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 No. OC355
 REVISED EDITION-D

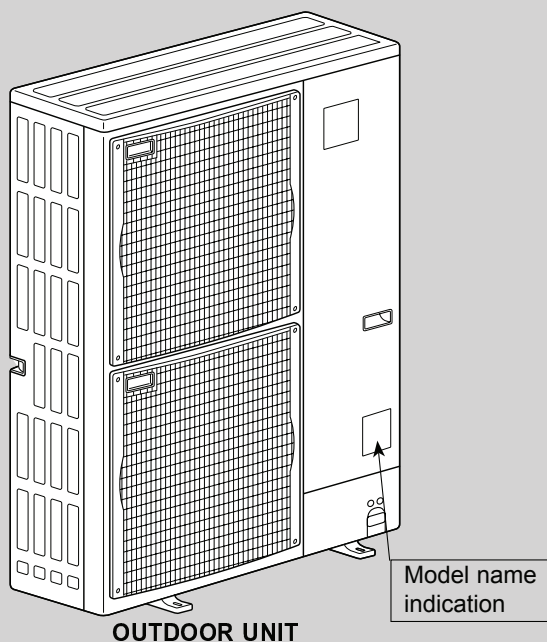

TECHNICAL & SERVICE MANUAL

[Model name] <Outdoor unit>	[Service Ref.]
PUMY-P100YHM	PUMY-P100YHM
PUMY-P100YHMA	PUMY-P100YHM ₁
PUMY-P125YHM	PUMY-P100YHMA
PUMY-P125YHMA	PUMY-P125YHM
PUMY-P140YHM	PUMY-P125YHM ₁
PUMY-P140YHMA	PUMY-P125YHMA
PUMY-P100YHMA-BS	PUMY-P140YHM
PUMY-P125YHMA-BS	PUMY-P140YHM ₁
PUMY-P140YHMA-BS	PUMY-P140YHMA
	PUMY-P100YHMA-BS
	PUMY-P125YHMA-BS
	PUMY-P140YHMA-BS

Revision:

- PUMY-P100/125/140YHMA-BS are added in REVISED EDITION-D.
- Some descriptions have been modified.

- Please void OC355 REVISED EDITION-C.



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NOTE :

- This service manual describes technical data of outdoor unit. As for indoor units, refer to its service manual.
- RoHS compliant products have <G> mark on spec name plate.
- For servicing of RoHS compliant products, refer to RoHS PARTS LIST.

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TECHNICAL CHANGES

PUMY-P100YHM₁ → PUMY-P100YHMA
 PUMY-P125YHM₁ → PUMY-P125YHMA
 PUMY-P140YHM₁ → PUMY-P140YHMA

- Compressor and oil have been changed.
 ANB33FDEMT → ANB33FDKMT
 Ester oil → Ether oil
- Electrical parts below have been changed.
 ①Controller board (MULTI.B.) ②Noise filter (N.F.)
- PEFY-P15 can be connected.

PUMY-P100YHM → PUMY-P100YHM₁
 PUMY-P125YHM → PUMY-P125YHM₁
 PUMY-P140YHM → PUMY-P140YHM₁

- The parts below have been changed.
 ①4-way valve and coil (21S4) ②Fan motor (MF1,MF2)
 ③Noise filter circuit board (N.F.) ④Multi controller circuit board (MULTI.B.)

2

SAFETY PRECAUTION

2-1. CAUTIONS RELATED TO NEW REFRIGERANT

Cautions for units utilizing refrigerant R410A

Use new refrigerant pipes.

Avoid using thin pipes.

Make sure that the inside and outside of refrigerant piping is clean and it has no contamination such as sulfur hazardous for use, oxides, dirt, shaving particles, etc.
In addition, use pipes with specified thickness.

Contamination inside refrigerant piping can cause deterioration of refrigerant oil etc.

Store the piping to be used during installation indoors and keep both ends of the piping sealed until just before brazing. (Leave elbow joints, etc. in their packaging.)

If dirt, dust or moisture enters into refrigerant cycle, that can cause deterioration of refrigerant oil or malfunction of compressor.

Use ester oil, ether oil or alkylbenzene oil (small amount) as the refrigerant oil applied to flares and flange connections.

If large amount of mineral oil enters, that can cause deterioration of refrigerant oil etc.

Charge refrigerant from liquid phase of gas cylinder.

If the refrigerant is charged from gas phase, composition change may occur in refrigerant and the efficiency will be lowered.

Do not use refrigerant other than R410A.

If other refrigerant (R22 etc.) is used, chlorine in refrigerant can cause deterioration of refrigerant oil etc.

Use a vacuum pump with a reverse flow check valve.

Vacuum pump oil may flow back into refrigerant cycle and that can cause deterioration of refrigerant oil etc.

Use the following tools specifically designed for use with R410A refrigerant.

The following tools are necessary to use R410A refrigerant.

Tools for R410A	
Gauge manifold	Flare tool
Charge hose	Size adjustment gauge
Gas leak detector	Vacuum pump adaptor
Torque wrench	Electronic refrigerant charging scale

Keep the tools with care.

If dirt, dust or moisture enters into refrigerant cycle, that can cause deterioration of refrigerant oil or malfunction of compressor.

Do not use a charging cylinder.

If a charging cylinder is used, the composition of refrigerant will change and the efficiency will be lowered.

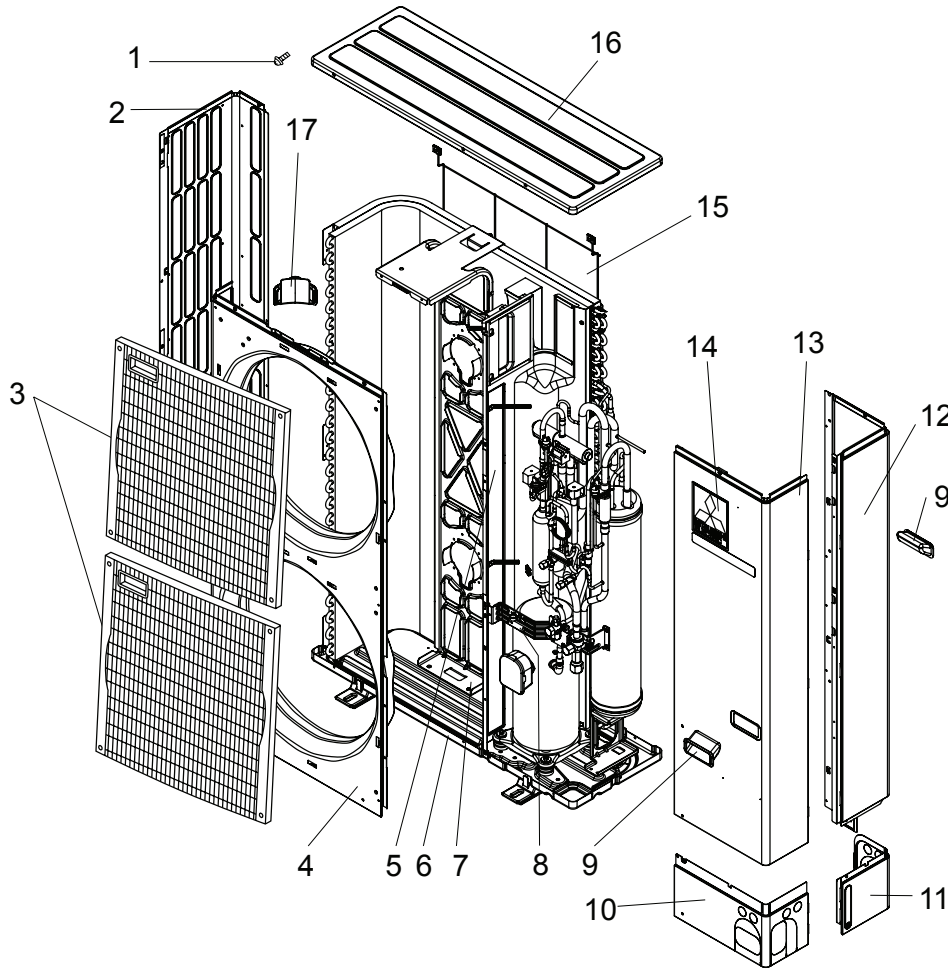
Ventilate the room if refrigerant leaks during operation. If refrigerant comes into contact with a flame, poisonous gases will be released.

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PARTS LIST (non-RoHS compliant)

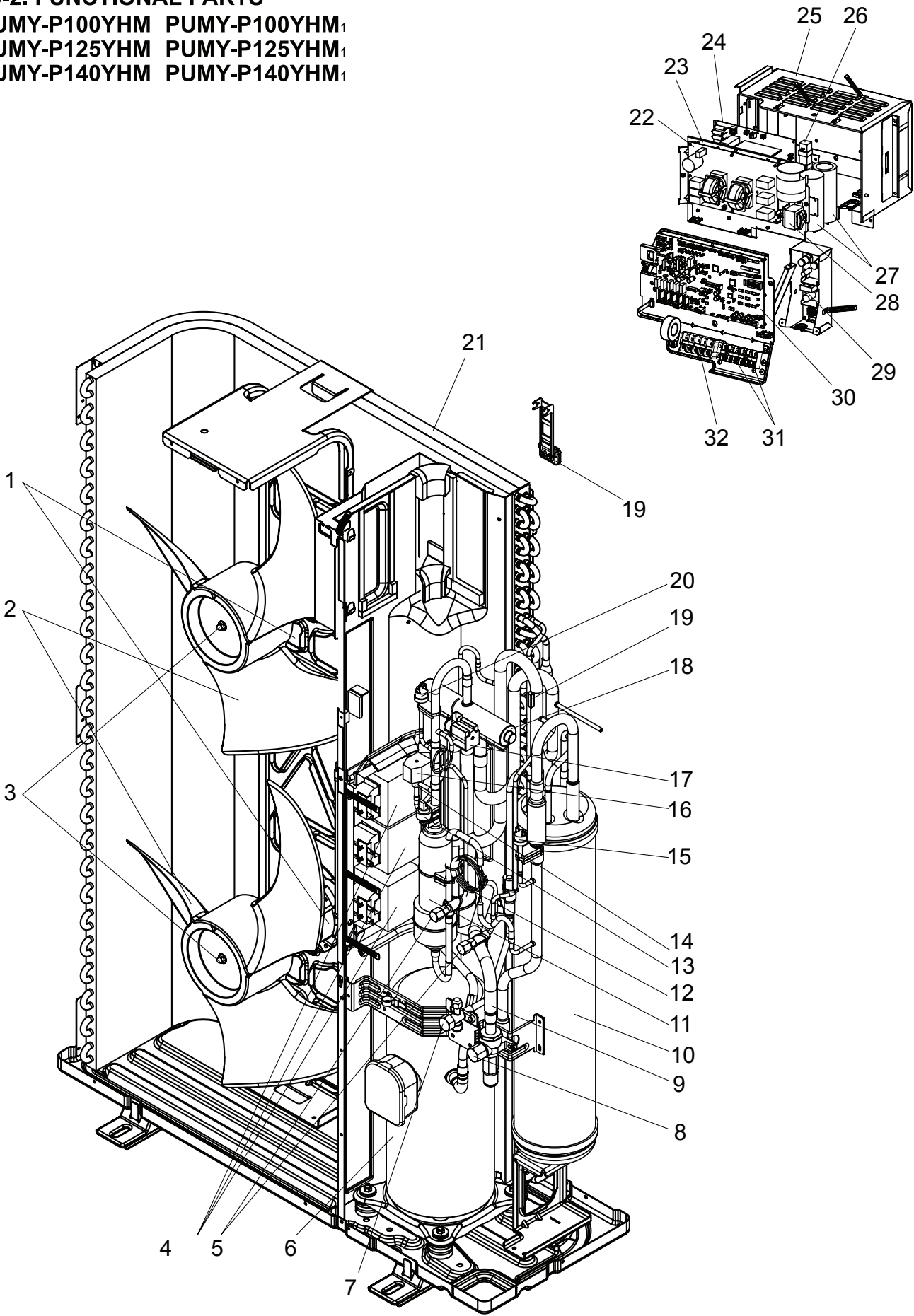
13-1. STRUCTURAL PARTS

PUMY-P100YHM PUMY-P125YHM PUMY-P140YHM
PUMY-P100YHM₁ PUMY-P125YHM₁ PUMY-P140YHM₁



No.	Part No.	Part Name	Specification	Q'ty/set		Remarks (Drawing No.)	Wiring Diagram Symbol	Recom- mended Q'ty
				PUMY-P100/125/140 YHM	YHM ₁			
1	-	F.ST SCREW	(5×10)	38	38	(DG12F536H10)		
2	R01 E02 662	SIDE PANEL (L)		1				
	T7W E02 662	SIDE PANEL (L)			1			
3	T7W E02 691	FAN GRILLE		2	2			
4	T7W E02 667	FRONT PANEL		1	1			
5	-	SEPARATOR		1	1	(BK00C409G05)		
6	R01 E14 686	BASE ASSY		1	1			
7	R01 E25 130	MOTOR SUPPORT		1	1			
8	-	VALVE BED ASSY		1	1	(BK00C142G15)		
9	R01 30L 655	HANDLE		2	2			
10	R01 E00 658	COVER PANEL (FRONT)		1				
	R01 E13 658	COVER PANEL (FRONT)			1			
11	R01 E01 658	COVER PANEL (REAR)		1				
	R01 E11 658	COVER PANEL (REAR)			1			
12	R01 E24 661	SIDE PANEL (R)		1	1			
13	T7W E04 668	SERVICE PANEL		1	1			
14	-	LABEL (MITSUBISHI)		1	1	(DG79R130H01)		
15	R01 E01 698	REAR GUARD		1	1			
16	R01 E08 641	TOP PANEL		1	1			
17	R01 E00 655	HANDLE		1	1			

13-2. FUNCTIONAL PARTS
PUMY-P100YHM PUMY-P100YHM₁
PUMY-P125YHM PUMY-P125YHM₁
PUMY-P140YHM PUMY-P140YHM₁

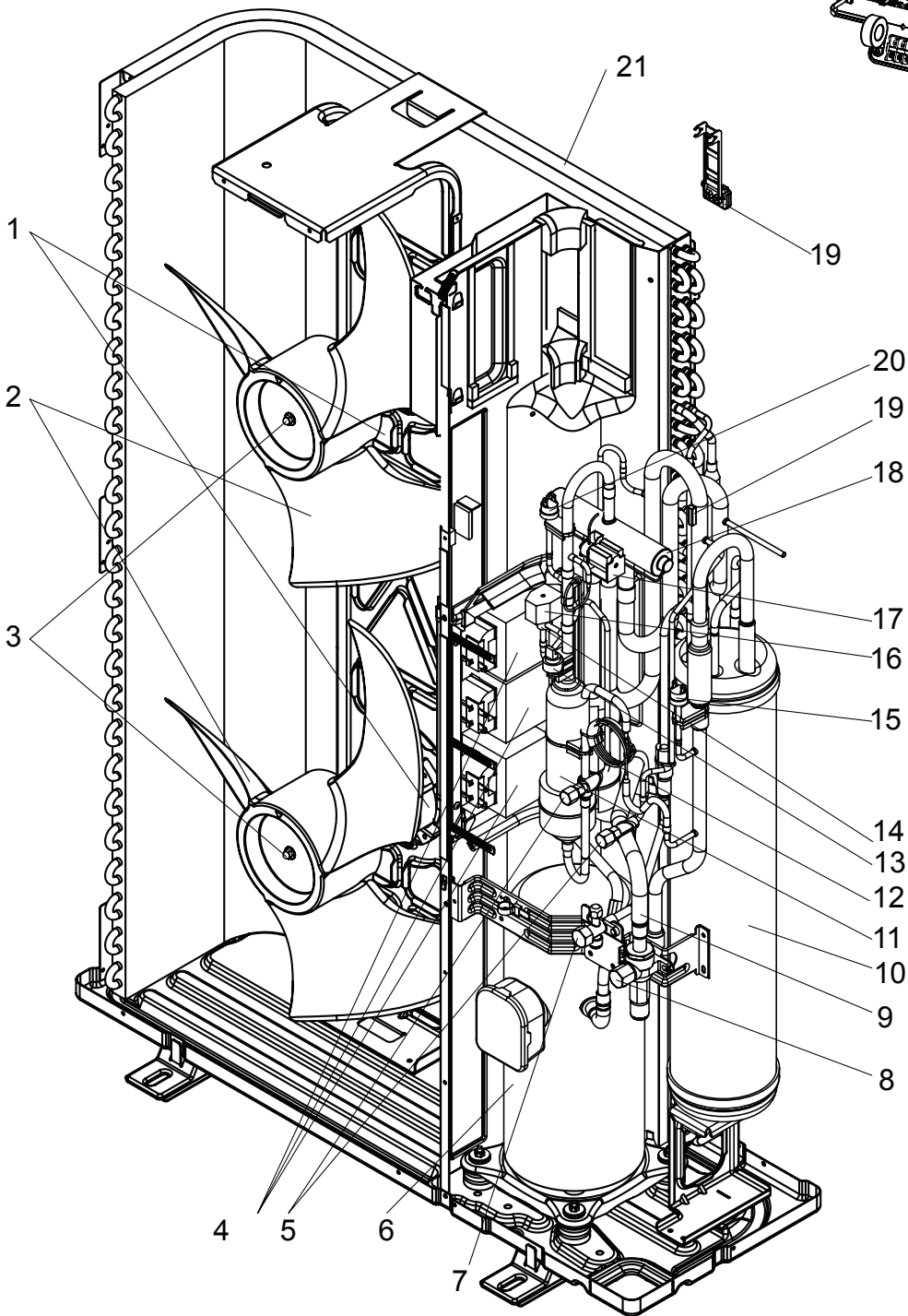
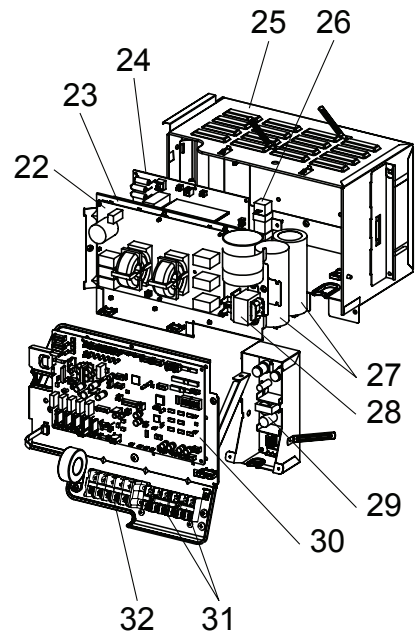


Part numbers that are circled are not shown in the figure.

No.	Part No.			Part Name	Specification	PUMY-P100/125/140		Remarks (Drawing No.)	Wiring Diagram Symbol	Recom- mended Q'ty
						YHM	YHM ₁			
1	R01	E41	221	FAN MOTOR		2			MF1,2	
	R01	E44	221	FAN MOTOR			2		MF1,2	
2	R01	E01	115	PROPELLER FAN		2	2			
3	R01	E02	097	NUT		2	2			
4	T7W	E07	259	REACTOR		3	3		ACL1,2,3	
5	R01	E06	413	CHARGE PLUG		2	2			
6	T97	410	747	COMPRESSOR	ANB33FDEMT Including RUBBER MOUNT	1	1		MC	
7	R01	E09	410	STOP VALVE	3/8	1	1			
8	R01	E09	411	BALL VALVE	5/8	1	1			
9	R01	E03	450	STRAINER		1	1			
10	R01	E35	440	ACCUMULATOR		1	1			
11	R01	E09	490	OIL SEPARATOR		1	1			
12	R01	E22	425	CAPILLARY TUBE		1	1	φ2.5×φ0.8×1000		
13	T7W	E04	208	H.P SENSOR		1	1		63HS	
14	R01	E09	428	BYPASS VALVE		1	1			
15	R01	25T	209	LOW PRESSURE SWITCH		1	1		63L	
16	T7W	E08	242	SOLENOID VALVE COIL <BYPASS VALVE>		1	1		SV1	
17	T7W	A01	242	SOLENOID COIL <FOUR-WAY VALVE>		1			21S4	
	T7W	E28	242				1		21S4	
18	R01	E24	403	FOUR-WAY VALVE		1				
	R01	E26	403					1		
19	T7W	E43	202	THERMISTOR		1	1		TH6,7	
20	R01	E04	208	HIGH PRESSURE SWITCH		1	1		63H	
21	T7W	E26	408	HEAT EXCHANGER		1	1			
22	T7W	E08	346	NOISE FILTER CIRCUIT BOARD		1			N.F.	
	T7W	E14	346					1		N.F.
23	T7W	E39	310	CONVERTER CIRCUIT BOARD		1	1		CONV.B.	
24	T7W	E26	313	POWER CIRCUIT BOARD		1	1		P.B.	
25		—		ELECTRICAL PARTS BOX		1	1	(BK00C410G06)		
26	R01	E08	233	RESISTOR		1	1		RS	
27	T7W	E03	254	MAIN SMOOTHING CAPACITOR		2	2		CB1, CB2	
28	T7W	E06	259	REACTOR		1	1		ACL4	
29	R01	E01	311	TRANSMISSION POWER BOARD		1	1		M-P.B.	
30	R01	H52	310	MULTI CONTROLLER CIRCUIT BOARD		1			MULTI.B.	
	R01	H76	310					1		MULTI.B.
31	T7W	E17	716	TERMINAL BLOCK	3P (M1, M2, S)	2	2		TB3, TB7	
32	T7W	E06	716	TERMINAL BLOCK	5P (L1,L2,L3,N,⊕)	1	1		TB1	
33	R01	E02	239	FUSE	250V 6.3A	2	2		F1,2	
34	R01	E66	202	THERMISTOR (OUTDOOR PIPE)		1	1		TH3	
35	T7W	E06	254	CAPACITOR		1	1		CK	
36	R01	17T	201	THERMISTOR (DISCHARGE)		1			TH4	
	R01	44L	201					1		TH4

14-1. FUNCTIONAL PARTS

PUMY-P100YHM ₁	PUMY-P125YHM ₁	PUMY-P140YHM ₁
PUMY-P100YHMA	PUMY-P125YHMA	PUMY-P140YHMA
PUMY-P100YHMA-BS	PUMY-P125YHMA-BS	PUMY-P140YHMA-BS



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

No.	ROHS	Part No.	Part Name	Specification	Q'ty/set			Remarks (Drawing No.)	Wiring Diagram Symbol	Recom- mended Q'ty
					PUMY-P100/125/140					
					YHM ₁	YHMA	YHMA-BS			
1	G	R01 E44 221	FAN MOTOR		2				MF1, 2	
	G	T7W E27 763	FAN MOTOR			2	2		MF1, 2	
2	G	R01 E08 115	PROPELLER FAN		2	2	2			
3	G	R01 E09 097	NUT		2	2	2			
4	G	T7W E12 259	REACTOR		3	3	3		ACL1,2,3	
5	G	R01 E14 413	CHARGE PLUG		2	2	2			
6	G	T97 415 747	COMPRESSOR	ANB33FDEMT	1			Including RUBBER MOUNTS	MC	
	G	T97 415 754	COMPRESSOR	ANB33FDKMT		1	1		MC	
7	G	R01 E13 410	STOP VALVE	3/8	1	1	1			
8	G	R01 E11 411	BALL VALVE	5/8	1	1	1			
9	G	R01 E06 450	STRAINER		1	1	1			
10	G	R01 E44 440	ACCUMULATOR		1	1	1			
11	G	R01 E12 490	OIL SEPARATOR		1	1	1			
12	G	R01 E26 425	CAPILLARY TUBE		1	1	1	φ2.5×φ0.8×1000		
13	G	R01 E07 208	H.P SENSOR		1	1	1		63HS	
14	G	R01 E14 428	BYPASS VALVE		1	1	1			
15	G	R01 E00 209	LOW PRESSURE SWITHCH		1	1	1		63L	
16	G	T7W E32 242	SOLENOID VALVE COIL(BYPASS VALVE)		1				SV1	
	G	R01 E57 242	SOLENOID VALVE COIL(BYPASS VALVE)			1			SV1	
	G	T7W E51 242	SOLENOID VALVE COIL(BYPASS VALVE)				1		SV1	
17	G	T7W E28 242	SOLENOID COIL(FOUR-WAY VALVE)		1				21S4	
	G	R01 E58 242	SOLENOID COIL(FOUR-WAY VALVE)			1	1		21S4	
18	G	R01 E26 403	FOUR-WAY VALVE		1					
	G	R01 E32 403	FOUR-WAY VALVE			1	1			
19	G	R01 E94 202	THERMISTOR		1	1	1		TH6, 7	
20	G	R01 E06 208	HIGH PRESSURE SWITCH		1	1	1		63H	
21	G	T7W E39 408	HEAT EXCHANGER		1	1	1			
22	G	T7W E23 346	NOISE FILTER CIRCUIT BOARD		1	1	1		N.F.	
23	G	T7W E54 310	CONVERTER CIRCUIT BOARD		1				CONV.B.	
	G	T7W E63 310	CONVERTER CIRCUIT BOARD			1	1		CONV.B.	
24	G	T7W E32 313	POWER CURCUIT BOARD		1				P.B.	
	G	T7W E42 313	POWER CURCUIT BOAR			1	1		P.B.	
25	G	—	ELECTRICAL PARTS BOX		1	1	1	(BK00C410G08)		
26	G	R01 E10 233	RESISTOR		1	1	1		RS	
27	G	R01 E02 254	MAIN SMOOTHING CAPACITOR		2				CB1,CB2	
	G	T7W E21 255	MAIN SMOOTHING CAPACITOR			2	2		CB1,CB2	
28	G	T7W E11 259	REACTOR		1				ACL4	
	G	R01 E31 259	REACTOR			1	1		ACL4	
29	G	R01 E02 311	TRANSMISSION POWER BOARD		1	1	1		M-P.B.	
30	G	R01 H76 310	MULTI CONTROLLER CIRCUIT BOARD		1				MULTI.B.	
	G	R01 N56 310	CONTROLLER CIRCUIT BOARD			1	1		C.B.	
31	G	T7W E31 716	TERMINAL BLOCK	3P (M1, M2, S)	2				TB3,TB7	
	G	R01 E27 246	TERMINAL BLOCK	3P (M1, M2, S)		2	2		TB3,TB7	
32	G	T7W E30 716	TERMINAL BLOCK	5P (L1, L2, L3, N, 0)	1	1	1		TB1	
33	G	R01 E06 239	FUSE	250V 6.3A	2	2	2		F1, 2	
34	G	R01 H00 202	THERMISTOR (OUTDOOR PIPE)		1	1	1		TH3	
35	G	T7W E10 254	CAPACITOR		1	1	1		CK	
36	G	R01 E11 201	THERMISTOR (DISCHARGE)		1	1	1		TH4	

14-2. STRUCTURAL PARTS

PUMY-P100YHM₁

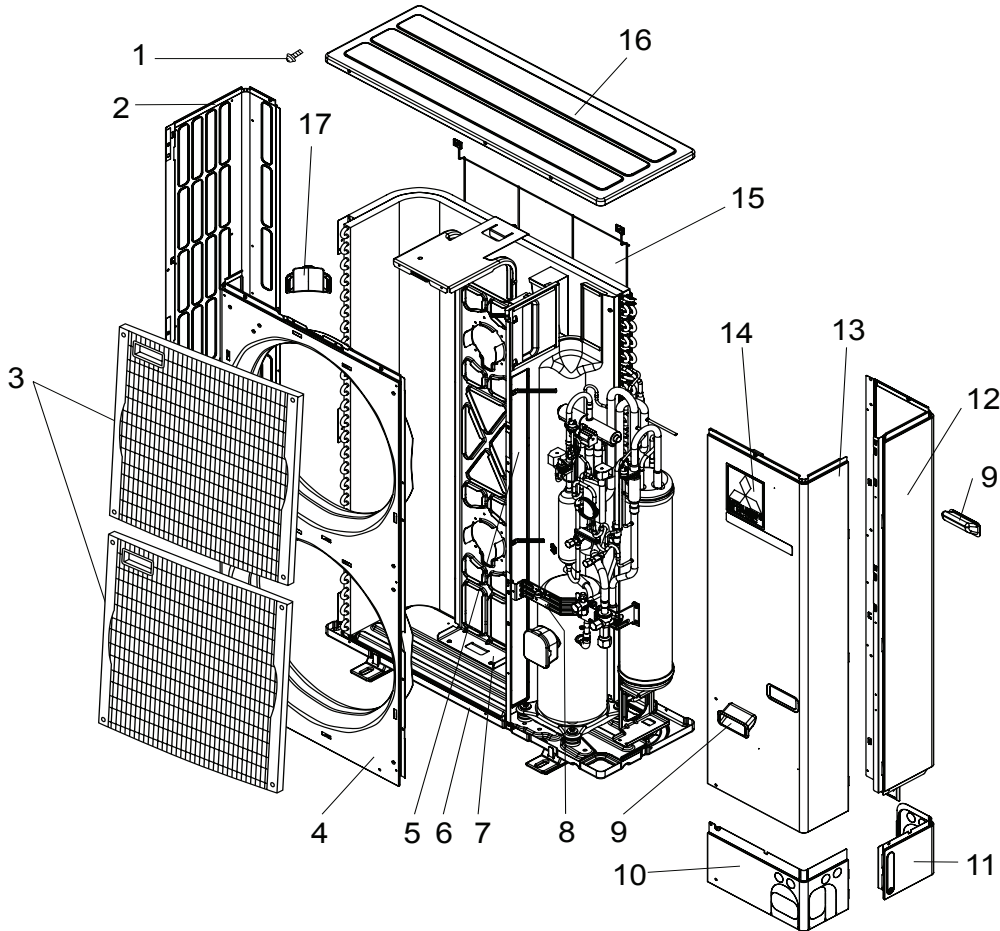
PUMY-P125YHM₁

PUMY-P140YHM₁

PUMY-P100YHMA(-BS)

PUMY-P125YHMA(-BS)

PUMY-P140YHMA(-BS)



No.	RoHS	Part No.	Part Name	Specification	Q'ty/set		Remarks (Drawing No.)	Wiring Diagram Symbol	Recom- mended Q'ty
					PUMY-P100/125/140				
					YMH ₁ /YHMA	YHMA-BS			
1	G	—	F.ST SCREW	(5×10)	38	38	(DG12F536H10)		
2	G	T7W E03 662	SIDE PANEL (L)		1				
	G	T7W E06 662	SIDE PANEL (L)			1			
3	G	T7W E03 691	FAN GRILLE		2	2			
4	G	T7W E06 667	FRONT PANEL		1	1			
5	G	—	SEPARATOR		1		(BK00C409G12)		
	G	—	SEPARATOR			1	(BK00C409G14)		
6	G	R01 E31 686	BASE ASSY		1				
	G	R01 E26 686	BASE ASSY			1			
7	G	R01 E27 130	MOTOR SUPPORT		1				
	G	R01 E19 130	MOTOR SUPPORT			1			
8	G	—	VALVE BED ASSY		1		(BK00C142G27)		
	G	—	VALVE BED ASSY			1	(BK00C142G29)		
9	G	R01 E01 655	HANDLE		2	2			
10	G	R01 E13 658	COVER PANEL (FRONT)		1				
	G	R01 E14 658	COVER PANEL (FRONT)			1			
11	G	R01 E11 658	COVER PANEL (REAR)		1				
	G	R01 E24 658	COVER PANEL (REAR)			1			
12	G	R01 E32 661	SIDE PANEL (R)		1				
	G	T7W E19 661	SIDE PANEL (R)			1			
13	G	T7W E09 668	SERVICE PANEL		1				
	G	T7W E13 668	SERVICE PANEL			1			
14	G	—	LABEL (MITSUBISHI)		1	1	(DG79R130H01)		
15	G	R01 E07 698	REAR GUARD		1	1			
16	G	R01 E15 641	TOP PANEL		1				
	G	R01 E28 641	TOP PANEL			1			
17	G	R01 E02 655	HANDLE		1	1			

DRAIN SOCKET

Part No.	PAC-SG61DS-E
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AIR OUTLET GUIDE

Part No.	PAC-SG59SG-E
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* Need 2 pieces.

AIR GUIDE

Part No.	PAC-SH63AG-E
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* Need 2 pieces.

DRAIN PAN

Part No.	PAC-SG64DP-E
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FILTER DRYER (For liquid line : ϕ 9.52)

Part No.	PAC-SG82DR-E
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* Only for R410A model (Don't use for R22 model.)

BRANCH PIPE (Joint)

Part No.	NUMBER OF BRANCHING POINTS
CMY-Y62-G-E	2
CMY-Y64-G-E	4
CMY-Y68-G-E	8

CITY MULTI™



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