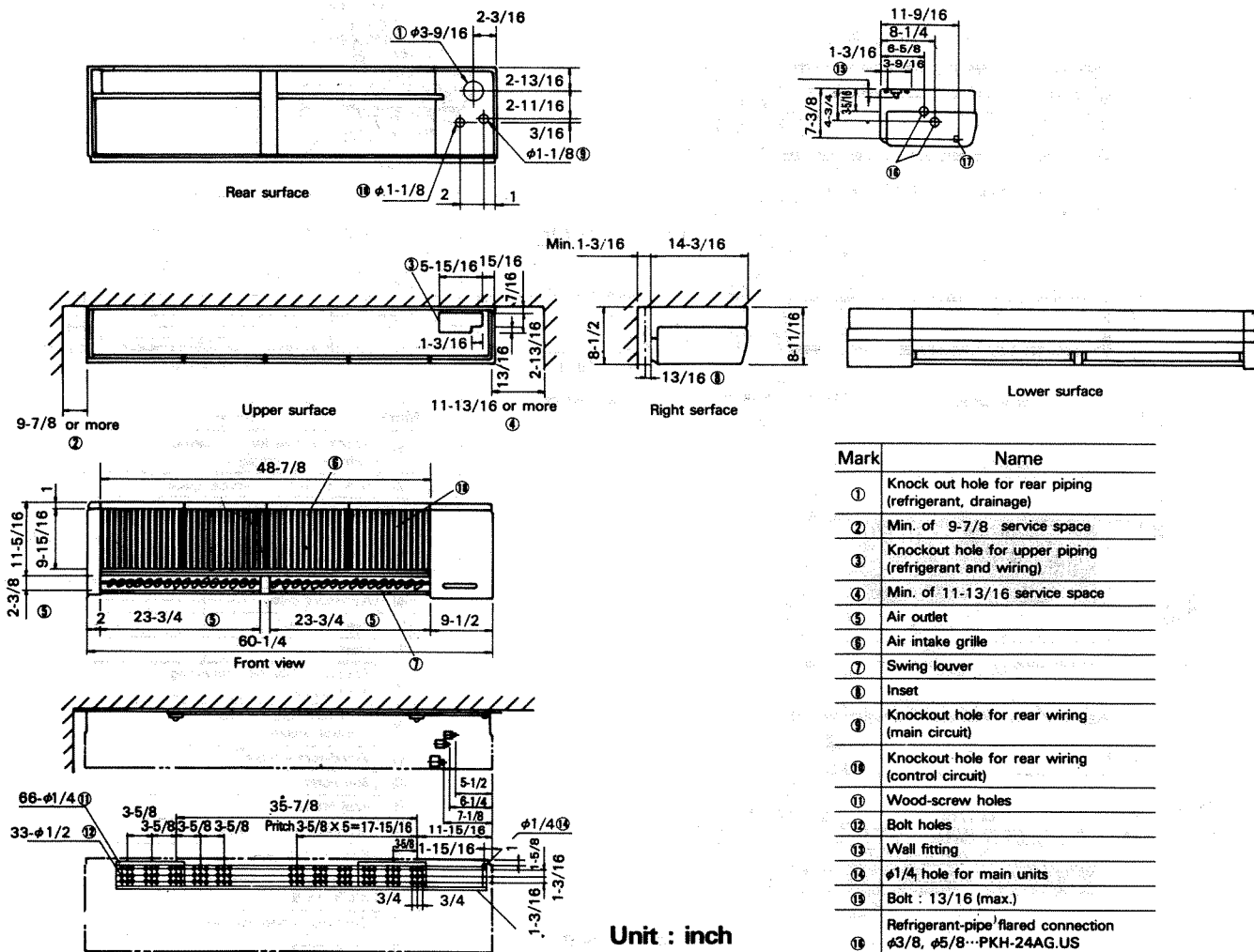
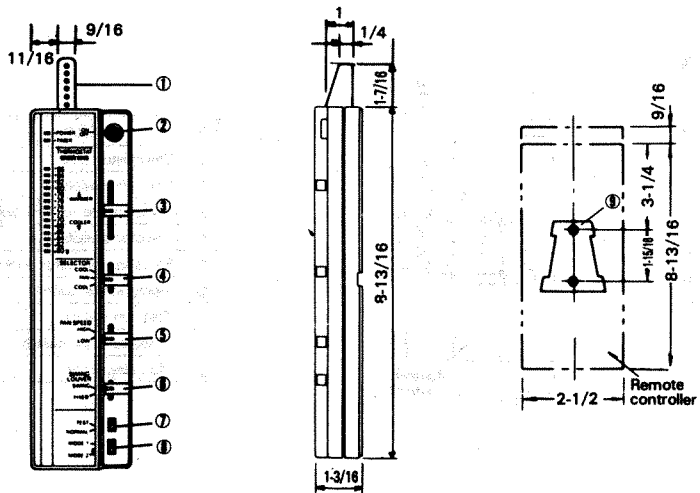


PKH-24AG.US, PKH-30AG.US INDOOR UNITS

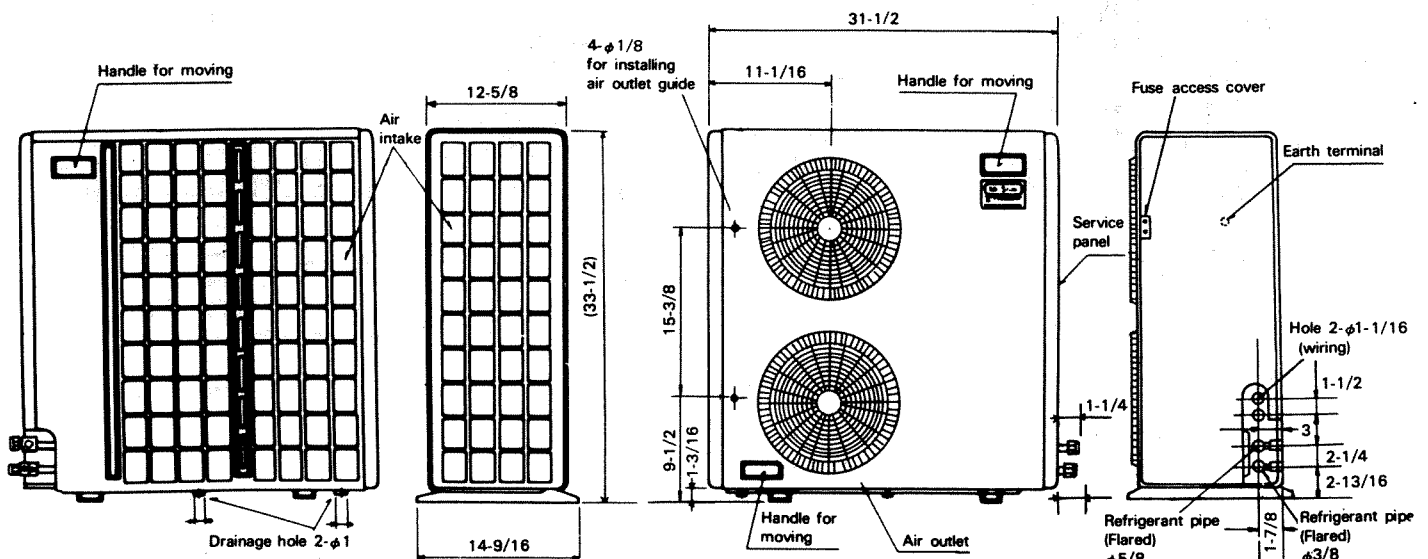
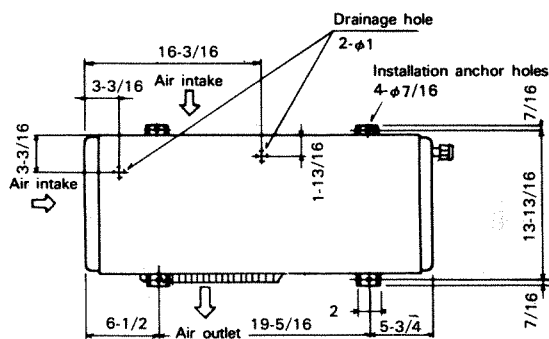
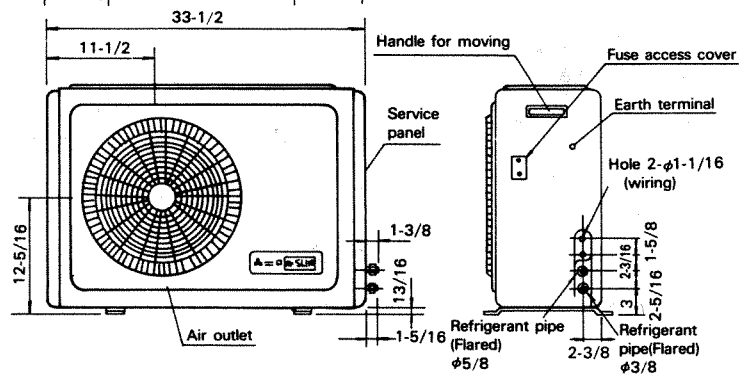
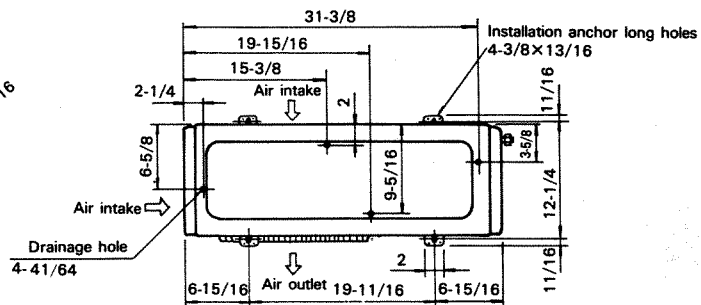
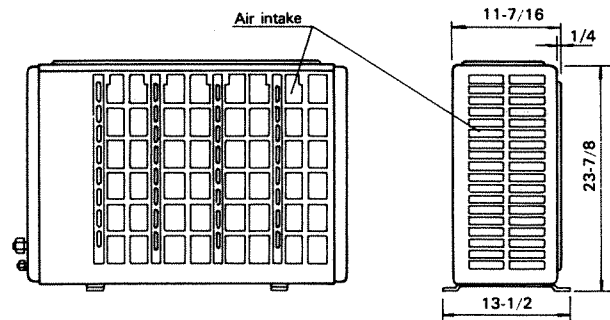


REMOTE CONTROLLER



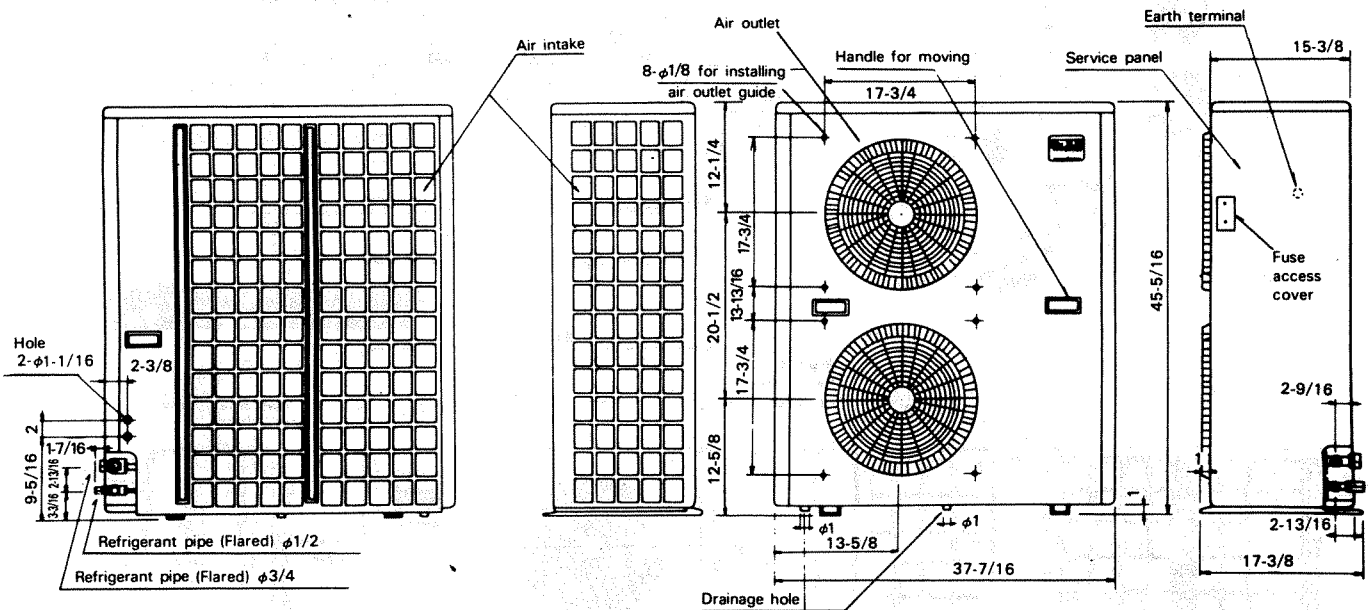
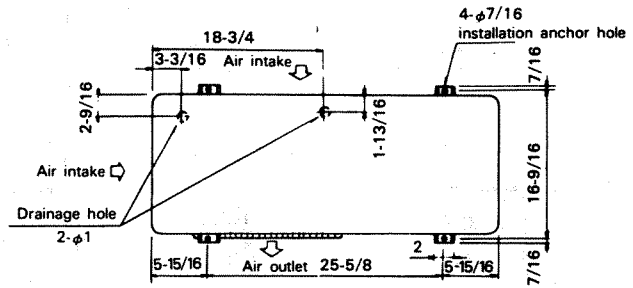
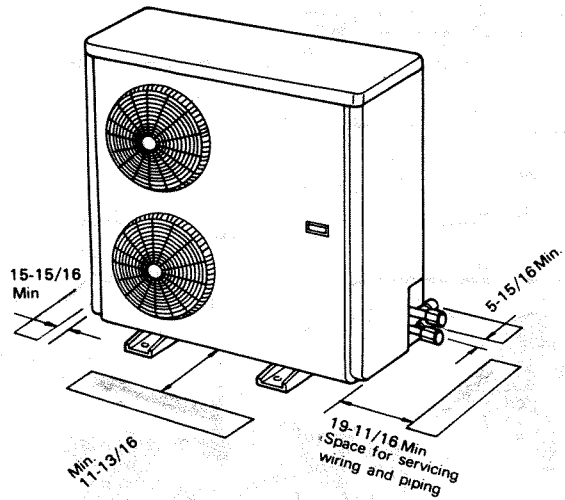
Mark	Name
①	Knock out hole for rear piping (refrigerant, drainage)
②	Min. of 9-7/8" service space
③	Knockout hole for upper piping (refrigerant and wiring)
④	Min. of 11-13/16" service space
⑤	Air outlet
⑥	Air intake grille
⑦	Swing louver
⑧	Inset
⑨	Knockout hole for rear wiring (main circuit)
⑩	Knockout hole for rear wiring (control circuit)
⑪	Wood-screw holes
⑫	Bolt holes
⑬	Wall fitting
⑭	ø1/4" hole for main units
⑮	Bolt : 13/16" (max.)
⑯	Refrigerant-pipe/flared connection ø3/8, ø5/8---PKH-24AG.US ø1/2, ø3/4---PKH-30AG.US
⑰	Drainage connection ø1
⑱	Alarm lamp

Mark	Name
①	Thermistor box
②	ON/OFF switch
③	Temperature control switch
④	Selector switch
⑤	Fan speed selector switch
⑥	Swing louver switch
⑦	Test run switch
⑧	Mode selector switch
⑨	Mounting plate



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PUH-30G₆ US OUTDOOR UNIT



Unit : inch

2.6 STANDARD OPERATION DATA

Models			PKH-18AG		PKH-24AG		PKH-30AG	
Item		Unit	Cooling	Heating	Cooling	Heating	Cooling	Heating
Electrical circuit	Voltage	V	208/230	208/230	208/230	208/230	208/230	208/230
	Frequency	Hz	60		60		60	
	Total current	A	9.6/8.5	8.3/7.5	12.4/11.2	11.9/10.8	15.1/13.6	16.9/15.3
	Total input	kW	1.9	1.6	2.5	2.3	3.1	3.2
	Total power factor	%	97	93	97	93	99	91
	I.D. fan current	A	0.5	0.5	0.5	0.5	0.5	0.5
	Aux. heater current	A	—	6.5/7.2	—	7.6/8.4	—	7.6/8.4
	O.D. fan current	A	0.8	0.8	0.5 + 0.4	0.5 + 0.4	0.9 + 0.7	0.9 + 0.7
	Comp. current	A	8.3/7.2	7.0/6.2	11.0/9.8	10.5/9.4	13.0/11.5	14.8/13.2
Refrigerant circuit	Condensing pressure	PSIG	256	200	250	230	242	270
	Suction pressure	PSIG	78	55	73	55	70	57
	Discharge temp.	°F	178	172	194	172	190	186
	Condensing temp.	°F	110	95	118	100	113	111
	Suction temp.	°F	49	32	52	32	51	32
	Comp. shell bottom temp.	°F	172	163	185	162	180	178
	Ref. pipe length	ft	25		25		25	
	Refrigerant charge	—	3lbs. 9oz		6lbs. 14oz		7lbs. 8oz	
Indoor side	Entering	°F	80	70	80	70	80	70
	air temp.	°F	67	60	67	60	67	60
	Discharge	DB	°F	55	96	59	99	55
	air temp.	WB	°F	54	—	57	—	53
	Fan speed	R.P.M.	1,200	1,600	1,400	1,500	1,300	1,500
	Airflow (High)	CFM	550	600	680	800	680	800
Outdoor side	Entering	DB	°F	95	47	95	47	95
	air temp.	WB	°F	—	43	—	43	—
	Fan speed upper/lower	R.P.M.	966	885	1,338/1,286	1,252/1,204	1,022/918	911/818
	Airflow	CFM	1,600	1,420	1,870	1,750	3,400	3,030
Capacity		BTU/h	18,000	18,000	23,100	24,700	30,000	31,000
SHF		—	0.68	—	0.72	—	0.64	—

3.1 STANDARD SPECIFICATIONS

ITEM	MODEL		PJH-18AG	PJH-24AG	PJHX-36AG		PJHX-48AG	
Capacity	Cooling	* 1 BTU/h	18,000	23,100	36,000		47,500	
	Heating	* 1,3 BTU/h	18,000 (24,150/25,520)	23,600 (31,290/33,000)	36,400(48,700/51,440)		50,000(65,380/68,810)	
	Heating	* 2,3 BTU/h	10,400 (16,550/17,920)	13,500 (21,190/22,900)	18,400(30,700/33,440)		30,000(45,380/48,810)	
Power consumption		* 1 kW	1.95	2.5	3.5		5.5	
		* 1,3 kW	1.7(3.5/3.9)	2.4(4.7/5.2)	3.4(7.0/7.8)		5.2(9.7/10.0)	
		* 2,3 kW	1.5(3.3/3.7)	1.8(4.1/4.6)	2.4(6.0/6.8)		3.8(8.3/9.3)	
EER		* 1	9.2	9.2	10.3		8.6	
SEER			9.7	9.8	10.4		9.1	
COP		* 1	3.1	2.9	3.1		2.8	
		* 2	2.0	2.2	2.2		2.3	
INDOOR UNIT MODEL			PJH-18AG.US	PJH-24AG.US	PJHX-36AG1.US	PJHX-36AG2.US	PJHX-48AG1.US	PJHX-42AG2.US
External finish			Munsell 2.5Y 8/0.3 & N6					
Power supply			V, phase, Hz					
Max. fuse size (time delay)			A					
Min. ampacity			F.L.A.					
Fan motor			A(kW)					
Auxiliary heater			CFM					
Airflow Lo-Hi Dry (Wet)			in.					
Dimensions	W	in.	46-5/8	46-5/8	46-5/8	46-5/8	46-5/8	46-5/8
	D	in.	22-5/8	22-5/8	22-5/8	22-5/8	22-5/8	22-5/8
	H	in.	13-3/4	13-3/4	13-3/4	13-3/4	13-3/4	13-3/4
Weight			lbs	104	104	104	104	104
OUTDOOR UNIT MODEL			PUH-18G6.US	PUH-24G6.US	PUHX-36G6.US		PUHX-48TG6.US	
External finish			Munsell 5Y 7/1					
Power supply			V, phase, Hz					
Max. fuse size (time delay)			A					
Min. ampacity			F.L.A.					
Fan motor			A(kW)					
Compressor	Model (type)		RH441NAA	NH456NF	NH480NL		JH512TEL	
	Winding resistance (Ω at 68°F)		C-R 1.59 C-S 3.22	C-R 0.86 C-S 1.72	C-R 0.58 C-S 1.16		0.68	
	* 5 R.L.A.		12.0	11.5	15.9		17.0	
	L.R.A.		37	52	74		126	
Crankcase heater			A(W)					
Refrigerant control			Capillary tube					
Defrost method			Reverse cycle					
Dimensions	W	in.	33-1/2	33-1/2	37-7/16		37-7/16	
	D	* 4 in.	11-7/16(12-5/8)	12-5/8(13-3/4)	15-3/8(16-9/16)		15-3/8(16-9/16)	
	H	in.	23-13/16	33-1/2	45-5/16		45-5/16	
Weight			lbs	138	176	265		304
REMOTE CONTROLLER			With indoor unit					
Control voltage (by built-in transformer)			Indoor unit-remote controller : DC 24V. Indoor unit-outdoor unit : DC 12V-polar					
REFRIGERANT PIPING			Not supplied (optional parts)					

- Notes * 1. Rating conditions (cooling)—indoor:80°F DB, 67°F WB outdoor:95°F DB, 75°F WB
(heating)—indoor:70°F DB, 60°F WB outdoor:47°F DB, 43°F WB
* 2. Rating conditions (heating)—indoor:70°F DB, 60°F WB outdoor:17°F DB, 15°F WB
* 3. Heating capacity and power consumption-in () include auxiliary electric heater operation at 208/230V.
* 4. Depth of outdoor unit in () includes thickness of grille fan.
* 5. Based on operating at A.R.I rating condition.

Operating range

		Indoor air intake temperature	Outdoor air intake temperature
Cooling	Maximum	95°F DB, 71°F WB	115°F DB
	Minimum	67°F DB, 57°F WB	32°F DB
Heating	Maximum	80°F DB, 67°F WB	75°F DB, 65°F WB
	Minimum	70°F DB, 60°F WB	17°F DB, 15°F WB

Units should be wired by licensed electric contractor accordingly to local code requirement.

3.1 PERFORMANCE DATA

1) COOLING CAPACITY

Models	Indoor air		Temperature air entering outdoor coil DB(F)														
	Airflow (CFM) B.F	EWB(F)	75			85			95			105			115		
			TC	SHC	TPC	TC	SHC	TPC	TC	SHC	TPC	TC	SHC	TPC	TC	SHC	TPC
PJH-18AG	520 0.14	71	21.6	11.2	1.65	20.5	10.8	1.83	19.4	10.4	2.01	18.3	10.0	2.18	17.2	9.6	2.37
		67	20.0	13.2	1.62	19.0	12.8	1.78	18.0	12.4	1.95	17.0	12.0	2.12	15.9	11.6	2.30
		63	18.5	15.2	1.59	17.6	14.8	1.75	16.6	14.4	1.91	15.7	13.9	2.07	14.6	13.5	2.24
PJH-24AG	550 0.16	71	27.0	13.7	2.13	26.0	13.3	2.34	24.9	12.9	2.55	23.7	12.4	2.78	22.6	12.0	3.01
		67	25.0	15.9	2.10	24.1	15.5	2.30	23.1	15.1	2.50	22.0	14.7	2.71	20.9	14.2	2.93
		63	23.2	18.1	2.07	22.3	17.7	2.26	21.4	17.3	2.45	20.4	16.9	2.65	19.4	16.4	2.86
PJHX-36AG	* 520 0.15	71	42.5	22.2	2.96	40.7	21.5	3.26	38.8	20.8	3.57	36.9	20.1	3.88	34.9	19.3	4.20
		67	39.4	26.1	2.92	37.7	25.4	3.21	36.0	24.7	3.50	34.2	24.0	3.80	32.3	23.3	4.11
		63	36.4	30.0	2.88	34.9	29.3	3.16	33.4	28.6	3.44	31.7	27.9	3.73	30.0	27.2	4.02
PJHX-48AG	* 550 0.14	71	56.4	28.1	5.07	54.1	27.2	5.37	51.5	26.2	5.72	48.9	25.1	6.09	46.0	24.0	6.49
		67	52.0	32.3	4.91	49.8	31.3	5.20	47.5	30.3	5.50	45.0	29.3	5.84	42.3	28.1	6.22
		63	47.9	36.4	4.78	45.9	35.4	5.02	43.6	34.4	5.31	41.3	33.3	5.62	38.9	32.2	5.95

Notes 1. B.F: Bypass Factor, EWB: Entering Wet-Bulb.

TC: Total Capacity (x10³BTU/h), SHC: Sensible Heat Capacity (x10³BTU/h)

TPC: Total Power Consumption (kW).

2. SHC is based on 80°FDB temperature of air entering indoor coil.

3. *CFM volume are for each indoor unit.

2) HEATING CAPACITY

Models	Indoor air		Temperature air entering outdoor coil WB(F)												Auxiliary heater (208V 230V)	
	Airflow (CFM)	EDB (F)	15		25		35		45		55		65			
			CA	PC	CA	PC	CA	PC	CA	PC	CA	PC	CA	PC	CA	PC
PJH-18AG	560	75	10.4	1.70	12.9	1.71	15.6	1.75	18.6	1.79	21.9	1.85	25.6	1.93	6.1	1.8
		70	10.1	1.64	12.7	1.65	15.6	1.67	18.6	1.71	22.0	1.76	25.8	1.83		
		65	9.9	1.58	12.6	1.59	15.5	1.60	18.7	1.63	22.1	1.67	25.9	1.74	7.5	2.2
PJH-24AG	620	75	15.6	2.01	18.1	2.22	21.0	2.39	24.3	2.53	28.2	2.63	32.7	2.73	7.8	2.3
		70	15.5	1.91	18.0	2.13	21.0	2.29	24.3	2.42	28.2	2.53	32.8	2.60		
		65	15.4	1.81	18.0	2.03	20.9	2.20	24.3	2.32	28.3	2.42	32.9	2.48	9.6	2.8
PJHX-36AG	※ 560	74	24.4	3.12	27.9	3.29	32.2	3.44	37.4	3.58	43.5	3.72	50.7	3.84	※ 6.1	※ 1.8
		70	24.4	2.99	28.0	3.16	32.3	3.30	37.5	3.43	43.7	3.55	51.0	3.66	※ 7.5	※ 2.2
		5	24.5	2.86	28.1	3.02	32.4	3.16	37.7	3.27	43.9	3.38	51.2	3.48		
PJHX-48AG	※ 620	75	29.1	4.69	35.6	4.86	43.0	5.06	51.3	5.31	60.9	5.60	72.1	5.96	※ 7.8	※ 2.3
		70	29.5	4.74	36.0	4.88	43.4	5.04	51.8	5.25	61.5	5.40	72.7	5.81		
		65	29.8	4.80	36.4	4.90	43.8	5.03	52.3	5.19	62.0	5.40	73.3	5.66	※ 9.6	※ 2.8

Notes 1. EDB: Entering Dry-Bulb.

CA: Capacity (x10³BTU/h), PC: Power consumption (kW)

2. In case auxiliary electric heater is "on", total capacity and total power consumption should be added the figures described in auxiliary heater column.

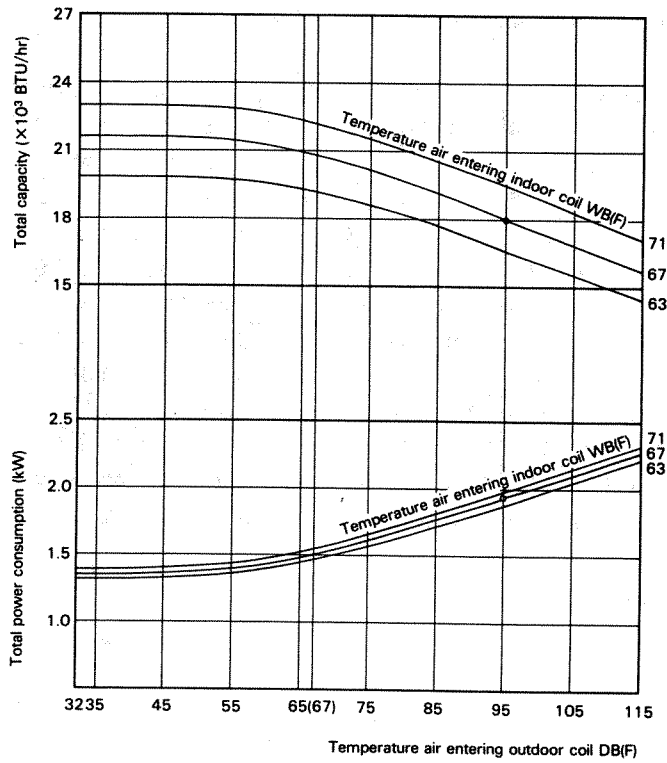
"ON" operation of auxiliary electric heater: Thermostat set temp.—Room temp. is greater than 5.4deg F.

"OFF" operation of auxiliary electric heater: Thermostat set temp.—Room temp. is less than 3.6deg F.

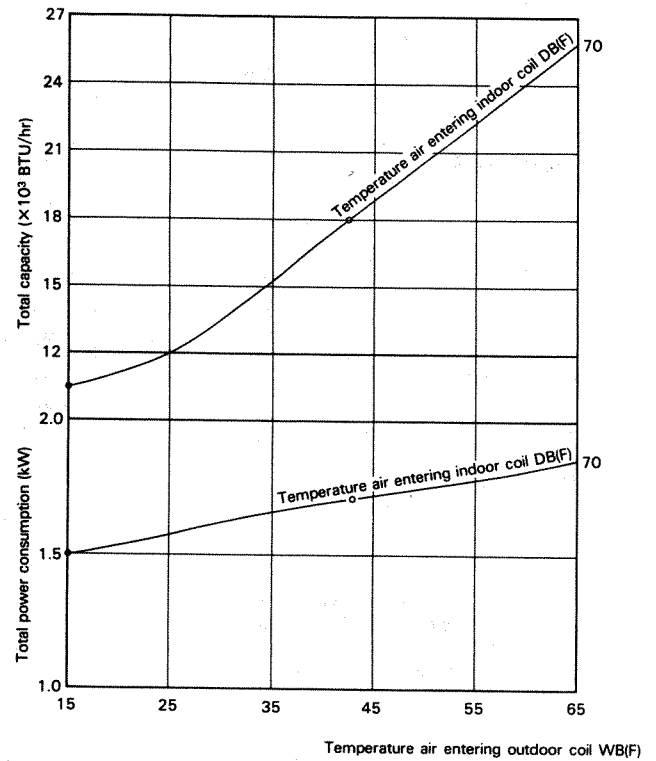
3. *CFM and Auxiliary heater capacities and power consumptions are for each indoor unit.

3.2 PERFORMANCE CURVE

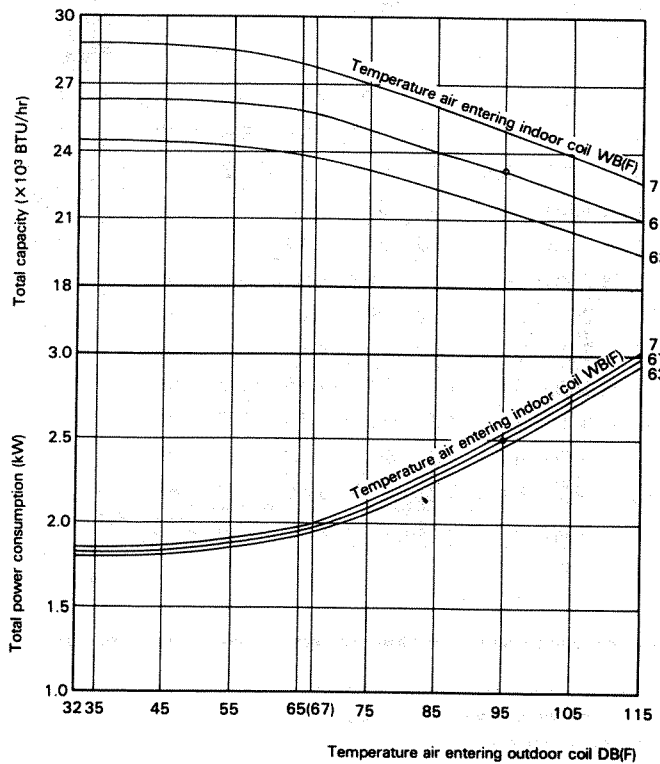
PJH-18AG [Cooling capacity]



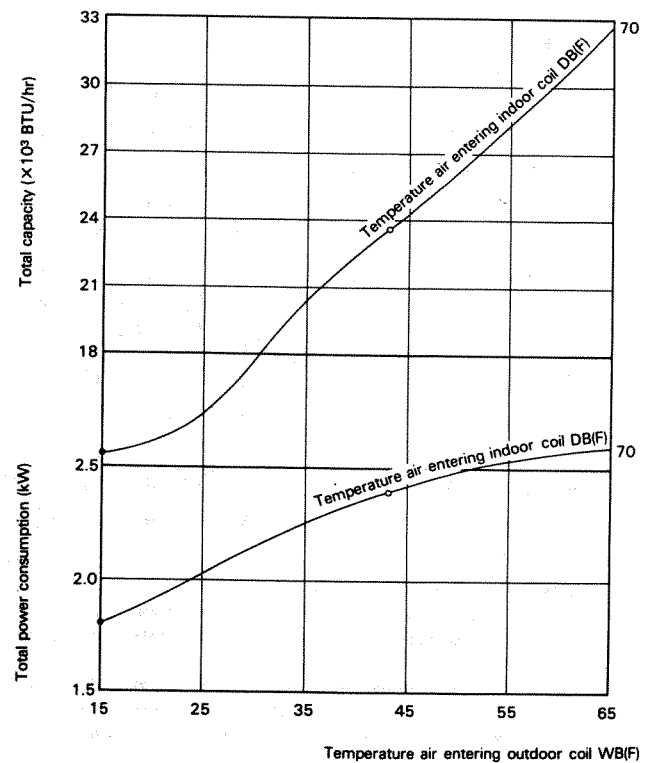
PJH-18AG [Heating capacity]



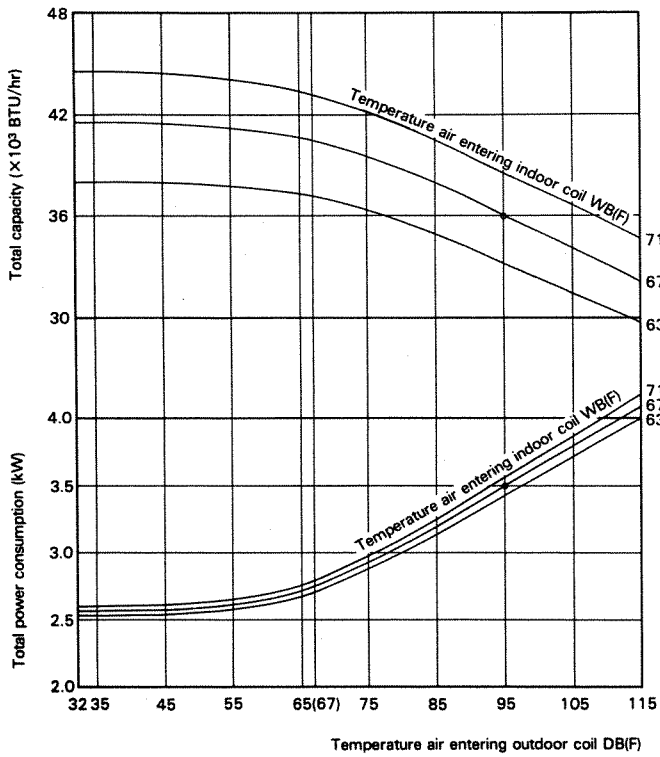
PJH-24AG [Cooling capacity]



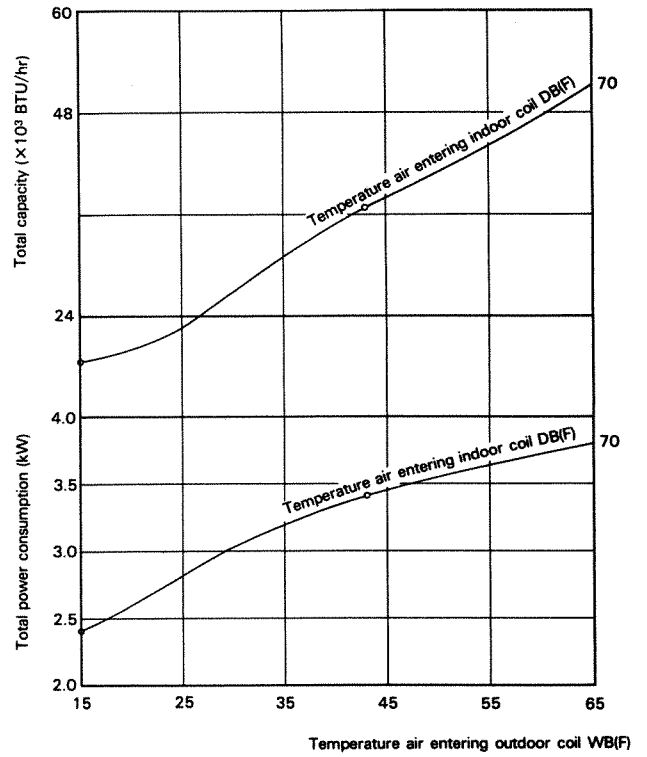
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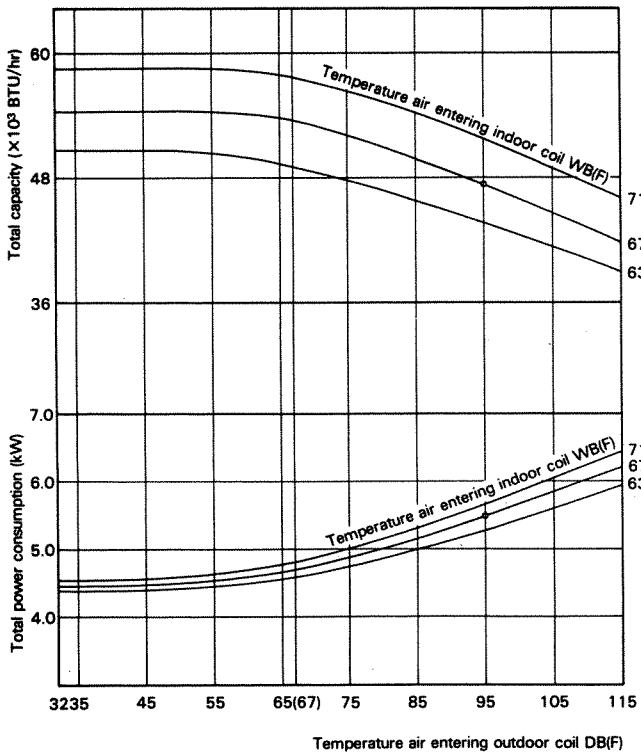
PJHX-36AG [Cooling capacity]



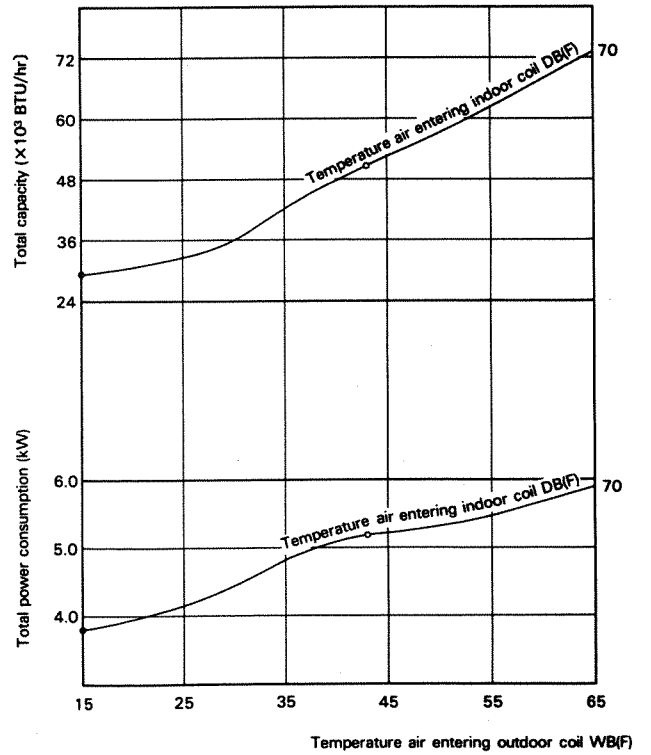
PJHX-36AG [Heating capacity]



PJHX-48AG [Cooling capacity]



PJHX-48AG [Heating capacity]

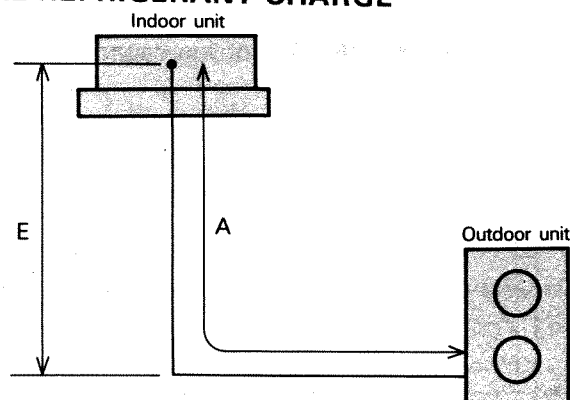


3.2 LIMITATION OF PIPING LENGTH & ADDITIONAL REFRIGERANT CHARGE

Limitation of piping length (PJH-18,24AG)

Models	Max.A (ft)	Max.E (ft)	Max.No. of bend
PJH-18AG	50	50	10
PJH-24AG	100	65	10

Piping size OD (in) Liquid 3/8
Gas 5/8



Refrigerant charge (oz)

Models	Outdoor unit precharged (up to 25 ft)	Refrigerant piping length (one way)						
		25 ft	40 ft	50 ft	55 ft	70 ft	85 ft	100 ft
PJH-18AG	3 lbs. 12oz	0	11	18	—	—	—	—
PJH-24AG	6 lbs. 14oz	0	11	18	21	32	42	53

Calculation: $0.7\text{oz/ft} \times (A - 25)\text{ft}$

Limitation of piping length

(PJHX-36AG)
(PJHX-48AG)

Piping length

A + C = Max 100(ft)

B + C = Max 100(ft)

A - B = Max 26(ft)

or B - A = Max 26(ft)

Height difference

D = Max 3(ft)

E = Max 65(ft)

Number of bend (90deg)

A + C = Max. 8

B + C = Max. 8

Piping size OD (in)

liquid A = 3/8

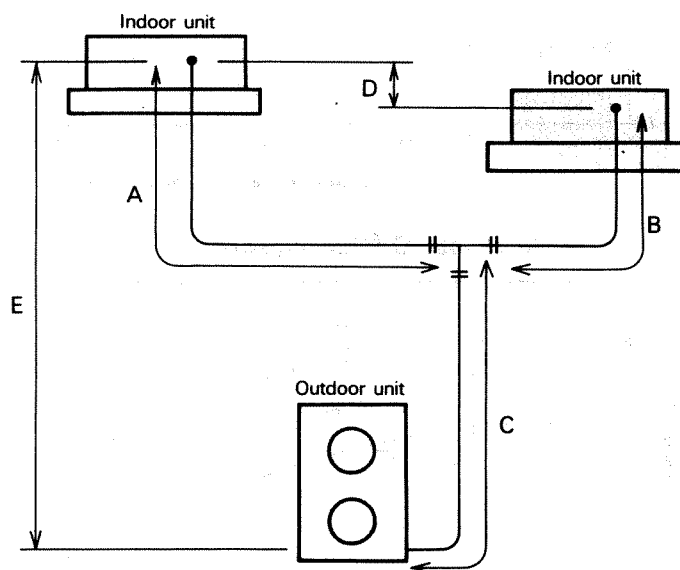
B = 3/8

C = 1/2

Gas A = 5/8

B = 5/8

C = 3/4



Refrigerant charge (oz)

A + B \ C		Piping length (one way)					
		17ft	25ft	40ft	55ft	70ft	85ft
Piping length (one way)	16ft	0	10	30	49	69	88
	30ft	10	20	40	59	79	98
	60ft	31	41	61	80	100	—

Calculation: $0.7\text{oz/ft} \times (A + B - 16)\text{ft} + 1.3\text{oz/ft} \times (C - 17)\text{ft}$

Outdoor unit precharged

PJHX-36AG 12lbs 13oz

PJHX-48AG 12lbs 13oz

3.3 OPERATING RANGE

1) POWER SUPPLY

208/230V 1 phase 60Hz
Guaranteed voltage range



208/230V 3 phase 60Hz
[ONLY PUHX-48TG₆.US(OUTDOOR UNIT)]

2) OPERATION

Function	Entering air temp.	Indoor		Outdoor	
	Condition	DB (°F)	WB (°F)	DB (°F)	WB (°F)
Cooling	Standard temp.	80	67	95	—
	Maximum temp.	95	71	115	—
	Minimum temp.	67	57	32	—
	Maximum humidity	80	75	80	—
Heating	High temp. (Minimum temp.)	70	60	47	43
	Low temp. (Minimum temp.)	70	60	17	15
	Maximum temp.	80	—	75	65

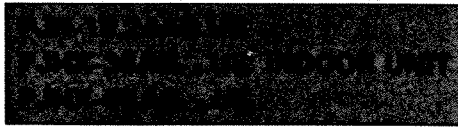
3.4 OUTLET AIR SPEED AND COVERAGE RANGE (DRY COIL)

Models	Air flow (CFM)	Air speed (ft/sec)	Coverage range (ft)	No. of outlet opening
PJH-18AG	280	14	20	2
PJH-24AG	310	15	22	2
PJHX-36AG	280	14	20	4
PJHX-48AG	310	15	22	4

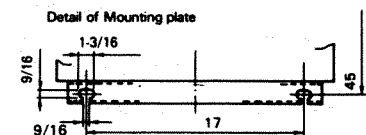
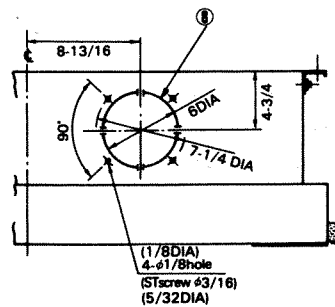
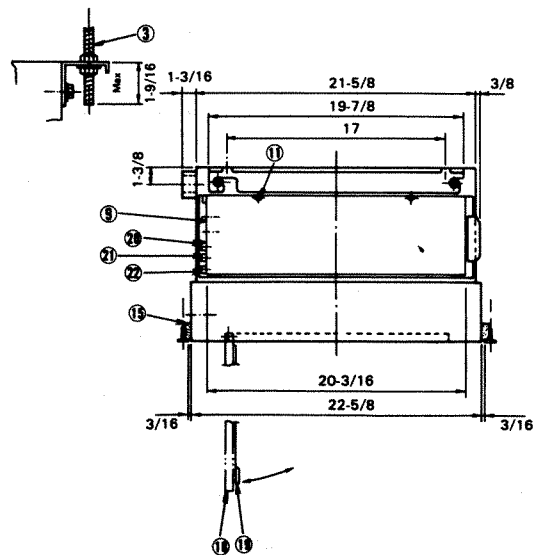
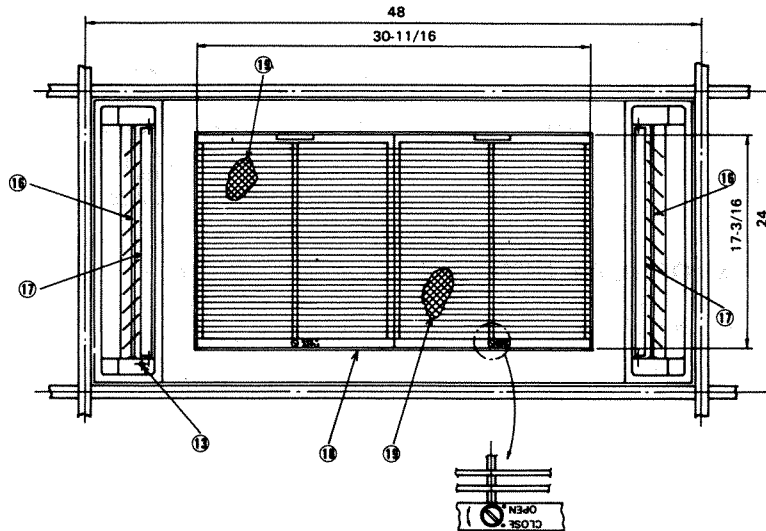
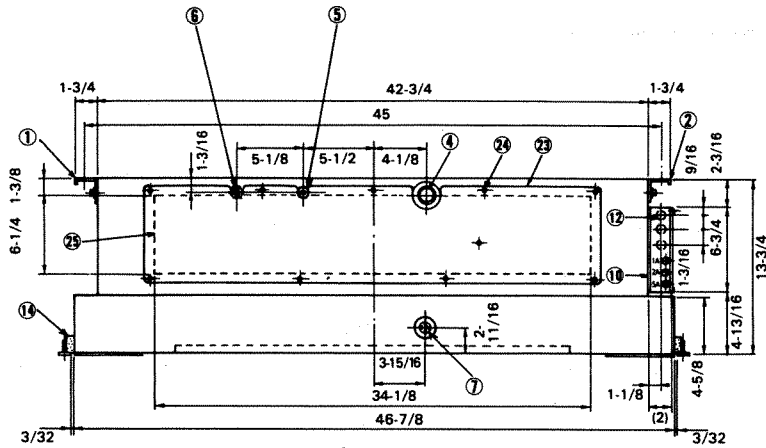
- The air coverage range is the value up to the position where the air speed is 0.8 ft/sec when air is blown out horizontally from the unit properly at the High notch position.
The coverage range should be used only as a general guideline since it varies according to the size of the room and furniture installed inside the room.
- CFM and coverage range values are for each outlet.

4

OUTLINES & DIMENSIONS



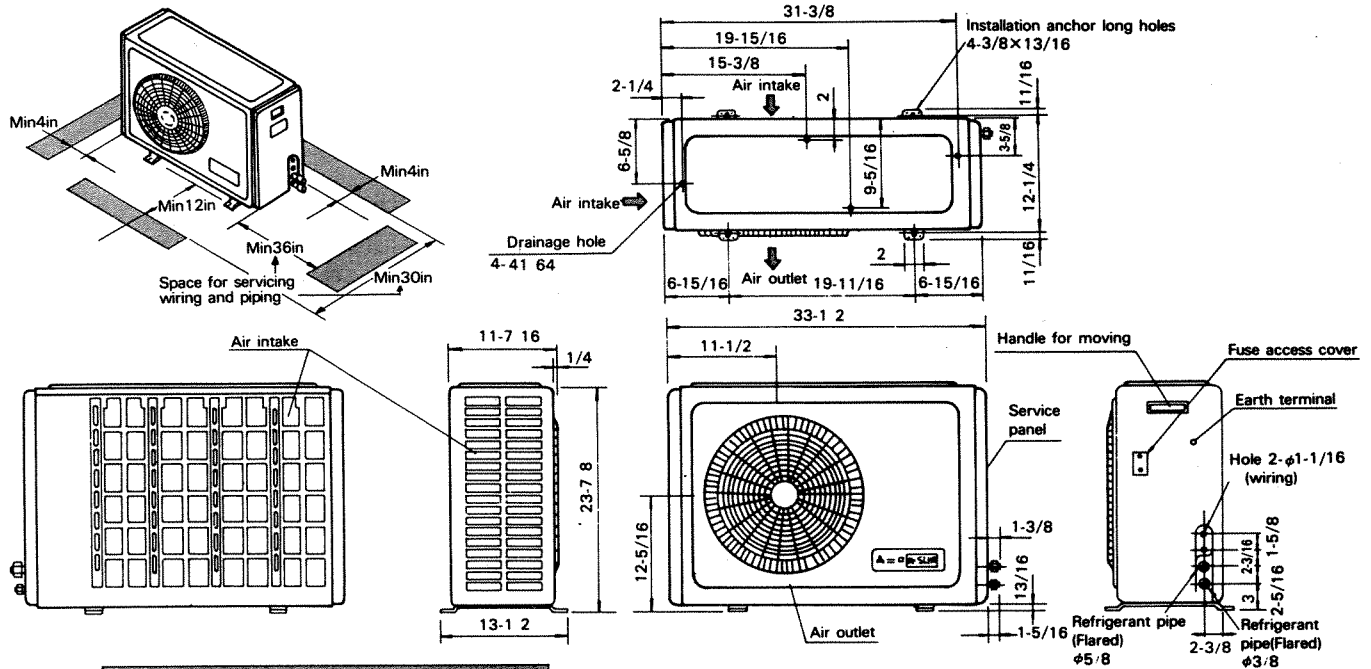
Unit: inch



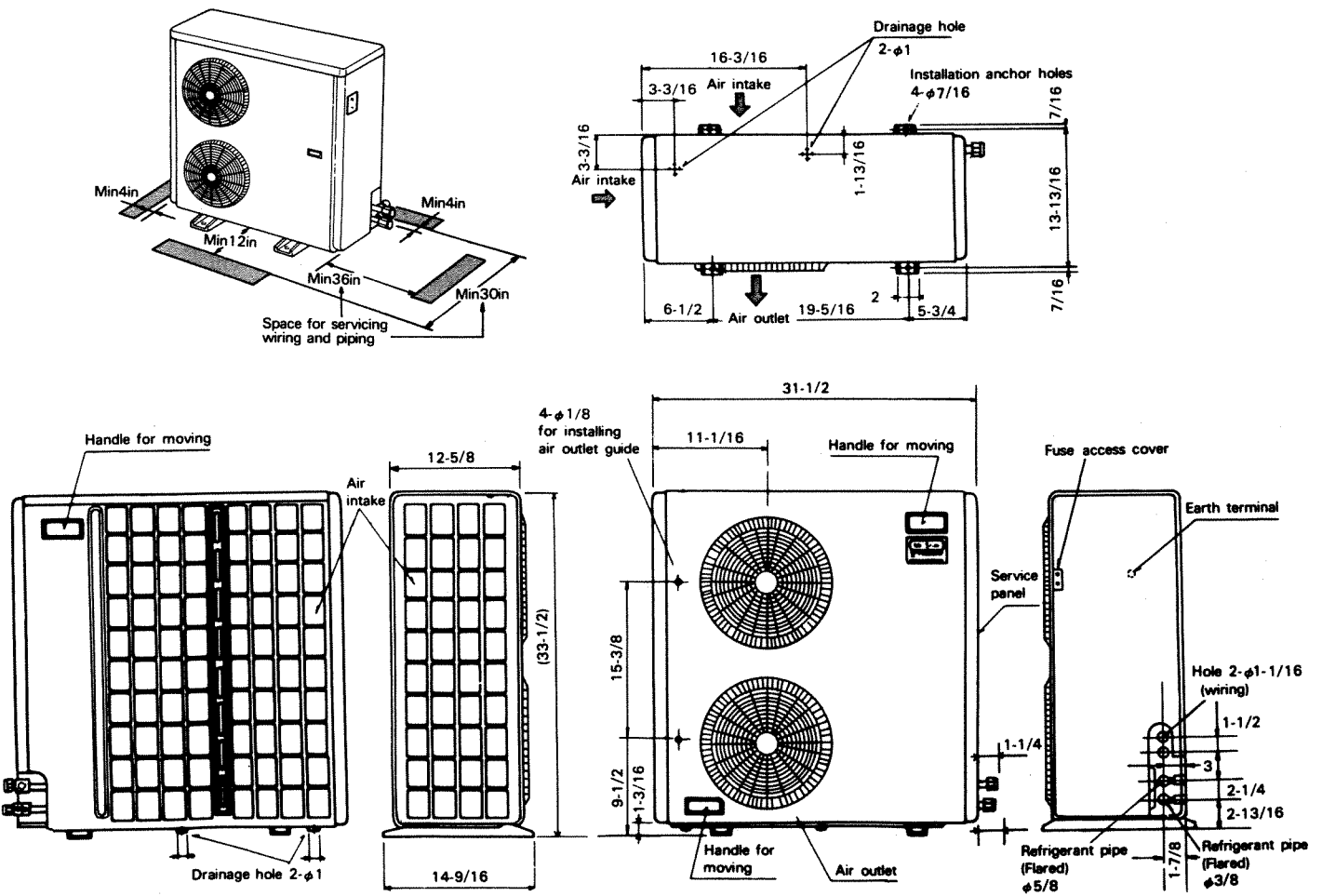
①	Mounting plate
②	Mounting plate
③	Suspension bolt 4-M10 or M12 (7/16" or 1/2")
④	Drainage pipe connection OD32 (1-1/4")
⑤	Refrigerant-pipe flared connection 3/8"
⑥	Refrigerant-pipe flared connection 5/8"
⑦	Drainage exit (only use for service)
⑧	Fresh air intake hole 6" DIA (ø153) (Knock out)
⑨	Electrical box
⑩	Cover panel (Electrical box)
⑪	Set screw of cover panel (2 pieces)
⑫	Wiring hole 3-7/8" DIA (Knock out)
⑬	Alarm lamp
⑭	Seal (11-9/16 x 13/16 x 22-11/16) (accessory)
⑮	Seal (11-9/16 x 13/16 x 47-11/16) (accessory)
⑯	Swing louver (auto)
⑰	Guide vane (manual)
⑱	Grille intake
⑲	Air filter (2 pieces)
⑳	Fuse (1A)
㉑	Fuse (2A)
㉒	Fuse (5A)
㉓	Service panel
㉔	Set screw of service panel (10 pieces)
㉕	Service space (34-3/16 x 6-1/4)

PUH-18G₆ US OUTDOOR UNITS

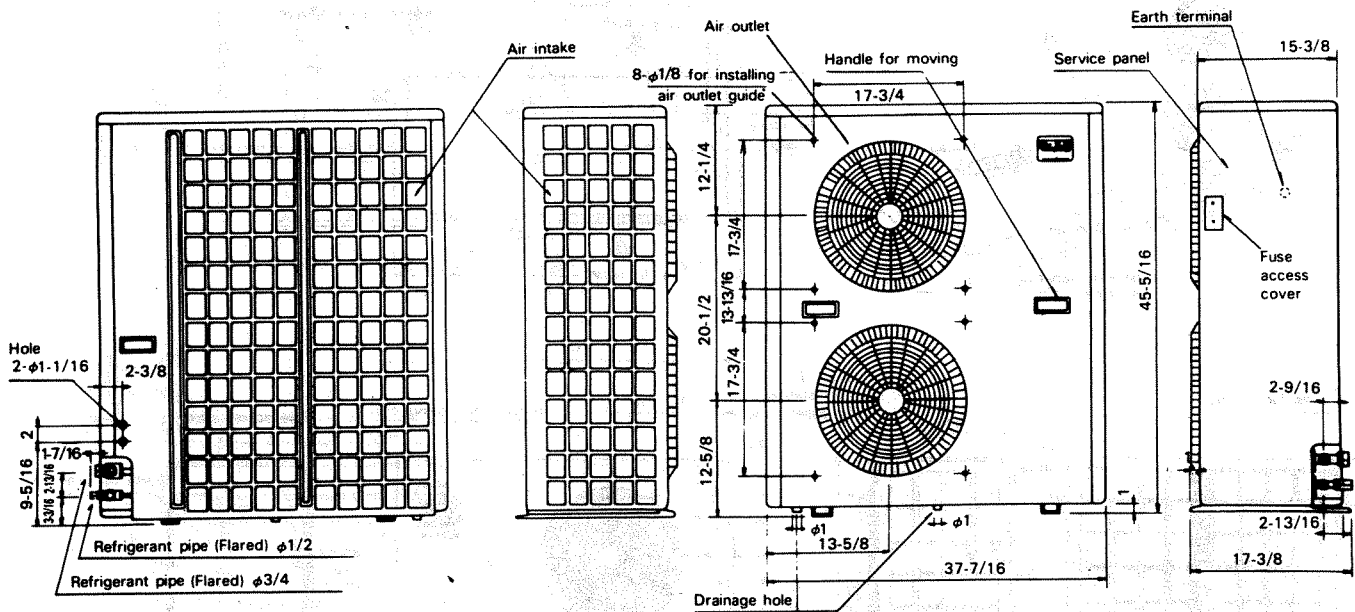
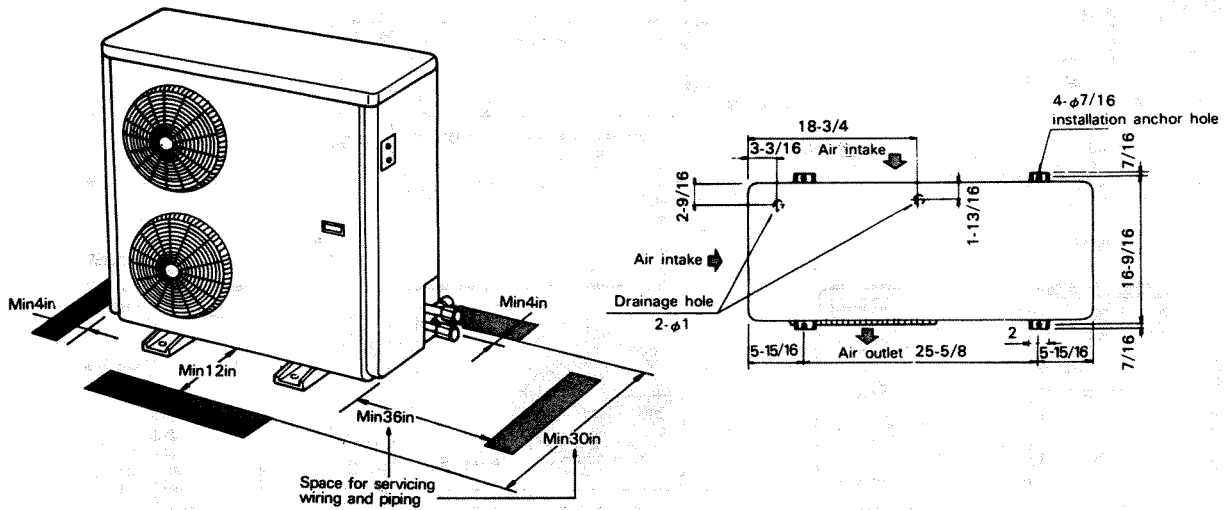
Unit : inch



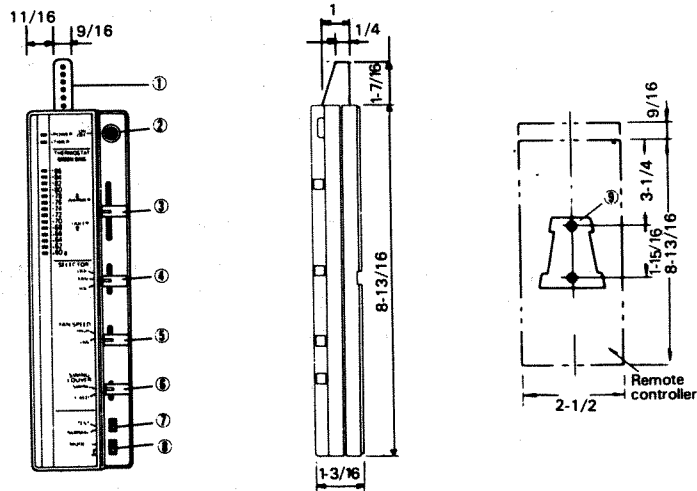
PUH-24G₆ US OUTDOOR UNIT



Unit : inch

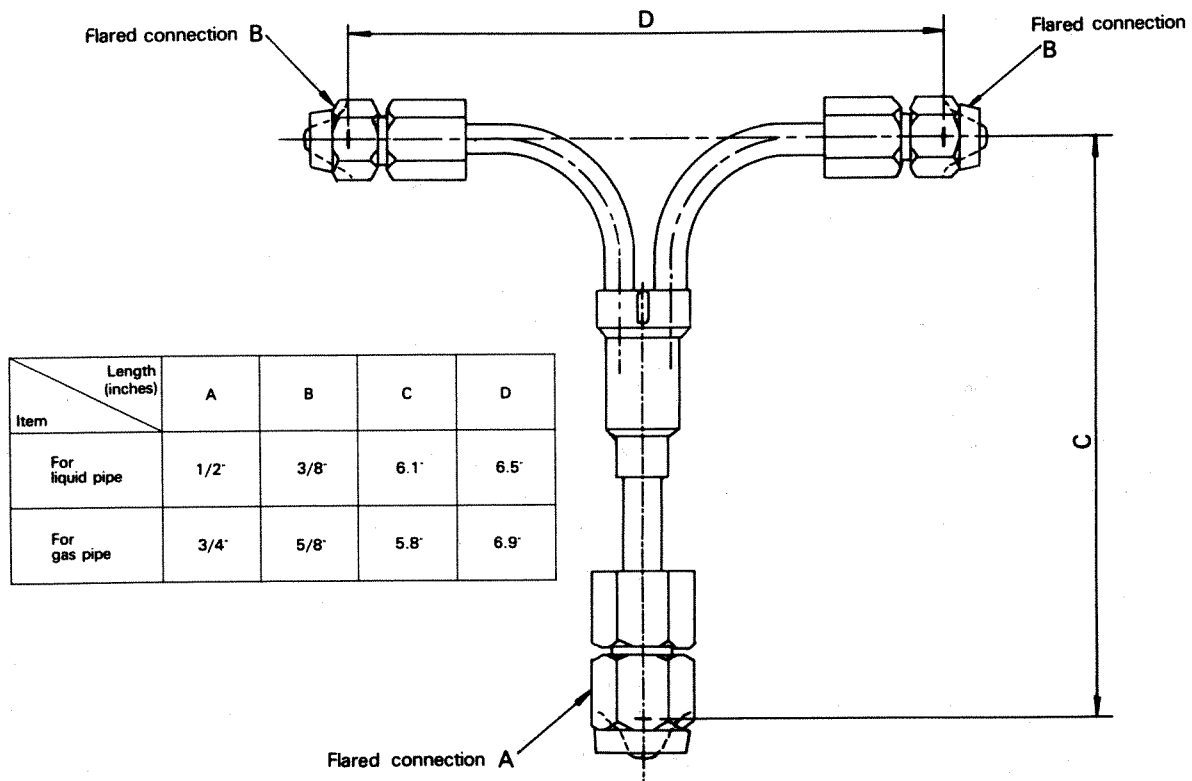


* 1 REMOTE CONTROLLER



Mark	Name
①	Thermistor box
②	ON/OFF switch
③	Temperature control switch
④	Selector switch
⑤	Fan speed selector
⑥	Swing louver switch
⑦	Test run switch
⑧	Mode selector switch
⑨	Mounting plate

* 1 BRANCH Tee (Accessory parts)



* 1 Controller and Branch tee are packed in indoor unit No.2 (PJHX type)

3.5 STANDARD OPERATION DATA

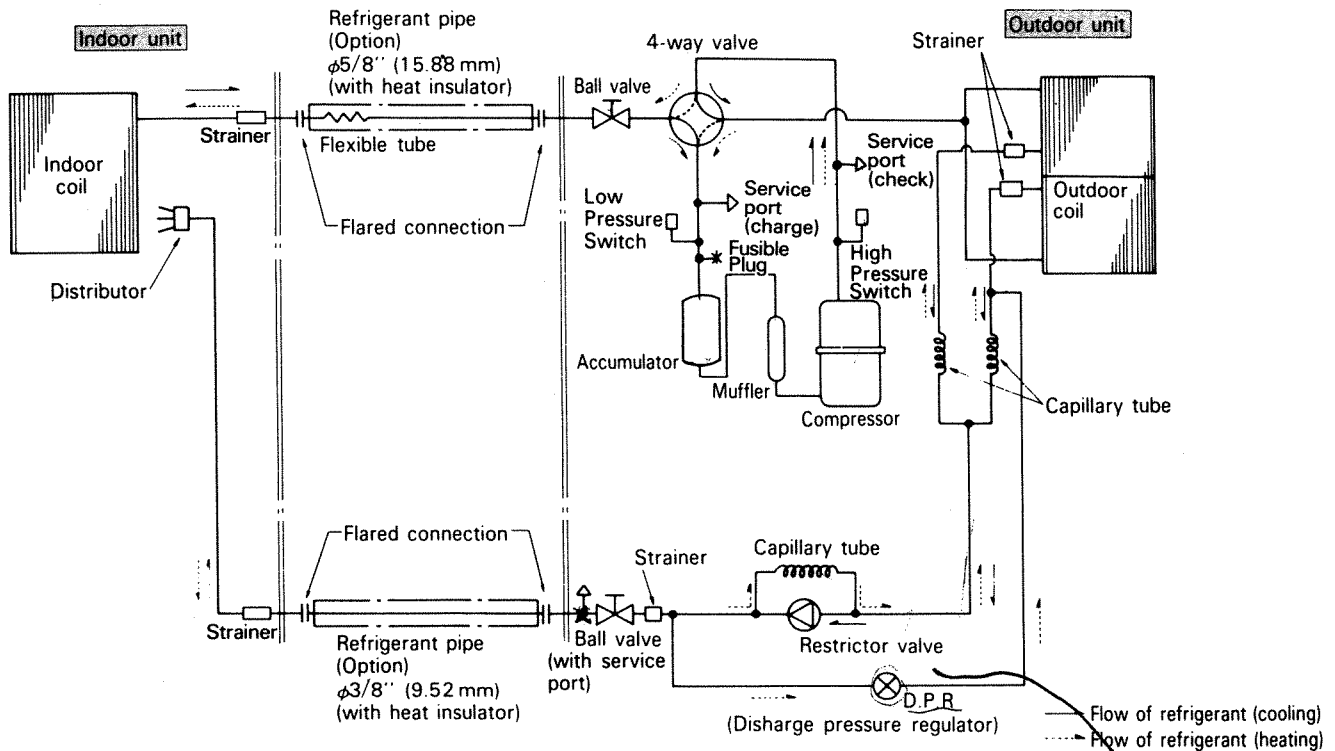
Models			PJH-18AG		PJH-24AG		PJHX-36AG		PJHX-48AG		
Item		Unit	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	
Total	Capacity	BTU/h	18,000	18,000	23,100	23,600	36,000	36,400	47,500	50,000	
	SHF	—	0.71	—	0.66	—	0.71	—	0.65	—	
	Input	kW	1.95	1.70	2.50	2.40	3.50	3.40	5.50	5.20	
Electrical circuit	INDOOR UNIT MODEL		PJH-18AG.US		PJH-24AG.US		PJHX-36AG ₁ .US PJHX-36AG ₂ .US		PJHX-48AG ₁ .US PJHX-48AG ₂ .US		
	Power supply(V,phase,(Hz))		208/230,1,60		208/230,1,60		208/230,1,60		208/230,1,60		
	Input *	kW	0.17	0.17	0.2	0.2	0.17	0.17	0.2	0.2	
	Fan current(F.L.A) *	A	0.8	0.8	0.9	0.9	0.8	0.8	0.9	0.9	
	OUTDOOR UNIT MODEL		PUH-18G ₆ .US		PUH-24G ₆ .US		PUHX-36G ₆ .US		PUHX-48TG ₆ .US		
	Power supply(V,phase,HZ)		208/230,1,60		208/230,1,60		208/230,1,60		208/230,3,60		
	Input	kW	1.78	1.53	2.30	2.20	3.33	3.23	5.30	5.00	
	Comp. current(R.L.A)	A	12.0	12.0	11.5	11.5	15.9	15.9	17.0	17.0	
	Fan current(F.L.A)	A	0.8	0.8	0.5+0.4	0.5+0.4	0.9+0.7	0.9+0.7	0.9+0.7	0.9+0.7	
Refrigrant circuit	Condensing pressure	PSIG	252	210	252	239	243	239	270	286	
	Suction pressure	PSIG	82	56	76	56	82	55	68	55	
	Dischge temp.	°F	194	182	185	168	198	182	200	209	
	Condensing temp.	°F	111	—	106	—	104	—	104	—	
	Suction temp.	°F	64	36	55	36	69	32	53	30	
	Ref. pipe length	Ft	See page 9								
	Refrigerant charge	—	3 lbs 12oz		6 lbs 14oz		12 lbs 13oz		12 lbs 13oz		
Indoor side	Entering	DB	°F	80	70	80	70	80	70	80	70
	air temp.	WB	°F	67	60	67	60	67	60	67	60
	Discharge	DB	°F	57	99	54	105	57	99	54	108
	air temp	WB	°F	56	—	53	—	56	—	52	—
	Fan speed	R.P.M	873	923	908	1,023	873	923	908	1,023	
	Air flow(Hi) *	CFM	520	560	550	620	520	560	550	620	
Outdoor side	Entering	DB	°F	95	47	95	47	95	47	95	47
	air temp.	WB	°F	—	43	—	43	—	43	—	43
	Fan speed upper/lower	R.P.M	996		1,338/1,286		1,022/918		1,022/918		
	Air flow	CFM	1,600		1,870		3,400		3,400		

* Values are for each indoor unit.

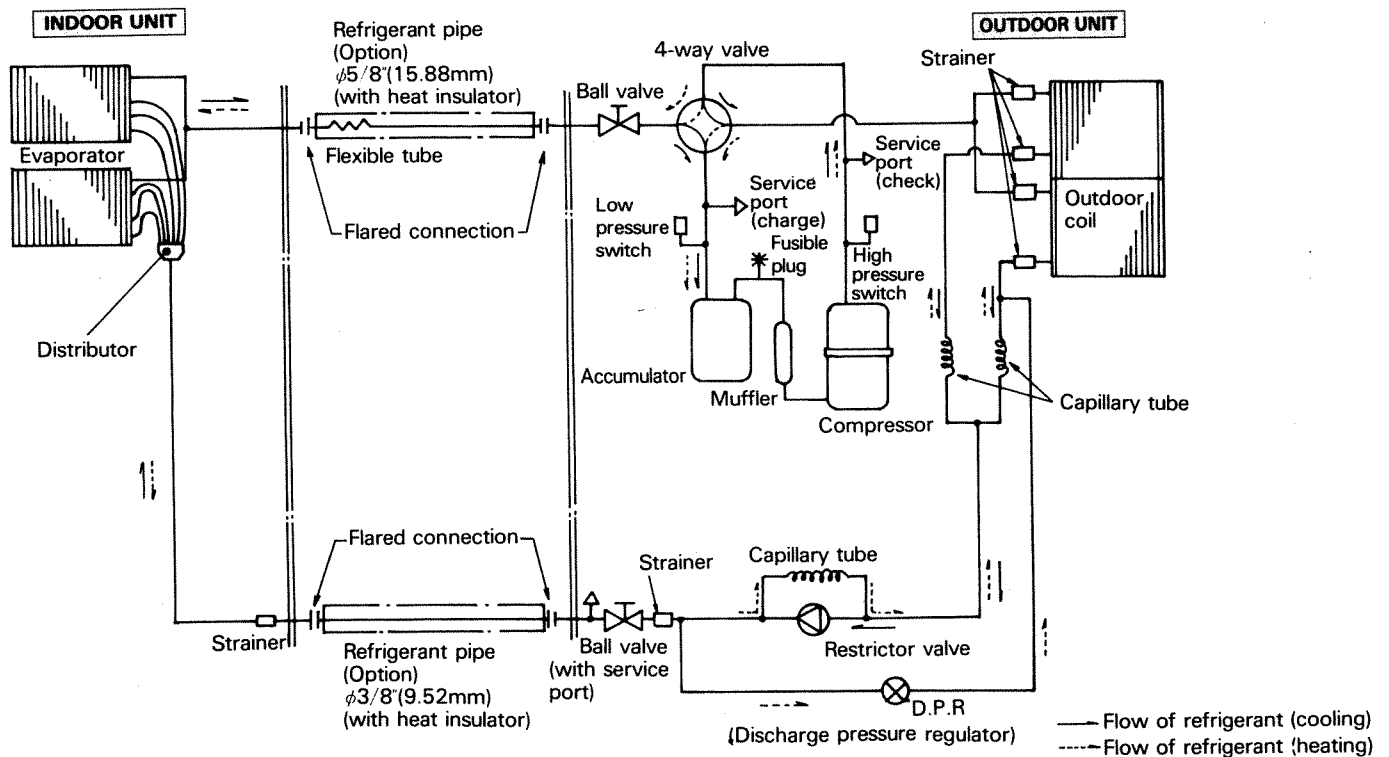
2

REFRIGERANT SYSTEM DIAGRAMS

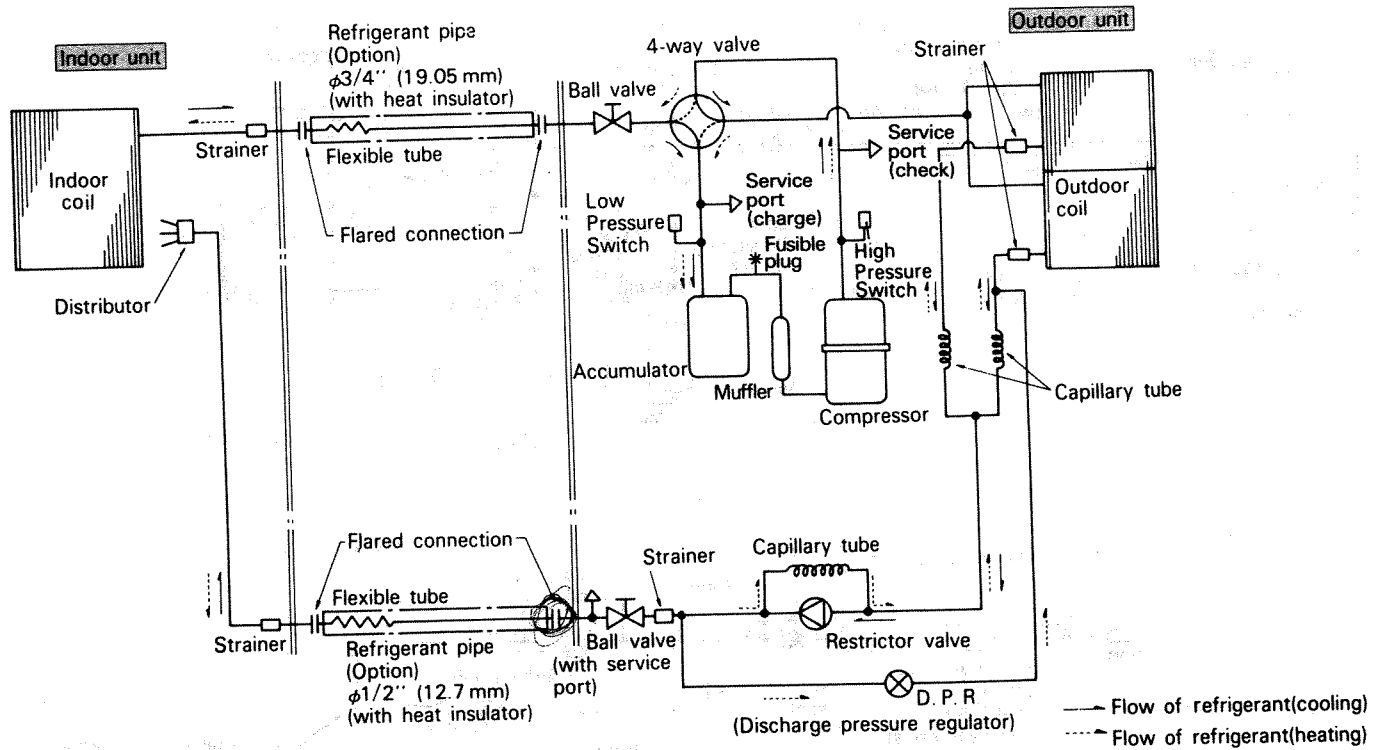
PKH-18AG.US/PUH-18G₆.US



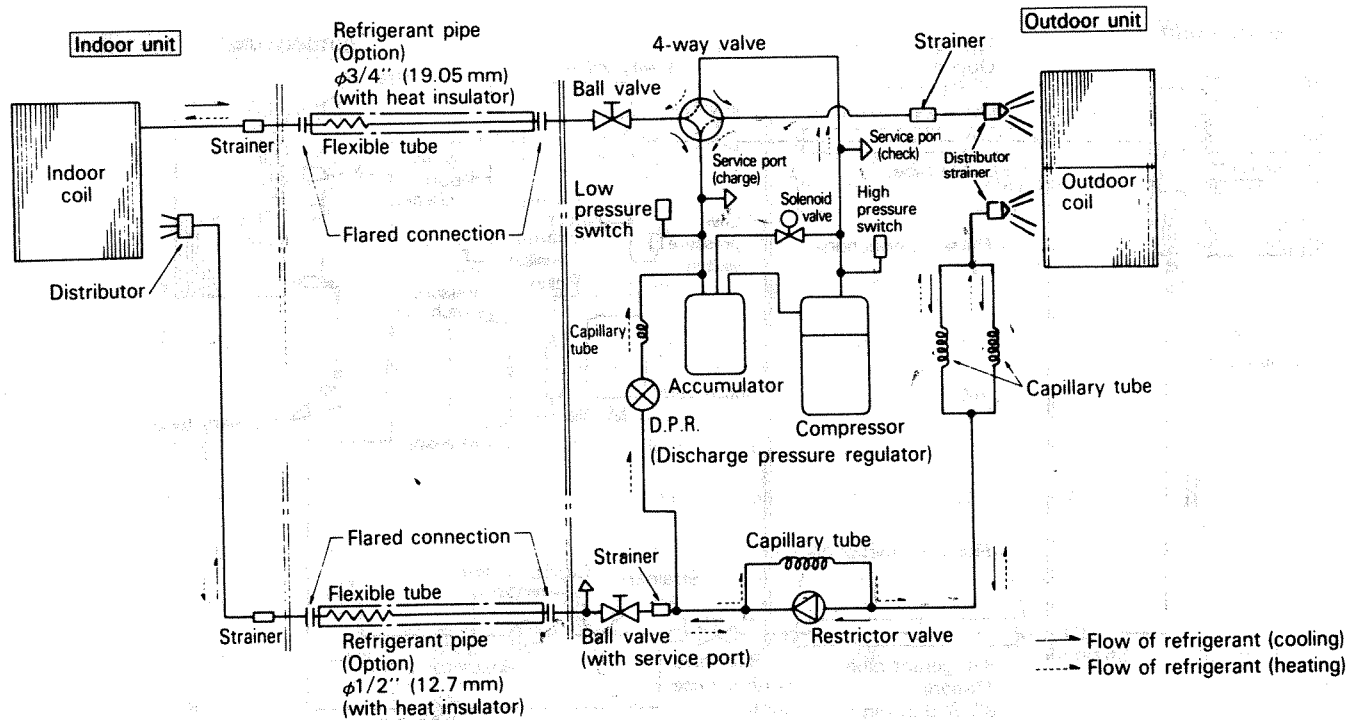
PJH-24AG.US/PUH-24G₆.US



PKH-30AG.US/PUH-30G₆.US

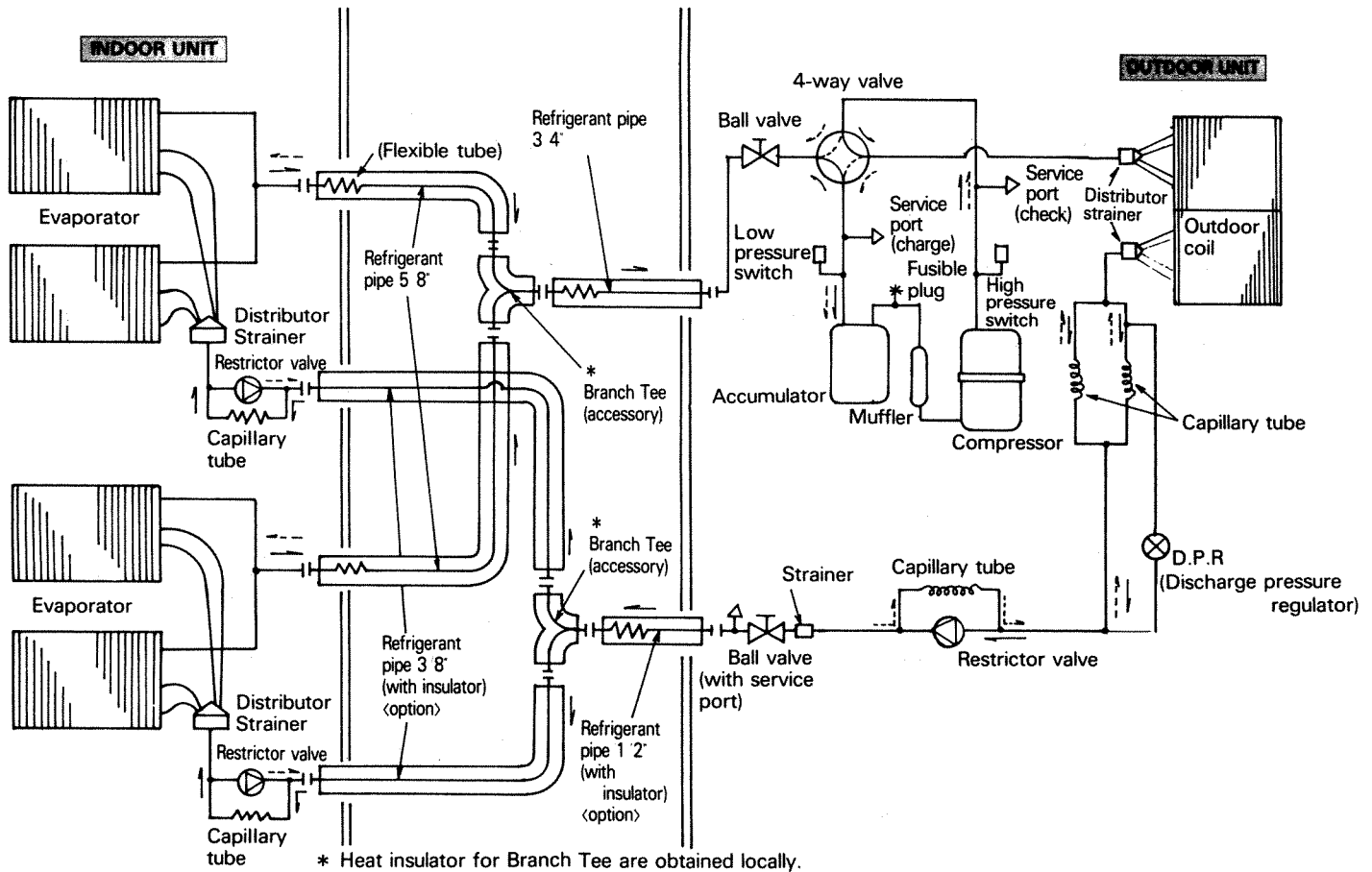


PCH-5AG.US/PUH-5G₆.US PCH-5AG.US/PUH-5TG₆.US

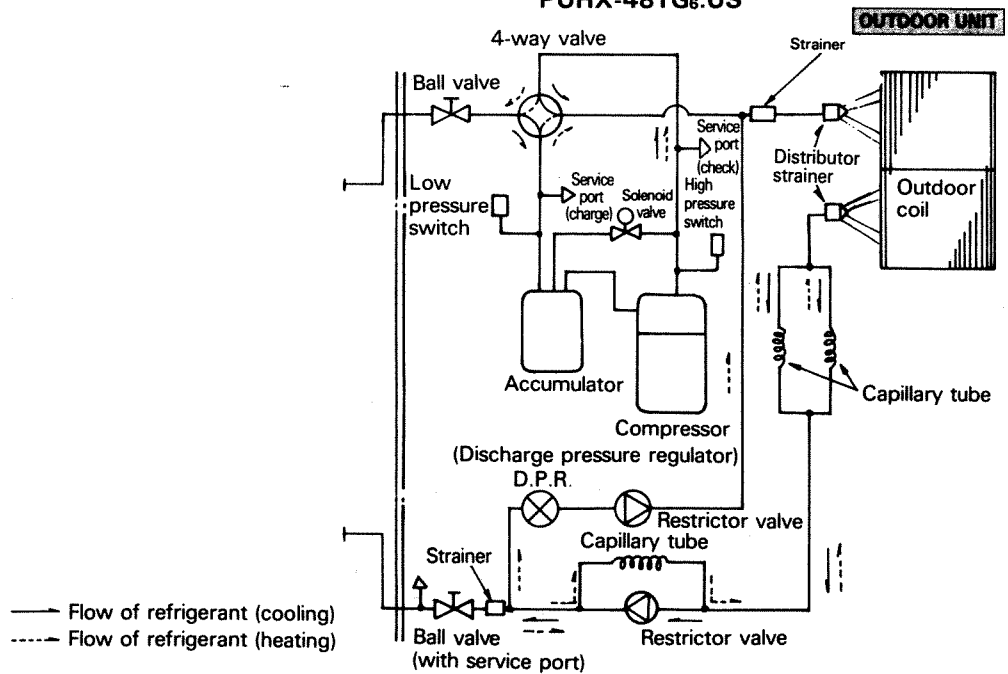


PJHX-36AG₁.US + PJHX-36AG₂.US
PJHX-48AG₁.US + PJHX-48AG₂.US

PUHX-36G₆.US



PUHX-48TG₆.US



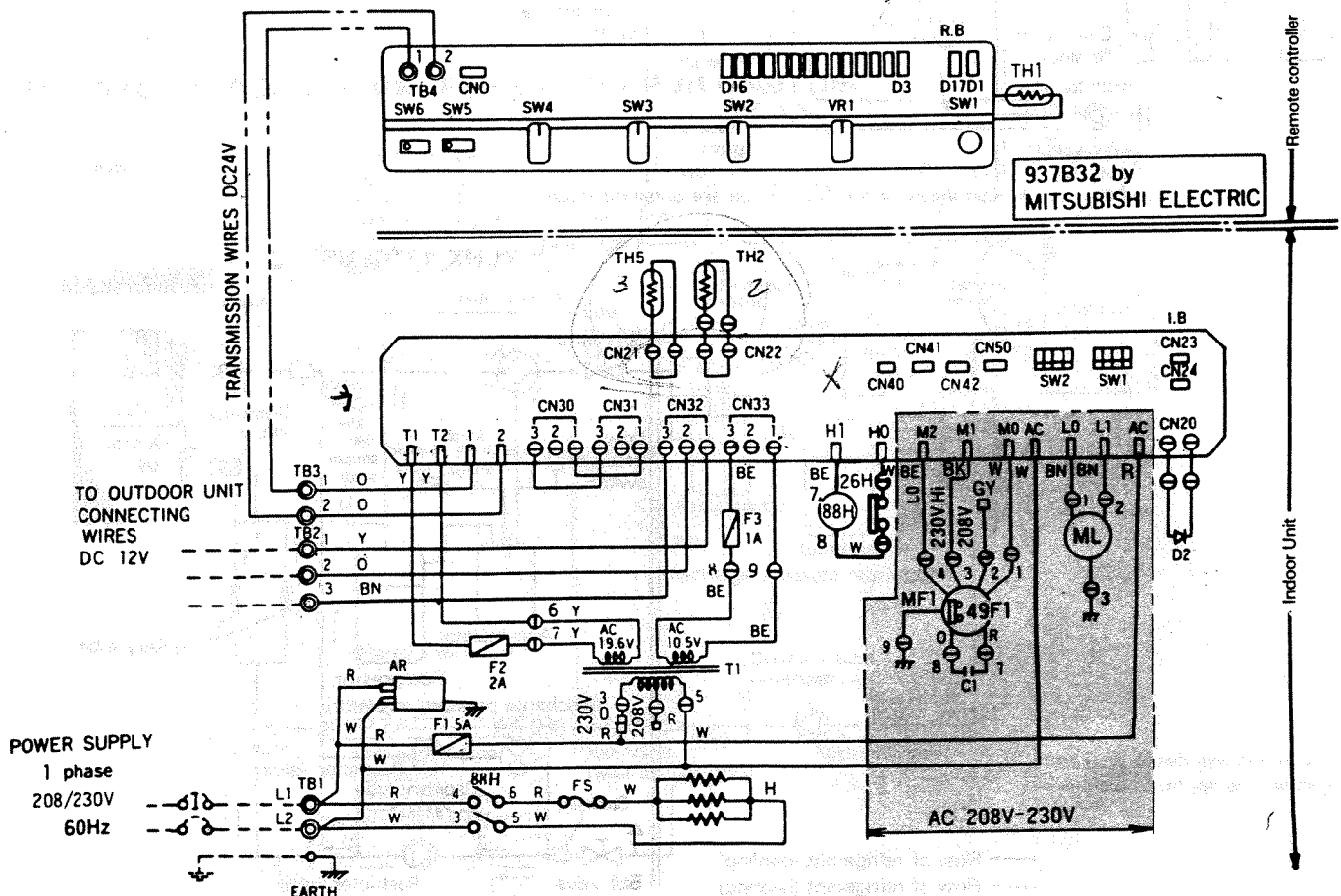
1. INDOOR UNIT

MODELS: PKH-18,24,30AG.US PCH-3,4,5AG.US

AR	SURGE ABSORBER	SW1(I.B)	SWITCH (SELF DIAGNOSTIC FUNCTION OR INTERVAL START TIMER)
C1	RUN CAPACITOR	SW2(I.B)	SWITCH (MODE SELECTOR)
C5	CAPACITOR	SW1(R.B)	POWER ON-OFF SWITCH
CNO(R.B)	CONNECTOR FOR TIME-SWITCH	SW2(R.B)	FUNCTION SELECTOR SWITCH
CN23(I.B)	CONNECTOR (FOR SELF DIAGNOSTIC FUNCTION)	SW3(R.B)	FAN MOTOR SPEED SELECTOR SWITCH
CN24(I.B)	CONNECTOR (FOR INTERVAL START TIMER)	SW4(R.B)	SWING LOUVER SWITCH
CN40(I.B)	CONNECTOR (NORMAL OPERATION)	SW5(R.B)	TEST RUN SWITCH
CN41(I.B)	CONNECTOR (EMERGENCY OPERATION FOR COOLING)	SW6(R.B)	THERMOSTAT SELECTOR SWITCH
CN42(I.B)	CONNECTOR (EMERGENCY OPERATION FOR HEATING)	T1	TRANSFORMER
CN50(I.B)	CONNECTOR (FOR REMOTE INDICATOR)	TB1.2	TERMINAL BLOCK (POWER SUPPLY)
D1(R.B)	POWER ON OFF L.E.D. INDICATOR	TB3.4	TERMINAL BLOCK, CONNECTING WIRE (INDOOR/OUTDOOR)
D2	L.E.D. FOR ALARM LAMP	TB5.6	TERMINAL BLOCK, TRANSMISSION WIRE (INDOOR/REMOTE CONTROLLER)
D3-D16(R.B)	TEMPERATURE L.E.D. INDICATOR	TH1	THERMISTOR FOR ROOM TEMPERATURE
D17(R.B)	TIME SWITCH L.E.D. INDICATOR	TH2	THERMISTOR FOR PIPE TEMPERATURE
F1-F3	FUSE	TH5	THERMISTOR FOR INTAKE AIR TEMPERATURE
49F1	INTERNAL THERMOSTAT FOR MF1	VR1(R.B)	VARIABLE RESISTOR(TEMPERATURE CONTROL)
FS	THERMAL FUSE FOR HEATER		
H	HEATER		
26H	THERMAL SWITCH FOR HEATER		
88H	CONTACTOR FOR HEATER		
I.B	INDOOR CONTROLLER BOARD		
MF1	INDOOR FAN MOTOR		
ML	SWING LOUVER MOTOR		
R.B	REMOTE CONTROLLER BOARD		

*Wire color code

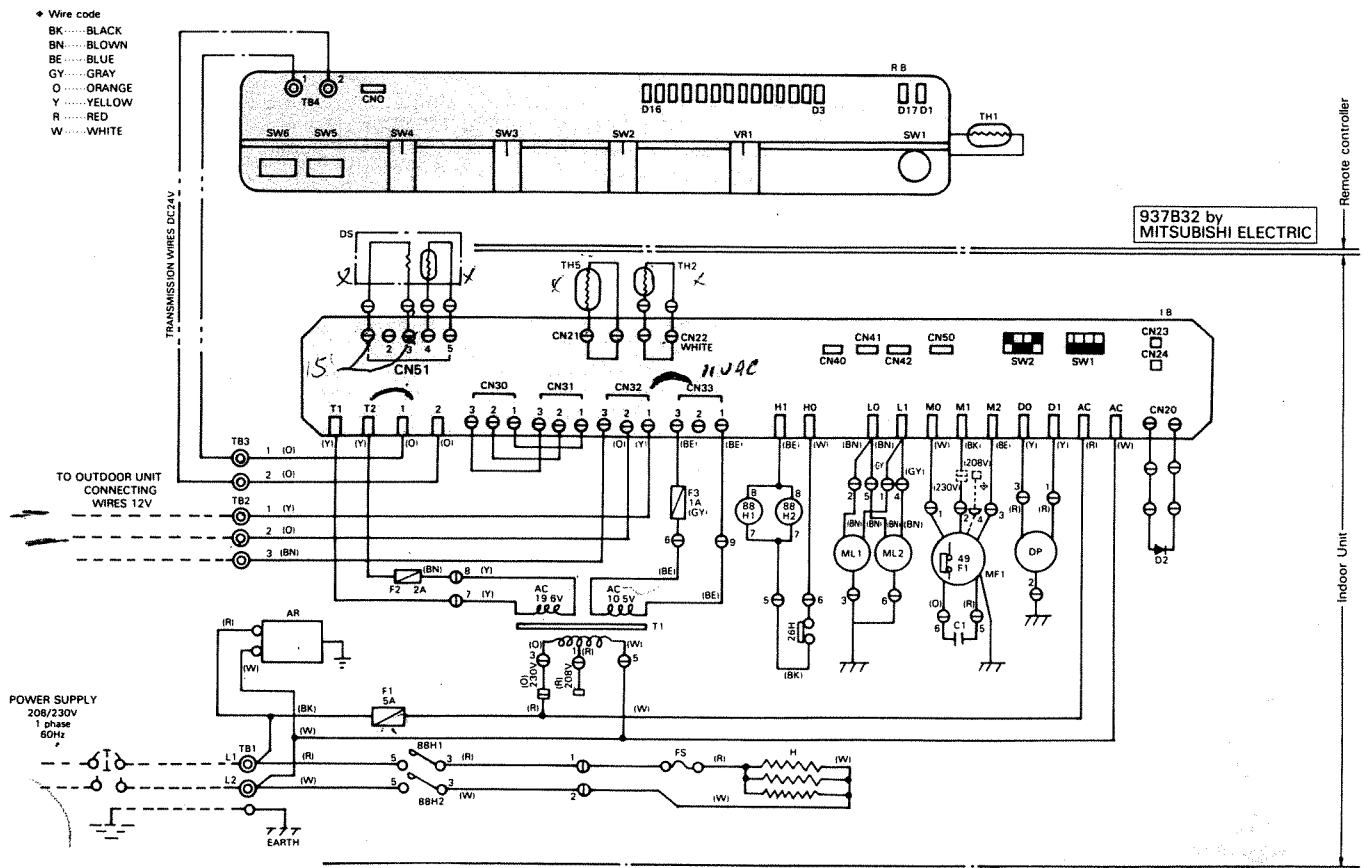
BK.....BLACK	Y YELLOW
BN.....BROWN	O ORANGE
BE.....BLUE	GY.....GRAY
R RED	W WHITE



2. INDOOR UNIT

MODELS: PJH-18,24AG.US

AR	SURGE ABSORBER	SW1(I.B)	SWITCH (SELF DIAGNOSTIC FUNCTION OR
C1	RUN CAPACITOR	SW1(R.B)	INTERVAL START TIMER)
CNO(R.B)	CONNECTOR (FOR TIME SWITCH)	SW2(I.B)	POWER ON-OFF SWITCH
CN23(I.B)	CONNECTOR (FOR SELF DIAGNOSTIC FUNCTION)	SW2(R.B)	SWITCH (MODE SELECTOR)
CN24(I.B)	CONNECTOR (FOR INTERVAL START TIMER)	SW3(R.B)	FUNCTION SELECTOR SWITCH
CN40(I.B)	CONNECTOR (NORMAL OPERATION)	SW4(R.B)	FAN MOTOR SPEED SELECTOR SWITCH
CN41(I.B)	CONNECTOR (EMERGENCY OPERATION FOR COOLING)	SW5(R.B)	SWING LOUVER SWITCH
CN42(I.B)	CONNECTOR (EMERGENCY OPERATION FOR HEATING)	SW6(R.B)	TEST RUN SWITCH
CN50(I.B)	CONNECTOR (FOR REMOTE INDICATOR)	T1	THERMOSTAT SELECTOR SWITCH
D1(R.B)	POWER ON/OFF L.E.D. INDICATOR	TB1	TRANSFORMER
D2	L.E.D. FOR ALARM LAMP	TB2	TERMINAL BLOCK (POWER SUPPLY)
D3-D16(R.B)	TEMPERATURE L.E.D. INDICATOR	TB3,4	TERMINAL BLOCK. TRANSMISSION WIRE
D17(R.B)	TIME SWITCH L.E.D. INDICATOR	TH1	(INDOOR OUTDOOR)
DP	DRAIN WATER LIFT-UP MECHANISM	TH2(I.B)	TERMISTOR FOR ROOM TEMPERATURE
DS	SENSOR FOR DRAIN WATER	TH5(I.B)	THERMISTOR FOR PIPE TEMPERATURE
F1-F3	FUSE	VR1(R.B)	THERMISTOR FOR INTAKE AIR
FS	THERMAL FUSE FOR HEATER	26H	VARIABLE RESISTOR (TEMPERATURE CONTROL)
I.B	INDOOR CONTROLLER BOARD	49F1	THERMAL SWITCH FOR HEATER
MF1	INDOOR FAN MOTOR	88H1,2	INTERNAL THERMOSTAT FOR MF1
ML1,2	SWING LOUVER MOTOR		RELAY FOR HEATER
H	HEATER		
R.B	REMOTE CONTROLLER BOARD		

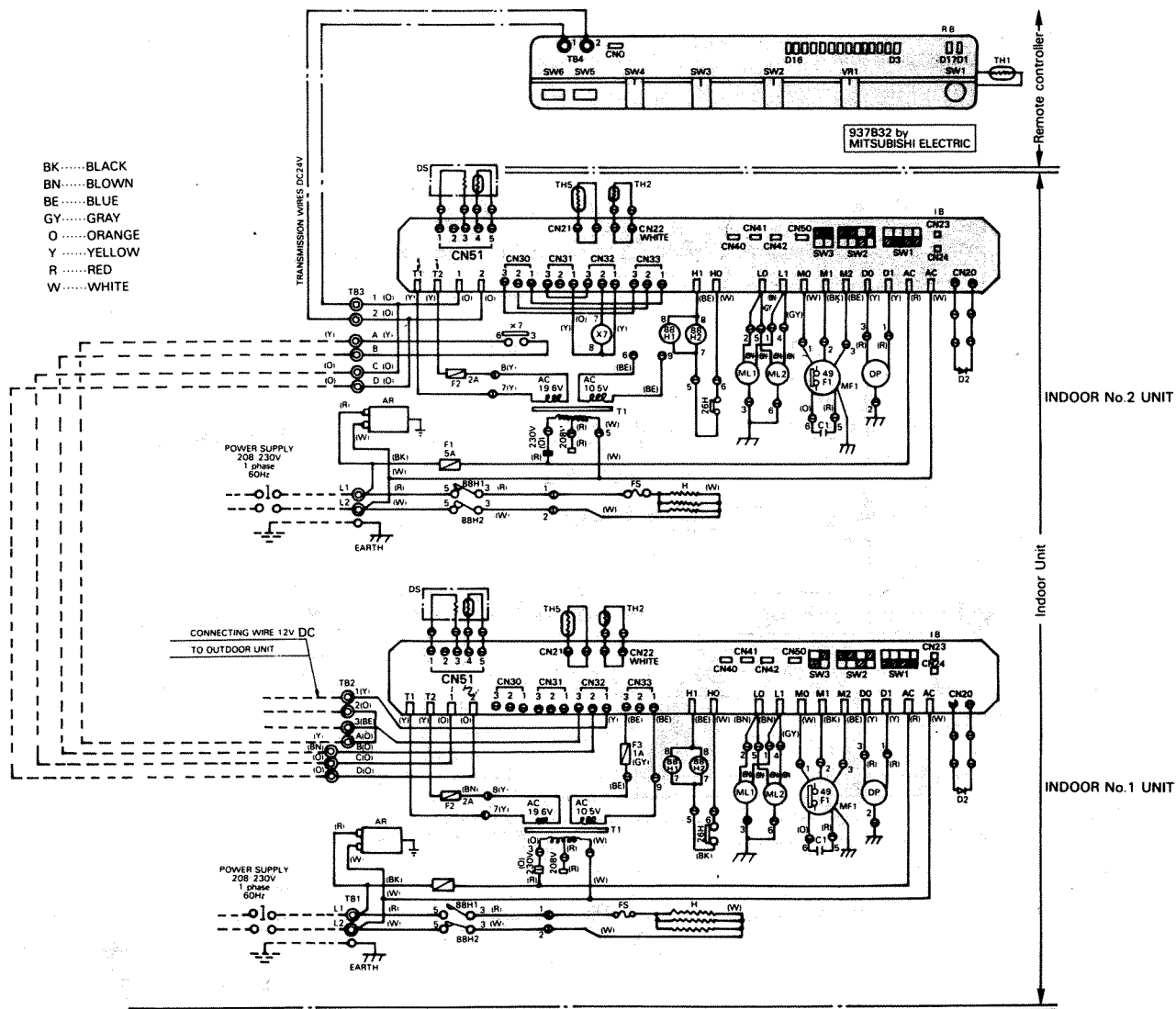


*ONLY PJH-24AG.US have this tap.

3. INDOOR UNIT

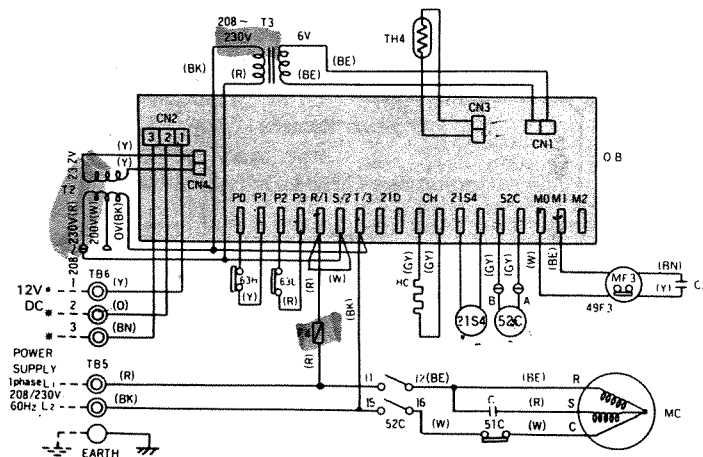
MODELS: PJHX-36,48AG₁/PJHX-36,48AG₂

AR	SURGE ABSORBER	SW1(R.B)	POWER ON-OFF SWITCH
C1	RUN CAPACITOR	SW2(I.B)	SWITCH (MODE SELECTOR)
CN23(I.B)	CONNECTOR (FOR SELF DIAGNOSTIC FUNCTION)	SW2(R.B)	FUNCTION SELECTOR SWITCH
CN24	CONNECTOR (FOR INTERVAL START TIMER)	SW3(R.B)	FAN MOTOR SPEED SELECTOR SWITCH
CN40(I.B)	CONNECTOR (NORMAL OPERATION)	SW4(R.B)	SWING LOUVER SWITCH
CN41(I.B)	CONNECTOR (EMERGENCY OPERATION FOR COOLING)	SW5(R.B)	TEST RUN SWITCH
CN42(I.B)	CONNECTOR (EMERGENCY OPERATION FOR HEATING)	SW6(R.B)	THERMOSTAT SELECTOR SWITCH
CN50(I.B)	CONNECTOR (FOR REMOTE INDICATOR)	T1	TRANSFORMER
CNO(R.B)	CONNECTOR (FOR TIME SWITCH)	TB1	TERMINAL BLOCK (POWER SUPPLY)
DI(R.B)	POWER ON OFF L.E.D. INDICATOR	TB2	TERMINAL BLOCK, TRANSMISSION WIRE (TO OUTDOOR UNIT AND INDOOR No.2 UNIT)
D2	L.E.D. FOR ALARM LAMP	TB3	TERMINAL BLOCK, TRANSMISSION WIRE (TO REMOTE CONTROLLER AND INDOOR No.1 UNIT)
D3-D16(R.B)	TEMPERATURE L.E.D. INDICATOR	TB4	TERMINAL BLOCK, TRANSMISSION WIRE (TO INDOOR No.2 UNIT)
D17(R.B)	TIME SWITCH L.E.D. INDICATOR	TH1	THERMISTOR FOR ROOM TEMPERATURE
DP	DRAIN WATER LIFT-UP MECHANISM	TH2(I.B)	THERMISTOR FOR PIPE TEMPERATURE
DS	SENSOR FOR DRAIN WATER	TH5(I.B)	THERMISTOR FOR INTAKE AIR
F1-F3	FUSE	VR1(R.B)	VARIABLE RESISTOR (TEMPERATURE CONTROL)
FS	THERMAL FUSE FOR HEATER	X7	RELAY(USE ONLY INDOOR No.2 UNIT)
I.B	INDOOR CONTROLLER BOARD	26H	THERMAL SWITCH FOR HEATER
MF1	INDOOR FAN MOTOR	49F1	INTERNAL THERMOSTAT FOR MF1
ML1,2	SWING LOUVER MOTOR	88H1,2	RELAY FOR HEATER
H	HEATER		
R.B	REMOTE CONTROLLER BOARD		
SW(I.B)	SWITCH (SET TWIN INDOOR UNITS OPERATION)		
SW1(I.B)	SWITCH (SELF DIAGNOSTIC FUNCTION OR INTERVAL START TIMER)		



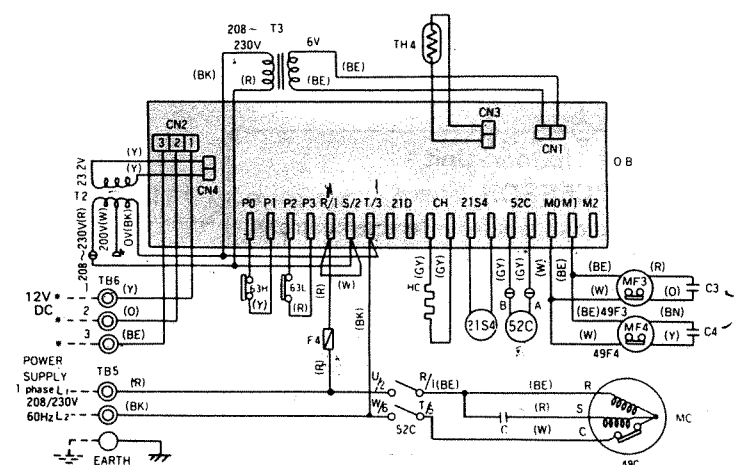
4. OUTDOOR UNIT

MODELS: PUH-18G₆.US



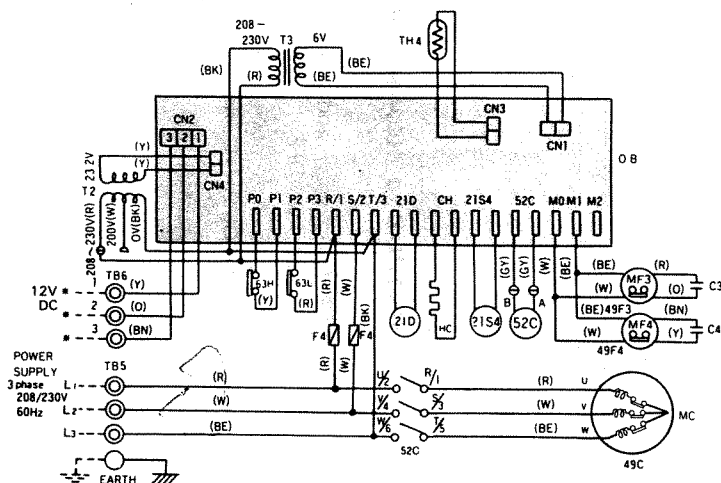
C	RUN CAPACITOR FOR MC
C3	RUN CAPACITOR FOR MF3
F4	FUSE(5A)
HC	CRANKCASE HEATER
MC	COMPRESSOR MOTOR
MF3	OUTDOOR FAN MOTOR
OB	OUTDOOR CONTROLLER BOARD
TB5	TERMINAL BLOCK(POWER SUPPLY)
TB6	TERMINAL BLOCK(CONNECTING WIRES INDOOR OUTDOOR)
TH4	THERMISTOR FOR PIPE TEMPERATURE
T23	TRANSFORMER
21S4	SOLENOID COIL FOR 4-WAY VALVE
49F3	INTERNAL THERMOSTAT FOR MF3
51C	OVER CURRENT RELAY FOR MC
52C	CONTACTOR FOR MC
63H	HIGH PRESSURE SWITCH
63L	LOW PRESSURE SWITCH

MODELS: PUH-24G₆.US/PUH-30G₆.US PUHX-36G₆.US/PUH-3,4,5G₆.US



C	RUN CAPACITOR FOR MC
C3,4	RUN CAPACITOR FOR MF3,4
F4	FUSE(5A)
49F3,4	INTERNAL THERMOSTAT FOR MF3,4
HC	CRANKCASE HEATER
MC	COMPRESSOR MOTOR
MF3,4	OUTDOOR FAN MOTOR
O.B	OUTDOOR CONTROLLER BOARD
TB5	TERMINAL BLOCK(POWER SUPPLY)
TB6	TERMINAL BLOCK(CONNECTING WIRES INDOOR OUTDOOR)
TH4	THERMISTOR FOR PIPE TEMPERATURE
T2,3	TRANSFORMER
21S4	SOLENOID COIL FOR 4-WAY VALVE
49C	INTERNAL THERMOSTAT FOR MC
52C	CONTACTOR FOR MC
63H	HIGH PRESSURE SWITCH
63L	LOW PRESSURE SWITCH

MODELS: PUHX-48TG₆.US/PUH-5TG₆.US



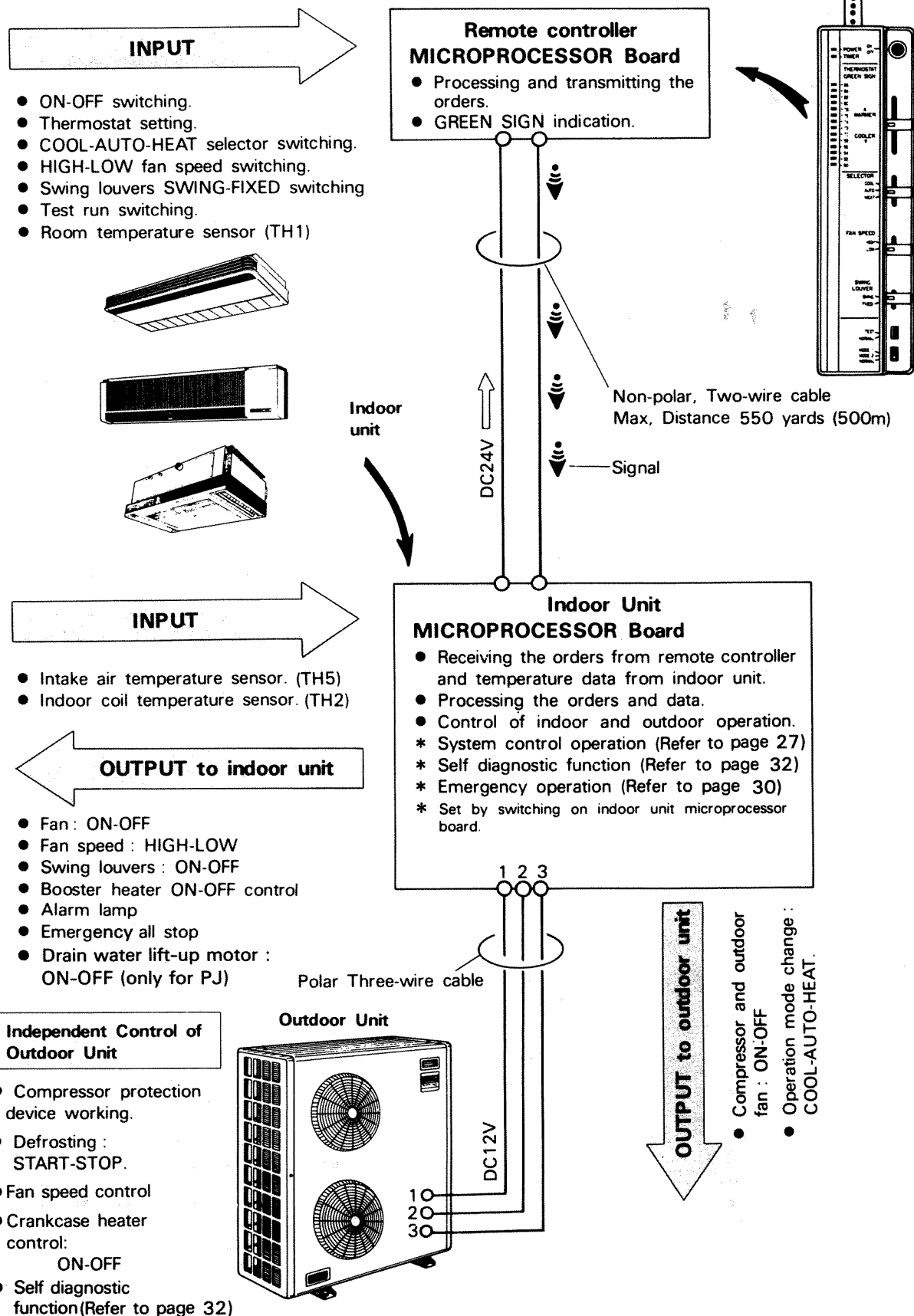
C3,4	RUN CAPACITOR FOR MF3,4
F4	FUSE(5A)
HC	CRANKCASE HEATER
MC	COMPRESSOR MOTOR
MF3,4	OUTDOOR FAN MOTOR
O.B	OUTDOOR CONTROLLER BOARD
TB5	TERMINAL BLOCK(POWER SUPPLY)
TB6	TERMINAL BLOCK(CONNECTING WIRES INDOOR OUTDOOR)
TH4	THERMISTOR FOR PIPE TEMPERATURE
T2,3	TRANSFORMER
21D	SOLENOID COIL FOR DEFROST
21S4	SOLENOID COIL FOR 4-WAY VALVE
49C	INTERNAL THERMOSTAT FOR MC
49F3,4	INTERNAL THERMOSTAT FOR MF3,4
52C	CONTACTOR FOR MC
63H	HIGH PRESSURE SWITCH
63L	LOW PRESSURE SWITCH

4

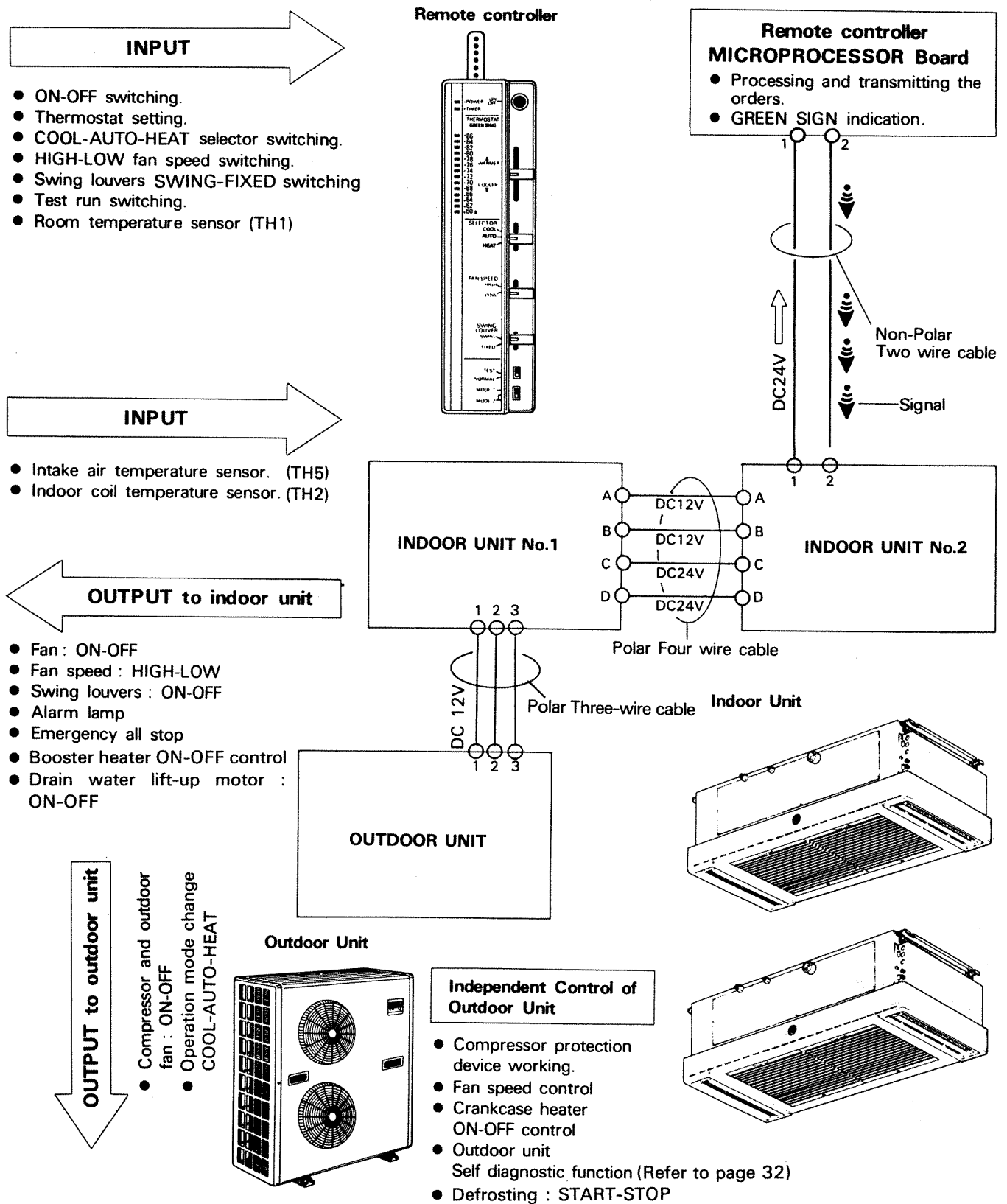
MICROPROCESSOR CONTROL

4.1. OUTLINE OF MICROPROCESSOR CONTROL (PCH · PKH · PJH)

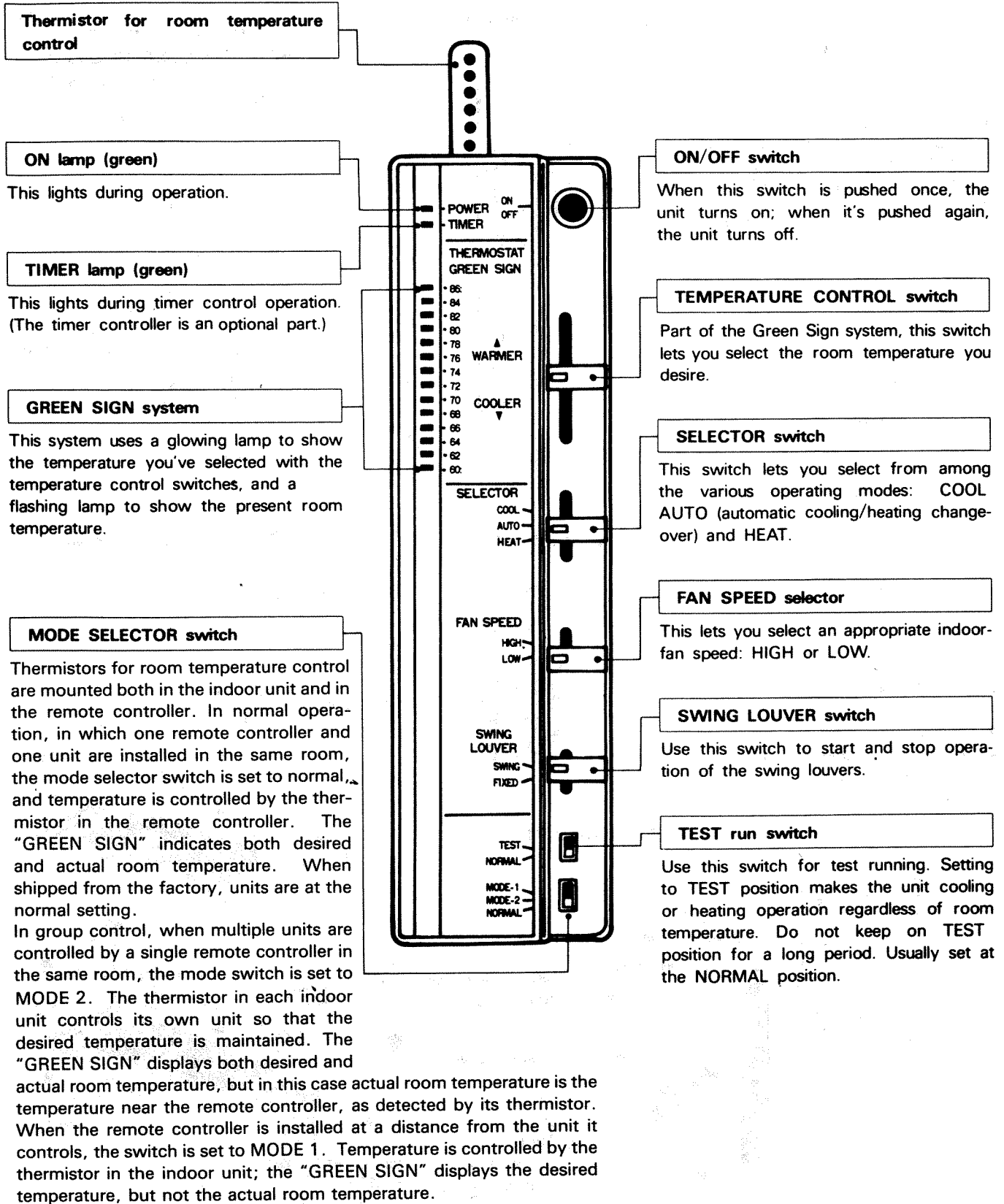
Remote controller



4.2 OUTLINE OF MICROPROCESSOR CONTROL (PJHX)



4.3 EASY OPERATION BY REMOTE CONTROLLER



4.4 SEQUENCE OF OPERATION

The 230VAC to the indoor unit is transformed into 19.6VAC and 10.5VAC and sent to the indoor microprocessor P.C. board and rectified to 24VDC and 12VDC respectively. The 24VDC powers the indoor P.C. board and the remote controller. The 12VDC is control voltage sent to the outdoor unit. The 12VDC wiring to the outdoor unit is polar, 1-1,2-2,3-3. The remote controller sends switch setting data to the indoor microprocessor which also receives temperature data from TH-1 (Room temperature thermistor), TH-2 (Indoor coil temperature thermistor) and TH-5 (Indoor return air thermistor). This data is processed in the indoor microprocessor. And signals are generated to start and stop both indoor and outdoor units.

4.5 SYSTEM CONTROL (MODE SWITCH FUNCTION)

With the mode selector switch in the NORMAL mode, the system is controlled by the TH1 (Room temperature thermistor) on top of the remote controller.

With the mode selector switch in MODE 1 or MODE 2 control is transferred to the TH5 (Indoor return air thermistor) which allows the remote controller to be taken to a remote location up to 550 yards away and the unit will maintain set temperature due to the function of TH-5. The difference between MODE 1 and MODE 2 is that in MODE 1 there will be only set point temperature indicated on the remote controller.