



SPLIT-TYPE, HEAT PUMP AIR CONDITIONERS

*Changes for the Better*

July 2006

No. OC309  
REVISED EDITION-A

# TECHNICAL & SERVICE MANUAL

**Series PKFY Wall Mounted R410A / R407C / R22**

Indoor unit  
[Model names]

PKFY-P20VAM-E

PKFY-P25VAM-E

[Service Ref.]

**PKFY-P20VAM-E**

**PKFY-P25VAM-E**

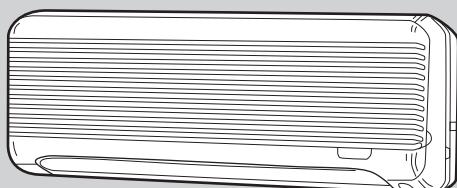
Revision:

- RoHS PARTS LIST is added.
- Some descriptions have been modified.

- Please void OC309.

Note:

- This manual describes only service data of the indoor units.
- RoHS compliant products have <G> mark on the spec name plate.
- For servicing of RoHS compliant products, refer to the RoHS Parts List.



INDOOR UNIT

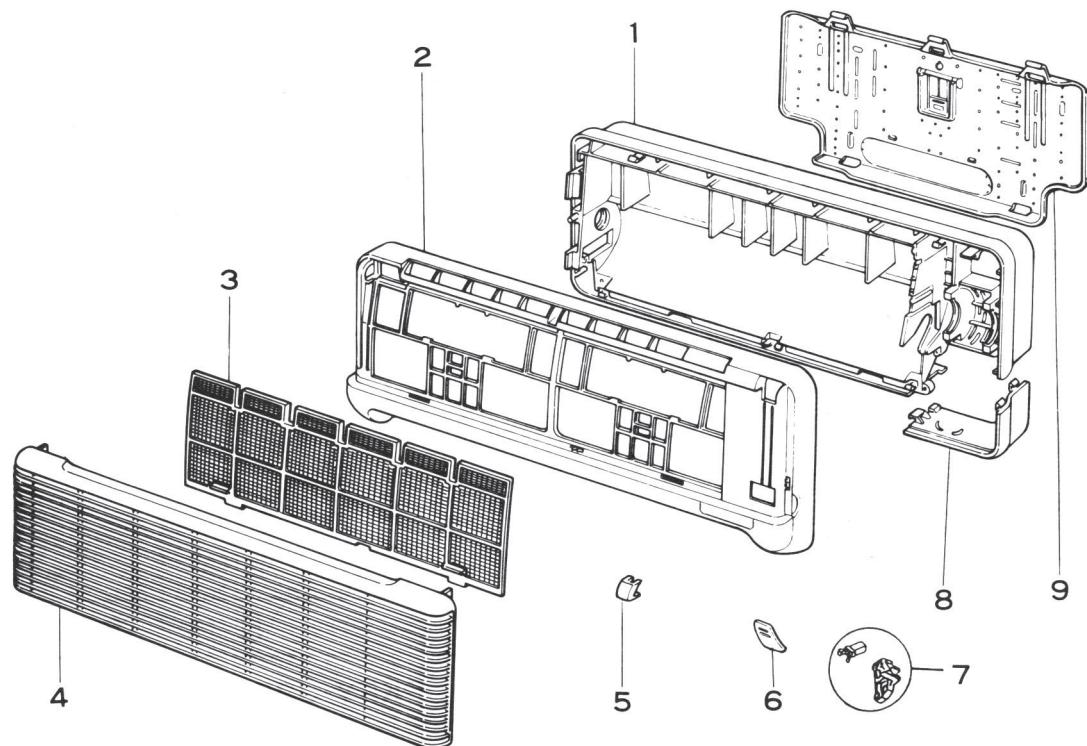
## CONTENTS

1. SAFETY PRECAUTION .....	2
2. PART NAMES AND FUNCTIONS .....	6
3. SPECIFICATION .....	8
4. OUTLINES AND DIMENSIONS .....	10
5. WIRING DIAGRAM .....	11
6. REFRIGERANT SYSTEM DIAGRAM .....	12
7. TROUBLESHOOTING .....	12
8. DISASSEMBLY PROCEDURE .....	19
9. PARTS LIST .....	22
10. RoHS PARTS LIST .....	25

## PANEL PARTS

PKFY-P20VAM-E

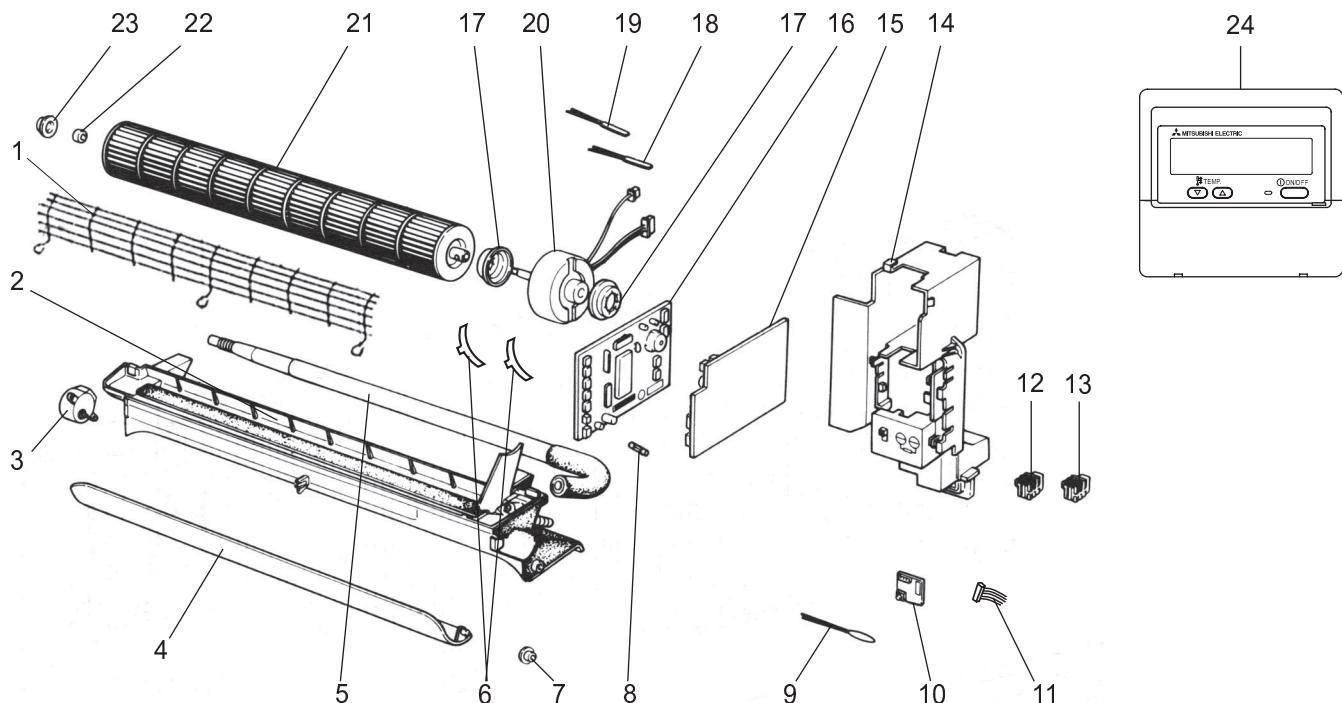
PKFY-P25VAM-E



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

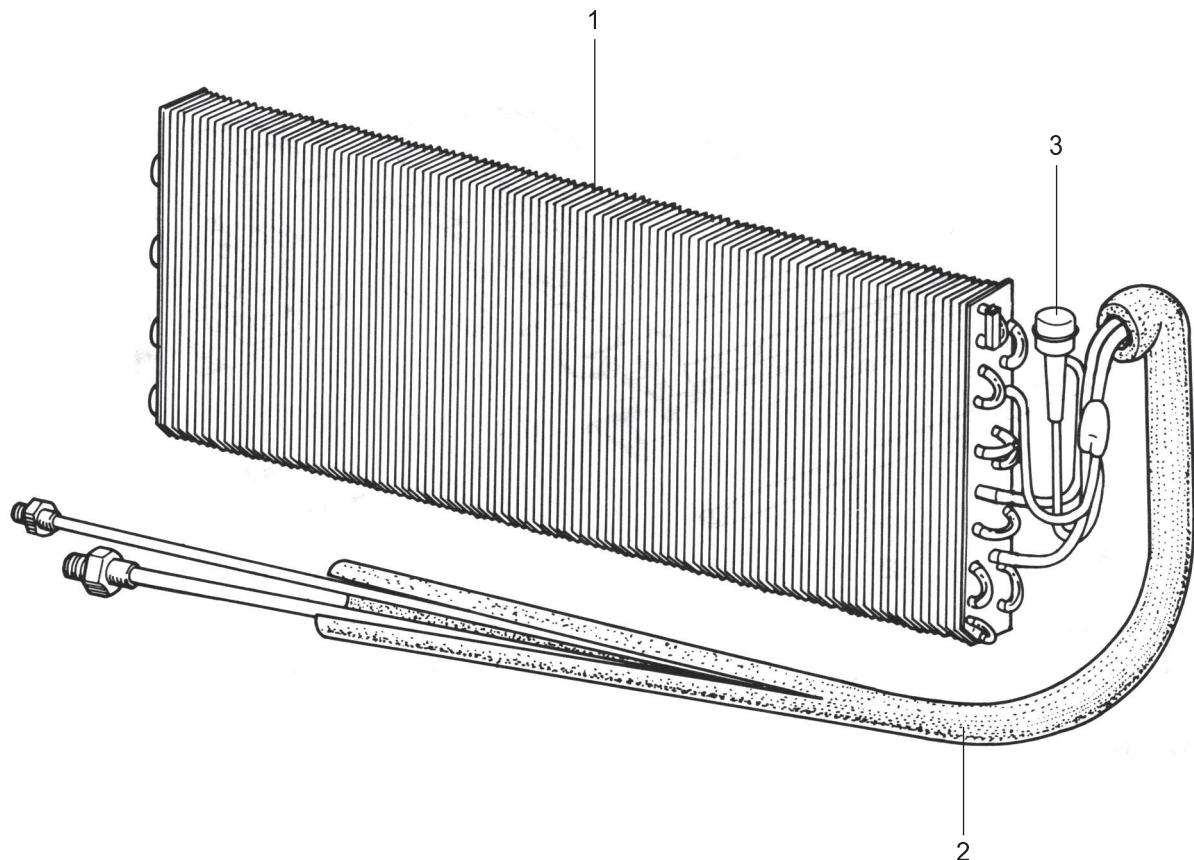
No.	Parts No.	Parts Name	Specifications	Q'ty / set	Remarks (Drawing No.)	Wiring Diagram Symbol	Recom- mended Q'ty	Price	
				PKFY-P20VAM-E PKFY-P25VAM-E				Unit	Amount
1	R01 22A 635	BOX		1					
2	R01 22A 651	FRONT PANEL		1					
3	R01 22A 500	AIR FILTER		1					
4	R01 22A 691	INTAKE GRILLE		1					
5	R01 22A 096	SCREW CAP		1	3PCS/SET				
6	—	RECEIVING COVER		1	(DT25C174H03)				
7	R01 22A 054	GRILLE CATCH		1					
8	T7WA00 658	CORNER BOX		1					
9	R01 22A 808	BACK PLATE		1					
10	—	BRAND LABEL		1	(BC79R798H02)				

**ELECTRICAL PARTS**  
**PKFY-P20VAM-E PKFY-P25VAM-E**



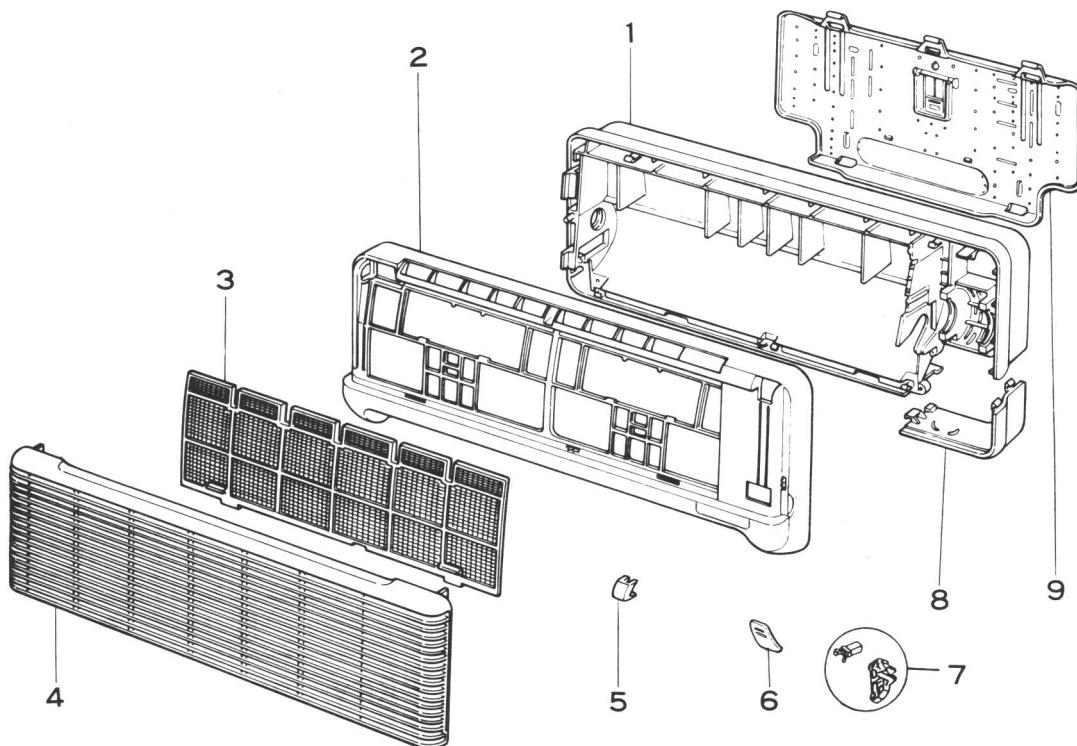
No.	Parts No.	Parts Name	Specifications	Q'ty / set		Remarks (Drawing No.)	Wiring Diagram Symbol	Recom- mended Q'ty	Price	
				PKFY- P20VAM-E	PKFY- P25VAM-E				Unit	Amount
1	T7W B00 675	FAN GUARD		1	1					
2	R01 22A 530	NOZZLE		1	1					
3	R01 22A 223	VANE MOTOR		1	1		MV			
4	R01 22A 002	AUTO VANE		1	1					
5	R01 22A 527	DRAIN HOSE		1	1					
6	R01 22A 126	MOTOR BAND	SET (LEFT, RIGHT)	1	1					
7	R01 07Y 092	VANE SLEEVE		1	1					
8	T7W 520 239	FUSE	250V 6.3A	1	1		FUSE			
9	T7W E12 202	ROOM TEMPERATURE THERMISTOR		1	1		TH21			
10	T7W B01 294	ADDRESS BOARD		1	1		A.B			
11	T7W E00 304	ADDRESS CABLE		1	1					
12	T7W 512 716	TERMINAL BLOCK	2P (M1, M2)	1	1		TB5			
13	T7W E05 716	TERMINAL BLOCK	3P (L, N, $\ominus$ )	1	1		TB2			
14	—	ELECTRICAL BOX		1	1	(BG00J285G24)				
15	T7W E03 313	POWER BOARD		1	1		P.B			
16	R01 H17 310	INDOOR CONTROLLER BOARD		1	1		M.B			
17	R01 22A 105	RUBBER MOUNT		2	2					
18	R01 E38 202	PIPE TEMPERATURE THERMISTOR	GAS	1	1		TH23			
19	T7W E06 202	PIPE TEMPERATURE THERMISTOR	LIQUID	1	1		TH22			
20	T7W E11 762	FAN MOTOR	PS4V17-KA	1	1		MF			
21	R01 22A 114	LINE FLOW FAN		1	1					
22	R01 005 103	SLEEVE BEARING		1	1					
23	R01 22A 102	BEARING MOUNT		1	1					
24	—	REMOTE CONTROLLER	PAR-21MAA	1	1		R.B			

**HEAT EXCHANGER PARTS**  
**PKFY-P20VAM-E**  
**PKFY-P25VAM-E**



No.	Parts No.	Parts Name	Specifications	Q'ty / set		Remarks (Drawing No.)	Wiring Diagram Symbol	Recom- mended Q'ty	Price	
				PKFY- P20VAM-E	PKFY- P25VAM-E				Unit	Amount
1	R01 H58 480	HEAT EXCHANGER		1						
	R01 H59 480	HEAT EXCHANGER			1					
2	R01 E03 470	CONNECT PIPE		1	1					
3	R01 E63 401	LINEAR EXPANSION VALVE		1	1		LEV			

**PANEL PARTS**  
**PKFY-P20VAM-E**  
**PKFY-P25VAM-E**

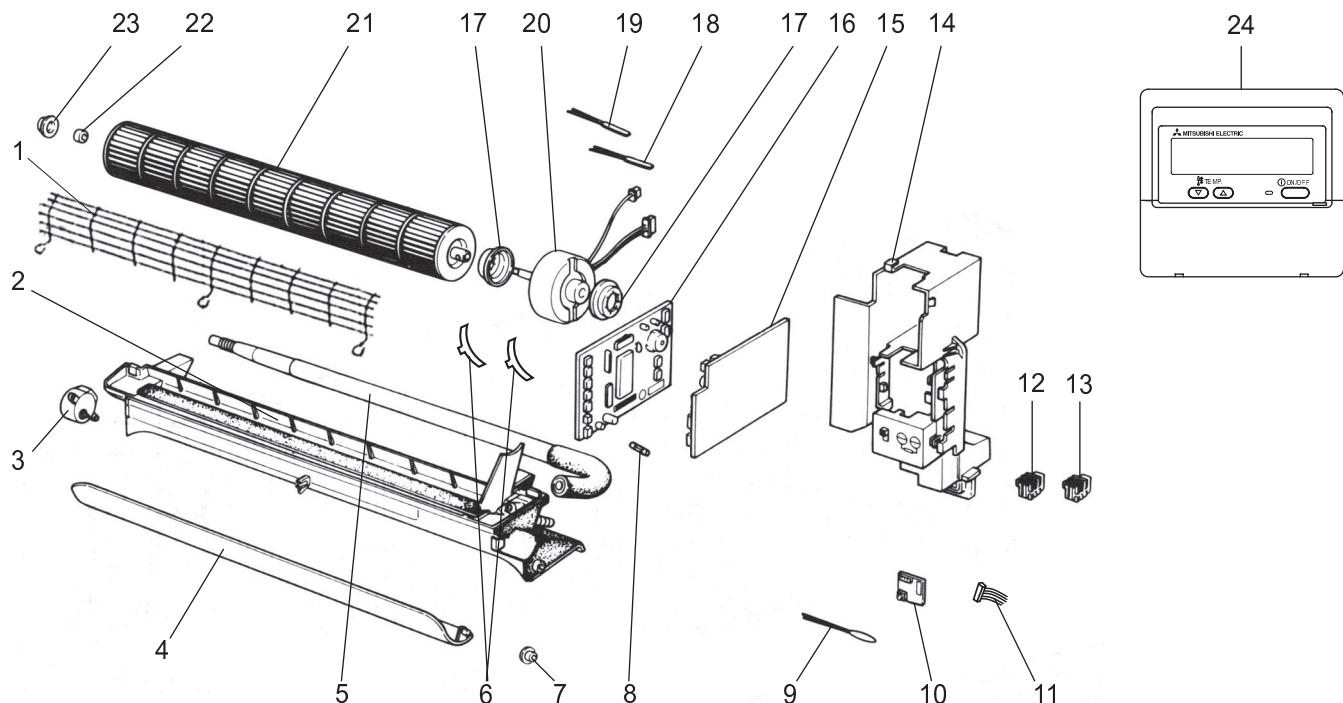


Part number that is circled is not shown in the figure.

No.	RoHS	Parts No.	Parts Name	Specifications	Q'ty / set	Remarks (Drawing No.)	Wiring Diagram Symbol	Recom- mended Q'ty	Price	
					PKFY-P20VAM-E PKFY-P25VAM-E				Unit	Amount
1	G	R01 23A 635	BOX		1					
2	G	R01 23A 651	FRONT PANEL		1					
3	G	R01 23A 500	AIR FILTER		1					
4	G	R01 23A 691	INTAKE GRILLE		1					
5	G	R01 23A 096	SCREW CAP		1	3PCS/SET				
6	G	—	RECEIVING COVER		1	(DT25C174H03)				
7	G	R01 23A 054	GRILLE CATCH		1					
8	G	T7W A01 658	CORNER BOX		1					
9	G	R01 23A 808	BACK PLATE		1					
⑩	G	—	BRAND LABEL		1	(BC79R798H02)				

## ELECTRICAL PARTS

### PKFY-P20VAM-E PKFY-P25VAM-E

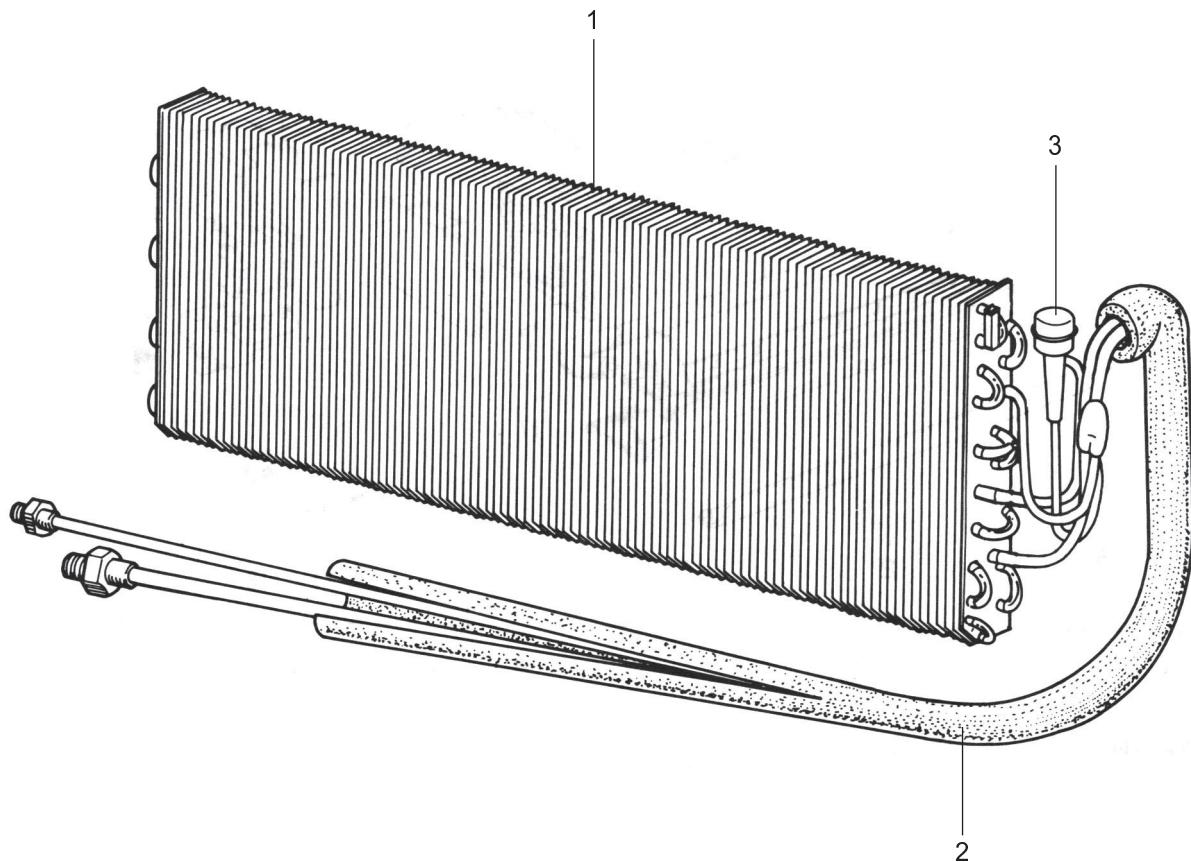


No.	RoHS	Parts No.	Parts Name	Specifications	Q'ty / set		Remarks (Drawing No.)	Wiring Diagram Symbol	Recom- mended Q'ty	Price	
					PKFY- P20VAM-E	PKFY- P25VAM-E				Unit	Amount
1	G	T7W 23A 675	FAN GUARD		1	1					
2	G	R01 23A 530	NOZZLE		1	1					
3	G	R01 23A 223	VANE MOTOR		1	1		MV			
4	G	R01 23A 002	AUTO VANE		1	1					
5	G	R01 23A 527	DRAIN HOSE		1	1					
6	G	R01 23A 126	MOTOR BAND	SET (LEFT, RIGHT)	1	1					
7	G	R01 08Y 092	VANE SLEEVE		1	1					
8	G	R01 E06 239	FUSE	250V 6.3A	1	1		FUSE			
9	G	R01 H06 202	ROOM TEMPERATURE THERMISTOR		1	1		TH21			
10	G	T7W E01 294	ADDRESS BOARD		1	1		A.B			
11	G	T7W E04 304	ADDRESS CABLE		1	1					
12	G	T7W E33 716	TERMINAL BLOCK	2P (M1, M2)	1	1		TB5			
13	G	T7W E34 716	TERMINAL BLOCK	3P (L, N, ⊕)	1	1		TB2			
14	G	—	ELECTRICAL BOX		1	1	(BG00J285G24)				
15	G	T7W E28 313	POWER BOARD		1	1		P.B			
16	G	R01 H94 310	INDOOR CONTROLLER BOARD		1	1		M.B			
17	G	R01 23A 105	RUBBER MOUNT		2	2					
18	G	R01 H14 202	PIPE TEMPERATURE THERMISTOR	GAS	1	1		TH23			
19	G	R01 H05 202	PIPE TEMPERATURE THERMISTOR	LIQUID	1	1		TH22			
20	G	T7W 23A 762	FAN MOTOR	PS4V17-KA	1	1		MF			
21	G	R01 23A 114	LINE FLOW FAN		1	1					
22	G	R01 E04 103	SLEEVE BEARING		1	1					
23	G	R01 23A 102	BEARING MOUNT		1	1					
24	G	—	REMOTE CONTROLLER	PAR-21MAA	1	1		R.B			

## HEAT EXCHANGER PARTS

PKFY-P20VAM-E

PKFY-P25VAM-E



No.	RoHS	Parts No.	Parts Name	Specifications	Q'ty / set		Remarks (Drawing No.)	Wiring Diagram Symbol	Recom- mended Q'ty	Price	
					PKFY- P20VAM-E	PKFY- P25VAM-E				Unit	Amount
1	G	R01 J37 480	HEAT EXCHANGER		1						
	G	R01 J38 480	HEAT EXCHANGER			1					
2	G	R01 E04 470	CONNECT PIPE		1	1					
3	G	R01 H05 401	LINEAR EXPANSION VALVE		1	1	LEV				

# CITY MULTI



**mitsubishi electric corporation**

HEAD OFFICE : TOKYO BLDG., 2-7-3, MARUNOUCHI, CHIYODA-KU, TOKYO100-8310, JAPAN

©Copyright 2004 MITSUBISHI ELECTRIC ENGINEERING CO., LTD.  
Distributed in Jul. 2006 No. OC309 REVISED EDITION-A PDF 8  
Distributed in Apr. 2004 No. OC309 PDF 9  
Made in Japan

New publication, effective Jul. 2006  
Specifications subject to change without notice