1 REFERENCE MANUAL

1-1. INDOOR UNIT

Model name	Service Ref.	Service manual No.
PLA-A12/18/24/30/36/42BA4	PLA-A12/18/24/30/36/42BA4	OCH482 OCB482
PCA-A24/30/36/42KA4	PCA-A24/30/36/42KA4	OCH484 OCB484
PKA-A12/18HA4	PKA-A12/18HA4	OCH483 OCB483
PKA-A24/30/36KA4	PKA-A24/30/36KA4.TH	OCH488 OCB488
PEA-A12/18AA4	PEA-A12/18AA4.TH	HWE0807B
PEAD-A24/30/36/42AA4	PEAD-A24/30/36/42AA4.TH	HWE0905A

2 SAFETY PRECAUTION

2-1. ALWAYS OBSERVE FOR SAFETY

Before obtaining access to terminals, all supply circuits must be disconnected.

2-2. CAUTIONS RELATED TO NEW REFRIGERANT

Cautions for units utilizing refrigerant R410A

Use new refrigerant pipes.

In case of using the existing pipes for R22, be careful with the followings.
· Be sure to clean the pipes and make sure that the insides of the pipes are clean.
· Change flare nut to the one provided with this product. Use a newly flared pipe.
· Avoid using thin pipes.

Make sure that the inside and outside of refrigerant piping is clean and it has no contaminants such as sulfur, oxides, dirt, shaving particles, etc, which are hazard to refrigerant cycle.
In addition, use pipes with specified thickness.

Contamination inside refrigerant piping can cause deterioration of refrigerant oil etc.

Store the piping to be used indoors during installation, and both ends of the piping sealed until just before brazing. (Leave elbow joints, etc. in their packaging.)

If dirt, dust or moisture enters into refrigerant cycle, that can cause deterioration of refrigerant oil or malfunction of compressor.

The refrigerant oil applied to flare and flange connections must be ester oil, ether oil or alkylbenzene oil in a small amount.

If large amount of mineral oil enters, that can cause deterioration of refrigerant oil etc.

Charge refrigerant from liquid phase of gas cylinder.

If the refrigerant is charged from gas phase, composition change may occur in refrigerant and the efficiency will be lowered.

Do not use refrigerant other than R410A.

If other refrigerant (R22 etc.) is used, chlorine in refrigerant can cause deterioration of refrigerant oil etc.

Use a vacuum pump with a reverse flow check valve.

Vacuum pump oil may flow back into refrigerant cycle and that can cause deterioration of refrigerant oil etc.

Use the following tools specifically designed for use with R410A refrigerant.

The following tools are necessary to use R410A refrigerant.

Tools for R410A	
Gauge manifold	Flare tool
Charge hose	Size adjustment gauge
Gas leak detector	Vacuum pump adaptor
Torque wrench	Electronic refrigerant charging scale

Handle tools with care.

If dirt, dust or moisture enters into refrigerant cycle, that can cause deterioration of refrigerant oil or malfunction of compressor.

Do not use a charging cylinder.

If a charging cylinder is used, the composition of refrigerant will change and the efficiency will be lowered.

Ventilate the room if refrigerant leaks during operation. If refrigerant comes into contact with a flame, poisonous gases will be released.

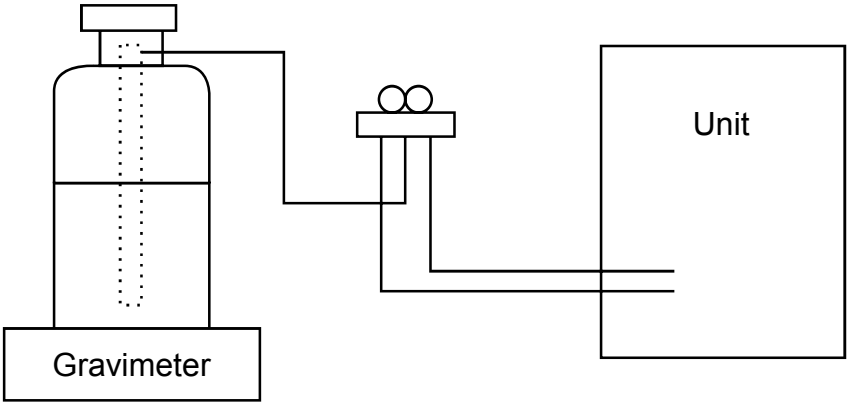
[1] Cautions for service

(1) Perform service after recovering the refrigerant left in unit completely.
(2) Do not release refrigerant in the air.
(3) After completing service, charge the cycle with specified amount of refrigerant.
(4) When performing service, install a filter drier simultaneously.
Be sure to use a filter drier for new refrigerant.

[2] Additional refrigerant charge

When charging directly from cylinder

· Check that cylinder for R410A on the market is syphon type.
· Charging should be performed with the cylinder of syphon stood vertically. (Refrigerant is charged from liquid phase.)



[3] Service tools

Use the below service tools as exclusive tools for R410A refrigerant.

No.	Tool name	Specifications
①	Gauge manifold	· Only for R410A
		· Use the existing fitting specifications.
		· Use high-tension side pressure of 5.3MPa·G or over.
②	Charge hose	· Only for R410A
		· Use pressure performance of 5.09MPa·G or over.
③	Electronic scale	—
④	Gas leak detector	· Use the detector for R134a, R407C or R410A
⑤	Adaptor for reverse flow check	· Attach on vacuum pump.
⑥	Refrigerant charge base	—
⑦	Refrigerant cylinder	· Only for R410A ·Top of cylinder (Pink) · Cylinder with syphon
⑧	Refrigerant recovery equipment	—

2-3. CAUTIONS FOR REFRIGERANT PIPING WORK

New refrigerant R410A is adopted for replacement inverter series. Although the refrigerant piping work for R410A is same as for R22, exclusive tools are necessary so as not to mix with different kind of refrigerant. Furthermore as the working pressure of R410A is 1.6 times higher than that of R22, their sizes of flared sections and flare nuts are different.

① Thickness of pipes

Because the working pressure of R410A is higher compared to R22, be sure to use refrigerant piping with thickness shown below. (Never use pipes of 0.7 mm [7/256 inch] or below.)

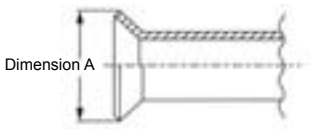
Diagram below: Piping diameter and thickness

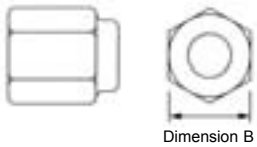
Nominal dimensions[inch]	Outside diameter (mm)	Thickness : mm [inch]	
		R410A	R22
1/4	6.35	0.8 [1/32]	0.8 [1/32]
3/8	9.52	0.8 [1/32]	0.8 [1/32]
1/2	12.70	0.8 [1/32]	0.8 [1/32]
5/8	15.88	1.0 [5/128]	1.0 [5/128]
3/4	19.05	—	1.0 [5/128]

② Dimensions of flare cutting and flare nut

The component molecules in HFC refrigerant are smaller compared to conventional refrigerants. In addition to that, R410A is a refrigerant, which has higher risk of leakage because of its working pressure is higher than that of other refrigerants. Therefore, to enhance air tightness and intensity, flare cutting dimension of copper pipe for R410A has been specified separately from the dimensions for other refrigerants as shown below. The dimension B of flare nut for R410A also has partly been changed to increase intensity as shown below. Set copper pipe correctly referring to copper pipe flaring dimensions for R410A below. For 1/2 and 5/8 inch, the dimension B changes.

Use torque wrench corresponding to each dimension.





Flare cutting dimensions Unit : mm [inch]

Nominal dimensions[inch]	Outside diameter	Dimension A ($^{+0}_{-0.4}$)	
		R410A	R22
1/4	6.35	9.1 [11/32-23/64]	9.0
3/8	9.52	13.2 [1/2-33/64]	13.0
1/2	12.70	16.6 [41/64-21/32]	16.2
5/8	15.88	19.7 [49/64-25/32]	19.4
3/4	19.05	—	23.3

Flare nut dimensions Unit : mm [inch]

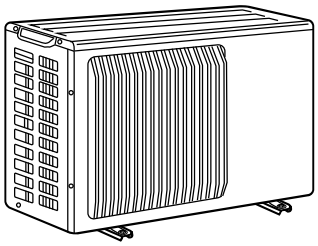
Nominal dimensions[inch]	Outside diameter	Dimension B	
		R410A	R22
1/4	6.35	17.0 [43/64]	17.0
3/8	9.52	22.0 [7/8]	22.0
1/2	12.70	26.0 [1-3/64]	24.0
5/8	15.88	29.0 [1-9/64]	27.0
3/4	19.05	—	36.0

③ Tools for R410A (The following table shows whether conventional tools can be used or not.)

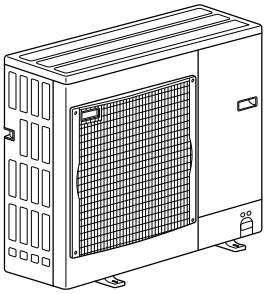
Tools and materials	Use	R410A tools	Can R22 tools be used?
Gauge manifold	Air purge, refrigerant charge and operation check	Tool exclusive for R410A	×
Charge hose		Tool exclusive for R410A	×
Gas leak detector	Gas leak check	Tool for HFC refrigerant	×
Refrigerant recovery equipment	Collection of refrigerant	Tool exclusive for R410A	×
Refrigerant cylinder	Refrigerant charge	Tool exclusive for R410A	×
Applied oil	Apply to flared section	Ester oil, ether oil and alkylbenzene oil(minimum amount)	×
Safety charger	Prevent compressor malfunction when charging refrigerant by spraying liquid refrigerant	Tool exclusive for R410A	×
Charge valve	Prevent gas from blowing out when detaching charge hose	Tool exclusive for R410A	×
Vacuum pump	Vacuum drying and air purge	Tools for other refrigerants can be used if equipped with adopter for reverse flow check	△ (Usable if equipped with adopter for reverse flow)
Flare tool	Flaring work of piping	Tools for other refrigerants can be used by adjusting flaring dimension	△ (Usable by adjusting flaring dimension)
Bender	Bend the pipes	Tools can be used for other refrigerants	○
Pipe cutter	Cut the pipes	Tools can be used for other refrigerants	○
Welder and nitrogen gas cylinder	Weld the pipes	Tools can be used for other refrigerants	○
Refrigerant charging scale	Refrigerant charge	Tools can be used for other refrigerants	○
Vacuum gauge or thermistor vacuum gauge and vacuum valve	Check the degree of vacuum. (Vacuum valve prevents back flow of oil and refrigerant to thermistor vacuum gauge)	Tools can be used for other refrigerants	○
Charging cylinder	Refrigerant charge	Tool exclusive for R410A	×

× : Prepare a new tool. (Use the new tool as the tool exclusive for R410A.)
△ : Tools for other refrigerants can be used under certain conditions.
○ : Tools for other refrigerants can be used.

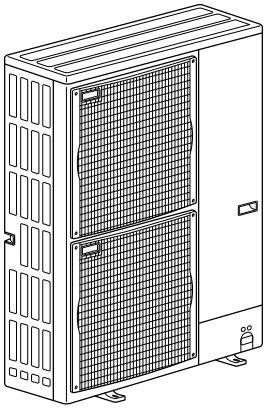
3 FEATURES



PUZ-A18NHA4
PUZ-A18NHA4-BS
PUY-A12/18NHA4
PUY-A12/18NHA4-BS



PUZ-A24/30/36NHA4
PUZ-A24/30/36NHA4-BS
PUY-A24/30/36NHA4
PUY-A24/30/36NHA4-BS



PUZ-A42NHA4
PUZ-A42NHA4-BS
PUY-A42NHA4
PUY-A42NHA4-BS

CHARGELESS SYSTEM
PRE-CHARGED REFRIGERANT IS SUPPLIED FOR PIPING LENGTH AT SHIPMENT.
(Max. 100ft, 30m (A42) / Max. 70ft, 20m (A12-36))

The refrigerant circuit with LEV(Linear Expansion Valve) and accumulator always control the optimal refrigerant level regardless of the length (A42: 100ft, 30m max. / A12-36: 70ft, 20m max. and 16ft, 5m min.) of piping. The additional refrigerant charging work during installation often causes problems.
It is completely eliminated by chargeless system. This unique system improves the quality and reliability of the work done. It also helps to speed up the installation time.

4 SPECIFICATIONS

Service Ref.			PUZ-A18NHA4 PUZ-A18NHA4-BS	PUZ-A24NHA4 PUZ-A24NHA4-BS	PUZ-A30NHA4 PUZ-A30NHA4-BS	PUZ-A36NHA4 PUZ-A36NHA4-BS	PUZ-A42NHA4 PUZ-A42NHA4-BS
Power supply	Phase		Single				
	Cycle Voltage		60Hz 208/230V				
MCA		A	13	18	25	25	26
MOCP		A	20	30	40	40	40
Breaker size		A	15	25	30	30	30
External finish			Munsell 3Y 7.8/1.1				
Heat exchanger			Plate fin coil				
Defrost method			Reverse cycle				
Crankcase heater		kW	-				
Compressor			Hermetic				
	Model		SNB130FQCM1	TNB220FLHM	TNB220FLHM	TNB220FLHM	ANV33FDPMT
	Motor output	kW	0.9	1.3	1.3	1.3	2.5
	R.L.A.		12	12	12	12	20
	L.R.A.		14	14	17.5	17.5	27.5
	Starter type		Inverter				
Fan	Fan(drive) × No.		Propeller fan × 1	Propeller fan × 1	Propeller fan × 1	Propeller fan × 1	Propeller fan × 2
	Fan motor output	kW	0.040	0.075	0.075	0.075	0.086 + 0.086
	Fan motor	F.L.A.	0.35	0.75	0.75	0.75	0.40 + 0.40
	Airflow	m^3/min	34	55	55	55	100
		CFM	1200	1940	1940	1940	3530
Sound level	Cooling	dB	48	48	48	48	51
	Heating	dB	47	50	50	50	55
Protection devices			HP switch Comp.shell thermo	HP switch Comp.shell thermo	HP switch Comp.shell thermo	HP switch Comp.shell thermo	HP switch LP switch Discharge thermo
Dimension	W	mm	800	950	950	950	950
	D	mm	300+23	330+30	330+30	330+30	330+30
	H	mm	600	943	943	943	1350
	W	in.	31-1/2	37-12/32	37-12/32	37-12/32	37-12/32
	D	in.	11-13/16 + 7/8	13 + 1-3/16	13 + 1-3/16	13 + 1-3/16	13 + 1-3/16
	H	in.	23-5/8	37-1/8	37-1/8	37-1/8	53-5/32
Weight		kg	41	75	75	75	118
		lbs	91	165	165	165	260
Refrigerant			R410A				
	Charged	kg	1.7	3.0	3.0	3.0	4.5
		lbs	3 + 12/16	6 + 10/16	6 + 10/16	6 + 10/16	10
	Control		Linear expansion valve				
	Oil	Model	Ether (FV50S)				
	Charged	L	0.65	0.87	0.87	0.87	1.4
		oz	20	28	28	28	45
Refrigerant piping	Pipe size OD	mm	6.35	9.52	9.52	9.52	9.52
	Liquid	in.	1/4	3/8	3/8	3/8	3/8
	Pipe size OD	mm	12.7	15.88	15.88	15.88	15.88
	Gas	in.	1/2	5/8	5/8	5/8	5/8
	Connection method Indoor		Flared				
	Connection method Outdoor		Flared				
	Height difference	m	Max. 30				
	IU - OU	ft	Max. 100				
	Piping length	m	Max. 30	Max. 50	Max. 50	Max. 50	Max. 50
		ft	Max. 100	Max. 165	Max. 165	Max. 165	Max. 165

Service Ref.			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	PUY-A42NHA4 PUY-A42NHA4-BS
Power supply	Phase		Single					
	Cycle Voltage		60Hz 208/230V					
MCA		A	13	13	18	25	25	26
MOCP		A	15	20	30	40	40	40
Breaker size		A	15	15	25	30	30	30
External finish			Munsell 3Y 7.8/1.1					
Heat exchanger			Plate fin coil					
Defrost method			-					
Crankcase heater		kW	-					
Compressor			Hermetic					
	Model		SNB130FQCM1	SNB130FQCM1	TNB220FLHM	TNB220FLHM	TNB220FLHM	ANV33FDPMT
	Motor output	kW	0.9	0.9	1.3	1.3	1.3	2.5
	R.L.A.		12	12	12	12	12	20
	L.R.A.		14	14	14	17.5	17.5	27.5
	Starter type		Inverter					
Fan	Fan (drive) × No.		Propeller fan × 1	Propeller fan × 1	Propeller fan × 1	Propeller fan × 1	Propeller fan × 1	Propeller fan × 2
	Fan motor output	kW	0.040	0.040	0.075	0.075	0.075	0.086 + 0.086
	Fan motor	F.L.A.	0.35	0.35	0.75	0.75	0.75	0.40 + 0.40
	Airflow	m^3/min	34	34	55	55	55	100
		CFM	1200	1200	1940	1940	1940	3530
Sound level	Cooling	dB	46	48	48	48	48	51
	Heating	dB	–	–	–	–	–	–
Protection devices			HP switch Comp.shell thermo	HP switch Comp.shell thermo	HP switch Comp.shell thermo	HP switch Comp.shell thermo	HP switch Comp.shell thermo	HP switch LP switch Discharge thermo
Dimension	W	mm	800	800	950	950	950	950
	D	mm	300+23	300+23	330+30	330+30	330+30	330+30
	H	mm	600	600	943	943	943	1350
	W	in.	31-1/2	31-1/2	37-12/32	37-12/32	37-12/32	37-12/32
	D	in.	11-13/16 + 7/8	11-13/16 + 7/8	13 + 1-3/16	13 + 1-3/16	13 + 1-3/16	13 + 1-3/16
	H	in.	23-5/8	23-5/8	37-1/8	37-1/8	37-1/8	53-5/32
Weight		kg	37	40	74	74	74	117
		lbs	82	89	163	163	163	258
Refrigerant			R410A					
	Charged	kg	1.3	1.7	3.0	3.0	3.0	4.5
		lbs	2 +14/16	3 + 12/16	6 + 10/16	6 + 10/16	6 + 10/16	10
	Control		Linear expansion valve					
	Oil	Model	Ether (FV50S)					
	Charged	L	0.65	0.65	0.87	0.87	0.87	1.4
		oz	20	20	28	28	28	45
Refrigerant piping	Pipe size OD	mm	6.35	6.35	9.52	9.52	9.52	9.52
	Liquid	in.	1/4	1/4	3/8	3/8	3/8	3/8
	Pipe size OD	mm	12.7	12.7	15.88	15.88	15.88	15.88
	Gas	in.	1/2	1/2	5/8	5/8	5/8	5/8
	Connection method Indoor		Flared					
	Connection method Outdoor		Flared					
	Height difference	m	Max. 30	Max. 30	Max. 30	Max. 30	Max. 30	Max. 30
	IU - OU	ft	Max. 100	Max. 100	Max. 100	Max. 100	Max. 100	Max. 100
	Piping length	m	Max. 30	Max. 30	Max. 50	Max. 50	Max. 50	Max. 50
		ft	Max. 100	Max. 100	Max. 165	Max. 165	Max. 165	Max. 165

5 DATA

5-1. REFILLING REFRIGERANT CHARGE (R410A : oz, kg)

Service Ref.	Piping Length (one way)													Factory Charged
	50ft	60ft	70ft	80ft	90ft	100ft	110ft	120ft	130ft	140ft	150ft	160ft	165ft	
	15m	18m	21m	24m	27m	30m	33m	37m	40m	43m	46m	49m	50m	
PUY-A12NHA4 PUY-A12NHA4-BS	42 oz	44 oz	46 oz	48 oz	50 oz	52 oz	-	-	-	-	-	-	-	46 oz
	1.2 kg	1.2 kg	1.3 kg	1.4 kg	1.4 kg	1.5 kg	-	-	-	-	-	-	-	1.3 kg
PUZ-A18NHA4 PUZ-A18NHA4-BS PUY-A18NHA4 PUY-A18NHA4-BS	56 oz	58 oz	60 oz	62 oz	64 oz	66 oz	-	-	-	-	-	-	-	60 oz
	1.6 kg	1.6 kg	1.7 kg	1.8 kg	1.8 kg	1.9 kg	-	-	-	-	-	-	-	1.7 kg
PUZ-A24NHA4 PUZ-A24NHA4-BS PUY-A24NHA4 PUY-A24NHA4-BS	94 oz	100 oz	106 oz	112 oz	118 oz	124 oz	130 oz	136 oz	142 oz	148 oz	154 oz	160 oz	166 oz	106 oz
	2.7 kg	2.8 kg	3.0 kg	3.2 kg	3.3 kg	3.5 kg	3.7 kg	3.9 kg	4.0 kg	4.2 kg	4.4 kg	4.5 kg	4.7 kg	3.0 kg
PUZ-A30NHA4 PUZ-A30NHA4-BS PUY-A30NHA4 PUY-A30NHA4-BS	94 oz	100 oz	106 oz	112 oz	118 oz	124 oz	130 oz	136 oz	142 oz	148 oz	154 oz	160 oz	166 oz	106 oz
	2.7 kg	2.8 kg	3.0 kg	3.2 kg	3.3 kg	3.5 kg	3.7 kg	3.9 kg	4.0 kg	4.2 kg	4.4 kg	4.5 kg	4.7 kg	3.0 kg
PUZ-A36NHA4 PUZ-A36NHA4-BS PUY-A36NHA4 PUY-A36NHA4-BS	94 oz	100 oz	106 oz	112 oz	118 oz	124 oz	130 oz	136 oz	142 oz	148 oz	154 oz	160 oz	166 oz	106 oz
	2.7 kg	2.8 kg	3.0 kg	3.2 kg	3.3 kg	3.5 kg	3.7 kg	3.9 kg	4.0 kg	4.2 kg	4.4 kg	4.5 kg	4.7 kg	3.0 kg
PUZ-A42NHA4 PUZ-A42NHA4-BS PUY-A42NHA4 PUY-A42NHA4-BS	132 oz	136 oz	142 oz	148 oz	154 oz	160 oz	166 oz	172 oz	178 oz	184 oz	190 oz	196 oz	202 oz	160 oz
	3.7 kg	3.9 kg	4.0 kg	4.2 kg	4.4 kg	4.5 kg	4.7 kg	4.9 kg	5.0 kg	5.2 kg	5.4 kg	5.6 kg	5.7 kg	4.5 kg

Longer pipe than 70 or 100 ft, additional charge is required.

5-2. COMPRESSOR TECHNICAL DATA

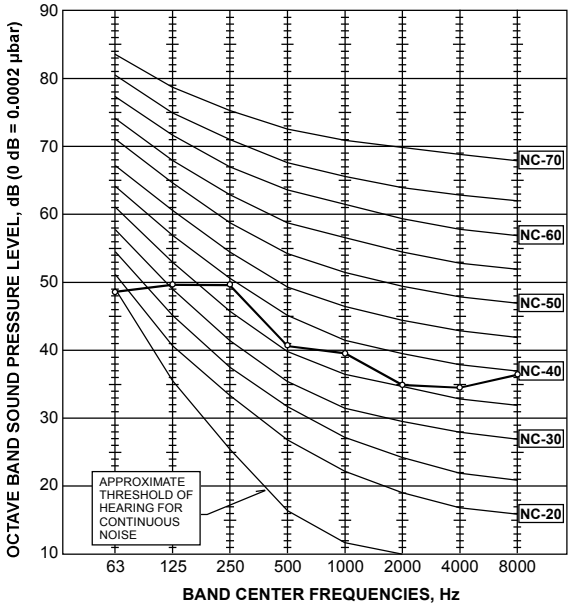
(at 20°C, 68°F)

Service Ref.		PUZ-A18NHA4 PUZ-A18NHA4-BS PUY-A12,18NHA4 PUY-A12,18NHA4-BS	PUZ-A24,30,36NHA4 PUZ-A24,30,36NHA4-BS PUY-A24,30,36NHA4 PUY-A24,30,36NHA4-BS	PUZ-A42NHA4 PUZ-A42NHA4-BS PUY-A42NHA4 PUY-A42NHA4-BS
Compressor model		SNB130FQCM1	TNB220FLHM	ANV33FDPMT
Winding Registance (Ω)	U-V	0.640	0.880	0.266
	U-W	0.640	0.880	0.266
	W-V	0.640	0.880	0.266

5-3. NOISE CRITERION CURVES

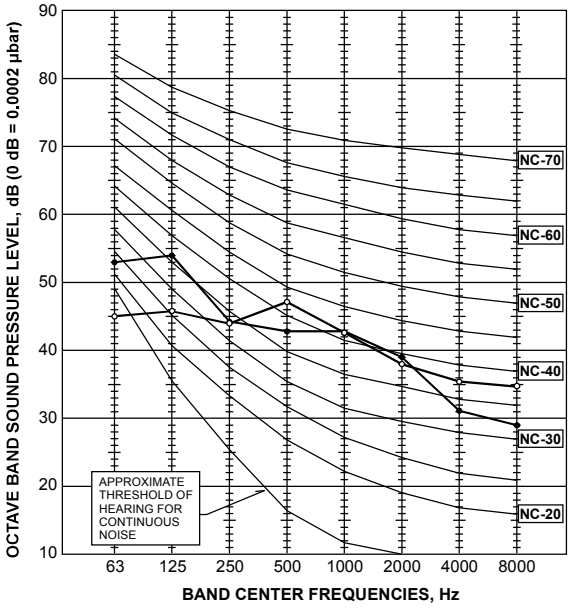
PUY-A12NHA4
PUY-A12NHA4-BS

MODE	SPL(dB)	LINE
COOLING	46	



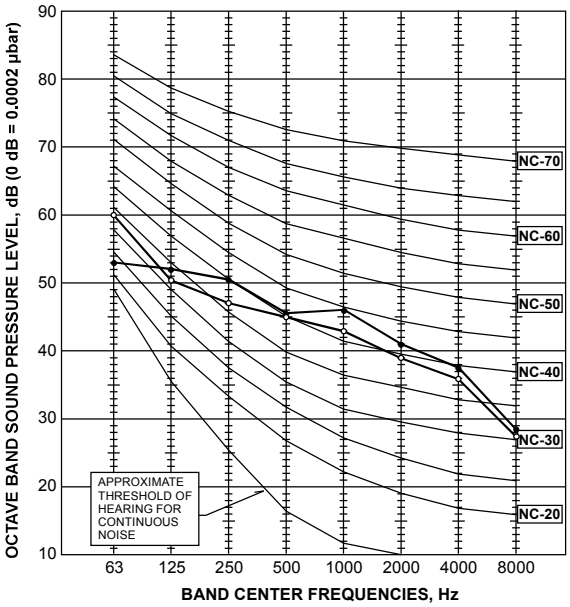
PUY-A18NHA4
PUY-A18NHA4-BS
PUZ-A18NHA4
PUZ-A18NHA4-BS

MODE	SPL(dB)	LINE
COOLING	48	
HEATING	47	



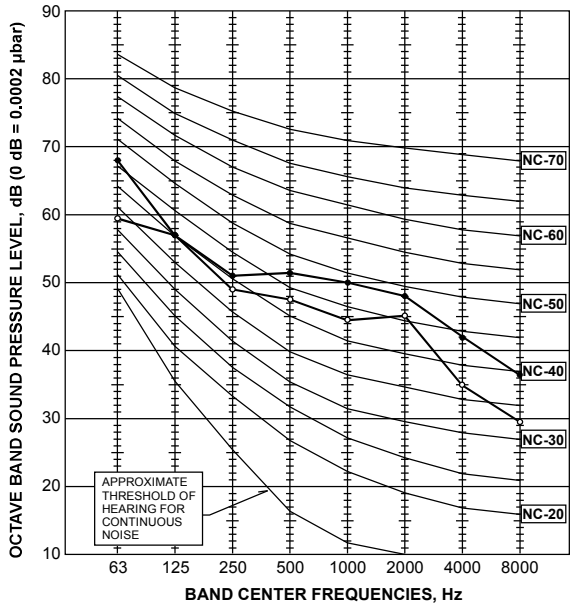
PUY-A24/30/36NHA4
PUY-A24/30/36NHA4-BS
PUZ-A24/30/36NHA4
PUZ-A24/30/36NHA4-BS

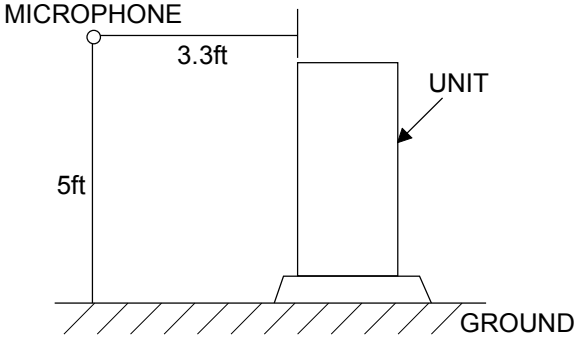
MODE	SPL(dB)	LINE
COOLING	48	
HEATING	50	



PUY-A42NHA4
PUY-A42NHA4-BS
PUZ-A42NHA4
PUZ-A42NHA4-BS

MODE	SPL(dB)	LINE
COOLING	51	
HEATING	55	





5-4. STANDARD OPERATION DATA

5-4-1. Heat pump

Representative matching			PKA-A18HA4		PKA-A24KA4		PKA-A30KA4		PKA-A36KA4		PLA-A42BA4	
Mode			COOLING	HEATING	COOLING	HEATING	COOLING	HEATING	COOLING	HEATING	COOLING	HEATING
Total	Capacity	BTU/h	18,000	19,000	24,000	26,000	30,000	32,000	34,200	37,000	42,000	45,000
	Input	W	2,240	1,970	2,270	2,330	4,130	3,150	5,030	3,610	4,600	4,450
Electrical circuit	Indoor unit model		PKA-A18HA4		PKA-A24KA4		PKA-A30KA4		PKA-A36KA4		PLA-A42BA4	
	Phase		Single		Single		Single		Single		Single	
	Cycle		60Hz		60Hz		60Hz		60Hz		60Hz	
	Voltage		230V		230V		230V		230V		230V	
	Current		0.33A		0.36A		0.36A		0.57A		1.00A	0.94A
	Outdoor unit model		PUZ-A18NHA4		PUZ-A24NHA4		PUZ-A30NHA4		PUZ-A36NHA4		PUZ-A42NHA4	
	Phase		Single		Single		Single		Single		Single	
	Cycle		60Hz		60Hz		60Hz		60Hz		60Hz	
	Voltage		230V		230V		230V		230V		230V	
	Current		9.8A	8.8A	9.4A	10.4A	18.1A	14.0A	21.7A	15.6A	20.4A	21.5A
Refrigerant circuit	Discharge pressure	MPa	3.01	3.03	2.78	2.89	3.08	3.04	3.23	2.95	2.83	2.93
	Suction pressure	MPa	0.77	0.64	0.92	0.68	0.77	0.64	0.74	0.63	0.82	0.69
	Discharge temperature	℃	80.1	83.7	73.9	77.9	81.2	81.4	88.1	80.7	73.4	80.3
	Condensing temperature	℃	49.9	50.8	46.9	48.5	50.8	50.8	52.8	49.3	47.5	47.5
	Suction temperature	℃	3.8	-1.1	12.1	0.4	3.3	-1.5	2.3	-2.0	4.9	0.3
	Ref. Pipe length	m	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
	Discharge pressure	PSIG	437	439	403	419	447	441	468	428	410	425
	Suction pressure	PSIG	112	93	133	99	117	93	107	91	120	100
	Discharge temperature	°F	176	183	165	172	178	179	191	177	164	177
	Condensing temperature	°F	122	123	116	119	123	123	127	121	118	118
	Suction temperature	°F	39	34	54	33	38	29	36	28	40	33
	Ref. Pipe length	ft	25	25	25	25	25	25	25	25	25	25
Indoor side	Intake air temperature DB	℃	26.7	21.1	26.7	21.1	26.7	21.1	26.7	21.1	26.7	21.1
	Intake air temperature WB	℃	19.4	15.6	19.4	15.6	19.4	15.6	19.4	15.6	19.4	15.6
	Discharge air temperature DB	℃	11.3	45.4	14.1	39.2	12.3	43.4	12.3	42.9	12.9	41.9
Outdoor side	Intake air temperature DB	℃	35	8.3	35	8.3	35	8.3	35	8.3	35	8.3
	Intake air temperature WB	℃	23.9	6.1	23.9	6.1	23.9	6.1	23.9	6.1	23.9	6.1
Indoor side	Intake air temperature DB	°F	80	70	80	70	80	70	80	70	80	70
	Intake air temperature WB	°F	67	60	67	60	67	60	67	60	67	60
	Discharge air temperature DB	°F	52	114	57	103	54	110	54	109	55	107
Outdoor side	Intake air temperature DB	°F	95	47	95	47	95	47	95	47	95	47
	Intake air temperature WB	°F	75	43	75	43	75	43	75	43	75	43
SHF			0.68	–	0.77	–	0.70	–	0.70	–	0.71	–
BF			0.08	–	0.09	–	0.09	–	0.09	–	0.15	–

5-4-2. Cooling only

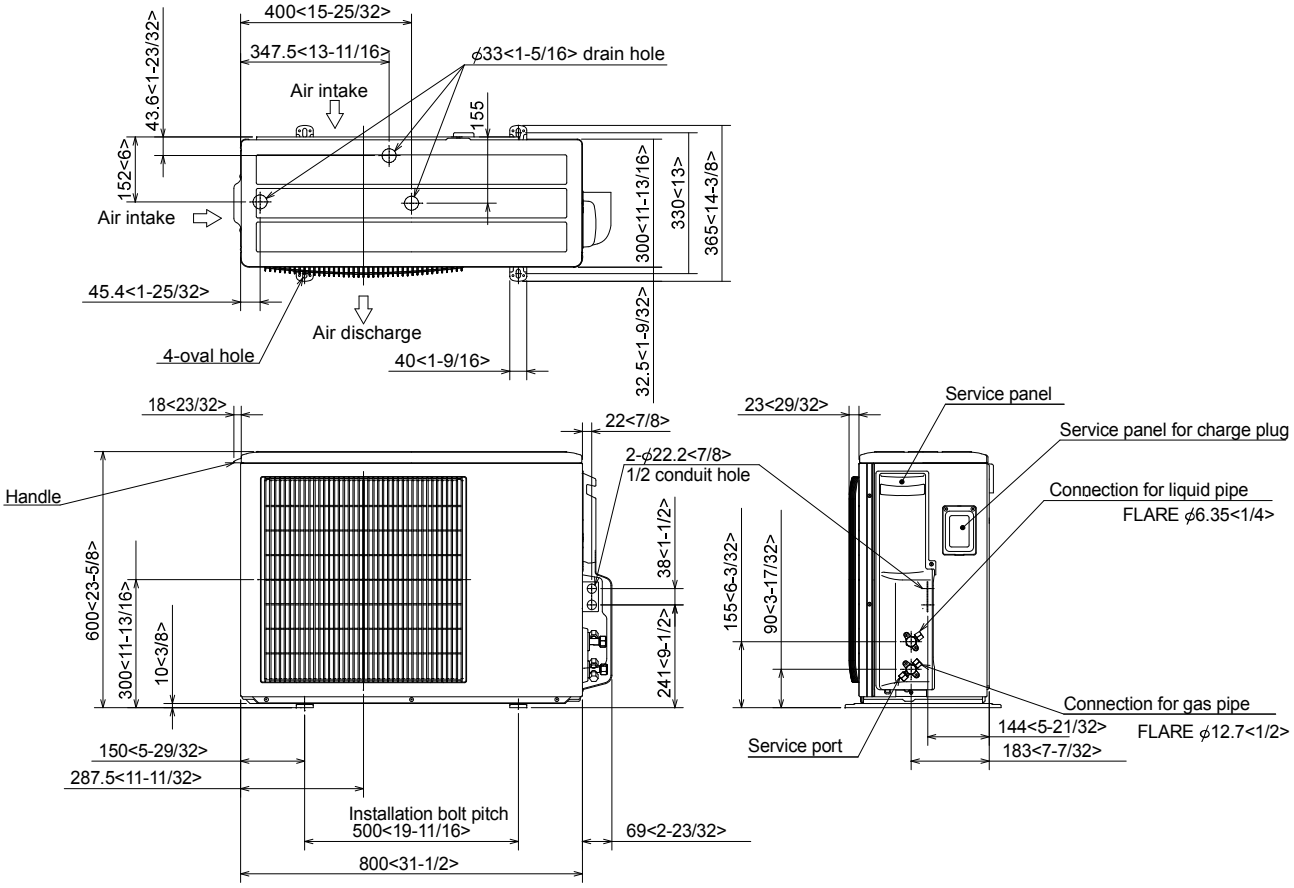
Representative matching			PKA-A12HA4	PKA-A18HA4	PKA-A24KA4	PKA-A30KA4	PKA-A36KA4	PLA-A42BA4
Mode			COOLING	COOLING	COOLING	COOLING	COOLING	COOLING
Total	Capacity	BTU/h	12,000	18,000	24,000	30,000	34,200	42,000
	Input	W	1,190	2,240	2,270	4,130	5,030	4,600
Electrical circuit	Indoor unit model		PKA-A12HA4	PKA-A18HA4	PKA-A24KA4	PKA-A30KA4	PKA-A36KA4	PLA-A42BA4
	Phase		Single	Single	Single	Single	Single	Single
	Cycle		60Hz	60Hz	60Hz	60Hz	60Hz	60Hz
	Voltage		230V	230V	230V	230V	230V	230V
	Current		0.33A	0.33A	0.36A	0.36A	0.57A	1.00A
	Outdoor unit model		PUY-A12NHA4	PUY-A18NHA4	PUY-A24NHA4	PUY-A30NHA4	PUY-A36NHA4	PUY-A42NHA4
	Phase		Single	Single	Single	Single	Single	Single
	Cycle		60Hz	60Hz	60Hz	60Hz	60Hz	60Hz
	Voltage		230V	230V	230V	230V	230V	230V
	Current		5.3A	9.8A	9.4A	18.1A	21.7A	20.4A
Refrigerant circuit	Discharge pressure	MPa	2.87	3.01	2.78	3.08	3.23	2.83
	Suction pressure	MPa	1.00	0.77	0.92	0.77	0.74	0.82
	Discharge temperature	℃	69.0	80.1	73.9	81.2	88.1	73.4
	Condensing temperature	℃	48.6	49.9	46.9	50.8	52.8	47.5
	Suction temperature	℃	12.5	3.8	12.1	3.3	2.3	4.9
	Ref. Pipe length	m	7.6	7.6	7.6	7.6	7.6	7.6
	Discharge pressure	PSIG	416	437	403	447	468	410
	Suction pressure	PSIG	145	112	133	117	107	120
	Discharge temperature	°F	156	176	165	178	191	164
	Condensing temperature	°F	119	122	116	123	127	118
	Suction temperature	°F	55	39	54	38	36	40
	Ref. Pipe length	ft	25	25	25	25	25	25
Indoor side	Intake air temperature DB	℃	26.7	26.7	26.7	26.7	26.7	26.7
	Intake air temperature WB	℃	19.4	19.4	19.4	19.4	19.4	19.4
	Discharge air temperature DB	℃	14.6	11.3	14.1	12.3	12.3	12.9
Outdoor side	Intake air temperature DB	℃	35	35	35	35	35	35
	Intake air temperature WB	℃	23.9	23.9	23.9	23.9	23.9	23.9
Indoor side	Intake air temperature DB	°F	80	80	80	80	80	80
	Intake air temperature WB	°F	67	67	67	67	67	67
	Discharge air temperature DB	°F	58	52	57	54	54	55
Outdoor side	Intake air temperature DB	°F	95	95	95	95	95	95
	Intake air temperature WB	°F	75	75	75	75	75	75
SHF			0.81	0.68	0.77	0.70	0.70	0.71
BF			0.08	0.08	0.09	0.09	0.09	0.15

6 OUTLINES AND DIMENSIONS

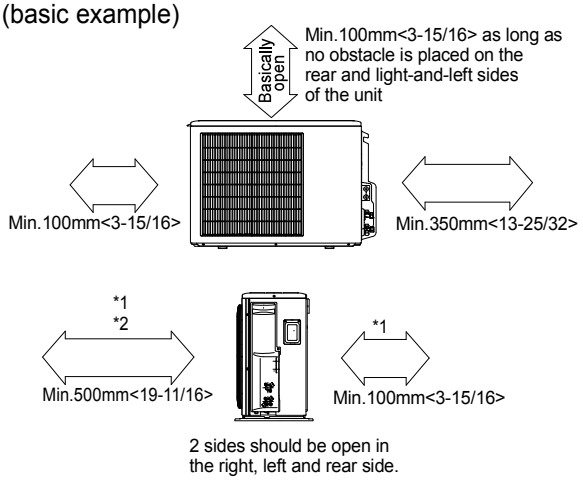
OUTDOOR UNIT

Unit: mm<inch>

PUZ-A18NHA4 PUZ-A18NHA4-BS PUY-A12/18NHA4 PUY-A12/18NHA4-BS

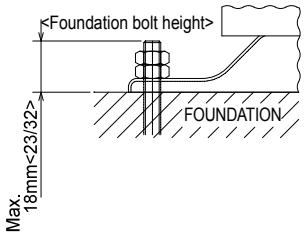


Free space around the outdoor unit
(basic example)



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.

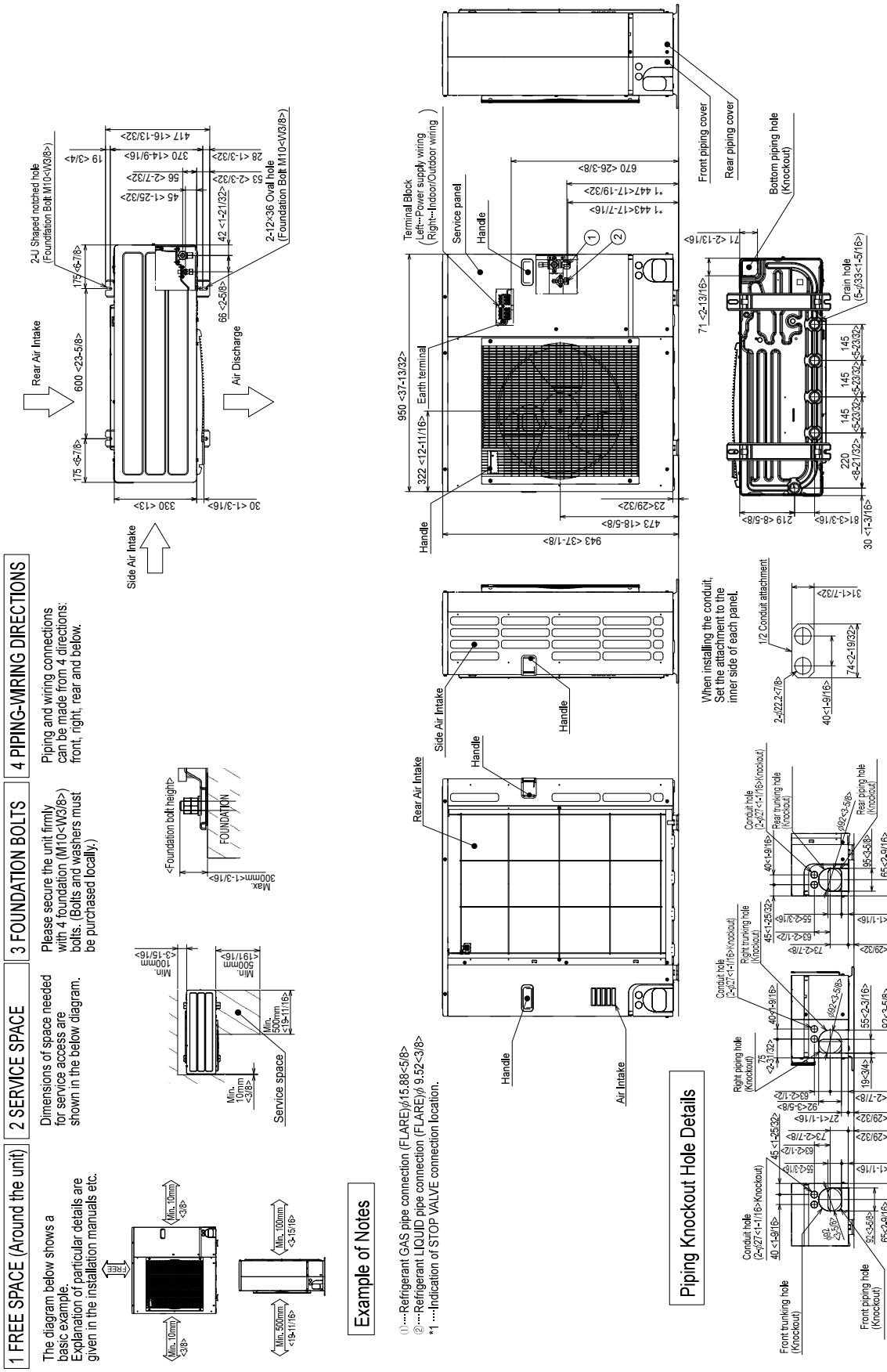
Minimum installation space for outdoor unit

*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-A24/30/36NHA4 **PUZ-A24/30/36NHA4-BS**
PUY-A24/30/36NHA4 **PUY-A24/30/36NHA4-BS**

Unit: mm<inch>



PUZ-A42NHA4 PUZ-A42NHA4-BS
PUY-A42NHA4 PUY-A42NHA4-BS

Unit: mm<inch>