PKA WALL-MOUNTED INDOOR UNITS

Due to continuing improvement, above specification may be subject to change without notice.

1. SPECIFICATIONS

- Wall-mounted indoor unit for residential and commercial applications
- Shiny-white–exterior plastic; compact design
- Quiet operation
- Self-check function—integrated diagnostics
- Limited warranty: five years parts and seven years compressors

Due to continuing improvement, above specification may be subject to change without notice.

1. SPECIFICATIONS

1-1. FOR THE COMBINATION OF OUTDOOR UNIT PUY-A·NHA4(-BS)

Model name	Indoor unit		PKA-A12HA4	PKA-A18HA4	PKA-A24KA4	PKA-A30KA4	PKA-A36KA4
	Outdoor unit		PUY-A12NHA4 PUY-A12NHA4-BS	PUY-A18NHA4 PUY-A18NHA4-BS	PUY-A24NHA4 PUY-A24NHA4-BS	PUY-A30NHA4 PUY-A30NHA4-BS	PUY-A36NHA4 PUY-A36NHA4-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	1190	2240	2270	4130	5030
	EER	Btu/h/W	10.1	8.0	10.6	7.3	6.8
	SEER	Btu/h/W	15.2	15.3	17.0	15.5	14.0
	Moisture Removal	Pints/h	2.0	5.2	5.0	8.1	9.2
*1	SHF		0.81	0.68	0.77	0.70	0.70
Heating	Max. Capacity	Btu/h	–	–	–	–	–
	Rated Capacity	Btu/h	–	–	–	–	–
	Min. Capacity	Btu/h	–	–	–	–	–
	Total Input	W	–	–	–	–	–
	COP	W/W	–	–	–	–	–
*1	HSPF (4/5)	Btu/h/W	–	–	–	–	–
Heating at low ambient	Rated 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 : Wired type				
Indoor unit	MCA	A	1				
	MOCP	A	15				
	Blower Motor (ECM)	F.L.A.	0.33		0.36		0.57
	Blower Motor Output	W	30		56		
	Airflow DRY	CMM	9-10.5-12		18-20-22		20-23-26
	(Lo-Mid-Hi) WET	CMM	8-9.5-11		16-18-20		18-21-23
	Airflow DRY	CFM	320-370-425		635-705-775		705-810-920
	(Lo-Mid-Hi) WET	CFM	290-335-380		570-635-700		635-730-830
	External pressure	Pa	0				
	Sound level (Lo-Mid-Hi)	dB(A)	36-40-43		39-42-45		43-46-49
	External finish (Panel)		White Munsell 1.0Y 9.2/0.2				
	Dimension Unit (Panel)	W : mm [inch]	898 [35-3/8]		1170 [46-1/16]		
		D : mm [inch]	249 [9-13/16]		295 [11-5/8]		
		H : mm [inch]	295 [11-5/8]		365 [14-3/8]		
	Weight	kg	13		21		
	Unit (Panel)	lbs	29		46		
	Field drain pipe size I.D.	mm [inch]	16 [5/8]				
Remote Controller			Attached in Indoor Unit				
Outdoor unit	MCA	A	13		18	25	
	MOCP	A	15	20	30	40	
	Fan Motor (ECM)	F.L.A.	0.35		0.75		
	Fan Motor Output	W	40		75		
	Compressor		SNB130FPBM1		TNB220FLHM		
		R.L.A	12				
		L.R.A.	14		17.5		
	Airflow	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]	3.0 [6 lbs 10 oz]		
	Oil	L [oz]	0.65 (MEL56) [20]		0.87 (FV50S) [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℃(80°F), W.B. 19.4℃(67°F) Outdoor : D.B. 35℃(95°F), W.B. 23.9℃(75°F)
(heating)-Indoor : D.B. 21.1℃(70°F), W.B. 15.6℃(60°F) Outdoor : D.B. 8.3℃(47°F), W.B. 6.1℃(43°F)
*2.Rating conditions(heating)-Indoor : D.B. 21.1℃(70°F), W.B. 15.6℃(60°F) Outdoor : D.B. -8.3℃(17°F), W.B. -9.4℃(15°F)

Due to continuing improvement, above specification may be subject to change without notice.

1. SPECIFICATIONS

1-2. FOR THE COMBINATION OF OUTDOOR UNIT PUZ-A·NHA4(-BS)

Model name	Indoor unit		PKA-A18HA4	PKA-A24KA4	PKA-A30KA4	PKA-A36KA4
	Outdoor unit		PUZ-A18NHA4 PUZ-A18NHA4-BS	PUZ-A24NHA4 PUZ-A24NHA4-BS	PUZ-A30NHA4 PUZ-A30NHA4-BS	PUZ-A36NHA4 PUZ-A36NHA4-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	2270	4130	5030
	EER	Btu/h/W	8.0	10.6	7.3	6.8
	SEER	Btu/h/W	15.3	17.0	15.5	14.0
	Moisture Removal	Pints/h	5.2	5.0	8.1	9.2
*1	SHF		0.68	0.77	0.70	0.70
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	1970	2330	3150	3610
	COP	W/W	2.83	3.27	2.98	3.00
*1	HSPF (4/5)	Btu/h/W	9.5 / 7.6	10.8 / 8.6	8.9 / 7.1	9.3 / 7.5
Heating at low ambient	Rated Capacity	Btu/h	13,000	18,000	23,000	25,000
	Total Input	W	1670	2200	2850	3030
*2	COP	W/W	2.28	2.40	2.37	2.42
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			
	Blower Motor (ECM)	F.L.A.	0.33	0.36		0.57
	Blower Motor Output	W	30	56		
	Airflow DRY	CMM	9-10.5-12	18-20-22		20-23-26
	(Lo-Mid-Hi) WET	CMM	8-9.5-11	16-18-20		18-21-23
	Airflow DRY	CFM	320-370-425	635-705-775		705-810-920
	(Lo-Mid-Hi) WET	CFM	290-335-380	570-635-700		635-730-830
	External pressure	Pa	0			
	Sound level (Lo-Mid-Hi)	dB(A)	36-40-43	39-42-45		43-46-49
	External finish (Panel)		White Munsell 1.0Y 9.2/0.2			
	Dimension Unit (Panel)	W : mm [inch]	898 [35-3/8]	1170 [46-1/16]		
		D : mm [inch]	249 [9-13/16]	295 [11-5/8]		
		H : mm [inch]	295 [11-5/8]	365 [14-3/8]		
	Weight	kg	13	21		
	Unit (Panel)	lbs	29	46		
	Field drain pipe size I.D.	mm [inch]	16 [5/8]			
Remote Controller			Attached in Indoor Unit			
Outdoor unit	MCA	A	13	18	25	
	MOCP	A	20	30	40	
	Fan Motor (ECM)	F.L.A.	0.35	0.75		
	Fan Motor Output	W	40	75		
	Compressor		SNB130FPBM1	TNB220FLHM		
		R.L.A	12			
		L.R.A.	14		17.5	
	Airflow	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]	3.0 [6 lbs 10 oz]		
	Oil	L [oz]	0.65 (MEL56) [20]	0.87 (FV50S) [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 Connection Method			Not Supplied Flared			

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

Due to continuing improvement, above specification may be subject to change without notice.

1-3. FOR THE COMBINATION OF OUTDOOR UNIT PUZ-HA·NHA4(-BS)

Model name	Indoor unit		PKA-A30KA4	PKA-A36KA4
	Outdoor unit		PUZ-HA30NHA4	PUZ-HA36NHA4
Cooling	Max. Capacity	Btu/h	30,000	34,200
	Rated Capacity	Btu/h	30,000	33,500
	Min. Capacity	Btu/h	18,000	18,000
	Total Input	W	2,500	2,790
	EER	Btu/h/W	12.0	12.0
	SEER	Btu/h/W	16.5	16.2
	Moisture Removal	Pints/h	8.1	8.7
*1	SHF		0.70	0.71
Heating	Max. Capacity	Btu/h	34,000	40,000
	Rated Capacity	Btu/h	32,000	38,000
	Min. Capacity	Btu/h	18,000	18,000
	Total Input	W	2,930	3,410
	COP	W/W	3.20	3.27
*1	HSPF(IV/V)	Btu/h/W	9.5 / 7.3	10.0 / 7.8
Heating at 17°F(-8.3°C)	Max.Capacity	Btu/h	32,000	38,000
	Total Input	W	5,080	6,010
*2	COP	W/W	1.85	1.85
Heating at 5°F(-15°C)	Max. Capacity	Btu/h	32,000	38,000
	Total Input	W	5,770	6,760
*3	COP	W/W	1.63	1.65
Power supply	Phase, Cycle, Voltage		1phase, 60Hz, 208/230V	
	Breaker size	A	30	
Voltage	Indoor - Outdoor S1 - S2		AC208/230V	
	Indoor - Outdoor S2 - S3		DC24V	
	Indoor - Remote Controller		DC12V : Wired type	
Indoor unit	MCA	A	1	
	MOCP	A	15	
	Blower Motor (ECM)	F.L.A.	0.36	0.57
	Blower Motor Output	W	56	
	Airflow DRY	CMM	18-20-22	20-23-26
	Airflow WET	CMM	16-18-20	18-21-23
	Airflow DRY	CFM	635-705-775	705-810-920
	Airflow WET	CFM	570-635-700	635-730-830
	External pressure	Pa	0	
	Sound level	dB(A)	39-42-45	43-46-49
	External finish (Grille)		White Munsell 1.0Y 9.2/0.2	
	Dimension Unit (Grille)	W : mm[inch]	1170 [46-1/16]	
		D : mm[inch]	295 [11-5/8]	
		H : mm[inch]	365 [14-3/8]	
	Weight Unit(Grille)	kg	21	
	Weight Unit(Grille)	lbs	46	
	Field drain pipe size	mm[inch]	I.D. 16 [5/8]	
Remote Controller			Attached in Indoor unit	
Outdoor unit	MCA	A	28	
	MOCP	A	40	
	Fan Motor (ECM)	F.L.A.	0.4 + 0.4	
	Fan Motor Output	W	60 + 60	
	Compressor	Type	ANB33FJEMT	ANB33FJEMT
		R.L.A.	18	
		L.R.A.	27.5	
	Airflow	CMM[CFM]	100[3,530]	
	Refrigerant Control		Electronic Expansion Valve	
	Defrost Method		Reverse Cycle	
	Sound level at cooling	dB(A)	52	
	Sound level at heating	dB(A)	53	
	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]	1,350 [53-1/8]	
	Weight	kg[lbs]	120 [265]	
Refrigerant	Type		R410A	
	Charge	kg[lbs, oz]	5.5 [12 lbs]	
	Oil	L[oz]	1.4(FV50S) [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.75m [Max.245ft]	
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.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)
*3.Conditions (heating)-Indoor : D.B. 21.1°C(70°F), W.B. 15.6°C(60°F) Outdoor : D.B. -15°C(5°F), W.B. -15°C(5°F)

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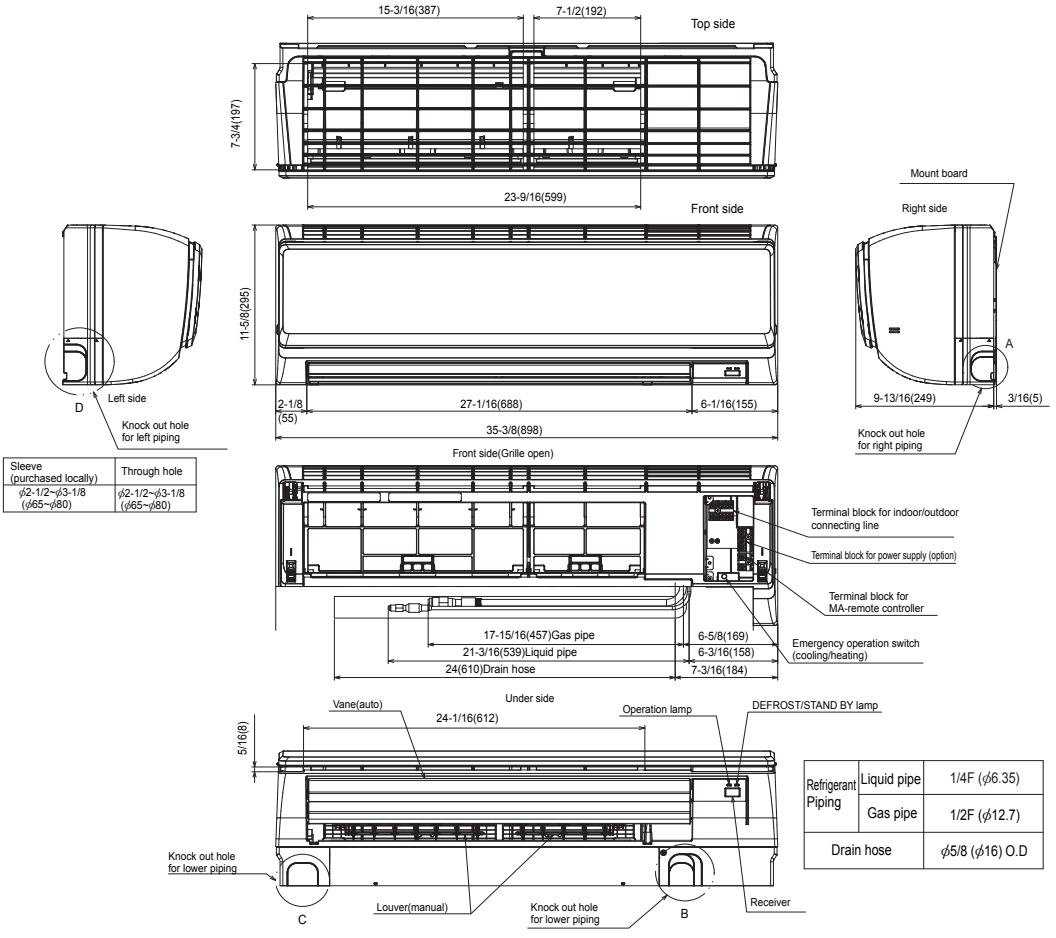
2. EXTERNAL DIMENSIONS

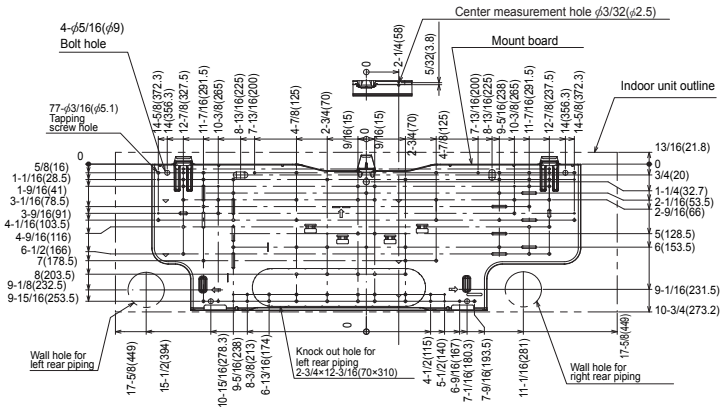
PKA-A12HA4 PKA-A18HA4

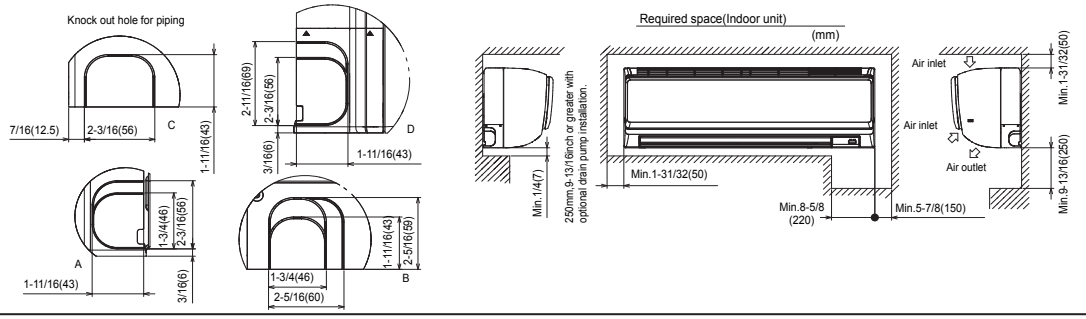
Unit: inch (mm)



Sleeve (purchased locally)	Through hole
ϕ2-1/2~ϕ3-1/8 (ϕ65~ϕ80)	ϕ2-1/2~ϕ3-1/8 (ϕ65~ϕ80)

Refrigerant Piping	Liquid pipe	1/4F (ϕ6.35)
	Gas pipe	1/2F (ϕ12.7)
Drain hose		ϕ5/8 (ϕ16) O.D



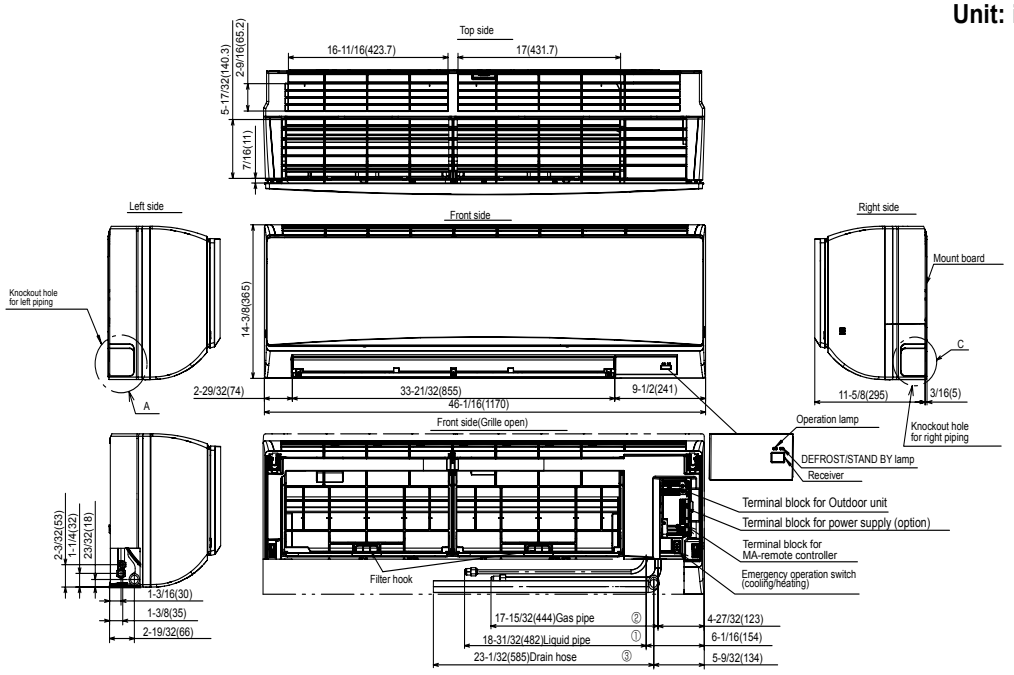


Due to continuing improvement, above specification may be subject to change without notice.

2. EXTERNAL DIMENSIONS

PKA-A24KA4.TH PKA-A30KA4.TH PKA-A36KA4.TH

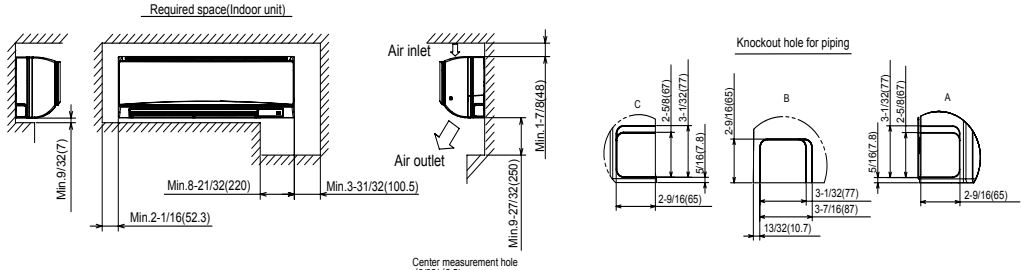
Unit: inch (mm)

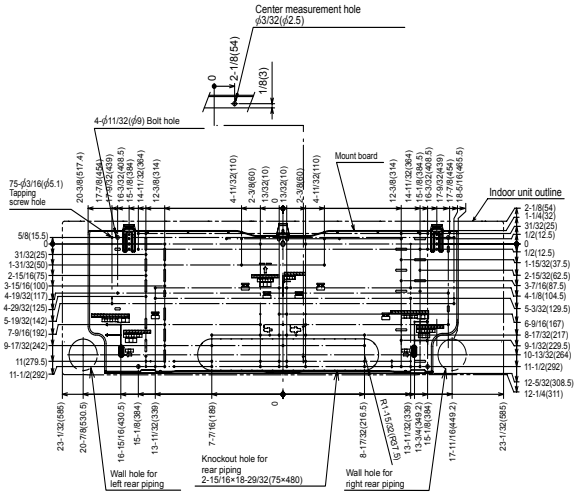


Sleeve (purchased locally)	Through hole
ϕ2-15/16 (ϕ75)	ϕ2-15/16~ϕ3-5/32 (ϕ75~ϕ80)

Piping connection

① Liquid pipe	Refrigerant pipe: 3/8 O.D(ϕ9.52) Flared connection: 3/8F
② Gas pipe	Refrigerant pipe: 5/8 O.D(ϕ15.88) Flared connection: 5/8F
③ Drain hose	5/8(ϕ16) O.D



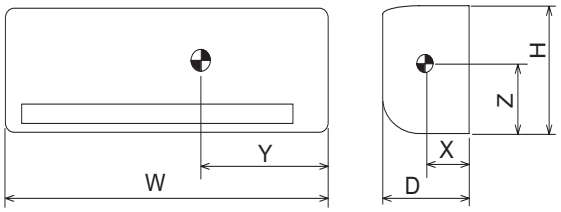


Due to continuing improvement, above specification may be subject to change without notice.

3. CENTER OF GRAVITY

PKA-A12HA4 PKA-A18HA4 PKA-A24KA4.TH
PKA-A30KA4.TH PKA-A36KA4.TH

Unit: inch (mm)



Model name	W	D	H	X	Y	Z
PKA-A12HA4	35-3/8 (898)	9-13/16 (249)	11-5/8 (295)	4-3/4 (120)	15-3/8 (390)	6-5/16 (160)
PKA-A18HA4	35-3/8 (898)	9-13/16 (249)	11-5/8 (295)	4-3/4 (120)	15-3/8 (390)	6-5/16 (160)
PKA-A24KA4	46-1/8 (1170)	11-5/8 (295)	14-3/8 (365)	7-1/2 (190)	18-1/8 (460)	7-1/2 (190)
PKA-A30KA4	46-1/8 (1170)	11-5/8 (295)	14-3/8 (365)	7-1/2 (190)	18-1/8 (460)	7-1/2 (190)
PKA-A36KA4	46-1/8 (1170)	11-5/8 (295)	14-3/8 (365)	7-1/2 (190)	18-1/8 (460)	7-1/2 (190)

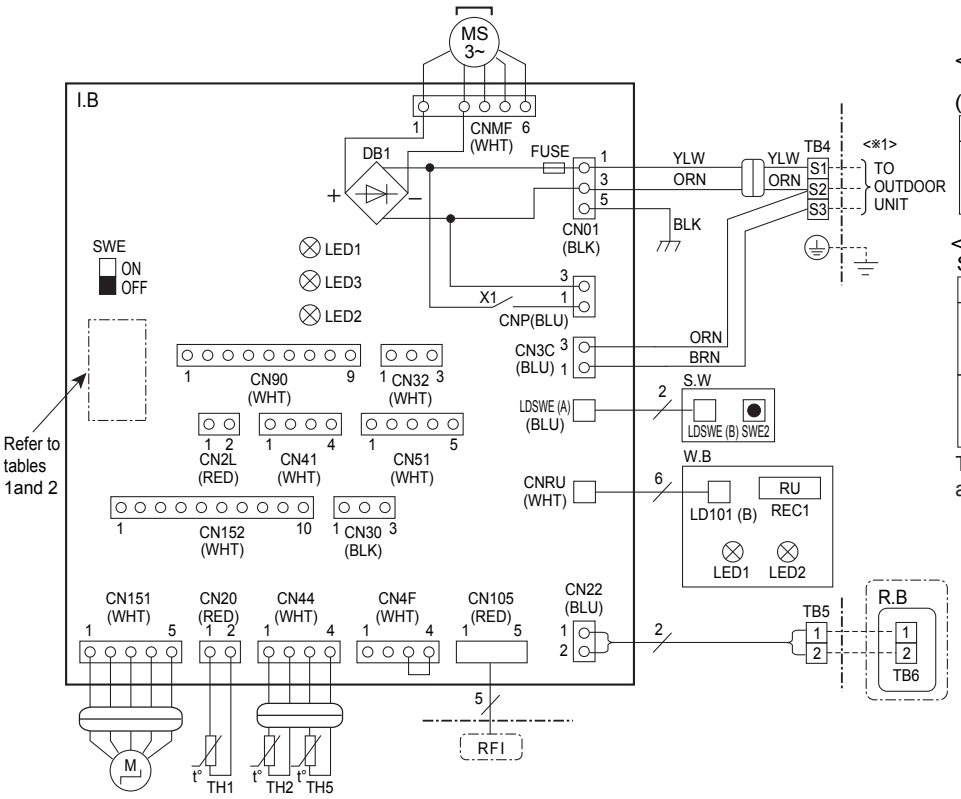
Due to continuing improvement, above specification may be subject to change without notice.

PKA-A12HA4 PKA-A18HA4

Unit: inch (mm)

[LEGEND]

Symbol	Name	Symbol	Name
I.B	Indoor controller board	M	Vane motor
CN2L	Connector (LOSSNAY)	MS	Fan motor
CN30	Connector (LLC)	S.W	Switch board
CN32	Connector (Remote switch)	SWE2	Emergency operation
CN41	Connector (HA terminal-A)	TB2	Terminal block (Indoor unit Power (option))
CN51	Connector (Centrally control)	TB4	Terminal block (Indoor/outdoor connecting line)
CN90	Connector (Remote operation adapter)	TB5	Terminal block (Remote controller transmission line)
CN105	Connector (Radio frequency interface)	TH1	Room temp. Thermistor (32°F/15KΩ, 77°F/5.4KΩ Detect)
CN152	Connector (Back-up heating)		
FUSE	FUSE(T3.15AL250V)	TH2	Pipe temp. Thermistor/liquid (32°F/15KΩ, 77°F/5.4KΩ Detect)
LED1	Power supply (I.B)		
LED2	Power supply (R.B)	TH5	Cond./eva. temp. Thermistor (32°F/15KΩ, 77°F/5.4KΩ Detect)
LED3	Transmission (Indoor-outdoor)		
SW1	Switch (Model selection) ※See Table 1	W.B	Pcb for IR wireless remote controller
SW2	Switch (Capacity code) ※See Table 2	LED1	LED (Operation indication : Green)
SWE	Connector (Emergency operation)	LED2	LED (Preparation for heating : Orange)
RFI	Radio frequency interface for RF thermostat	REC1	Receiving unit
		OPTION PART	
		R.B	Wired remote controller board
		TB6	Terminal block (Remote controller transmission line)



<Table 1>
SW1
(MODEL SELECTION)

SETTING
1 2 3 4 5 ON OFF

<Table 2>
SW2(CAPACITY CODE)

MODELS	SETTING
PKA-A12HA4	1 2 3 4 5 ON OFF
PKA-A18HA4	1 2 3 4 5 ON OFF

The black square (■) indicates a switch position.

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.

Due to continuing improvement, above specification may be subject to change without notice.

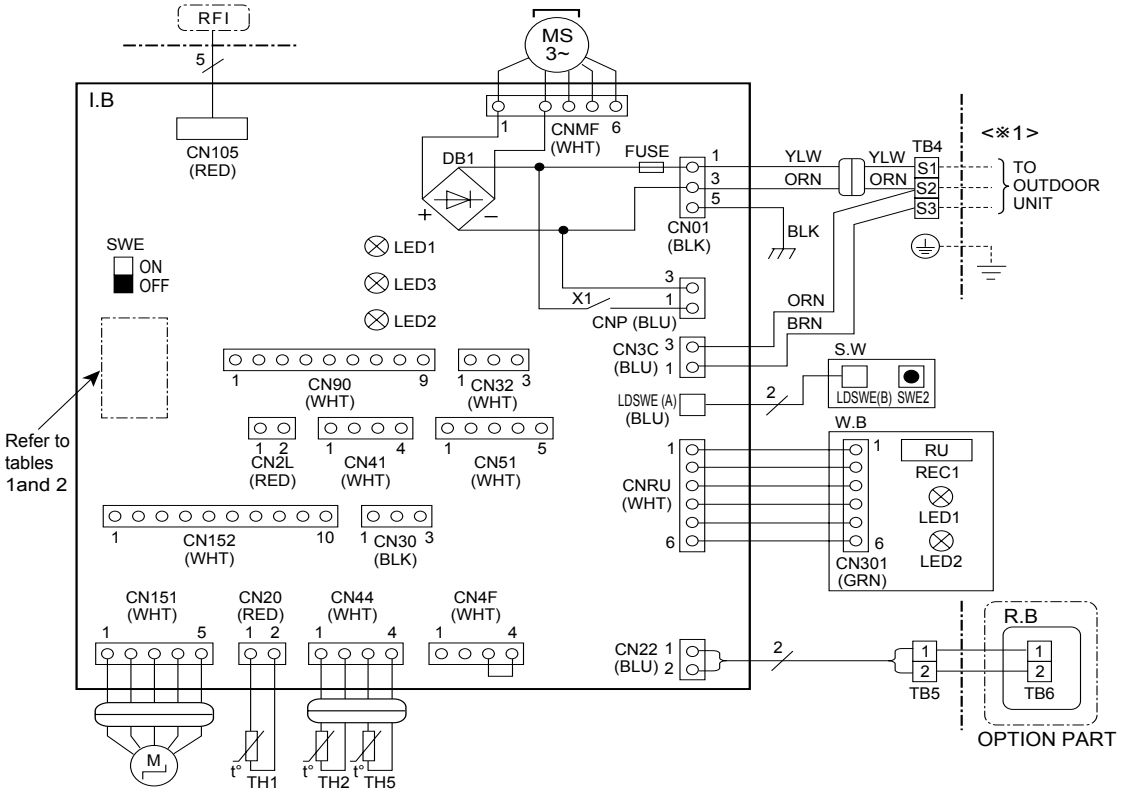
4. ELECTRICAL WIRING DIAGRAMS

PKA-A24KA4.TH PKA-A30KA4.TH PKA-A36KA4.TH

Unit: inch (mm)

[Explanation of symbols]

Symbol	Name	Symbol	Name
I.B	Indoor controller board	M	Vane motor
CN2L	Connector (LOSSNAY)	MS	Fan motor
CN30	Connector (LLC)	S.W	Switch board
CN32	Connector (Remote switch)	SWE2	Emergency operation
CN41	Connector (HA terminal-A)	TB2	Terminal block(Indoor unit Power (option))
CN51	Connector (Centrally control)	TB4	Terminal block (Indoor/outdoor connecting line)
CN90	Connector (Remote operation adapter)	TB5	Terminal block (Remote controller transmission line)
CN105	Connector (Radio frequency interface)	TH1	Room temp. Thermistor (32°F/15kΩ, 77°F/5.4kΩ Detect)
CN152	Connector (Back-up heating)		
FUSE	FUSE (T3.15AL250V)	TH2	Pipe temp. Thermistor/liquid (32°F/15kΩ, 77°F/5.4kΩ Detect)
LED1	Power supply (I.B)		
LED2	Power supply (R.B)	TH5	Cond./eva. temp. Thermistor (32°F/15kΩ, 77°F/5.4kΩ Detect)
LED3	Transmission (Indoor-outdoor)		
SW1	Switch (Model selection) ※See table 1	W.B	Pcb for IR wireless remote controller
SW2	Switch (Capacity code) ※See table 2	LED1	LED (Operation indication : Green)
SWE	Connector (Emergency operation)	LED2	LED (Preparation for heating: Orange)
R.B	Wired remote controller board	REC1	Receiving unit
TB6	Terminal block (Remote controller transmission line)	RFI	Radio frequency interface for RF thermostat



<Table 1>
SW1
(MODEL SELECTION)

SETTING
1 2 3 4 5 ON OFF

<Table 2>
SW2 (CAPACITY CODE)

MODELS	SETTING	MODELS	SETTING	MODELS	SETTING
PKA-A24KA4	1 2 3 4 5 ON OFF	PKA-A30KA4	1 2 3 4 5 ON OFF	PKA-A36KA4	1 2 3 4 5 ON OFF

The black square (■) indicates a switch position.

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.

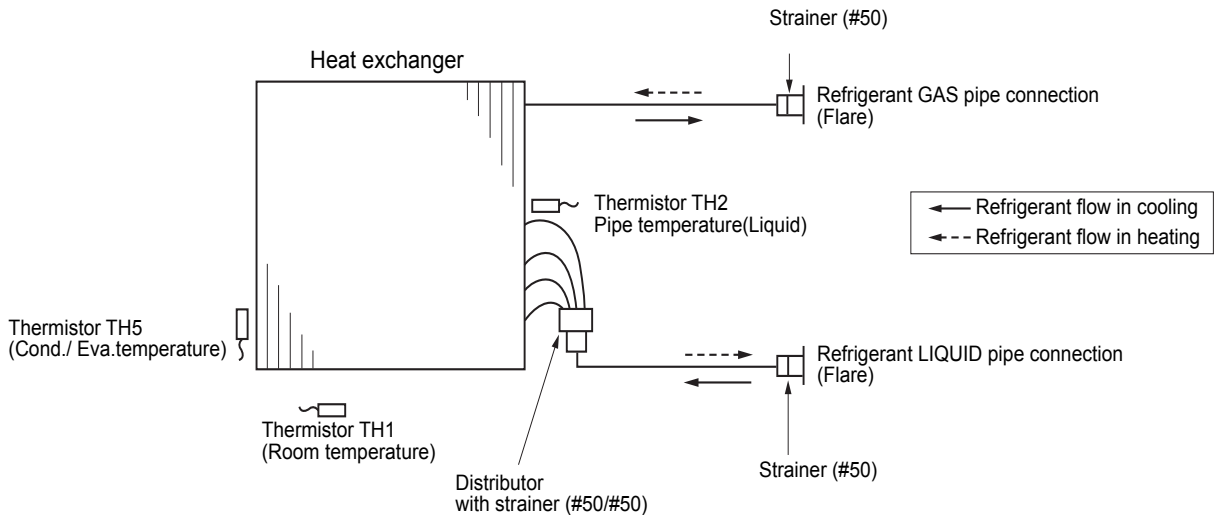
※1: Use copper supply wires.

Due to continuing improvement, above specification may be subject to change without notice.

5. REFRIGERANT SYSTEM DIAGRAMS

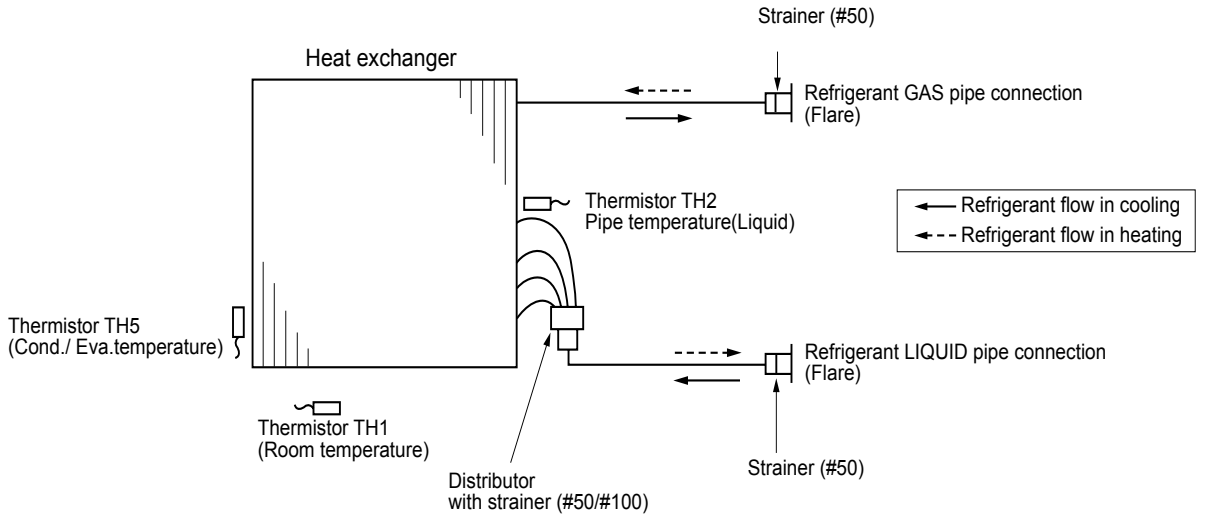
PKA-A12HA4 PKA-A18HA4

Unit: inch (mm)



PKA-A24KA4.TH PKA-A30KA4.TH PKA-A36KA4.TH

Unit: inch (mm)

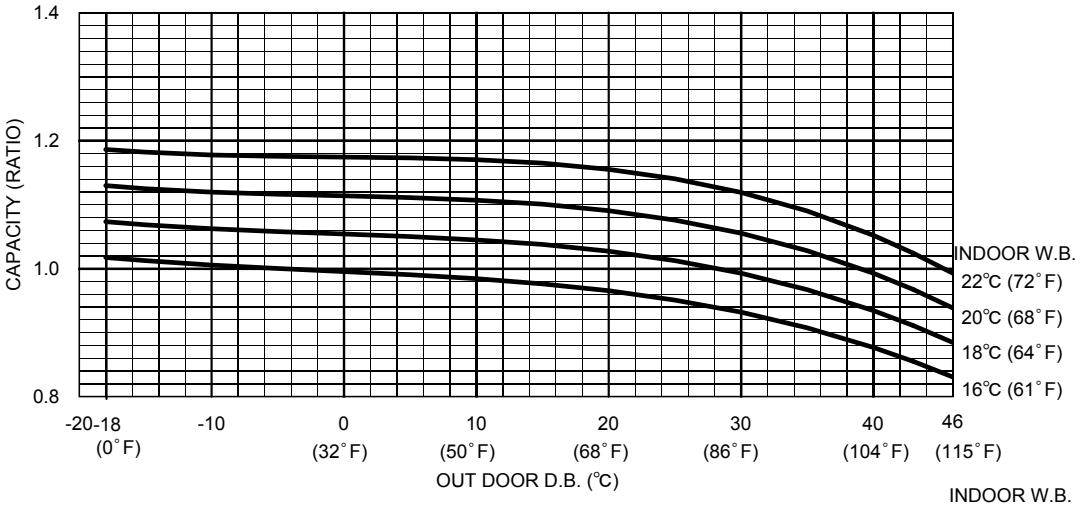


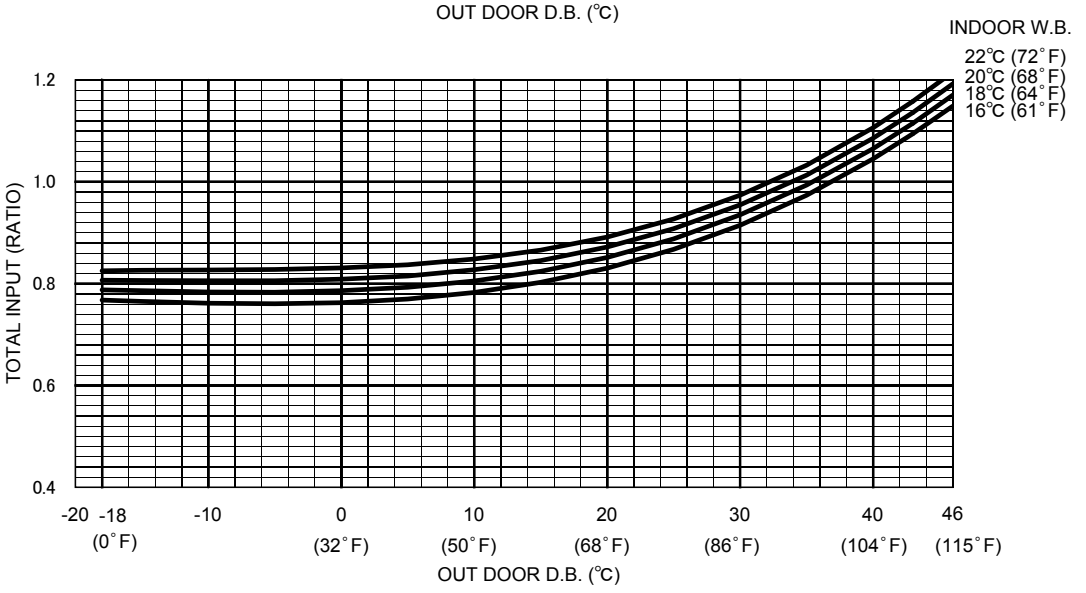
Due to continuing improvement, above specification may be subject to change without notice.

6. CAPACITY CORRECTION CURVE BY TEMPERATURE

6-1. FOR THE COMBINATION OF OUTDOOR UNIT PUY-A·NHA4(-BS)

Cooling performance curve



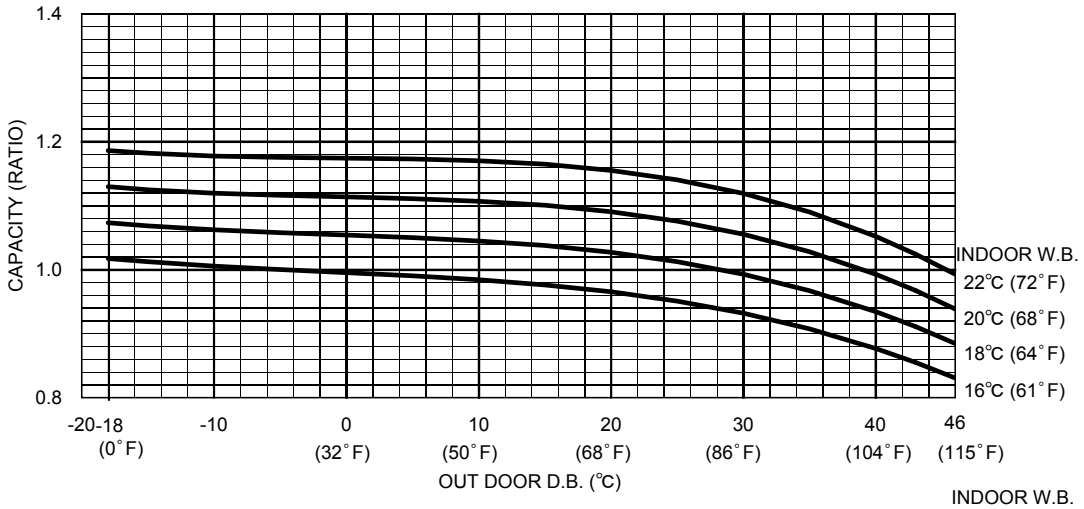


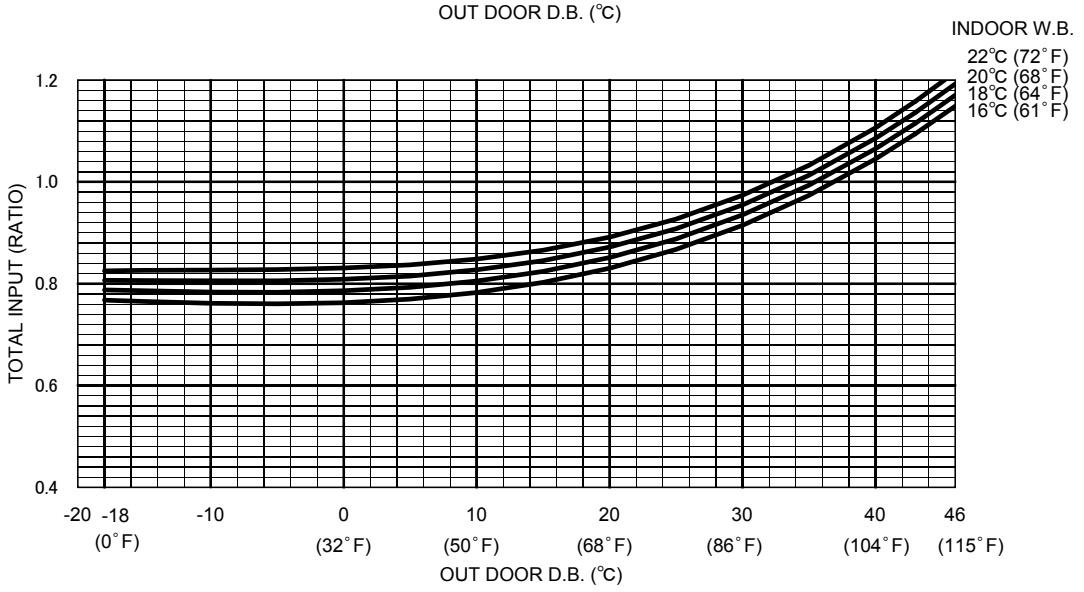
Note:This diagram shows the case where the operation frequency of a compressor is fixed.

Due to continuing improvement, above specification may be subject to change without notice.

6-2. FOR THE COMBINATION OF OUTDOOR UNIT PUZ-A·NHA4(-BS)

Cooling performance curve



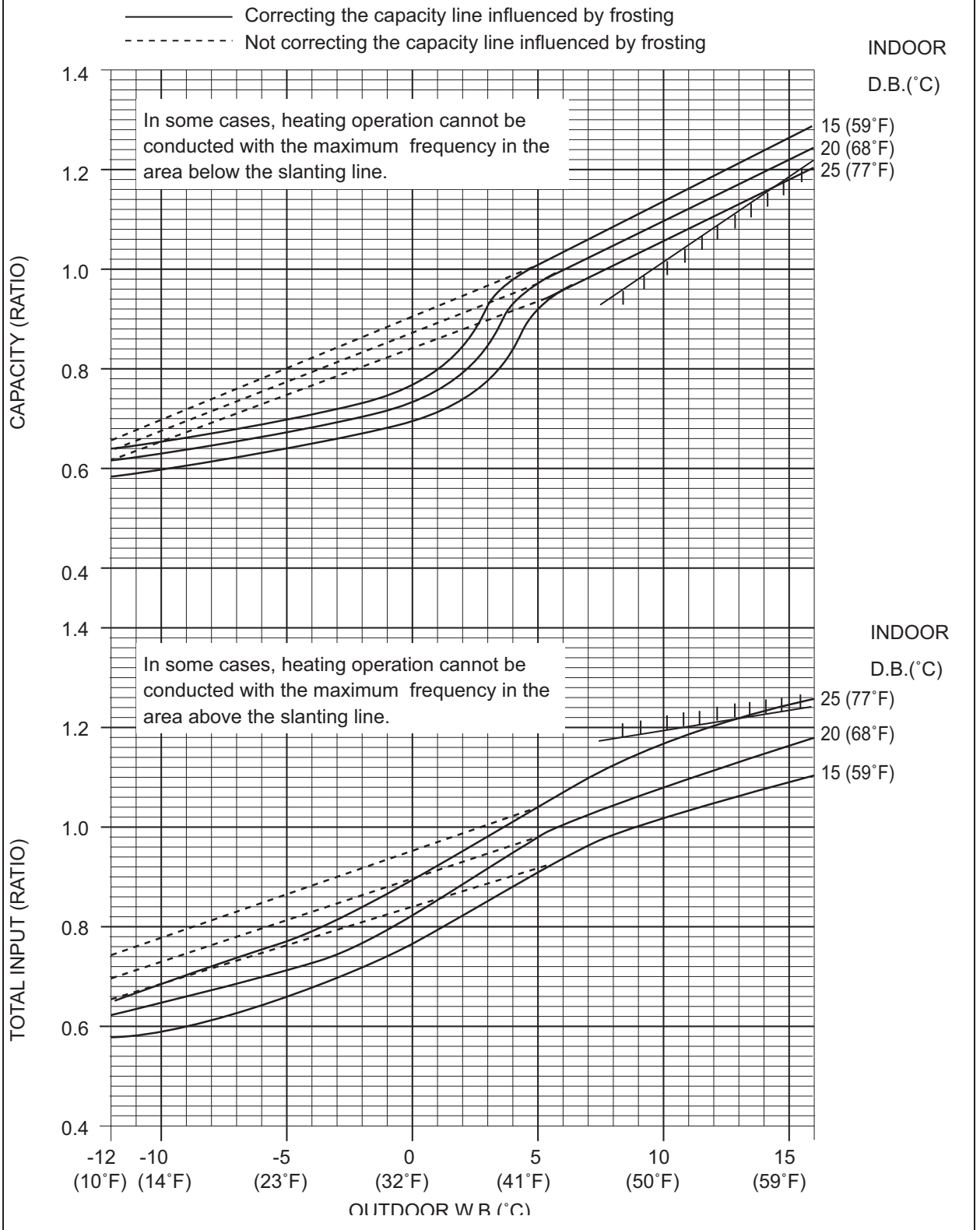


Note:This diagram shows the case where the operation frequency of a compressor is fixed.

Due to continuing improvement, above specification may be subject to change without notice.

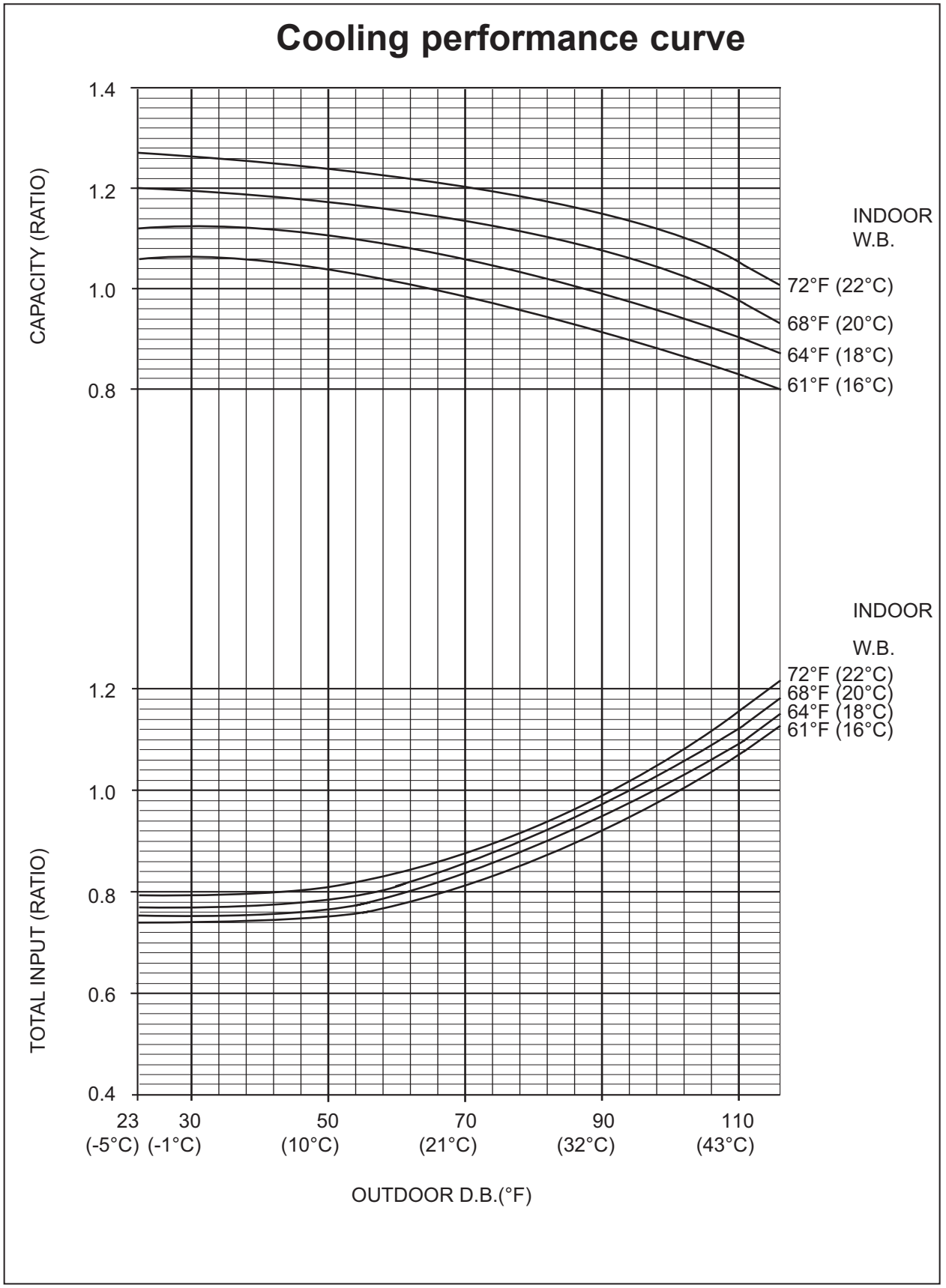
6-2. FOR THE COMBINATION OF OUTDOOR UNIT PUZ-A·NHA4(-BS) (cont.)

Heating performance curve



Due to continuing improvement, above specification may be subject to change without notice.

6-3. FOR THE COMBINATION OF OUTDOOR UNIT PUZ-HA·NHA4(-BS)

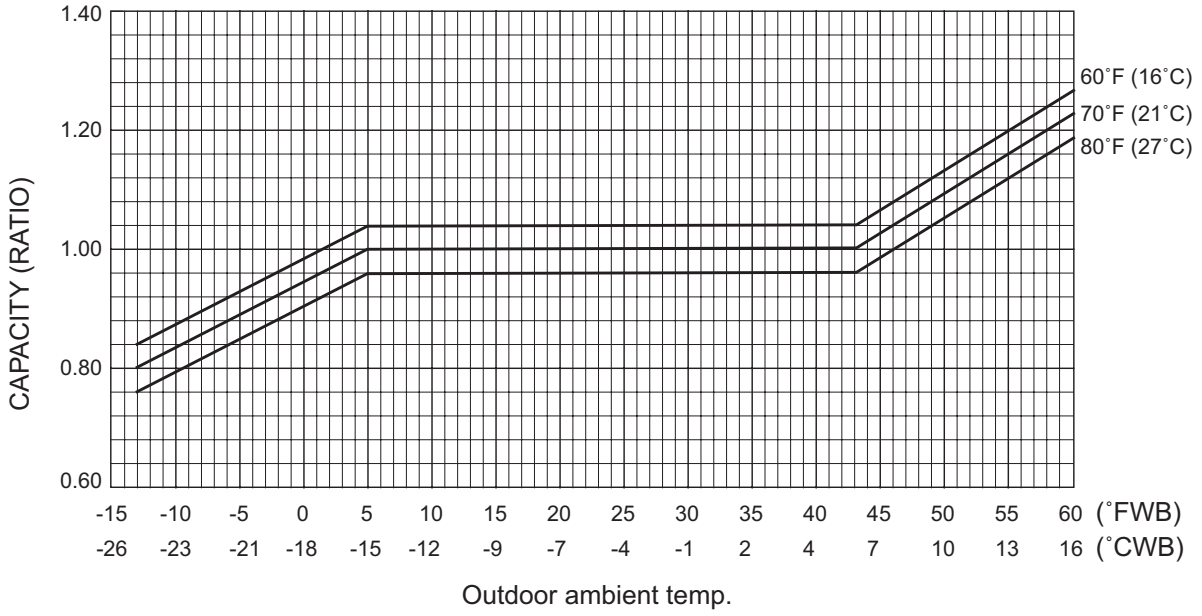


Due to continuing improvement, above specification may be subject to change without notice.

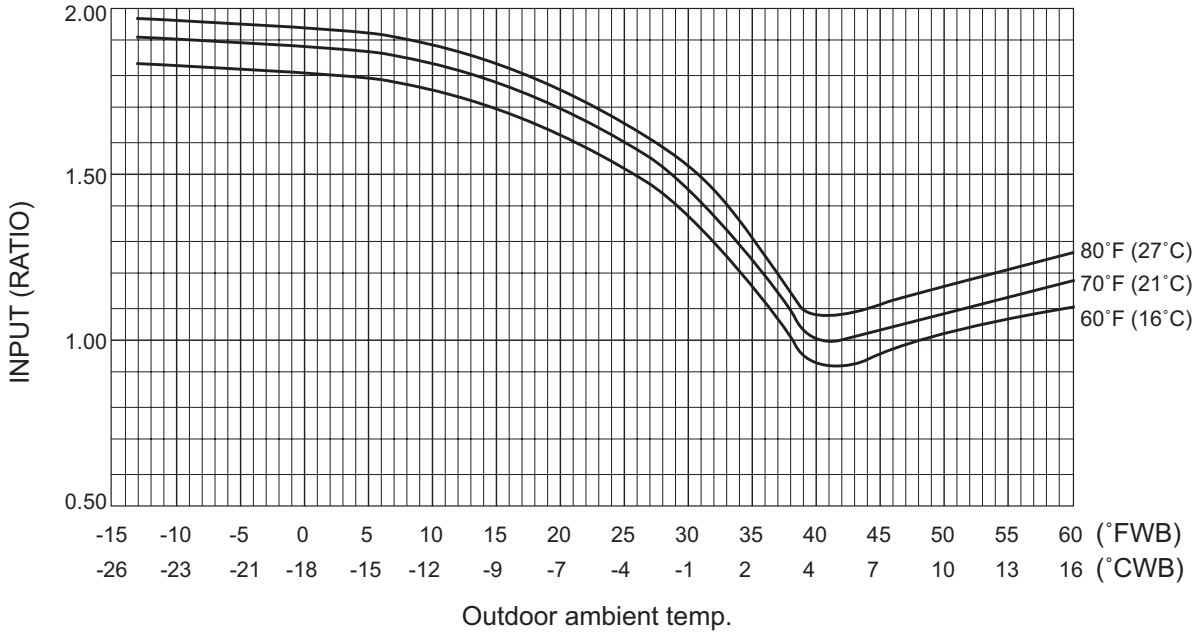
6-3. FOR THE COMBINATION OF OUTDOOR UNIT PUZ-HA·NHA4(-BS) (cont.)

Rated heating performance curve

Rated heating capacity



Heating input



Due to continuing improvement, above specification may be subject to change without notice.

7. CAPACITY CORRECTION TABLE BY TEMPERATURE

7-1. FOR THE COMBINATION OF OUTDOOR UNIT PUY(Z)-A·NHA4(-BS)

CAPACITY (RATIO)

Outdoor D.B.[°C]	-18	-15	-10	-5	0	5	10	15	20	25	30	35	40	43	46
Outdoor D.B.[°F]	0	–	–	23	32	–	50	–	68	–	86	–	104	–	115
Indoor W.B. 22°C (72°F)	1.186	1.182	1.178	1.175	1.174	1.173	1.170	1.165	1.155	1.141	1.119	1.090	1.052	1.024	0.993
Indoor W.B. 20°C (68°F)	1.130	1.125	1.120	1.116	1.114	1.111	1.107	1.101	1.091	1.076	1.056	1.028	0.993	0.968	0.939
Indoor W.B. 18°C (64°F)	1.073	1.068	1.062	1.058	1.054	1.050	1.045	1.038	1.027	1.013	0.993	0.967	0.934	0.911	0.885
Indoor W.B. 16°C (61°F)	1.018	1.012	1.006	1.000	0.995	0.990	0.984	0.976	0.965	0.951	0.932	0.908	0.877	0.855	0.831

TOTAL INPUT (RATIO)

Outdoor D.B.[°C]	-18	-15	-10	-5	0	5	10	15	20	25	30	35	40	43	46
Outdoor D.B.[°F]	0	–	–	23	–	–	50	–	68	–	86	–	104	–	115
Indoor W.B. 22°C (72°F)	0.825	0.826	0.827	0.828	0.831	0.837	0.848	0.866	0.892	0.927	0.973	1.033	1.106	1.158	1.216
Indoor W.B. 20°C (68°F)	0.807	0.806	0.805	0.806	0.809	0.815	0.827	0.845	0.872	0.908	0.954	1.013	1.086	1.136	1.192
Indoor W.B. 18°C (64°F)	0.788	0.786	0.784	0.783	0.786	0.793	0.805	0.824	0.852	0.888	0.935	0.994	1.065	1.115	1.170
Indoor W.B. 16°C (61°F)	0.768	0.765	0.761	0.760	0.763	0.770	0.783	0.802	0.830	0.867	0.915	0.974	1.045	1.094	1.149

Due to continuing improvement, above specification may be subject to change without notice.

7. CAPACITY CORRECTION TABLE BY TEMPERATURE

7-1. FOR THE COMBINATION OF OUTDOOR UNIT PUY(Z)-A·NHA4(-BS) (cont.)

7-1-1. P-SERIES HEATING CORRECTION

Indoor D.B [° F]	Outdoor intake air W.B. ° C (° F)					
	-10 (14)	-5 (23)	0 (32)	5 (41)	10 (50)	15 (59)
59	0.65	0.7	0.77	1.01	1.14	1.26
68	0.63	0.67	0.73	0.97	1.1	1.22
77	0.6	0.64	0.7	0.92	1.06	1.18

7-1-2. P-SERIES DEFROST CORRECTION

Outdoor intake temperature W.B. [° F]	43	39	36	32	28	25	21	18	14
Outdoor intake temperature W.B. [° C]	6	4	2	0	-2	-4	-6	-8	-10
Correction factor	1	0.8	0.82	0.84	0.87	0.9	0.93	0.96	1

7-2. FOR THE COMBINATION OF OUTDOOR UNIT PUZ-HA·NHA4(-BS)

7-2-1. P-SERIES HYPER HEATING CORRECTION

Indoor D.B [° F]	Outdoor intake air W.B. ° C (° F)							
	-25 (-13)	-20 (-4)	-15 (5)	-10 (14)	-5 (23)	0 (32)	5 (41)	10 (50)	15 (59)
60	0.84	0.94	1.04	1.04	1.04	1.04	1.04	1.14	1.26
70	0.80	0.90	1.00	1.00	1.00	1.00	1.00	1.10	1.22
80	0.76	0.86	0.96	0.96	0.96	0.96	0.96	1.06	1.18

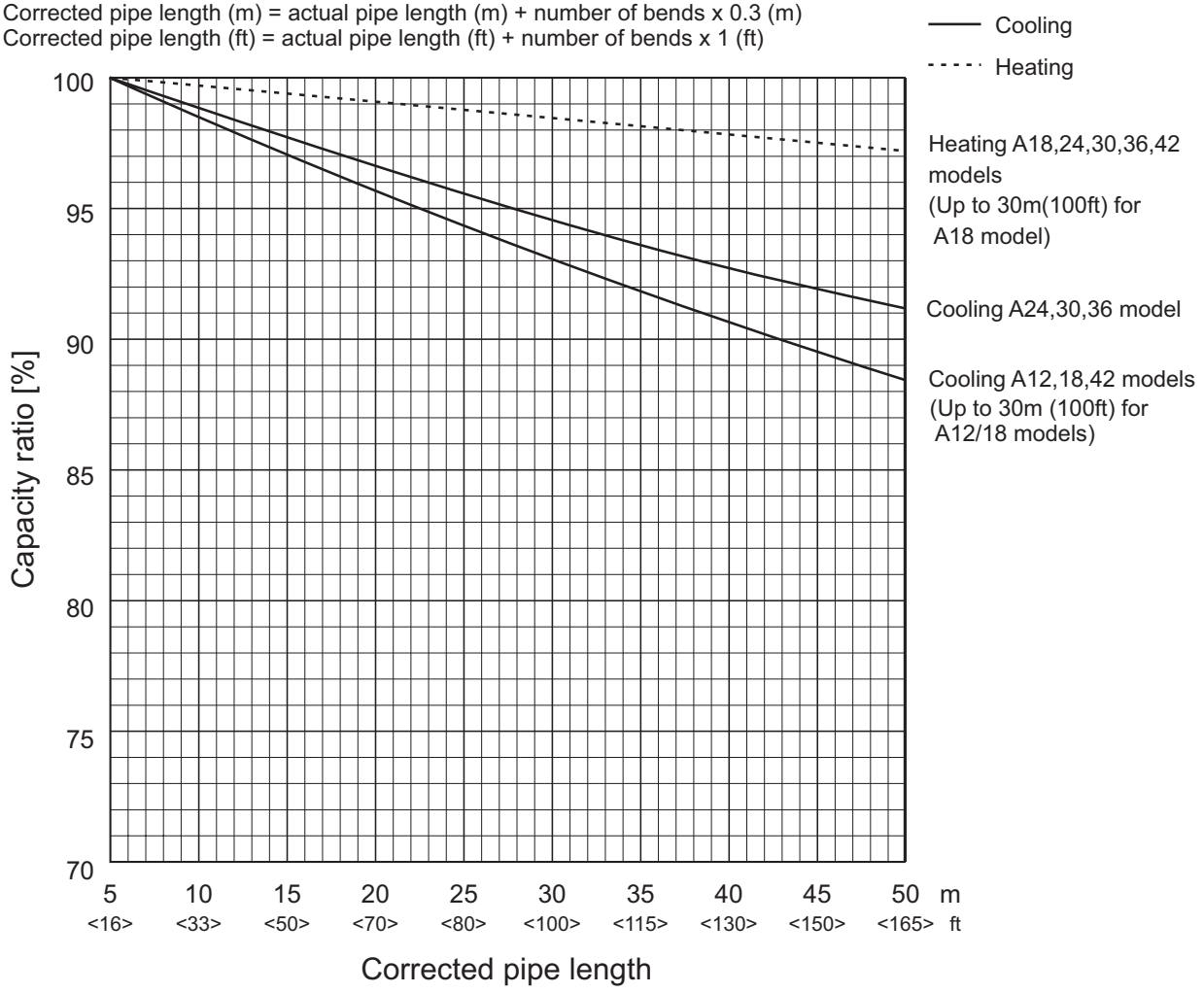
Intdoo intake air			Outdoor intake air W.B. ° C (° F)															
			-5 (23)	0 (32)	5 (41)	10 (50)	15 (59)	20 (68)	25 (77)	30 (86)	35 (95)	40 (104)	45 (115)					
D.B. [° C]	D.B. [° F]	W.B. [° C]	W.B. [° F]	TC	TC	TC	TC	TC	TC	TC	TC	TC	TC	TC				
				Coef	Coef	Coef	Coef	Coef	Coef	Coef	Coef	Coef	Coef	Coef				
24	75	16	61	1.07	1.06	1.05	1.04	1.02	0.99	0.96	0.93	0.89	0.85	0.80				
24	75	18	64	1.12	1.12	1.12	1.11	1.09	1.06	1.03	1.00	0.97	0.93	0.87				
24	75	20	68	1.20	1.19	1.18	1.17	1.16	1.14	1.12	1.09	1.05	1.01	0.93				
24	75	22	72	1.27	1.27	1.25	1.24	1.23	1.21	1.19	1.16	1.13	1.09	1.01				

Due to continuing improvement, above specification may be subject to change without notice.

8. CAPACITY CORRECTION CURVE BY REFRIGERANT PIPING LENGTH

8-1. FOR THE COMBINATION OF OUTDOOR UNIT PUY(Z)-A·NHA4(-BS)

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)

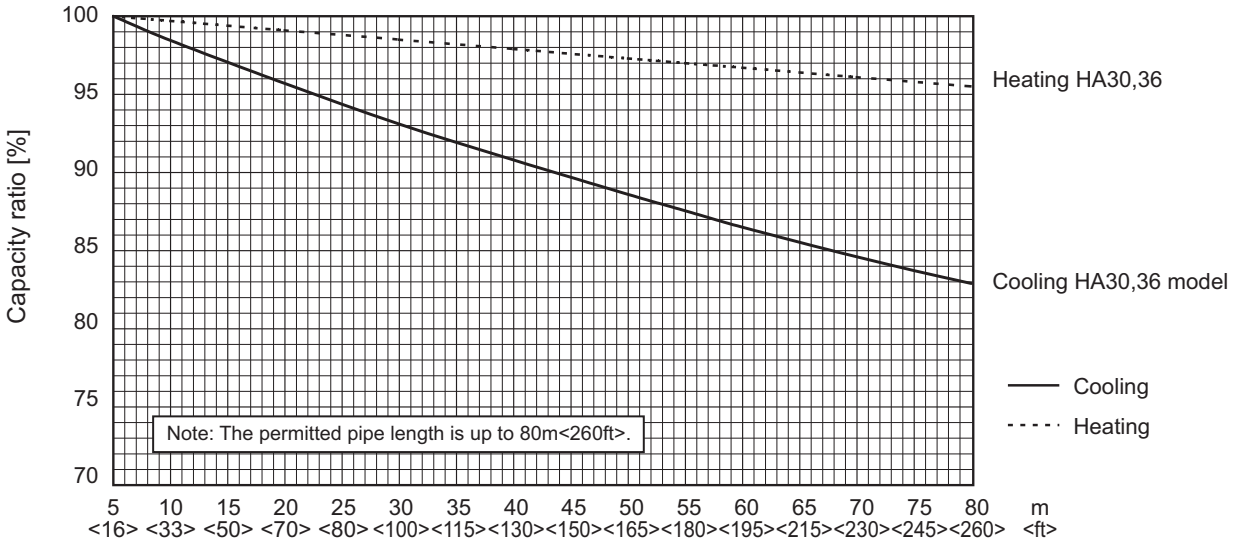


Due to continuing improvement, above specification may be subject to change without notice.

8. CAPACITY CORRECTION CURVE BY REFRIGERANT PIPING LENGTH

8-2. FOR THE COMBINATION OF OUTDOOR UNIT PUZ-HA·NHA4(-BS)

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)



Due to continuing improvement, above specification may be subject to change without notice.

9. CAPACITY CORRECTION TABLE BY REFRIGERANT PIPING LENGTH

9-1. FOR THE COMBINATION OF OUTDOOR UNIT PUY(Z)-A·NHA4(-BS)

9-1-1. P-SERIES COOLING CORRECTION

	68	77	86	95	104	115
61	0.99	0.96	0.93	0.89	0.85	0.8
64	1.06	1.03	1	0.97	0.93	0.87
68	1.14	1.12	1.09	1.05	1.01	0.93
72	1.21	1.19	1.16	1.13	1.09	1.01

9-1-2. P-SERIES PIPING CORRECTION COOLING

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	0.985	0.957	0.931	-	-
PUY-A24/30/36 PUZ-A24/30/36	1	0.988	0.966	0.946	0.929	0.913
PUY-A42 PUZ-A42	1	0.985	0.957	0.931	0.908	0.886

9-1-3. P-SERIES PIPING CORRECTION HEATING

Refrigerant piping length(one way)					
5m (16ft)	10m (33ft)	20m(70ft)	30m (100ft)	40m (130ft)	50m (165ft)
1	0.997	0.991	0.985	0.979	0.973

9-2. FOR THE COMBINATION OF OUTDOOR UNIT PUZ-HA·NHA4(-BS)

9-1-2. P-SERIES PIPING CORRECTION PUZ-HA·NHA4(-BS)

9-1-2-1. COOLING CAPACITY CORRECTION FACTORS

Outdoor unit	Refrigerant piping length (one way)									
	5m(16ft)	10m (33ft)	20m (70ft)	30m (100ft)	40m (130ft)	50m (165ft)	65m (180ft)	60m (195ft)	70m (230ft)	80m (260ft)
PUZ-HA30NHA4	1	0.985	0.957	0.931	0.908	0.866	0.876	0.865	0.846	0.829
PUZ-HA36NHA4										

9-1-2-2. P-SERIES DEFROST CORRECTION

Outdoor unit	Refrigerant piping length (one way)									
	5m(16ft)	10m (33ft)	20m (70ft)	30m (100ft)	40m (130ft)	50m (165ft)	65m (180ft)	60m (195ft)	70m (230ft)	80m (260ft)
PUZ-HA30NHA4	1	0.997	0.991	0.985	0.979	0.973	0.97	0.967	0.961	0.955
PUZ-HA36NHA4										

Due to continuing improvement, above specification may be subject to change without notice.

10. CHARGE CALCULATIONS

10-1. ADDITION OF REFRIGERANT

10-1-1. PUY(Z)-A·NHA4(-BS)

- 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

10-1-2. PUZ-HA·NHA4(-BS)

- 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

Due to continuing improvement, above specification may be subject to change without notice.

OUTLET AIR SPEED AND COVERAGE RANGE

		PKA-A12HA4	PKA-A18HA4
Airflow	CFM	425	425
Air speed	ft/sec.(m/sec.)	20.0(6.1)	20.0(6.1)
Coverage range	ft(m)	35(10.8)	35(10.8)

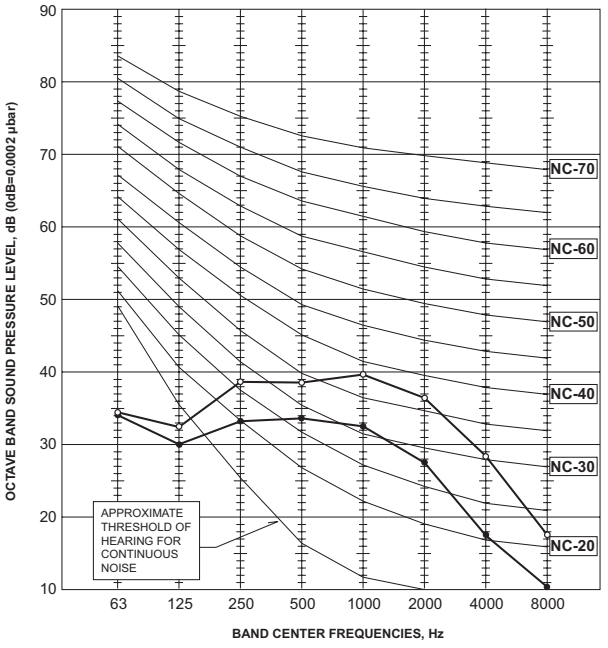
		PKA-A24KA4	PKA-A30KA4	PKA-A36KA4
Airflow	CFM	775	775	920
Air speed	ft/sec.(m/sec.)	19.7(6.0)	19.7(6.0)	22.3(6.8)
Coverage range	ft(m)	47(14.3)	47(14.3)	53(16.1)

The air coverage range is the distance to which the 0.8 ft/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.

12. SOUND PRESSURE LEVELS

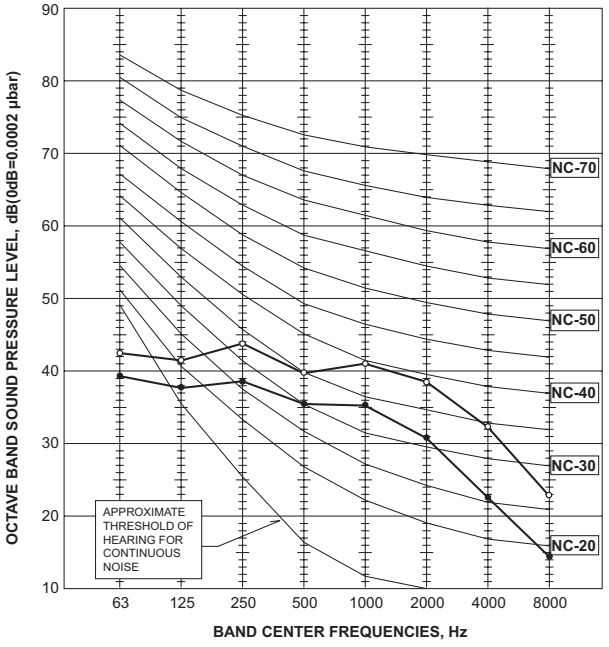
PKA-A12HA4
PKA-A18HA4

NOTCH	SPL(dB)	LINE
High	43	○—○
Low	36	●—●



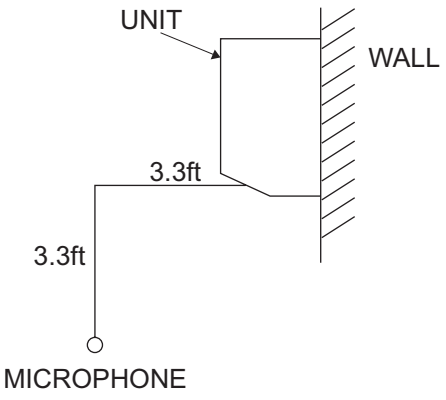
PKA-A24KA4
PKA-A30KA4

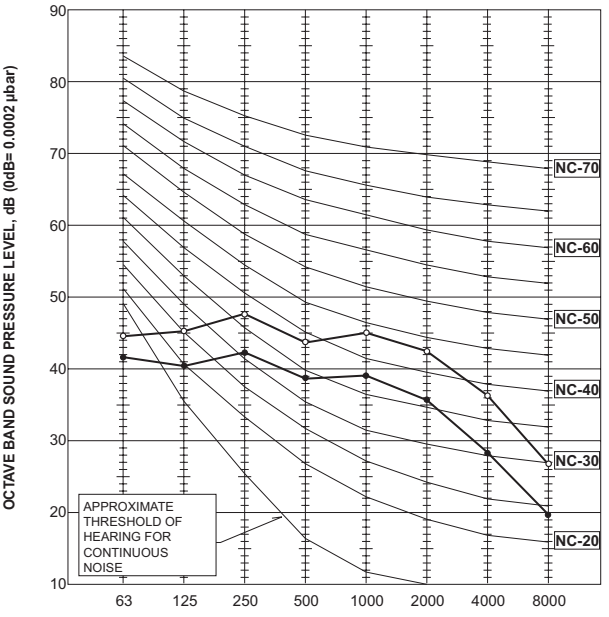
NOTCH	SPL(dB)	LINE
High	45	○—○
Low	39	●—●



PKA-A36KA4

NOTCH	SPL(dB)	LINE
High	49	○—○
Low	43	●—●





Due to continuing improvement, above specification may be subject to change without notice.

13. STANDARD OPERATION RANGE

13-1. FOR THE COMBINATION OF OUTDOOR UNIT PUY(Z)-A·NHA4(-BS)

		Indoor intake air temperature	Outdoor intake air temperature
Cooling	Maximum	D.B. 35℃(95°F), W.B. 21.7℃(71°F)	D.B. 46℃(115°F)
	Minimum	D.B. 19.4℃(67°F), W.B. 13.9℃(57°F)	D.B. -18℃(0°F)*
Heating	Maximum	D.B. 26.7℃(80°F), W.B. 19.4℃(67°F)	D.B. 21.1℃(70°F), W.B. 15℃(59°F)
	Minimum	D.B. 21.1℃(70°F), W.B. 15.6℃(60°F)	D.B. -11.1℃(12°F), W.B. -12.2℃(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℃(23°F)DB.)

13-2. FOR THE COMBINATION OF OUTDOOR UNIT PUZ-HA·NHA4(-BS)

		Indoor intake air temperature	Outdoor intake air temperature
Cooling	Maximum	D.B. 32°C(90°F), W.B. 23°C(73°F)	D.B. 46°C(115°F)
	Minimum	D.B. 19°C(66°F), W.B. 15°C(59°F)	D.B. -18°C(0°F)*
Heating	Maximum	D.B. 28°C(83°F)	D.B. 21.1°C(70°F), W.B. 15°C(59°F)
	Minimum	D.B. 17°C(63°F)	D.B. -25°C(-13°F), W.B. -25°C(-13°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.)

Due to continuing improvement, above specification may be subject to change without notice.

14. ACCESSORIES

Part Number	Descriptions	Applicable model
C13-103	Blue Diamond Sensor Extension Cable - 15 Ft.	
CN24RELAY-KIT-CM3	Relay Kit for external heater adapter connects to CN24 on indoor control board	PKA Series
DPLS1	Drain Pan Level Sensor/Control for indoor unit shut off to prevent Drain Pan Overflow	
DSD-400N	Outdoor Unit 3-1/4 inch Mounting Base (Pair) - Plastic	
MCCH1	Portable Central Controller (PCC) - controls up to 16 RedLINK Zones - requires an MHK1 on each indoor unit	
MHK1	Wireless wall-mounted remote controller (MRCH1) with a signal receiver (MIFH1) and cable (MRC1) all in one kit	
MOS1	Outdoor Air Sensor - reads both outside temperature and humidity displayed on MRCH1 and MCCH1 if installed	
PAC-715AD	Wire for Remote on/off with CN32 connector	
PAC-725AD	Connector and wire for Operation status/error, booster fan control for fresh air using CN51	
PAC-SE41TS-E	Remote temperature sensor for indoor units	
PAC-SE59RA-E	Connector and wire for CN-152 Aux Heat	
PAC-SF40RM-E	Remote Operation Adapter with wire terminals for remote on/off and operation status/error	
PAC-YT53CRAU	Simple MA Remote Controller	
PAR-21MAAU	Multi-functional hard wired controller (used specifically for twinning, lead/lag, and 7 day programmable applications) Requires MAC-333IF-E Adaptor	
PAR-FA32MA	Wireless Signal Receiver used with PAR-FL32MA	
PAR-FL32MA	Wireless Remote Controller used with PAR-FA32MA	
RCMKP1CB	Lockdown Bracket for wireless, hand-held, remote controllers	
MSDD-50TR-E	P-SERIES Twinning Distribution Pipe Kit	P-Series IDU's supported on A24, A36, and HA36 outdoor units only

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14. ACCESSORIES

Part Number	Descriptions		Applicable model
SI30-115	Mini-Condensation pump - 115 volt application		PKA Series
SI30-230	Mini-Condensation pump - 230 volt application		
TAZ-MS303	3-Pole Disconnect Switch 30 Amps 600 volts rated for turning power supply off at indoor unit - fits 2" X 4" utility box		
X87-711 - 110	Advanced Blue Diamond Mini-Condensation pump w/ Resevoir & Sensor - 110 volt application		
X87-721 - 208/230	Advanced Blue Diamond Mini-Condensation pump w/ Resevoir & Sensor - 208/230 volt application		
PAC-SC84PI-E	L Connector Pipe for Left Side Piping		A24,30,36
MLS141212T-15	Diamondback Linesets	1/4 x 1/2 x 15' / 1/2" Twin-Tube Insulation	A12,18
MLS141212T-30		1/4 x 1/2 x 30' / 1/2" Twin-Tube Insulation	
MLS141212T-50		1/4 x 1/2 x 50' / 1/2" Twin-Tube Insulation	
MLS141212T-65		1/4 x 1/2 x 65' / 1/2" Twin-Tube Insulation	
MLS141212T-100		1/4 x 1/2 x 100' / 1/2" Twin-Tube Insulation	
MPLS385812T-10		3/8 x 5/8 x 10' / 1/2" Twin-Tube Insulation	A24,30,36
MPLS385812T-15		3/8 x 5/8 x 15' / 1/2" Twin-Tube Insulation	
MPLS385812T-30		3/8 x 5/8 x 30' / 1/2" Twin-Tube Insulation	
MPLS385812T-50		3/8 x 5/8 x 50' / 1/2" Twin-Tube Insulation	
MPLS385812T-65		3/8 x 5/8 x 65' / 1/2" Twin-Tube Insulation	
MPLS385812T-100		3/8 x 5/8 x 100' / 1/2" Twin-Tube Insulation	

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