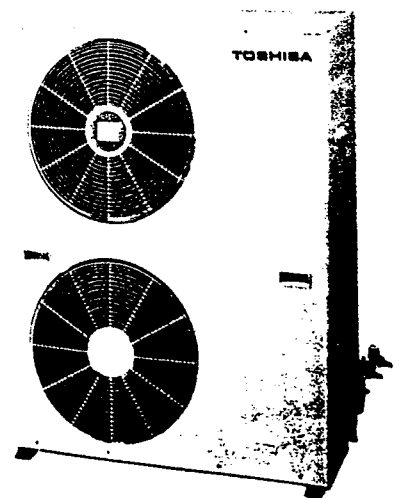
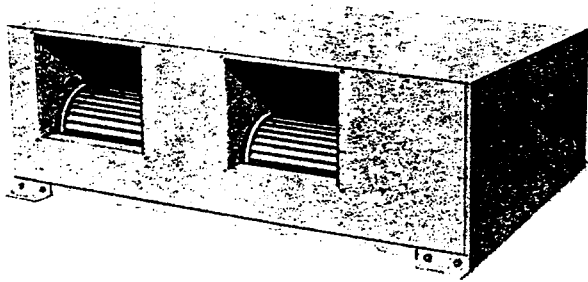


TOSHIBA

AIR-CONDITIONER SPLIT (DUCT TYPE)

RDA-2505UDE8/S2505E8



CONTENTS

1. SPECIFICATIONS	3
2. CONSTRUCTION VIEWS	4
3. SCHEMATIC DIAGRAM	6
4. SPECIFICATIONS OF ELECTRICAL PARTS	7
5. REFRIGERANT PIPING DIAGRAM	8
6. PERFORMANCE CHARACTER	9
7. CONNECTION FLANGE (REFERENCE)	11
8. EXPLODED VIEWS AND PARTS LIST	12
8-1. Indoor unit (RDA-2505UDE8)	12
8-2. Outdoor unit (RDA-S2505E8)	15

1. SPECIFICATIONS

ITEM		MODEL	RDA-2505UDE8
Cooling capacity	*1	k cal/h	22,500
		BTU/h	90,000
		kW	26.2
Power source		Phase	3
		V	380/415
		Hz	50
Power consumption		kW	10.8
Power factor		%	86
Running current		A	18.2
Starting current		A	100
Refrigerant	Name of refrigerant		R-22
	Charge volume	kg	4.7
Refrigerant control			Capillary tube
Interconnection pipe	Gas side size	mm (in.)	φ25.4 (1")
	Coupler style		Brazing
	Liquid side size	mm (in.)	φ12.7 (1/2")
	Coupler style		Brazing & Flare
	Standard length	m (ft.)	5 (17.4')
	Maximum length (of one way)	m (ft.)	25 (82')
	Maximum height		
	Indoor unit higher	m (ft.)	15 (49')
	Outdoor unit higher	m (ft.)	15 (49')
Condensate drain joint	Diameter (Outside)		MPT1" (25A)
INDOOR UNIT Model			RDA-2505UDE8
Dimensions	Height	mm (ft.-in.)	430 (1'4-15/16")
	Width	mm (ft.-in.)	1,350 (4'5-1/8")
	Depth	mm (ft.-in.)	800 (2'1-1/2")
Net weight		kg (lbs.)	123 (272)
Heat exchanger type			Finned tube
Indoor fan type			Centrifugal fan
Air volume		m³/h (CFM)	4,800 (2,830)
External static pressure	Standard	mm Aq	7
	Max. on standard motor	mm Aq	18
Fan motor output		W	1,500
Air filter			Not provided
OUTDOOR UNIT Model			RDA-S2505E8
Dimensions	Height	mm (ft.-in.)	1,340 (4'4-3/4")
	Width	mm (ft.-in.)	930 (3'5/8")
	Depth	mm (ft.-in.)	385 (1'3-3/16")
Net weight		kg (lbs.)	170 (375)
Heat exchanger type			Finned tube
Outdoor fan type			Propeller fan
Fan motor output		W	200 x 2
Compressor	Model		YH1000JA
	Output	kW	7.5
Protective device			High pressure switch over current relay Inner overload relay
Optional air filter kit (not usable for in-ceiling installation)			RBP-F1805U

Specifications are subject to change without notice.

Note 1: Cooling Capacity is based on the following temperature conditions.

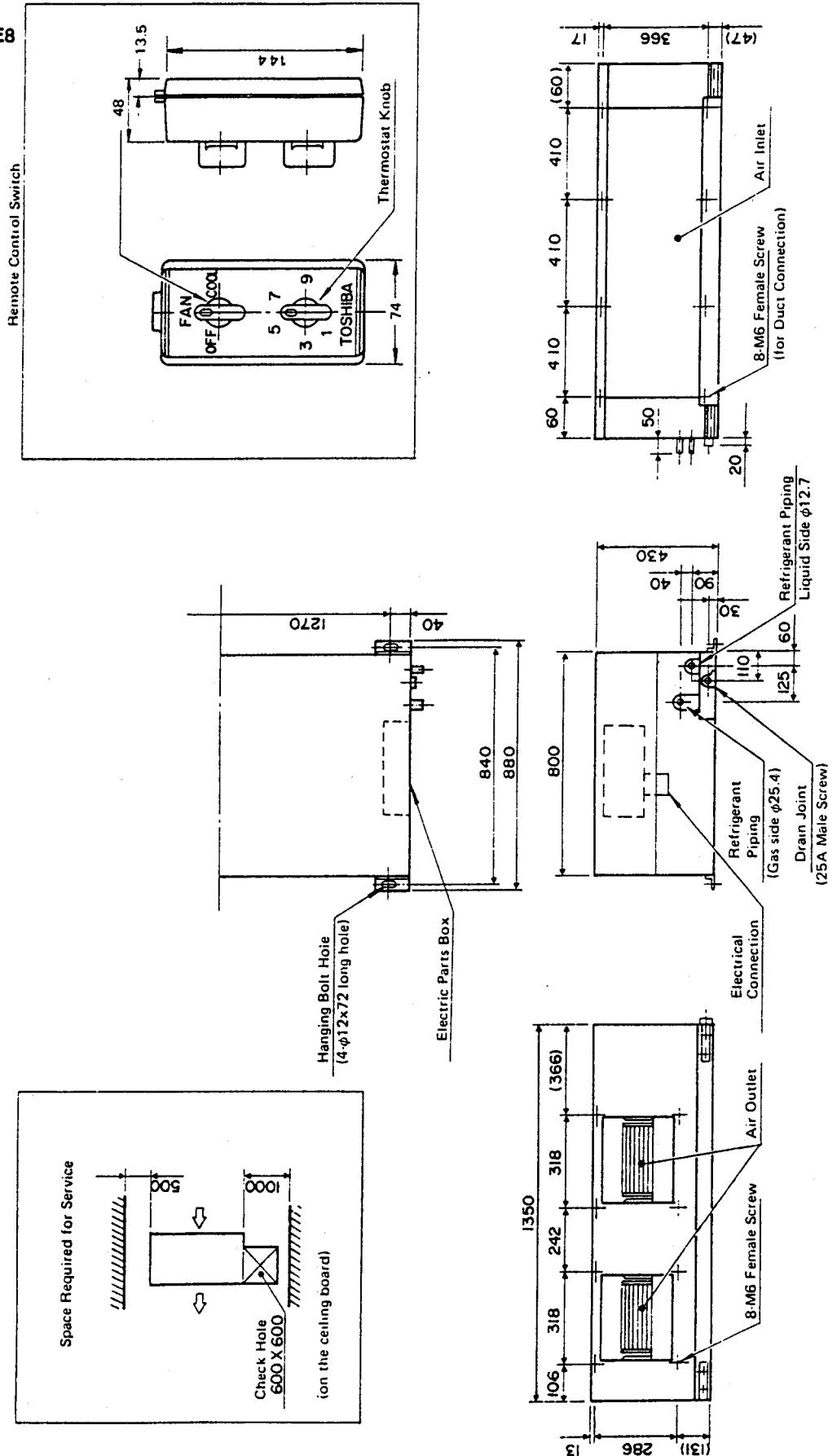
Room air temperature	27°C DB	(80°F DB)
	19.5°C WB	(67°F WB)
Ambient air temperature	35°C DB	(95°F DB)

Note 2: Operating range of the units
Room air temperature

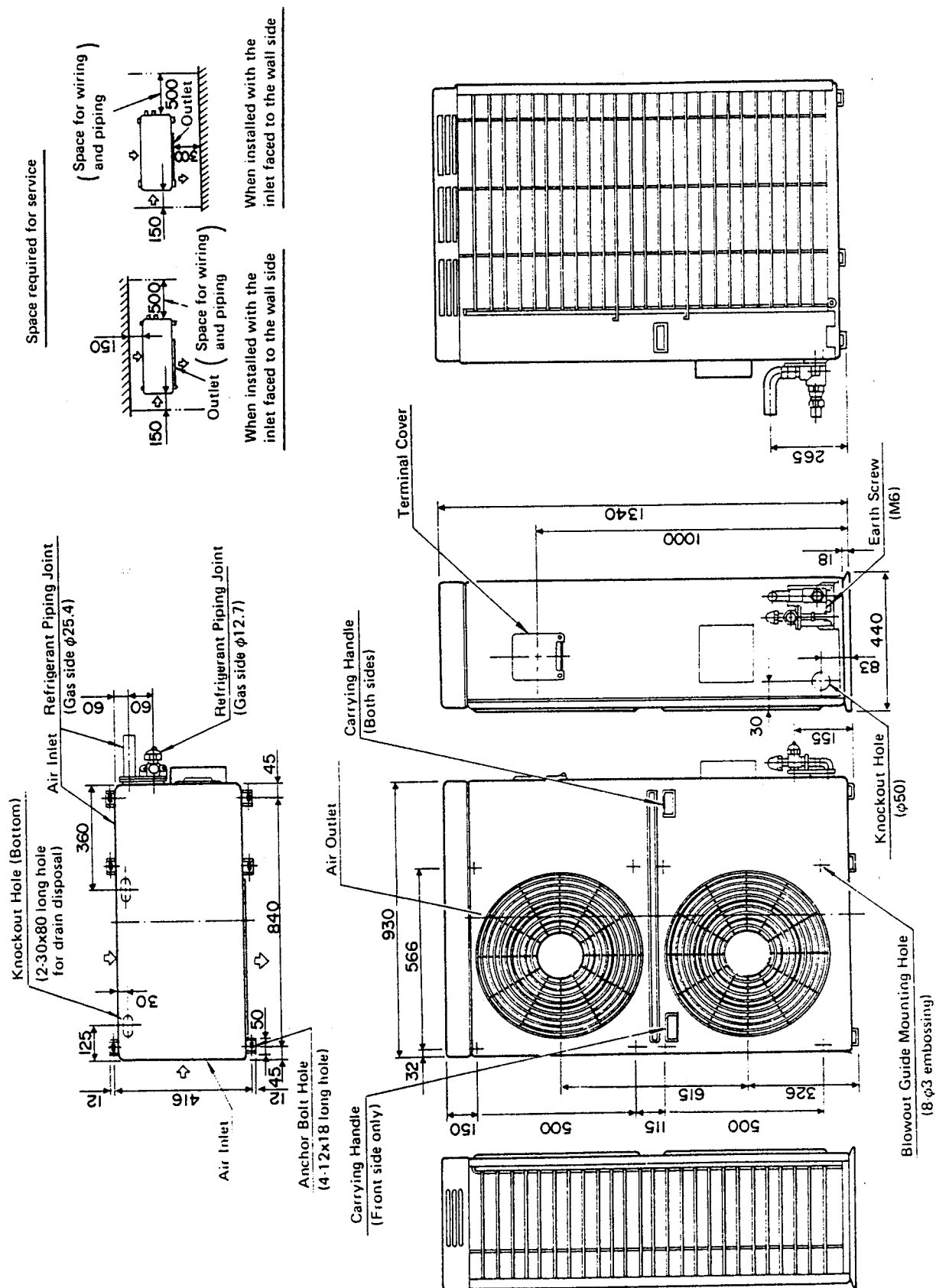
When cooling	
Maximum	32°C DB, 22.5°C WB (90° DB, 73°F WB)
Minimum	21°C DB, 15.5°C WB (70°F DB, 60°F WB)
Ambient air temperature	
When cooling	
Maximum	52°C DB (126°G DB)
Minimum	21°C DB (70°F DB)

2. CONSTRUCTION VIEWS

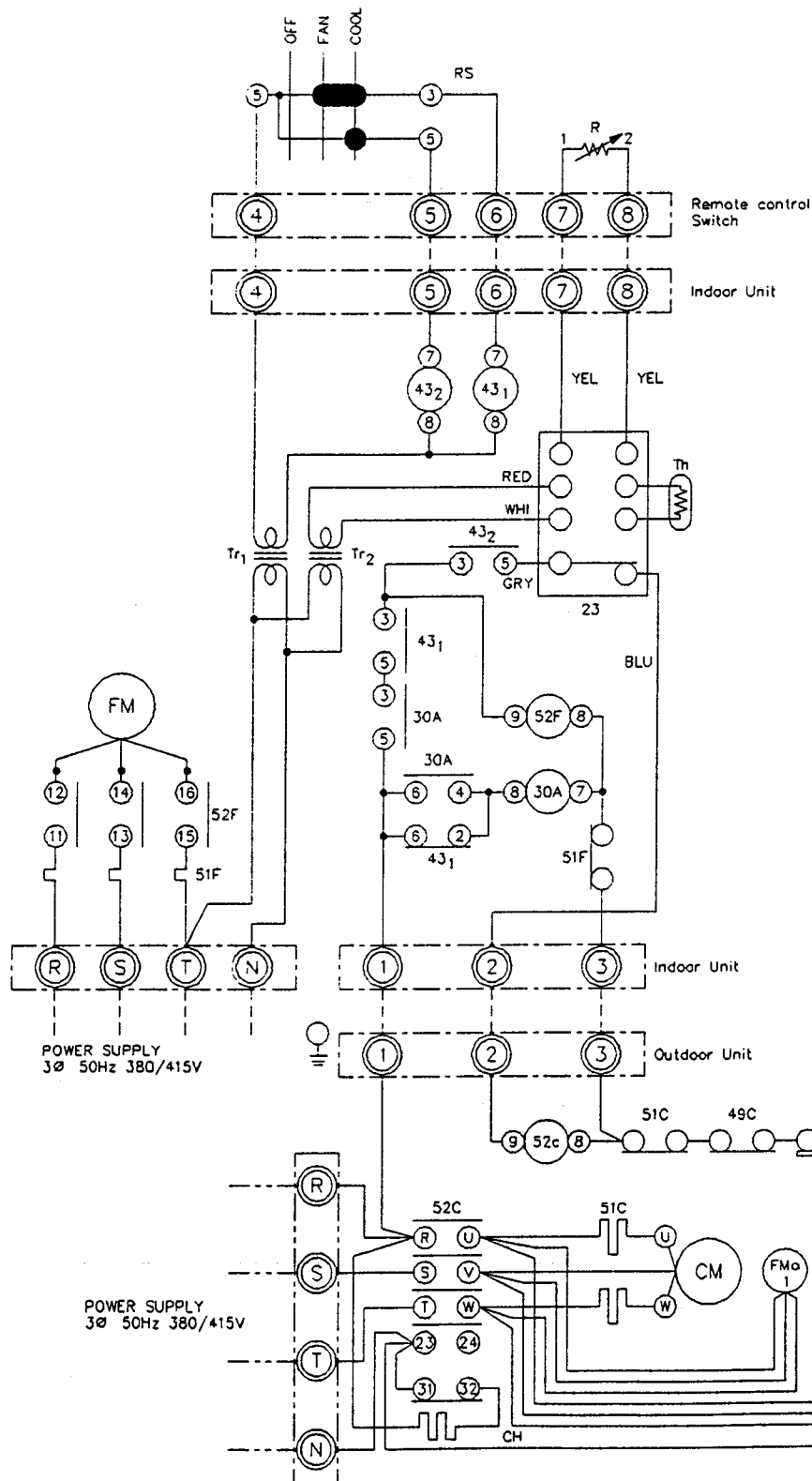
2-1. Indoor unit
RDA-2505UDE8



2-2. Outdoor unit
RDA-S2505E8



3. SCHEMATIC DIAGRAM



○ shows terminal block and figures show terminal numbers.
Broken line show wiring at site.

Mark	Description
FM	Fan Motor
52F	Magnetic Contactor
RS	Selector Switch
R	Variable Resistor
43 _{1,2}	Relay
30A	Relay
Th	Sensor (Thermostat)
23	Thermostat
Tr _{1,2}	Transformer
51F	Thermostat (Fan Motor)
FMo _{1,2}	Fan motor (Outdoor)
RCo _{1,2}	Running Capacitor (Outdoor)
49C	Inner Overload Relay
63H	High Pressure Switch
CM	Compressor
52C	Magnetic Contactor
51C	Overload Relay
CH	Crank-case Heater

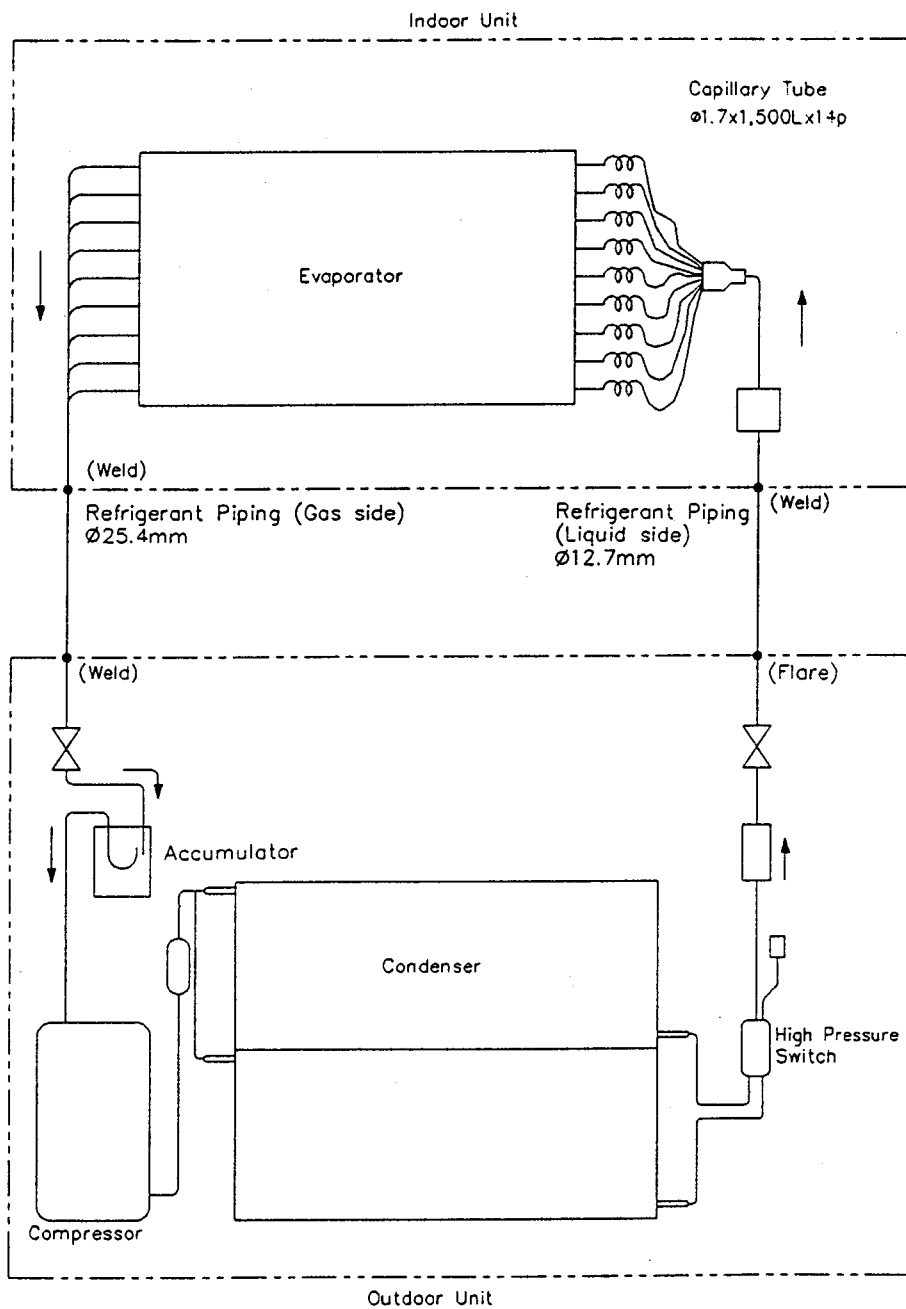
4. SPECIFICATIONS OF ELECTRICAL PARTS

4-1. RDA-2505UDE8/S2505E8

No.	Parts name	Type	Specifications
1	Compressor	YH1000JA	Output (Rated) 7.5 kW, 2 pole, 3 phase, 380/415 V, 50 Hz Winding resistance 1.00 Ω , at 20°C
2	Indoor unit Fan motor	IK-DBK	Output (Rated) 1,500 W, 4 pole, 3 phase, 400 V, 50 Hz
3	Outdoor unit Fan motor	TF-400-200E	Output (Rated) 200 W, 6 pole, 3 phase, 400 V, 50 Hz Winding resistance (Ω , at 20°C) 181.4 Ω
4	Magnetic contactor for Indoor fan motor	ME-10F-FE	Tripping current 3.6 A, Resetting (manual)
5	Crank case heater		AC 240 V , 100 W
6	Transformer	TB230	230 V /100 V
7	Transformer	TB300	230 V /24 V
8	High pressure switch	20PS-C	Tripping pressure 30 kg/cm ² G Resetting pressure 23 kg/cm ² G
9	Relay	LY2F	AC 230 V , AC 24 V
10	Magnetic contactor	C-35	230 V
11	Overcurrent relay	U0-10	Tripping current 31.5 A, Resetting (automatic)

5. REFRIGERANT PIPING DIAGRAM

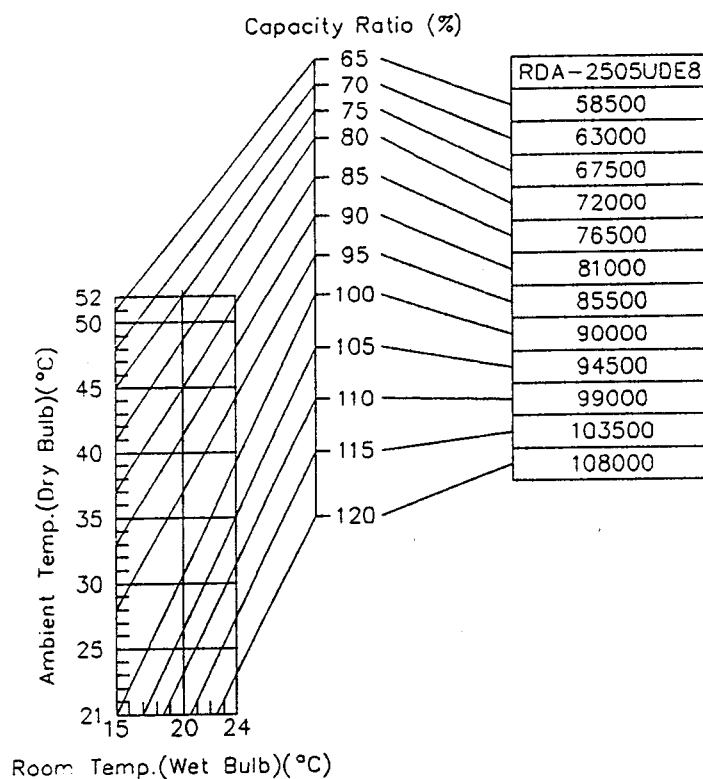
RDA-2505UDE8/S2505E8



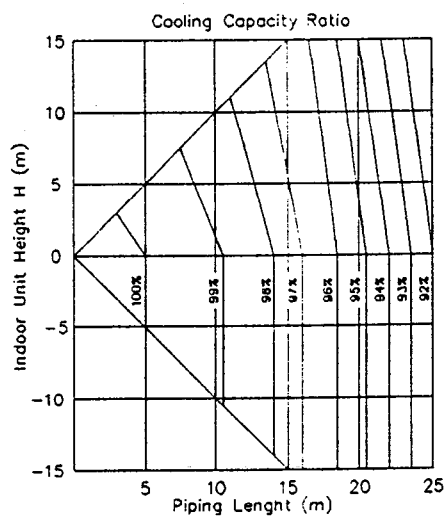
6. PERFORMANCE CHARACTER

6-1. RDA-2505UDE8

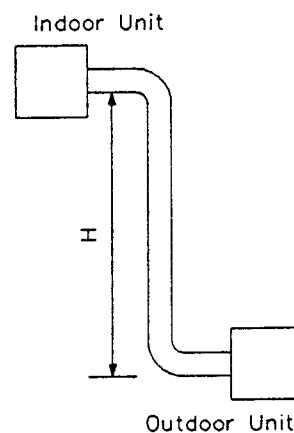
(1) Cooling Capacity



(2) Piping Length/Cooling Capacity



Multiply the capacity (required by capacity ratio shown in the above table)



(3) Piping Length/Additional Refrigerant Volume

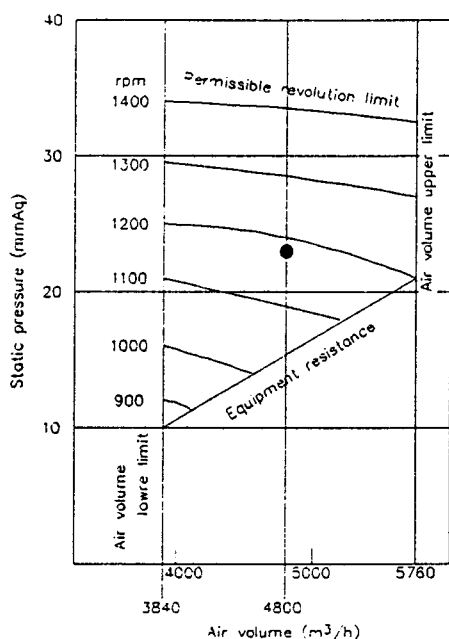
In case of piping length is more than 5m, less than 25m.

Model	Add. Volume (per meter)	Maximum Add. Volume
RDA-2505UDE8/S2505E8	70 g/m	1.4 kg

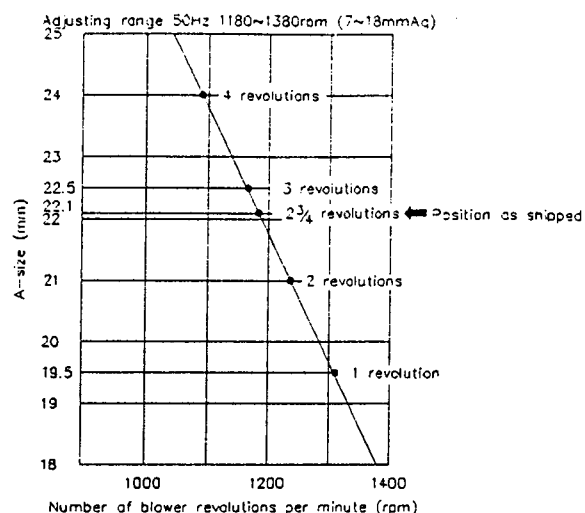
(4) Blower Performance RDA-2505UDE8

Blower Characteristics

Standard Air volume 4800 m³/h
Number of revolutions per minute when shipped • 50 Hz (1180rpm)



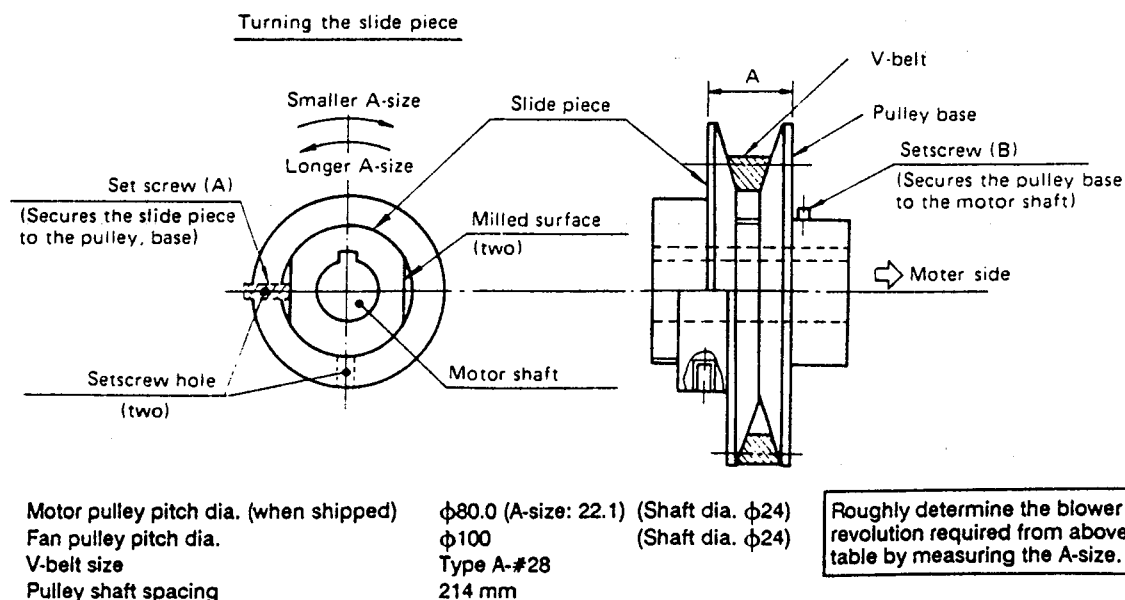
Adjustable Range of the Number of Blower Revolutions Per Minute for Variable Pulley



Note: The A-size of the variable pulley is adjustable for each 1/4 revolution of the slide piece according to the combination of the milled surface of the pulley base with the set screw hole.

(5) Adjusting Variable Pulley (RDA-2505UDE8)

Indoor unit uses a variable pulley on the motor pulley side. Adjust the variable pulley by determining the required blower revolution from above table to suit the external static pressure to the duct. Troubles, such as noise and vibration, and air conditioner malfunctions could result when the blower revolutions greatly differs from the blower revolutions required.

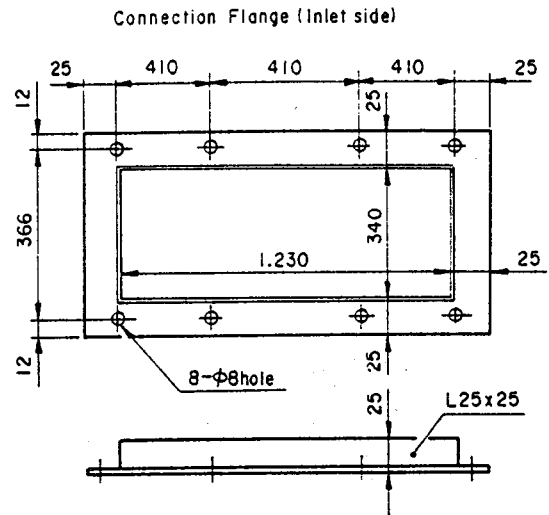
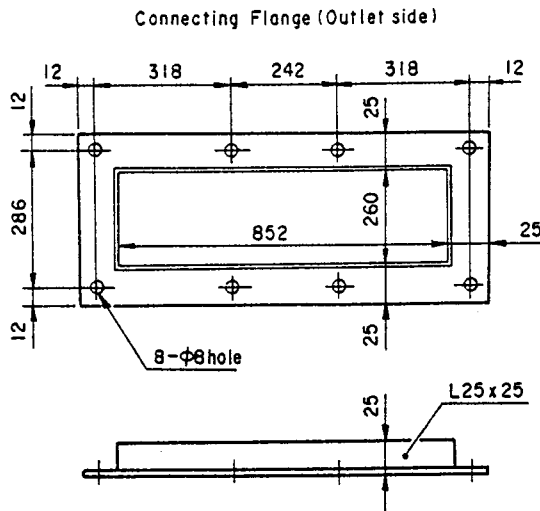


7. CONECTION FLANGE (REFERENCE)

■ Connection Flange of Air Outlet and Inlet Ducting

Connection flange is not provided on the indoor unit. Procure it as shown below at site.

RDA-2505UDE8



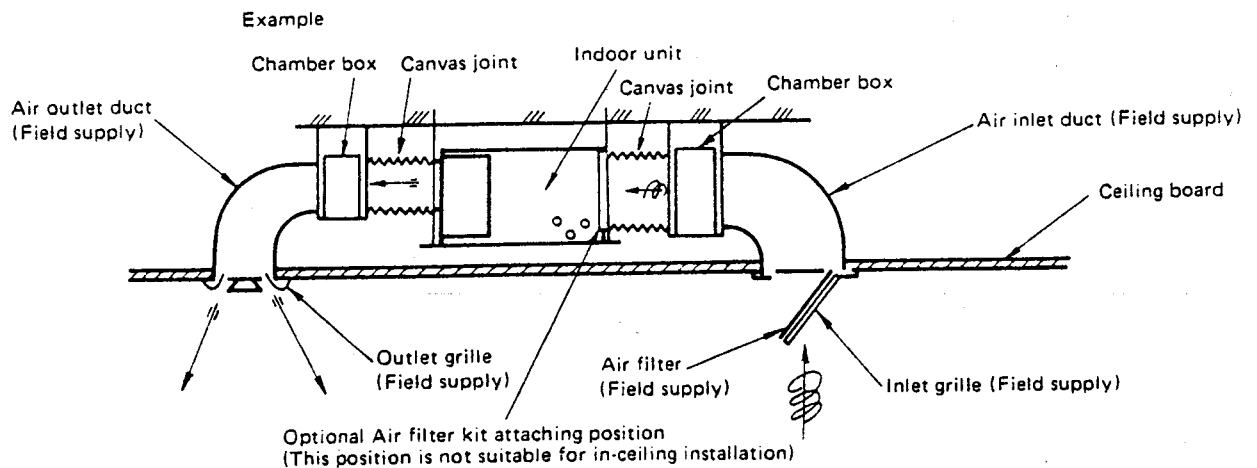
NOTE

If the main body of the air conditioner is connected with the canvas joint by using a rivet, it becomes impossible to inspect refrigeration cycle at a later time. Be sure to fasten them with bolts by using the flanges shown above. (Fixing bolt M6 x 12 should be procured locally.)

■ Location of Air Filter

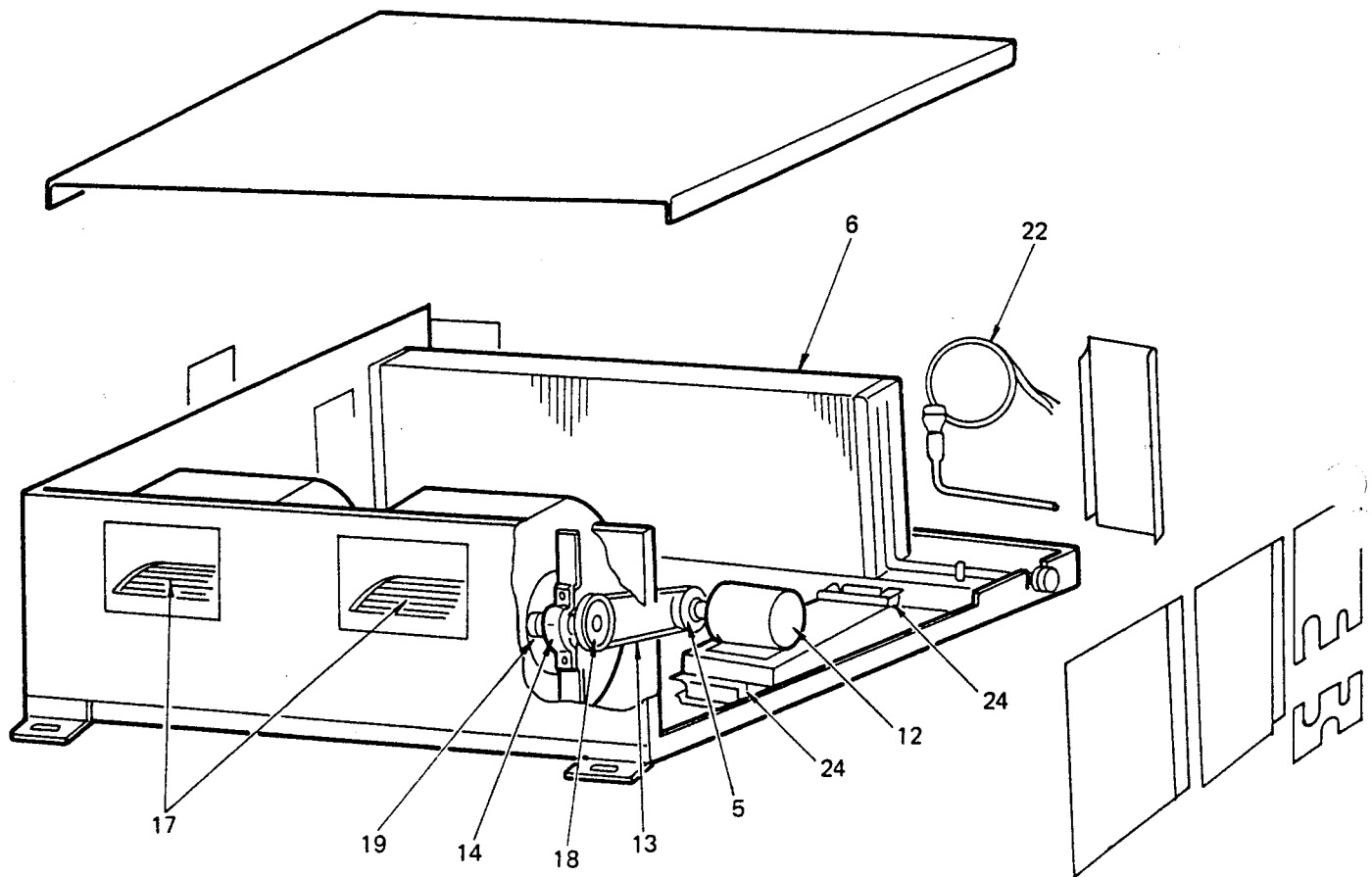
Air filter is not provided in the indoor unit.

Procure it at site, and install it as shown below.



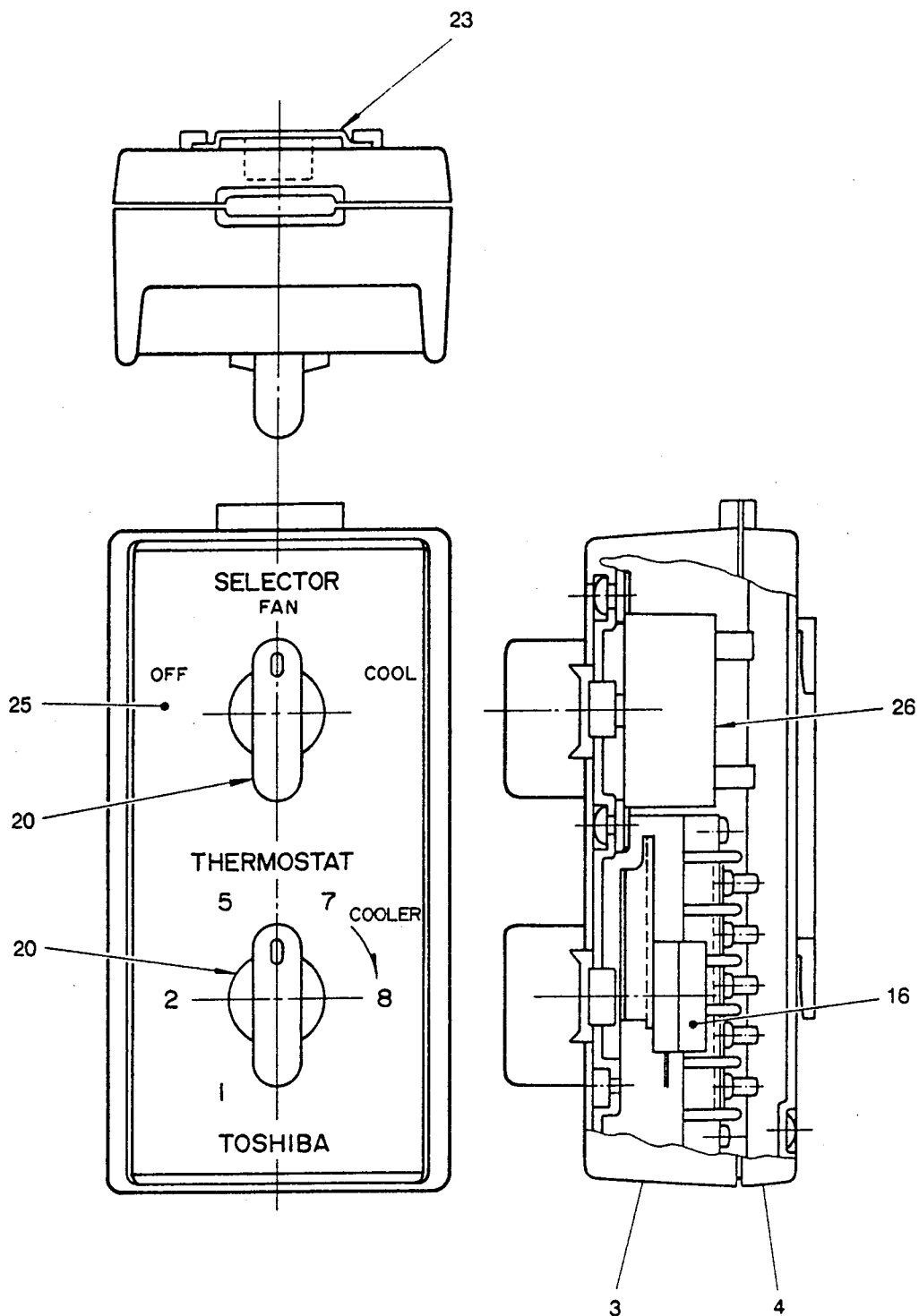
8. EXPLODED VIEWS AND PARTS LIST

8-1. Indoor unit RDA-2505UDE8



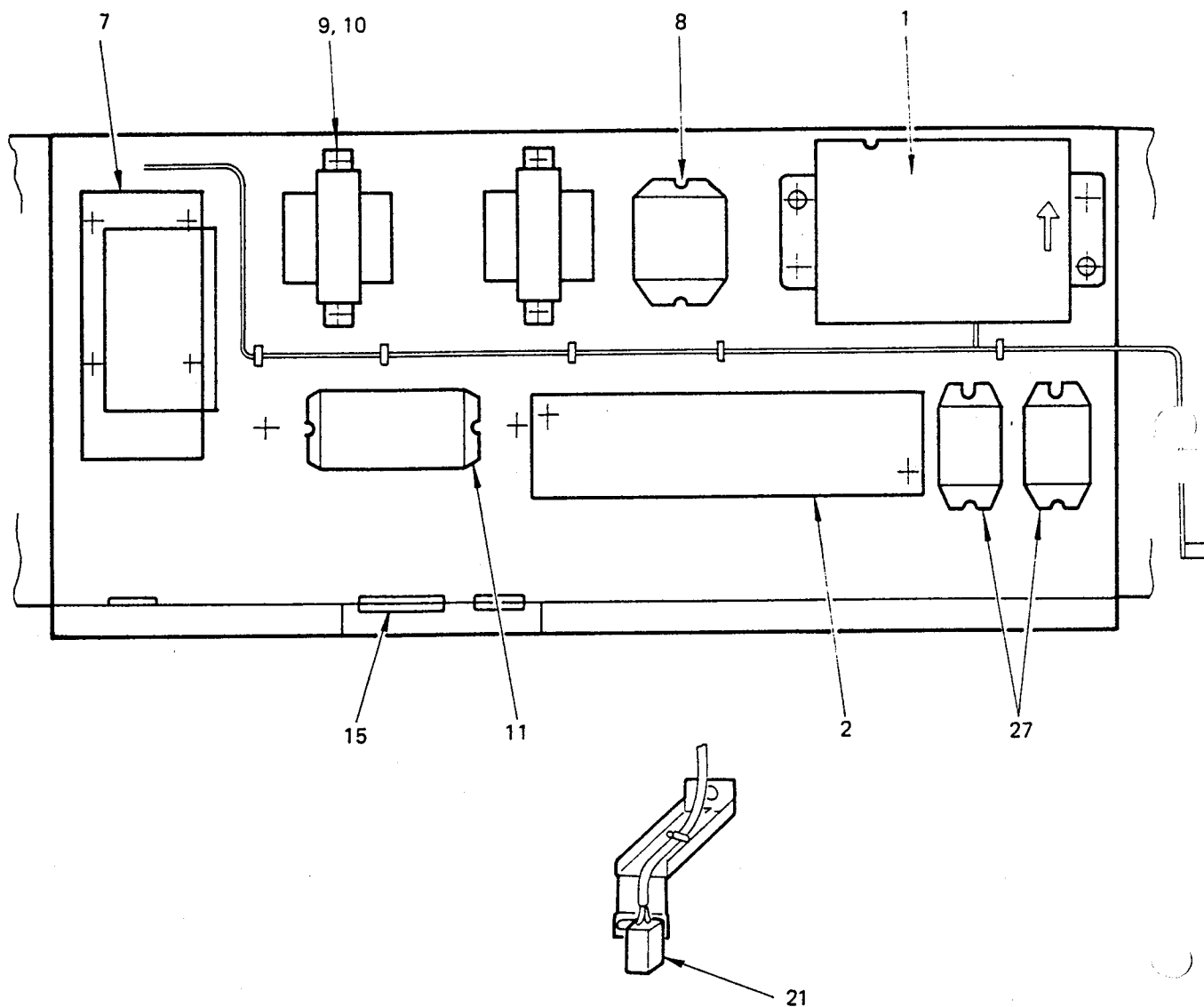
Location No.	Part No.	Description
5	43124187	Pulley, 99-VA-1
6	43144551	Evaporator
12	43121350	Motor, AC 400/400, 440V, 50/60 Hz, Fan
13	43123067	Belt
14	43125097	Bearing, Ball

Location No.	Part No.	Description
17	43120109	Fan, Sirocco
18	43124188	Pulley
19	43139016	Ring Stopper
22	43047492	Tube, Capillary
24	43195203	Cushion Rubber, Base



Location No.	Part No.	Description
3	43161008	Case-remocon
4	43162013	Cover-remocon
16	43155044	Variable Resistor, 2K ohm 0.3W
20	43067040	Knob

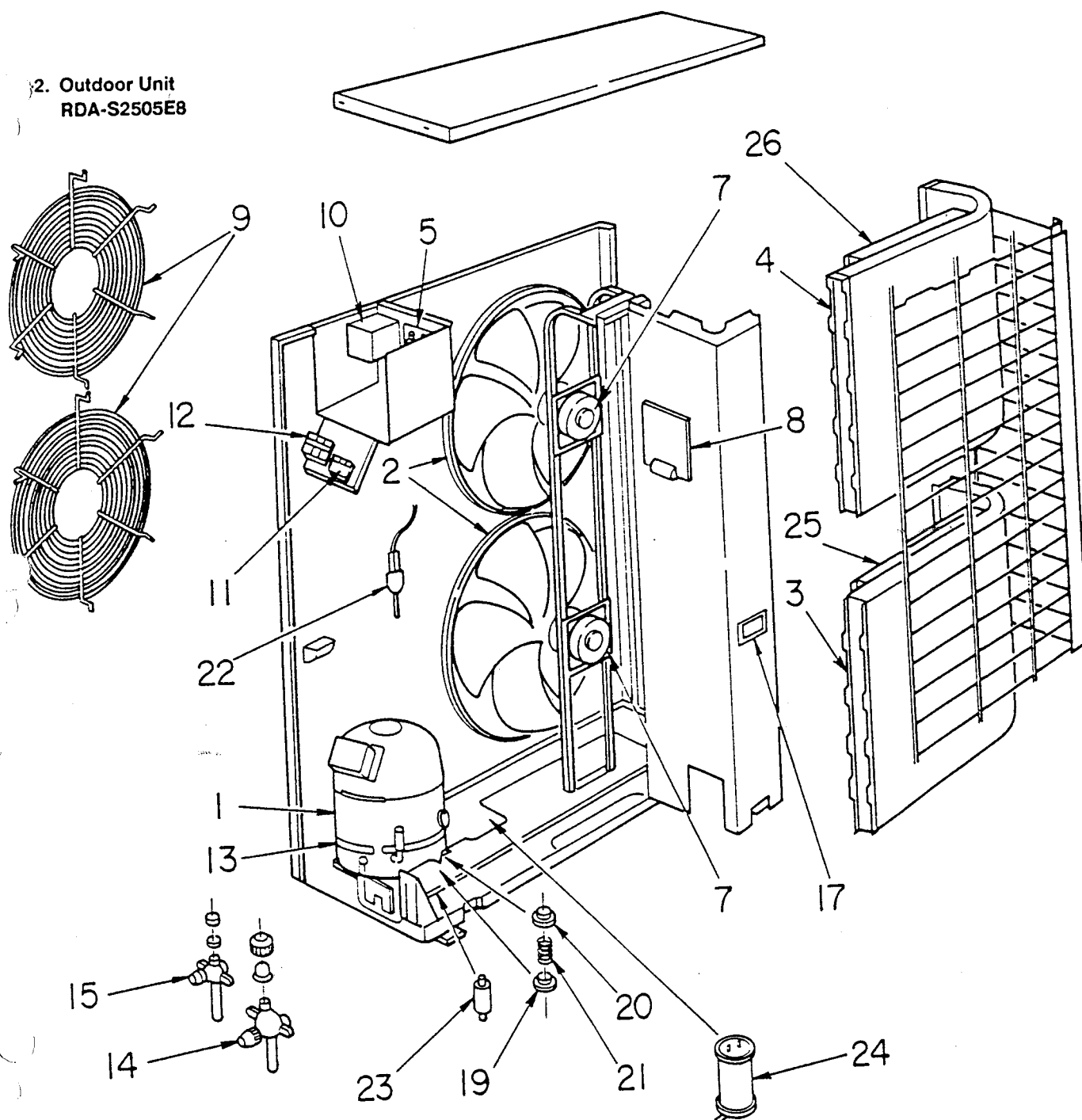
Location No.	Part No.	Description
23	43082121	Holder, Remocon
25	43117767	Plate
26	43151171	Switch, Rotary



Location No.	Part No.	Description
1	43150093	Thermostat
2	43160226	Terminal, Block
7	43152273	Magnetic-switch, Electric
8	43154141	Relay, LY2F-L
9	43058131	Transformer, Power, 230V, TB-230

Location No.	Part No.	Description
10	43158081	Transformer, Power
11	43160294	Terminal Block, 4P
15	43096124	Bushing
21	43169228	Sensor
27	43154143	Relay, 2Y2F-L

2. Outdoor Unit
RDA-S2505E8



Location No.	Part No.	Description
1	43140706	Compressor, YH1000JA
2	43120129	Fan, Propeller
3	43143515	Condenser, Lower
4	43143516	Condenser, Upper
5	43754073	Relay, Overload
7	43121432	Motor, AC 400V, 50 Hz, Fan
8	43062086	Cover, Electric Parts
9	43191169	Guard-fan
10	43152315	Magnetic-switch
11	43060324	Terminal Block, 3P
12	43160269	Terminal Block, 4P
13	43157078	Heater, Crank Case

Location No.	Part No.	Description
14	43146382	Service Valve
15	43146378	Packed Valve
17	43119368	Hanger
19	43195185	Cushion, Under, Compressor
20	43195186	Cushion, Upper, Compressor
21	43107200	Spring, Base
22	43151191	Switch, High Pressure
23	43145078	Dryer
24	43148106	Accumulator
25	43143517	Condenser, Lower, Sub
26	43143518	Condenser, Upper, Sub

TOSHIBA CORPORATION

1-1, SHIBAURA 1-CHOME, MINATO-KU, TOKYO 105, JAPAN