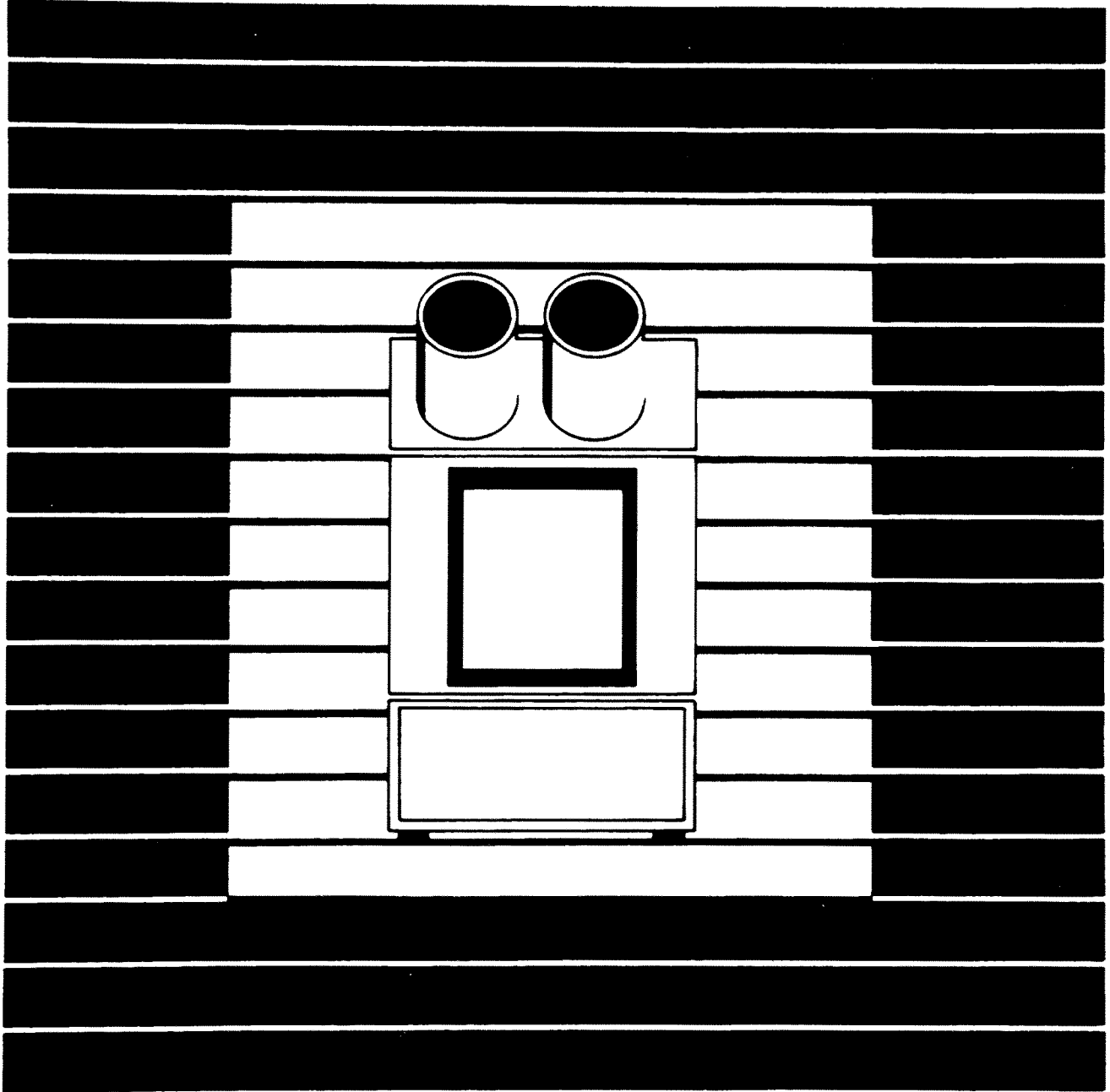


MOVINCOOL[®]

SPOT COOLING SYSTEMS

SERVICE MANUAL

10SFU-1 · 15SFU-1 · 20HFU-1



Manufactured by **NIPPONDENSO CO., LTD.**

Distributed by **NIPPONDENSO OF LOS ANGELES, INC.**

G5ZAP-02

FOREWORD

This manual has been published to service the Movin Cool 10SFU-1, 15SFU-1 and 20HFU-1.

The purpose of this manual is making up for the previous manual in modifying specification. The main functions of model 10SFU-1, 15SFU-1 and 20HFU-1 are the same as those of 10SFU, 15SFU and 20HFU. Please use the service manual RAC-043 and this service manual in servicing the model 10SFU-1, 15SFU-1 and 20HFU-1.

TABLE OF CONTENTS

1. GENERAL DESCRIPTION.....	1
2. MODIFIED PARTS	2
3. WIRING	5
4. PARTS CATALOG	11

© 1994 NIPPONDENSO CO.,LTD.

All Rights Reserved. This book, parts thereof, may not be reproduced or copied in any form without the written permission of the publisher.

1. GENERAL DESCRIPTION

The Movin Cool 10SFU-1, 15SFU-1 and 20HFU-1 are modified versions of models of 10SFU, 15SFU and 20HFU.

Compared to the original models, these three models have several additional functions, which are described below.

(1) AUTOMATIC RESTART AFTER POWER INTERRUPTION

A restart auxiliary has been added to the electrical system to allow automatic restarting of the system after a power interruption, eliminating the need for manual reset of the control switch.

(2) COMPRESSOR PROTECTION

There is a time delay circuit included in the electrical system to prevent a heavy load from being applied on the compressor motor when restarting the system. This delay is in effect any time when the compressor is turned on, by the control switch, thermostatic control, or resumption after black-out. (This delay is also in effect when automatic restart after power interruption operates.)

Delay time 75 ± 15 seconds

(3) TEMPERATURE CONTROL

The compressor is controlled by a thermostat which senses the return air temperature. This thermostat can be set to approximate temperatures by means of the thermostat dial, located below the control switch.

Dial Setting		1	2	3	4	5	6	7
Retrun Air Temperature (Approx.)	°C	32	29	27	24	21	18	16
	°F	90	85	80	75	70	65	60

(4) FAN MOTOR CONTROL SWITCH

The fan motor is controlled by a switch located in the control box. There are two positions:

- A. When the switch is set to the left, the fan motor will be controlled by the thermostat which controls the compressor. In this case, both the fan and the compressor will stop when the thermostatic control reads sufficiently low return air temperature. When the temperature rises again, the fan will restart automatically. The fan motor is not subject to the delay circuit which protects the compressor, so the fan will begin approximately 75 seconds before the compressor restarts.
- B. When the switch is set to the right, the fan motor will be controlled only by the control switch. As long as the unit is set to FAN or COOL, the fan will operate continuously.

(5) CONDENSATE PUMP KIT <OPTION>

These models come standard with a condensate tank, which collects the water that forms on the evaporator during normal cooling operation. If the unit is required to operate continuously without periodic emptying of this tank, a condensate pump may be needed. A condensate pump kit is available for models 10SFU-1, 15SFU-1 and 20HFU-1.

MODEL CPK1

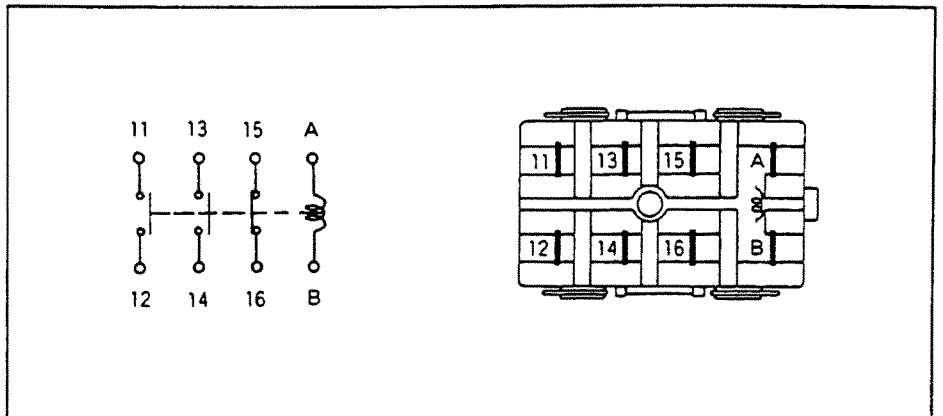
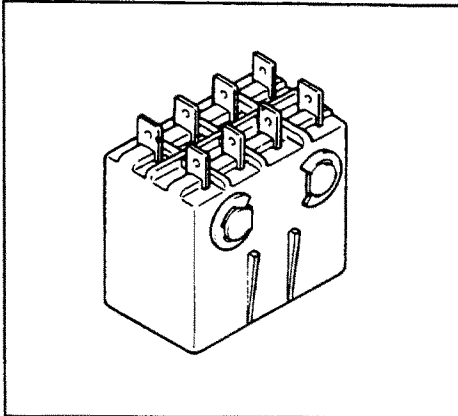
CAUTION

Because there is a built-in delay circuit to protect the compressor, the compressor will never start up immediately, regardless of the type of operation. These delays are part of the normal operation of models 10SFU-1, 15HFU-1 and 20HFU-1 (see paragraph (2) above). and should not be diagnosed as malfunctions.

2. MODIFIED PARTS

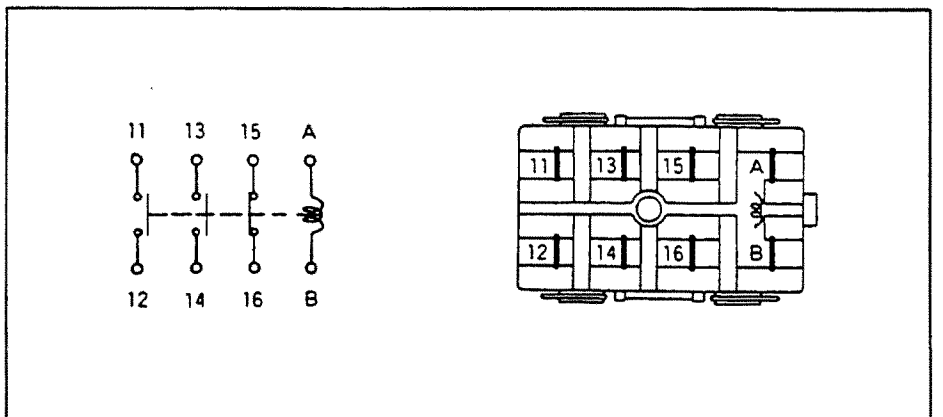
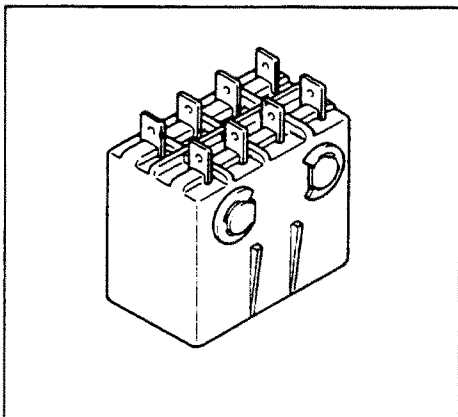
(1) COMPRESSOR MOTOR RELAY (For 10SFU-1)

RATED VOLTAGE AC 115V
 RATED CURRENT 20 amps
 UL Listed file No. E43028



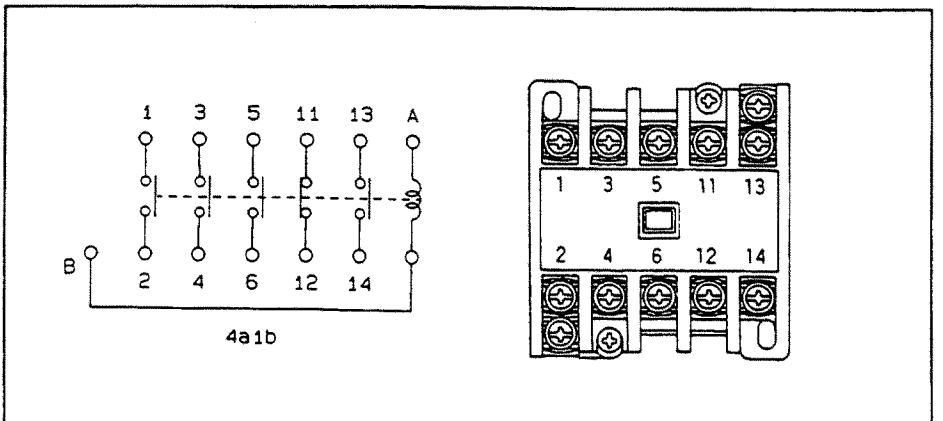
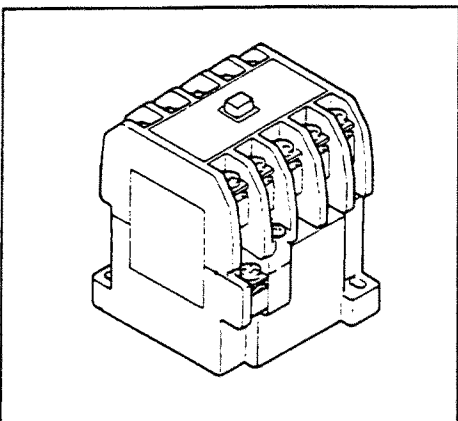
(2) COMPRESSOR MOTOR RELAY (For 15SFU-1)

RATED VOLTAGE AC 230V
 RATED CURRENT 10 amps
 UL Listed file No. E43028



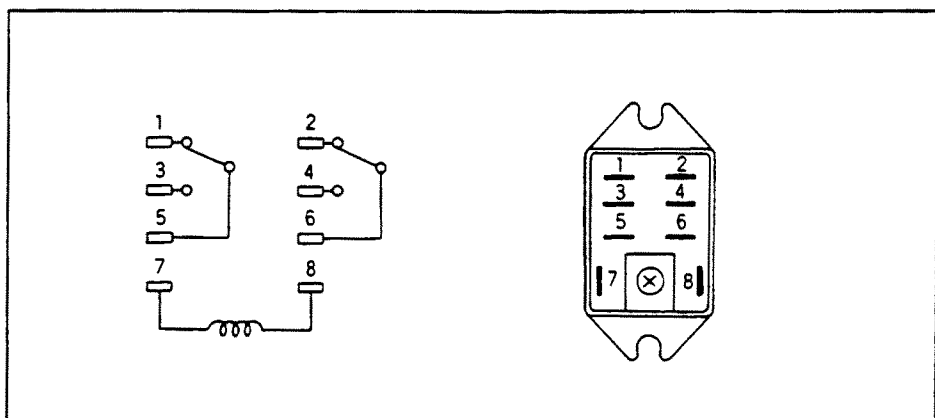
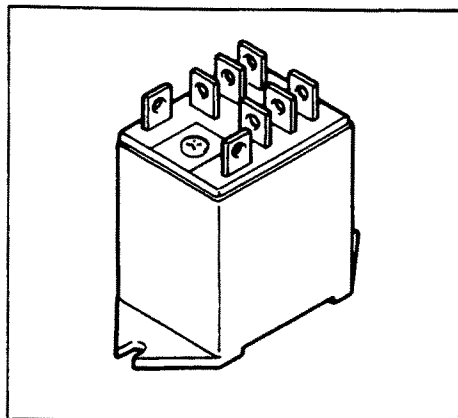
(3) COMPRESSOR MOTOR RELAY (For 20HFU-1)

RATED VOLTAGE AC 230V
 RATED CURRENT 30 amps
 UL Listed file No. E43028



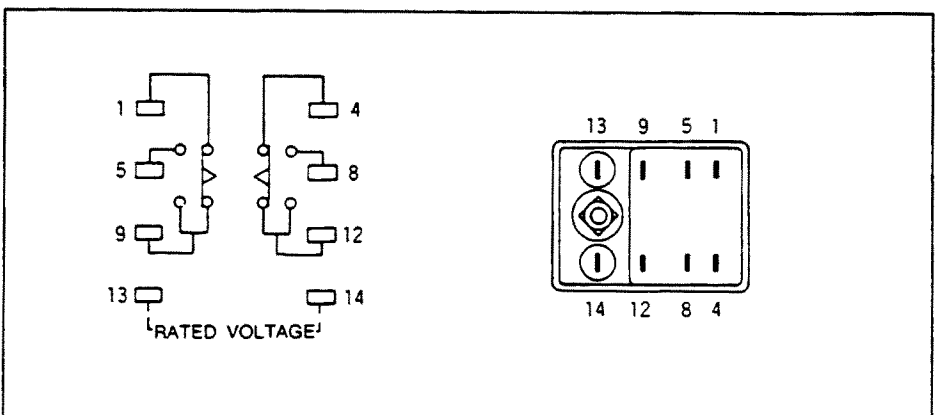
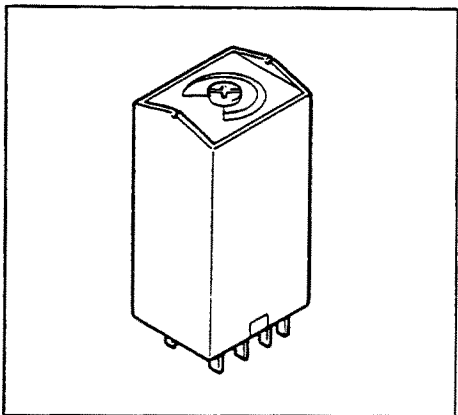
(4) RESTART AUXILIARY RELAY

RATED VOLTAGE AC 115V (For 10SFU-1) AC 230V (For 15SFU-1, 20HFU-1)
 RATED CURRENT 10 amps
 UL Listed file No. E43028



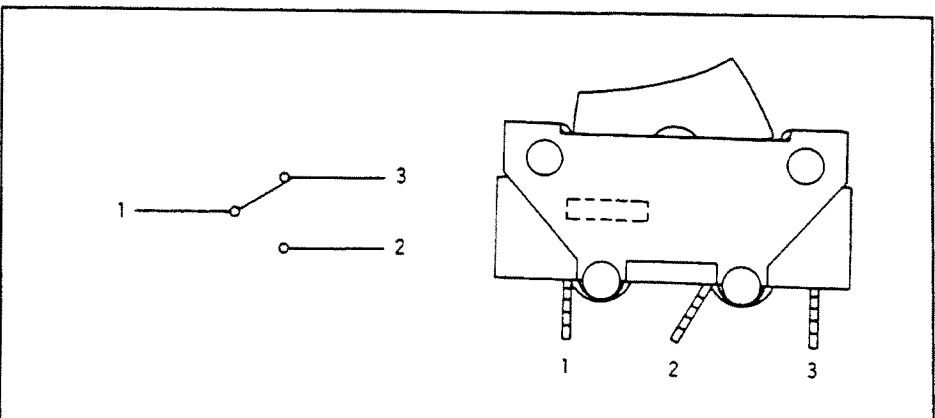
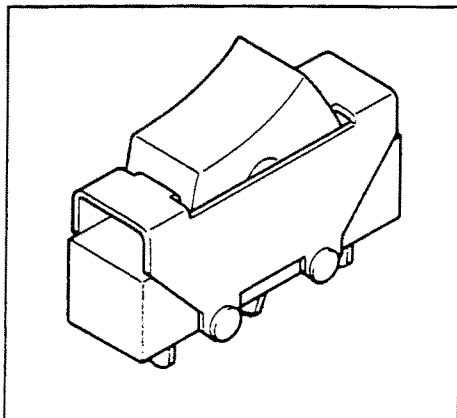
(5) TIME DELAY RELAY FOR COMPRESSOR

RATED VOLTAGE AC 115V (For 10SFU-1) AC 220V (For 15SFU-1, 20HFU-1)
 IN OPERATION 3 amps
 AFTER OPERATION 13 amps
 RELAY TIME 75±15sec.
 UL Listed file No. E43028



(6) FAN MODE CONTROL SWITCH (For 15SFU-1 AND 20HFU-1)

RATED VOLTAGE AC 250V
 RATED CURRENT 10 amps
 UL Listed file No. E35901



(7) THERMOSTAT

RATED VOLTAGE

AC 115V (For 10SFU-1) AC 220~240V (For 15SFU-1, 20HFU-1)

RATED CURRENT

8 amps (Power Factor $\text{COS } \rho = 1$, For 10SFU-1)

5 amps (Power Factor $\text{COS } \rho = 1$, For 15SFU-1, 20HFU-1)

OFF

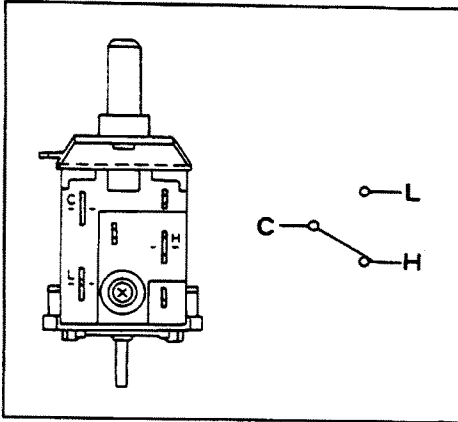
16 ± 1.5 (°C)

DIFF

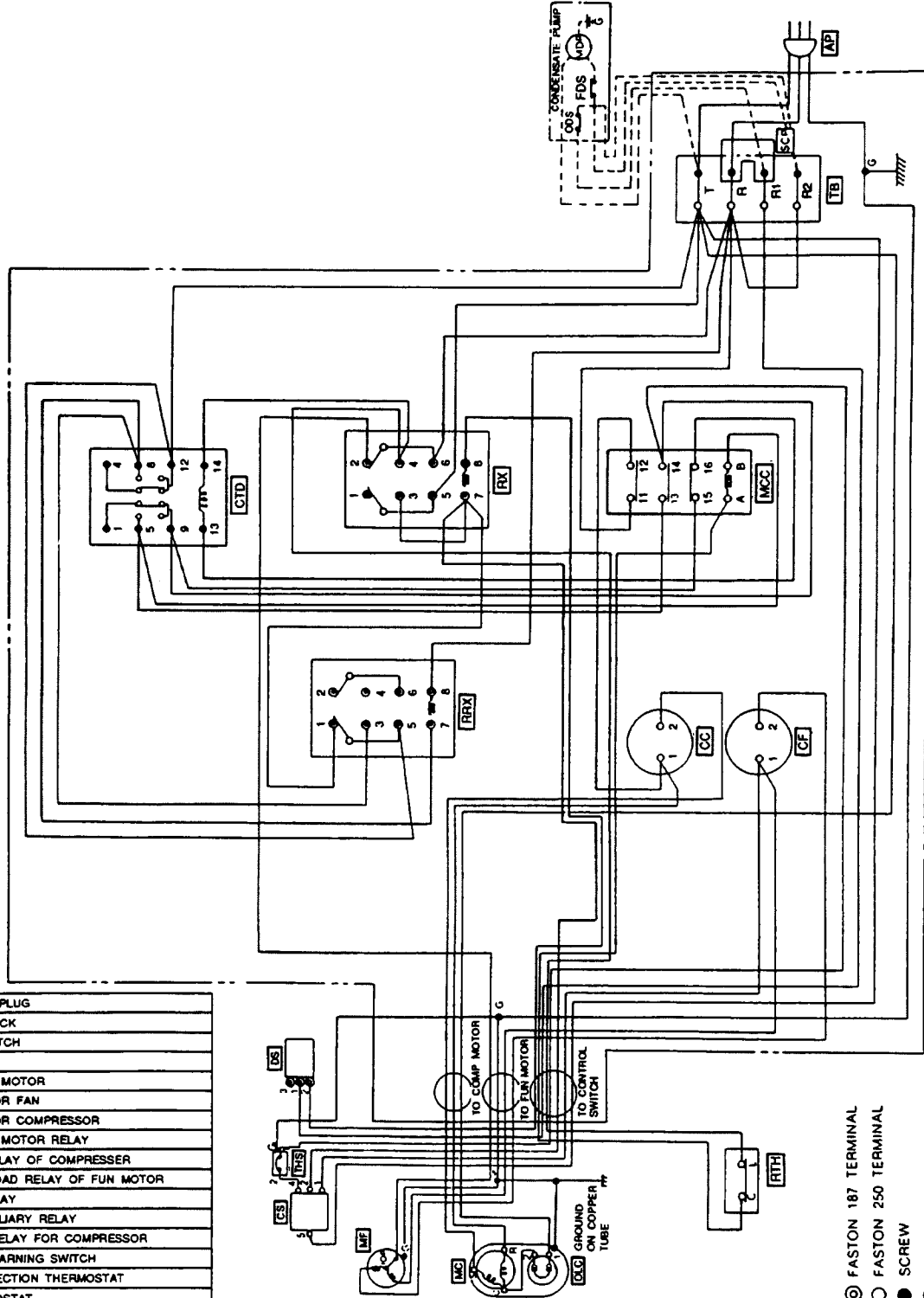
2.5 ± 1 (°C) (ON: 18.5 (°C))

UL Listed file No.

E43028



3. WIRING (1) 10SFU-1

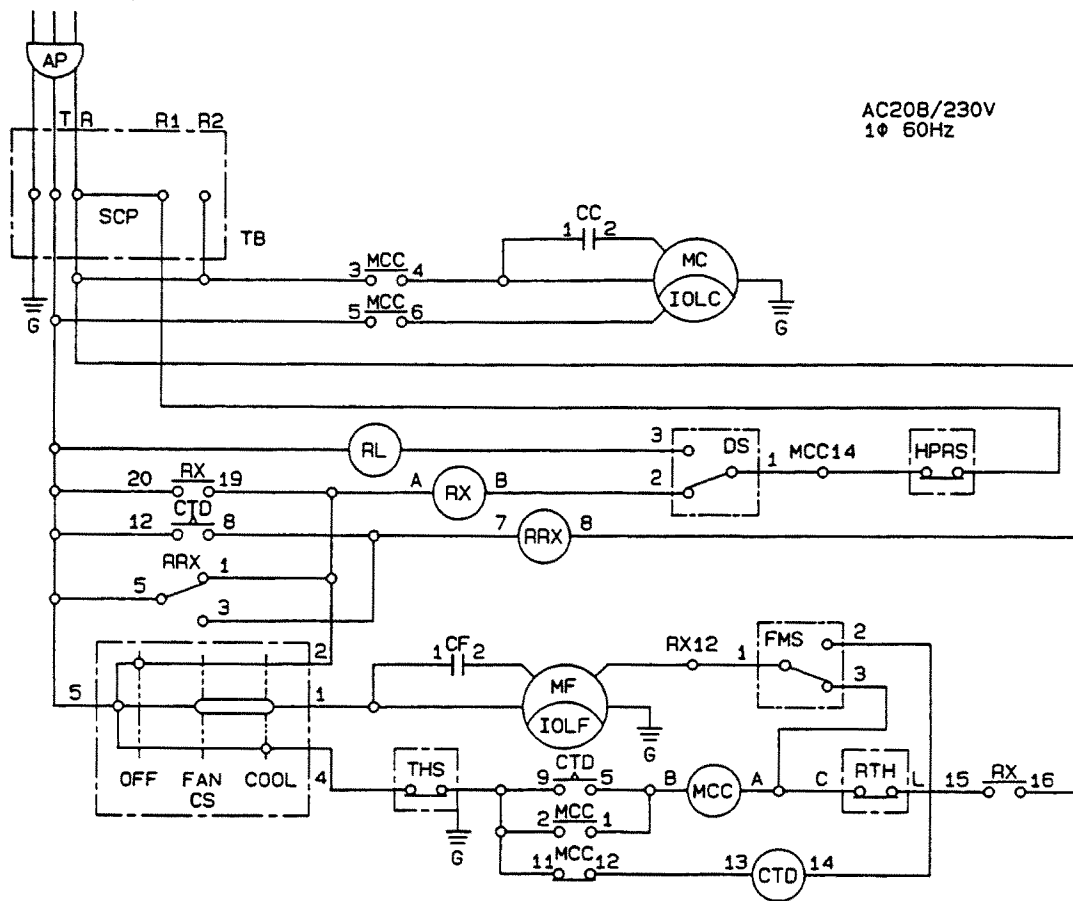


A P	ATTACHMENT PLUG
T B	TERMINAL BLOCK
C S	CONTROL SWITCH
M F	FUN MOTOR
M C	COMPRESSOR MOTOR
C F	CAPACITOR FOR FAN
C C	CAPACITOR FOR COMPRESSOR
M C C	COMPRESSOR MOTOR RELAY
O L C	OVERLOAD RELAY OF COMPRESSOR
I O L F	INNER OVERLOAD RELAY OF FUN MOTOR
R X	AUXILIARY RELAY
R R X	RESTART AUXILIARY RELAY
C T D	TIME DELAY RELAY FOR COMPRESSOR
D S	FULL DRAIN WARNING SWITCH
T H S	FREEZE PROTECTION THERMOSTAT
R T H	ROOM THERMOSTAT
S C P	SHORT-CIRCUIT PLATE
G	GROUNDING
(M O P)	(CONDENSATE PUMP MOTOR)
(F D S)	(DRAIN FLOAT SWITCH)
(O D S)	(DRAIN OVERFLOW SWITCH)

CAUTION

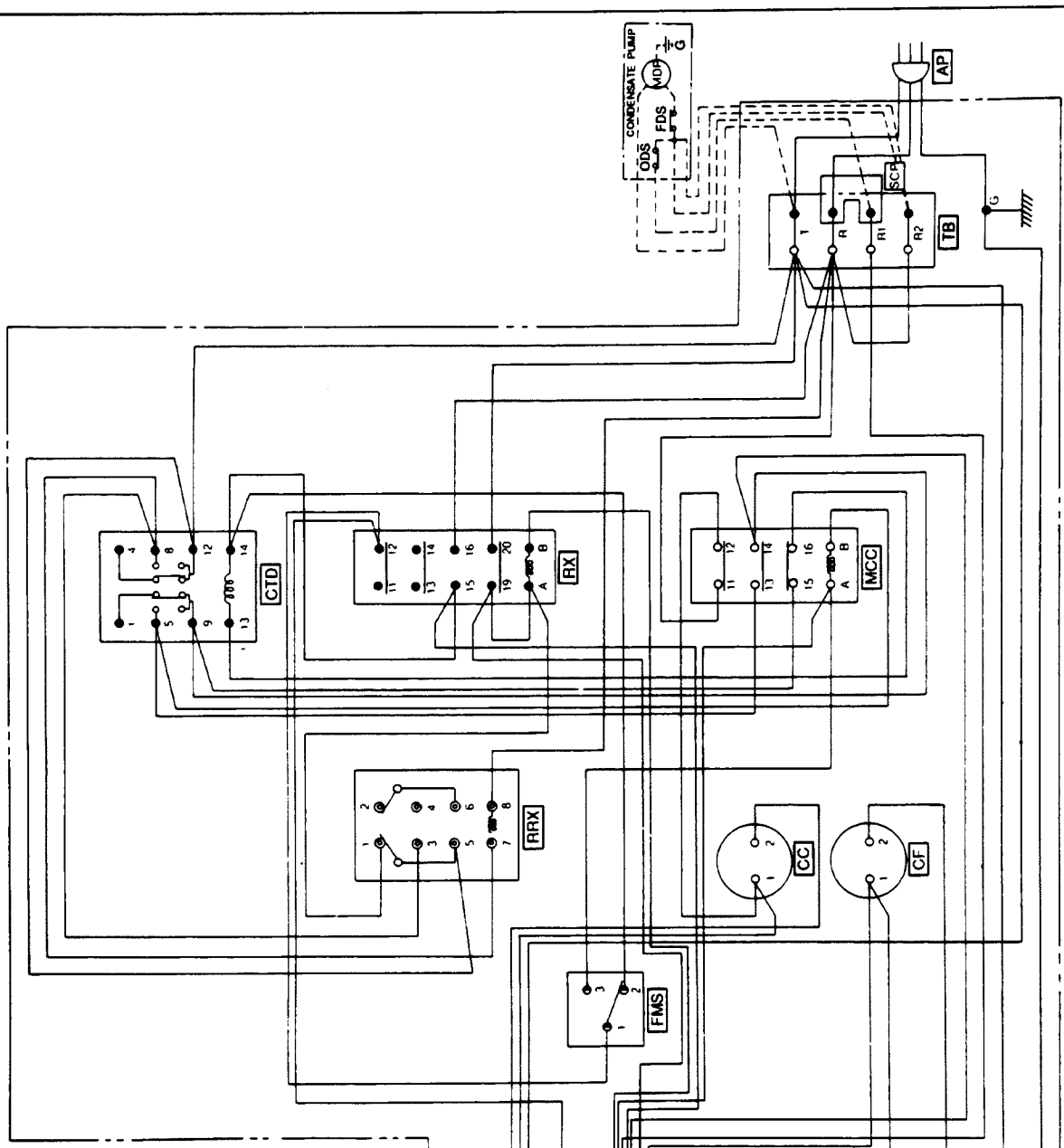
Surely detach the short-circuit plate(SCP)
In case of setting the Drain Pump(option)

- ⊙ FASTON 187 TERMINAL
- FASTON 250 TERMINAL
- SCREW
- SOLDER

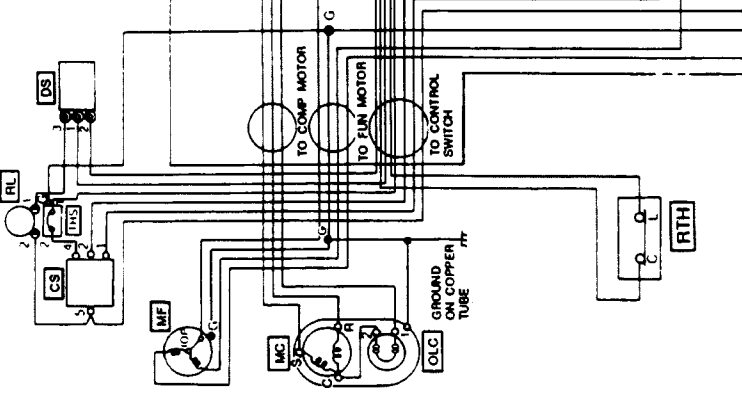


A P	ATTACHMENT PLUG
T B	TERMINAL BLOCK
C S	CONTROL SWITCH
F M S	FAN MODE SWITCH
M F	FAN MOTOR
M C	COMPRESSOR MOTOR
C F	CAPACITOR FOR FAN
C C	CAPACITOR FOR COMPRESSOR
M C C	COMPRESSOR MOTOR RELAY
I O L C	INNER OVERLOAD RELAY OF COMPRESSOR
I O L F	INNER OVERLOAD RELAY OF FAN MOTOR
R X	AUXILIARY RELAY
R R X	RESTART AUXILIARY RELAY
C T D	TIME DELAY RELAY FOR COMPRESSOR
D S	FULL DRAIN WARNING SWITCH
T H S	FREEZE PROTECTION THERMOSTAT
R T H	ROOM THERMOSTAT
H P R S	HIGH PRESSURE SWITCH
R L	DRAIN OVERFLOW LAMP
S C P	SHORT-CIRCUIT PLATE
G	GROUNDING

(2) 15SFU-1

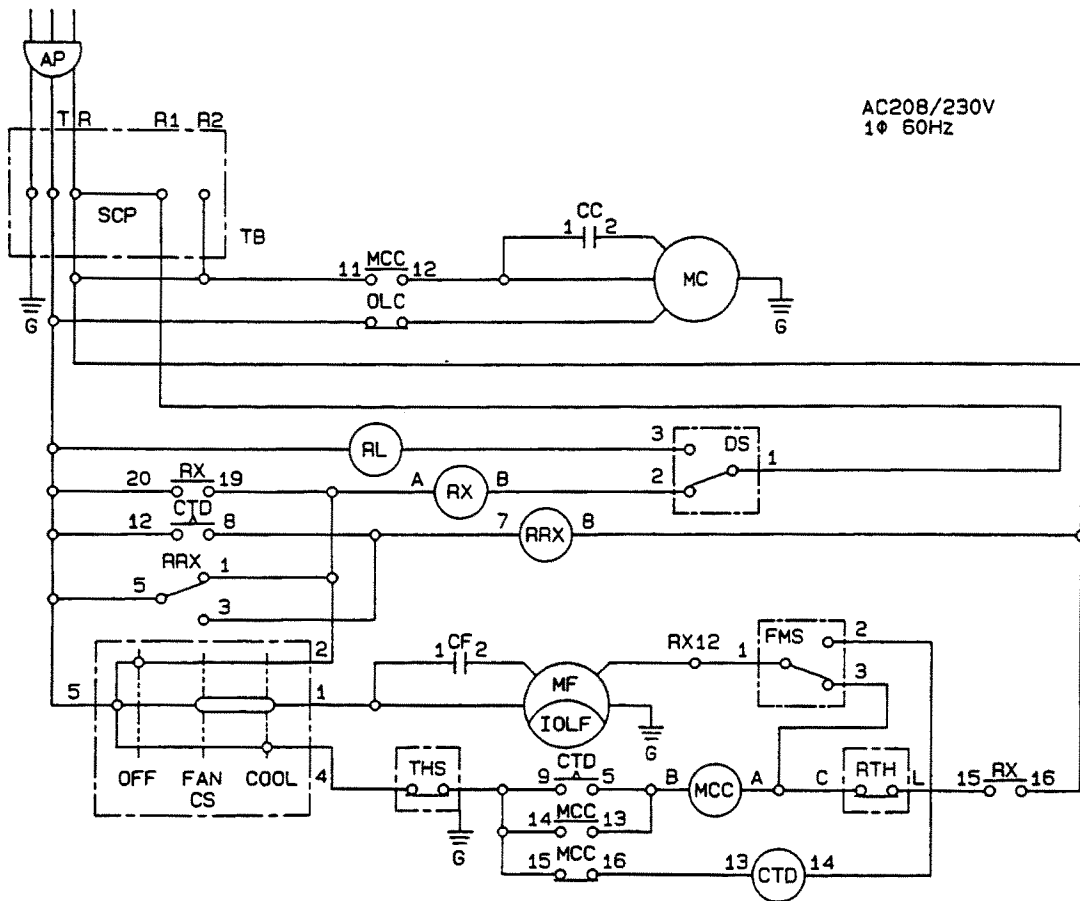


A P	ATTACHMENT PLUG
T B	TERMINAL BLOCK
C S	CONTROL SWITCH
F M S	FAN MODE SWITCH
M F	FUN MOTOR
M C	COMPRESSOR MOTOR
C F	CAPACITOR FOR FUN
C C	CAPACITOR FOR COMPRESSOR
M C C	COMPRESSOR MOTOR RELAY
O L C	OVERLARD RELAY OF COMPRESSOR
I O L F	INNER OVERLARD RELAY OF FUN MOTOR
R X	AUXILIARY RELAY
R R X	RESTART AUXILIARY RELAY
C T D	TIME DELAY RELAY FOR COMPRESSOR
D S	FULL DRAIN WARNING SWITCH
T H S	FREEZE PROTECTION THERMOSTAT
R T H	ROOM THERMOSTAT
R L	DRAIN OVERLOW LAMP
S C P	SHORT-CIRCUIT PLATE
G	GROUND
(M O P)	(CONDENSATE PUMP MOTOR)
(F D S)	(DRAIN FLOAT SWITCH)
(O D S)	(DRAIN OVERLOW SWITCH)



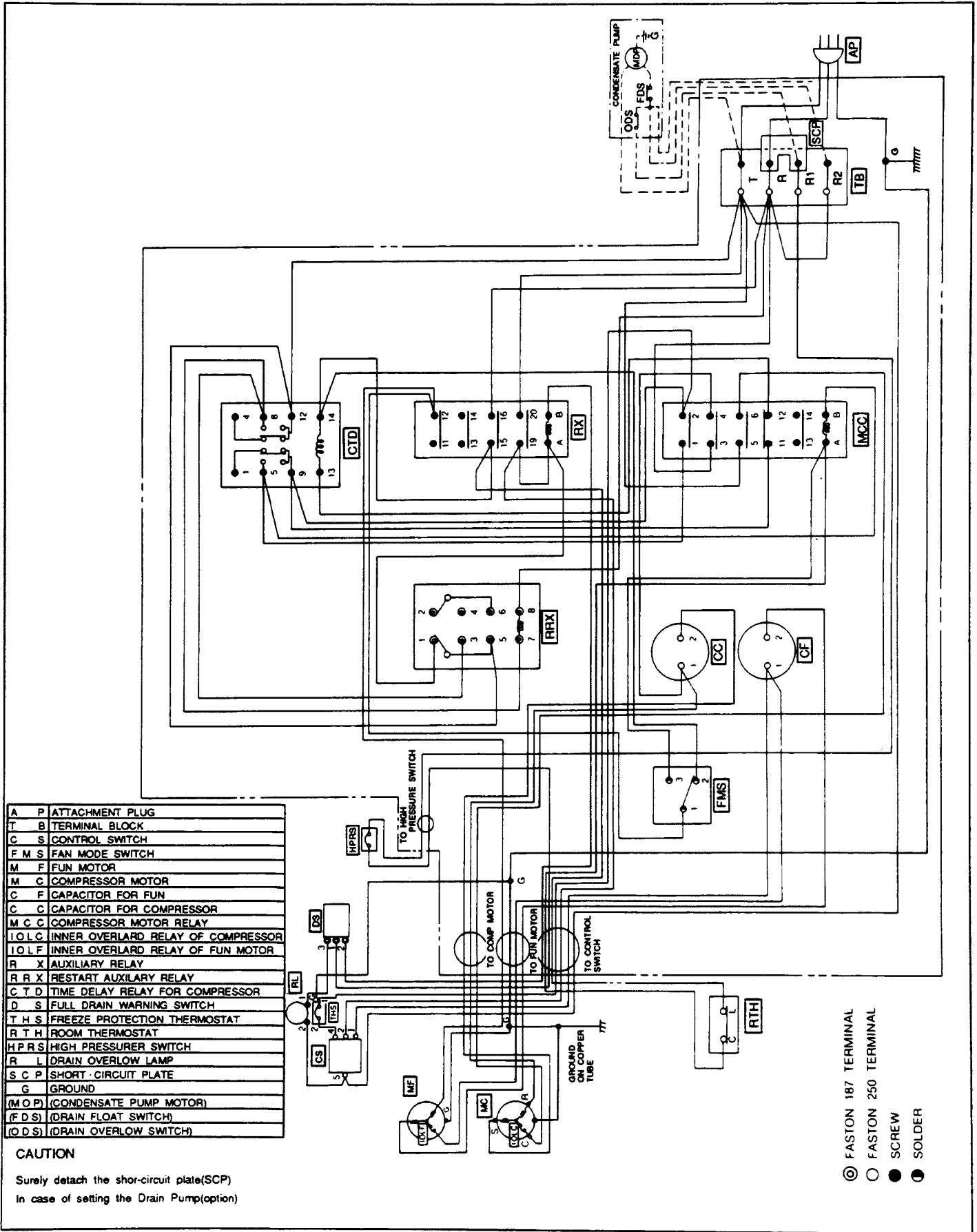
CAUTION
 Surely detach the short-circuit plate(SCP)
 In case of setting the Drain Pump(option)

- ⊙ FASTON 187 TERMINAL
- FASTON 250 TERMINAL
- SCREW
- SOLDER



A P	ATTACHMENT PLUG
T B	TERMINAL BLOCK
C S	CONTROL SWITCH
F M S	FAN MODE SWITCH
M F	FAN MOTOR
M C	COMPRESSOR MOTOR
C F	CAPACITOR FOR FAN
C C	CAPACITOR FOR COMPRESSOR
M C C	COMPRESSOR MOTOR RELAY
O L C	OVERLOAD RELAY OF COMPRESSOR
I O L F	INNER OVERLOAD RELAY OF FAN MOTOR
R X	AUXILIARY RELAY
R R X	RESTART AUXILIARY RELAY
C T D	TIME DELAY RELAY FOR COMPRESSOR
D S	FULL DRAIN WARNING SWITCH
T H S	FREEZE PROTECTION THERMOSTAT
R T H	ROOM THERMOSTAT
R L	DRAIN OVERFLOW LAMP
S C P	SHORT-CIRCUIT PLATE
G	GROUNDING

(3) 20HFU-1

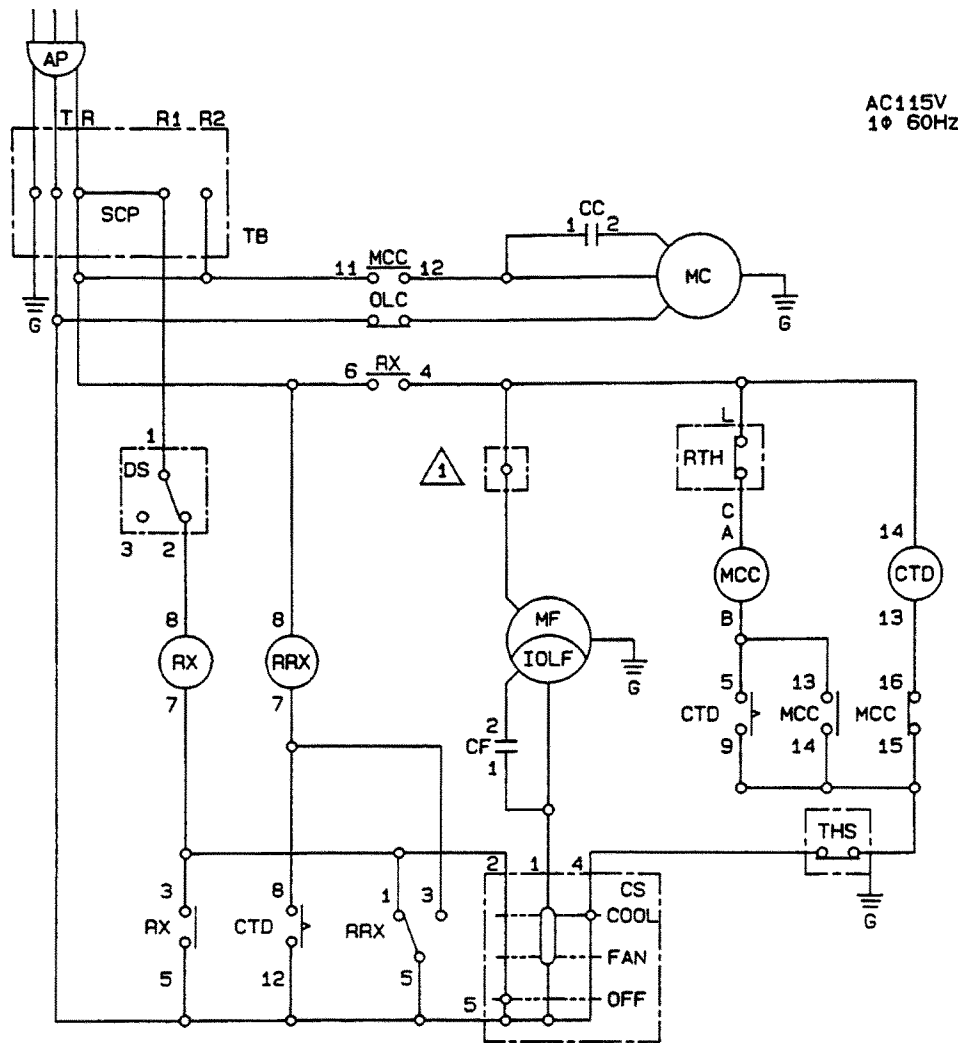


A P	ATTACHMENT PLUG
T B	TERMINAL BLOCK
C S	CONTROL SWITCH
F M S	FAN MODE SWITCH
M F	FUN MOTOR
M C	COMPRESSOR MOTOR
C F	CAPACITOR FOR FUN
C C	CAPACITOR FOR COMPRESSOR
M C C	COMPRESSOR MOTOR RELAY
I O L C	INNER OVERLOAD RELAY OF COMPRESSOR
I O L F	INNER OVERLOAD RELAY OF FUN MOTOR
R X	AUXILIARY RELAY
R R X	RESTART AUXILIARY RELAY
C T D	TIME DELAY RELAY FOR COMPRESSOR
D S	FULL DRAIN WARNING SWITCH
T H S	FREEZE PROTECTION THERMOSTAT
R T H	ROOM THERMOSTAT
H P R S	HIGH PRESSURER SWITCH
R L	DRAIN OVERLOW LAMP
S C P	SHORT-CIRCUIT PLATE
G	GROUND
(M O P)	(CONDENSATE PUMP MOTOR)
(F D S)	(DRAIN FLOAT SWITCH)
(O D S)	(DRAIN OVERLOW SWITCH)

CAUTION

Surely detach the shor-circuit plate(SCP)
In case of setting the Drain Pump(option)

- ⊙ FASTON 187 TERMINAL
- FASTON 250 TERMINAL
- SCREW
- ⦿ SOLDER

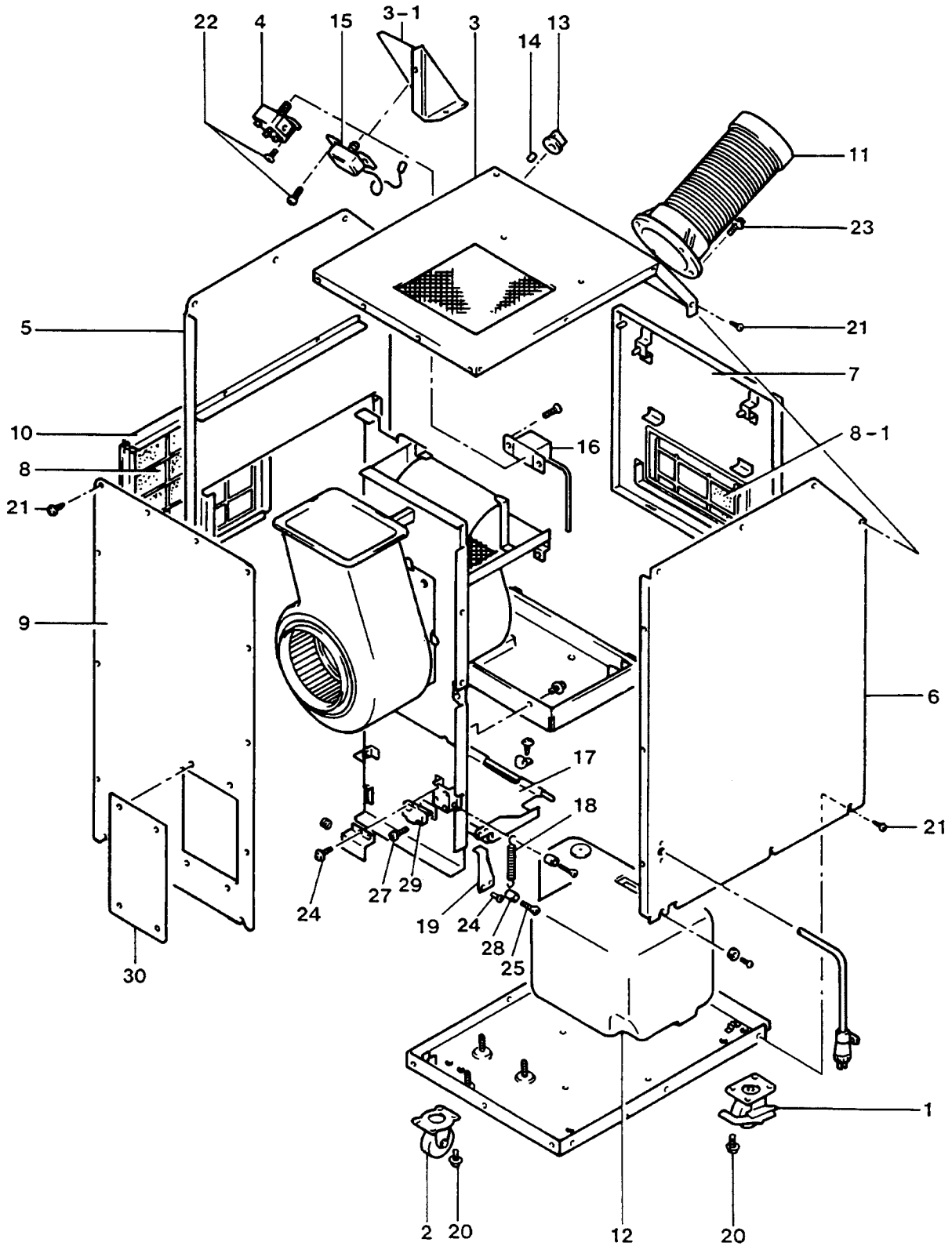


AC115V
1ϕ 60Hz

A P	ATTACHMENT PLUG
T B	TERMINAL BLOCK
C S	CONTROL SWITCH
M F	FAN MOTOR
M C	COMPRESSOR MOTOR
C F	CAPACITOR FOR FAN
C C	CAPACITOR FOR COMPRESSOR
MCC	COMPRESSOR MOTOR RELAY
OLC	OVERLOAD RELAY OF COMPRESSOR
IOLF	INNER OVERLOAD RELAY OF FAN MOTOR
R X	AUXILIARY RELAY
RRX	RESTART AUXILIARY RELAY
CTD	TIME DELAY RELAY FOR COMPRESSOR
D S	FULL DRAIN WARNING SWITCH
THS	FREEZE PROTECTION THERMOSTAT
RTH	ROOM THERMOSTAT
SCP	SHORT-CIRCUIT PLATE
G	GROUNDING

4. PARTS CATALOG
(1) 10SFU-1 (Part No.484000-1220)

[Exterior panels]



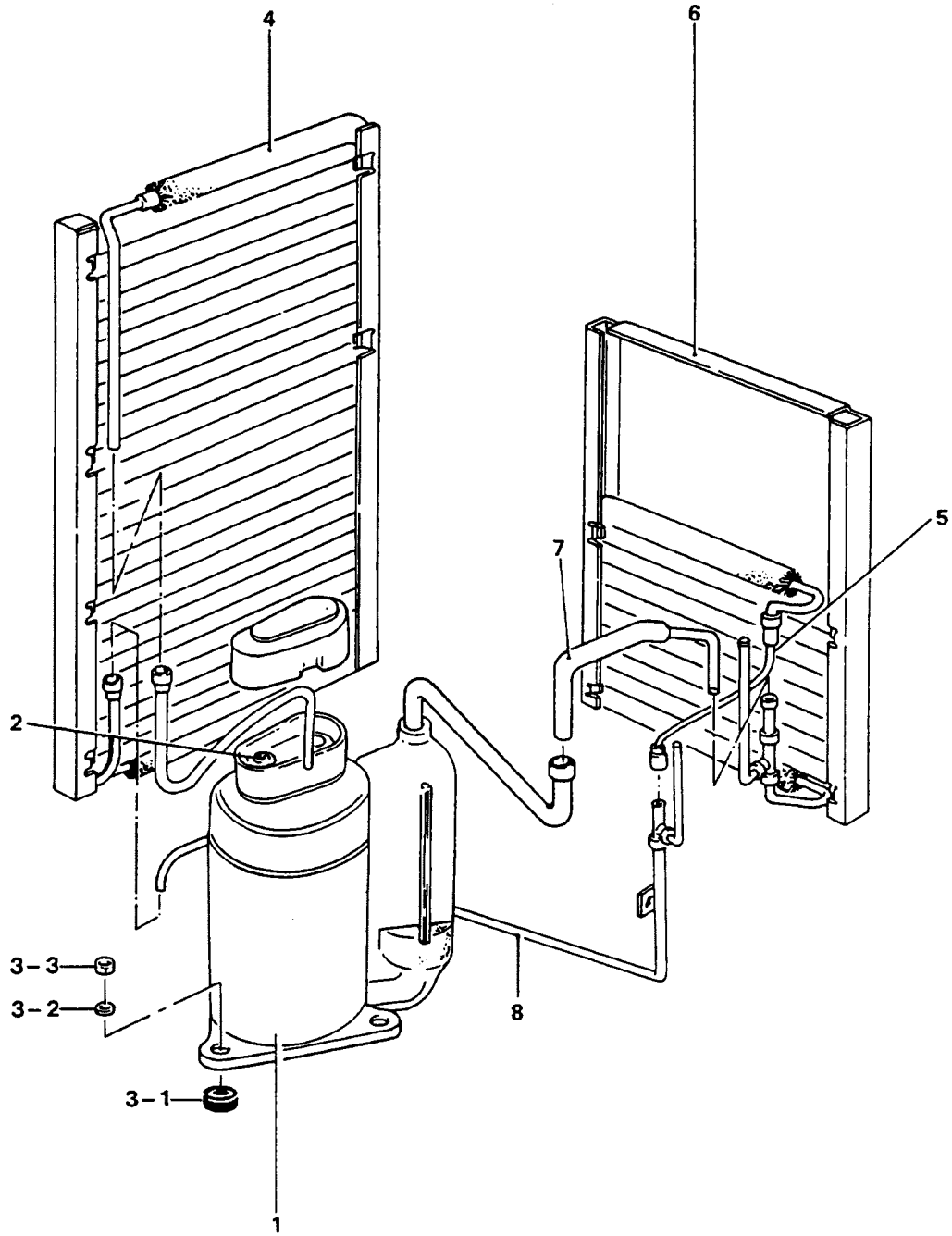
SERVICE PARTS

ILL. No.	DESCRIPTION	PART No.	QTY.	REMARKS
1	Unit assy, 10SFU-1	484100-1130	1	W/Brake (ϕ 75)
2	Roller	484702-0150	2	
3	Roller	484702-0160	2	
3	Panel assy (upper)	484410-3410	1	W/Thermostat include No.4, 15, 16 22
3-1	Switch assy			
4	Switch	484502-0070	1	
5	Panel assy (right)	484410-1420	1	
6	Panel assy (left)	484410-3420	1	
7	Panel assy (front)	484410-3430	1	
8	Filter	484401-0660	1	
8-1	Filter	484401-0900	1	
9	Panel (rear)	484411-2510	1	
10	Filter assy	484400-0190	1	
11	Duct assy	484350-0110	1	
12	Tank	484731-0021	1	
13	Knob	484923-0150	1	
14	Clip	484917-0131	1	
15	Thermostat	484504-0030	1	
16	Thermostat	484504-0020	1	
17	Frame sub-assy	484310-0541	1	
18	Spring Tension Coil	949171-2090	2	
19	Bracket	484321-0510	1	
28	Socket	480837-0030	4	
29	Switch	484502-0230	1	
30	Panel	484411-2520	1	

STANDARD PARTS

ILL. No.	DESCRIPTION	PART No.	HEX. SIZE	THREAD DIA.	LENGTH	PITCH	QTY.
20	Bolt, w/Washer	91510-08141	12	8	14	1.25	8
21	Screw, w/Washer	949007-6700	—	4	11	—	41
22	Screw, Crossrecess pan	910510-04061	—	4	6	0.7	5
23	Screw, w/Washer	91370-06121	—	6	12	1.0	4
24	Screw	949006-5850	—	4	10	0.7	7
25	Screw, Crossrecess countersunk	91060-04161	—	4	16	0.7	4
27	Screw, w/Washer	91310-03161	—	3	16	0.5	2

[Refrigerant system]

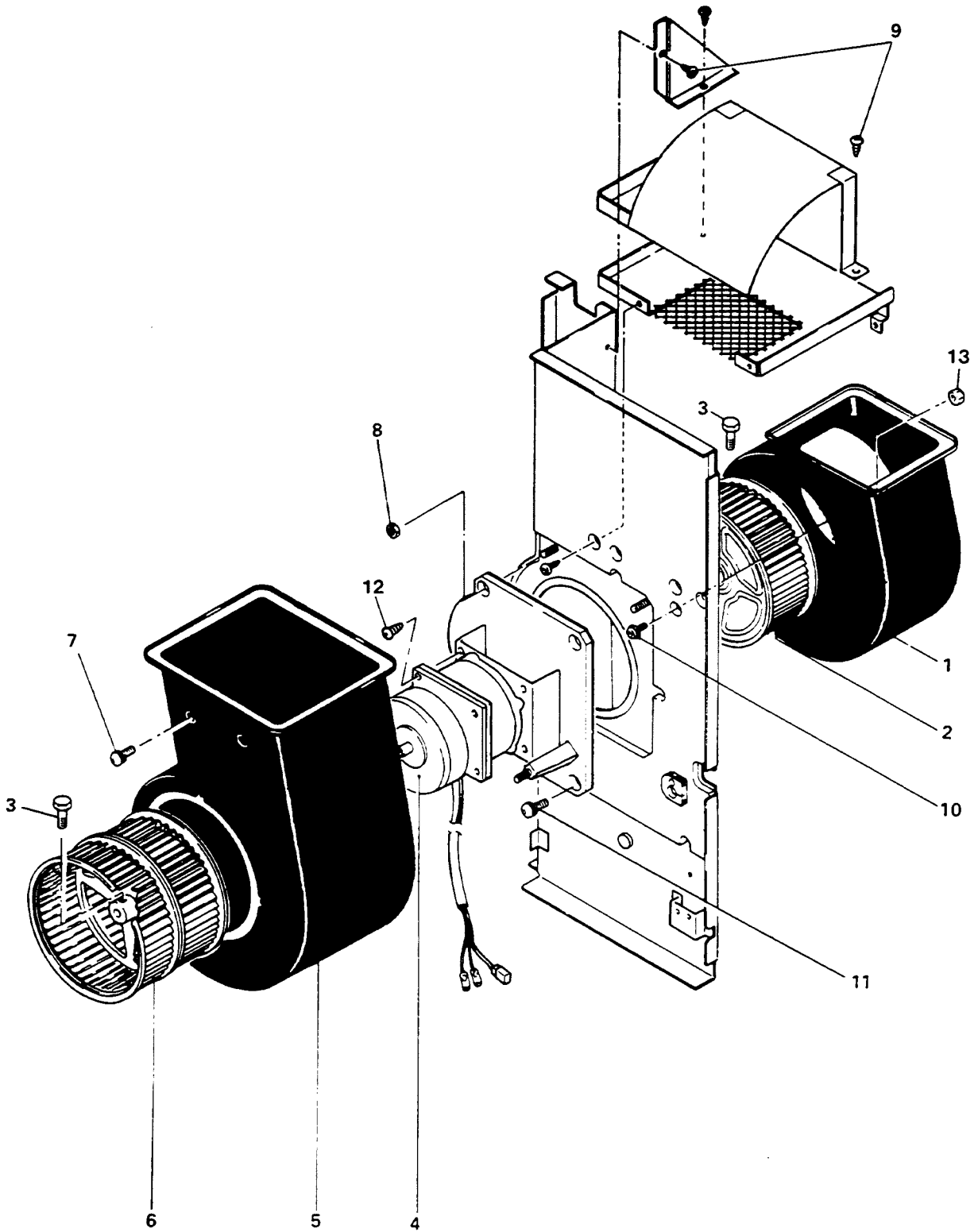


SERVICE PARTS

ILL. No.	NOMENCLATURE	PART No.	QTY.	REMARKS
1	Compressor assy	484650-1060	1	Hex. size 8 (Terminal box)
2	Relay, overload	484501-0190	1	
3-1	Spacer	484921-0060	3	
3-2	Washer, Steel plate	949011-5330	3	
3-3	Nut, hexagon	90190-08651	3	M8
4	Core assy (condenser)	484600-0530	1	
5	Pipe assy (capillary)	484800-2340	1	
6	Core assy (evaporator)	484600-1070	1	
7	Pipe assy	484800-2160	1	
8	Pipe assy	484800-0910	1	

* Pipe assy, charging is supplied with 5 pipes per one package.

[Fan]



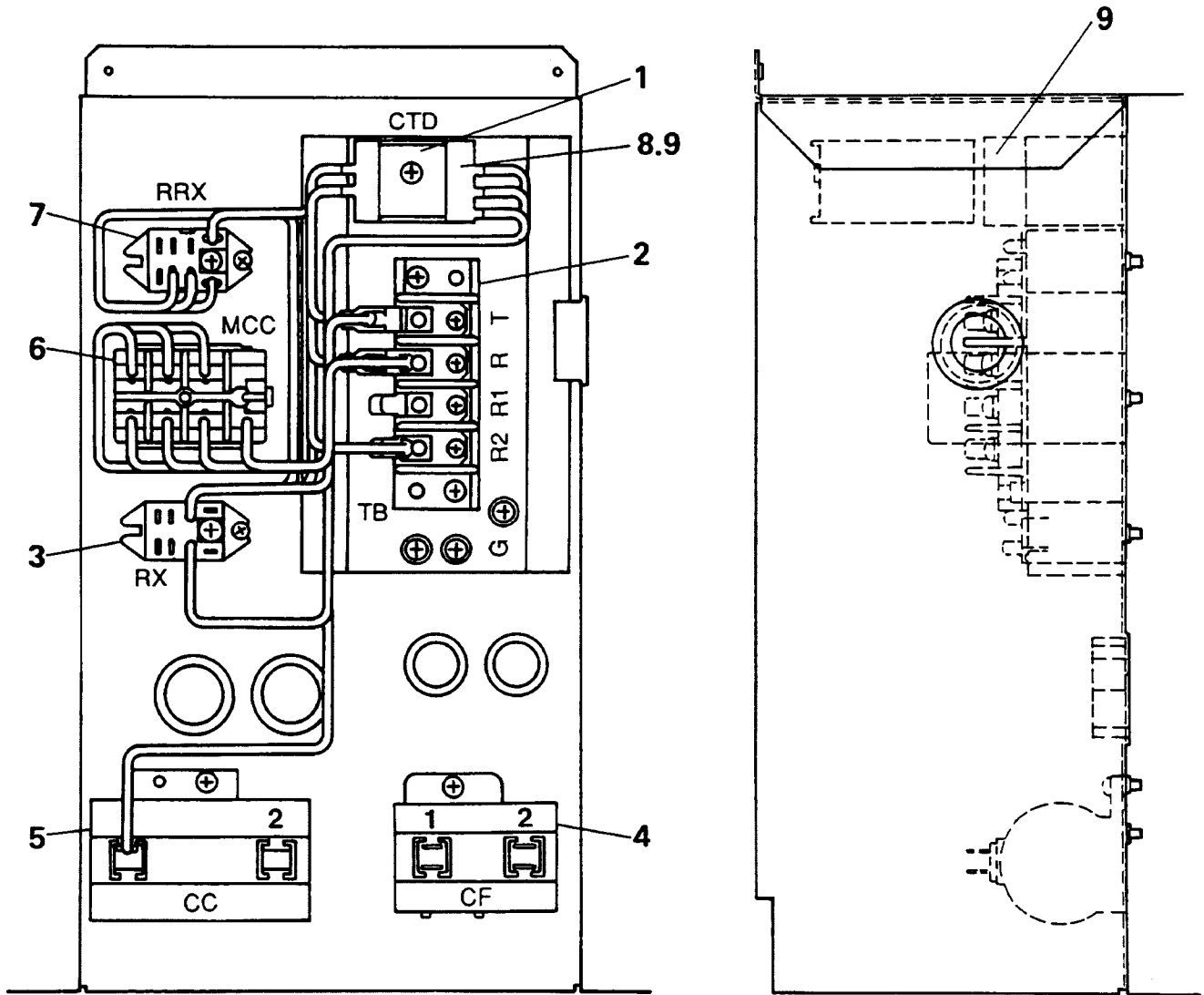
SERVICE PARTS

ILL. No.	NOMENCLATURE	PART No.	QTY.	REMARKS
1	Casing	484261-0010	1	—
2	Fan	484221-0112	1	—
3	Bolt, hex	949040-6150	2	Hex. size 10, M8
4	Motor	484211-0890	1	—
5	Casing	484261-0070	1	
6	Fan	484221-0122	1	

STANDARD PARTS

ILL. No.	NOMENCLATURE	HEX. SIZE	THREAD DIA.	LENGTH	PITCH	QTY.
7	Screw, w/Washer	—	4	14	0.7	2
8	Nut, Frange	10	6	—	1.0	2
9	Screw	—	4	10	0.7	9
10	Screw, w/Washer	—	6	16	1.0	4
11	Screw, w/Washer	—	6	12	1.0	2
12	Screw, Crossrecess pan		6	10	1.0	2
13	Nut, hex		6	—	1.0	4

[Control unit]

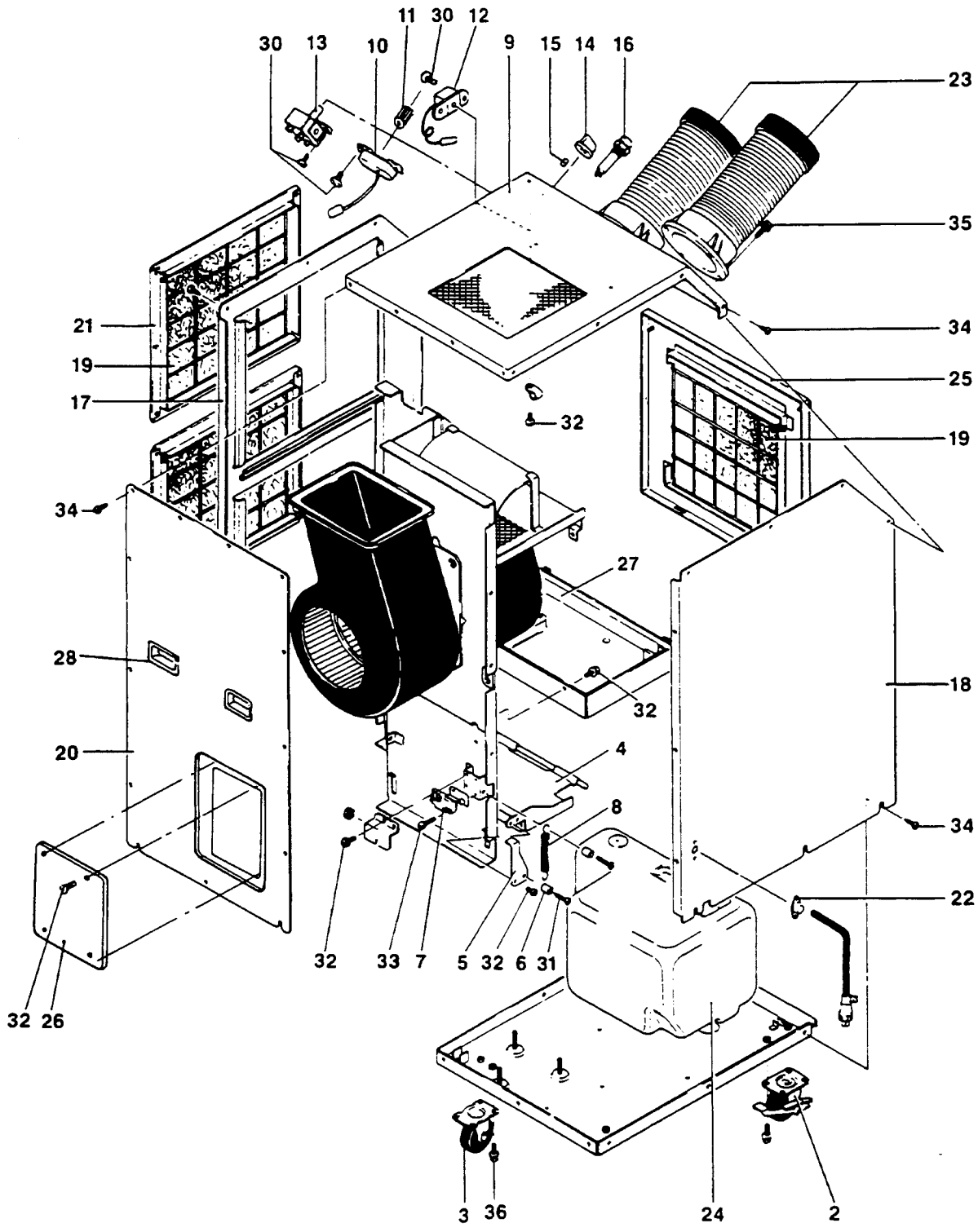


SERVICE PARTS

ILL. No.	DESCRIPTION	PART No.	QTY.	REMARKS
1	Relay	484531-0380	1	
2	Terminal	484503-0281	1	
3	Relay	484531-0370	1	
4	Capacitor	484507-0441	1	200 V 16.0 μ F
5	Capacitor	484507-0450	1	370 V 25.0 μ F
6	Relay	484531-0361	1	
7	Relay	484531-0370	1	
8	Terminal	484503-0170	1	
9	Holder	484927-0400	1	

(2) 15SFU-1 (Part No.484000-0610)

[Exterior panels]



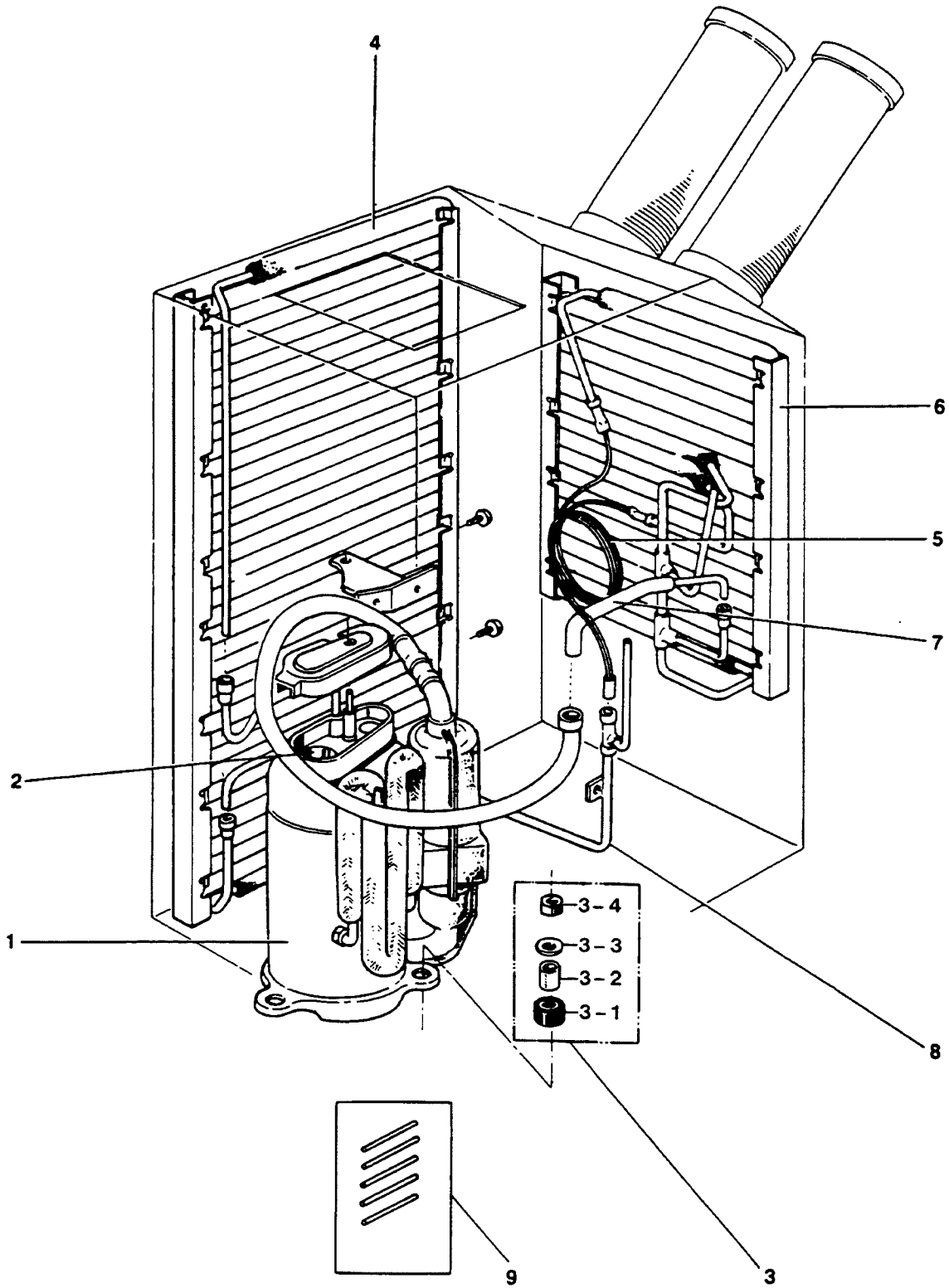
SERVICE PARTS

ILL. No.	DESCRIPTION	PART No.	QTY.	REMARKS
1	Unit assy, 15SFU-1	484100-0540	1	
2	Roller	484702-0090	2	W/Brake (φ75)
3	Roller	484702-0100	2	W/O Brake (φ75)
4	Frame sub-assy	484310-0541	1	
5	Bracket	484321-0510	1	
6	Socket	480837-0030	4	
7	Switch assy	484560-0230	1	
8	Spring, tension coil	949171-2090	2	
9	Panel assy	484410-1271	1	
10	Thermostat	484504-0030	1	
11	Knob	484923-0060	1	
12	Thermostat	484504-0020	1	
13	Switch	484502-0070	1	
14	Knob	484923-0150	1	
15	Clip	484917-0131	1	
16	Lamp	484933-0100	1	~'87/7
		484933-0150	1	'87/8~
17	Panel	484410-1310	1	
		484410-1460	1	'89/1~
18	Panel	484410-1330	1	Include No. 22
		484410-1500	1	'89/1~
19	Filter	484401-0660	3	
20	Panel	484410-1290	1	Include No. 28
21	Frame assy	484300-0260	2	
22	Cnnector	479748-0020	1	
23	Nozzle kit	484209-0060	2	Include No. 35
24	Tank	484731-0021	1	
25	Panel assy	484410-0600	1	
		484410-2590	1	'89/1~Include No. 19
26	Panel	484411-0780	1	
27	Pan assy, drain	484430-0120	1	
28	Handle	484451-0030	2	

STANDARD PARTS

ILL. No.	NOMENCLATURE	PART NUMBER	HEX. SIZE	THREAD DIA.	LENGTH	PITCH	QTY.
30	Screw, crossrecess pan	91050-04061	—	4	6	0.7	5
31	Screw, crossrecess countersunk	91060-04161	—	4	16	0.7	4
32	Screw, w/Washer	91370-04101	—	4	10	0.7	11
33	Screw, w/Washer	91310-03161	—	3	16	0.5	2
34	Screw, tapping, w/Washer	949008-0850	—	4	10	—	41
35	Screw, w/Washer	91370-06121	—	6	12	1.0	8
36	Bolt, w/Washer	91510-08141	12	8	14	1.25	8

[Refrigerant system]

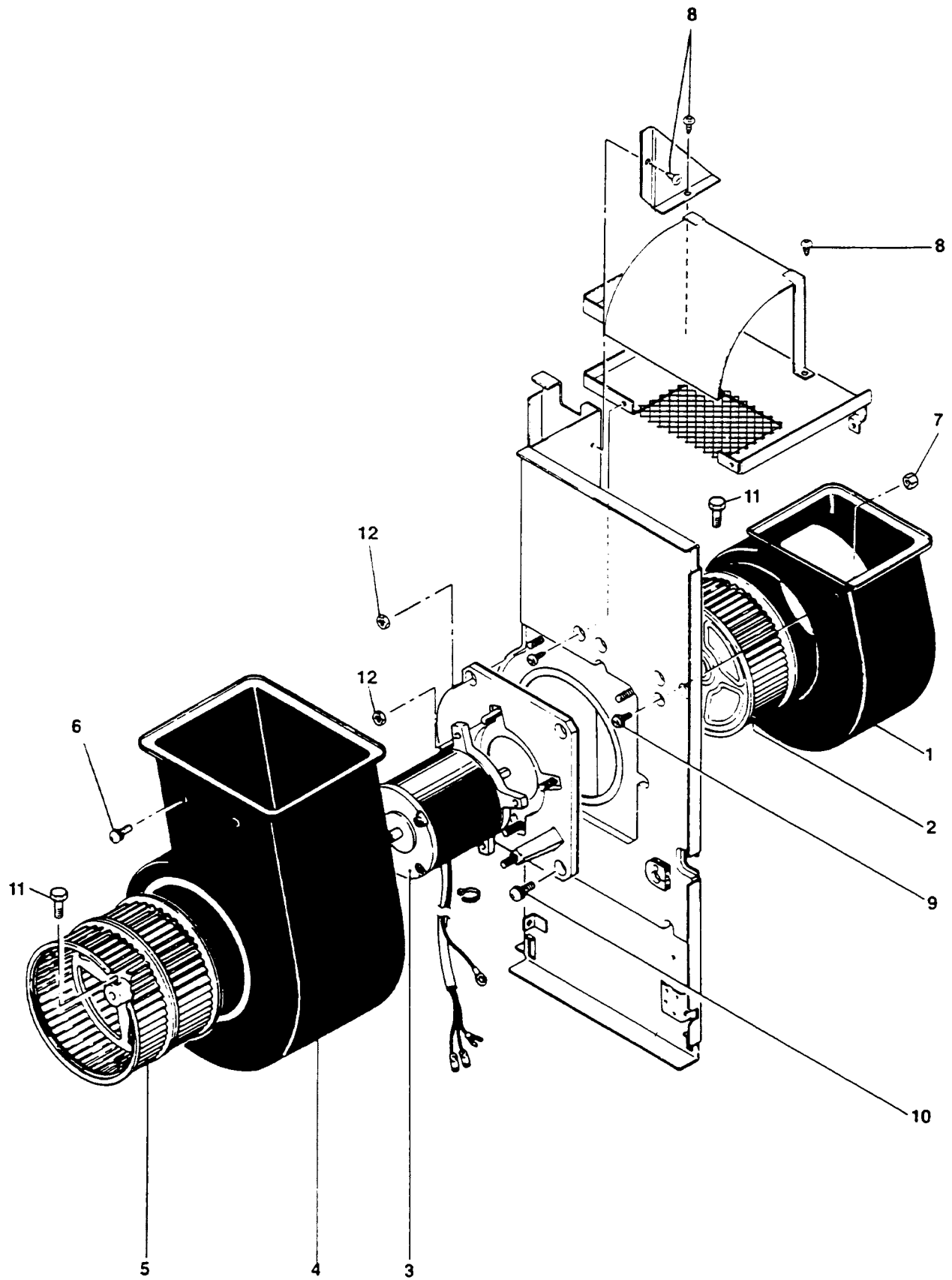


SERVICE PARTS

ILL. No.	DESCRIPTION	PART No.	QTY.	REMARKS
1	Compressor assy	484650-0390	1	Hex. size 8 (Terminal box)
2	Relay, overload	484501-0090	1	
3-1	Cushion	484904-0150	3	
3-2	Collar, steel	949192-5550	3	
3-3	Washer, steel plate	949011-5330	3	
3-4	Nut, hexagon	90190-08651	3	
4	Core assy	484600-0320	1	
5	Pipe assy	484800-1000	1	
6	Core assy	484600-0300	1	
7	Pipe assy	484800-0980	1	
8	Pipe assy	484800-0990	1	
9	Pipe assy	484800-0440	1	*

* Pipe assy, charging is supplied with 5 pipes per one package.

[Fan]



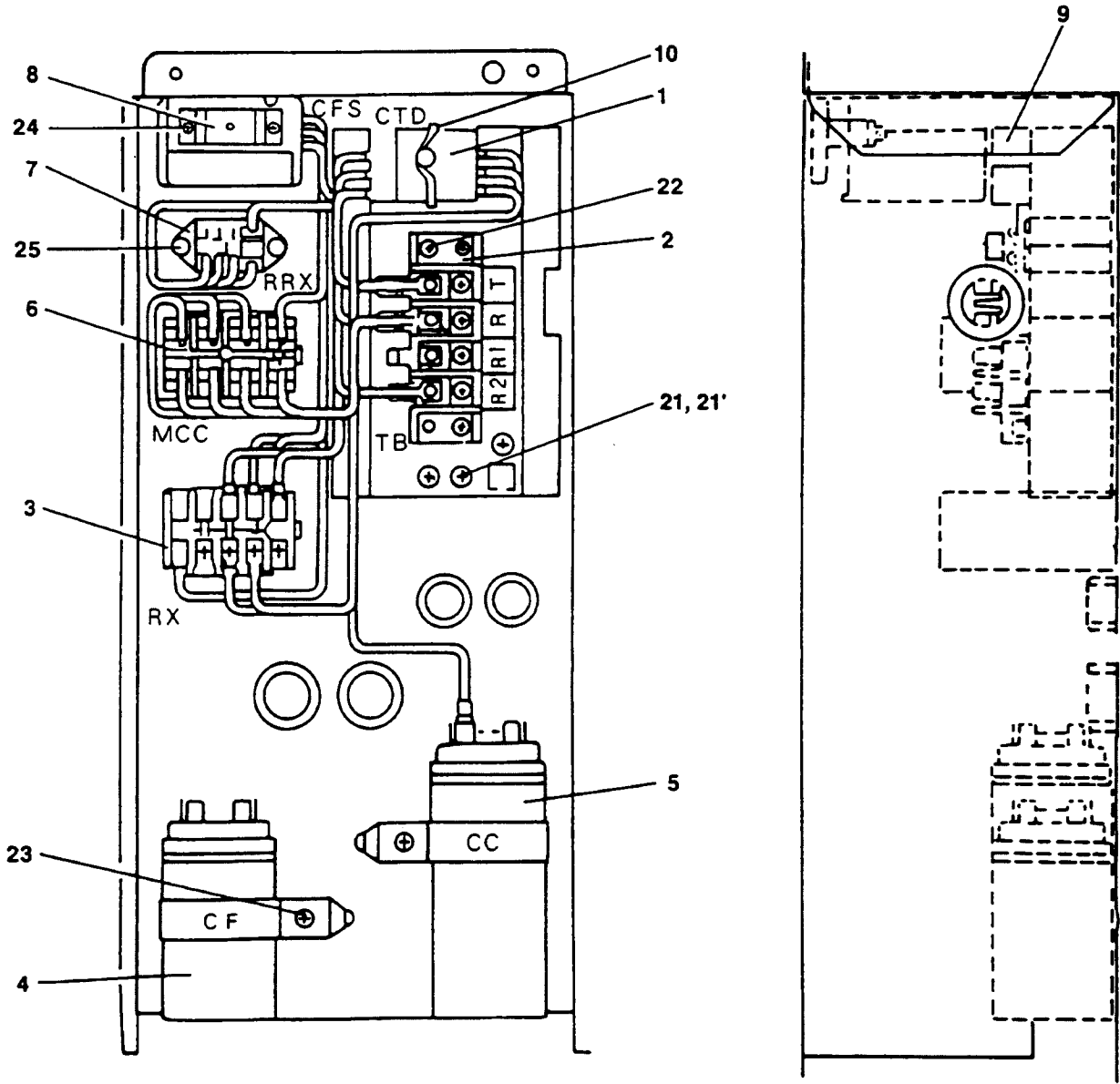
SERVICE PARTS

ILL. No.	DESCRIPTION	PART No.	QTY.	REMARKS
1	Casing	484261-0010	1	
2	Fan	484221-0112	1	
3	Motor	484211-0441	1	
4	Casing	484261-0070	1	
5	Fan	484221-0122	1	
11	Bolt, hex	949040-6150	2	Hex. size 10

STANDARD PARTS

ILL. No.	NOMENCLATURE	PART NUMBER	HEX. SIZE	THREAD DIA.	LENGTH	PITCH	QTY.
6	Screw, w/Washer	949007-3600	—	4	14	0.7	2
7	Nut, hex	90160-06051	10	6	—	1.0	4
8	Screw, w/Washer	91370-04101	—	4	10	0.7	9
9	Screw, w/Washer	91370-06161	—	6	16	1.0	4
10	Screw, w/Washer	91370-06121	—	6	12	1.0	2
12	Nut, frange	92150-06061	10	6	—	1.0	8

[Control unit]



SERVICE PARTS

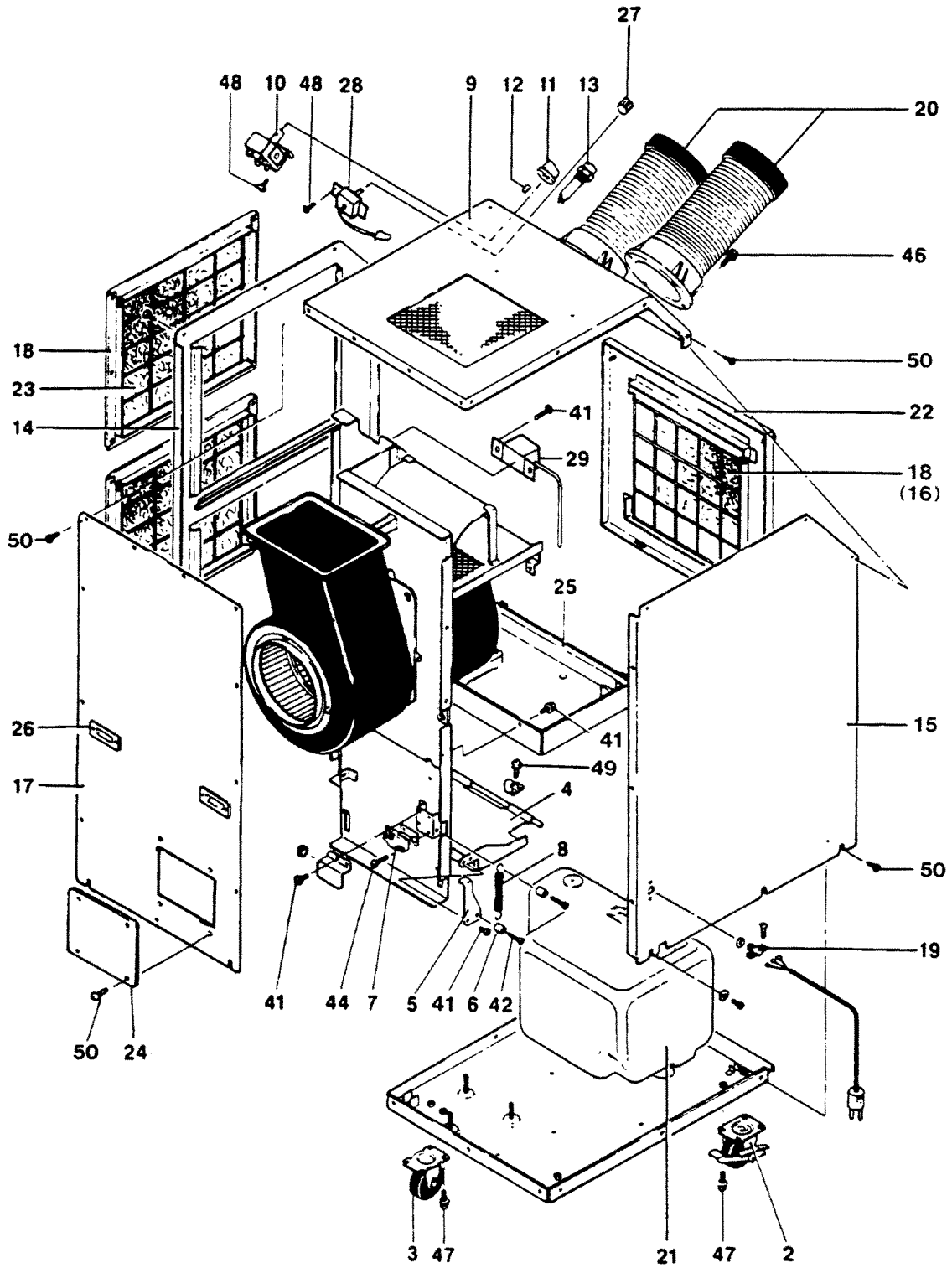
ILL. No.	DESCRIPTION	PART No.	QTY.	REMARKS
1	Relay	484531-0250	1	Time delay 440V 10.0 μ F, fan 440V 25.0 μ F, comp.
2	Terminal	484503-0180	1	
3	Relay	484531-0200	1	
4	Condenser	484507-0220	1	
5	Condenser	484507-0230	1	
6	Relay	484531-0230	1	
7	Relay	484531-0240	1	
8	Switch assy	484560-0300	1	
9	Terminal	484503-0170	1	
10	Holder	484927-0400	1	

STANDARD PARTS

ILL. No.	NOMENCLATURE	PART NUMBER	HEX. SIZE	THREAD DIA.	LENGTH	PITCH	QTY.
21	Washer, plate	90200-04331	—	—	—	—	3
21'	Screw, crossrecess pan	91051-04100	—	4	10	0.7	3
22	Screw	949006-3280	—	4	18	0.7	2
23	Screw	949006-3250	—	4	8	0.7	8
24	Screw	949006-4570	—	2.5	5	0.45	2
25	Screw, frange	92100-03081	—	3	8	0.5	2

(3) 20HFU-1 (Part No.484000-0601)

[Exterior panels]



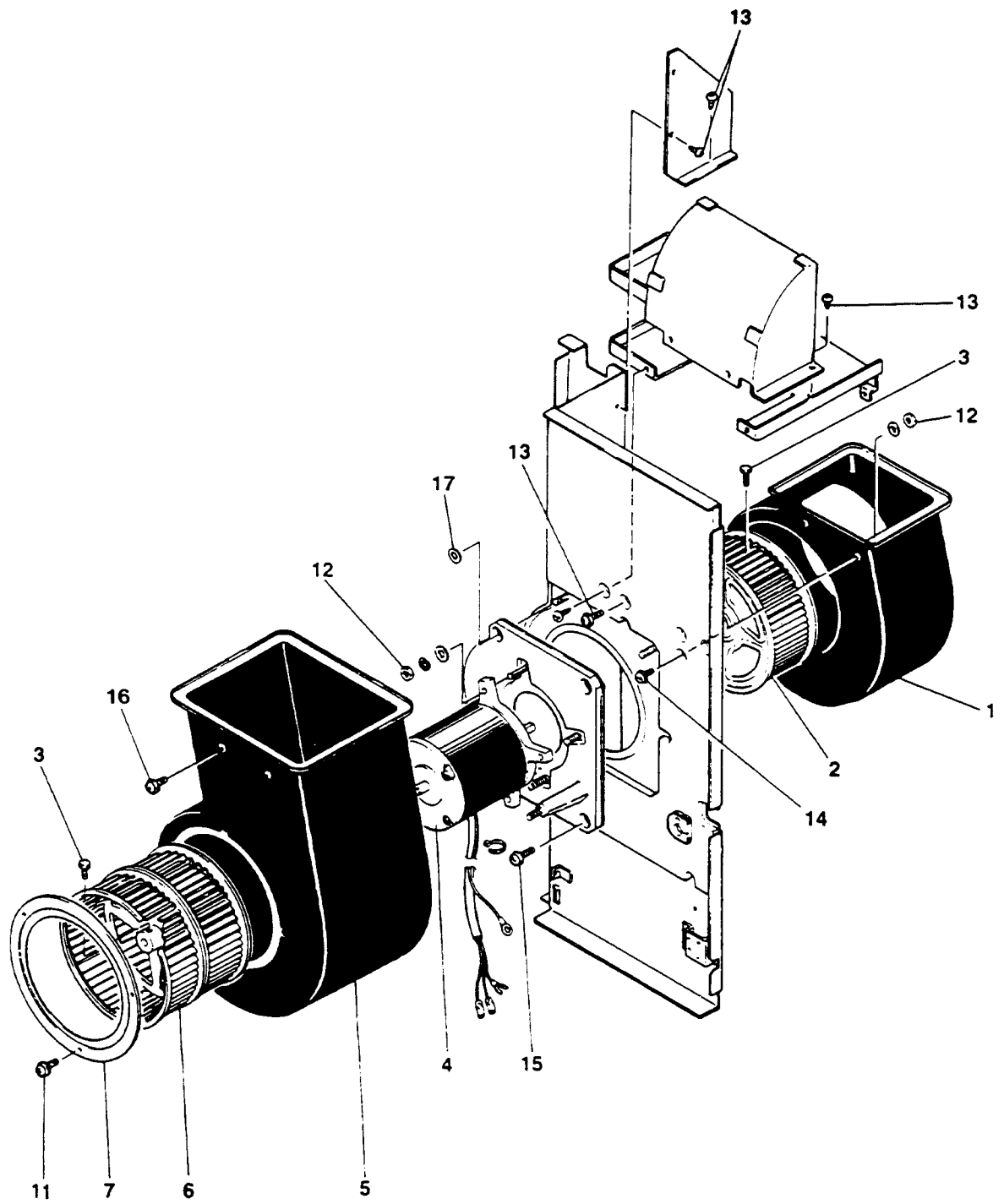
SERVICE PARTS

ILL. No.	DESCRIPTION	PART No.	QTY.	REMARKS
1	Unit assy, 20HFU-1	484100-0531	1	
2	Roller	484702-0090	2	W/Brake (ϕ 75)
3	Roller	484702-0100	2	W/O Brake (ϕ 75)
4	Frame sub-assy	484310-0541	1	
5	Bracket	484321-0510	1	
6	Socket	480837-0030	4	
7	Switch assy	484560-0230	1	
8	Spring, tension coil	949171-2090	2	
9	Panel assy	484410-1261	1	
10	Switch	484502-0070	1	
11	Knob	484923-0150	1	
12	Clip	484917-0131	1	
13	Lamp	484933-0100	1	~'87/7
		484933-0150	1	'87/8~
14	Panel assy	484410-1301	1	
		484410-1450	1	'89/1~
15	Panel assy	484410-1320	1	Include No. 19
		484410-3260	1	'94/4~
16	Filter (for evaporator)	484401-0660	1	
17	Panel assy	484410-3270	1	Include No. 26
18	Frame assy	484300-0320	2	
19	Connector	479748-0020	1	
20	Nozzle kit	484209-0050	2	Include No. 46
21	Tank	484731-0021	1	
22	Panel assy	484410-0600	1	
		484410-2590	1	'94/4~
23	Filter (for condenser)	484401-0650	2	
24	Panel	484411-2381	1	
25	Pan assy drain	484430-0120	1	
26	Handle	484451-0030	2	
27	Knob	484923-0060	1	
28	Thermostat	484504-0030	1	
29	Thermostat	484504-0020	1	

STANDARD PARTS

ILL. No.	NOMENCLATURE	PART NUMBER	HEX. SIZE	THREAD DIA.	LENGTH	PITCH	QTY.
41	Screw, w/Washer	91370-04101	—	4	10	0.7	13
42	Screw, crossrecess countersunk	91060-04161	—	4	16	0.7	4
43	Not shown	91370-04141	—	4	14	0.7	7
44	Screw, w/Washer	91310-03161	—	3	16	0.5	2
45	Not shown	949001-1570	—	4	10	—	4
46	Screw, w/Washer	91370-06121	—	6	12	1.0	8
47	Bolt, w/Washer	91510-08141	12	8	14	1.25	16
48	Screw, crossrecess pan	91050-04061	—	4	6	0.7	3
49	Screw	949006-5850	—	4	10	0.7	4
50	Screw, w/Washer	949007-6700	—	4	11	0.7	48

[Fan]



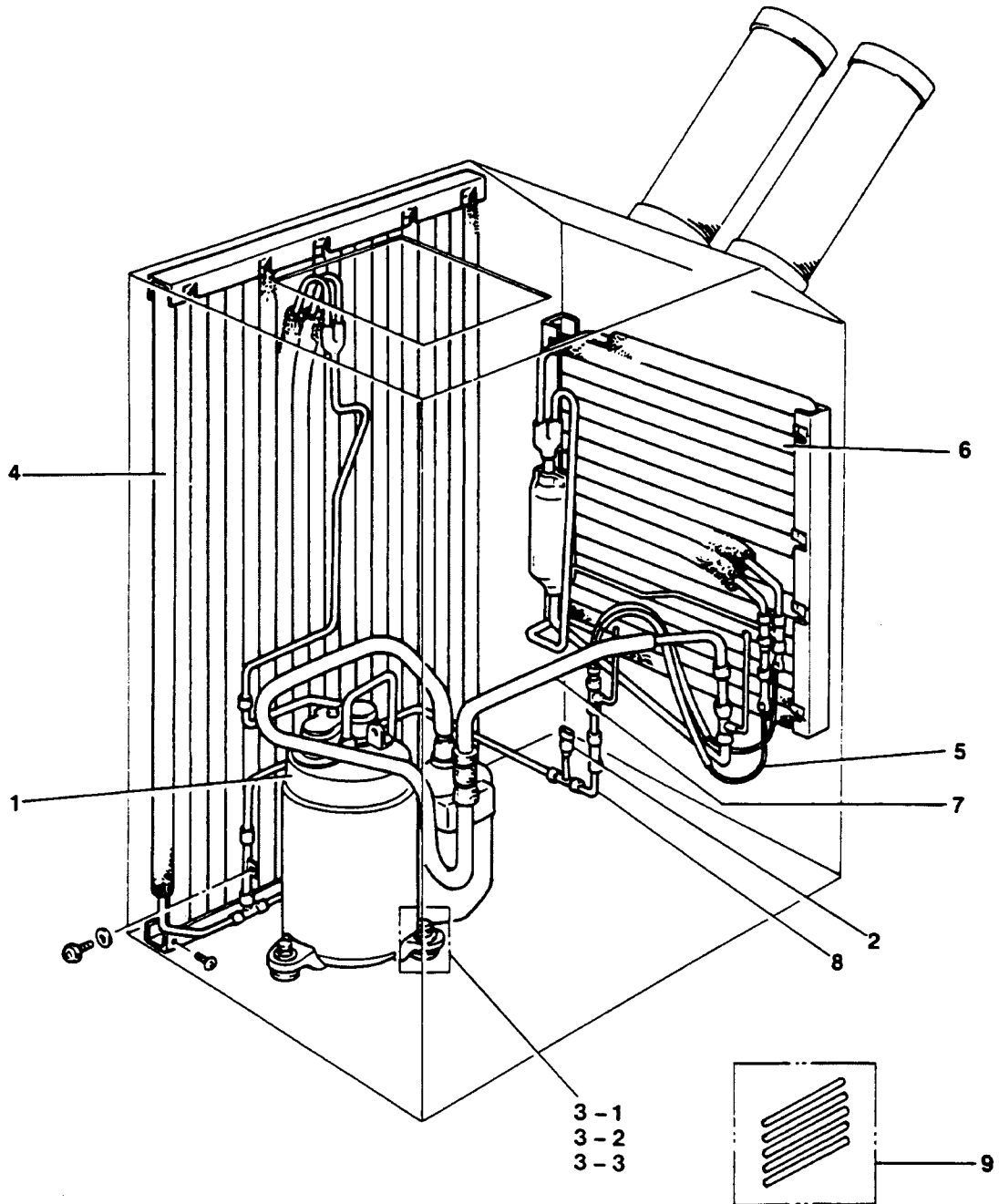
SERVICE PARTS

ILL. No.	DESCRIPTION	PART No.	QTY.	REMARKS
1	Casing	484261-0010	1	Hex. size 10
2	Fan	484221-0112	1	
3	Bolt, hex	949040-6150	2	
4	Motor	484211-0431	1	
5	Casing assy	484260-0100	1	
6	Fan	484221-0142	1	
7	Ring sub assy	484280-0050	1	

STANDARD PARTS

ILL. No.	DESCRIPTION	HEX. SIZE	THREAD DIA.	LENGTH	PITCH	QTY.
11	Screw, w/Washer	—	4	14	0.7	7
12	Nut, hex	10	6	—	1.0	8
13	Screw, w/Washer	—	4	10	0.7	9
14	Screw, w/Washer	—	6	16	1.0	4
15	Screw, w/Washer	—	6	12	1.0	5
16	Screw, w/Washer	—	4	14	0.7	2
17	Nut, frange	(10)	6	—	1.0	2

[Refrigerant system]

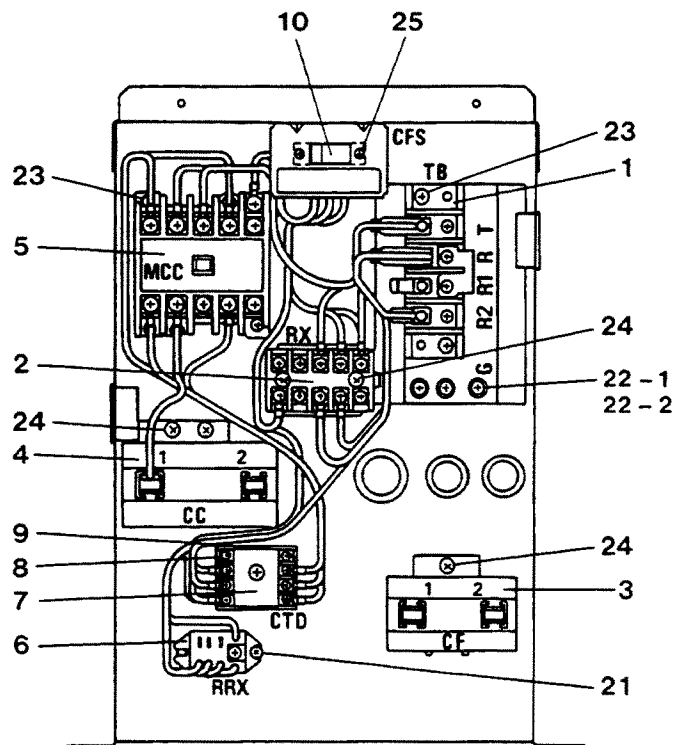


SERVICE PARTS

ILL. No.	DESCRIPTION	PART No.	QTY.	REMARKS
1	Compressor assy	484650-1040	1	Hex. size 8 (Terminal box)
2	Switch assy, pressure	484660-0201	1	
3-1	Cushion	484904-0100	3	
3-2	Collar, steel	949192-5750	3	
3-3	Nut	949056-2500	3	(M8×1.25)
4	Core assy	484600-0360	1	
5	Pipe assy	484800-1220	1	
6	Core assy	484600-0980	1	Include No. 5
7	Pipe assy	484800-1160	1	
8	Pipe assy	484800-2260	1	Include No. 2, 10
9	Pipe assy	484800-0440	1	*

* Pipe assy, charging is supplied with 5 pipes per one package.

[Control Unit]



SERVICE PARTS

ILL. No.	DESCRIPTION	PART No.	QTY.	REMARKS
1	Terminal	484503-0281	1	
2	Relay, auxiliary	484531-0200	1	
3	Capacitor	484507-0390	1	400V, 12 μ F
4	Capacitor	484507-0400	1	370V, 30 μ F
5	Relay	484531-0220	1	
6	Relay	484531-0240	1	
7	Relay	484531-0250	1	
8	Terminal	484503-0170	1	
9	Holder	484927-0400	1	
10	Switch assy	484560-0290	1	

STANDARD PARTS

ILL. No.	NOMENCLATURE	PART NUMBER	HEX. SIZE	THREAD DIA.	LENGTH	PITCH	QTY.
21	Screw, frange	92100-03081	—	3	8	0.5	1
22-1	Washer, plate	90201-04300	—	—	—	—	3
22-2	Screw, crossrecess pan	91051-04100	—	4	10	0.7	3
23	Screw	949006-3280	—	4	18	0.7	4
24	Screw	949006-3250	—	4	8	0.7	7
25	Screw	949006-4570	—	2.5	5	0.45	2

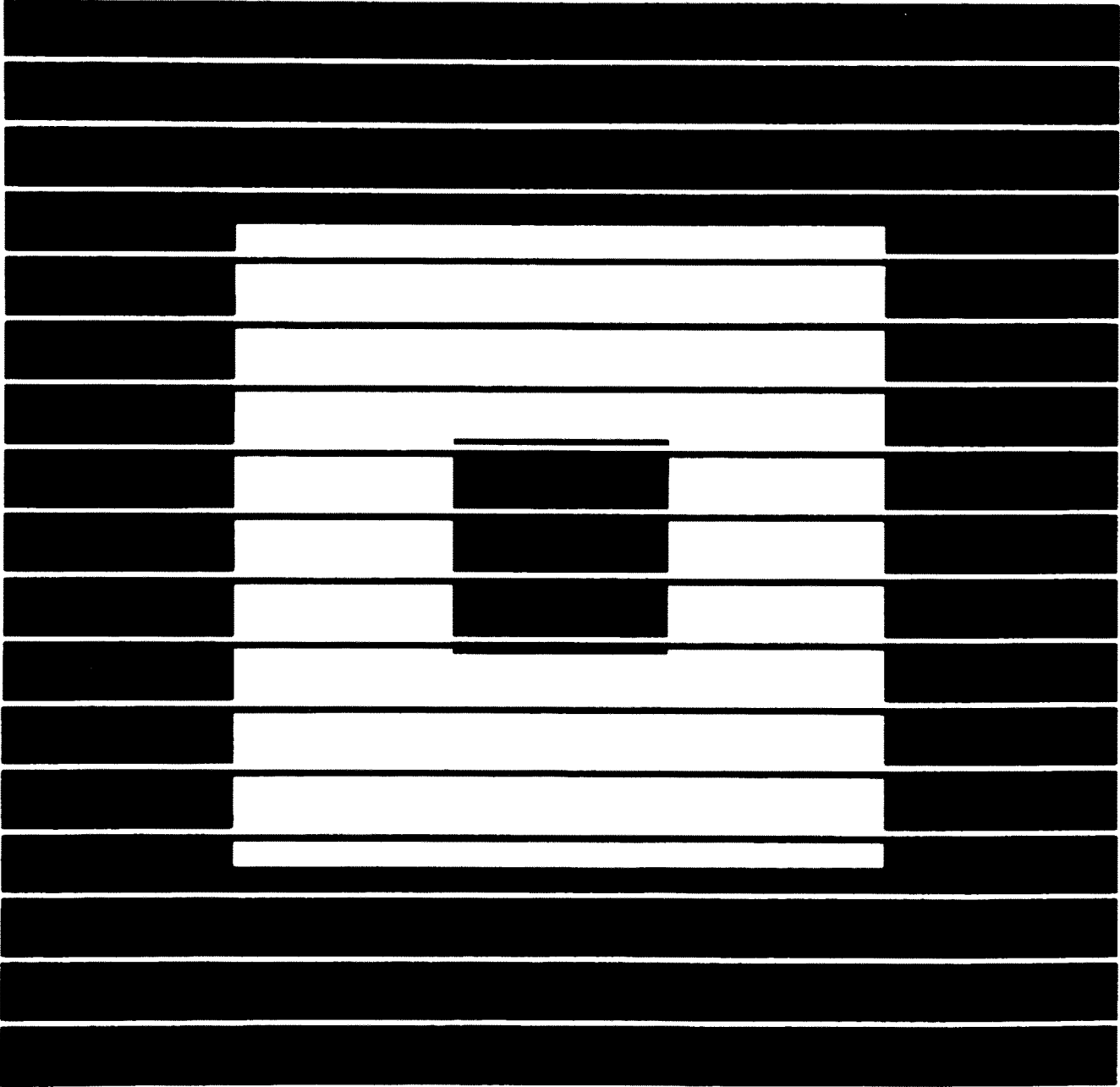
NIPPONDENSO CO.,LTD.

OVERSEAS SERVICE DEPARTMENT

Kariya, Aichi, Japan

First Issue : MAY , 1994

Publication No. : G5ZAP-02



NIPPONDENSO CO.,LTD.