

# SERVICE MANUAL

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## **Series PE** **Ceiling Concealed**

Model name

<Indoor unit>

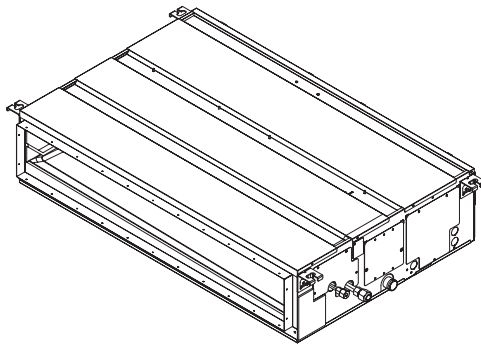
**PE-P18JAK**

**PE-P24JAK**

**PE-P30JAK(L)**

**PE-P36JAK(L)**

**PE-P42JAK(L)**



INDOOR UNIT

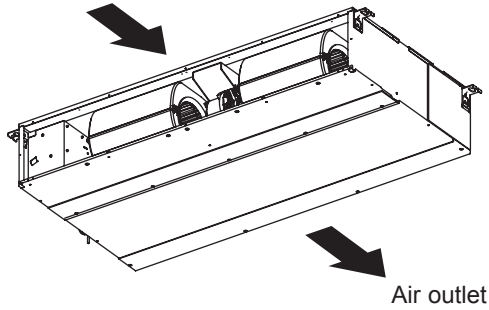
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# PART NAMES AND FUNCTIONS

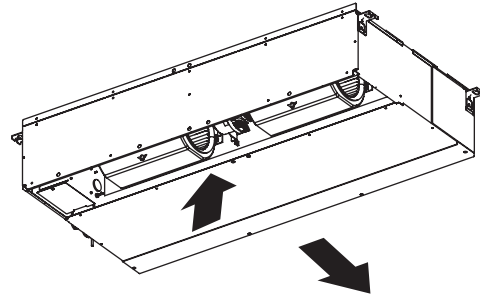
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## Indoor unit

Air intake (sucks the air inside the room into the unit)



In case of rear inlet



In case of bottom inlet

# SPECIFICATION

Indoor unit	Service Ref.		PE-P18, 24JAK	
	Mode		Cooling	
	Power supply		Single phase, 50,60Hz, 220-240V	
	Input	kW	0.14	
	Running Current	A	1.12	
	External finish		Galvanized sheets	
	Heat exchanger		Plate fin coil	
	Fan	Fan (drive) × No.		Sirocco fan × 2
		Fan motor output	kW	0.121
		Airflow (Low-High)	m <sup>3</sup> /min (CFM)	17.5-27.0 (618-953)
		External static pressure	Pa	30-50
	Booster heater		kW	-
	Operation control & Thermostat		Remote controller & built-in	
	Sound pressure level (Low-High)	30Pa	dB (A)	30-38
		50Pa		33-41
	Field drain pipe O.D		mm (in.)	32 (1-1/4)
	Dimensions	W	mm (in.)	1100 (43-5/16)
D		mm (in.)	732 (28-7/8)	
H		mm (in.)	250 (9-7/8)	
Weight			kg	29
			lbs	64

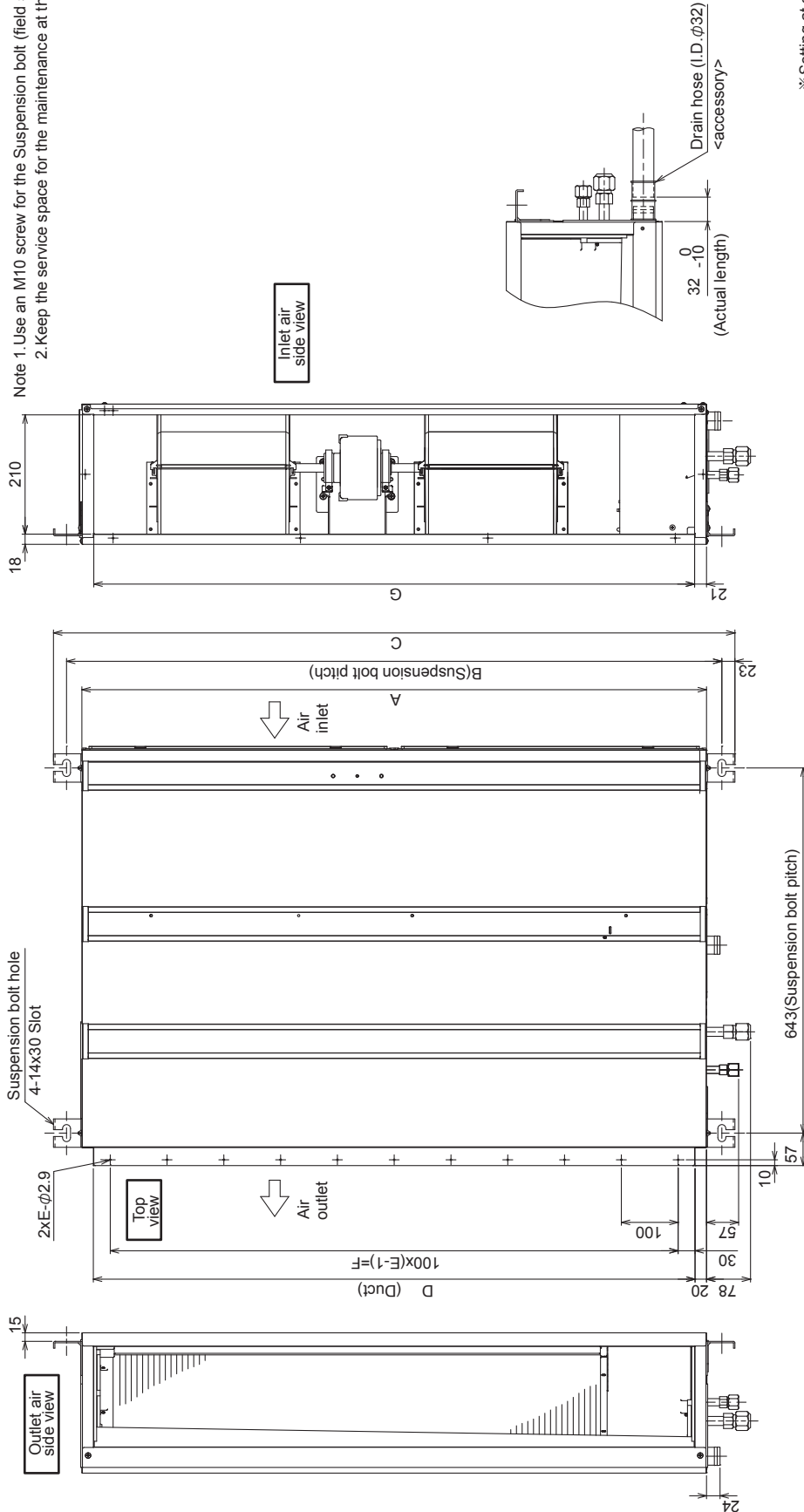
Indoor unit	Service Ref.		PE-P30, 36JAK(L)	PE-P42JAK(L)	
	Mode		Cooling	Cooling	
	Power supply		Single phase, 50,60Hz, 220-240V	Single phase, 50,60Hz, 220-240V	
	Input	kW	0.25	0.36	
	Running Current	A	1.68	2.40	
	External finish		Galvanized sheets	Galvanized sheets	
	Heat exchanger		Plate fin coil	Plate fin coil	
	Fan	Fan (drive) × No.		Sirocco fan × 2	Sirocco fan × 2
		Fan motor output	kW	0.244	0.244
		Airflow (Low-High)	m <sup>3</sup> /min (CFM)	24.0-34.0 (847-1201)	28.0-42.0 (989-1483)
		External static pressure	Pa	30-50-70	30-50-70
	Booster heater		kW	-	-
	Operation control & Thermostat		Remote controller & built-in		
	Sound pressure level (Low-Mid-High)	35Pa	dB (A)	34-42	36-40-44
		50Pa		34-42	36-40-44
		70Pa		34-43	36-41-45
	Field drain pipe O.D		mm (in.)	32 (1-1/4)	32 (1-1/4)
Dimensions	W	mm (in.)	1400 (55-1/8)	1400 (55-1/8)	
	D	mm (in.)	732 (28-7/8)	732 (28-7/8)	
	H	mm (in.)	250 (9-7/8)	250 (9-7/8)	
Weight			kg	38	
			lbs	84	
			86	86	

# OUTLINES & DIMENSIONS

## Indoor unit

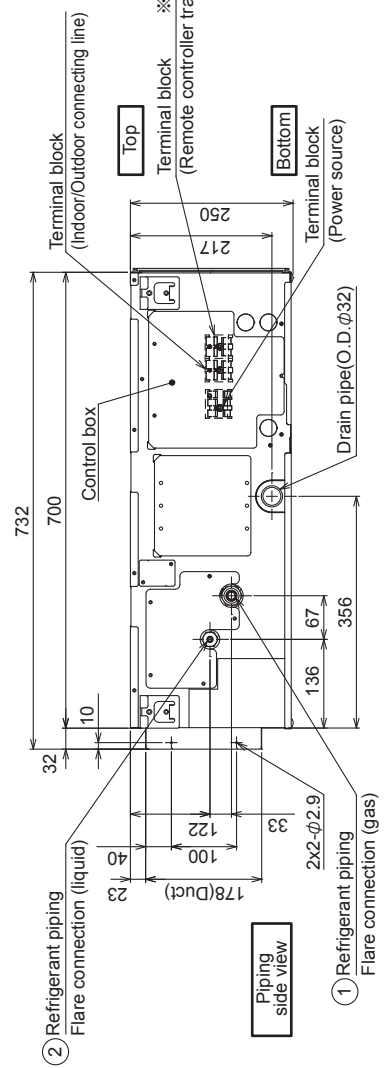
### ■ PE-P18, 24, 30, 36, 42JAK(L)

Note 1. Use an M10 screw for the Suspension bolt (field supply).  
2. Keep the service space for the maintenance at the bottom.



※ Setting at shipment

Model	A	B	C	D	E	F	G	① Gas pipe	② Liquid pipe
PE-P18JAK	1100	1154	1200	1060	11	1000	1058	φ12.7	φ6.35
PE-P24JAK	1400	1454	1500	1360	14	1300	1358	φ15.88	φ9.52



※ For PE-P-JAK (Remote controller transmission line)

[Maintenance access space]  
 Secure enough access space to allow for the maintenance, inspection, and replacement of the motor, fan, heat exchanger, and control box in one of the following ways.  
 Select an installation site for the indoor unit so that its maintenance access space will not be obstructed by beams or other objects.

- (1) When a space of 300mm or more is available below the unit between the unit and the ceiling, (Fig.1)
- Create access door 1 and 2 (450x450mm each) as shown in Fig.2.
- (Access door 2 is not required if enough space is available below the unit for a maintenance worker to work in.)
- (2) When a space of less than 300mm is available below the unit between the unit and the ceiling.
- (At least 20mm of space should be left below the unit as shown in Fig.3.)
- Create access door 1 diagonally below the control box and access door 3 below the unit as shown in Fig.4.
- Create access door 4 below the control box and the unit as shown in Fig.5.

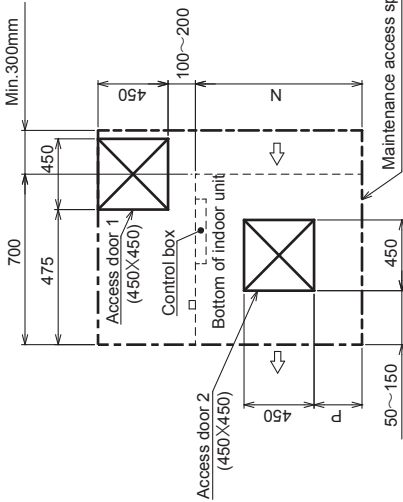
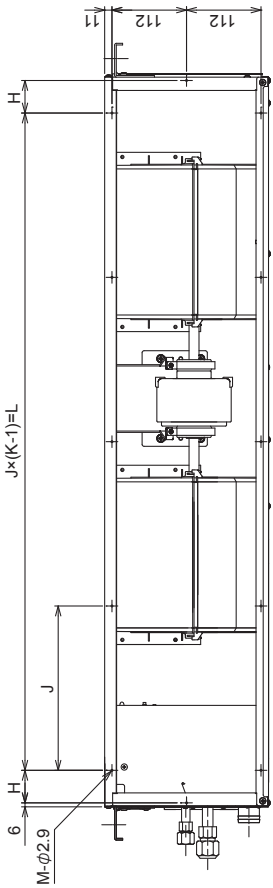


Fig.2 (Viewed from the direction of the arrow Z)

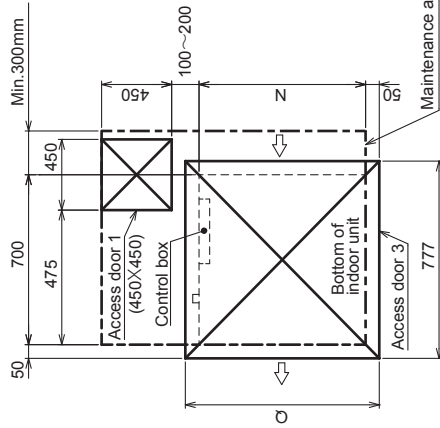


Fig.4 (Viewed from the direction of the arrow Y)

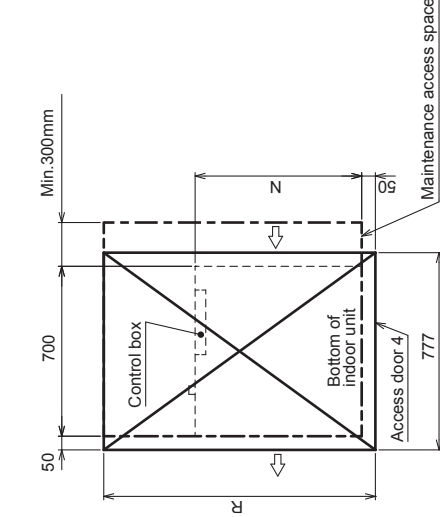


Fig.5 (Viewed from the direction of the arrow Y)

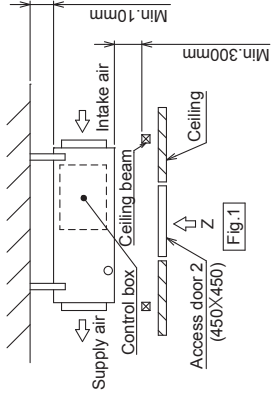


Fig.1

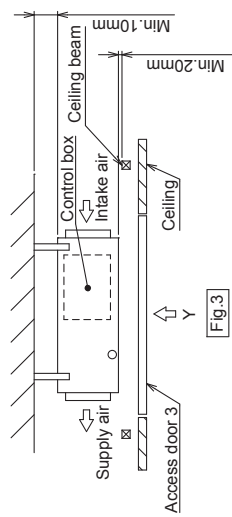
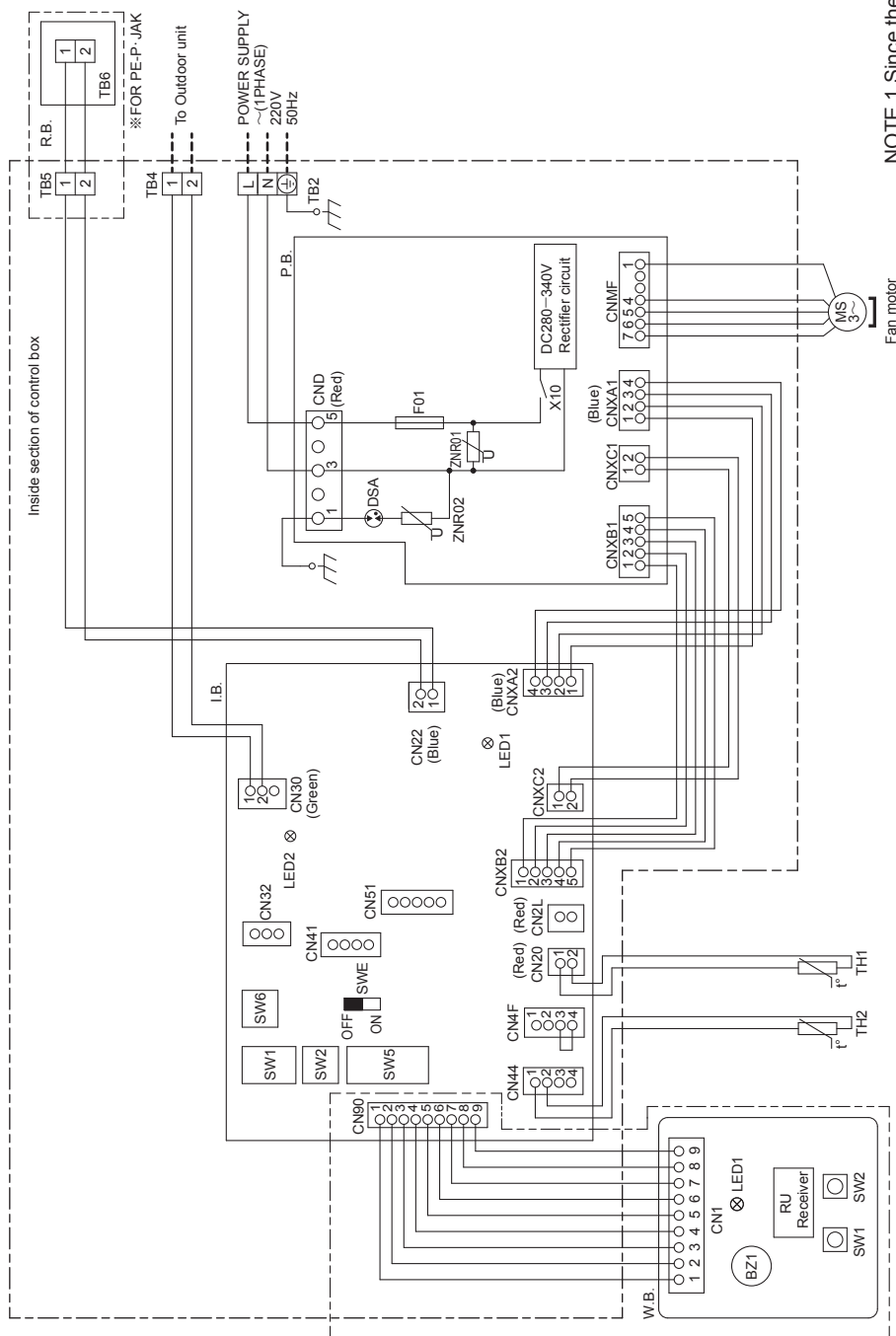


Fig.3

Model	H	J	K	L	M	N	P	Q	R
PE-P18,24,JAK	49	330	4	990	10	1100	250~350	1200	1700
PE-P30,36,42,JAK(L)	54	320	5	1280	12	1400	400~500	1500	2000

# WIRING DIAGRAM

■ PE-P18, 24, 30, 36, 42JAK(L)



**NOTE 1.** Since the outdoor side electric wiring may change be sure to check the outdoor unit electric wiring for servicing.  
**2.** Indoor and outdoor connecting wires are made with polarities, make wiring matching terminal numbers(L,N,⊕).  
**3.** Symbols used in wiring diagram above are,  
 ○○○○: Connector, □: Terminal,  
 -----(Heavy dotted line): Field wiring  
**4.** Specification subject to change without notice.

## SYMBOL EXPLANATION

SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME
IB.	Indoor controller board	W.B.	Wireless remote controller board		
CN2L	Connector (Lossnay)	F01	Fuse AC250V 6.3A	RU	Wireless remote controller board Receiving unit
CN32	Connector (Remote switch)	ZNR01,02	Varistor	BZ1	Buzzer
CN41	Connector (HA Terminal-A)	DSA	Arrester	LED1	LED (Run indicator)
CN51	Connector (Centrally control)	X10	Aux. relay	SW1	Switch (Heating ON/OFF)
CN90	Connector (Wireless)	TH1	Intake air temp. thermistor	SW2	Switch (Cooling ON/OFF)
LED1	LED(Power supply)	TH2	Pipe temp. thermistor/liquid	R.B.	Remote controller board
LED2	LED(Remote controller supply)	TB2	Terminal block (Power supply)	TB6	Terminal block (Remote controller transmission line)
SW1	Switch (for model selection)	TB4	Terminal block (Indoor/Outdoor connecting line)		
SW2	Switch (for capacity code)	TB5	Terminal block (Remote controller transmission line)		
SW5	Switch (for system selection)				
SW6	Switch (for emergency operation)				
SWE	Connector (Emergency operation)				

# REFRIGERANT SYSTEM DIAGRAM

■ PE-P18, 24, 30, 36, 42JAK(L)

