

TECHNICAL & SERVICE MANUAL

Series PKA Wall Mounted R407C/R410A

**Indoor unit
[Model names]**

PKA-RP2.5FAL

PKA-RP3FAL

PKA-RP4FAL

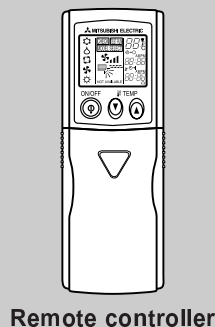
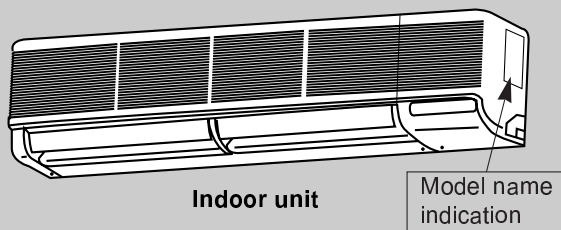
[Service Ref.]
PKA-RP2.5FAL
PKA-RP3FAL
PKA-RP4FAL
Revision:

- Part No. of TOP PLATE (page 50, 51) has been modified in REVISED EDITION-B.

- Please void OC301 REVISED EDITION-A.

Note:

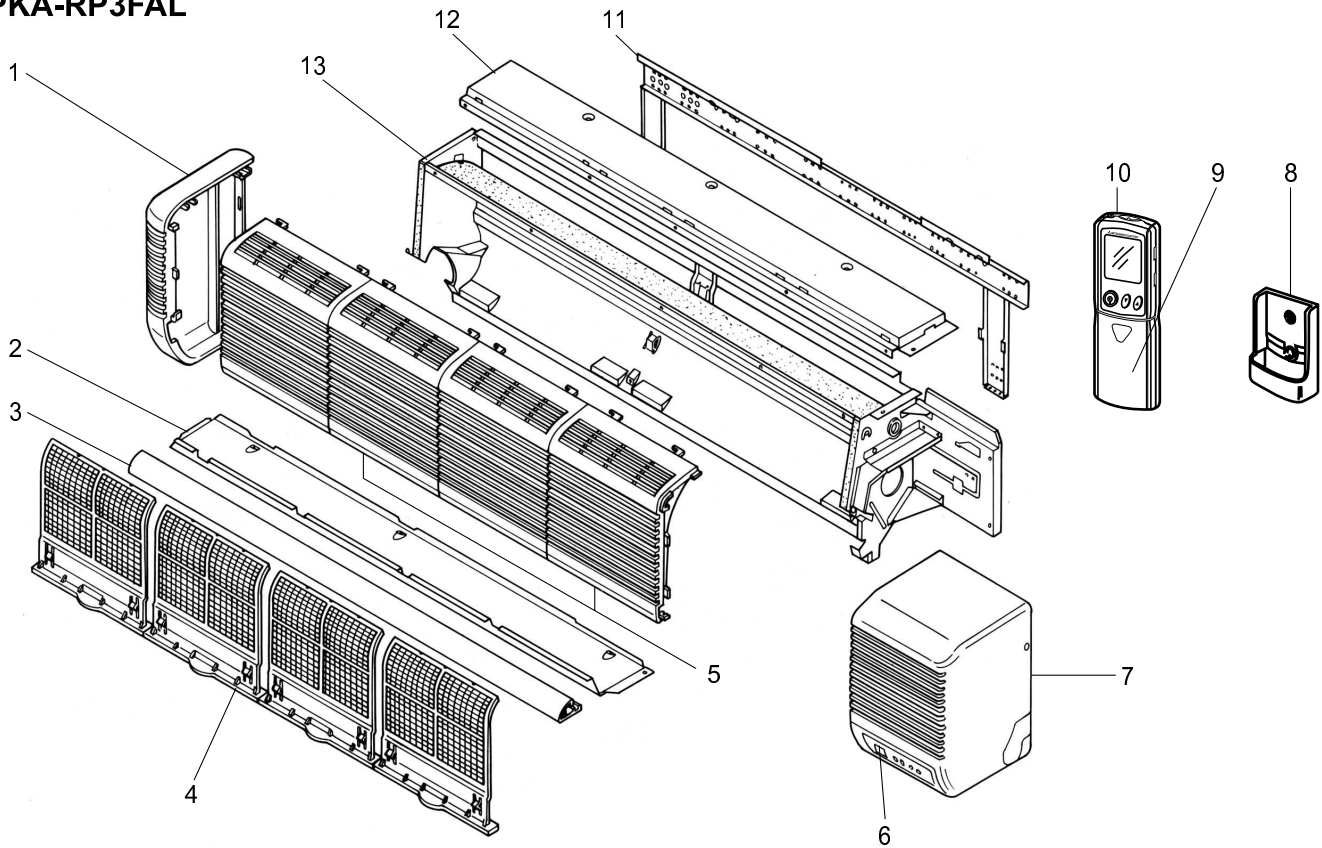
- This manual does not cover outdoor units. When servicing them, please refer to service manual OC261, OC285, OC294, OC298 and this manual in a set.
- RoHS compliant products have <G> mark on the spec name plate.



CONTENTS

1. COMBINATION OF INDOOR AND OUTDOOR UNITS	2
2. SAFETY PRECAUTION	3
3. PART NAMES AND FUNCTIONS	6
4. SPECIFICATIONS	8
5. DATA	14
6. OUTLINES AND DIMENSIONS	33
7. WIRING DIAGRAM	35
8. REFRIGERANT SYSTEM DIAGRAM	36
9. TROUBLESHOOTING	37
10. DISASSEMBLY PROCEDURE	47
11. RoHS PARTS LIST	50
12. OPTIONAL PARTS	Back Cover

STRUCTURAL PARTS
PKA-RP2.5FAL
PKA-RP3FAL

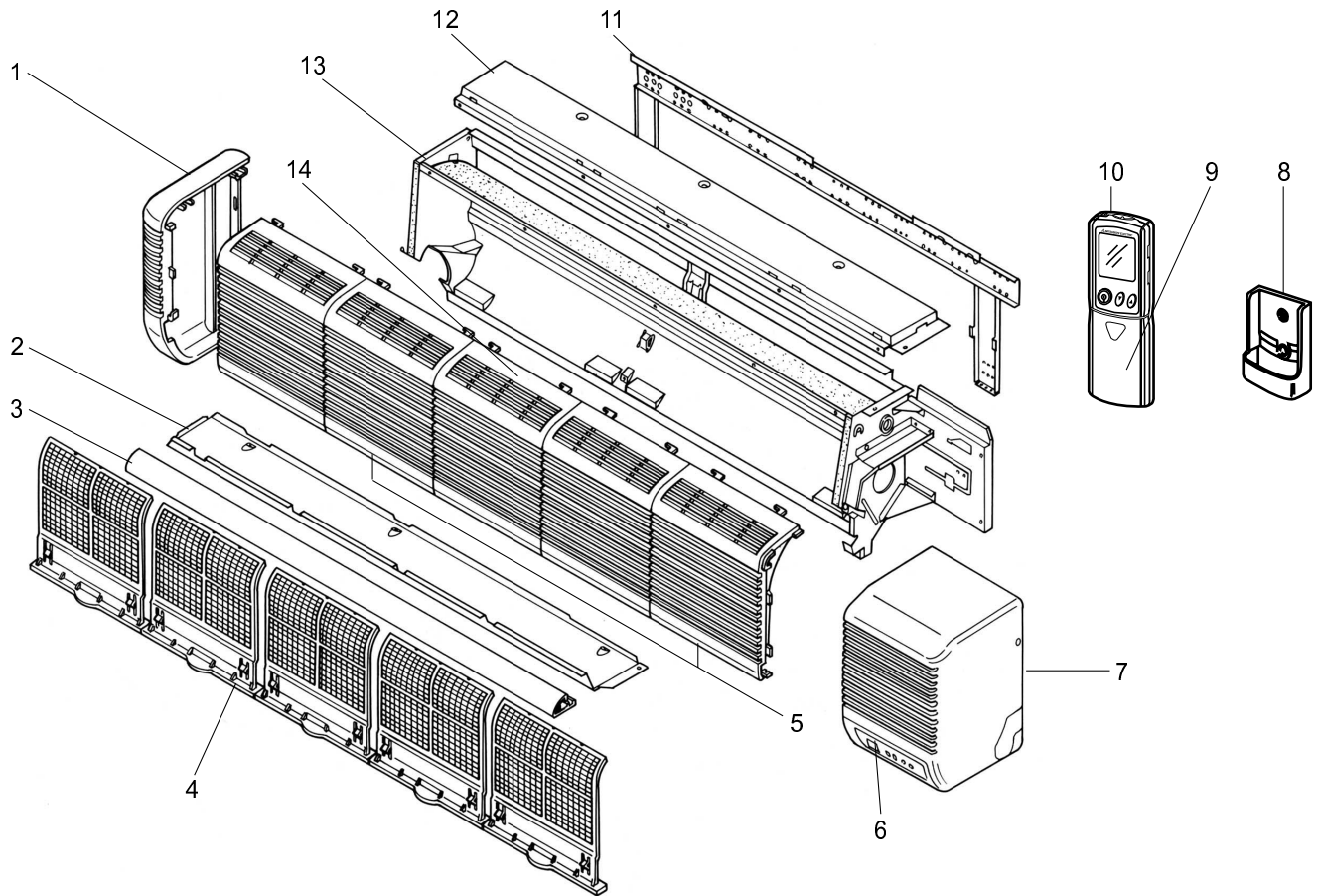


Part numbers that is circled is not shown in the figure.

No.	RoHS	Part No.	Part Name	Specifications	Q'ty/unit		Remarks (Drawing No.)	Wiring Diagram Symbol	Recom- mended Q'ty
					PKA-				
					RP2.5FAL	RP3FAL			
1	G	R01 14G 662	LEFT SIDE PANEL		1	1			
2	G	R01 E02 812	UNDER PLATE		1	1			
3	G	R01 E00 811	NOSE		1	1			
4	G	R01 A17 500	AIR FILTER		4	4			
5	G	R01 17G 691	INTAKE GRILLE		2	2			
6	G	R01 E18 658	RECEIVER		1	1		RU	
7	G	T7W E18 661	RIGHT SIDE PANEL		1	1			
8	G	R01 E00 075	WIRELESS REMOTE CONTROLLER HOLDER		1	1			
9	G	R01 E03 049	WIRELESS REMOTE CONTROLLER DOOR		1	1			
10	G	T7W E10 714	WIRELESS REMOTE CONTROLLER		1	1			
11	G	R01 E03 808	BACK PLATE		1	1			
12	G	R01 E19 641	TOP PLATE		1	1			
13	G	—	BOX ASSEMBLY		1	1	(RG00A734GW8)		
14	G	R01 E02 523	DRAIN SOKET		1	1			

RoHS PARTS LIST

STRUCTURAL PARTS PKA-RP4FAL

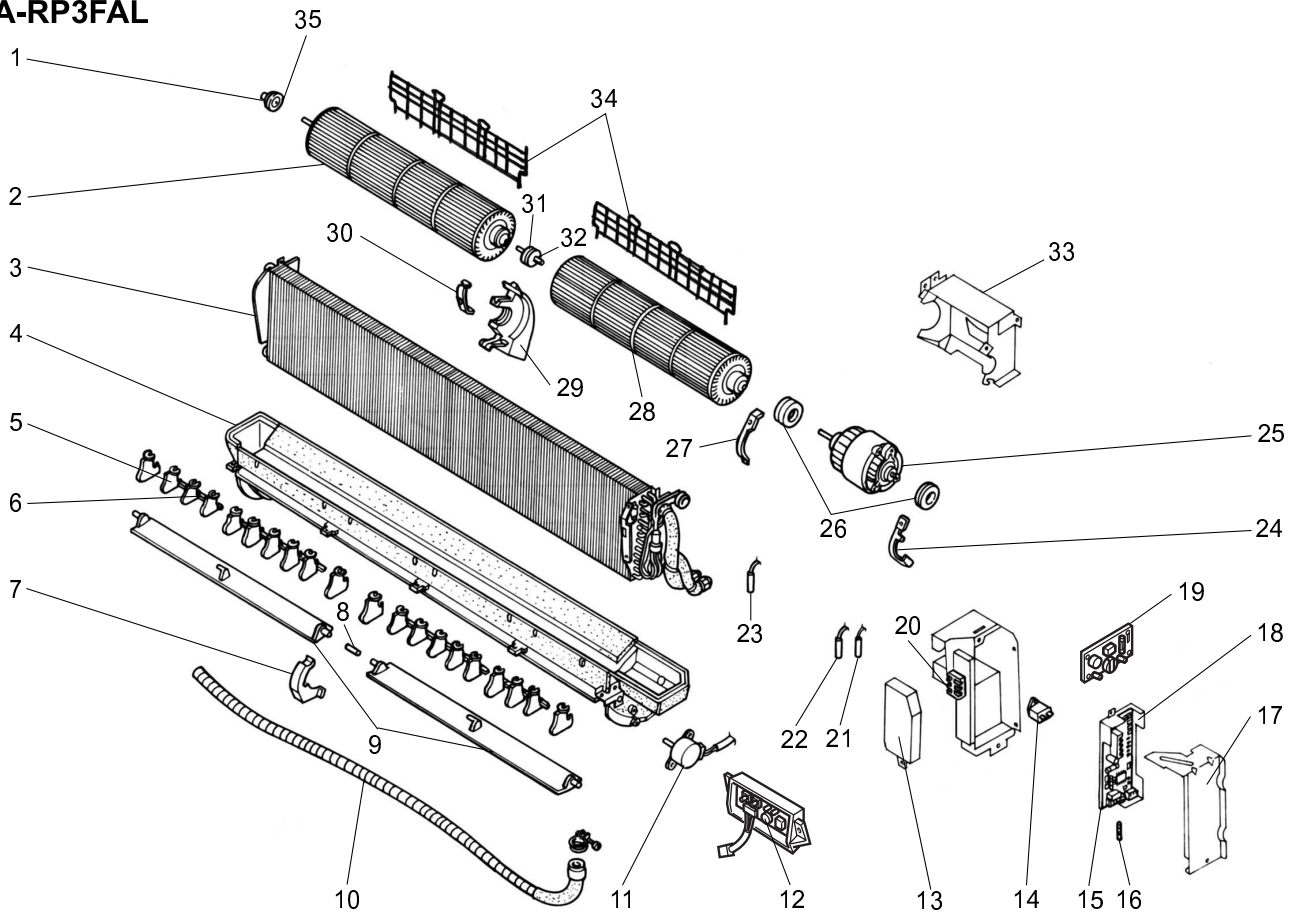


Part numbers that is circled is not shown in the figure.

No.	RoHS	Part No.	Part Name	Specification	Q'ty/unit	Remarks (Drawing No.)	Wiring Diagram Symbol	Recom- mended Q'ty
					PKA-RP4FAL			
1	G	R01 14G 662	LEFT SIDE PANEL		1			
2	G	R01 E02 812	UNDER PLATE		1			
3	G	R01 E01 811	NOSE		1			
4	G	R01 A17 500	AIR FILTER		5			
5	G	R01 17G 691	INTAKE GRILLE		2			
6	G	R01 E18 658	RECEIVER		1		RU	
7	G	T7W E18 661	RIGHT SIDE PANEL		1			
8	G	R01 E00 075	WIRELESS REMOTE CONTROLLER HOLDER		1			
9	G	R01 E03 049	WIRELESS REMOTE CONTROLLER DOOR		1			
10	G	T7W E10 714	WIRELESS REMOTE CONTROLLER		1			
11	G	R01 E04 808	BACK PLATE		1			
12	G	R01 E20 641	TOP PLATE		1			
13	G	—	BOX ASSEMBLY		1	(RG00A734GW9)		
14	G	R01 18G 692	INTAKE GRILLE		1			
15	G	R01 E02 523	DRAIN SOKET		1			

RoHS PARTS LIST

ELECTRICAL PARTS PKA-RP2.5FAL PKA-RP3FAL



No.	RoHS	Part No.	Part Name	Specification	Q'ty/unit		Remarks (Drawing No.)	Wiring Diagram Symbol	Recom- mended Q'ty
					PKA-				
					RP2.5FAL	RP3FAL			
1	G	R01 Z61 102	BEARING MOUNT		1	1			
2	G	R01 E23 114	LEFT LINEFLOW FAN		1	1			
3	G	R01 K49 480	HEAT EXCHANGER		1				
	G	R01 K50 480	HEAT EXCHANGER			1			
4	G	T7W E24 529	DRAIN PAN		1	1			
5	G	—	GUIDE VANE		16	16	(BG25J821G01)		
6	G	—	ARM		3	3	(BG25H301G01)		
7	G	R01 14G 621	CENTER COVER		1	1			
8	G	R01 13G 063	JOINT SHAFT		1	1			
9	G	R01 18G 002	AUTO VANE		2	2			
10	G	R01 E04 527	DRAIN HOSE		1	1			
11	G	R01 E13 223	VANE MOTOR		1	1		MV	
12	G	R01 50J 317	WIRELESS REMOTE CONTROLLER BOARD		1	1		W.B	
13	G	—	TERMINAL COVER		1	1	(BG02J608H07)		
14	G	R01 E13 255	CAPACITOR (FAN MOTOR)	2.0μF 440V	1	1		C	
15	G	T7W E36 310	INDOOR CONTROLLER BOARD		1	1		I.B	
16	G	R01 E13 239	FUSE	250V 4A	1	1		F1	
17	G	—	CONTROLLER COVER		1	1	(BG02A648G02)		

Continued to the next page.

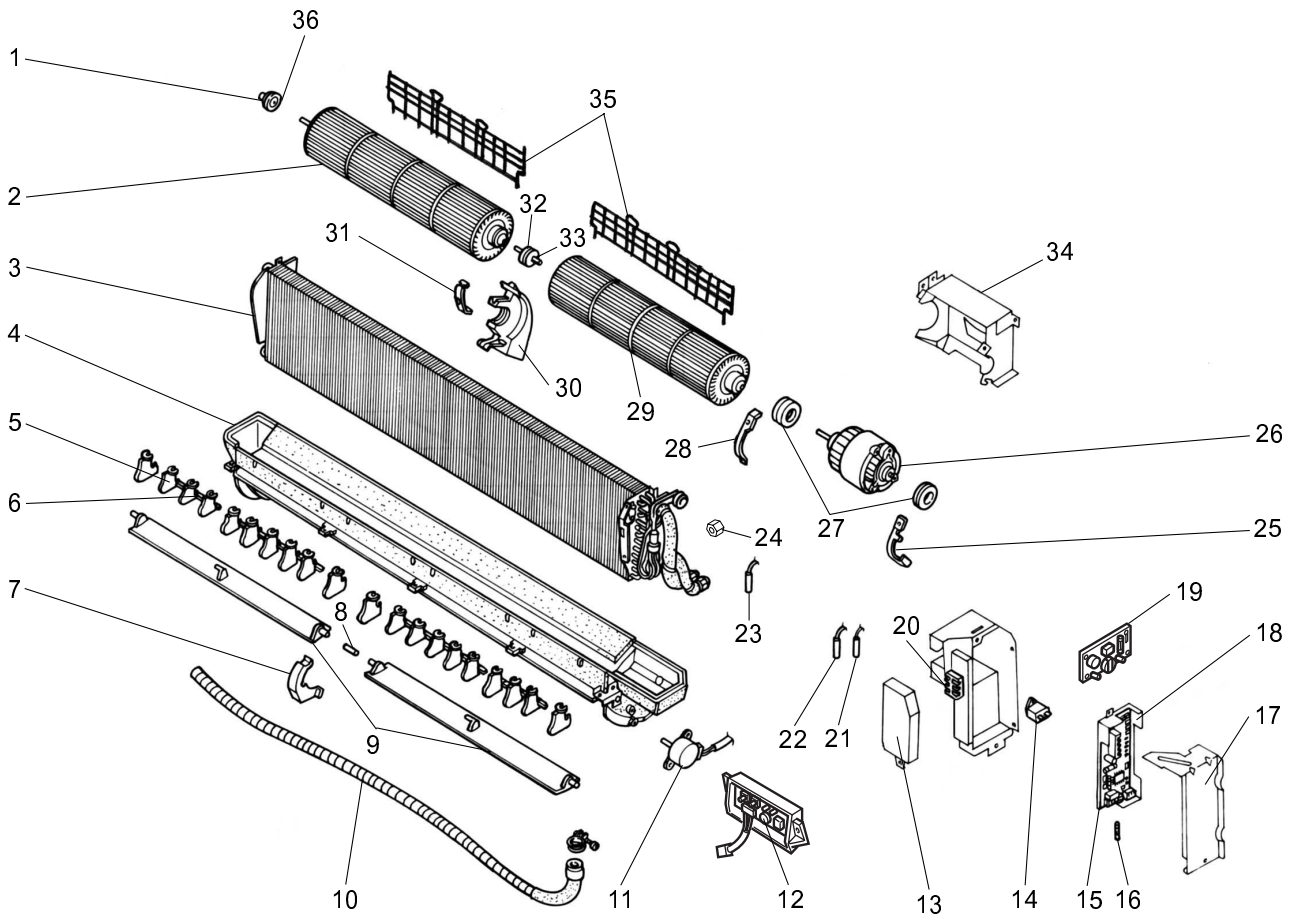
RoHS PARTS LIST

From the previous page.

No.	RoHS	Part No.	Part Name	Specification	Q'ty/unit		Remarks (Drawing No.)	Wiring Diagram Symbol	Recom- mended Q'ty
					PKA-				
					RP2.5FAL	RP3FAL			
18	G	—	CONTROLLER CASE			1	(BG25B573H06)		
19	G	T7W E00 313	INDOOR POWER BOARD			1		P.B	
20	G	T7W E13 716	TERMINAL BLOCK	3P(S1, S2, S3)		1		TB4	
21	G	R01 H06 202	ROOM TEMPERATURE THERMISTOR			1		TH1	
22	G	R01 H07 202	CONDENSER / EVAPORATOR TEMPERATURE THERMISTOR			1		TH5	
23	G	R01 H05 202	PIPE TEMPERATURE THERMISTOR			1		TH2	
24	G	—	MOTOR BAND			1	(BG02H065H01)		
25	G	R01 13G 220	FAN MOTOR	PN4S40-K		1		MF	
26	G	R01 12G 105	RUBBER MOUNT			2			
27	G	—	MOTOR BAND			1	(BG02H178H01)		
28	G	R01 E04 115	RIGHT LINEFLOW FAN			1			
29	G	—	CENTER SUPPORT			1	(BG00R259G07)		
30	G	—	BEARING BAND			1	(BG02L462H02)		
31	G	R01 KV5 102	BEARING MOUNT			1			
32	G	R01 E03 103	SLEEVE BEARING			1			
33	G	—	MOTOR LEG			1	(BG02A534H16)		
34	G	T7W E15 675	FAN GUARD			2			
35	G	R01 E04 103	SLEEVE BEARING			1			

RoHS PARTS LIST

ELECTRICAL PARTS PKA-RP4FAL



No.	RoHS	Part No.	Part Name	Specification	Q'ty/unit	Remarks (Drawing No.)	Wiring Diagram Symbol	Recom- mended Q'ty
					PKA-RP4FAL			
1	G	R01 Z61 102	BEARING MOUNT		1			
2	G	R01 E24 114	LEFT LINEFLOW FAN		1			
3	G	T7W E99 480	HEAT EXCHANGER		1			
4	G	T7W E25 529	DRAIN PAN		1			
5	G	—	GUIDE VANE		22	(BG25J821G01)		
6	G	—	ARM		4	(BG25H301G01)		
7	G	R01 14G 621	CENTER COVER		1			
8	G	R01 13G 063	JOINT SHAFT		1			
9	G	R01 19G 002	AUTO VANE		2			
10	G	R01 E04 527	DRAIN HOSE		1			
11	G	R01 E13 223	VANE MOTOR		1		MV	
12	G	R01 50J 317	WIRELESS REMOTE CONTROLLER BOARD		1		W.B	
13	G	—	TERMINAL COVER		1	(BG02J608H07)		
14	G	R01 E12 255	CAPACITOR (FAN MOTOR)	3.0 μ F 440V	1		C	
15	G	T7W E36 310	INDOOR CONTROLLER BOARD		1		I.B	
16	G	R01 E13 239	FUSE	250V 4A	1		F1	
17	G	—	CONTROLLER COVER		1	(BG02A648G02)		

Continued to the next page.

RoHS PARTS LIST

From the previous page.

No.	RoHS	Part No.	Part Name	Specification	Q'ty/unit	Remarks (Drawing No.)	Wiring Diagram Symbol	Recom- mended Q'ty
					PKA-RP4FAL			
18	G	—	CONTROLLER CASE		1	(BG25B573H06)		
19	G	T7W E00 313	INDOOR POWER BOARD		1		P.B	
20	G	T7W E13 716	TERMINAL BLOCK	3P(S1, S2, S3)	1		TB4	
21	G	R01 H06 202	ROOM TEMPERATURE THERMISTOR		1		TH1	
22	G	R01 H07 202	CONDENSER / EVAPORATOR TEMPERATURE THERMISTOR		1		TH5	
23	G	R01 H05 202	PIPE TEMPERATURE THERMISTOR		1		TH2	
24	G	T7W E00 457	FLARE NUT	5/8	1			
25	G	—	MOTOR BAND		1	(BG02H065H01)		
26	G	T7W E24 762	FAN MOTOR	PN4S70-K	1		MF	
27	G	R01 16G 105	RUBBER MOUNT		2			
28	G	—	MOTOR BAND		1	(BG02H178H01)		
29	G	R01 E05 115	RIGHT LINEFLOW FAN		1			
30	G	—	CENTER SUPPORT		1	(BG00R259G07)		
31	G	—	BEARING BAND		1	(BG02L462H02)		
32	G	R01 KV5 102	BEARING MOUNT		1			
33	G	R01 E03 103	SLEEVE BEARING		1			
34	G	—	MOTOR LEG		1	(BG02A534H17)		
35	G	T7W E16 675	FAN GUARD		2			
36	G	R01 E04 103	SLEEVE BEARING		1			

12-1. WIRED REMOTE CONTROLLER

Part No.	PAR-20MAAT-E
----------	--------------

12-2. PROGRAM TIMER

Part No.	PAC-SC32PTA
----------	-------------

12-3. REMOTE SENSOR

Part No.	PAC-SC41TS-E
----------	--------------

12-4. REMOTE OPERATION ADAPTER

Part No.	PAC-SF40RM-E
----------	--------------

12-5. REMOTE ON/OFF ADAPTER

Part No.	PAC-SE55RA-E
----------	--------------

12-6. DRAIN LIFT UP MECHANISM

Part No.	PAC-SE88DM-E
----------	--------------

mitsubishi electric corporation

HEAD OFFICE : TOKYO BLDG., 2-7-3, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310, JAPAN