36BA	1 2 3 4 5 ON OFF
PLA-A24BA	1 2 3 4 5 ON OFF	PLA-A42BA	1 2 3 4 5 ON OFF

Refer to tables 1 and 2.

<Table 1> SW1 (MODEL SELECTION)

SW1	Service
1 2 3 4 5	ON OFF



- Notes: 1. Symbols used in wiring diagram above are, : Connector, : Terminal block.
 2. Indoor and outdoor connecting wires have polarities, make sure to match terminal numbers (S1, S2, S3) for correct wiring.
 3. Since the outdoor side electric wiring may change, be sure to check the outdoor unit electric wiring for servicing.

*1. Use copper supply wires.

[Self-diagnosis]

1. For details on how to operate self-diagnosis with the wireless remote control, refer to the technical manuals etc.
 2. For the wired remote control: When you quickly press twice the CHECK switch on the remote control, the unit begins self-diagnosis, and Check Codes generated in the past appear on the display.

[LEGEND]

SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME
P.B	INDOOR POWER BOARD	C	CAPACITOR<FAN MOTOR>	W.B	WIRELESS REMOTE CONTROLLER BOARD
I.B	INDOOR CONTROLLER BOARD	DP	DRAIN-UP MACHINE	BZ	BUZZER
BCR	FAN CONTROL ELEMENT	DS	DRAIN SENSOR	LED1	LED<RUN INDICATOR >
CN2L	CONNECTOR<LOSSNAY>	H2	DEW PREVENTION HEATER	LED2	LED<HOT ADJUST>
CN32	CONNECTOR<REMOTE SWITCH>	MF	FAN MOTOR	RU	RECEIVING UNIT
CN41	CONNECTOR<HA TERMINAL-A>	MV	VANE MOTOR	SW1	SWITCH<HEATING ON/OFF>
CN51	CONNECTOR<CENTRALLY CONTROL>	R.B	WIRED REMOTE CONTROLLER BOARD	SW2	SWITCH<COOLING ON/OFF>
FUSE	FUSE (6.3A/250V)	TB4	TERMINAL BLOCK<INDOOR/OUTDOOR CONNECTING LINE>		
LED1	POWER SUPPLY<I.B>				
LED2	POWER SUPPLY<R.B>	TB5, TB6	TERMINAL BLOCK<REMOTE CONTROLLER TRANSMISSION LINE >		
LED3	TRANSMISSION<INDOOR-OUTDOOR>				
SW1	SWITCH <MODEL SELECTION>*See Table 1.	TH1	ROOM TEMP.THERMISTOR <32°F/15kΩ, 77°F/5.2kΩ DETECT>		
SW2	SWITCH <CAPACITY CODE>*See Table 2.				
SWE	SWITCH<EMERGENCY OPERATION>	TH2	PIPE TEMP.THERMISTOR/LIQUID <32°F/15kΩ, 77°F/5.2kΩ DETECT>		
X1	RELAY<DRAIN PUMP>				
X4	RELAY<FAN MOTOR>	TH5	COND./EVA. TEMP.THERMISTOR <32°F/15kΩ, 77°F/5.2kΩ DETECT>		
ZNR	VARIATOR				

Please set the voltage using the remote controller.
For the setting method, please refer to the indoor unit Installation Manual.

Please set the voltage using the remote controller.
For the setting method, please refer to the indoor unit Installation Manual

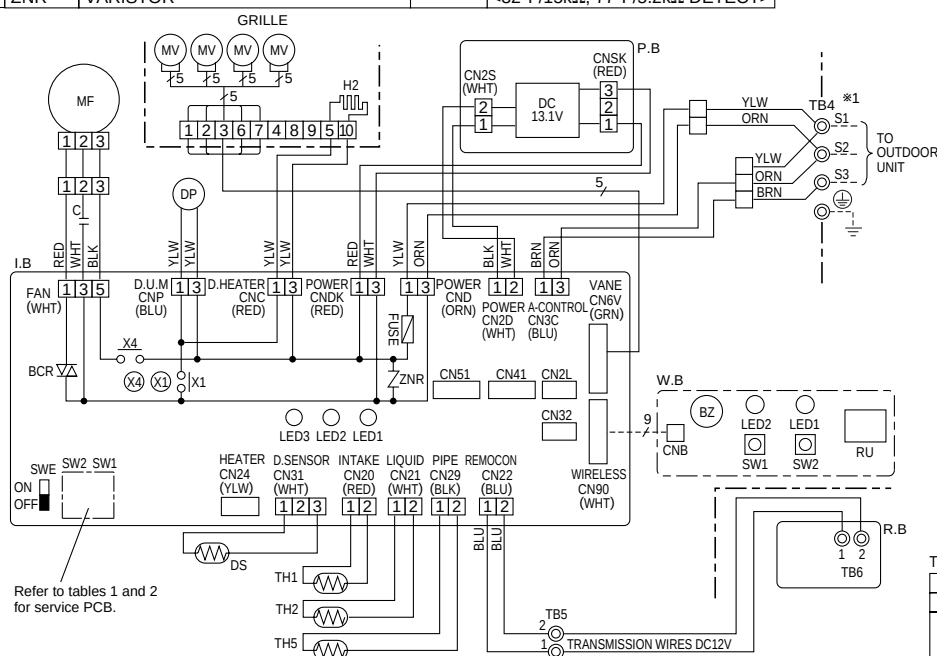


Table 1

SW1					
MODELS	Service board				
PLA-A,AA					ON OF

Table 2

SW2					
MODELS		Service board	MODELS		Service board
PLA-A12AA		ON OFF	PLA-A30AA		ON OFF
PLA-A18AA		ON OFF	PLA-A36AA		ON OFF
PLA-A24AA		ON OFF	PLA-A42AA		ON OFF

NOTES:

1. Symbols used in wiring diagram above are, □□□: Connector, ⊙: Terminal (block).
2. Indoor and outdoor connecting wires have polarities, make sure to match terminal numbers (S1, S2, S3) for correct wirings.
3. Since the outdoor side electric wiring may change, be sure to check the outdoor unit electric wiring diagram for servicing.
4. This diagram shows the wiring of Indoor and Outdoor connecting wires (specification of 230V), adopting superimposed system of power and signal.

※1. Use copper supply wires.

[Self-diagnosis]

1. For details on how to operate self-diagnosis with the wireless remote control, refer to the technical manuals etc.
2. For the wired remote control : When you quickly press twice the CHECK switch on the remote control, the unit begins self-diagnosis, and Check Codes generated in the past appear on the display.
For check Codes and Symptoms, refer to the table below.

Check code	Symptom	Check code	Symptom
P1	Abnormality of room temperature thermistor (TH1)	E0-E5	Abnormality of the signal transmission between remote controller and indoor unit
P2	Abnormality of pipe temperature thermistor / Liquid (TH2)	E6-EF	Abnormality of the signal transmission between indoor unit and outdoor unit
P4	Abnormality of drain sensor (DS)	Fb	Abnormality of indoor controller board
P5	Malfunction of drain-up machine	U*, F*	Abnormality in outdoor unit. Refer to outdoor unit wiring diagram.
P6	Freezing / overheating protection is working.	—	No trouble generated in the past
P8	Abnormality of pipe temperature	FFFF	No corresponding unit
P9	Abnormality of pipe temperature thermistor / Cond. / Eva. (TH5)		

PKA-A12GA PKA-A18GA PKA-A12GAL PKA-A18GAL

[LEGEND]

SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME
P.B	INDOOR POWER BOARD	C	CAPACITOR<FAN MOTOR>	W.B	WIRELESS REMOTE CONTROLLER BOARD
I.B	INDOOR CONTROLLER BOARD	MF	FAN MOTOR	RU	RECEIVING UNIT
FUSE	FUSE (6.3A/250V)	MV	VANE MOTOR	BZ	BUZZER
ZNR	VARISTOR	TB4	TERMINAL BLOCK<INDOOR/OUTDOOR CONNECTING LINE>	LED1	LED<RUN INDICATOR >
CN2L	CONNECTOR<LOSSNAY>	TB5, TB6	TERMINAL BLOCK<REMOTE CONTROLLER TRANSMISSION LINE >	LED2	LED<HOT ADJUST>
CN32	CONNECTOR<REMOTE SWITCH>	TH1	ROOM TEMP.THERMISTOR <32°F/15kΩ, 77°F/5.2kΩ DETECT>	SW1	SWITCH<HEATING ON/OFF>
CN41	CONNECTOR<HA TERMINAL-A>	TH2	PIPE TEMP.THERMISTOR/LIQUID <32°F/15kΩ, 77°F/5.2kΩ DETECT>	SW2	SWITCH<COOLING ON/OFF>
CN51	CONNECTOR<CENTRALLY CONTROL>	TH5	COND./EVA.TEMP.THERMISTOR <32°F/15kΩ, 77°F/5.2kΩ DETECT>		
SW1	SWITCH <MODEL SELECTION>*See Table 1.	R.B	WIRED REMOTE CONTROLLER BOARD		
SW2	SWITCH <CAPACITY CODE>*See Table 2.				
SWE	SWITCH<EMERGENCY OPERATION>				
X4	RELAY<FAN MOTOR>				
BCR	FAN CONTROL ELEMENT				
LED1	POWER SUPPLY<I.B>				
LED2	POWER SUPPLY<R.B>				
LED3	TRANSMISSION<INDOOR-OUTDOOR>				

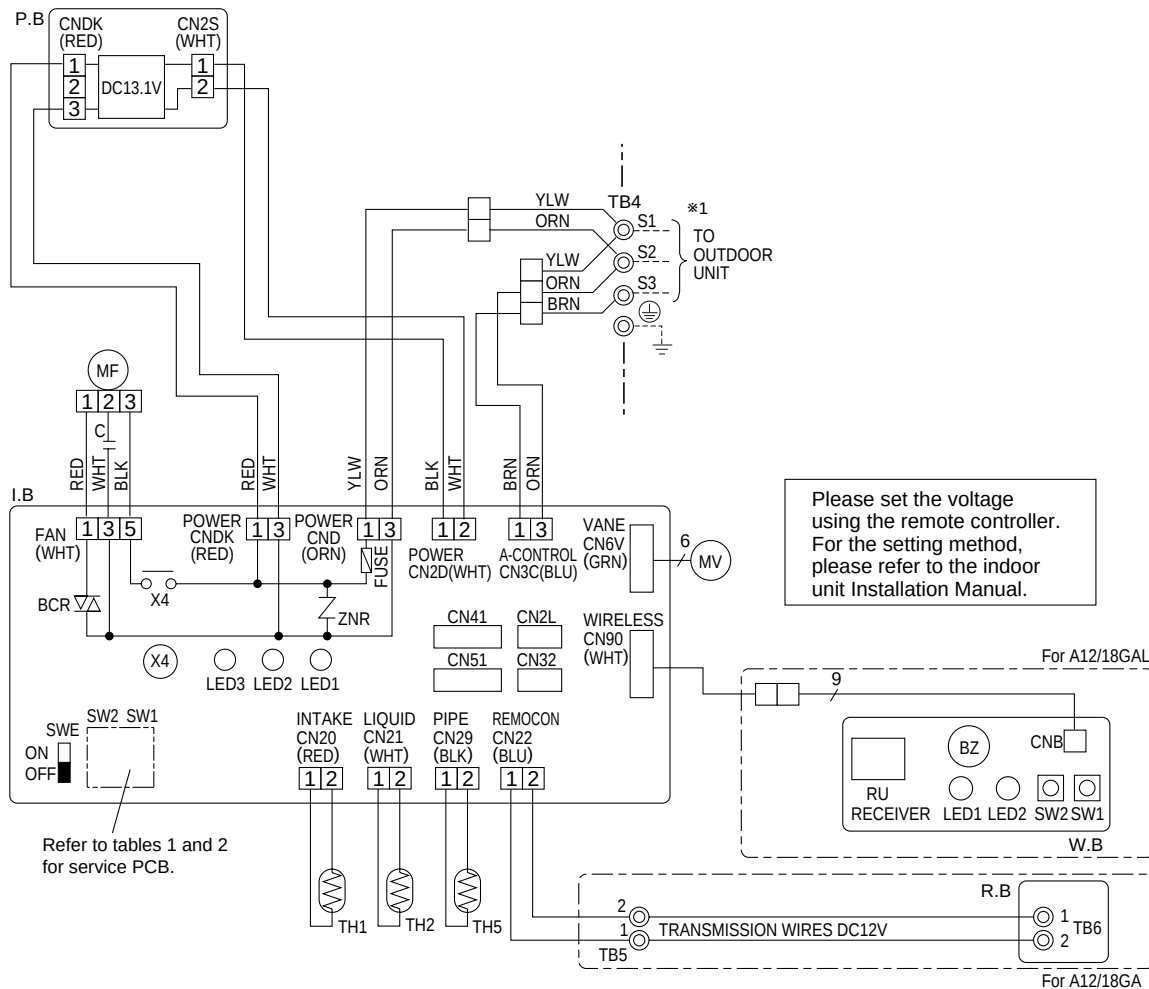


Table 1

SW1
Service board
1 2 3 4 5 ON OFF

Table 2

MODELS	Service board	MODELS	Service board
PKA-A12GA(L)	1 2 3 4 5 ON OFF	PKA-A18GA(L)	1 2 3 4 5 ON OFF

NOTES:

- Since the outdoor side electric wiring may change, be sure to check the outdoor unit electric wiring for servicing.
 - Indoor and outdoor connecting wires have polarities, make sure to match terminal numbers (S1, S2, S3) for correct wiring.
 - Symbols used in wiring diagram above are, : Connector, : Terminal (block).
 - This diagram shows the wiring of Indoor and Outdoor connecting wires (specification of 230V), adopting superimposed system of power and signal.
- *1. Use copper supply wires.

PKA-A24FA PKA-A30FA PKA-A36FA PKA-A24FAL PKA-A30FAL PKA-A36FAL

[LEGEND]

SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME
P.B	INDOOR POWER BOARD	C	CAPACITOR<FAN MOTOR>	W.B	WIRELESS REMOTE CONTROLLER BOARD
I.B	INDOOR CONTROLLER BOARD	MF	FAN MOTOR	RU	RECEIVING UNIT
FUSE	FUSE (6.3A/250V)	MV	VANE MOTOR	BZ	BUZZER
ZNR	VARISTOR	TB4	TERMINAL BLOCK<INDOOR/OUTDOOR CONNECTING LINE>	LED1	LED<RUN INDICATOR>
CN2L	CONNECTOR<LOSSNAY>	TB5,TB6	TERMINAL BLOCK<REMOTE CONTROLLER TRANSMISSION LINE>	LED2	LED<HOT ADJUST>
CN32	CONNECTOR<REMOTE SWITCH>	TH1	ROOM TEMP.THERMISTOR <32°F/15kΩ, 77°F/5.2kΩ DETECT>	SW1	SWITCH<HEATING ON/OFF>
CN41	CONNECTOR<HA TERMINAL-A>	TH2	PIPE TEMP.THERMISTOR/LIQUID <32°F/15kΩ, 77°F/5.2kΩ DETECT>	SW2	SWITCH<COOLING ON/OFF>
CN51	CONNECTOR<CENTRALLY CONTROL>	TH5	COND./EVA.TEMP.THERMISTOR <32°F/15kΩ, 77°F/5.2kΩ DETECT>		
SW1	SWITCH <MODEL SELECTION>*See Table 1.	R.B	WIRED REMOTE CONTROLLER BOARD		
SW2	SWITCH <CAPACITY CODE>*See Table 2.				
SWE	SWITCH<EMERGENCY OPERATION>				
X4	RELAY<FAN MOTOR>				
BCR	FAN CONTROL ELEMENT				
LED1	POWER SUPPLY<I.B>				
LED2	POWER SUPPLY<R.B>				
LED3	TRANSMISSION<INDOOR-OUTDOOR>				

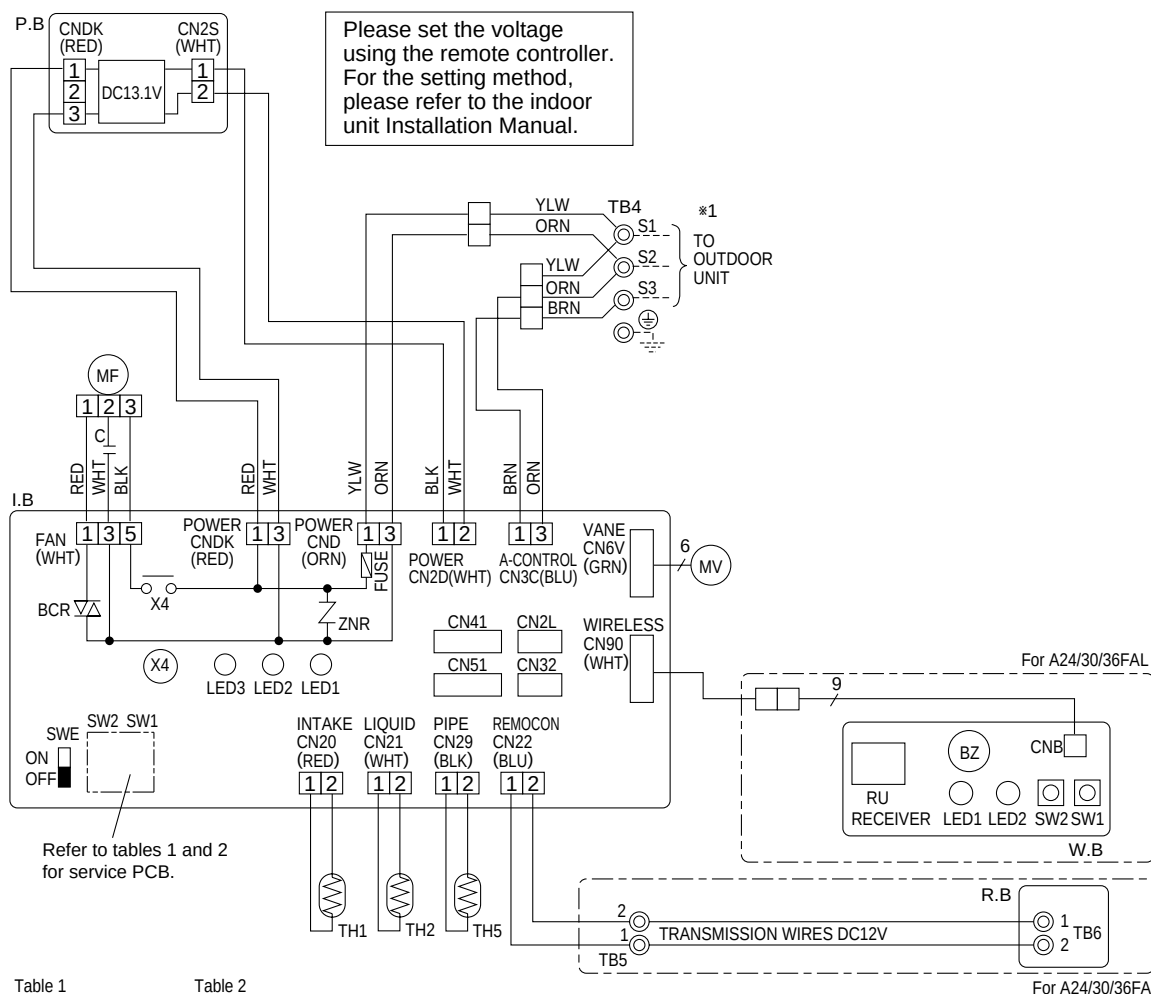


Table 1

SW1					
Service board					
1	2	3	4	5	ON OFF
1	2	3	4	5	ON OFF

Table 2

SW2					
MODELS	Service board	MODELS	Service board	MODELS	Service board
PKA-A24FA(L)	1 2 3 4 5 ON OFF	PKA-A30FA(L)	1 2 3 4 5 ON OFF	PKA-A36FA(L)	1 2 3 4 5 ON OFF
PKA-A24FA(L)	1 2 3 4 5 ON OFF	PKA-A30FA(L)	1 2 3 4 5 ON OFF	PKA-A36FA(L)	1 2 3 4 5 ON OFF

NOTES:

- Since the outdoor side electric wiring may change, be sure to check the outdoor unit electric wiring for servicing.
- Indoor and outdoor connecting wires have polarities, make sure to match terminal numbers (S1, S2, S3) for correct wiring.
- Symbols used in wiring diagram above are, □: Connector, ⊙: Terminal (block).
- This diagram shows the wiring of Indoor and Outdoor connecting wires (specification of 230V), adopting superimposed system of power and signal.

*1. Use copper supply wires.

PCA-A24GA PCA-A30GA PCA-A36GA PCA-A42GAL

[LEGEND]

SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME
P.B	INDOOR POWER BOARD	C	CAPACITOR<FAN MOTOR>	W.B	WIRELESS REMOTE CONTROLLER BOARD(OPTION)
I.B	INDOOR CONTROLLER BOARD	MF	FAN MOTOR	RU	RECEIVING UNIT
FUSE	FUSE (6.3A/250V)	MV	VANE MOTOR	BZ	BUZZER
ZNR	VARISTOR	TB4	TERMINAL BLOCK<INDOOR/OUTDOOR CONNECTING LINE>	LED1	LED<RUN INDICATOR >
CN2L	CONNECTOR<LOSSNAY>	TB5,TB6	TERMINAL BLOCK<REMOTE CONTROLLER TRANSMISSION LINE >	LED2	LED<HOT ADJUST>
CN32	CONNECTOR<REMOTE SWITCH>			SW1	SWITCH<HEATING ON/OFF>
CN41	CONNECTOR<HA TERMINAL-A>			SW2	SWITCH<COOLING ON/OFF>
CN51	CONNECTOR<CENTRALLY CONTROL>	TH1	ROOM TEMP.THERMISTOR <32°F/15kΩ, 77°F/5.2kΩ DETECT>		
SW1	SWITCH <MODEL SELECTION>*See Table 1.	TH2	PIPE TEMP.THERMISTOR/LIQUID <32°F/15kΩ, 77°F/5.2kΩ DETECT>		
SW2	SWITCH <CAPACITY CODE>*See Table 2.	TH5	COND./EVA.TEMP.THERMISTOR <32°F/15kΩ, 77°F/5.2kΩ DETECT>		
SWE	SWITCH<EMERGENCY OPERATION>	R.B	WIRED REMOTE CONTROLLER BOARD		
X1	RELAY<DRAIN PUMP>				
X4	RELAY<FAN MOTOR>				
BCR	FAN CONTROL ELEMENT				
LED1	POWER SUPPLY<I.B>				
LED2	POWER SUPPLY<R.B>				
LED3	TRANSMISSION<INDOOR-OUTDOOR>				

Please set the voltage using the remote controller.
For the setting method, please refer to the indoor unit Installation Manual.

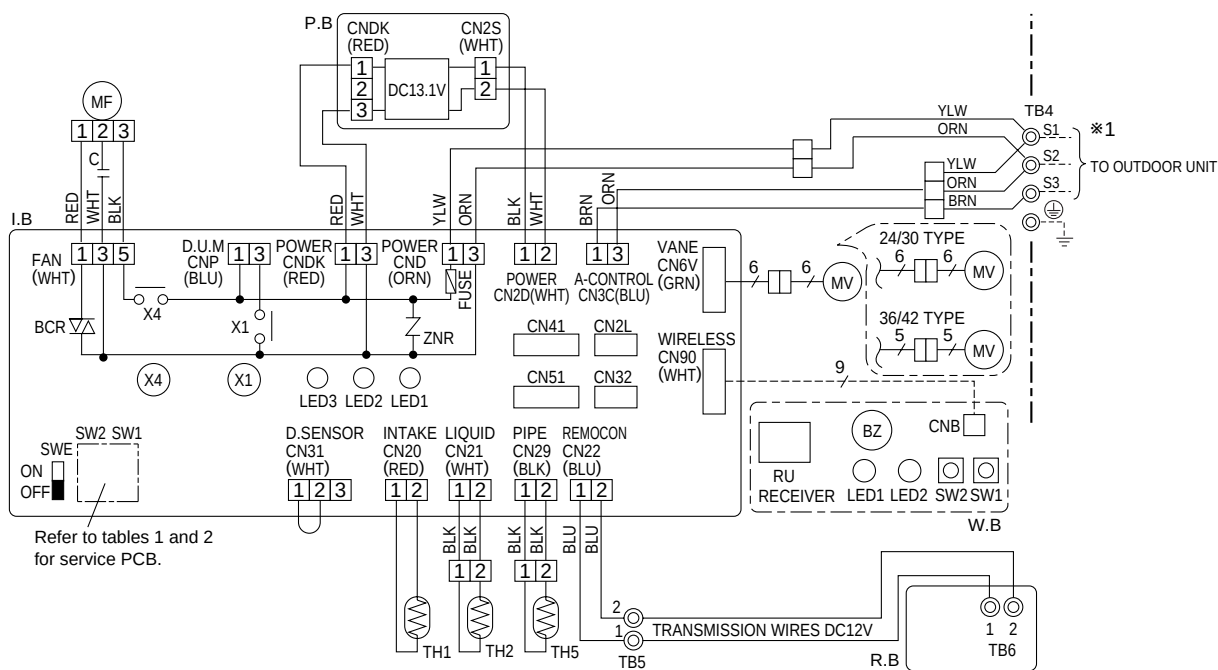


Table 1

SW1	
MODELS	Service board
PCA-A,GA	1 2 3 4 5 ON OFF

Table 2

SW2			
MODELS	Service board	MODELS	Service board
PCA-A24GA	1 2 3 4 5 ON OFF	PCA-A36GA	1 2 3 4 5 ON OFF
PCA-A30GA	1 2 3 4 5 ON OFF	PCA-A42GA	1 2 3 4 5 ON OFF

NOTES:

- Since the outdoor side electric wiring may change, be sure to check the outdoor unit electric wiring for servicing.
 - Indoor and outdoor connecting wires have polarities, make sure to match terminal numbers (S1, S2, S3) for correct wirings.
 - Symbols used in wiring diagram above are, : Connector, : Terminal (block).
 - This diagram shows the wiring of Indoor and Outdoor connecting wires (specification of 230V), adopting superimposed system of power and signal.
- *1. Use copper supply wires.

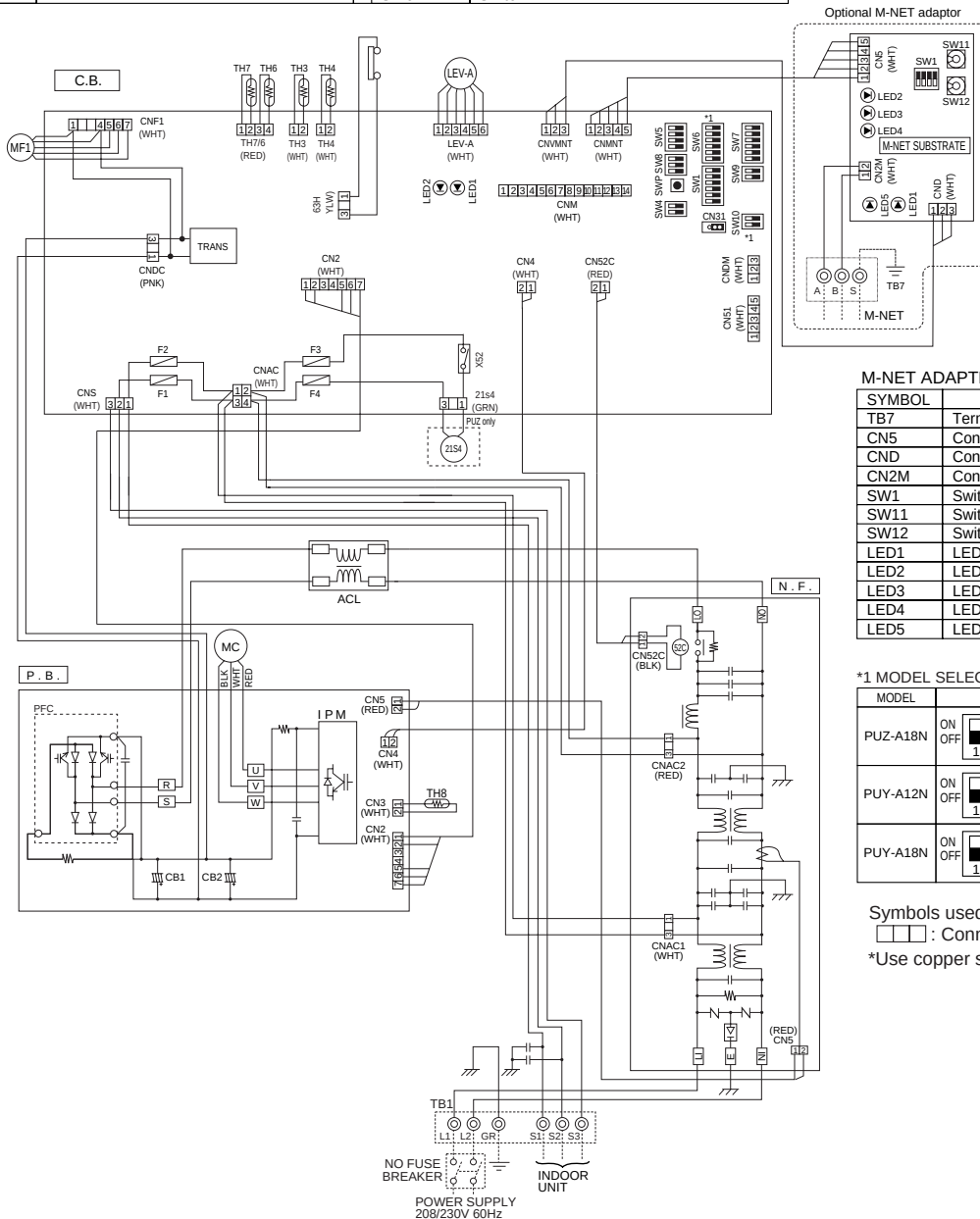
[Emergency operation procedure]

When the wired remote control or the indoor unit microcomputer has failed, but all other components work properly, if you set the switch (SWE) on the indoor control board ON, the indoor unit will begin Emergency Operation.
When Emergency Operation is activated, indoor fan runs at high speed.

PUY-A12NHA(-BS) PUY-A18NHA(-BS) PUZ-A18NHA(-BS)

[LEGEND]

SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME
TB1	Terminal Block<Power Supply, Indoor/Outdoor>	IPM	Inverter	SW10	Switch<Model Select>
MC	Motor for Compressor	CB1-CB2	Main Smoothing Capacitor	LED1,LED2	Light Emitting Diodes <Operation Inspection Indicators>
MF1	Fan Motor	N.F.	Noise Filter Circuit Board	F1-4	Fuse<6.3 A>
21S4	Solenoid Valve (Four-Way Valve)	LI/LO	Connection Terminal<L1-Phase>	SWP	Switch<Pump Down>
63H	High Pressure Switch	NI/NO	Connection Terminal<L2-Phase>	CN31	Connector<Emergency Operation>
TH3	Thermistor<Outdoor Pipe>	E	Connection Terminal<Ground>	CNM	Connector<A-Control Service Inspection Kit>
TH4	Thermistor<Discharge>	52C	52C Relay	CNMNT	Connector <Connected to Optional M-NET Adapter Board>
TH6	Thermistor<Outdoor 2-Phase Pipe>	C.B.	Controller Circuit Board	CNVMT	Connector <Connected to Optional M-NET Adapter Board>
TH7	Thermistor<Outdoor>	SW1	Switch<Forced Defrost, Defect History Record Reset, Refrigerant Address>	CNDM	Connector < Connected for Option (Contact Input)>
TH8	Thermistor<Heat Sink>	SW4	Switch<Test Operation>	X52	Relay
LEV-A	Electronic Expansion Valve	SW5	Switch<Function Switch>		
ACL	Reactor	SW6	Switch<Model Select>		
P.B.	Power Circuit Board	SW7	Switch<Function Setup>		
R/S	Connection Terminal<L1/L2-Phase>	SW8	Switch		
U/V/W	Connection Terminal<U/V/W-Phase>	SW9	Switch		
PFC	Converter				



M-NET ADAPTER

SYMBOL	NAME
TB7	Terminal Block<M-net connection>
CN5	Connector<Transmission>
CND	Connector<Power Supply>
CN2M	Connector<M-NET communication>
SW1	Switch<Status of communication>
SW11	Switch<Address setting : 1st digit>
SW12	Switch<Address setting : 2nd digit>
LED1	LED<Power Supply : DC5V>
LED2	LED<Connection to Outdoor Unit>
LED3	LED<Transmission : Sending>
LED4	LED<Transmission : Recelving>
LED5	LED<Power Supply : DC12V>

*1 MODEL SELECT

MODEL	SW6	SW10
PUZ-A18N	ON OFF 1 2 3 4 5 6	ON OFF 1 2
PUY-A12N	ON OFF 1 2 3 4 5 6	ON OFF 1 2
PUY-A18N	ON OFF 1 2 3 4 5 6	ON OFF 1 2

Symbols used in wiring diagram above are,
 : Connector, : Terminal(block).

*Use copper supply wire.

Cautions when Servicing

⚠ WARNING:

When the main supply is turned off, the voltage [340 V] in the main capacitor will drop to 20 V in approx. 2 minutes (input voltage: 230 V). When servicing, make sure that LED1 (green) on the outdoor circuit board goes out, and wait for at least 1 minute.

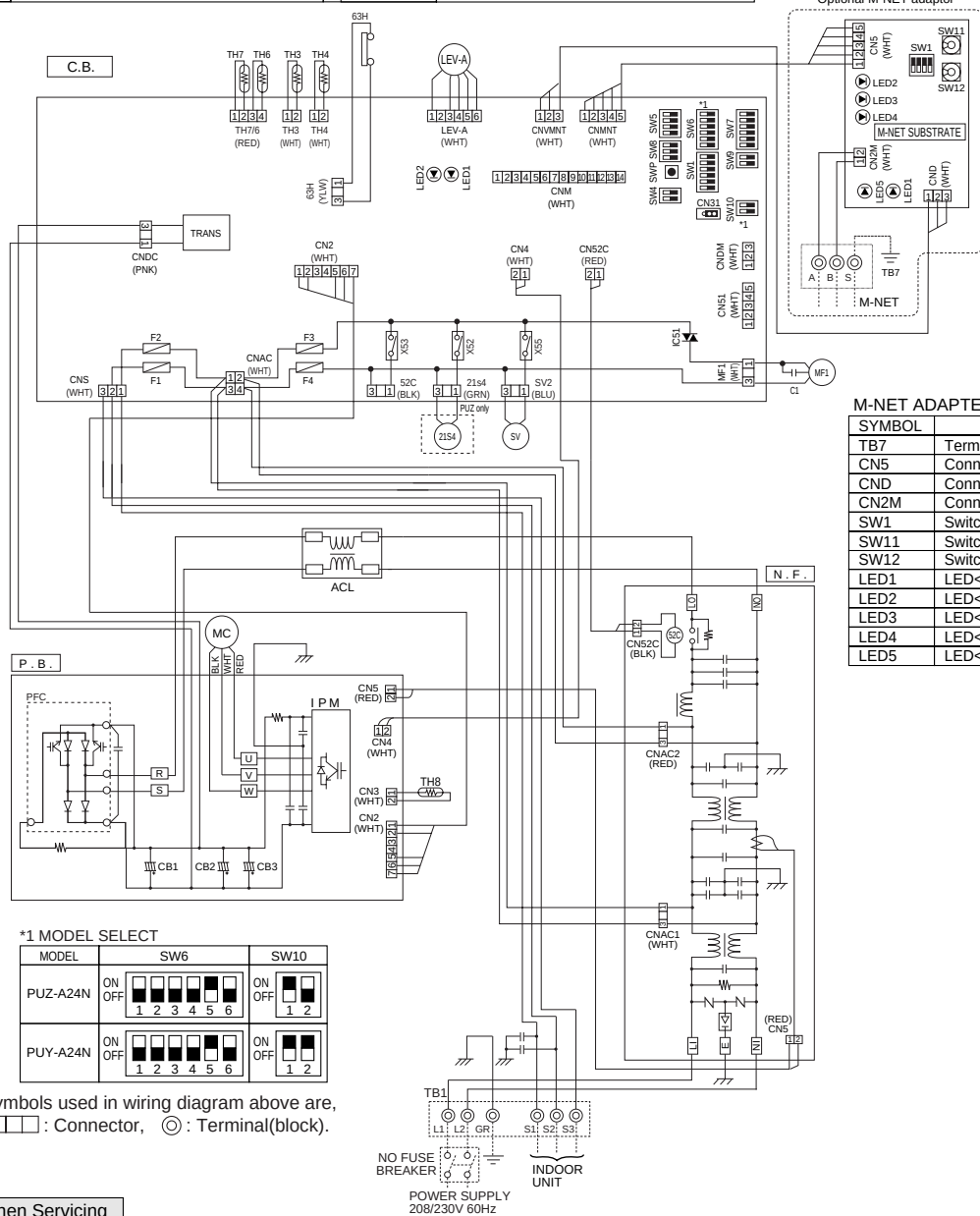
Components other than the outdoor board may be faulty: Check and take corrective action, referring to the service manual.

Do not replace the outdoor board without checking.

PUY-A24NHA(-BS) PUZ-A24NHA(-BS)

[LEGEND]

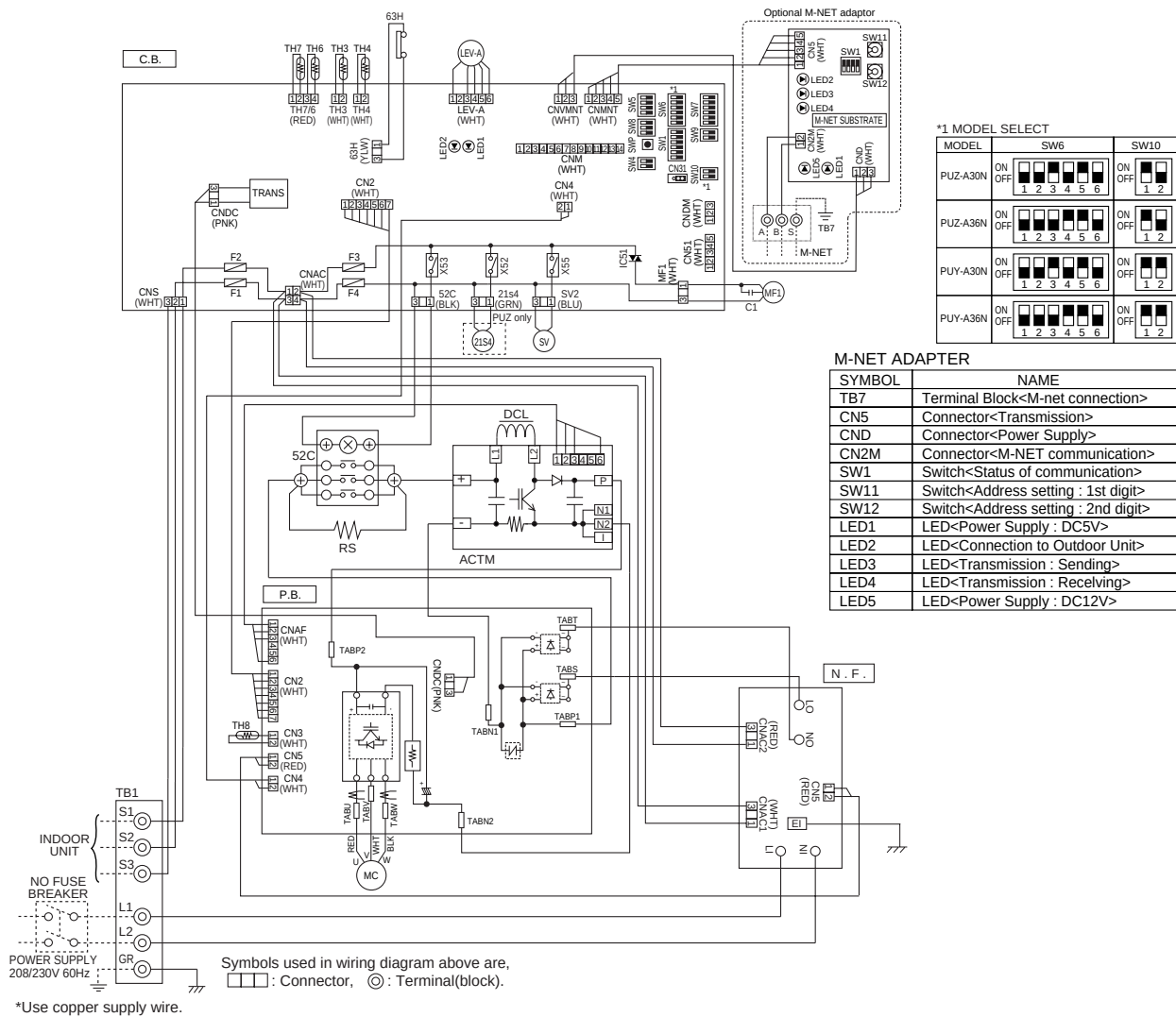
SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME
TB1	Terminal Block<Power Supply, Indoor/Outdoor>	PFC	Converter	SW10	Switch<Model Select>
MC	Motor for Compressor	IPM	Inverter	LED1,LED2	Light Emitting Diodes <Operation Inspection Indicators>
MF1	Fan Motor	CB1~CB3	Main Smoothing Capacitor	F1~4	Fuse<6.3 A>
C1	Fan Capacitor	N.F.	Noise Filter Circuit Board	IC51	Solid State Relay<SSR>
21S4	Solenoid Valve (Four-Way Valve)	LI/L0	Connection Terminal<L1-Phase>	SWP	Switch<Pump Down>
63H	High Pressure Switch	NI/NO	Connection Terminal<L2-Phase>	CN31	Connector<Emergency Operation>
SV	Solenoid Valve (Bypass Valve)	E	Connection Terminal<Ground>	CNM	Connector<A-Control Service Inspection Kit>
TH3	Thermistor<Outdoor Pipe>	52C	52C Relay	CNMNT	Connector <Connected to Optional M-NET Adapter Board>
TH4	Thermistor<Discharge>	C.B.	Controller Circuit Board	CNVMT	Connector <Connected to Optional M-NET Adapter Board>
TH6	Thermistor<Outdoor 2-Phase Pipe>	SW1	Switch<Forced Defrost, Defect History Record Reset, Refrigerant Address>	CNDM	Connector < Connected for Option (Contact Input)>
TH7	Thermistor<Outdoor>	SW4	Switch<Test Operation>	X53,X52,X55	Relay
TH8	Thermistor<Heat sink>	SW5	Switch<Function Switch>		
LEV-A	Electronic Expansion Valve	SW6	Switch<Model Select>		
ACL	Reactor	SW7	Switch<Function Setup>		
P.B.	Power Circuit Board	SW8	Switch		
R/S	Connection Terminal<L1/L2-Phase>	SW9	Switch		
U/V/W	Connection Terminal<U/V/W-Phase>				



PUY-A30NHA(-BS) PUY-A36NHA(-BS) PUZ-A30NHA(-BS) PUZ-A36NHA(-BS)

[LEGEND]

SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME
TB1	Terminal Block<Power Supply, Indoor/Outdoor >	P.B.	Power Circuit Board	SW6	Switch<Model Select>
MC	Motor for Compressor	TABU/V/W	Connection Terminal<U/V/W-Phase>	SW7	Switch<Function Setup>
MF1	Fan Motor	TABS/T	Connection Terminal<L1/L2-Phase>	SW8	Switch
C1	Fan Capacitor	TABP1/P2	Connection Terminal<DC Voltage>	SW9	Switch
21S4	Solenoid Valve (Four-Way Valve)	TABN1/N2	Connection Terminal<DC Voltage>	SW10	Switch<Model Select>
SV	Solenoid Valve (Bypass Valve)	DS2,3	Diode Bridge	SWP	Switch<Pump Down>
63H	High Pressure Switch	IPM	Power Module	CN31	Connector<Emergency Operation>
TH3	Thermistor<Outdoor Pipe>	N.F.	Noise Filter Circuit Board	LED1,LED2	Light Emitting Diodes <Operation Inspection Indicators>
TH4	Thermistor<Discharge>	LI/LO	Connection Lead<L1-Phase>	CNM	Connector<A-Control Service Inspection Kit>
TH6	Thermistor<Outdoor 2-Phase Pipe>	NI/NO	Connection Lead<L2-Phase>	CNMNT	Connector<Connected to Optional M-NET Adapter Board>
TH7	Thermistor<Outdoor>	EI	Connection Terminal<Ground>	CNMNT	Connector<Connected to Optional M-NET Adapter Board>
TH8	Thermistor<Heat Sink>	C.B.	Controller Circuit Board	CNDM	Connector
LEV-A	Electronic Expansion Valve	F1~4	Fuse<6.3 A>	X52,X53,X55	Relay
DCL	Reactor	SW1	Switch<Forced Defrost, Defect History Record Reset, Refrigerant Address>	IC51	Solid State Relay<SSR>
52C	52C Relay	SW4	Switch<Test Operation>		
RS	Rush Current Protect Resistor	SW5	Switch<Function Switch>		
ACTM	Active Filter Module				



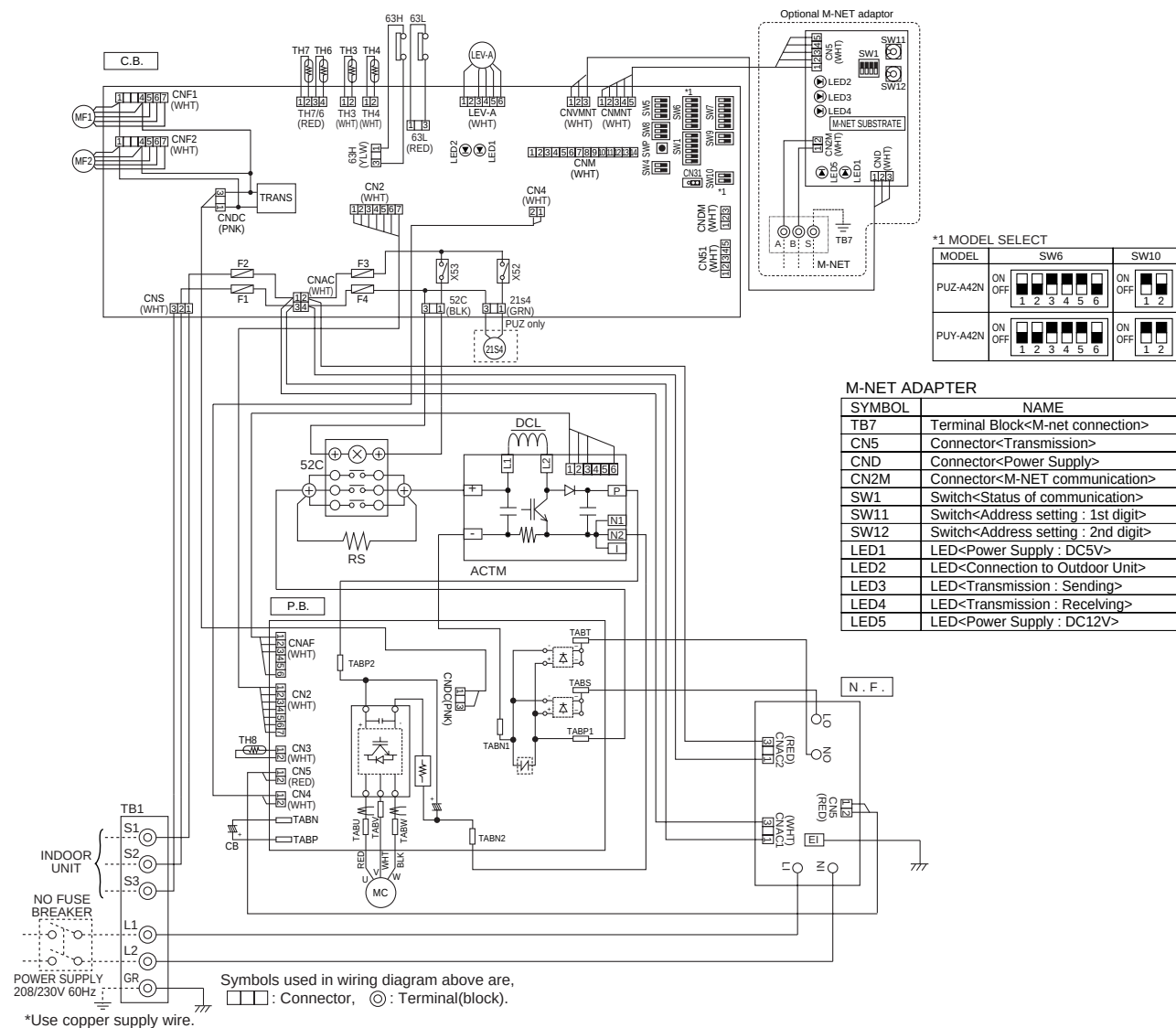
Cautions when Servicing

⚠ WARNING:
 When the main supply is turned off, the voltage [340 V] in the main capacitor will drop to 20 V in approx. 2 minutes (input voltage: 230 V). When servicing, make sure that LED1 (green) on the outdoor circuit board goes out, and wait for at least 1 minute.
 Components other than the outdoor board may be faulty: Check and take corrective action, referring to the service manual.
 Do not replace the outdoor board without checking.

PUY-A42NHA(-BS) PUZ-A42NHA(-BS)

[LEGEND]

SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME
TB1	Terminal Block<Power Supply, Indoor/Outdoor >	P.B.	Power Circuit Board	SW6	Switch<Model Select>
MC	Motor for Compressor	TABU/V/W	Connection Terminal<U/V/W-Phase>	SW7	Switch<Function Setup>
MF1,MF2	Fan Motors	TABS/T	Connection Terminal<L1/L2-Phase>	SW8	Switch
21S4	Solenoid Valve (Four-Way Valve)	TABP1/P2/P	Connection Terminal<DC Voltage>	SW9	Switch
63H	High Pressure Switch	TABN1/N2/N	Connection Terminal<DC Voltage>	SW10	Switch<Model Select>
63L	Low Pressure Switch	DS2,3	Diode Bridge	SWP	Switch<Pump Down>
TH3	Thermistor<Outdoor Pipe>	IPM	Power Module	CN31	Connector<Emergency Operation>
TH4	Thermistor<Discharge>	N.F.	Noise Filter Circuit Board	LED1,LED2	Light Emitting Diodes <Operation Inspection Indicators>
TH6	Thermistor<Outdoor 2-Phase Pipe>	LI/LO	Connection Lead<L1-Phase>	CNM	Connector<A-Control Service Inspection Kit>
TH7	Thermistor<Outdoor>	NI/NO	Connection Lead<L2-Phase>	CNMNT	Connector<Connected to Optional M-NET Adapter Board>
TH8	Thermistor<Heat Sink>	EI	Connection Terminal<Ground>	CNMNT	Connector<Connected to Optional M-NET Adapter Board>
LEV-A	Electronic Expansion Valve	C.B.	Controller Circuit Board	CNDM	Connector< Connected for Option (Contact Input)>
DCL	Reactor	F1-4	Fuse<6.3 A>	X52,X53	Relay
52C	52C Relay	SW1	Switch<Forced Defrost, Defect History Record Reset, Refrigerant Address>		
RS	Rush Current Protect Resistor	SW4	Switch<Test Operation>		
ACTM	Active Filter Module	SW5	Switch<Function Switch>		
CB	Main Smoothing Capacitor				



Cautions when Servicing

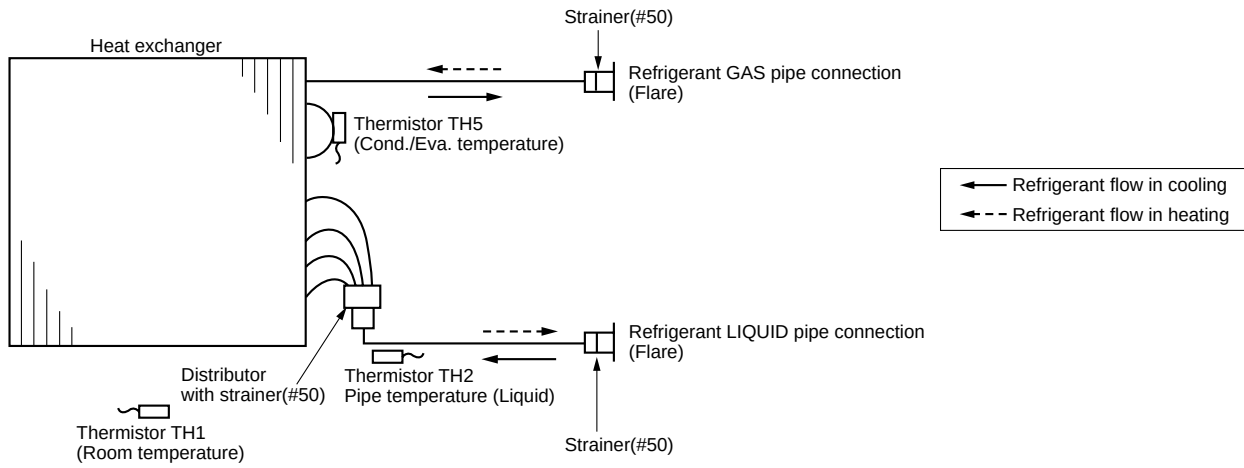
⚠ WARNING:

When the main supply is turned off, the voltage [340 V] in the main capacitor will drop to 20 V in approx. 2 minutes (input voltage: 230 V). When servicing, make sure that LED1 (green) on the outdoor circuit board goes out, and wait for at least 1 minute. Components other than the outdoor board may be faulty: Check and take corrective action, referring to the service manual. Do not replace the outdoor board without checking.

5-1. INDOOR UNIT

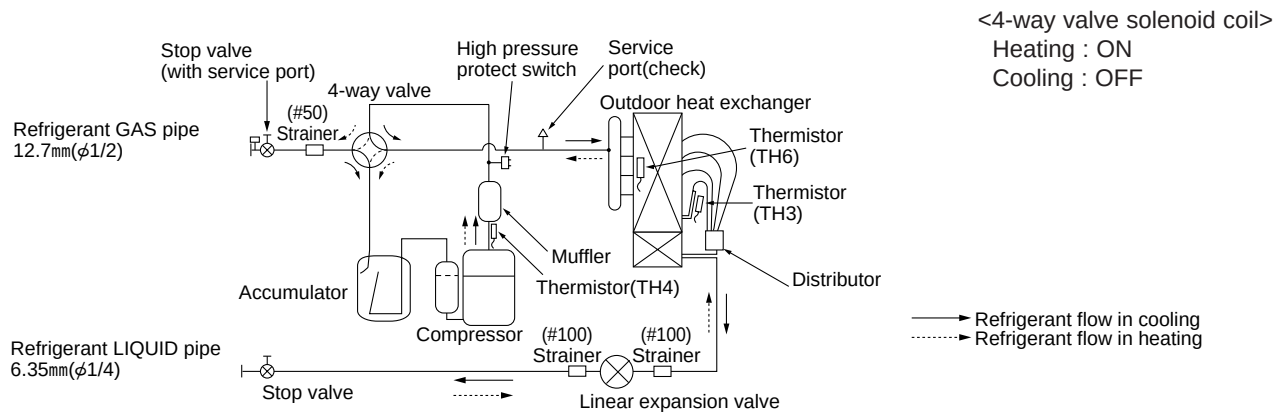
Unit : mm

PLA-A·BA PLA-A·AA PKA-A·GA PKA-A·GAL
 PCA-A·GA PKA-A·FA PKA-A·FAL

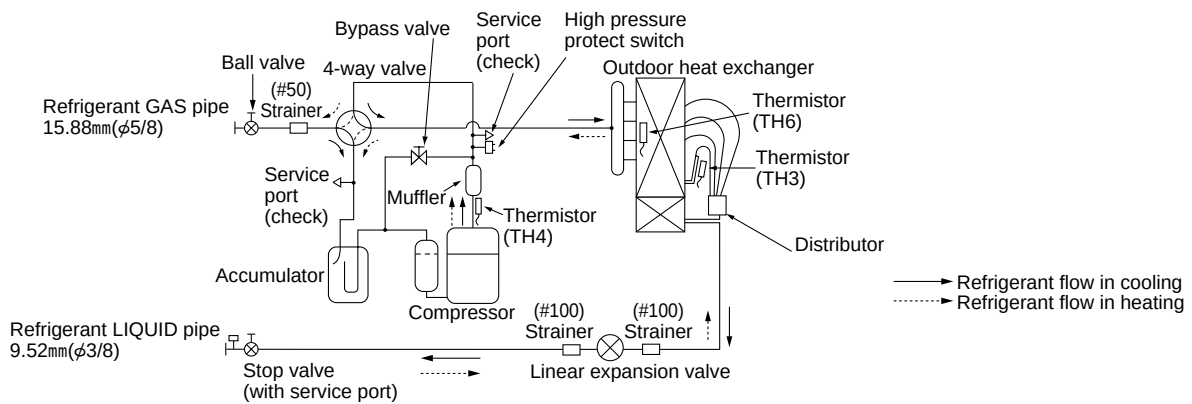


5-2. OUTDOOR UNIT PUZ-A18NHA(-BS)

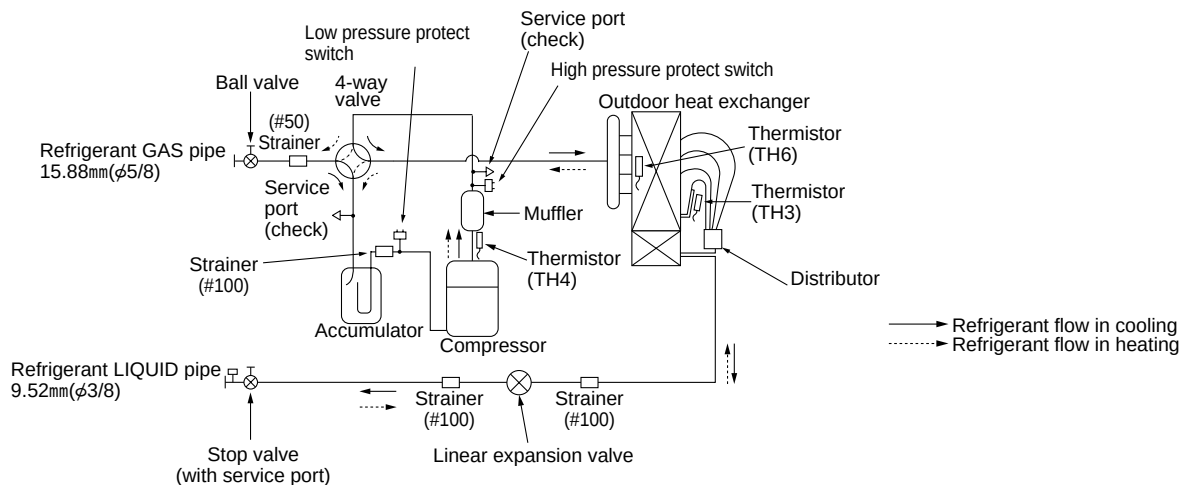
Unit : mm(inch)



PUZ-A24NHA(-BS) PUZ-A30NHA(-BS) PUZ-A36NHA(-BS)

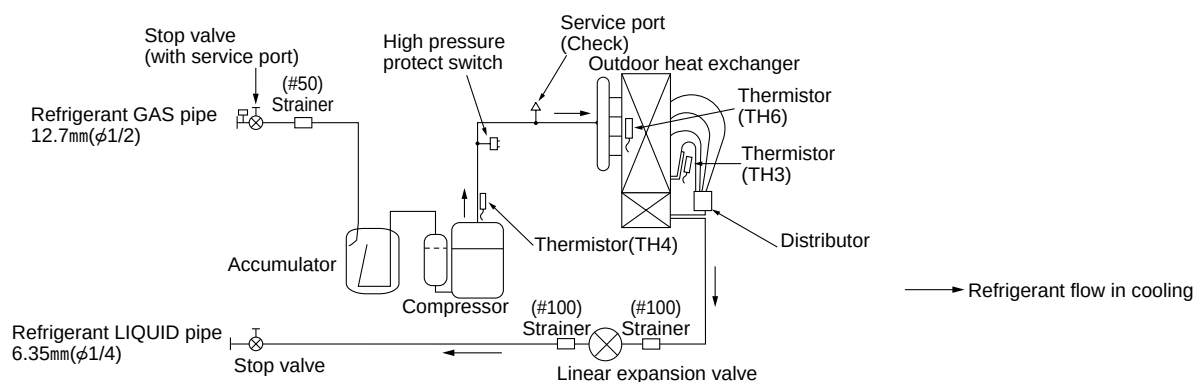


PUZ-A42NHA(-BS)

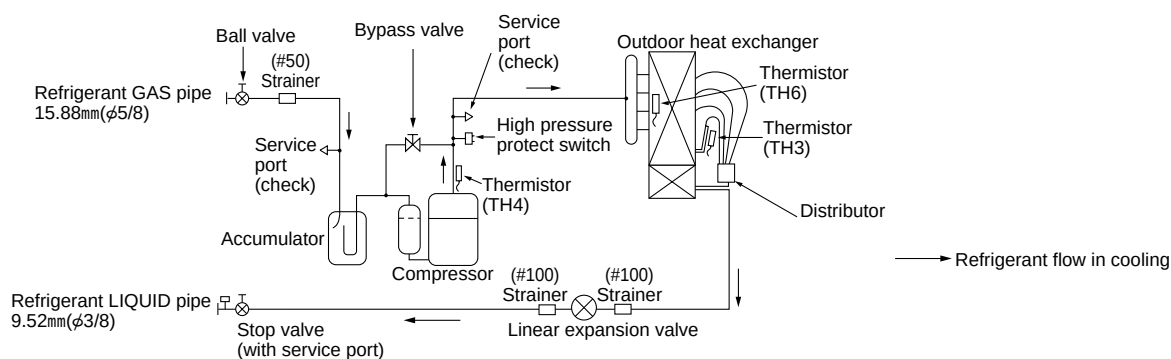


PUY-A12NHA(-BS) PUY-A18NHA(-BS)

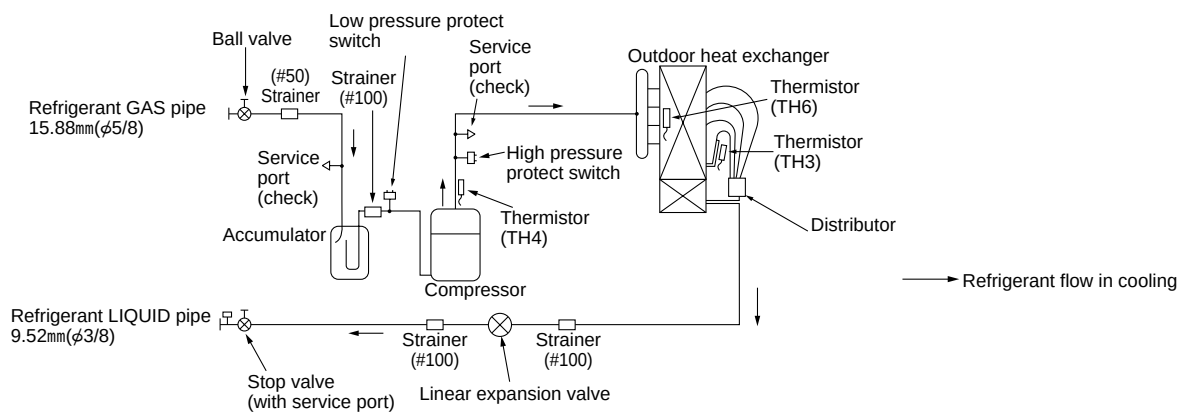
Unit : mm(inch)



PUY-A24NHA(-BS) PUY-A30NHA(-BS) PUY-A36NHA(-BS)

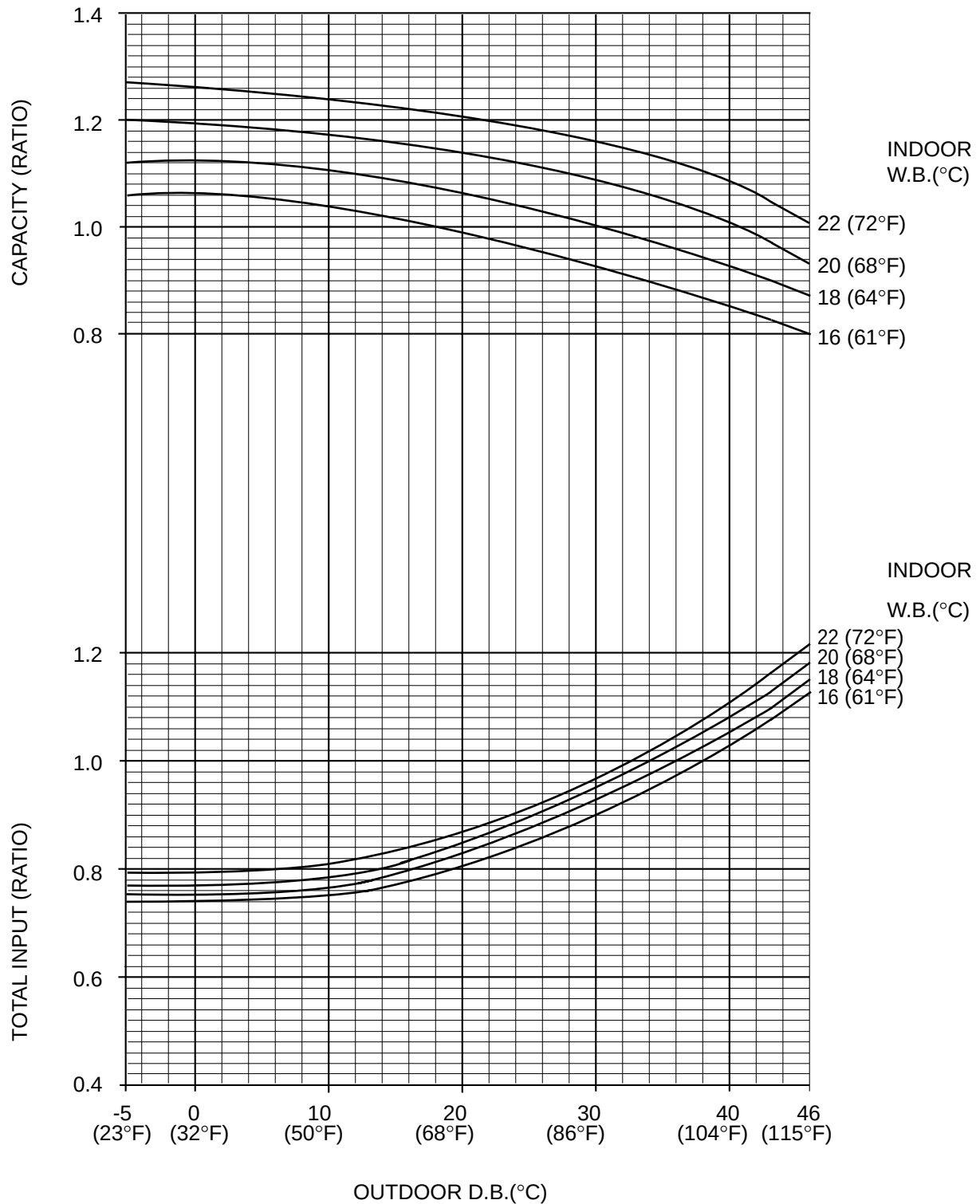


PUY-A42NHA(-BS)

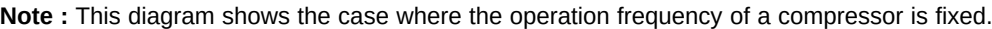


FOR THE COMBINATION OF OUTDOOR UNIT PUZ-A·NHA(-BS), PUY-A·NHA(-BS)

Cooling performance curve



Note : This diagram shows the case where the operation frequency of a compressor is fixed.



7-1. COOLING CAPACITY CORRECTION FACTORS

Outdoor unit	Refrigerant piping length (one way)					
	5m (16ft)	10m (33ft)	20m (70ft)	30m (100ft)	40m (130ft)	50m (165ft)
PUY-A12/18 PUZ-A18	1.00	0.985	0.957	0.931	—	—
PUY-A24/30/36 PUZ-A24/30/36	1.00	0.988	0.966	0.946	0.929	0.913
PUY-A42 PUZ-A42	1.00	0.985	0.957	0.931	0.908	0.886

7-2. HEATING CAPACITY CORRECTION FACTORS

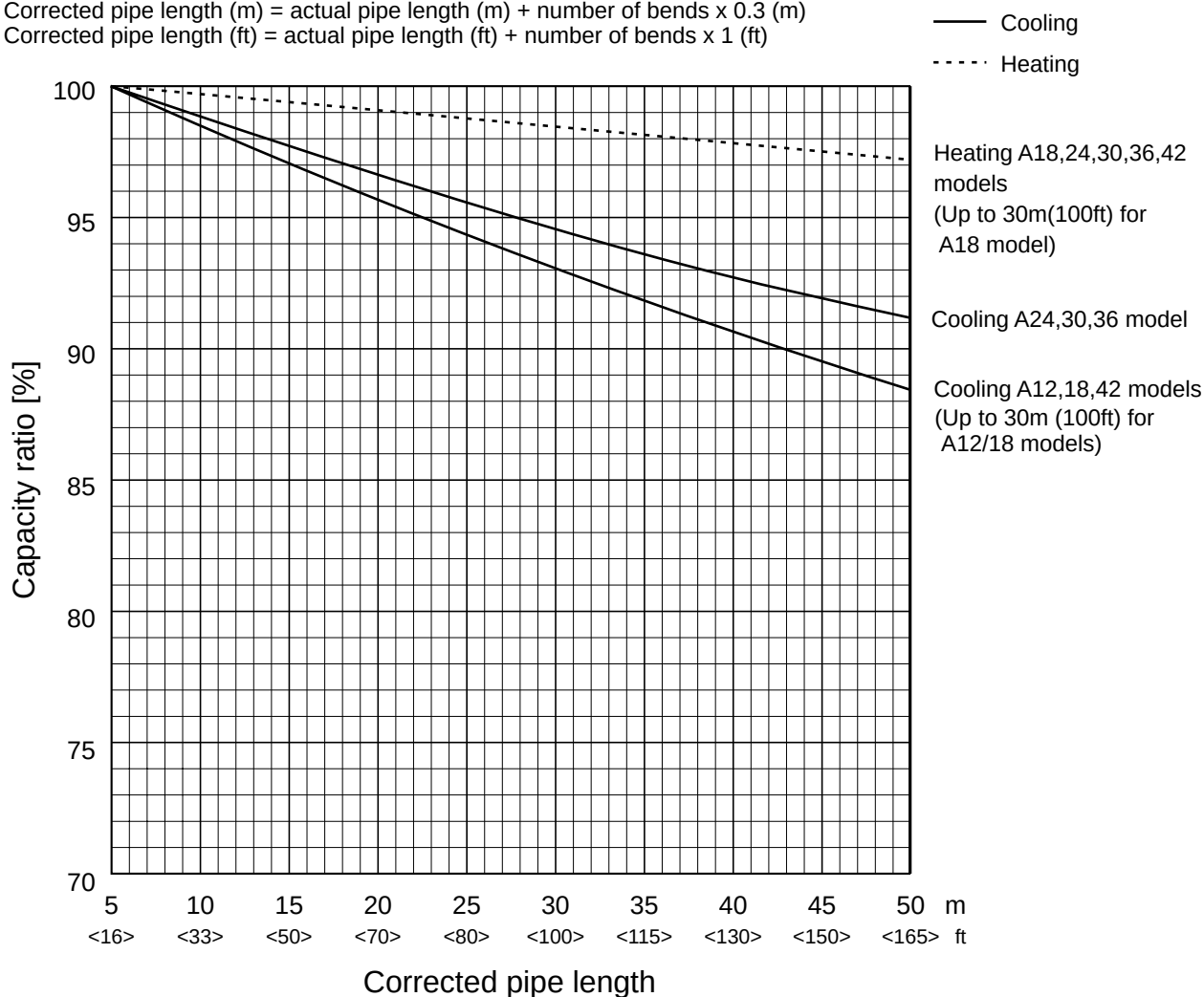
Outdoor unit	Refrigerant piping length (one way)					
	5m (16ft)	10m (33ft)	20m (70ft)	30m (100ft)	40m (130ft)	50m (165ft)
PUZ-A18	1.00	0.997	0.991	0.985	—	—
PUZ-A24/30/36	1.00	0.997	0.991	0.985	0.979	0.973
PUZ-A42	1.00	0.997	0.991	0.985	0.979	0.973

7-3. CAPACITY CORRECTION

Cooling and heating capacity is lowered according to pipe length. Capacity can be obtained by referring to the capacity curves below.

Corrected pipe length (m) = actual pipe length (m) + number of bends x 0.3 (m)

Corrected pipe length (ft) = actual pipe length (ft) + number of bends x 1 (ft)



7-4. ADDITION OF REFRIGERANT

- Additional charging is not necessary if the pipe length does not exceed 20 m(70 ft) for A12-A36 or 30 m(100 ft) for A42.
- If the pipe length exceeds the specified length above, charge the unit with additional R410A refrigerant according to the permitted pipe lengths in the chart below.
 - * When the unit is stopped, charge the unit with the additional refrigerant through the liquid stop valve after the pipe extensions and indoor unit have been vacuumized.
 - * When the unit is operating, add refrigerant to the gas check valve using a safety charger. Do not add liquid refrigerant directly to the check valve.
 - * After charging the unit with refrigerant, note the added refrigerant amount on the service label (attached to the unit).
- Be careful when installing multiple units. Connecting to an incorrect indoor unit can lead to abnormally high pressure and have a serious effect on operation performance.

Model	Max. pipe length	Max. height difference	Additional refrigerant charging amount (kg/oz)										
			20 m 70 ft	25 m 80 ft	27 m 90 ft	30 m 100 ft	33.5 m 110 ft	36.6 m 120 ft	40 m 130 ft	43 m 140 ft	45.5 m 150 ft	48.8 m 160 ft	50 m 165 ft
A12, A18	30 m, 100 ft	30 m, 100 ft	0	0.06 kg 2 oz	0.11 kg 4 oz	0.17 kg 6 oz	—	—	—	—	—	—	—
A24, A30, A36	50 m, 165 ft	30 m, 100 ft	0	0.17 kg 6 oz	0.34 kg 12 oz	0.51 kg 18 oz	0.68 kg 24 oz	0.85 kg 30 oz	1.02 kg 36 oz	1.19 kg 42 oz	1.36 kg 48 oz	1.53 kg 54 oz	1.70 kg 60 oz
A42	50 m, 16 5 ft	30 m, 100 ft	0	0	0	0	0.17 kg 6 oz	0.34 kg 12 oz	0.51 kg 18 oz	0.68 kg 24 oz	0.85 kg 30 oz	1.02 kg 36 oz	1.19 kg 42 oz

8-1. OUTLET AIR SPEED AND COVERAGE RANGE

		PLA-A12BA	PLA-A18BA	PLA-A24BA	PLA-A30BA	PLA-A36BA	PLA-A42BA
Air flow	CFM	530	640	640	740	1060	1090
Air speed	ft/sec.(m/sec.)	8.5(2.6)	10.5(3.2)	10.5(3.2)	12.1(3.7)	17.4(5.3)	17.7(5.4)
Coverage range	ft(m)	13(4.1)	15(4.8)	15(4.8)	18(5.6)	26(8.0)	26(8.2)

		PLA-A12AA	PLA-A18AA	PLA-A24AA	PLA-A30AA	PLA-A36AA	PLA-A42AA
Air flow	CFM	490	710	710	710	990	990
Air speed	ft/sec.(m/sec.)	10.8(3.3)	13.1(4.0)	13.1(4.0)	13.1(4.0)	16.1(4.9)	16.1(4.9)
Coverage range	ft(m)	14(4.4)	19(5.7)	19(5.7)	19(5.7)	24(7.4)	24(7.4)

		PCA-A24GA	PCA-A30GA	PCA-A36GA	PCA-A42GA
Air flow	CFM	635	635	880	880
Air speed	ft/sec.(m/sec.)	12.5(3.8)	12.5(3.8)	13.5(4.1)	13.5(4.1)
Coverage range	ft(m)	34(10.4)	34(10.4)	40(12.6)	40(12.6)

		PKA-A12GA PKA-A12GAL	PKA-A18GA PKA-A18GAL
Air flow	CFM	425	425
Air speed	ft/sec.(m/sec.)	17.4(5.3)	17.4(5.3)
Coverage range	ft(m)	33(10)	33(10)

		PKA-A24FA PKA-A24FAL	PKA-A30FA PKA-A30FAL	PKA-A36FA PKA-A36FAL
Air flow	CFM	705	705	990
Air speed	ft/sec.(m/sec.)	16.1(4.9)	16.1(4.9)	17.7(5.4)
Coverage range	ft(m)	41(12.4)	41(12.4)	50(15.3)

The air coverage range is the distance to which the 0.8ft/sec. air can reach, when air is blown out horizontally from the unit at the High notch position.

The coverage range should be used only as a general guideline since it varies according to the size of the room and the furniture inside the room.

8-2. PLA-A·BA

8-2-1 FRESH AIR INTAKE AND BRANCH DUCT

1. Branch duct hole and fresh air intake hole (Fig. 1)

At the time of installation, use the duct holes (cut out) located at the positions shown in Fig.1, as and when required.

• A fresh air intake hole for the optional multi function casement can also be made.

Note:

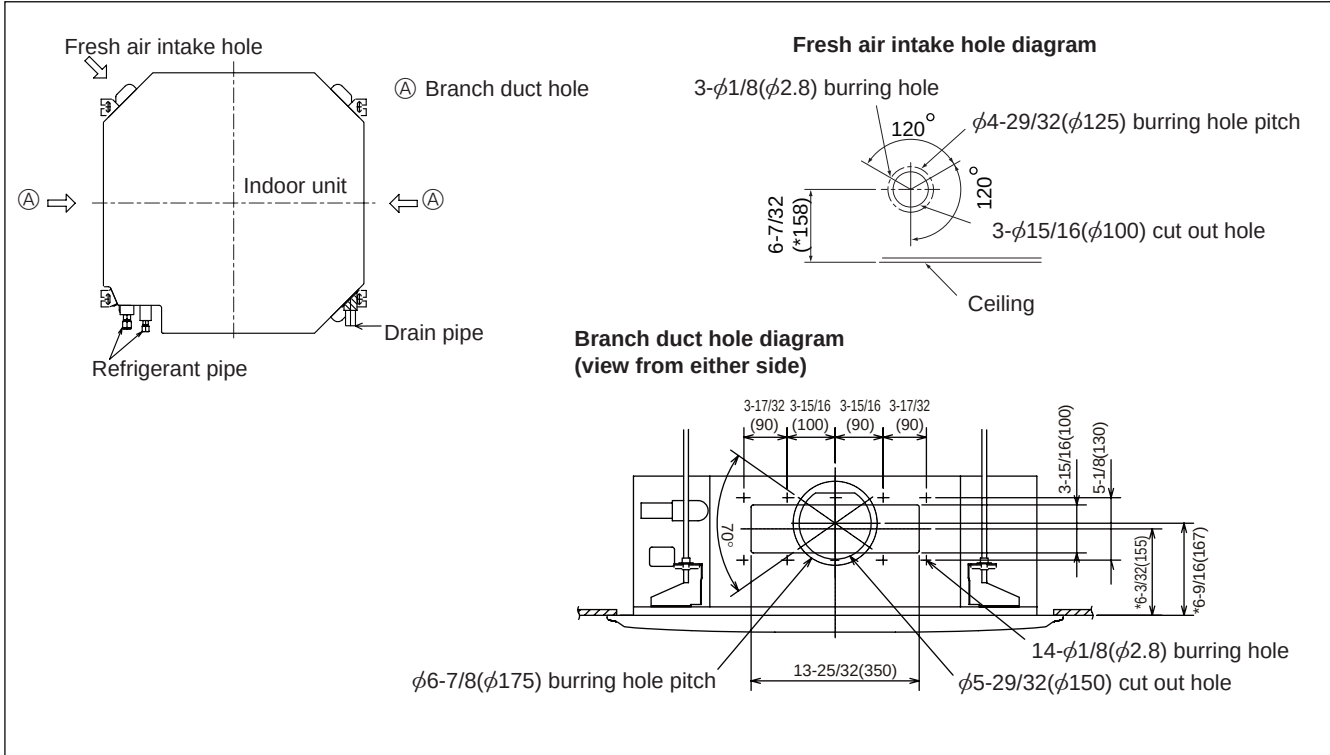
The figure marked with * in the drawing represent the dimensions of the main unit excluding those of the optional multi function casement.

When installing the optional multi function casement, add 5-5/16 to the dimensions marked on the figure.

When installing the branch ducts, be sure to insulate adequately.

Otherwise condensation and dripping may occur.

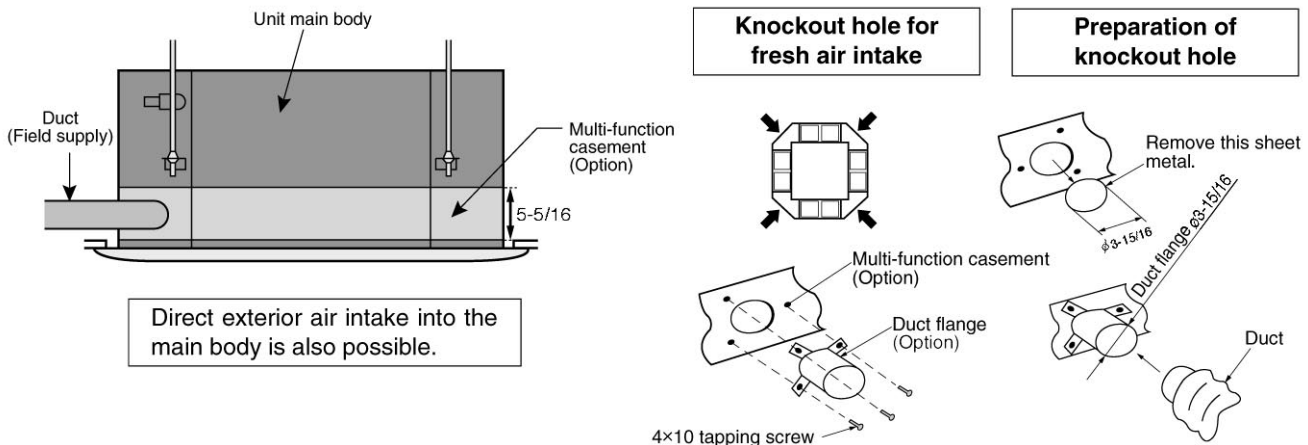
Unit : inch(mm)



2. Fresh air intake (Installation at site)

By mounting the optional multi-function casement to the indoor unit main body, and mounting the duct fange(option) onto it further, fresh exterior air intake can be accomplished.

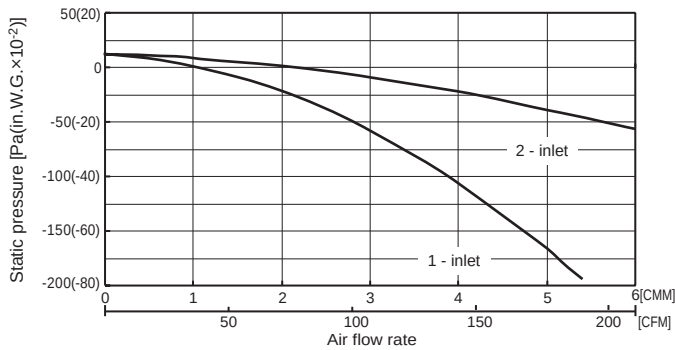
(The mounting of the multi-function casement increases the height of the ceiling plenum by 5-5/16(135mm).)



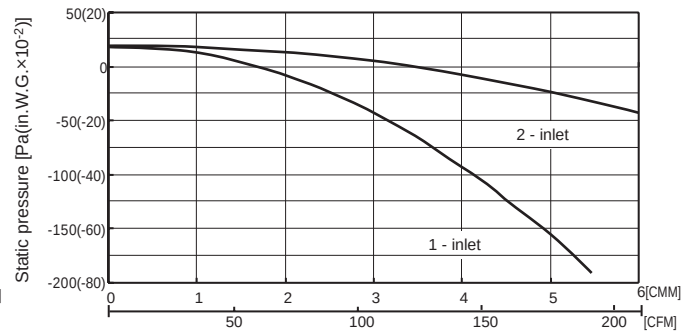
3. Fresh air intake amount & static pressure characteristics

1 PLA-A12 · A18 · A24 · A30BA

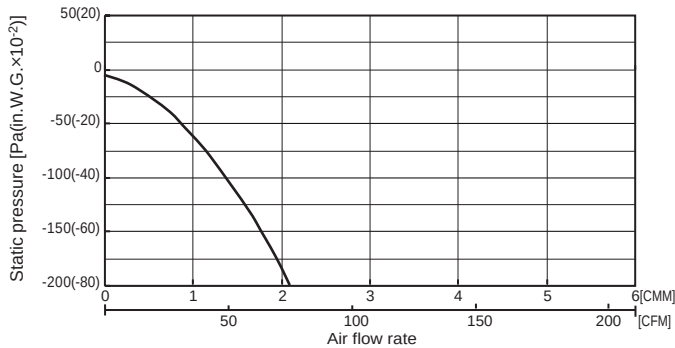
Multifunction casement + High efficiency filter



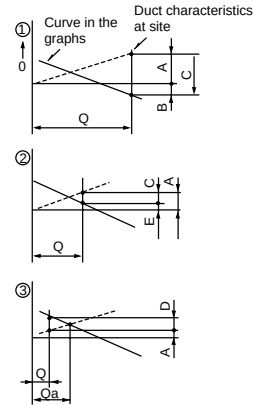
Multifunction casement + Standard filter



Taking air into the unit



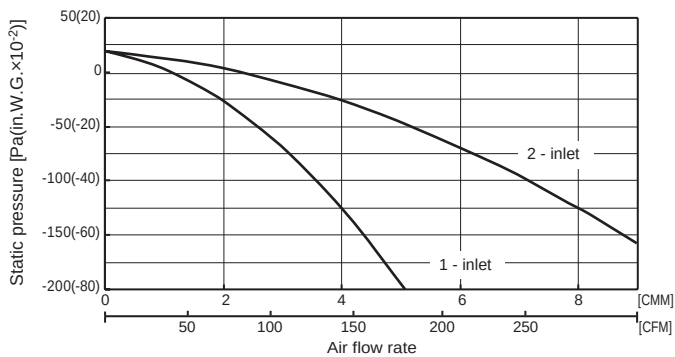
How to read curves



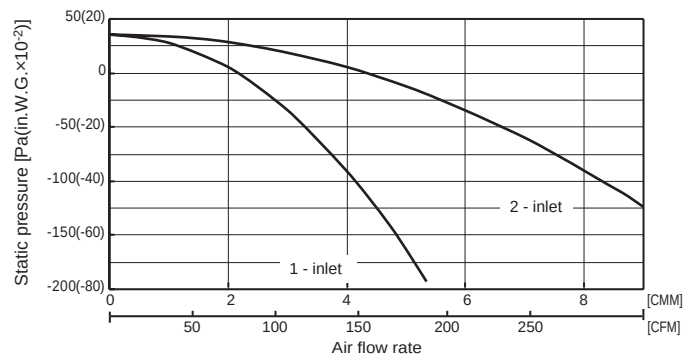
- Q...Designed amount of fresh air intake <CMM(CFM)>
- A...Static pressure loss of fresh air intake duct system with air flow amount Q <Pa(in.W.G.×10⁻²)>
- B...Forced static pressure at air conditioner inlet with air flow amount Q <Pa(in.W.G.×10⁻²)>
- C...Static pressure of booster fan with air flow amount Q <Pa(in.W.G.×10⁻²)>
- D...Static pressure loss increase amount of fresh air intake dust system for air flow amount Q <Pa(in.W.G.×10⁻²)>
- E...Static pressure of indoor unit with air flow amount Q <Pa(in.W.G.×10⁻²)>
- Qa...Estimated amount of fresh air intake without D <CMM(CFM)>

2 PLA-A36 · A42BA

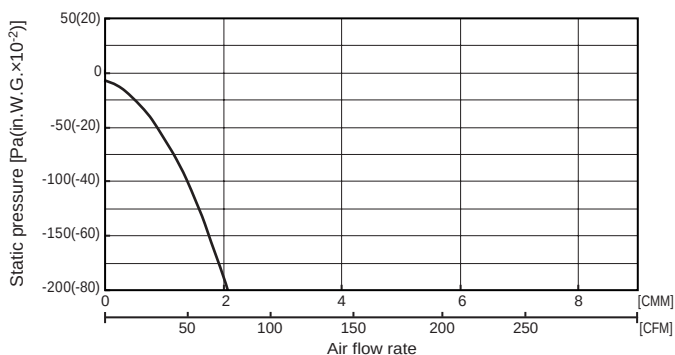
Multifunction casement + Standard filter



Multifunction casement + High efficiency filter



Taking air into the unit

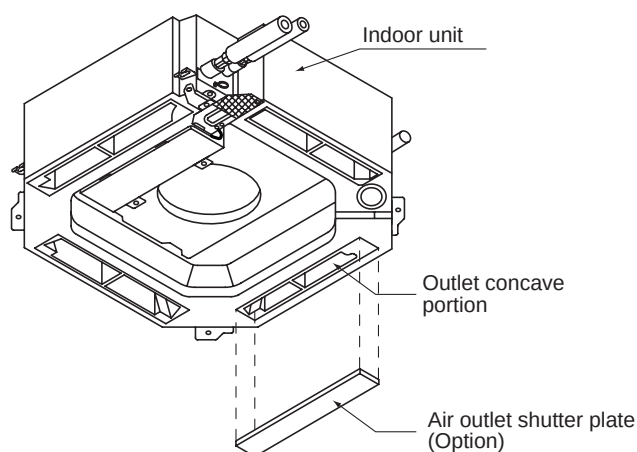
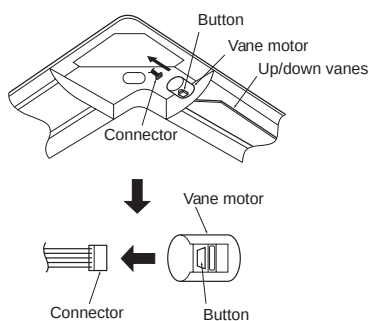


4. Change of outlet numbers

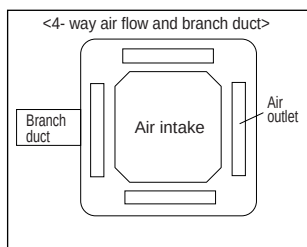
The optional air outlet is necessary.

To change the air outlet number to 3-, or 2-way outlet, the outlet number should be closed with the operational air outlet shutter.

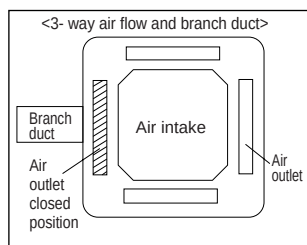
When the air outlets are closed, close the vane by removing the vane connector.



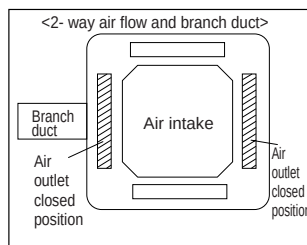
5. Branch duct and change of outlet numbers



※ Branch duct should be connected to one of the branch duct holes on the main unit.



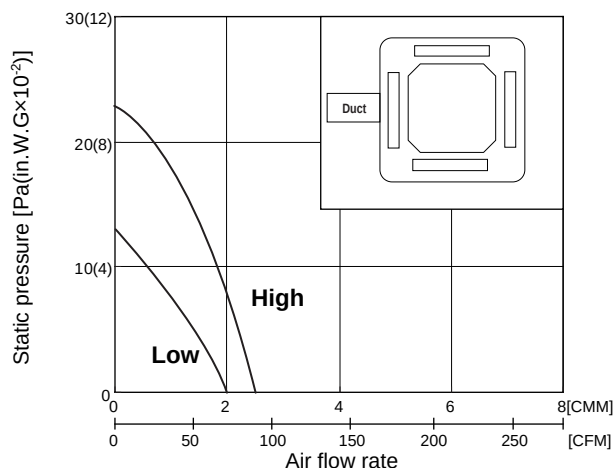
※ Close the outlet on the side or branch duct and air flows in 3 directions.



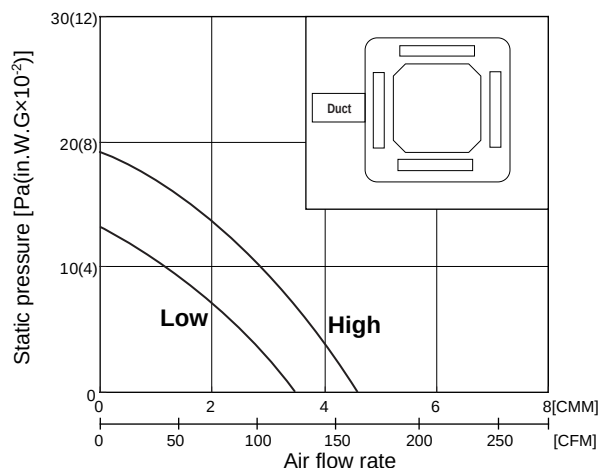
※ The outlet on the side or branch duct and one of the other outlets are closed. Air flows in 2 directions.

PLA-A30BA

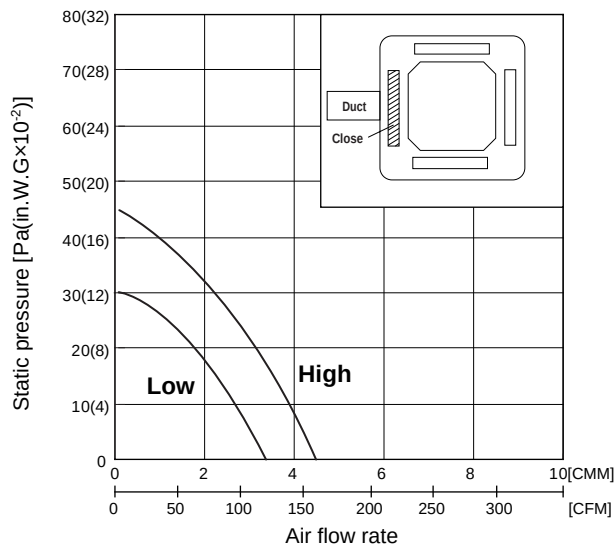
● 4-way air flow (horizontal vane) Round duct



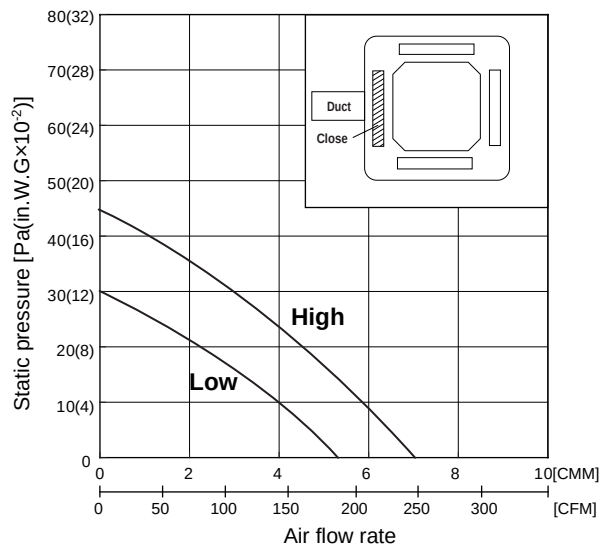
● 4-way air flow (horizontal vane) Rectangular duct



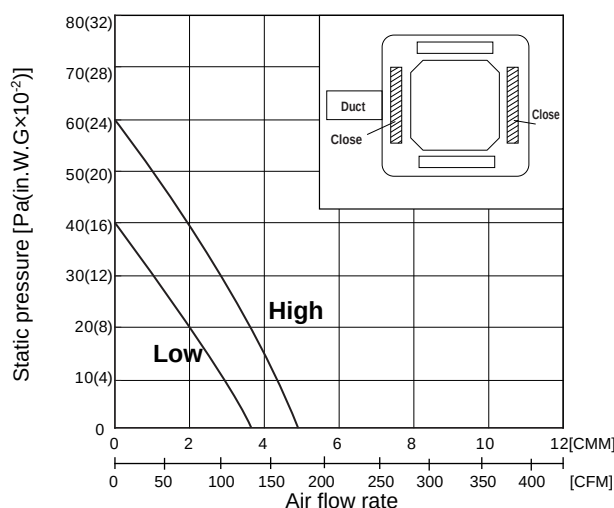
● 3-way air flow (horizontal vane) Round duct



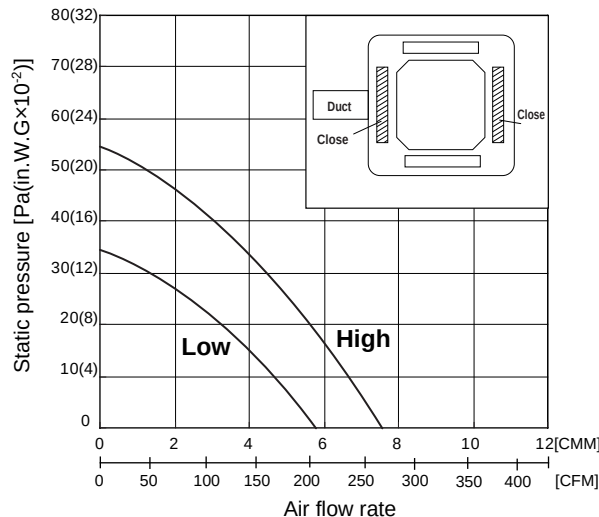
● 3-way air flow (horizontal vane) Rectangular duct



● 2-way air flow (horizontal vane) Round duct



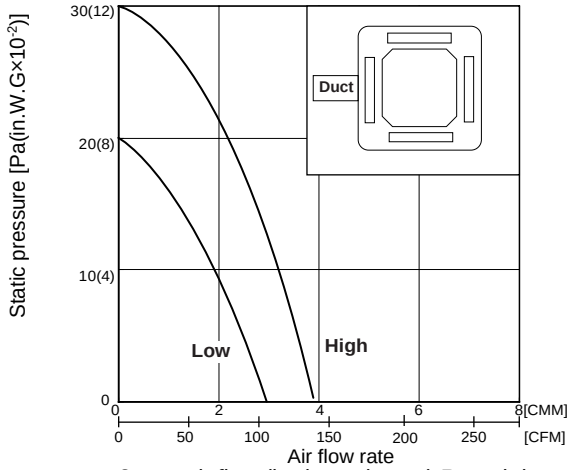
● 2-way air flow (horizontal vane) Rectangular duct



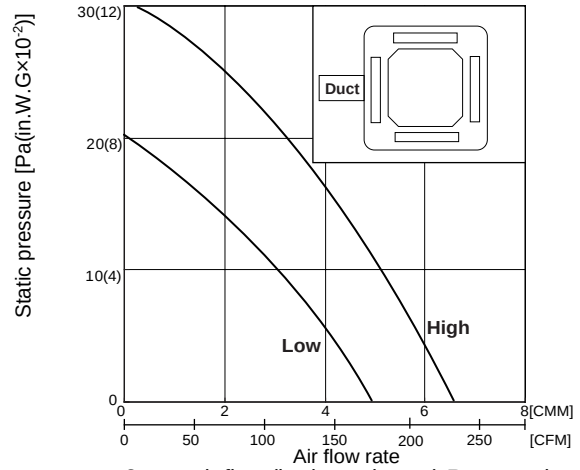
- Use 1 of the 2 duct holes on the indoor unit.
- Air flow rate of PLA-A12~24BA can be calculated from the air flow rate based on the characteristic of the duct for PLA-A30BA.
- Use the optional air outlet shutter plate (PAC-SH51SP-E) for 3-way and 2-way air flow.

PLA-A42BA

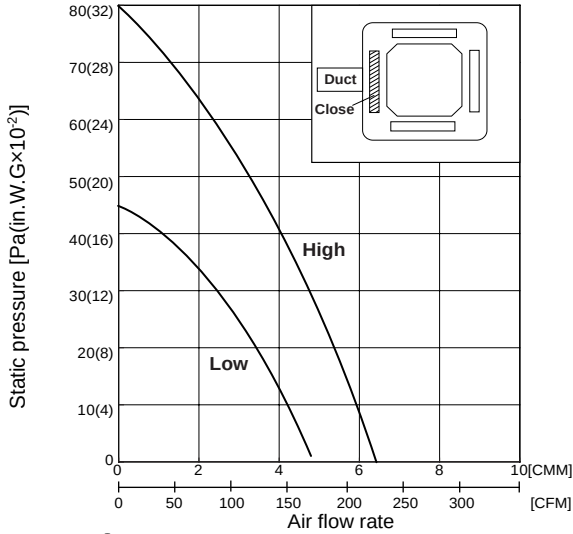
● 4-way air flow (horizontal vane) Round duct



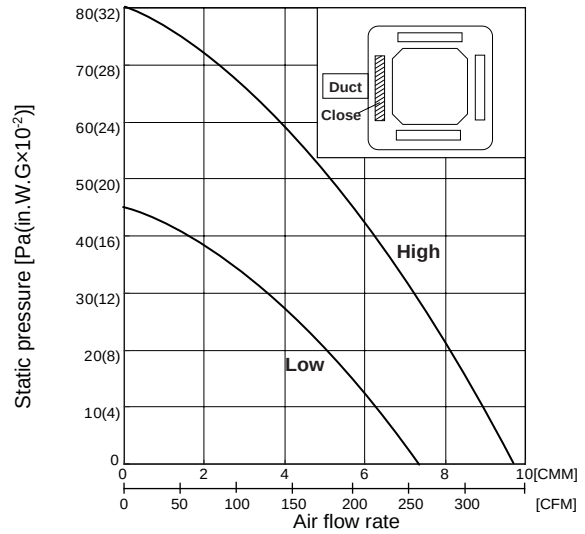
● 4-way air flow (horizontal vane) Rectangular duct



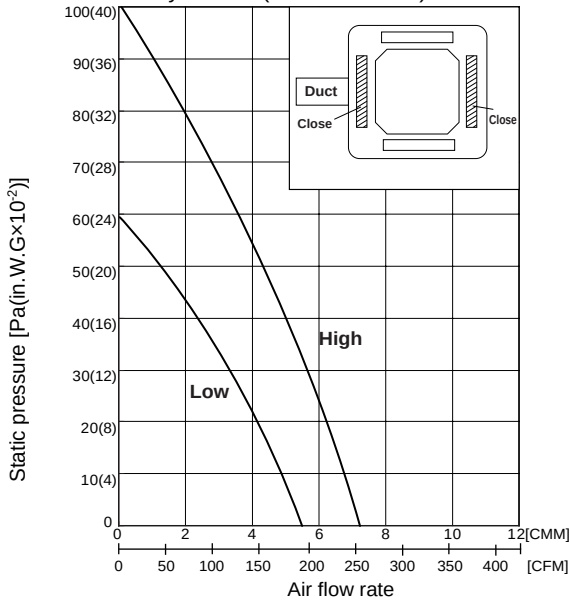
● 3-way air flow (horizontal vane) Round duct



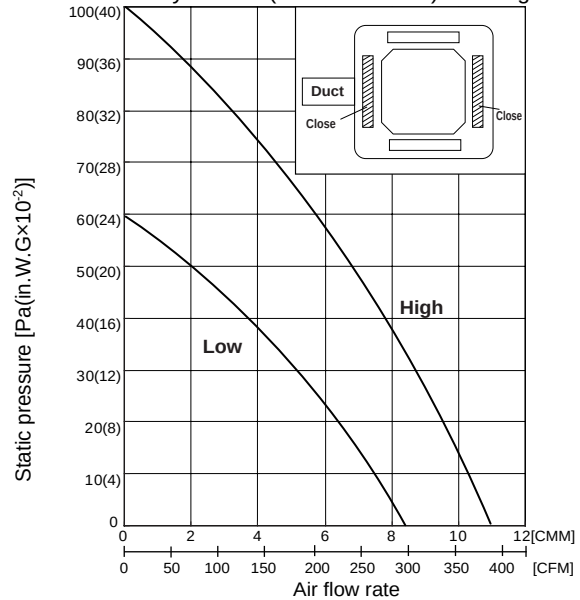
● 3-way air flow (horizontal vane) Rectangular duct



● 2-way air flow (horizontal vane) Round duct



● 2-way air flow (horizontal vane) Rectangular duct



- Use 1 of the 2 duct holes on the indoor unit.
- Air flow rate of PLA-A36BA can be calculated from the air flow rate based on the characteristic of the duct for PLA-A42BA.
- Use the optional air outlet shutter plate (PAC-SH51SP-E) for 3-way and 2-way air flow.

8-3. PLA-A-AA

8-3-1. FRESH AIR INTAKE AMOUNT

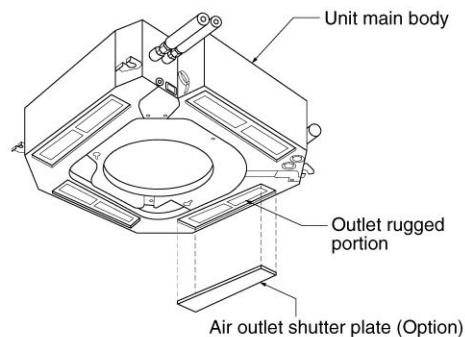
1. Adjusting the width of the air outlets

● Change of outlet numbers

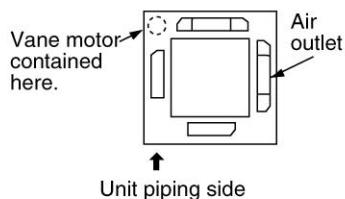
[The optional air outlet shutter is necessary.]

To change the air outlet numbers to 3-, or 2-way outlet, the outlets should be closed with the optional air outlet shutter.

(When the air outlets are closed, close the vane by removing the vane connector.)

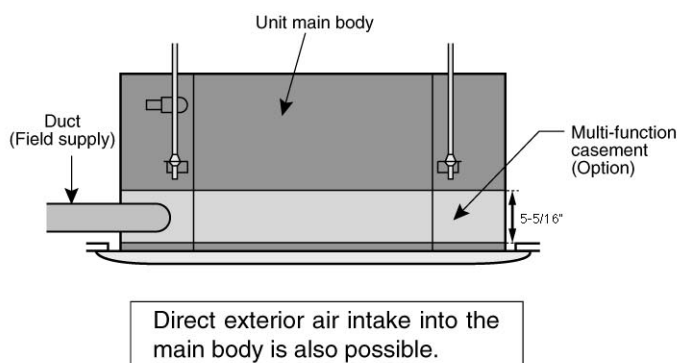


- For the portion to be cut (V-shaped groove), see the figure below (as seen from the rear of the panel).



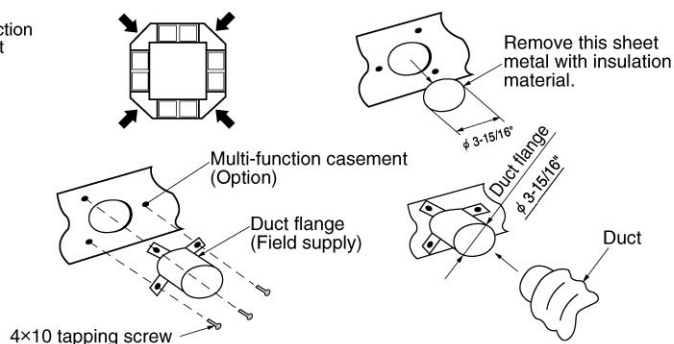
2. Fresh air intake (Installation of site)

- By mounting the optional multi-function casement to the indoor unit main body, and mounting the duct and duct flange (field supply) onto it further, fresh exterior air intake can be accomplished.
(The mounting of the multi-function casement increases the height of the ceiling plenum by 5-5/16".)



Knockout hole for fresh air intake

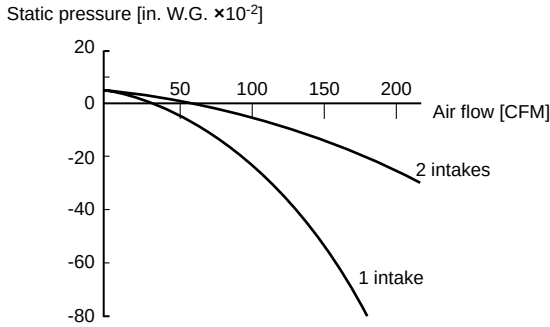
Preparation of knockout hole



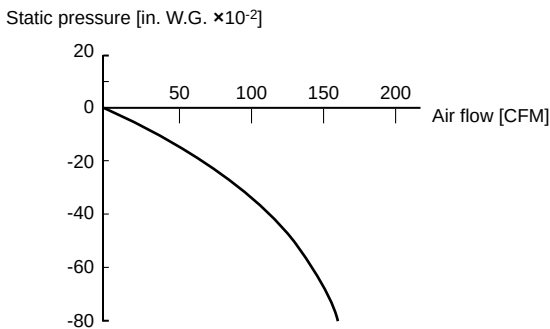
3. Fresh air intake amount & static pressure characteristics

1 PLA-A12 / 18 / 24 / 30 AA

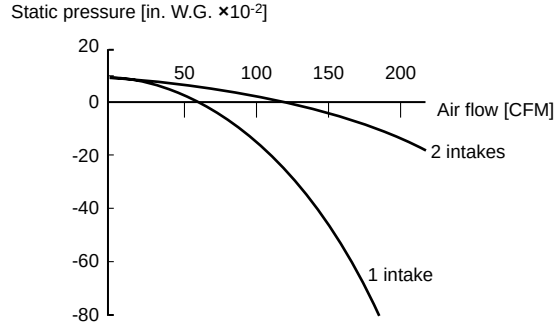
Multifunction casement + Standard filter



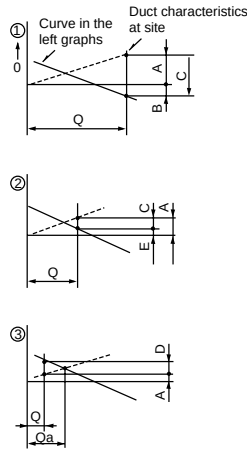
Taking air into the unit



Multifunction casement + High efficiency filter



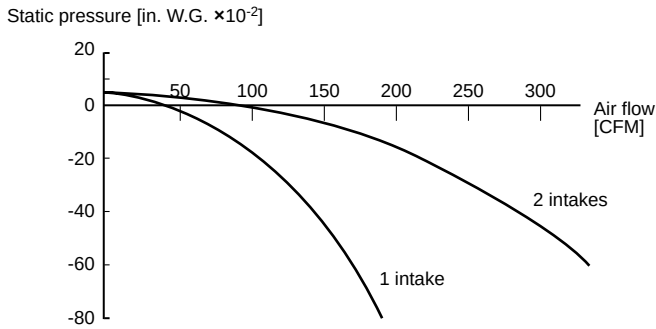
How to read curves



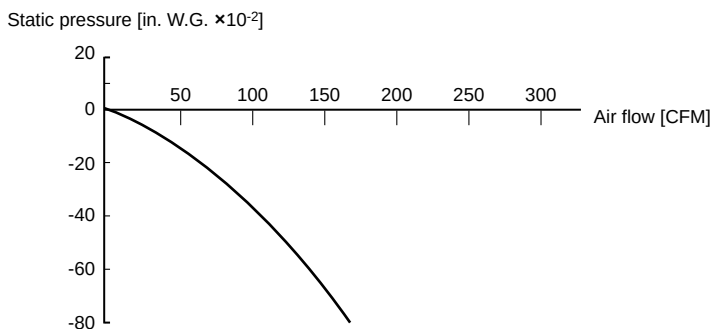
- Q...Planned amount of fresh air intake <CFM>
- A...Static pressure loss of fresh air intake duct system with air flow amount Q <in.W.G. $\times 10^{-2}$ >
- B...Forced static pressure at air conditioner inlet with air flow amount Q <in.W.G. $\times 10^{-2}$ >
- C...Static pressure of booster fan with air flow amount Q <in.W.G. $\times 10^{-2}$ >
- D...Static pressure loss increase amount of fresh air intake duct system for air flow amount Q <in.W.G. $\times 10^{-2}$ >
- E...Static pressure of indoor unit with air flow amount Q <in.W.G. $\times 10^{-2}$ >
- Qa...Estimated amount of fresh air intake without D <CFM>

2 PLA-A36 / 42 AA

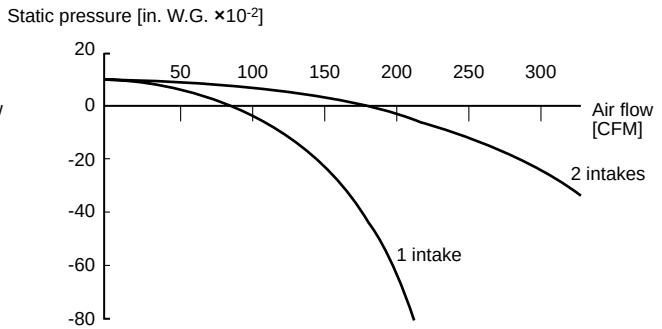
Multifunction casement + Standard filter



Taking air into the unit

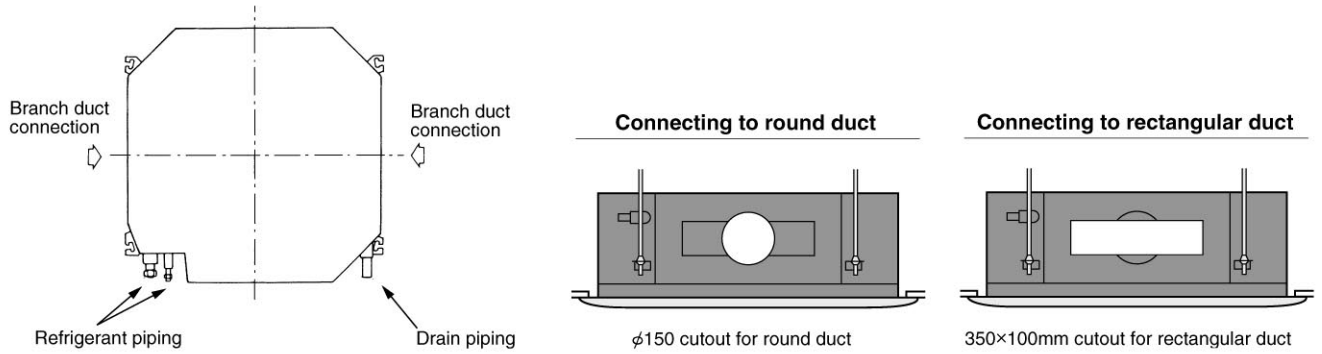


Multifunction casement + High efficiency filter



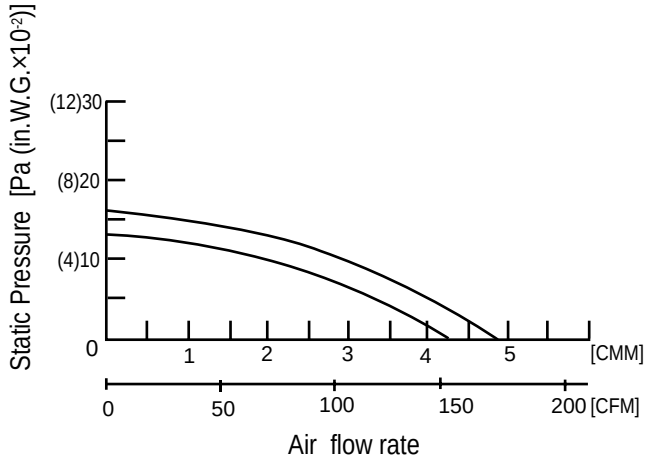
8-3-2. BRANCH DUCT (Installation at site)

To be compatible with both round and rectangular branch ducts, knockout holes are designed to fit both shapes for flexible on-site installation.

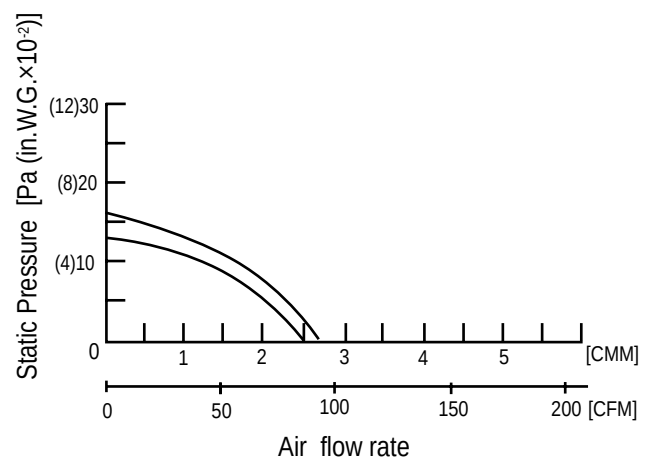


Branch duct air flow rate/static pressure characteristics PLA-A12AA

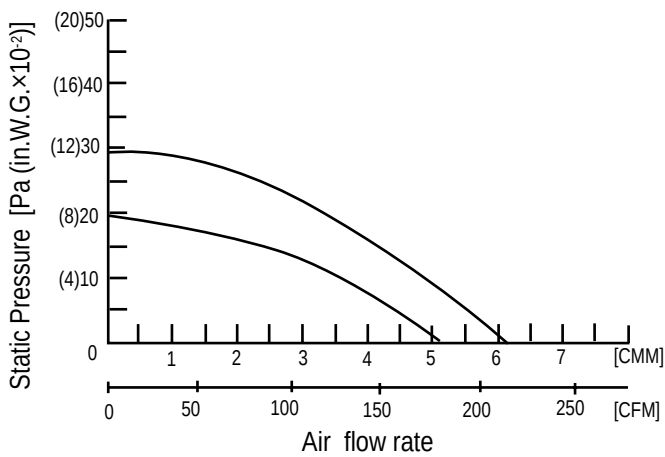
4-way air flow (horizontal vane) Rectangular duct



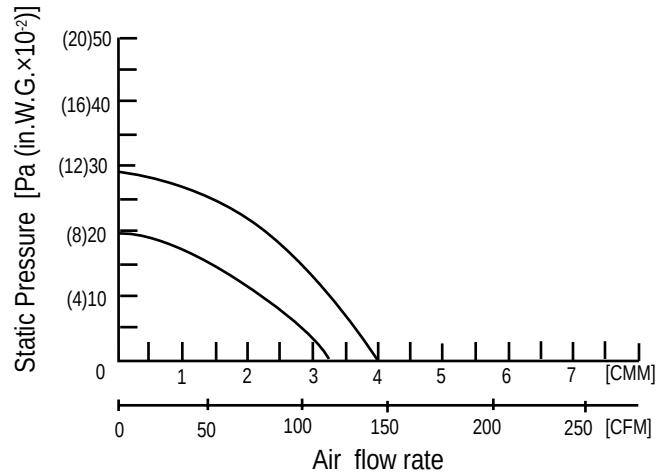
4-way air flow (horizontal vane) Round duct



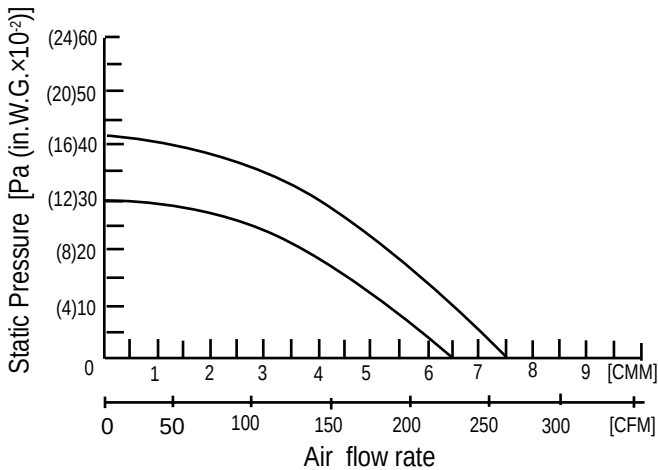
3-way air flow (horizontal vane) Rectangular duct



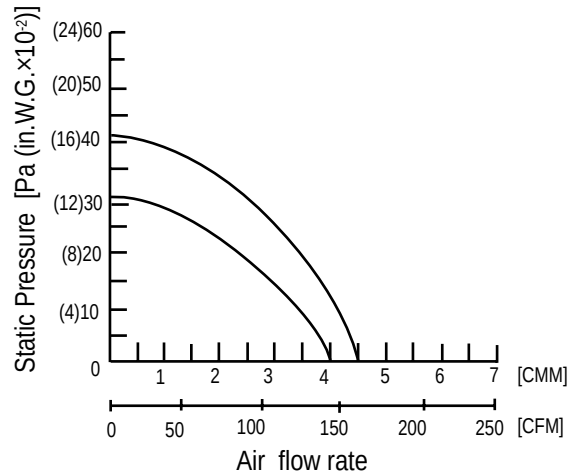
3-way air flow (horizontal vane) Round duct



2-way air flow (horizontal vane) Rectangular duct

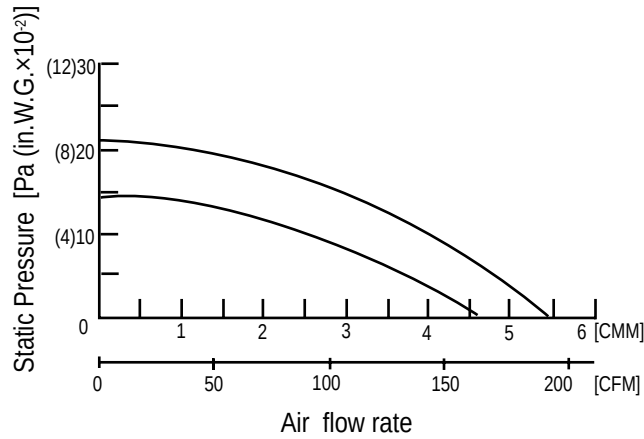


2-way air flow (horizontal vane) Round duct

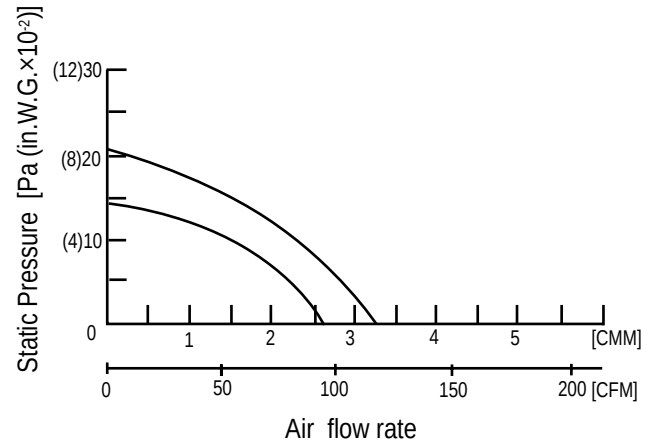


PLA-A18/24/30AA

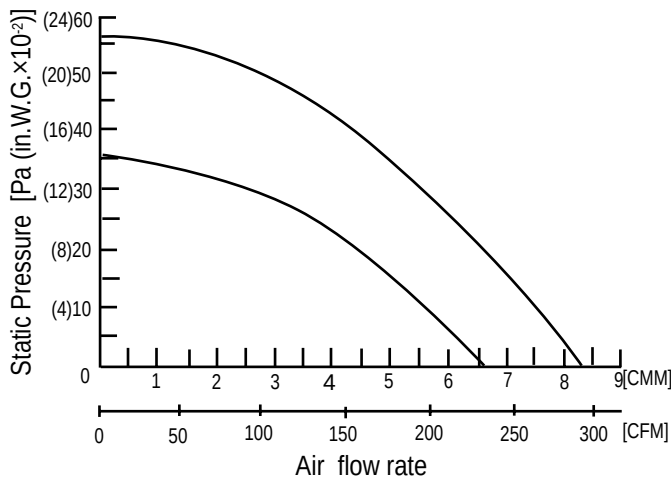
4-way air flow (horizontal vane) Rectangular duct



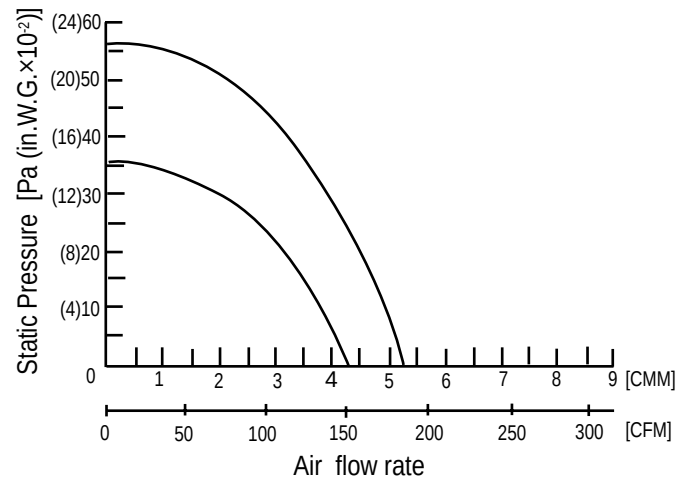
4-way air flow (horizontal vane) Round duct



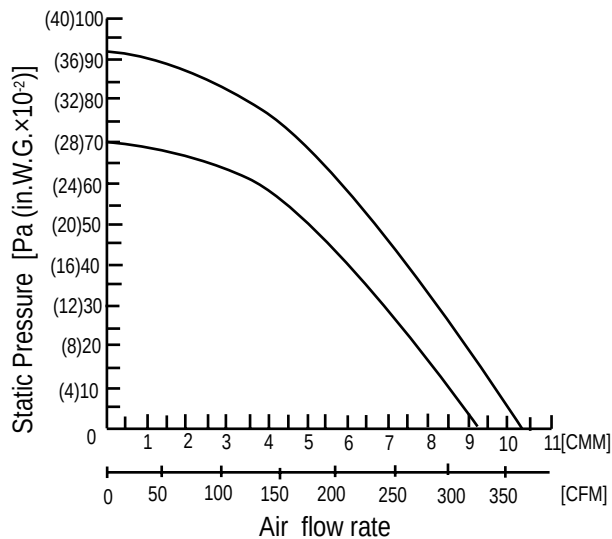
3-way air flow (horizontal vane) Rectangular duct



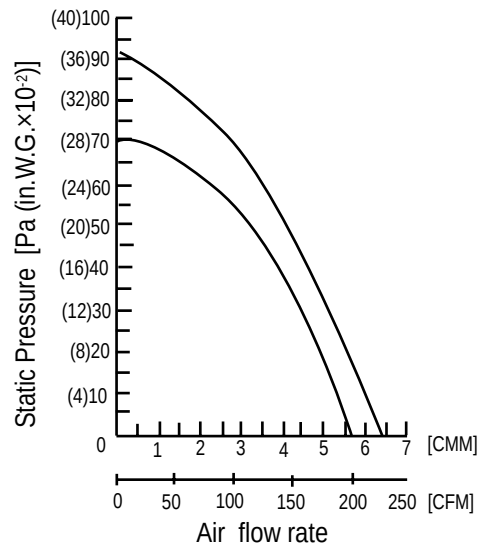
3-way air flow (horizontal vane) Round duct



2-way air flow (horizontal vane) Rectangular duct

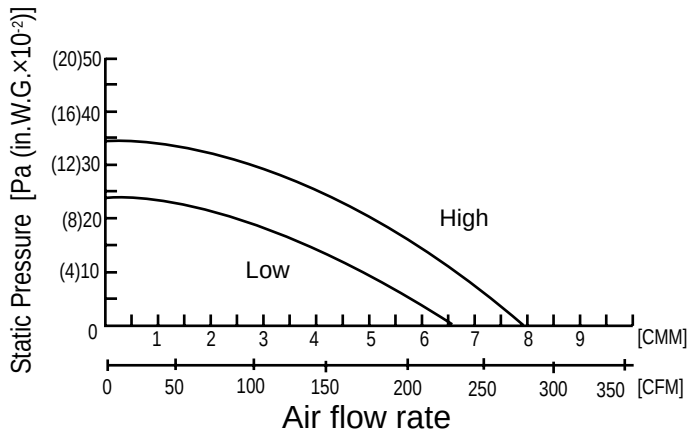


2-way air flow (horizontal vane) Round duct

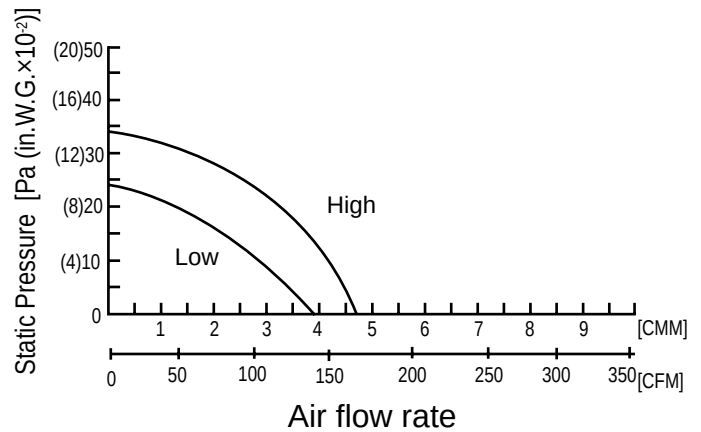


PLA-A36/42AA

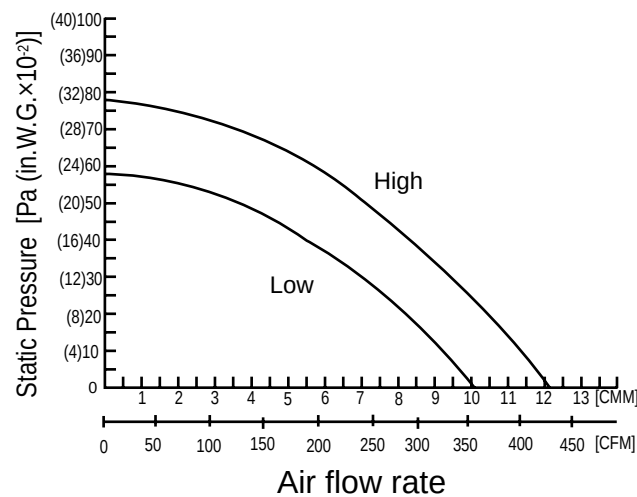
4-way air flow (horizontal vane) Rectangular duct



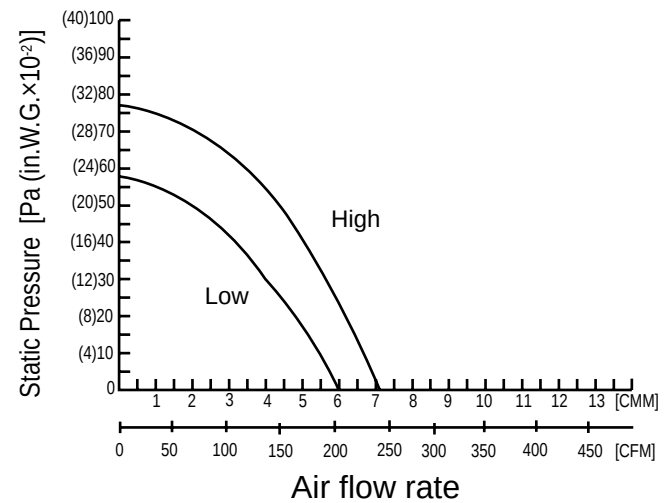
4-way air flow (horizontal vane) Round duct



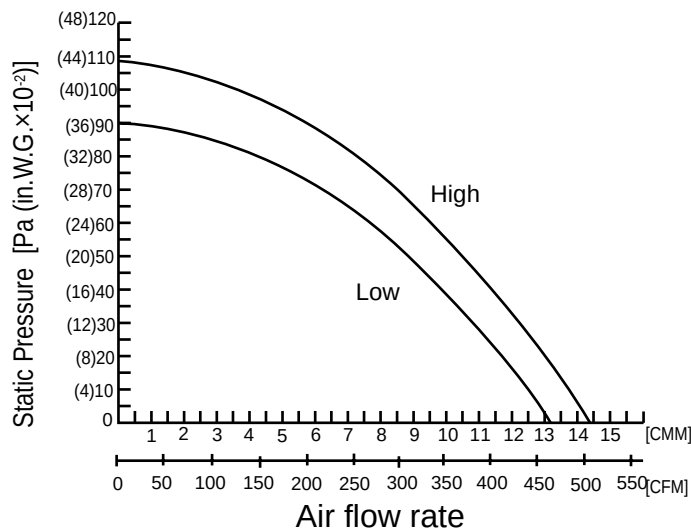
3-way air flow (horizontal vane) Rectangular duct



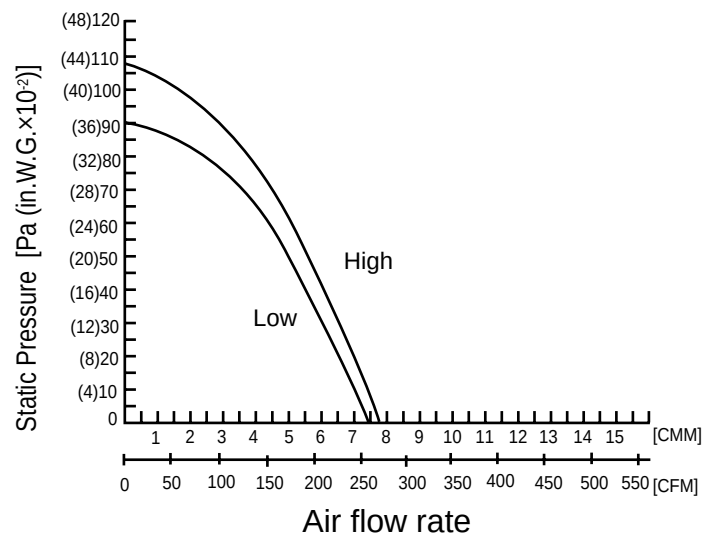
3-way air flow (horizontal vane) Round duct



2-way air flow (horizontal vane) Rectangular duct

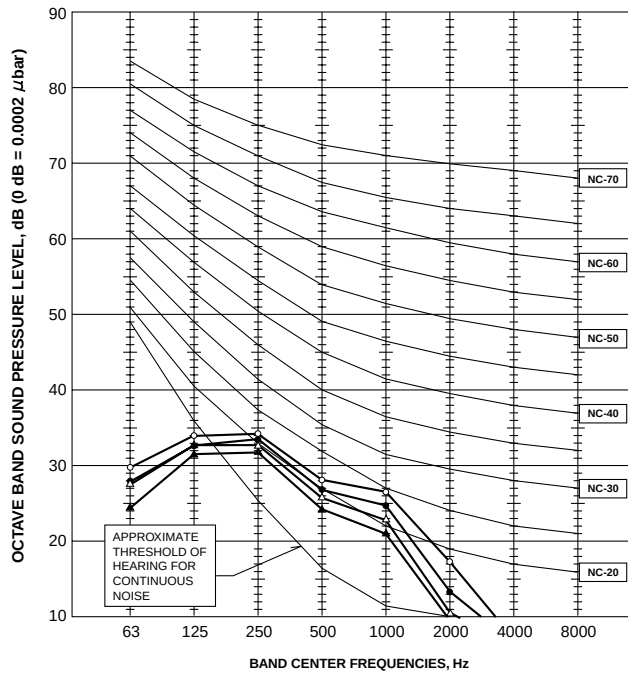


2-way air flow (horizontal vane) Round duct



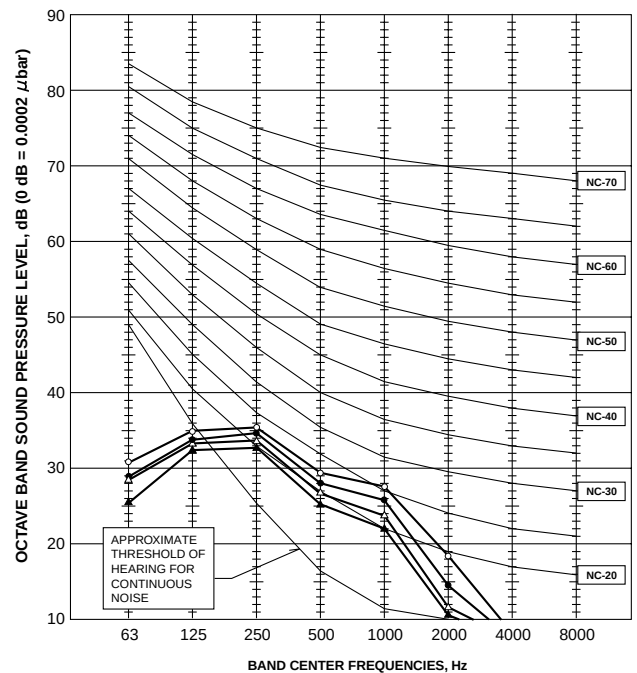
PLA-A12BA

NOTCH	SPL(dB)	LINE
High	31	○—○
Medium1	29	●—●
Medium2	28	△—△
Low	27	▲—▲



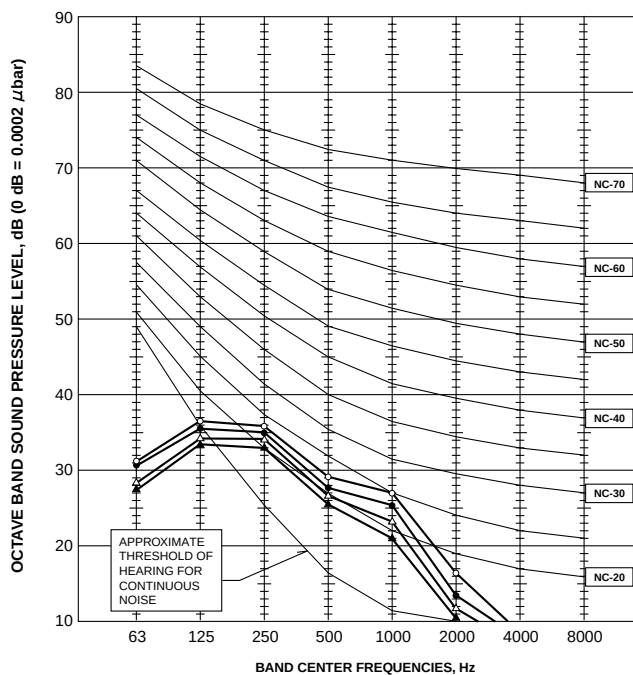
PLA-A18BA

NOTCH	SPL(dB)	LINE
High	32	○—○
Medium1	31	●—●
Medium2	29	△—△
Low	28	▲—▲



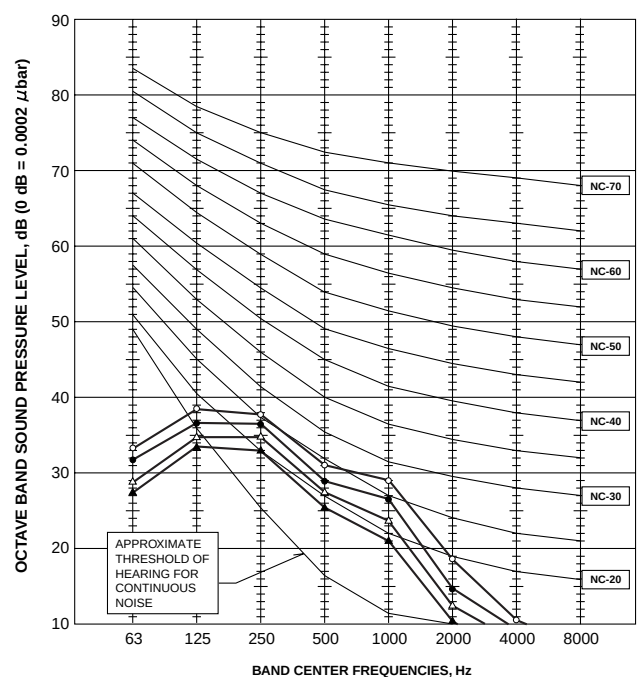
PLA-A24BA

NOTCH	SPL(dB)	LINE
High	32	○—○
Medium1	31	●—●
Medium2	29	△—△
Low	28	▲—▲



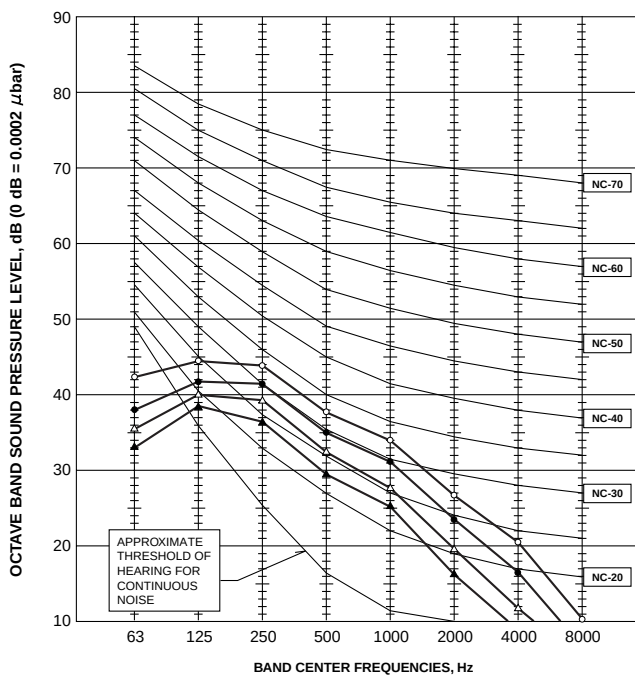
PLA-A30BA

NOTCH	SPL(dB)	LINE
High	34	○—○
Medium1	32	●—●
Medium2	30	△—△
Low	28	▲—▲



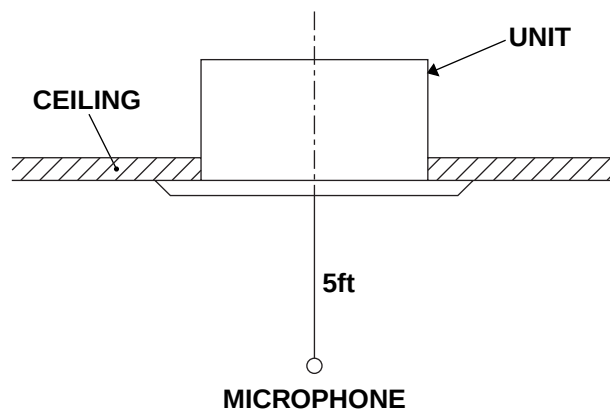
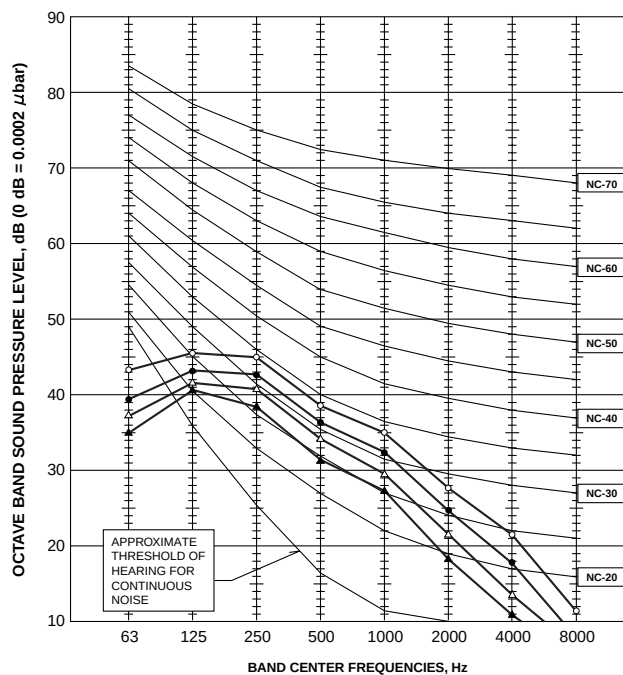
PLA-A36BA

NOTCH	SPL(dB)	LINE
High	40	○—○
Medium1	37	●—●
Medium2	34	△—△
Low	32	▲—▲



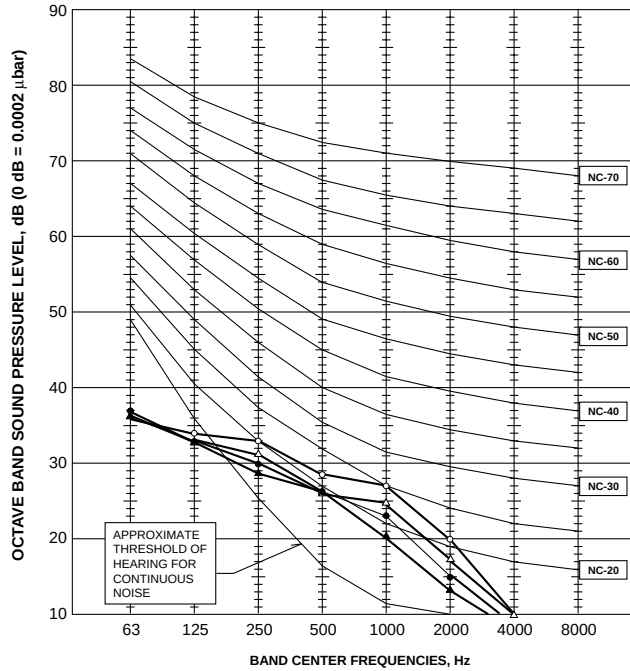
PLA-A42BA

NOTCH	SPL(dB)	LINE
High	41	○—○
Medium1	39	●—●
Medium2	36	△—△
Low	34	▲—▲



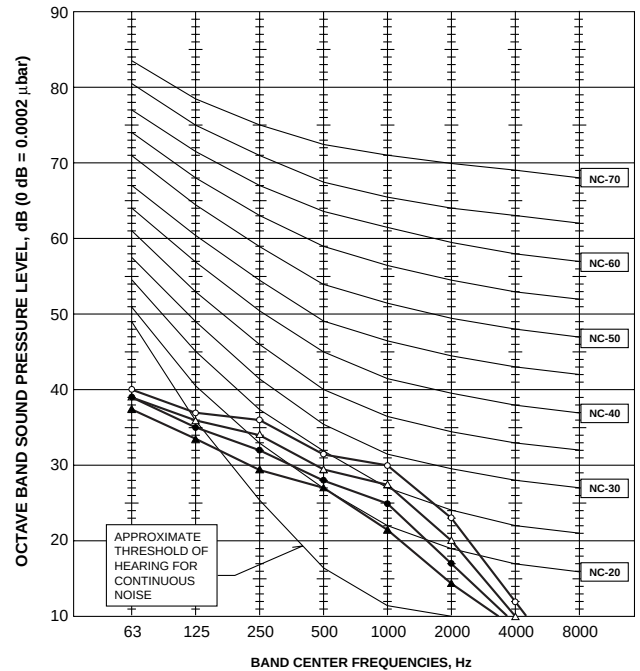
PLA-A12AA

NOTCH	SPL(dB)	LINE
High	31	○—○
Medium1	29	△—△
Medium2	28	●—●
Low	27	▲—▲



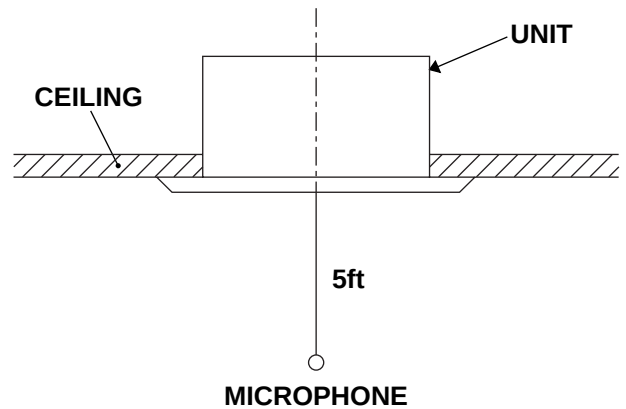
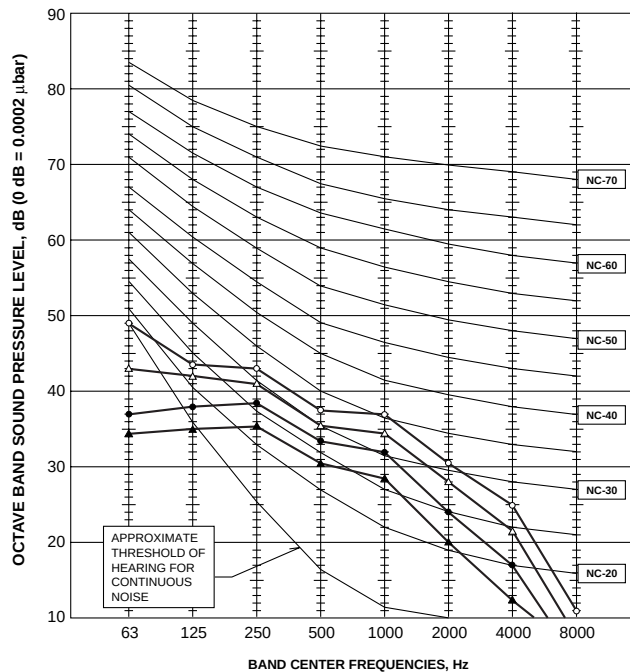
PLA-A18AA PLA-A24AA PLA-A30AA

NOTCH	SPL(dB)	LINE
High	34	○—○
Medium1	32	△—△
Medium2	30	●—●
Low	28	▲—▲



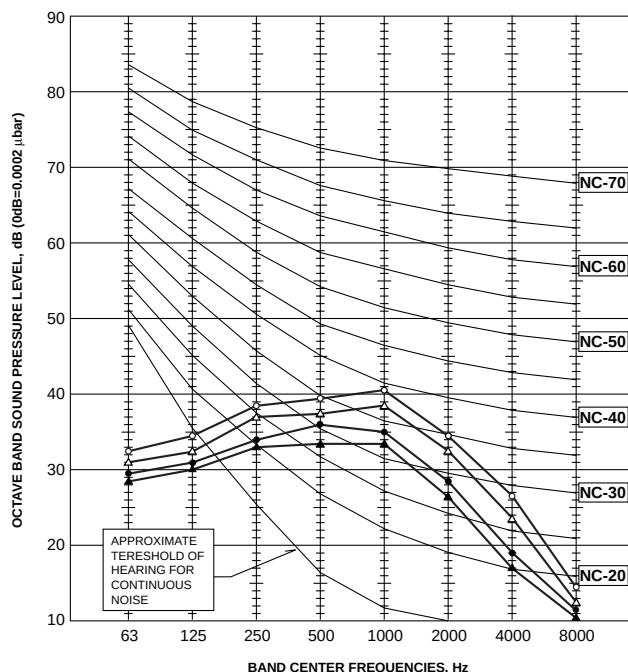
PLA-A36AA PLA-A42AA

NOTCH	SPL(dB)	LINE
High	41	○—○
Medium1	39	△—△
Medium2	36	●—●
Low	33	▲—▲



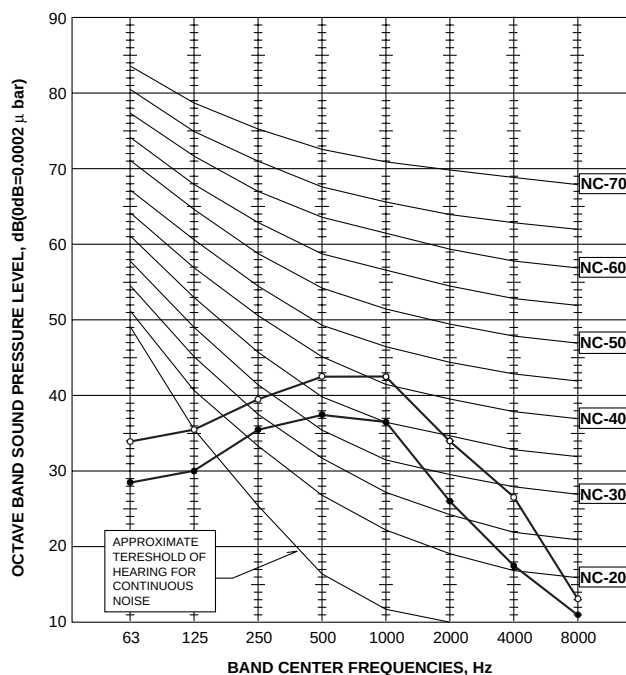
PKA-A12GA
PKA-A18GA
PKA-A12GAL
PKA-A18GAL

NOTCH	SPL(dB)	LINE
High	43	○—○
Medium1	41	△—△
Medium2	38	●—●
Low	36	▲—▲



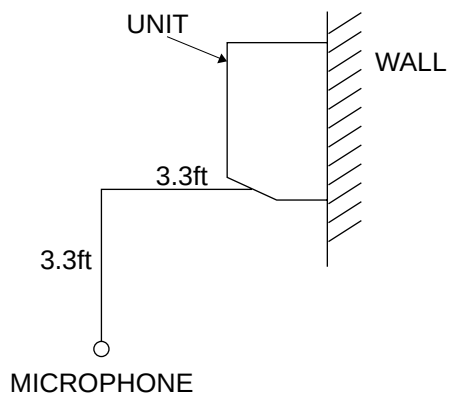
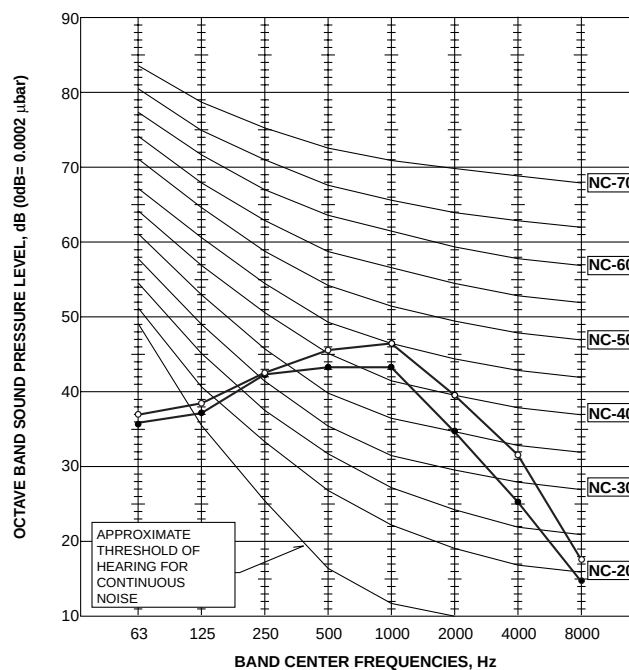
PKA-A24FA
PKA-A30FA
PKA-A24FAL
PKA-A30FAL

NOTCH	SPL(dB)	LINE
High	45	○—○
Low	39	●—●



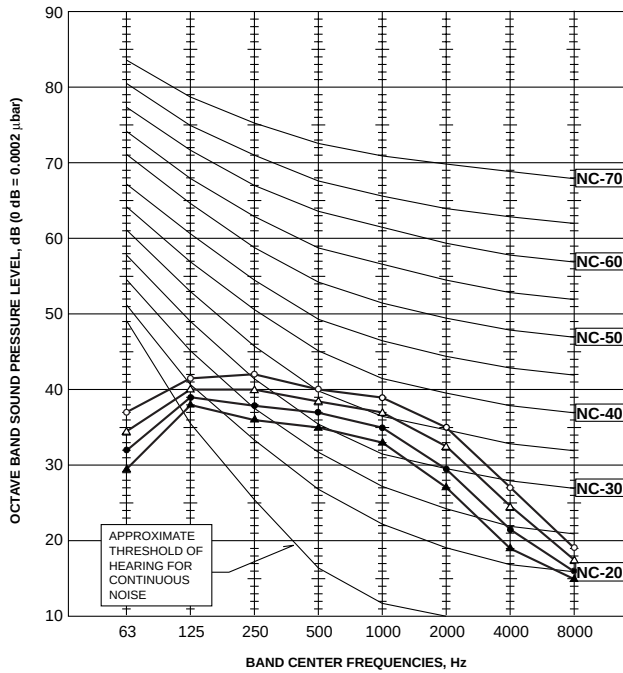
PKA-A36FA
PKA-A36FAL

NOTCH	SPL(dB)	LINE
High	49	○—○
Low	46	●—●



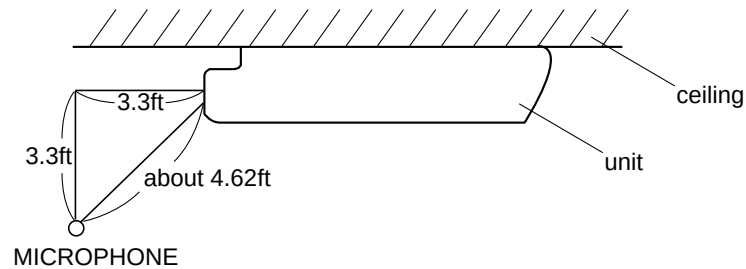
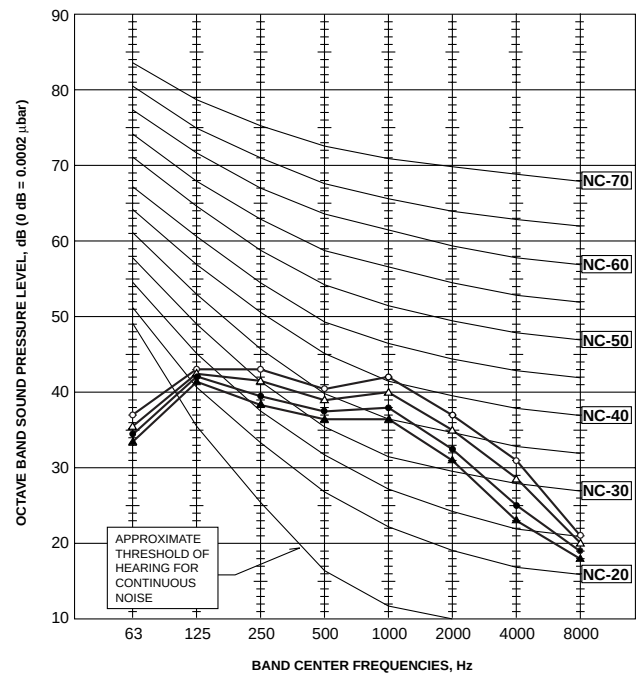
**PCA-A24GA
PCA-A30GA**

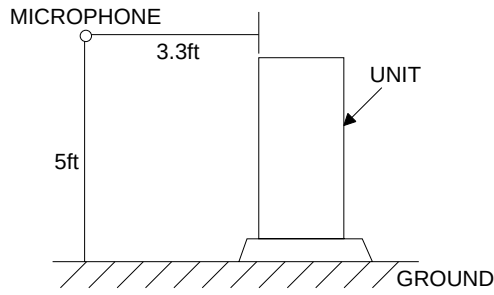
NOTCH	SPL(dB)	LINE
High	43	○—○
Medium1	41	△—△
Medium2	39	●—●
Low	37	▲—▲



**PCA-A36GA
PCA-A42GA**

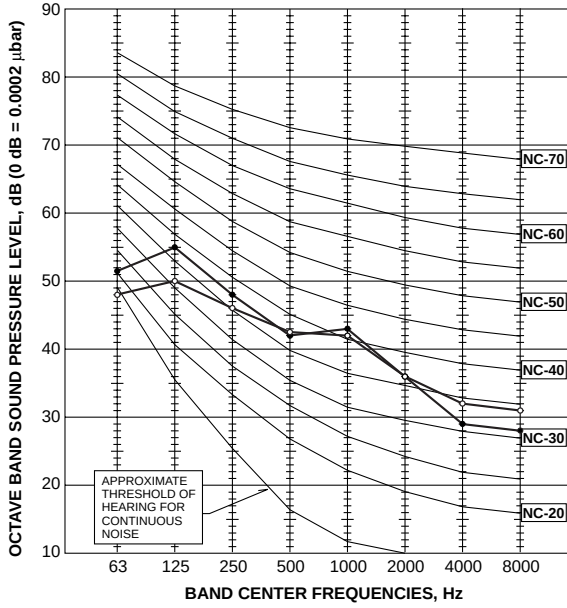
NOTCH	SPL(dB)	LINE
High	45	○—○
Medium1	43	△—△
Medium2	41	●—●
Low	40	▲—▲





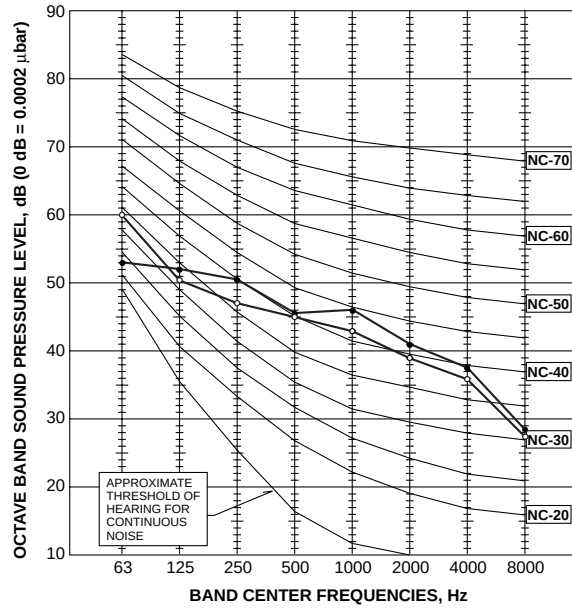
PUY-A12NHA (-BS)
PUY-A18NHA (-BS)
PUZ-A18NHA (-BS)

MODE	SPL(dB)	LINE
COOLING	46	○—○
HEATING	47	●—●



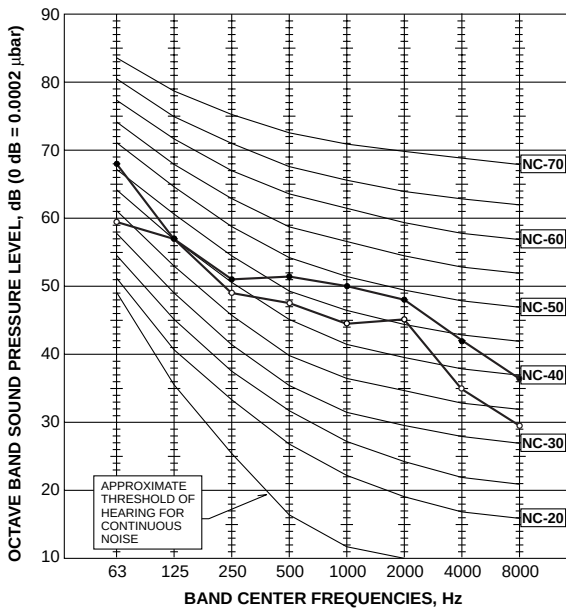
PUY-A24/30/36NHA(-BS)
PUZ-A24/30/36NHA(-BS)

MODE	SPL(dB)	LINE
COOLING	48	○—○
HEATING	50	●—●



PUY-A42NHA(-BS)
PUZ-A42NHA(-BS)

MODE	SPL(dB)	LINE
COOLING	51	○—○
HEATING	55	●—●



10-1. INDOOR UNIT

Part Name	Model Name	Applicable model
Remote sensor (extensible)	PAC-SE41TS-E	All models
Connector for CN51 (output for remote display + pulse12V input)	PAC-88HA-E(1pc.) PAC-725AD(10pcs.)	
Connector for CN32 (remote ON/OFF)	PAC-SE55RA-E	
Decoration panel with Wired remote controller	PLP-42BAMD	PLA-A·BA
Decoration panel	PLP-40BAU	
Multi-function casement	PAC-SH53TM-E	
Flange for fresh air intake	PAC-SH65OF-E	
High-efficiency filter element (PAC-SH53TM-E is needed.)	PAC-SH59KF-E	
i-see sensor corner panel	PAC-SA1ME-E	
Wireless signal receiver	PAR-SA9FA-E	
Space panel	PAC-SH48AS-E	
Air outlet shutter plate	PAC-SH51SP-E	
Multi-functional casement	PAC-SG03TM-E	PLA-A·AA
High-efficiency filter element (PAC-SG03TM-E is needed.)	PAC-SG01KF-E	
Wireless remote controller + Corner panel	PAR-SW96U-E	
Grille + Wired remote controller	PLP-42AAMD	
Grille	PLP-40AAU	
Air outlet shutter plate	PAC-SG06SP-E	PCA-A·GA
High-efficiency filter	PAC-SE81KF-E	
Wireless remote controller + adapter	PAR-SL99U-E	PKA-A24/30/36FA(L)
L shape connection pipe	PAC-SC84PI-E	



10-2. OUTDOOR UNIT

Part Name	Model Name	Applicable model
M-NET adapter	PAC-SF80MA-E	All models
A-control service tool	PAC-SK52ST	
Drain socket	PAC-SG61DS-E	
Air outlet guide (A42 needs 2 pieces.)	PAC-SG58SG-E	A12,18
	PAC-SG59SG-E	A24-42
Air protect guide (A42 needs 2 pieces.)	PAC-SG56AG-E	A12,18
	PAC-SH63AG-E	A24-42
Drain pan	PAC-SG63DP-E	A12,18
	PAC-SG64DP-E	A24-42
Distribution pipe for twin use	MSDD-50SR-E	A24,36



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