

PUZ HYPER HEAT PUMP OUTDOOR UNITS

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1. SPECIFICATIONS

INVERTER-driven compressor varies speed dynamically to adapt continuously to the room load.

- R410A refrigerant
- INVERTER technology for maximum energy-efficiency, precise temperature control, and more consistent comfort in every space
- Innovative flash technology enables high heating capacity at lower outside temperatures
- Exhibits 100% of rated heating capacity at 5° F; 90% of rated heating capacity at -4° F
- Indoor unit powered by outdoor unit
- Rugged housing, tough cabinet finish, strong welds at numerous stress point
- Standard air filter is included with indoor unit; high-efficiency filter is available as an option
- Optional hand-held wireless remote controller with receiver kit is available with or without i-see sensor
- Easy interior access to every P-Series unit
- Durable, aerodynamic fan design
- L-shape condenser coil features copper tubing and aluminum fins
- Cabinet mounting and construction are designed to withstand 155 MPH winds
- Limited warranty; five years parts and seven years compressors

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1. SPECIFICATIONS

Model Name		PUZ-HA30NHA4 PUZ-HA36NHA4		
Power supply	Phase	Single		
	Cycle	60Hz		
	Voltage	208/230V		
MCA	A	28		
MOCP	A	40		
Breaker size	A	30		
External finish		Munsell 3Y 7.8/1.1		
Heat exchanger		Plate fin coil		
Defrost method		Reverse cycle		
Crankcase heater	kW	-		
Compressor		Hermetic		
	Model	ANB33FJEMT		
	Motor output	kW	2.5	
	R.L.A.	20		
	L.R.A.	27.5		
	Starter type	Inverter		
Fan	Fan(drive) × No.		Propeller fan × 2	
	Fan motor output	kW	0.086 + 0.086	
	Fan motor (ECM)	F.L.A.	0.40 + 0.40	
	Airflow	m ³ /min	100	
		CFM	3530	
Sound level	Cooling	dB	52	
	Heating	dB	53	
Protection devices		HP switch LP switch Discharge thermo		
Dimension	W	mm	950	
	D	mm	330+30	
	H	mm	1350	
	W	in.	37-12/32	
	D	in.	13 + 1-3/16	
	H	in.	53-5/32	
Weight		kg	120	
		lbs	265	
Refrigerant		R410A		
	Charged	kg	5.5	
		lbs	12	
	Control		Linear expansion valve	
	Oil Charged	Model	Ether (FV50S)	
		L	1.4	
	oz	45		
Refrigerant piping	Pipe size OD	mm	9.52	
	Liquid	in.	3/8	
	Pipe size OD	mm	15.88	
	Gas	in.	5/8	
	Connection method Indoor		Flared	
	Connection method Outdoor		Flared	
	Height difference IU - OU	m	Max. 30	
		ft	Max. 100	
	Piping length	m	Max. 75	
ft		Max. 245		

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1. SPECIFICATIONS

REFILLING REFRIGERANT CHARGE (R410A : oz, kg)

Model Name	Piping Length (one way)														Factory Charged
	100ft 30m	110ft 33m	120ft 37m	130ft 40m	140ft 43m	150ft 46m	160ft 49m	180ft 55m	200ft 61m	210ft 64m	230ft 70m	245ft 75m			
PUZ-HA30NHA4 PUZ-HA36NHA4	194 oz	200 oz	206 oz	212 oz	218 oz	224 oz	230 oz	242 oz	254 oz	260 oz	272 oz	280 oz	195 oz		
	5.5 kg	5.7 kg	5.9 kg	6.0 kg	6.2 kg	6.4 kg	6.6 kg	6.7 kg	7.2 kg	7.4 kg	7.7 kg	7.9 kg		5.5 kg	

Longer pipe than 100 ft, additional charge is required.

(at 20°C, 68°F)

Model Name	PUZ-HA30NHA4 PUZ-HA36NHA4	
Compressor model	ANB33F JEMT	
Winding Resistance (Ω)	U-V	0.188
	U-W	0.188
	W-V	0.188

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1. SPECIFICATIONS

EFFICIENCY RATINGS

Outdoor Unit	Indoor Unit	SEER	EER	HSPF	COP @ 47° F	COP @ 17° F	COP @ 5° F	Energy Star	Tax Credit
PUZ-HA30NHA4	PKA-A30KA4	16.5	12	9.5	3.2	2.17	1.62	Yes	
PUZ-HA30NHA4	PLA-A30BA4	15.6	12.2	9.4	2.73	2.05	1.41	Yes	
PUZ-HA30NHA4	PCA-A30KA4	16.1	12.1	9.3	3.14	1.97	1.6	Yes	
PUZ-HA30NHA4	PEAD-A30AA4	16.5	12	9.5	3.4	2.14	1.73	Yes	
PUZ-HA36NHA4	PKA-A36KA4	16.2	12	10	3.27	2.2	1.64	Yes	
PUZ-HA36NHA4	PLA-A36BA4	17	12.6	10	3.45	2.28	1.9	Yes	Yes
PUZ-HA36NHA4	PCA-A36KA4	16.6	12.1	10.3	3.41	2.27	1.7	Yes	
PUZ-HA36NHA4	PEAD-A36AA4	16.8	12.1	10.4	3.52	2.42	1.82	Yes	
PUZ-HA36NHA4	PEA-A18AA4 + PEA-A18AA4	16.8	12.5	10.4	3.52	2.5	1.82	Yes	Yes
Note:	Efficiency values based on AHRI 210/240 test method.								

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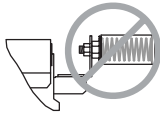
2. EXTERNAL DIMENSIONS

PUZ-A30/36NHA4 PUZ-A30/36NHA4-BS

Unit: mm<inch>

3 FOUNDATION BOLTS | 4 PIPING-WIRING DIRECTIONS

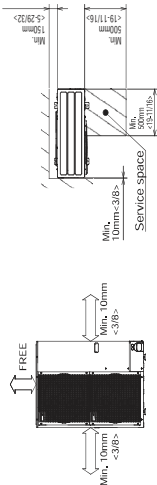
Please secure the unit firmly with 4 foundation (M10<W3/8>) bolts. Bolts and washers must be purchased locally.



Entire mounting flange must be supported. No cantilevering about bolt hole of mounting flange allowed.

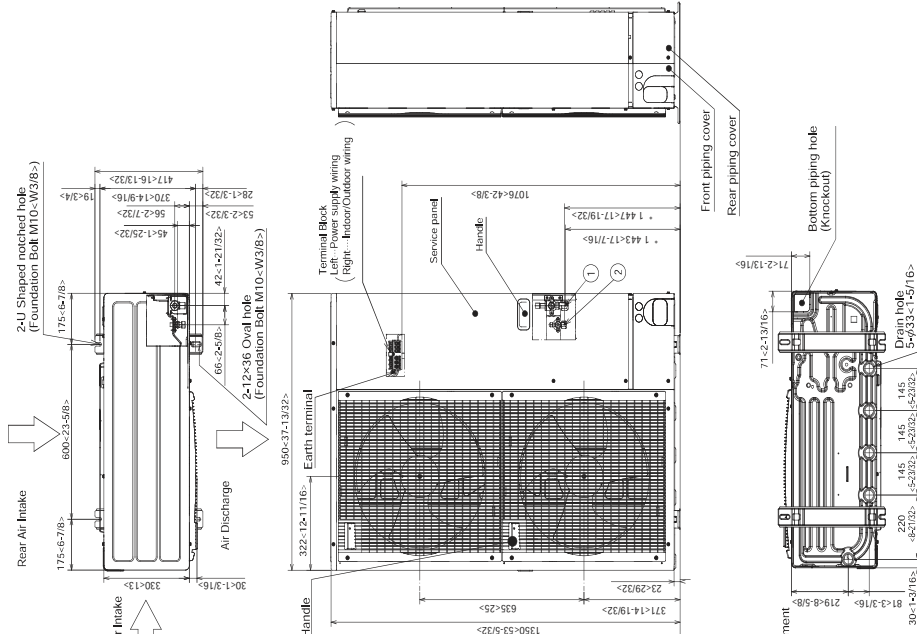
1 FREE SPACE (Around the unit) | 2 SERVICE SPACE

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

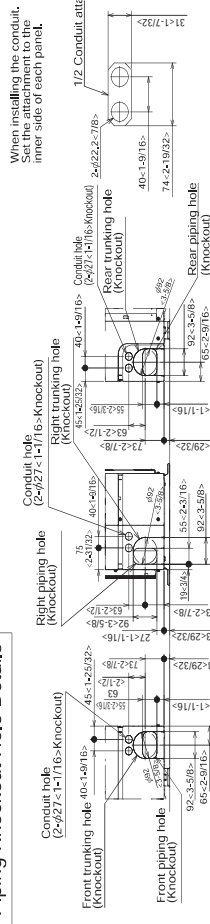


Example of Notes

- ①... Refrigerant GAS pipe connection (FLARE)φ15.88<3/8>
- ②... Refrigerant LIQUID pipe connection (FLARE)φ 9.52<3/8>
- * 1 ... Indication of STOP VALVE connection location.



Piping Knockout Hole Details

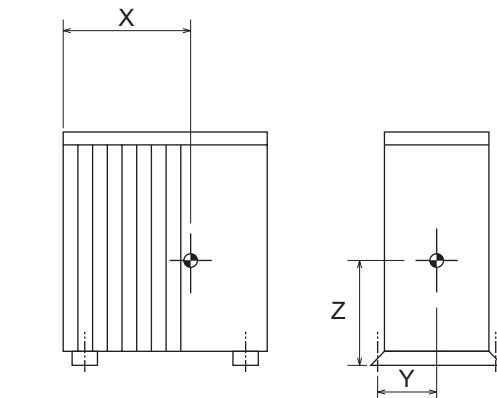


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3. CENTER OF GRAVITY

Unit: mm<inch>

PUY-A24/30/36NHA4,A42NHA5 PUY-A24/30/36NHA4,A42NHA5-BS



Unit: inch (mm)

Model name	X	Y	Z
PUZ-HA30/36NHA (-BS)	23-15/64 (590)	7-9/32 (185)	15-55/64 (403)

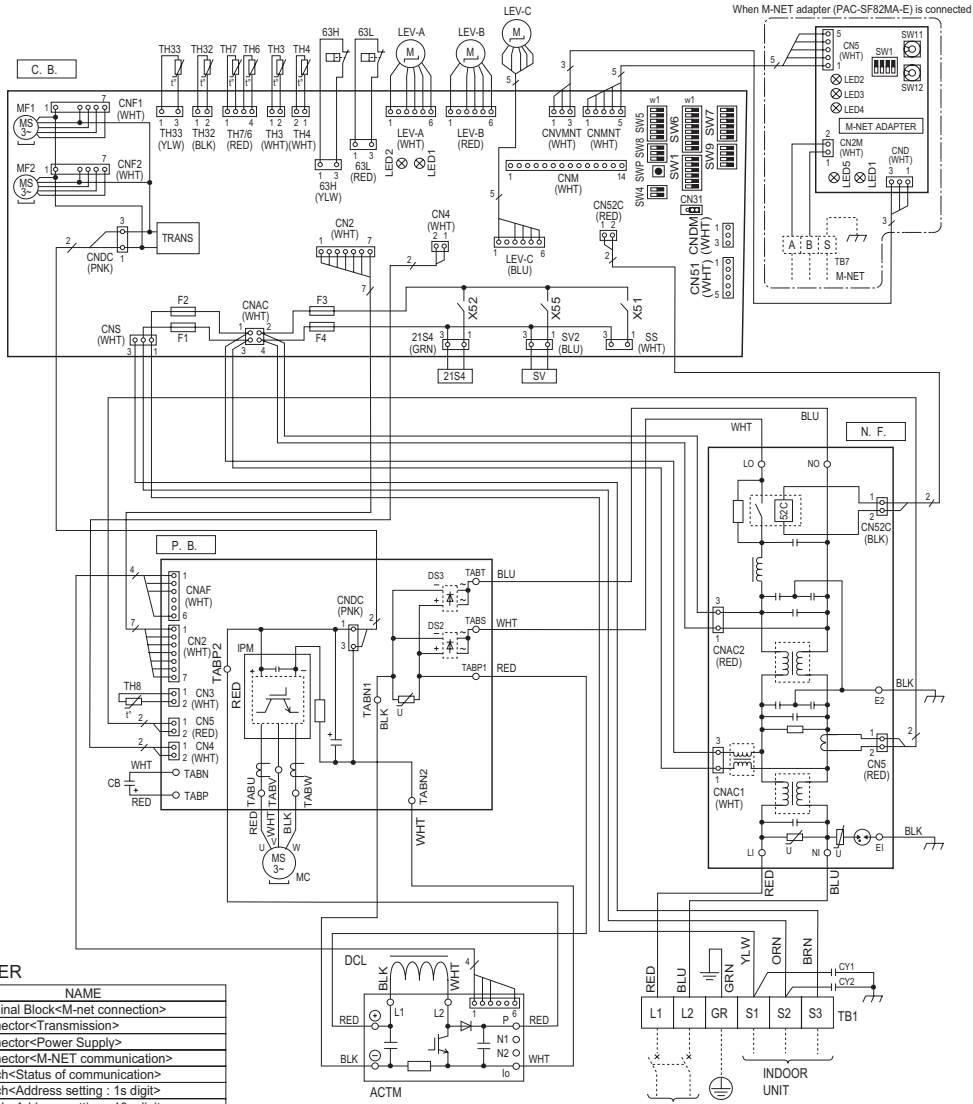
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4. ELECTRICAL WIRING DIAGRAMS

PUZ-A30/36NHA4 PUZ-A30/36NHA4-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 Motor	TABS/T	Connection Terminal <L/N-Phase>	SW8	Switch<Function Setup>
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>	SWP	Switch<Pump Down>
63L	Low Pressure Switch	DS2, DS3	Diode Bridge	CN31	Connector<Emergency Operation>
SV	Solenoid Valve (Bypass Valve)	IPM	Power Module	SS	Connector<Connection for Option>
TH3,TH32,TH33	Thermistor<Outdoor Pipe>	N.F.	Noise Filter Circuit Board	CNM	Connector<A-Control Service Inspection Kit>
TH4	Thermistor<Discharge>	LI / LO	Connection Terminal<L-Phase>	CNMNT	Connector <Connected to Optional M-NET Adapter Board>
TH6	Thermistor<Outdoor 2-Phase Pipe>	NI / NO	Connection Terminal<N-Phase>	CNMVMT	Connector <Connected to Optional M-NET Adapter Board>
TH7	Thermistor<Outdoor>	E1, E2	Connection Terminal<Ground>	CNDM	Connector < Connected for Option (Contact Input)>
TH8	Thermistor<Heatsink>	52C	52C Relay	CN51	Connector < Connected for Option (Signal output)>
LEV-A,LEV-B,LEV-C	Electronic Expansion Valve	C.B.	Controller Circuit Board	LED1,LED2	LED<Operation Inspection Indicators>
DCL	Reactor	SW1	Switch<Forced Defrost, Defect History Record Reset, Refrigerant Address>	F1-F4	Fuse< T6.3AL250V>
ACTM	Active Filter Module	SW4	Switch<Test Operation>	X51,X52,X55	Relay
CB	Main Smoothing Capacitor	SW5	Switch<Function Switch>		
CY1, CY2	Capacitor				



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 : 1s digit>
SW12	Switch<Address setting : 10s digit>
LED1	LED<Power Supply : DC5V>
LED2	LED<Connection to Outdoor Unit>
LED3	LED<Transmission : Sending>
LED4	LED<Transmission : Receiving>
LED5	LED<Power Supply : DC12V>

w1MODEL SELECT

MODEL	SW6	SW5-6 w2
30N	ON OFF [Switch positions]	ON OFF [Switch positions]
36N	ON OFF [Switch positions]	ON OFF [Switch positions]

w2. SW5 -1 to 5 : Function Switch

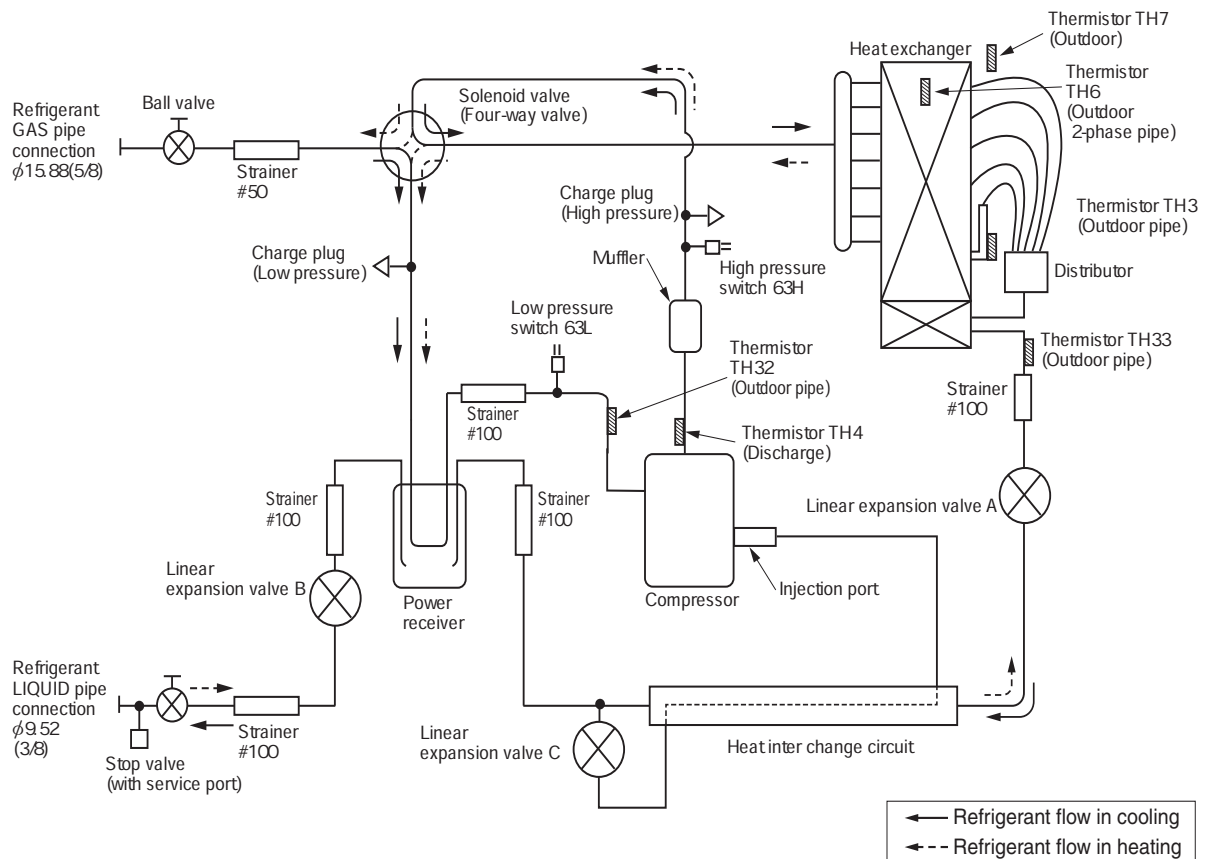
POWER SUPPLY
200/230V 60Hz
wUse copper supply wires.

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5. REFRIGERANT SYSTEM DIAGRAMS

PUZ-A30/36NHA4 PUZ-A30/36NHA4-BS

Unit: mm<inch>



Refrigerant recovering (pump down)

Perform the following procedures to recover the refrigerant when moving the indoor unit or the outdoor unit.

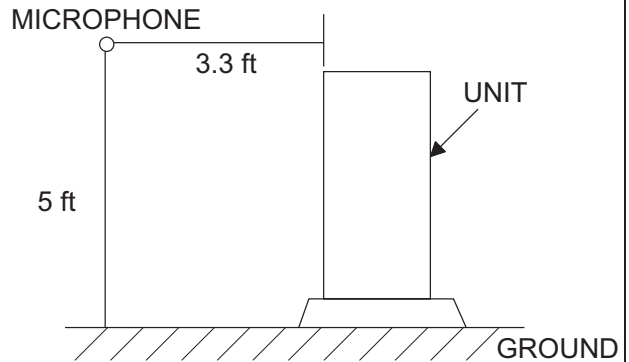
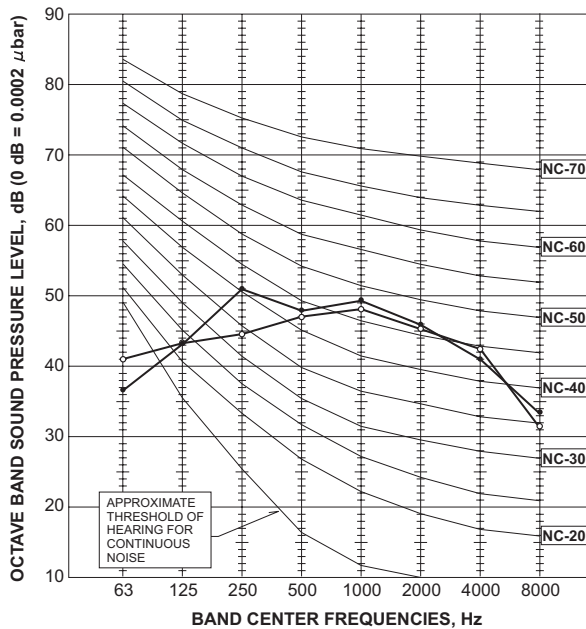
- ① Turn on the power supply (circuit breaker).
 - ※When power is supplied, make sure that "CENTRALLY CONTROLLED" is not displayed on the remote controller. If "CENTRALLY CONTROLLED" is displayed, the refrigerant recovering (pump down) cannot be completed normally.
- ② After the liquid stop valve is closed, set the SWP switch on the control board of the outdoor unit to ON. The compressor (outdoor unit) and ventilators (indoor and outdoor units) start operating and refrigerant collecting operation begins. LED1 and LED2 on the control board of the outdoor unit are lit.
 - ※Set the SWP switch (push-button type) to ON in order to perform refrigerant recovering operation only when the unit is stopped. However, refrigerant recovering operation cannot be performed until compressor stops even if the unit is stopped. Wait 3 minutes until compressor stops and set the SWP switch to ON again.
- ③ Because the unit automatically stops in about 2 to 3 minutes after the refrigerant collecting operation (LED1 is not lit and LED2 is lit), be sure to quickly close the gas stop valve.
 - ※In case the outdoor unit is stopped when LED1 is lit and LED2 is not lit, open the liquid stop valve completely, and then repeat step ② 3 minutes later.
 - ※If the refrigerant collecting operation has been completed normally (LED1 is not lit and LED2 is lit), the unit will remain stopped until the power supply is turned off.
- ④ Turn off the power supply (circuit breaker).

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6. SOUND PRESSURE LEVELS

PUZ-HA30NHA2
PUZ-HA36NHA2

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



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7. STANDARD OPERATION RANGE

		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.)

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8. ACCESSORIES

Part Number	Descriptions	Applicable model
PAC-SK52ST	Service Tool with display screen for operation and diagnostic data	All models
CWMB1	4 piece (1-pair) condensing unit wall mounting brackets - painted steel	
PAC-SF82MA-E	M-NET control adapter for Building Management System	
PAC-SG59SG-E	Air Outlet Guide (Directs airflow upward from outdoor fan)	All models (requires 2)
PAC-SG64DP-E	Outdoor Drain Pan	All models
ULTRILITE2	Outdoor Unit Mounting Pad 24" x 42" x 3"	
WB-PA2	Wind Baffle	All models (requires 2)

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