MITSUBISHI ELECTRIC

SPLIT-TYPE, HEAT PUMP AIR CONDITIONERS

January 2023

No. OCH750
REVISED EDITION-D

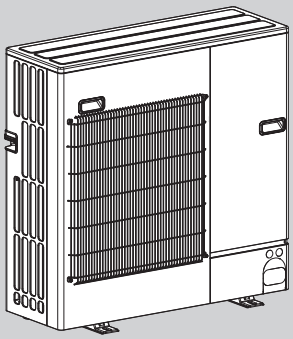
SERVICE MANUAL R410A

[Model Name]	[Service Ref.]
PUZ-HA24NHA1	PUZ-HA24NHA1
PUZ-HA30NKA	PUZ-HA30NKA
PUZ-HA36NKA	PUZ-HA36NKA
PUZ-HA42NKA1	PUZ-HA42NKA1

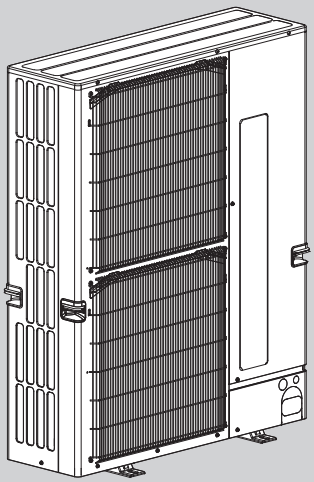
Revision:
- Abnormal conditions have been added in "10. TROUBLESHOOTING" in REVISED EDITION-D.

OCH750C is void.

Note:
- This manual describes service data of the outdoor units only.



PUZ-HA24NHA1



PUZ-HA30NKA
PUZ-HA36NKA
PUZ-HA42NKA1

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PARTS CATALOG (OCB750)

1 REFERENCE MANUAL

INDOOR UNIT SERVICE MANUAL

Model Name	Service Ref.	Service Manual No. Parts Catalog No.
PLA-A12/18/24/30/36/42EA7	PLA-A12/18/24/30/36/42EA7	OCH640 OCB640
PKA-A12/18LA	PKA-A12/18LA	- -
PKA-A24/30/36KA7	PKA-A24/30/36KA7.TH	OCH639 OCB639
PCA-A24/30/36/42KA7	PCA-A24/30/36/42KA7.TH	OCH638 OCB638
PEAD-A12/18/24/30/36/42AA7	PEAD-A12/18/24/30/36/42AA7	HWE1608A BWE01629A
PVA-A12/18/24/30/36/42AA7	PVA-A12/18/24/30/36/42AA7	MD-1404-K011 MD-1404-K012

2 SAFETY PRECAUTION

2-1. ALWAYS OBSERVE FOR SAFETY

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

Preparation before the repair service.

- Prepare the proper tools.
- Prepare the proper protectors.
- Provide adequate ventilation.
- After stopping the operation of the air conditioner, turn off the power-supply breaker.
- Discharge the condenser before the work involving the electric parts.

Precautions during the repair service.

- Do not perform the work involving the electric parts with wet hands.
- Do not pour water into the electric parts.
- Do not touch the refrigerant.
- Do not touch the hot or cold areas in the refrigerating cycle.
- When the repair or the inspection of the circuit needs to be done without turning off the power, exercise great caution not to touch the live parts.
- When opening or closing the valve below freezing temperatures, refrigerant may spurt out from the gap between the valve stem and the valve body, resulting in injuries.

2-2. CAUTIONS RELATED TO NEW REFRIGERANT

Cautions for units utilizing refrigerant R410A

Use new refrigerant pipes.

In the case of using the existing pipes for R22, be careful with the following:
· 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 indoors, 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.

Use the specified refrigerant only.

Never use any refrigerant other than that specified.
Doing so may cause a burst, an explosion, or fire when the unit is being used, serviced, or disposed of.
Correct refrigerant is specified in the manuals and on the spec labels provided with our products.
We will not be held responsible for mechanical failure, system malfunction, unit breakdown or accidents caused by failure to follow the instructions.

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

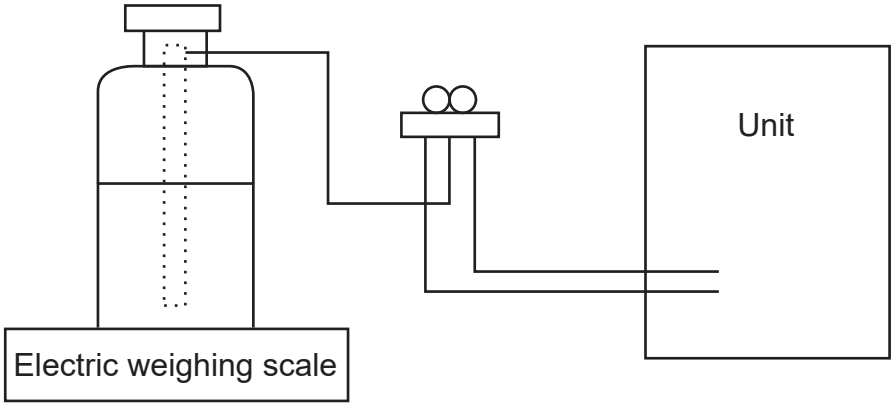
[1] Cautions for service

(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 a 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 5.3 MPa·G or over.
2	Charge hose	· Only for R410A
		· Use pressure performance of 5.09 MPa·G or over.
3	Electronic weighing 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 time higher than that of R22, their sizes of flared sections and flare nuts are different.

1. Thickness of pipes

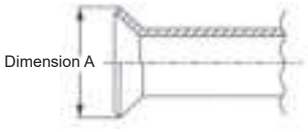
Because the working pressure of R410A is higher compared to R22, be sure to use refrigerant piping with thickness shown below. (Never use pipes of 7/256 inch [0.7mm] or below.)

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

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 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 strength as shown below. Set copper pipe correctly referring to copper pipe flaring dimensions for R410A below. For 1/2 and 5/8 inch pipes, the dimension B changes.

Use torque wrench corresponding to each dimension.



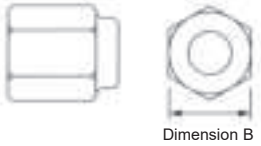


Diagram below: Piping diameter and thickness

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

Flare nut dimensions

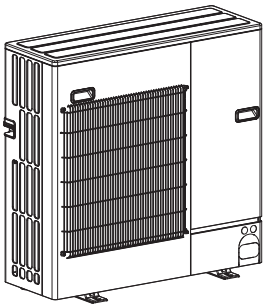
Nominal dimensions (in)	Outside diameter (mm)	Dimension B: in (mm)	
		R410A	R22
1/4	6.35	43/64 (17.0)	17.0
3/8	9.52	7/8 (22.0)	22.0
1/2	12.70	1-3/64 (26.0)	24.0
5/8	15.88	1-9/64 (29.0)	27.0
3/4	19.05	—	36.0

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

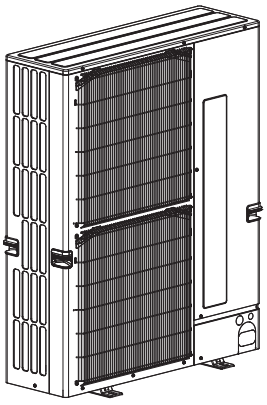
Tools and materials	Use	R410A tools	Can R22 tools be used?
Gauge manifold	Air purge, refrigerant charge and operation check	Tool exclusive for R410A	×
Charge hose		Tool exclusive for R410A	×
Gas leak detector	Gas leak check	Tool for HFC refrigerant	×
Refrigerant recovery equipment	Refrigerant recovery	Tool exclusive for R410A	×
Refrigerant cylinder	Refrigerant charge	Tool exclusive for R410A	×
Applied oil	Apply to flared section	Ester 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 for other refrigerants can be used	○
Pipe cutter	Cut the pipes	Tools for other refrigerants can be used	○
Welder and nitrogen gas cylinder	Weld the pipes	Tools for other refrigerants can be used	○
Refrigerant charging scale	Recover refrigerant	Tools for other refrigerants can be used	○
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	Recover refrigerant	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-HA24NHA1



PUZ-HA30NKA
PUZ-HA36NKA
PUZ-HA42NKA1

CHARGELESS SYSTEM
PRE-CHARGED REFRIGERANT IS SUPPLIED FOR PIPING LENGTH AT SHIPMENT.
Maximum 100 ft, 30 m (HA30/36/42), 70ft, 21m (HA24).

The refrigerant circuit with LEV(Linear Expansion Valve) and power receiver always control the optimal refrigerant level regardless of the length (maximum: 100 ft [30 m] (HA30/36/42), 70ft [21m] (HA24) and minimum: 16 ft [5 m]) of piping. The additional refrigerant charging work during installation often causes problems. It is completely eliminated by chargelss system. This unique system improves the quality and reliability of the work done. It also helps to speed up the installation time.

Note:
Please carefully consider the indoor unit location when piping lengths are less than values indicated as below as there could be intermittent noises during normal operation that would be noticeable in very quiet environments.
• HA24/30/36: 16 ft. (5 m)
• HA42: 25 ft. (7.5 m)

4 SPECIFICATIONS

Service Ref.			PUZ-HA24NHA1	PUZ-HA30NKA
Power supply	Phase		Single	
	Cycle		60Hz	
	Voltage		208/230 V	
MCA		A	17	24
MOCP		A	27	40
Breaker size		A	25	35
External finish			Munsell 3Y 7.8/1.1	
Heat exchanger			Plate fin coil	
Defrost method			Reverse cycle	
Crankcase heater		kW	—	
Compressor			Hermetic	
	Model		DNB28FBAMT	ANB33FJMMT
	Motor output	kW	2.2	2.5
	R.L.A.		9.0	18.0
	L.R.A.		18.0	27.5
	Starter type		Inverter	
Fan	Fan(drive) × No.		Propeller fan x 1	Propeller fan x 2
	Fan motor output	kW	0.074	0.074 + 0.074
	Fan motor	F.L.A.	0.33	0.33 + 0.33
	Airflow	m3/min	58	115
		CFM	2050	4060
Sound pressure level (SPL)	Cooling	dB	52	52
	Heating	dB	53	53
Protection devices			HP switch	
			Comp. Surface thermistor	
Dimensions	W	in	37-13/32	41-11/32
	D	in	12-63/64+63/64	
	H	in	37-1/8	52-43/64
	W	mm	950	1050
	D	mm	330 + 25	
	H	mm	943	1338
Weight		lb	190	261
		kg	86	118
Refrigerant			R410A	
	Charged	lb	7.72	11.46
		kg	3.5	5.2
	Control		Linear expansion valve	
	Oil Charged	Model	FVC68D	FV50S
		oz	34	47
		L	1.0	1.4
Refrigerant piping	Pipe size O.D. Liquid	in	3/8	
		mm	9.52	
	Pipe size O.D. Gas	in	5/8	
		mm	15.88	
	Connection method Indoor		Flared	
	Connection method Outdoor		Flared	
	Height difference IU-OU	ft	Maximum 100	
		m	Maximum 30	
	Piping length	ft	Maximum 165	Maximum 245
		m	Maximum 50	Maximum 75

Service Ref.			PUZ-HA36NKA	PUZ-HA42NKA1
Power supply	Phase		Single	
	Cycle		60Hz	
	Voltage		208/230 V	
MCA		A	26	36
MOCP		A	42	60
Breaker size		A	35	40
External finish			Munsell 3Y 7.8/1.1	
Heat exchanger			Plate fin coil	
Defrost method			Reverse cycle	
Crankcase heater		kW	—	
Compressor			Hermetic	
	Model		ANB33FJMMT	ANB42FJTMT
	Motor output	kW	2.5	3.0
	R.L.A.		18.0	19.0
	L.R.A.		27.5	28.0
	Starter type		Inverter	
Fan	Fan(drive) × No.		Propeller fan x 2	
	Fan motor output	kW	0.074 + 0.074	
	Fan motor	F.L.A.	0.33 + 0.33	
	Airflow	m3/min	115	100
		CFM	4060	3530
Sound pressure level (SPL)	Cooling	dB	52	49
	Heating	dB	53	51
Protection devices			HP switch	
			Comp. Surface thermistor	
Dimensions	W	in	41-11/32	
	D	in	12-63/64+63/64	
	H	in	52-43/64	
	W	mm	1050	
	D	mm	330 + 25	
	H	mm	1338	
Weight		lb	261	283
		kg	118	128
Refrigerant			R410A	
	Charged	lb	11.46	13.23
		kg	5.2	6.0
	Control		Linear expansion valve	
	Oil Charged	Model	FV50S	FVC68D
		oz	47	57
		L	1.4	1.7
Refrigerant piping	Pipe size O.D. Liquid	in	3/8	
		mm	9.52	
	Pipe size O.D. Gas	in	5/8	
		mm	15.88	
	Connection method Indoor		Flared	
	Connection method Outdoor		Flared	
	Height difference IU-OU	ft	Maximum 100	
		m	Maximum 30	
	Piping length	ft	Maximum 245	
		m	Maximum 75	

5 DATA

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

Service Ref.	Piping Length (one way)																				Factory Charged
	70 ft	80 ft	90 ft	100 ft	110 ft	120 ft	130 ft	140 ft	150 ft	160 ft	165 ft	170 ft	180 ft	190 ft	200 ft	210 ft	220 ft	230 ft	240 ft	245 ft	
	21 m	24 m	27 m	30 m	34 m	37 m	40 m	43 m	46 m	49 m	50 m	52 m	55 m	58 m	61 m	64 m	67 m	70 m	73 m	75 m	
PUZ-HA24NHA1	-	7 oz	14 oz	21 oz	28 oz	35 oz	42 oz	49 oz	56 oz	63 oz	67 oz	-	-	-	-	-	-	-	-	-	123 oz
	-	0.2 kg	0.4 kg	0.6 kg	0.8 kg	1.0 kg	1.2 kg	1.4 kg	1.6 kg	1.8 kg	1.9 kg	-	-	-	-	-	-	-	-	-	3.5 kg
PUZ-HA30NKA PUZ-HA36NKA	-	-	-	-	7 oz	14 oz	18 oz	25 oz	32 oz	35 oz	39 oz	42 oz	49 oz	49 oz	49 oz	49 oz	49 oz	49 oz	49 oz	49 oz	183 oz
					0.2 kg	0.4 kg	0.5 kg	0.7 kg	0.9 kg	1.0 kg	1.1 kg	1.2 kg	1.4 kg	1.4 kg	1.4 kg	1.4 kg	1.4 kg	1.4 kg	1.4 kg	1.4 kg	5.2 kg
PUZ-HA42NKA1	-	-	-	-	7 oz	14 oz	18 oz	25 oz	32 oz	35 oz	39 oz	42 oz	49 oz	53 oz	60 oz	67 oz	71 oz	78 oz	81 oz	85 oz	212 oz
					0.2 kg	0.4 kg	0.5 kg	0.7 kg	0.9 kg	1.0 kg	1.1 kg	1.2 kg	1.4 kg	1.5 kg	1.7 kg	1.9 kg	2.0 kg	2.2 kg	2.3 kg	2.4 kg	6.0 kg

For pipes longer than 70 ft or 100 ft, additional charge is required.

5-2. COMPRESSOR TECHNICAL DATA

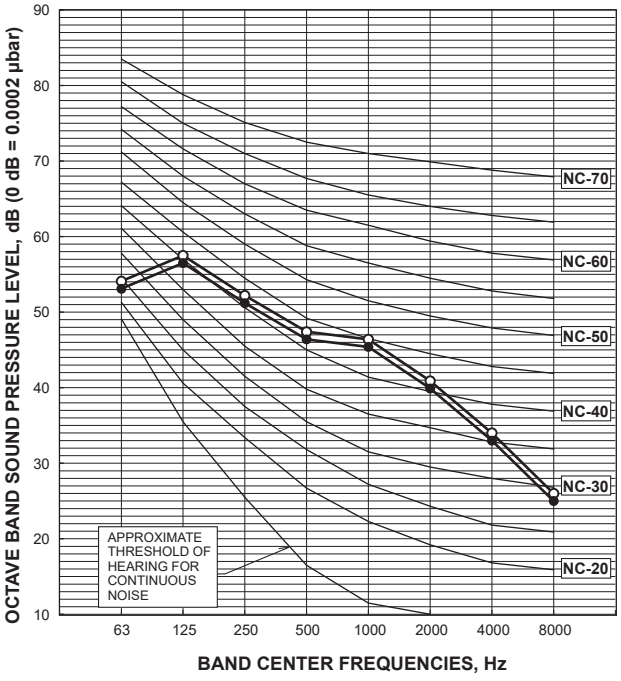
Winding temperature at 68°F [20°C]

Service Ref.		PUZ-HA24NHA1	PUZ-HA30NKA	PUZ-HA36NKA	PUZ-HA42NKA1
Compressor model		DNB28FBAMT	ANB33FJMMT		ANB42FJTMT
Winding Resistance (Ω)	U - V	0.74	0.188		
	U - W	0.74	0.188		
	W - V	0.74	0.188		

5-3. NOISE CRITERION CURVES

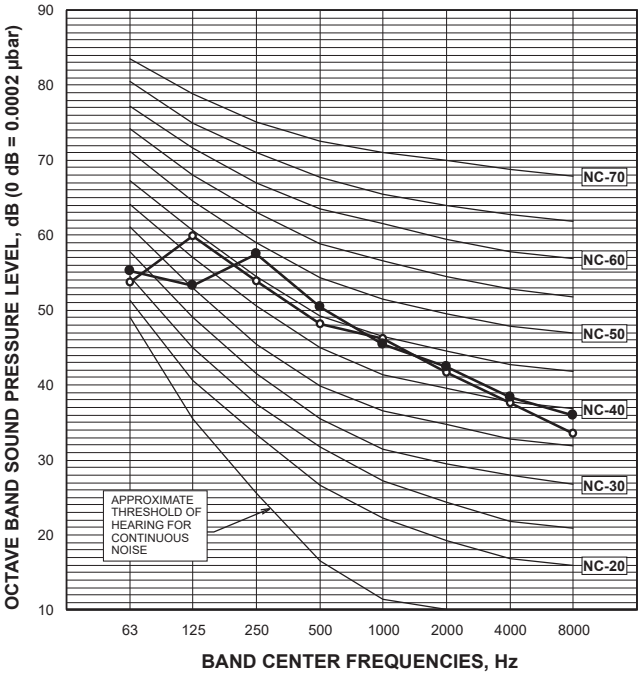
PUZ-HA24NHA1

MODE	SPL(dB)	LINE
COOLING	52	○—○
HEATING	53	●—●



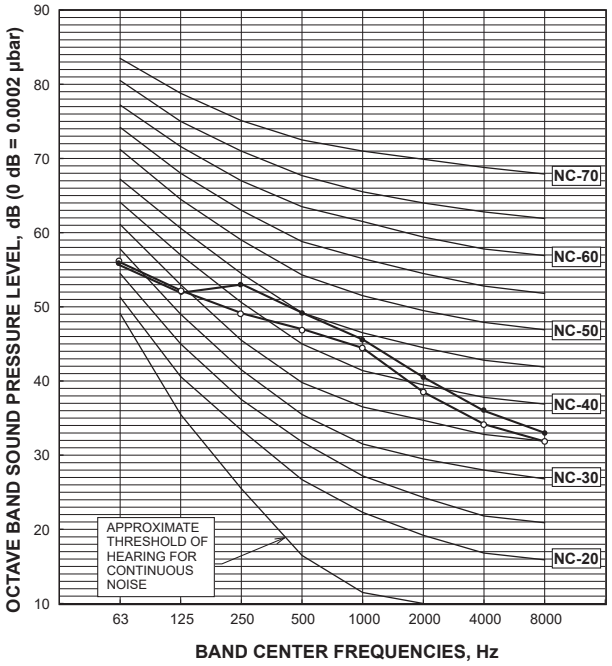
PUZ-HA30NKA
PUZ-HA36NKA

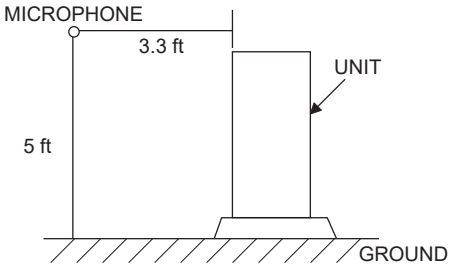
MODE	SPL(dB)	LINE
COOLING	52	○—○
HEATING	53	●—●



PUZ-HA42NKA1

MODE	SPL(dB)	LINE
COOLING	49	○—○
HEATING	51	●—●





5-4. STANDARD OPERATION DATA

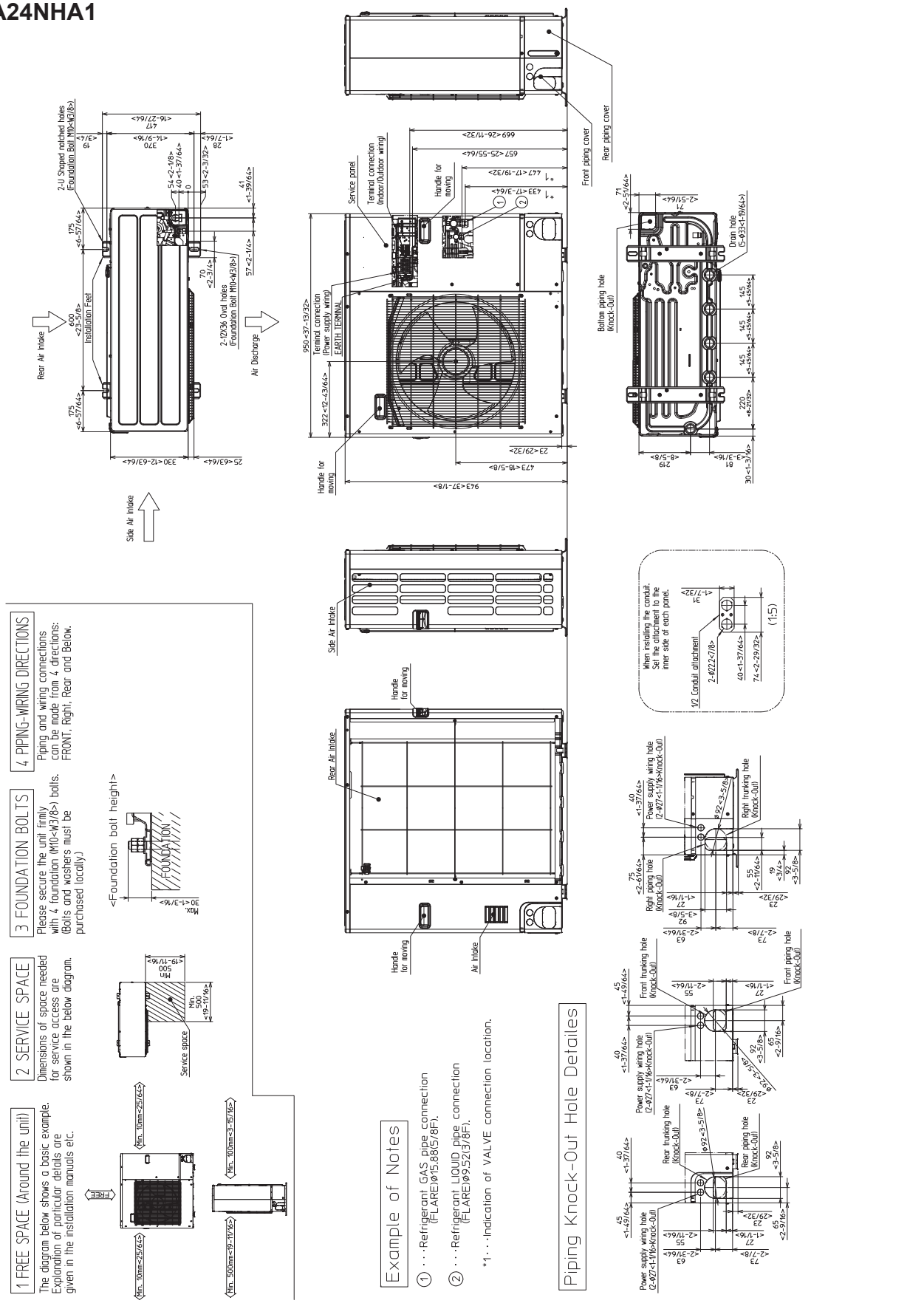
Representative matching			PLA-A24EA7		PLA-A30EA7	
Mode			COOLING	HEATING	COOLING	HEATING
Total	Capacity	Btu/h	24,000	26,000	30,000	32,000
	Input	W	1,710	1,710	2,130	2,220
Electrical circuit	Indoor unit model		PLA-A24EA7		PLA-A30EA7	
	Phase		Single			
	Cycle		60 Hz			
	Voltage		208/230 V			
	Current		0.49 A		0.59 A	
	Outdoor unit model		PUZ-HA24NHA1		PUZ-HA30NKA	
	Phase		Single		Single	
	Cycle		60 Hz		60 Hz	
	Voltage		208/230 V		208/230 V	
	Current		7.40 A	7.40 A	8.79 A	9.19 A
Refrigerant circuit	Discharge pressure	PSIG	383	325	361	347
	Suction pressure	PSIG	145	100	144	110
	Discharge temperature	°F	146	141	143	142
	Condensing temperature	°F	114	98	109	97
	Suction temperature	°F	57	40	53	38
	Ref. Pipe length	ft	25	25	25	25
	Discharge pressure	Mpa	2.64	2.24	2.49	2.39
	Suction pressure	Mpa	1.00	0.69	1.00	0.76
	Discharge temperature	°C	63.5	60.5	61.4	61.1
	Condensing temperature	°C	45.3	36.7	42.7	36.3
	Suction temperature	°C	14	4.4	11.8	3.3
	Ref. Pipe length	m	7.6	7.6	7.6	7.6
Indoor side	Intake air temperature D.B.	°F	80	70	80	70
	Intake air temperature W.B.	°F	67	60	67	56
	Discharge air temperature D.B.	°F	58	100	56	104
Outoor side	Intake air temperature D.B.	°F	95	47	95	47
	Intake air temperature W.B.	°F	75	43	76	43
Indoor side	Intake air temperature D.B.	°C	26.7	21.1	26.7	21.1
	Intake air temperature W.B.	°C	19.4	15.6	19.4	13.4
	Discharge air temperature D.B.	°C	14.3	37.5	13.2	39.9
Outoor side	Intake air temperature D.B.	°C	35.0	8.3	35.0	8.3
	Intake air temperature W.B.	°C	23.9	6.1	24.3	6.1
SHF			0.86	-	0.80	-
BF			0.05	-	0.05	-

Representative matching			PLA-A36EA7		PLA-A42EA7	
Mode			COOLING	HEATING	COOLING	HEATING
Total	Capacity	Btu/h	36,000	38,000	42,000	48,000
	Input	W	2,760	2,650	3,920	4,210
Electrical circuit	Indoor unit model		PLA-A36EA7		PLA-A42EA7	
	Phase		Single			
	Cycle		60 Hz			
	Voltage		208/230 V			
	Current		0.98 A		1.05 A	
	Outdoor unit model		PUZ-HA36NKA		PUZ-HA42NKA1	
	Phase		Single		Single	
	Cycle		60 Hz		60 Hz	
	Voltage		208/230 V		208/230 V	
	Current		11.17 A	10.71 A	16.20 A	17.46 A
Refrigerant circuit	Discharge pressure	PSIG	379	331	386	374
	Suction pressure	PSIG	142	106	129	106
	Discharge temperature	°F	37	153	152	149
	Condensing temperature	°F	34	96	114	110
	Suction temperature	°F	51	46	46	35
	Ref. Pipe length	ft	25	25	25	25
	Discharge pressure	Mpa	2.61	2.28	2.66	2.58
	Suction pressure	Mpa	0.98	0.73	0.89	0.73
	Discharge temperature	°C	2.614	67.3	66.5	65.1
	Condensing temperature	°C	0.978	35.8	45.7	43.5
	Suction temperature	°C	10.3	7.5	7.6	1.6
	Ref. Pipe length	m	7.6	7.6	7.6	7.6
Indoor side	Intake air temperature D.B.	°F	80	70	80	70
	Intake air temperature W.B.	°F	67	57	67	60
	Discharge air temperature D.B.	°F	57	101	55	108
Outoor side	Intake air temperature D.B.	°F	95	47	95	47
	Intake air temperature W.B.	°F	73	43	84	43
Indoor side	Intake air temperature D.B.	°C	26.7	21.1	26.8	21.1
	Intake air temperature W.B.	°C	19.4	13.8	19.4	15.6
	Discharge air temperature D.B.	°C	13.8	38.3	13.0	42.3
Outoor side	Intake air temperature D.B.	°C	35.1	8.3	35.1	8.4
	Intake air temperature W.B.	°C	22.6	6.1	28.8	6.2
SHF			0.83	-	0.88	-
BF			0.04	-	0.05	-

6 OUTLINES AND DIMENSIONS

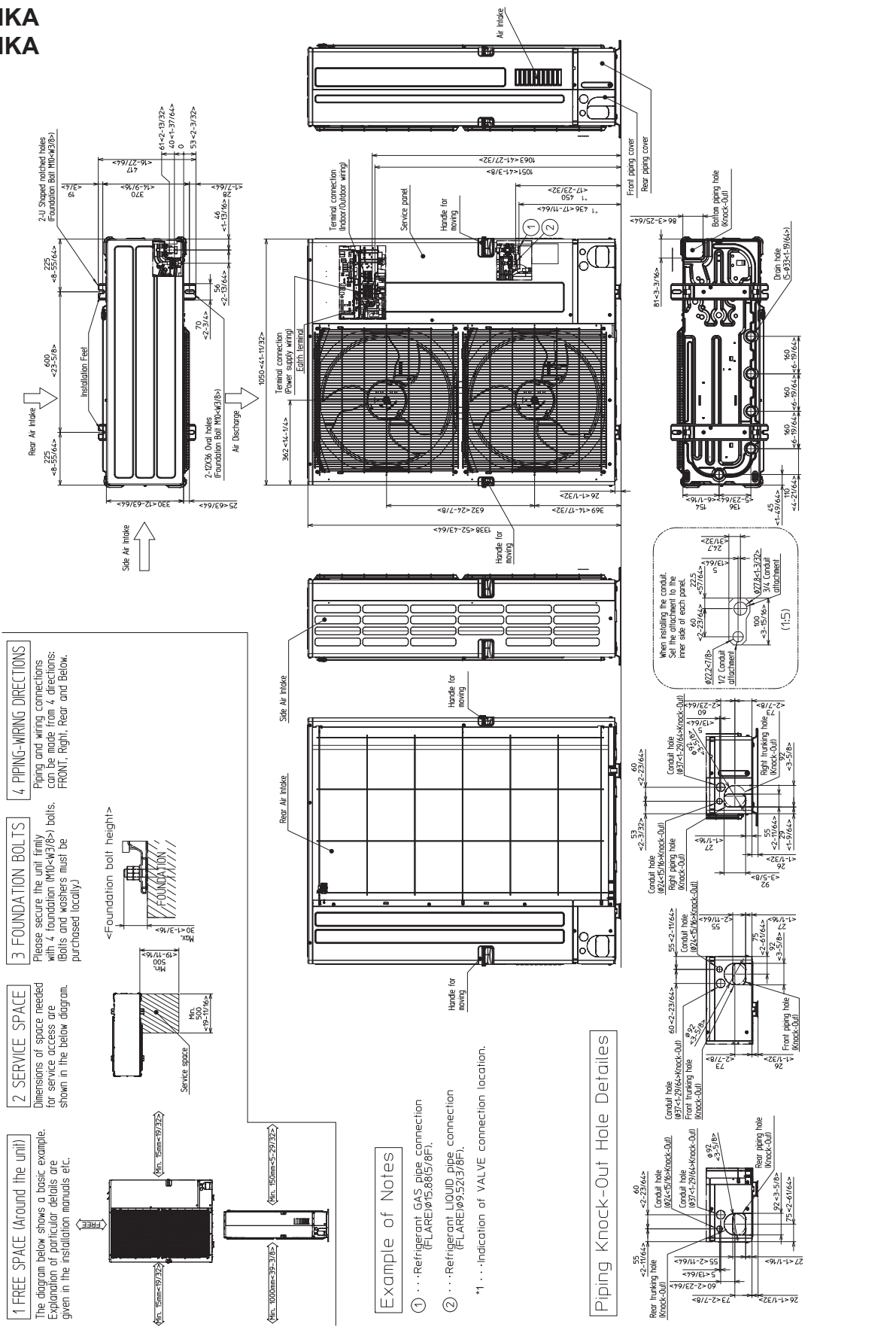
Unit: mm<in>

PUZ-HA24NHA1



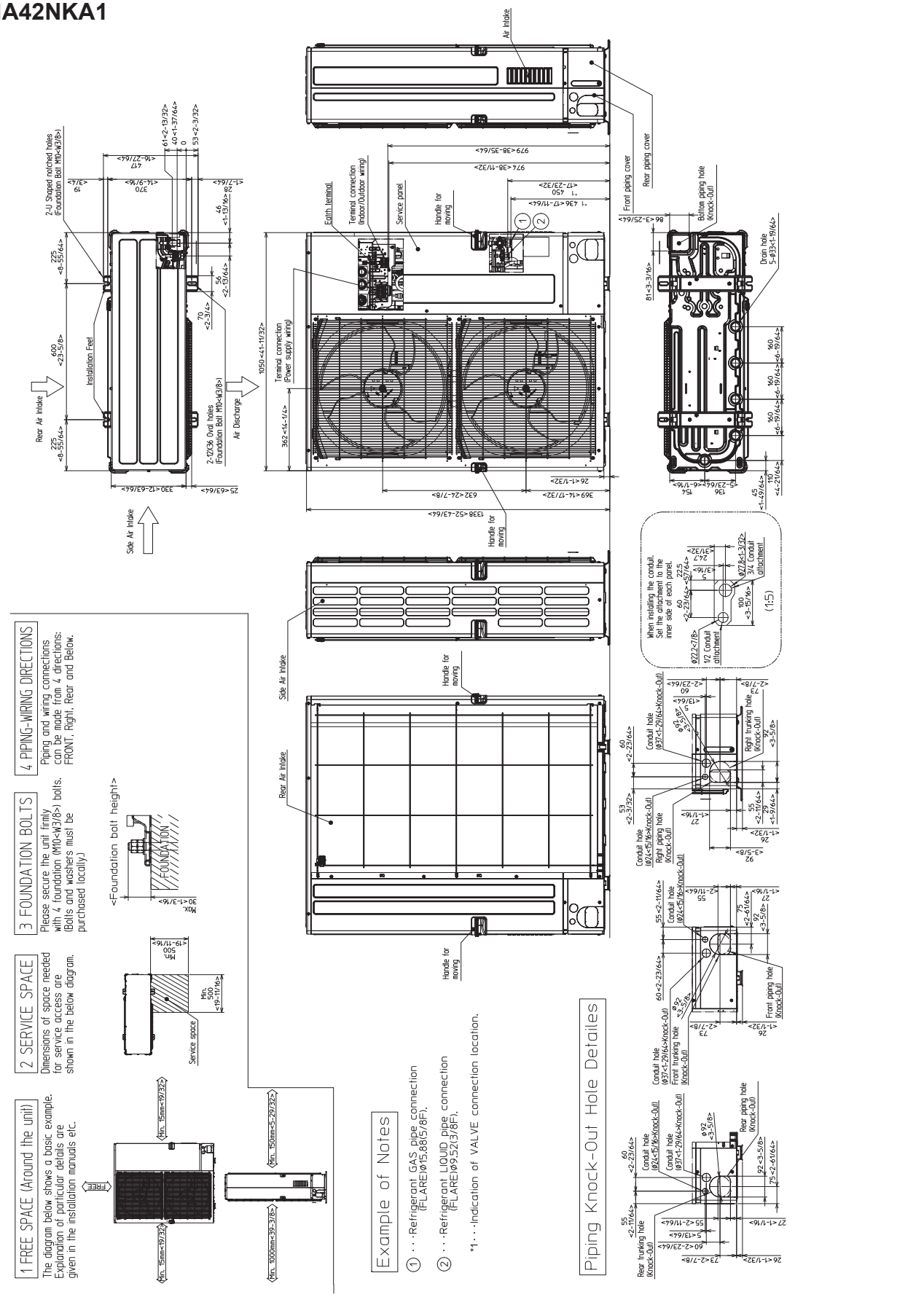
Unit: mm<in>

PUZ-HA30NKA
PUZ-HA36NKA



Unit: mm<in>

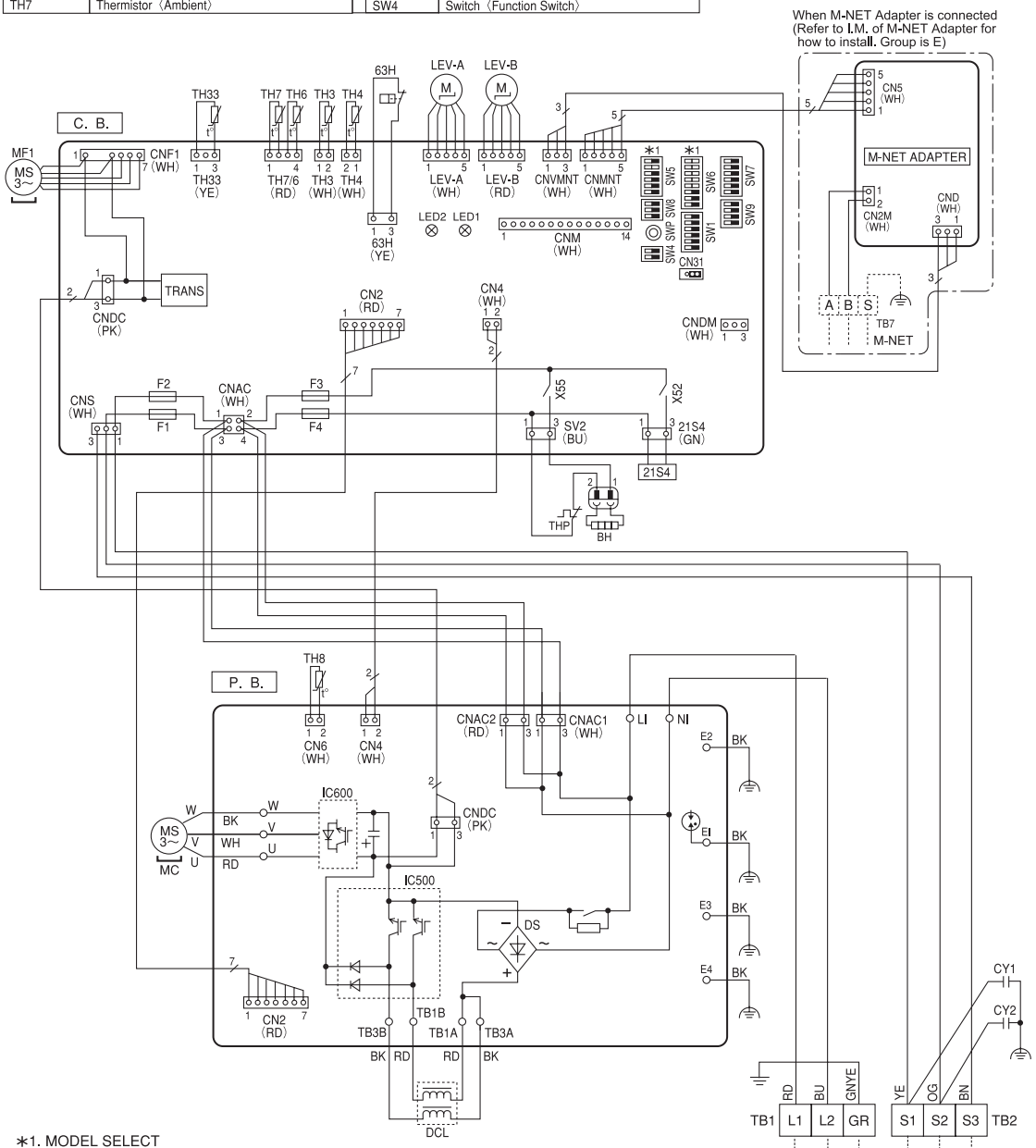
PUZ-HA42NKA1



7 WIRING DIAGRAM

PUZ-HA24NHA1

SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME
TB1	Terminal Block 〈Power Supply〉	TH8	Thermistor 〈Heat Sink〉	SW5	Switch 〈Function Switch, Model Select〉
TB2	Terminal Block 〈Indoor/Outdoor〉	TH33	Thermistor 〈Comp. Surface〉	SW6	Switch 〈Model Select〉
MC	Motor for Compressor	LEV-A, LEV-B	Linear Expansion Valve	SW7	Switch 〈Function Switch〉
MF1	Fan Motor	DCL	Reactor	SW8	Switch 〈Function Switch〉
21S4	Solenoid Valve 〈4-Way Valve〉	CY1, CY2	Capacitor	SW9	Switch 〈Function Switch〉
63H	High Pressure Switch	P. B.	Power Circuit Board	SWP	Switch 〈Pump Down〉
BH	Base Heater	C. B.	Controller Circuit Board	CNM	Connector 〈Connection for Option〉
THP	Thermal Protector	F1, F2	Fuse 〈T10AL250V〉	CN31	Connector 〈Emergency Operation〉
TH3	Thermistor 〈Liquid〉	F3, F4	Fuse 〈T6.3AL250V〉	CNDM	Connector 〈Connection for Option〉
TH4	Thermistor 〈Discharge〉	SW1	Switch 〈Manual Defrost, Defect History Record Reset, Refrigerant Address〉	SV2	Connector
TH6	Thermistor 〈2-Phase Pipe〉			X52, X55	Relay
TH7	Thermistor 〈Ambient〉	SW4	Switch 〈Function Switch〉		



∗1. MODEL SELECT
The black square (■) indicates a switch position.

MODEL	SW6-4, 5, 6, 7, 8 ∗2	SW5-5 ∗2
PUZ-HA24NHA1	ON / OFF 1 2 3 4 5 6 7 8	ON / OFF 1 2 3 4 5 6

∗2. SW6-1 to 3, SW5-1 to 4, 6 : Function Switch

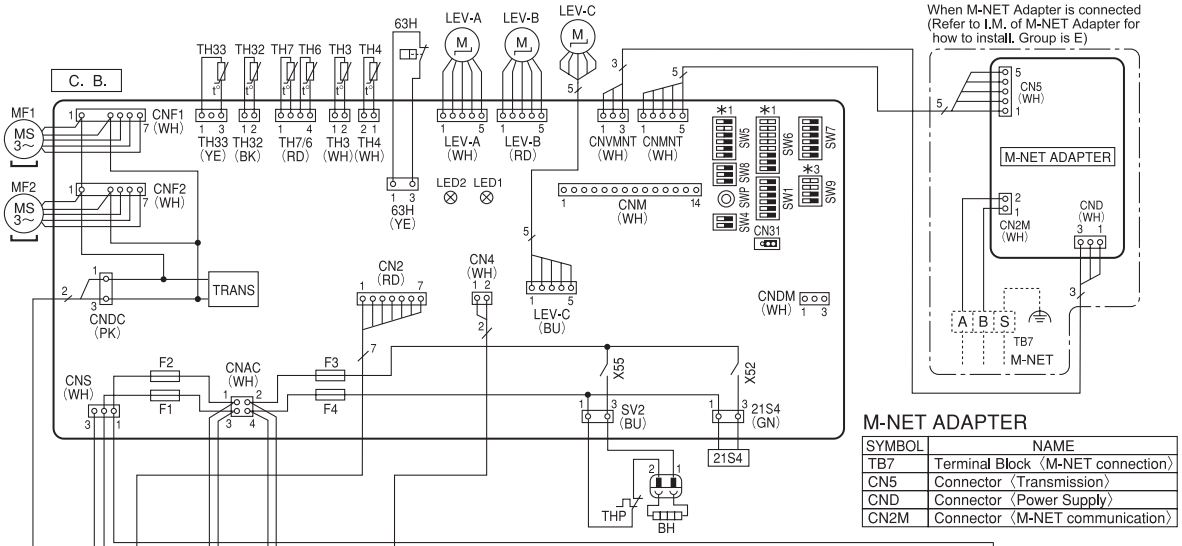
M-NET ADAPTER

SYMBOL	NAME
TB7	Terminal Block 〈M-NET connection〉
CN5	Connector 〈Transmission〉
CND	Connector 〈Power Supply〉
CN2M	Connector 〈M-NET communication〉

∗Use copper supply wires.
∗Utiliser des fils d'alimentation en cuivre.

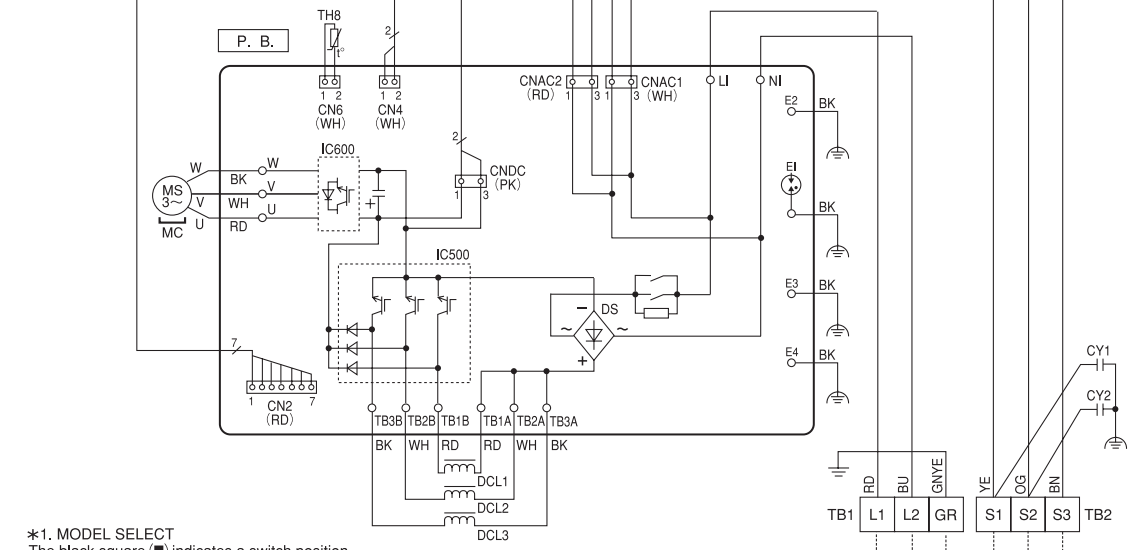
PUZ-HA30NKA PUZ-HA36NKA

SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME
TB1	Terminal Block 〈Power Supply〉	TH8	Thermistor 〈Heat Sink〉	SW4	Switch 〈Function Switch〉
TB2	Terminal Block 〈Indoor/Outdoor〉	TH32	Thermistor 〈Suction〉	SW5	Switch 〈Function Switch, Model Select〉
MC	Motor for Compressor	TH33	Thermistor 〈Comp. Surface〉	SW6	Switch 〈Model Select〉
MF1, MF2	Fan Motor	LEV-A, LEV-B, LEV-C	Linear Expansion Valve	SW7	Switch 〈Function Switch〉
21S4	Solenoid Valve 〈4-Way Valve〉	DCL1, DCL2, DCL3	Reactor	SW8	Switch 〈Function Switch〉
63H	High Pressure Switch	CY1, CY2	Capacitor	SW9	Switch 〈Function Switch〉
BH	Base Heater	P. B.	Power Circuit Board	SWP	Switch 〈Pump Down〉
THP	Thermal Protector	C. B.	Controller Circuit Board	CNM	Connector 〈Connection for Option〉
TH3	Thermistor 〈Liquid〉	F1, F2	Fuse 〈T10AL250V〉	CN31	Connector 〈Emergency Operation〉
TH4	Thermistor 〈Discharge〉	F3, F4	Fuse 〈T6.3AL250V〉	CNDM	Connector 〈Connection for Option〉
TH6	Thermistor 〈2-Phase Pipe〉	SW1	Switch 〈Manual Defrost, Defect History Record Reset, Refrigerant Address〉	SV2	Connector
TH7	Thermistor 〈Ambient〉			X52, X55	Relay



M-NET ADAPTER

SYMBOL	NAME
TB7	Terminal Block 〈M-NET connection〉
CN5	Connector 〈Transmission〉
CND	Connector 〈Power Supply〉
CN2M	Connector 〈M-NET communication〉



∗1. MODEL SELECT
The black square (■) indicates a switch position.

MODEL	SW6-4, 5, 6, 7, 8 ∗2	SW5-5 ∗2	MODEL	SW6-4, 5, 6, 7, 8 ∗2	SW5-5 ∗2
PUZ-HA30NKA	ON OFF 1 2 3 4 5 6 7 8	ON OFF 1 2 3 4 5 6	PUZ-HA36NKA	ON OFF 1 2 3 4 5 6 7 8	ON OFF 1 2 3 4 5 6

∗2. SW6-1 to 3, SW5-1 to 4, 6 : Function Switch

∗3 Ambient temp. of ZUBADAN Flash Injection becomes effective.
The black square (■) indicates a switch position.

Ambient temp.	SW9-3,4 ∗4	Ambient temp.	SW9-3,4 ∗4	Ambient temp.	SW9-3,4 ∗4	Ambient temp.	SW9-3,4 ∗4
37°F or less (Initial setting)	ON OFF 1 2 3 4	32°F or less	ON OFF 1 2 3 4	27°F or less	ON OFF 1 2 3 4	21°F or less	ON OFF 1 2 3 4

∗4 SW9-1 to 2 : Function Switch

∗Use copper supply wires.
∗Utiliser des fils d'alimentation en cuivre.