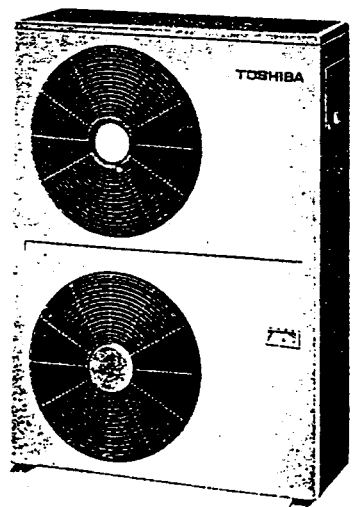
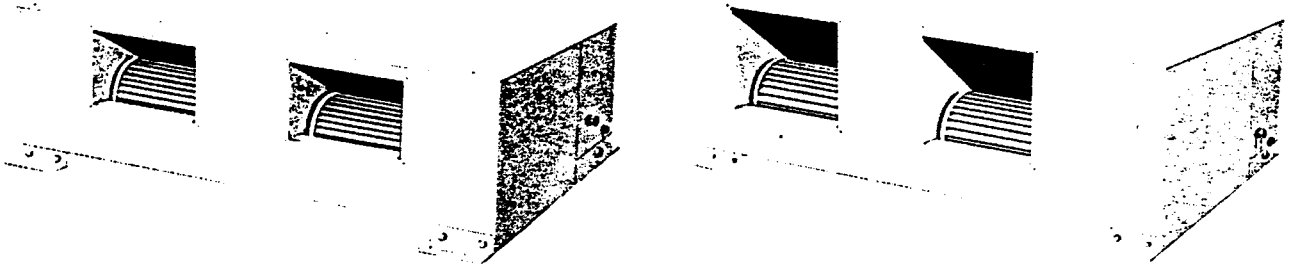


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センターファイル
Center File

AIR-CONDITIONER SPLIT (DUCT TYPE)

RDA-1255UDE8/S1255E8 RDA-1805UDE8/S1805E8



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1. SPECIFICATIONS

ITEM			MODEL	RDA-1255UDE8	RDA-1805UDE8
Cooling capacity	*1	k cal/h		12,200	18,100
		BTU/h		48,400	72,000
		kW		14.2	21.1
Power source		Phase		3	3
		V		380/415	380/415
		Hz		50	50
Power consumption		kW		5.0	7.9
Power factor		%		86	86
Running current		A		8.4	13.3
Starting current		A		50	80
Refrigerant	Name of refrigerant			R-22	R-22
	Charge volume		kg	3.3	3.8
Refrigerant control				Capillary tube	Capillary tube
Interconnection pipe	Gas side size	mm (in.)		φ19 (3/4")	φ25.4 (1")
	Coupler style			Flare	Brazing
	Liquid side size	mm (in.)		φ9.5 (3/8")	φ12.7 (1/2")
	Coupler style			Flare	Brazing & Flare
	Standard length	m (ft)		5 (17.4')	5 (17.4')
	Maximum length (of one way)	m (ft)		25 (82')	25 (82')
	Maximum height				
	Indoor unit higher	m (ft)		15 (49')	15 (49')
	Outdoor unit higher	m (ft)		15 (49')	15 (49')
Condensate drain joint	Diameter (Outside)			MPT1" (25A)	MPT1" (25A)
INDOOR UNIT			RDA-1255UDE8	RDA-1805UDE8	
Model	Height	mm (ft-in)		380 (1'2-31/32")	430 (1'4-15/16")
	Width	mm (ft-in)		1,200 (3'11-1/4")	1,350 (4'5-1/8")
	Depth	mm (ft-in)		660 (2'1-31/32")	800 (2'7-1/2")
Net weight		kg (lbs)		74 (163)	120 (265)
Heat exchanger type				Finned tube	Finned tube
Indoor fan type				Centrifugal fan	Centrifugal fan
Air volume		m ³ /h (CFM)		2,100 (1,236)	3,600 (2,120)
External static pressure	Standard	mm Aq		7 (Δ)	7
	Max. on standard motor	mm Aq		17 (Δ)	18
Fan motor output		W		300	750
Air filter				Not provided	Not provided
OUTDOOR UNIT			RDA-S1255E8	RDA-S1805E8	
Model	Height	mm (ft-in)		1,240 (4'13/16")	1,340 (4'4-3/4")
	Width	mm (ft-in)		930 (3'5/8")	930 (3'5/8")
	Depth	mm (ft-in)		385 (1'3-3/16")	385 (1'3-3/16")
Net weight		kg (lbs)		112 (247)	155 (342)
Heat exchanger type				Finned tube	Finned tube
Outdoor fan type				Propeller fan	Propeller fan
Fan motor output		W		39 + 63	105 x 2
Compressor	Model			YH506JA	YH750JA
	Output	kW		3.75	5.5
Protective device				High pressure switch over current relay Inner overload relay	High pressure switch over current relay Inner overload relay
Optional air filter kit (not usable for in-ceiling installation)				RBP-F1255U	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°F DB, 73°F WB)

Minimum 21°C DB, 15.5°C WB (70°F DB, 60°F WB)

Ambient air temperature

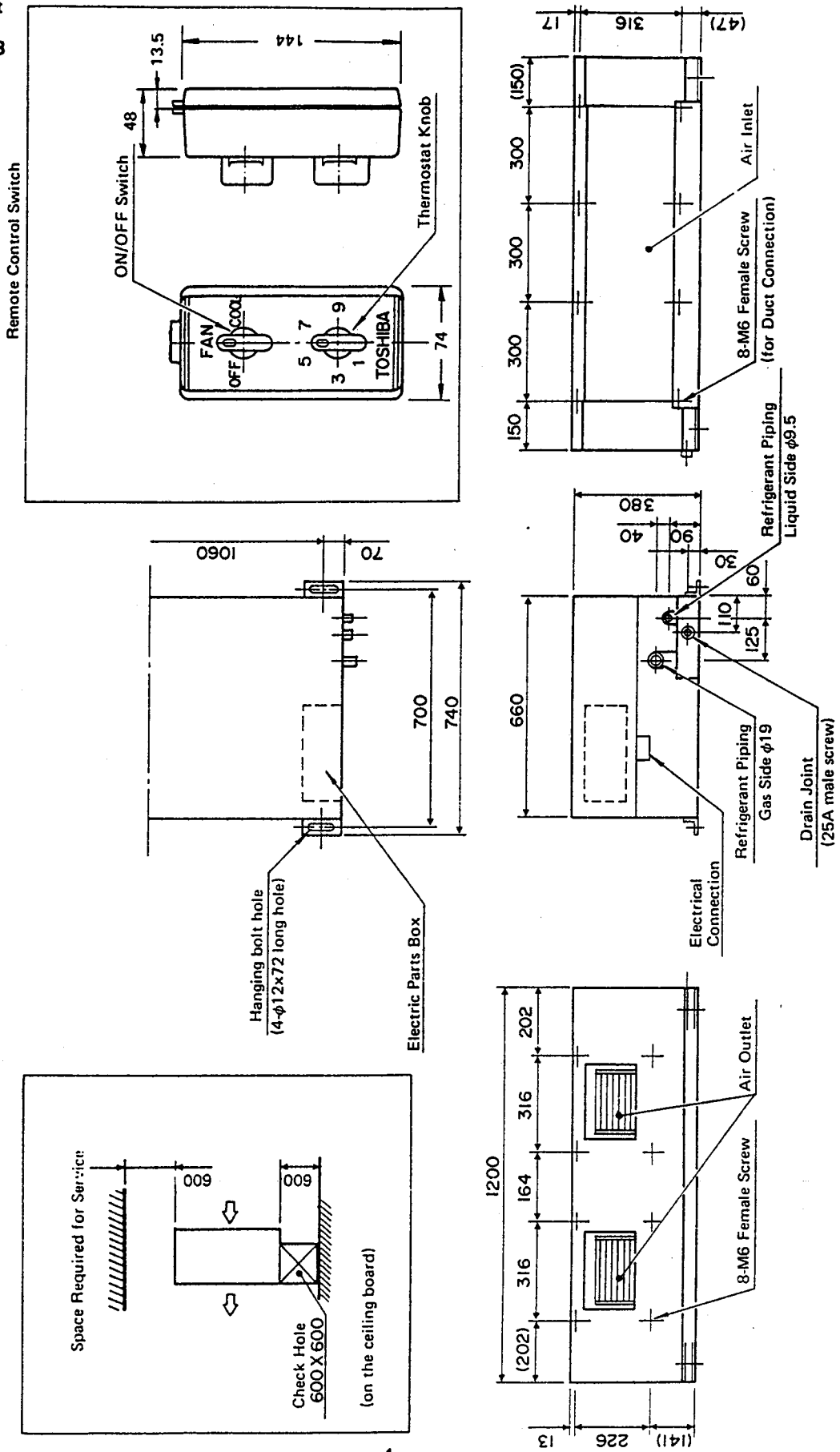
When cooling

Maximum 52°C DB (126°F DB)

Minimum 21°C DB (70°F DB)

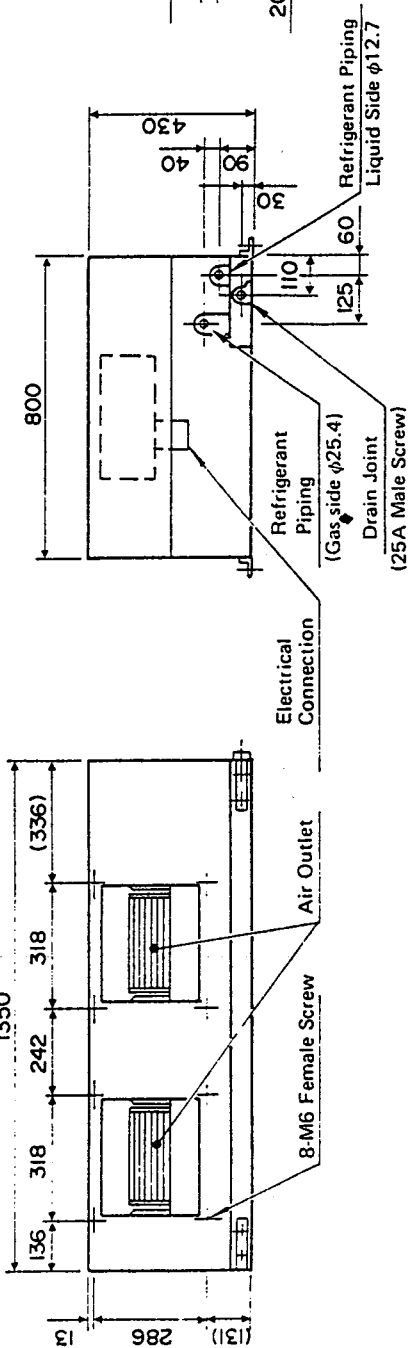
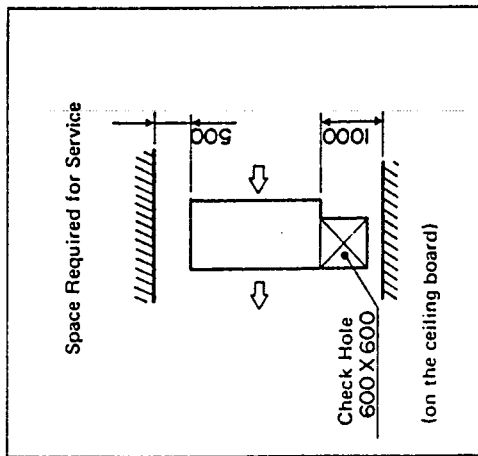
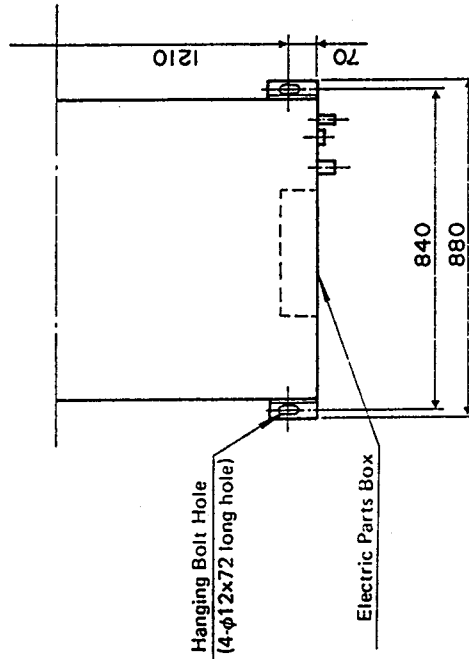
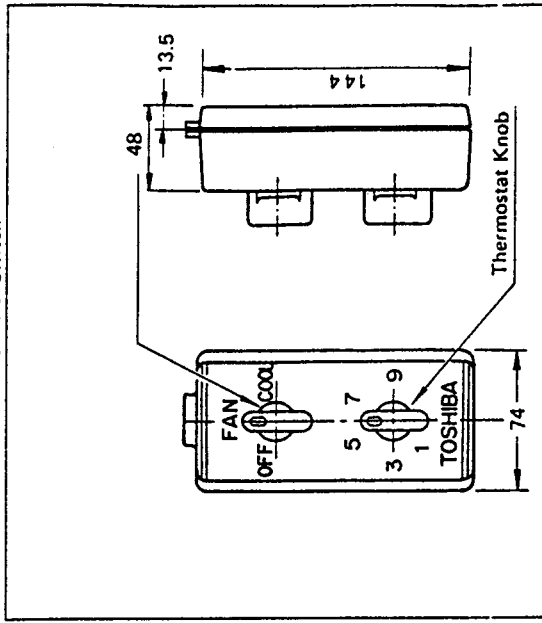
2. CONSTRUCTION VIEWS

2-1 Indoor unit
RDA-1255UDE8

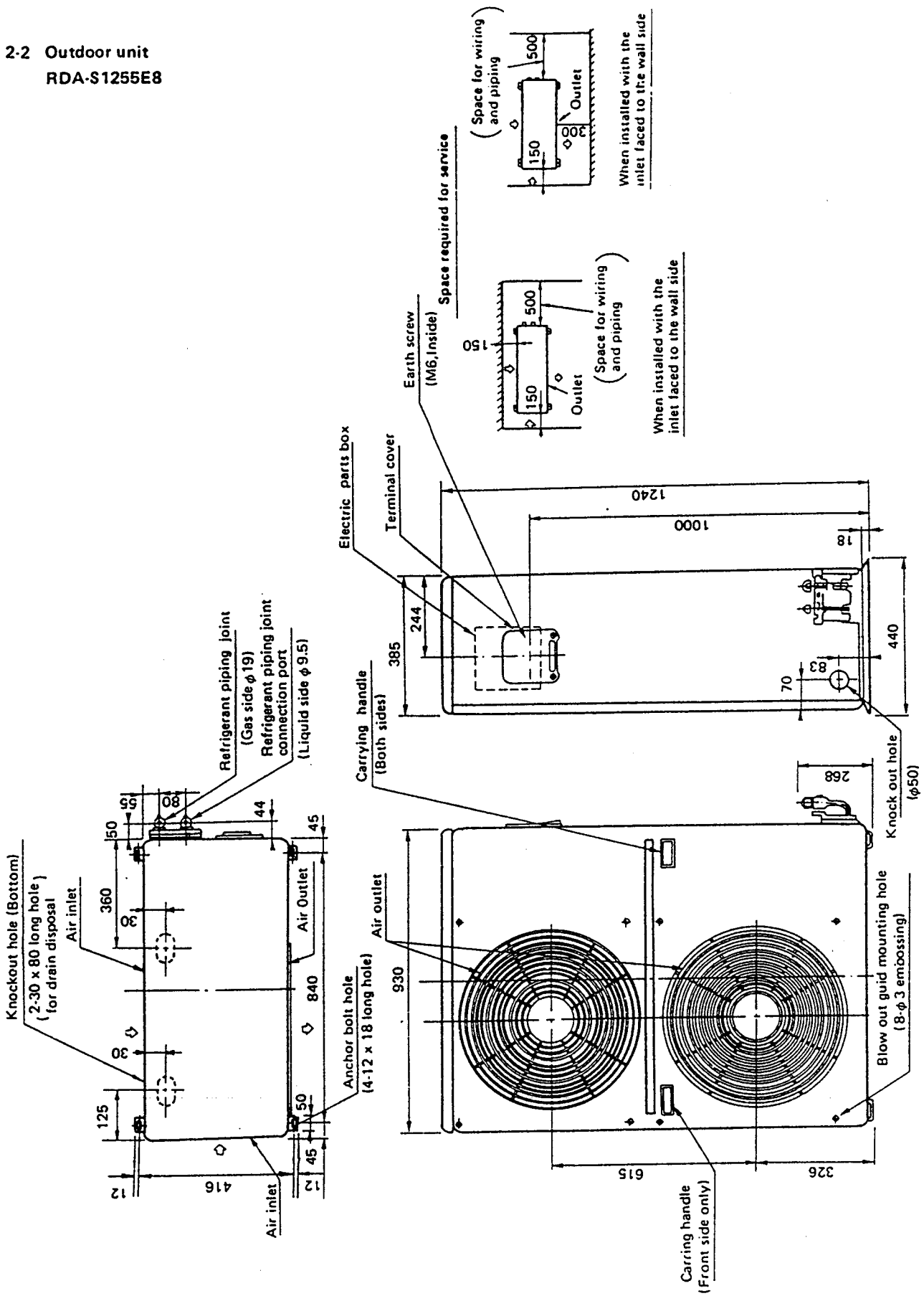


RDA-1805UDE8

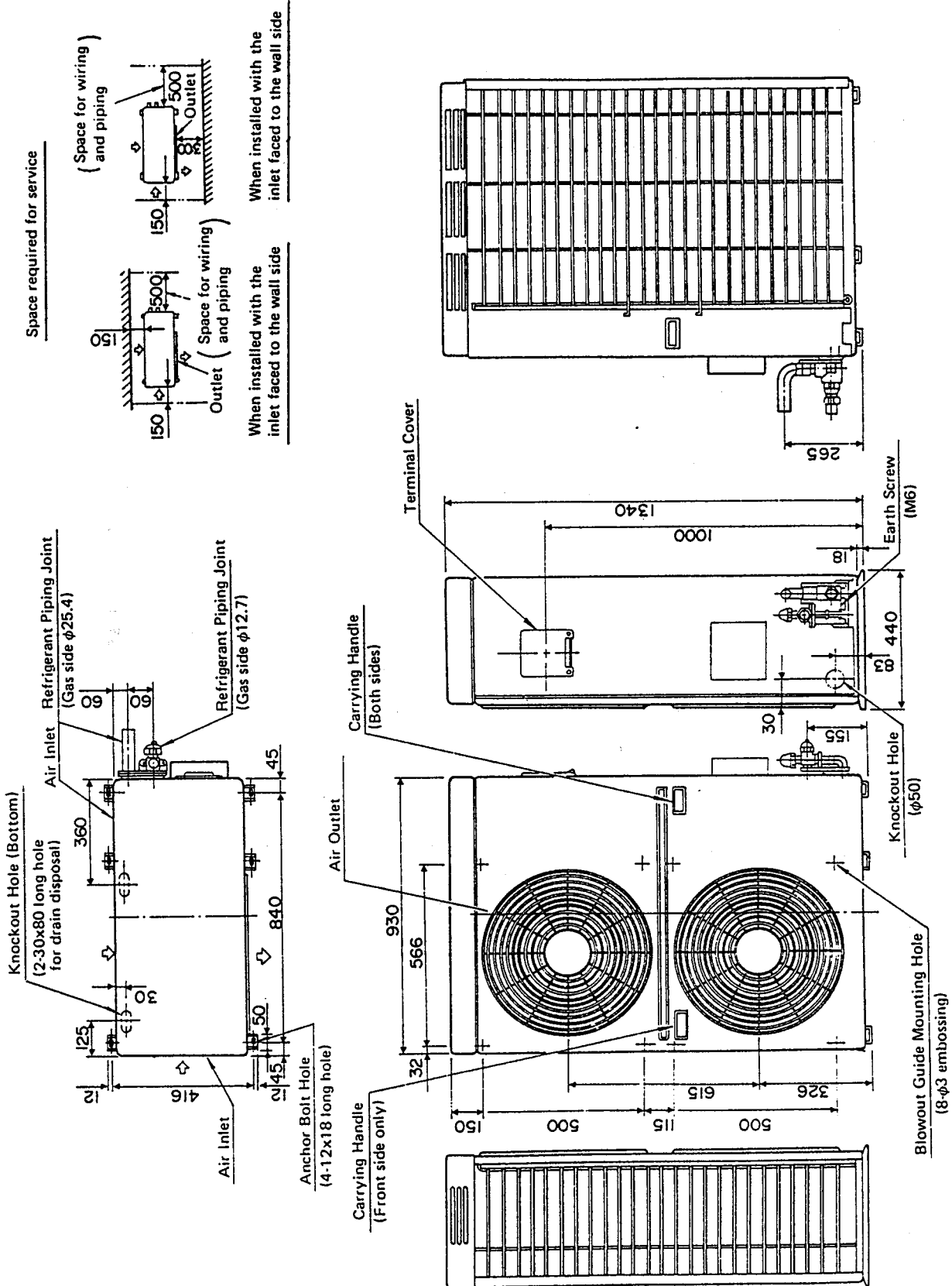
Remote Control Switch



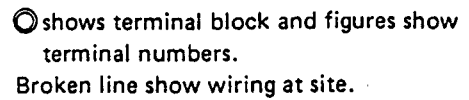
2-2 Outdoor unit
RDA-S1255E8



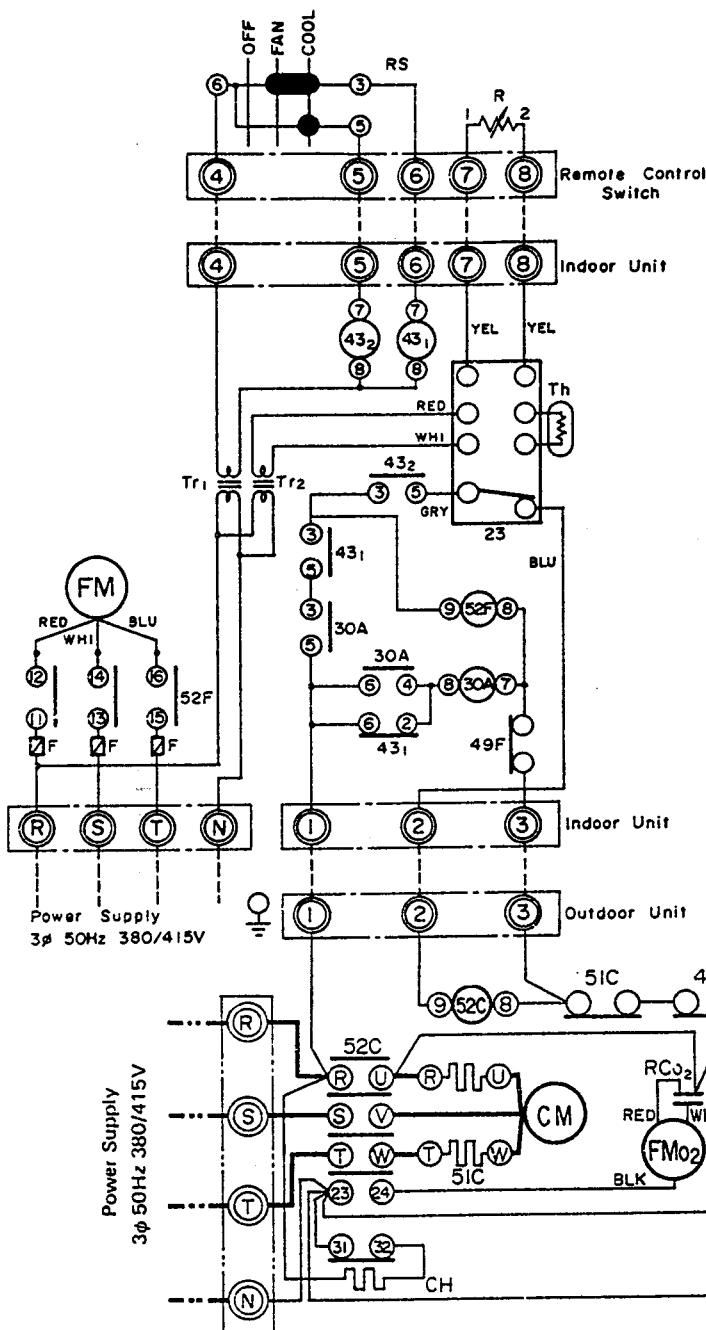
2-3 Outdoor unit RDA-S1805E8



UDA-1255UDE8/S1255E8



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
49F	Thermostat (Fan Motor)
F	Fuse
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



○ 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
49F	Thermostat (Fan Motor)
F	Fuse
FM _{01,2}	Fan Motor (Outdoor)
RC _{01,2}	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-1255UDE8/S1255E8

No.	Parts name	Type	Specifications		
1	Compressor	YH506JA	Output (Rated) 3.75 kW, 2 pole, 3 phase, 380/415 V, 50 Hz		
			Winding resistance 2.29 Ω , at 20°C		
2	Indoor unit Fan motor	TTF-400-300-4A	Output (Rated) 300 W, 3 phase, 400 V, 50 Hz		
			Winding resistance (Ω , at 20°C)	Δ 37.8	λ 113.0
3	Outdoor unit Fan motor	AF-230-39K	Output (Rated) 39 W, 6 pole, 1 phase, 220/240 V, 50 Hz		
			Winding resistance (Ω , at 20°C)	R-B 53.3	W-B 54.2
		AF-230-63K-1	Output (Rated) 63 W, 6 pole, 1 phase, 220/240 V, 50 Hz		
			Winding resistance (Ω , at 20°C)	R-B 40.0	W-B 43.2
4	Magnetic contactor	E4-20	230 V		
5	Running capacitor for Outdoor Fan motor	35FAFN405UJ	AC 350 V, 4 μ F		
		EAL40M405UF1	AC 400 V, 4 μ F		
6	Transformer	TB230	230 V/100 V		
7	Transformer	TB300	230 V, 24 V		
8	High pressure switch	20PS-B	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-25	230 V		
11	Overcurrent relay	RC4-35ER1	Tripping current 12 A, Resetting manual		

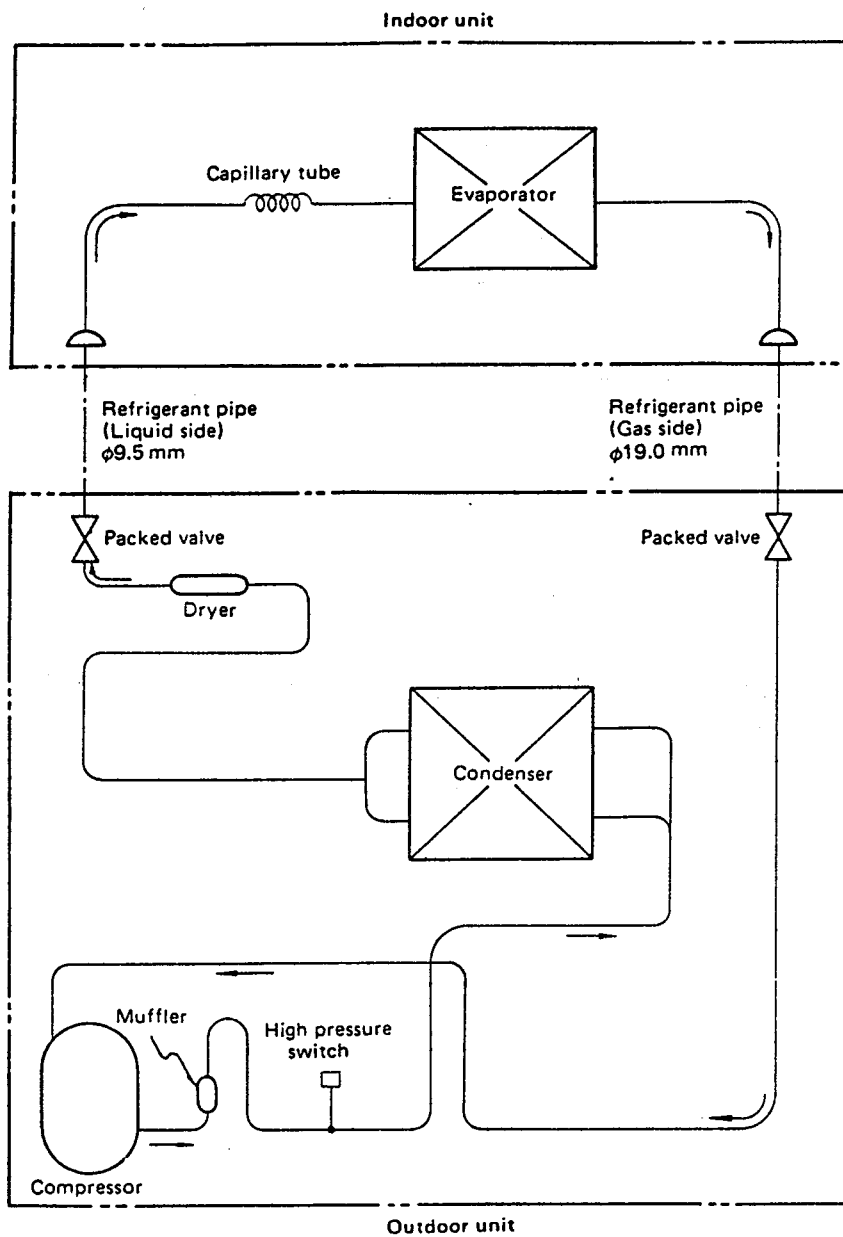
4-2 RDA-1805UDE8/S1805E8

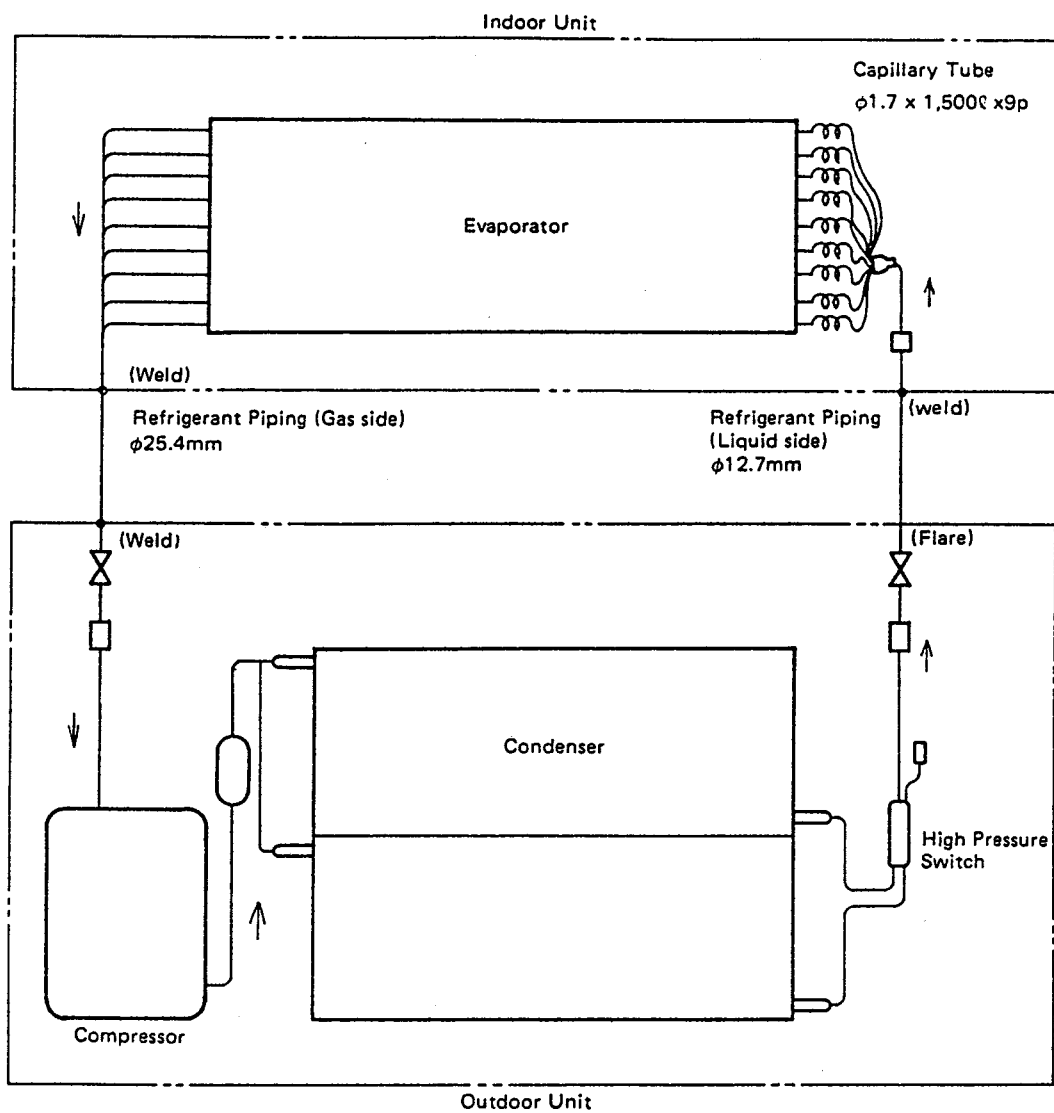
No.	Parts name	Type	Specifications		
1	Compressor	YH750JA	Output (Rated) 5.5 kW, 2 pole, 3 phase, 380/415 V, 50 Hz Winding resistance 1.37 Ω , at 20°C		
2	Indoor unit Fan motor	IK-DBK	Output (Rated) 750 W, 4 pole, 3 phase, 400 V, 50 Hz		
3	Outdoor unit Fan motor	AF-220-105B	Output (Rated) 105 W, 6 pole, 1 phase, 230 V, 50 Hz		
			Winding resistance (Ω , at 20°C)	R-B 21.9	W-B 50.8
4	Magnetic contactor for Indoor fan motor	ME-10F-FE	Tripping current 1.9 A, Resetting (manual)		
5	Running capacitor for Outdoor fan motor	A45AMFL405W	AC 450 V, 4 μ F		
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 26.5 A, Resetting (automatic)		

5. REFRIGERANT PIPING DIAGRAM

INDOOR UNIT
PDA-1255UDE8

OUTDOOR UNIT
RDA-S1255E8

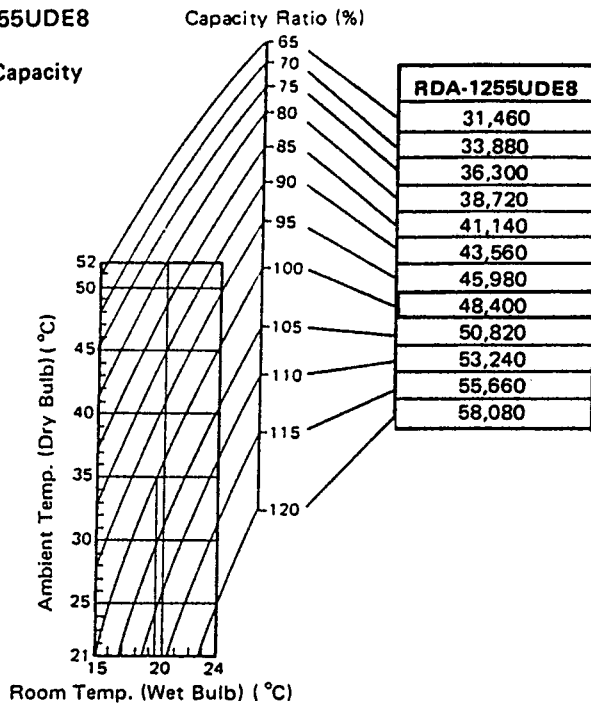




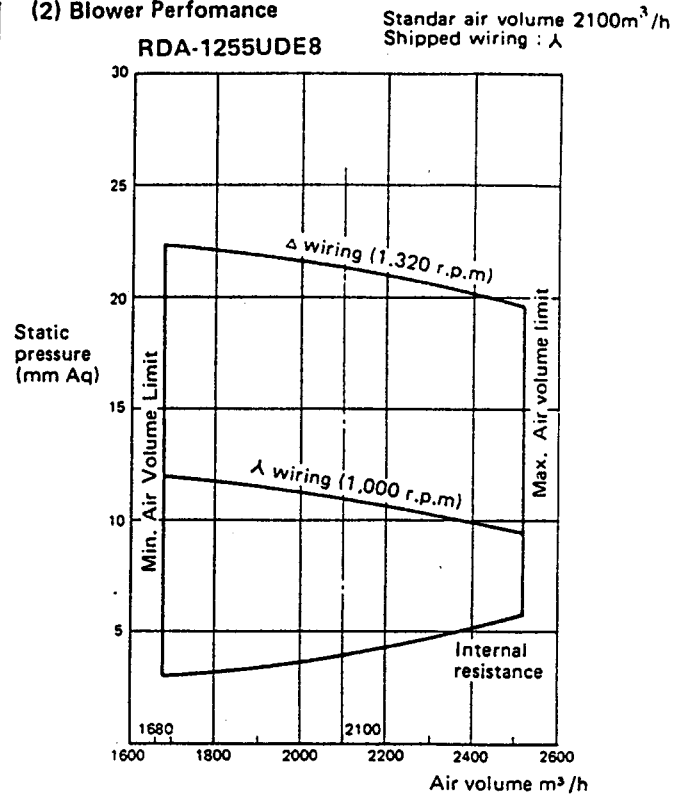
6. PERFORMANCE CHARACTER

6-1 RDA-1255UDE8

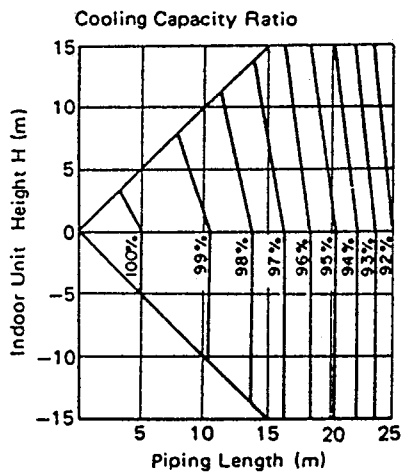
(1) Cooling Capacity



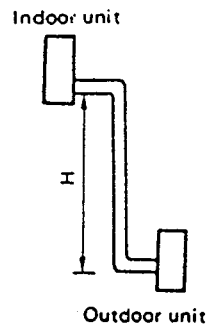
(2) Blower Performance



(3) Piping Length/Cooling Capacity



Multiply the capacitys required by
by capacity ratio shown in the above table



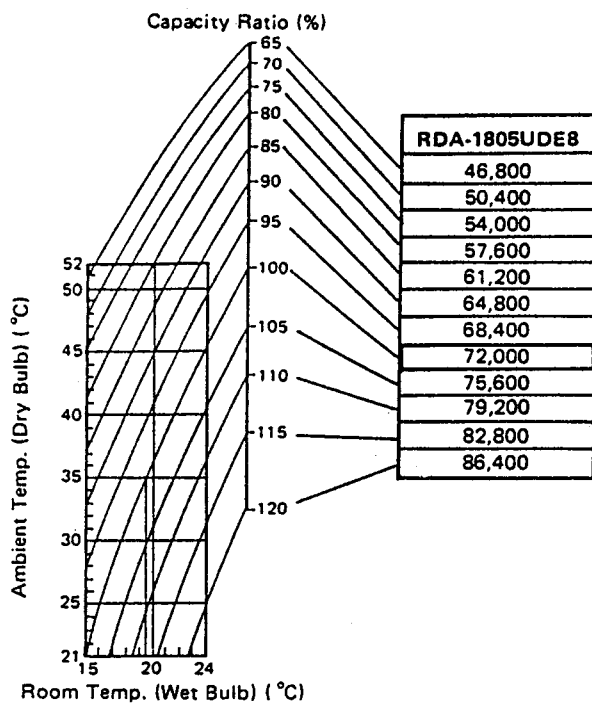
(4) Piping Length/Additional Refrigerant Volume

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

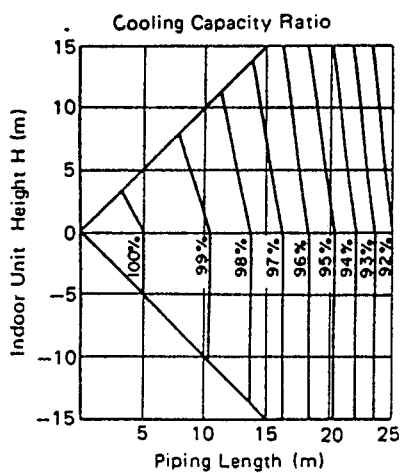
Model	Add. volume (per 1 meter)	Maximum Add. volume
RDA-1255UDE8/S1255E8	50 g/m	1,000 g

6-2 RDA-1805UDE8

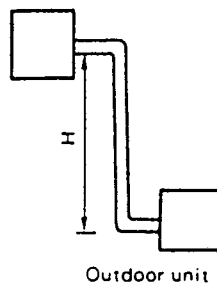
(1) Cooling Capacity



(2) Piping Length/Cooling Capacity



Indoor unit



Outdoor unit

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

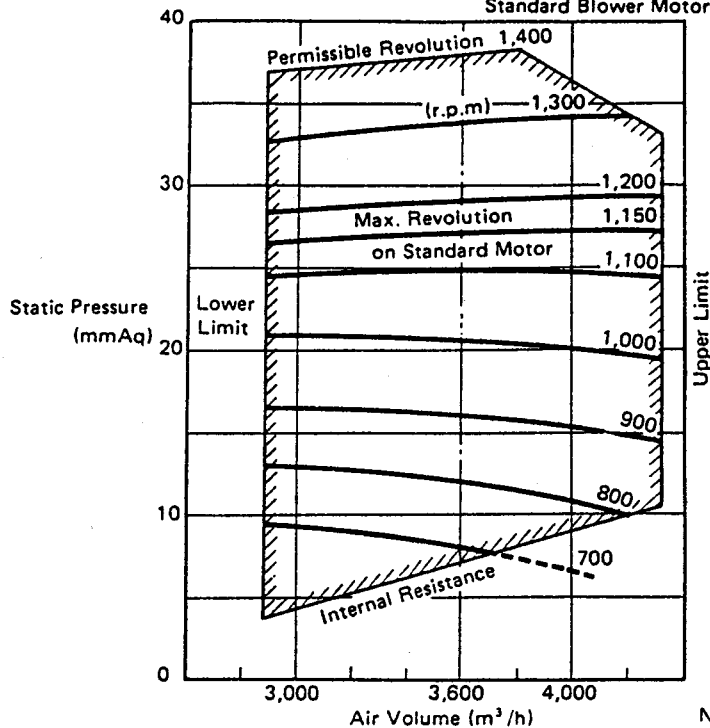
(3) Piping Length/Additional Refrigerant Volume

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

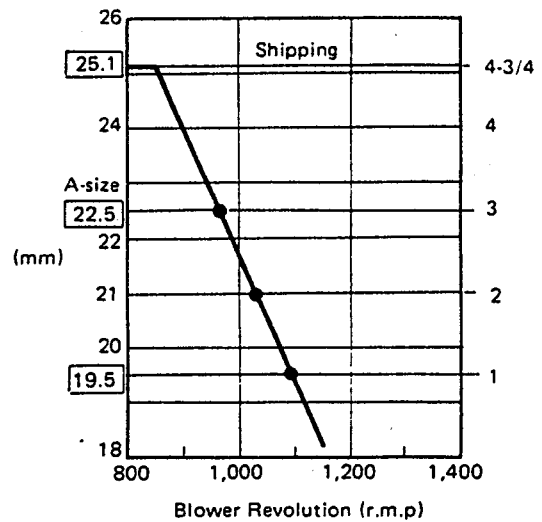
Model	Add. Volume (per meter)	Maximum Add. Volume
RDA-1805UDE8 /S1805EB	130 g/m	2.6 kg

(4) Blower Performance
RAD-1805UDE8

Standard Air Volume 3,600m³/h
Shipped Revolution 860r.p.m.
Standard Blower Motor 0.75kw



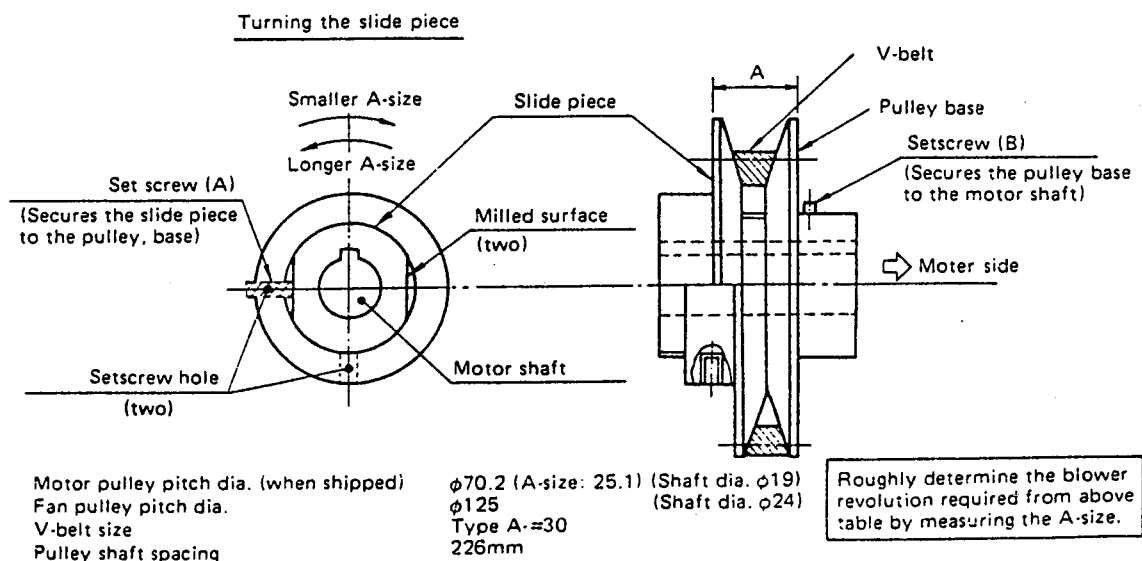
Adjusting Range of Variable Pulley
860 ~ 1,150r.p.m



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-1805UDE8)

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.

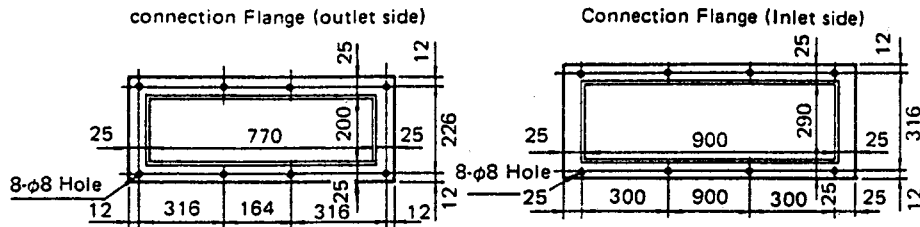


7. CONNECTION FLANGE (REFERENCE)

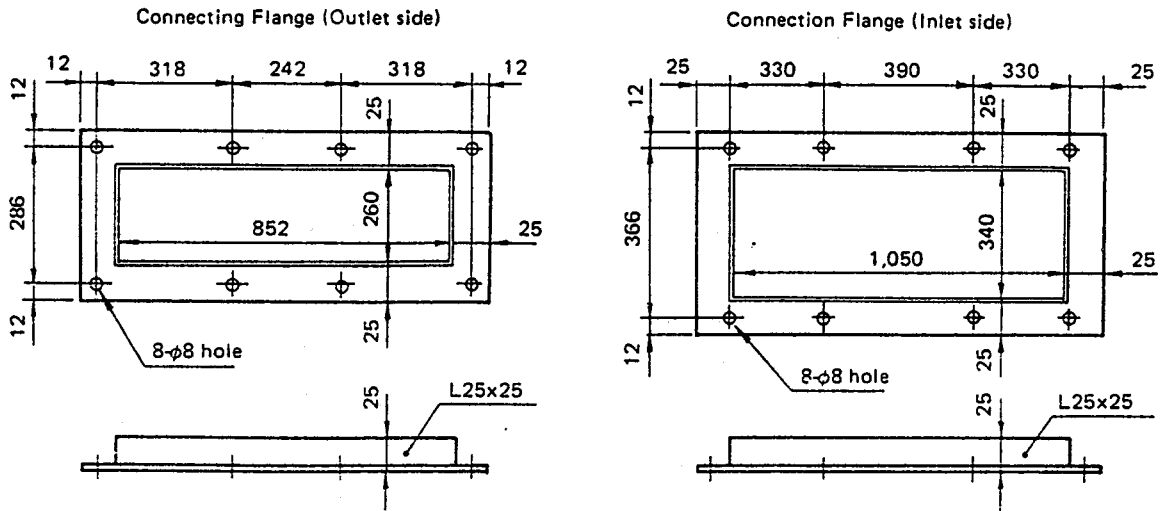
- Connection Flange of Air Outlet and Inlet Ducting

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

RDA-1255UDE8



RDA-1805UDE8

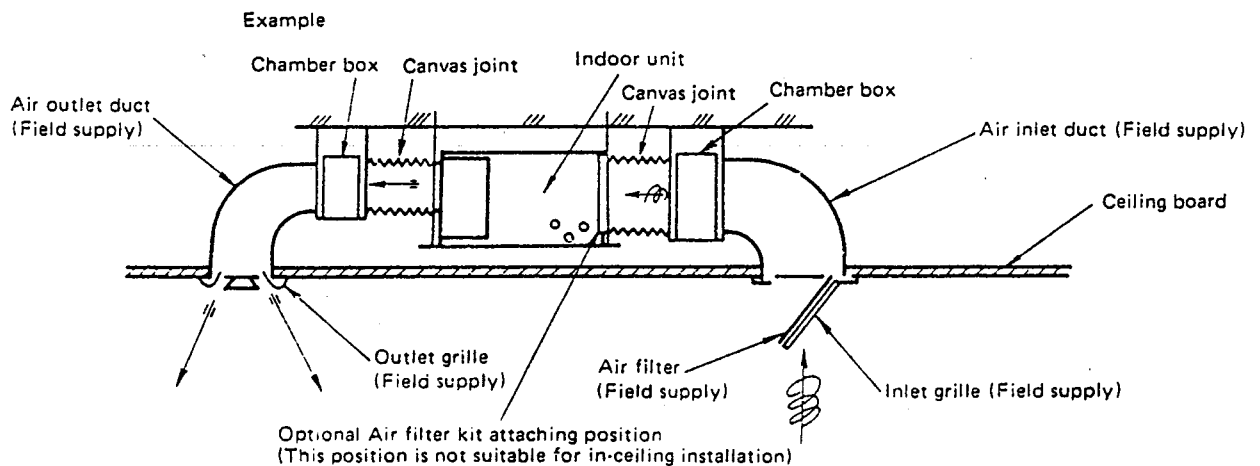


NOTE

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.)

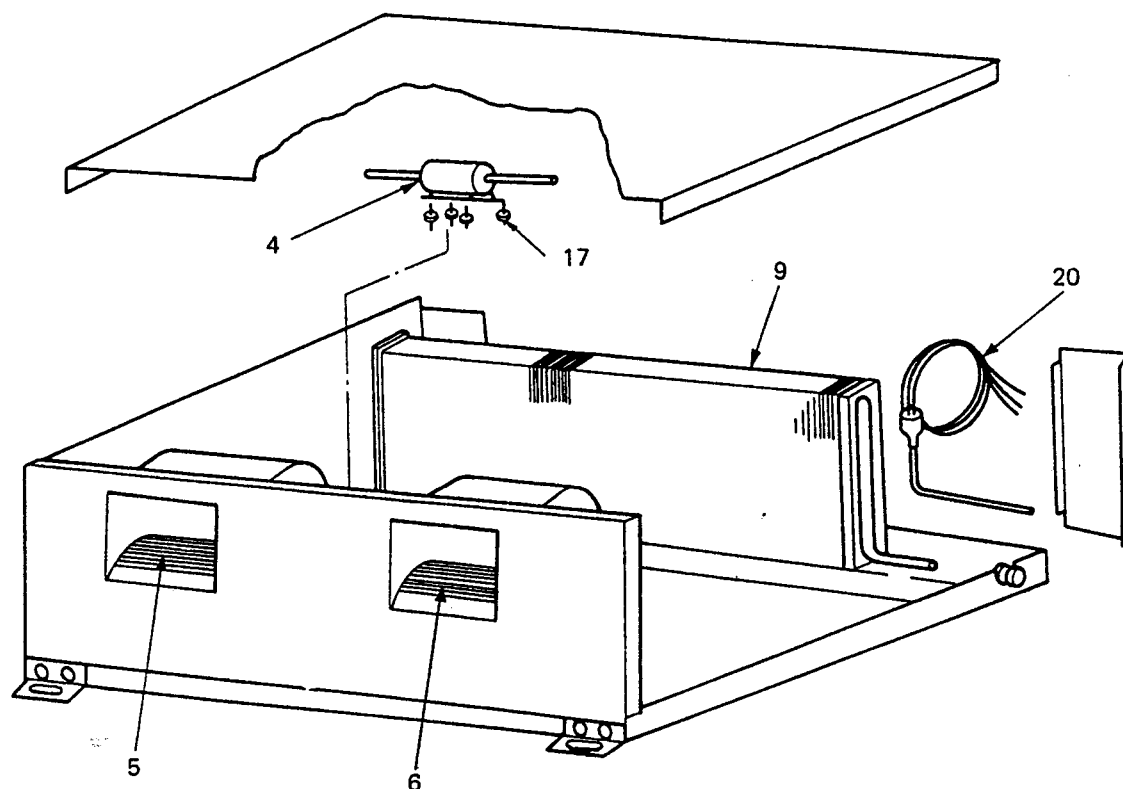
- Location of Air Filter

Air filter is not provided in the indoor unit.
Procure it at site, and install it as shown below.



8. EXPLODED VIEWS AND PARTS LISTS

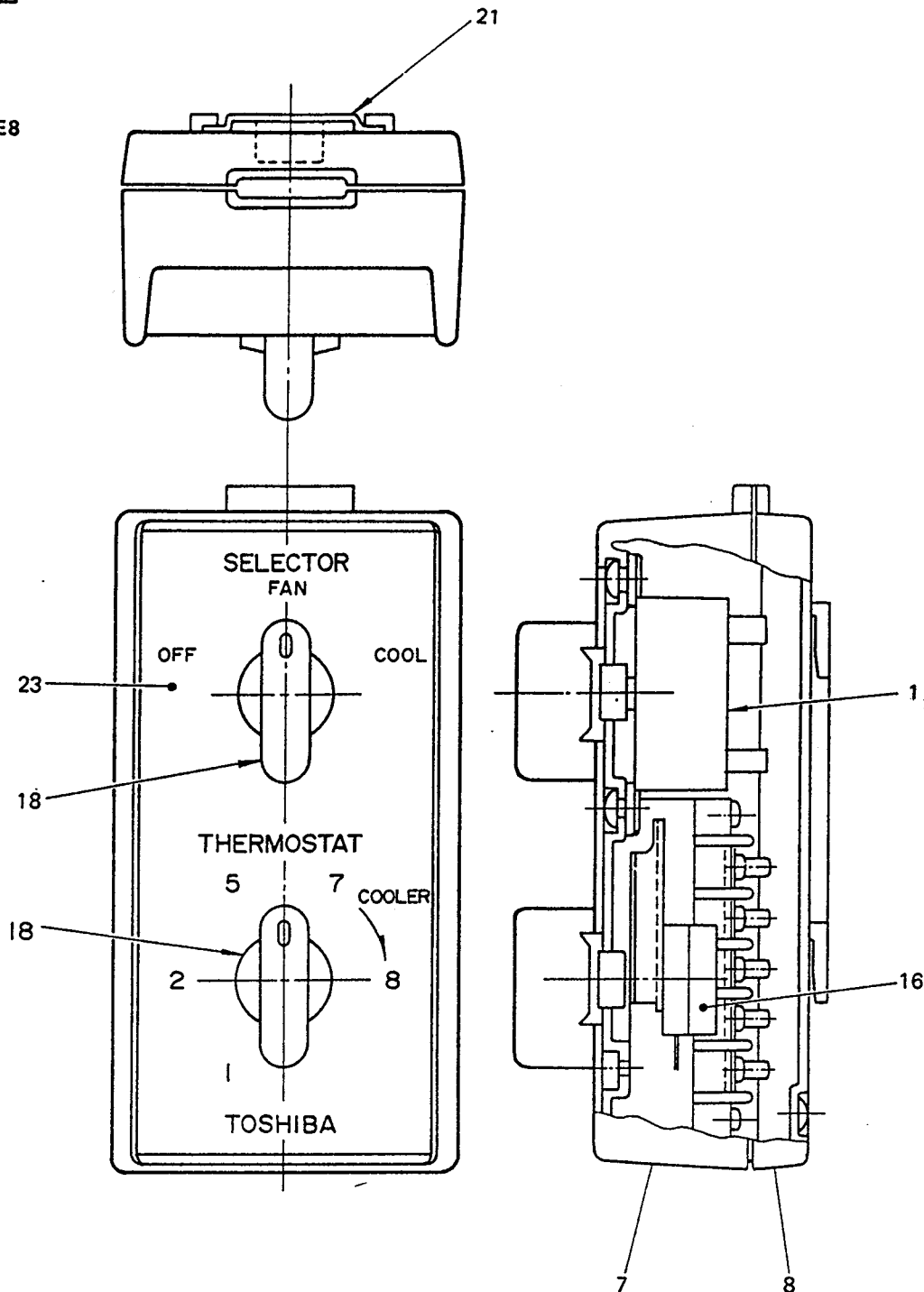
8-1 Indoor unit
RDA-1255UDE8



Location No.	Part No.	Description
4	43121336	Motor, AC 400V, 50Hz, Fan
5	43120070	Fan, Sirocco
6	43120119	Fan, Sirocco

Location No.	Part No.	Description
9	43144467	Evaporator
17	43195117	Cushion Rubber, Base
20	43047491	Capillary Tube

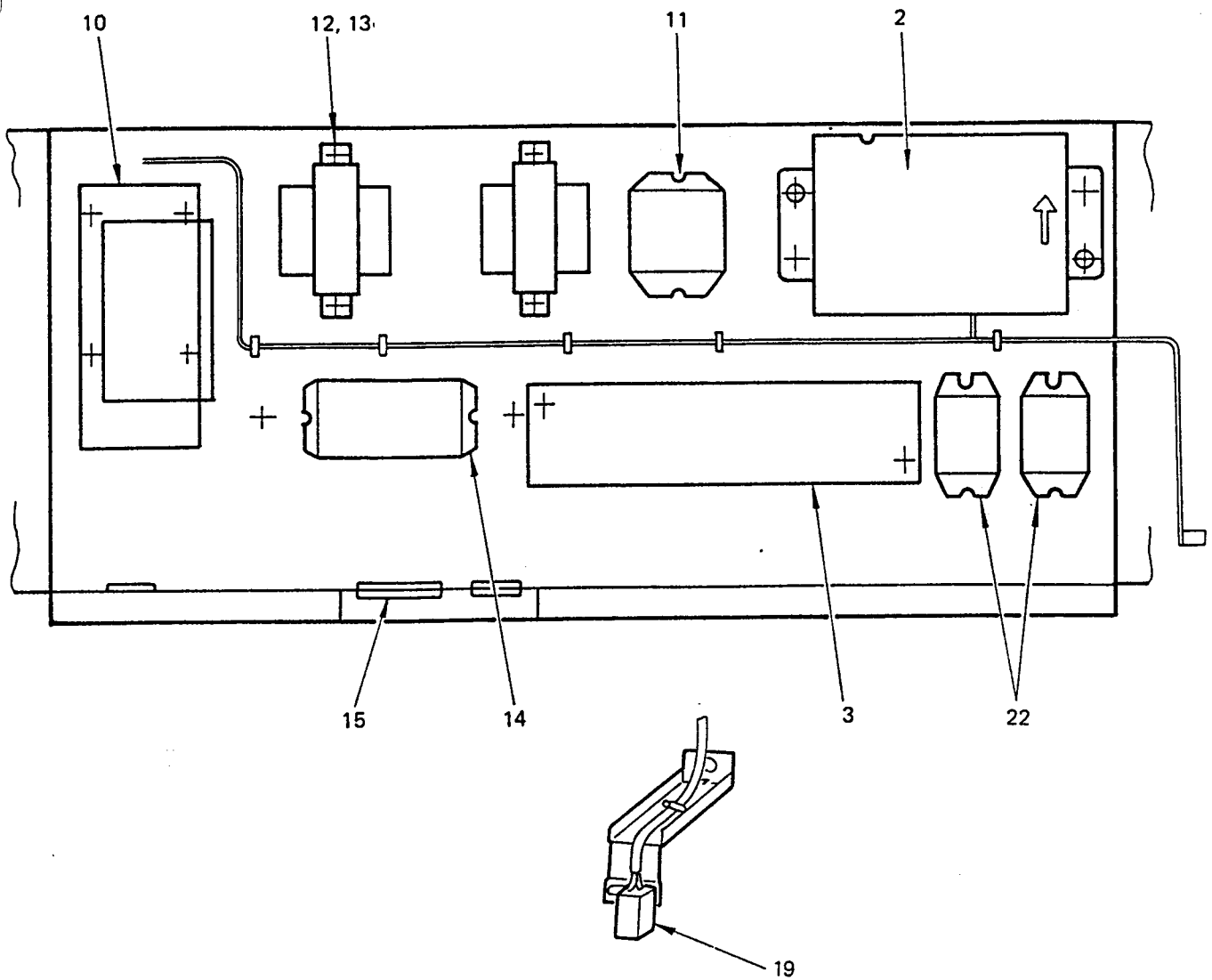
RDA-1255UDE8



Location No.	Part No.	Description
1	43151171	Switch, Rotary
7	43161008	Case-remocon
8	43162013	Cover-remocon
16	43155044	Variable Resistor, 2K OUM 0.3W

Location No.	Part No.	Description
18	43067040	Knob
21	43082121	Holder, Remocon
23	43117767	Plate

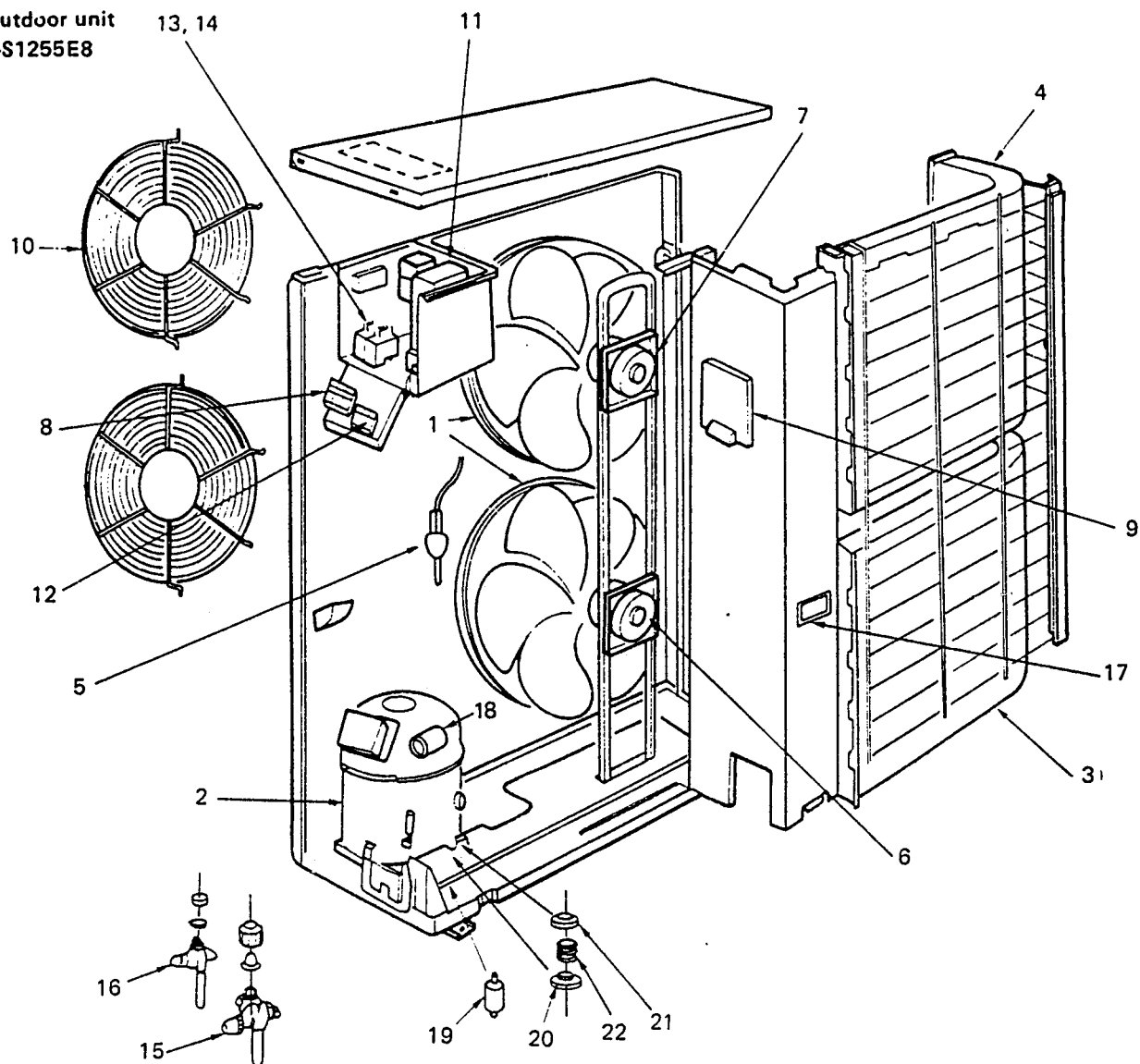
RDA-1255UDE8



Location No.	Part No.	Description
2	43150093	Thermostat
3	43160226	Terminal, Block
10	43152285	Magnetic-switch E4-20
11	43154141	Relay, LY2F-L
12	43058131	Transformer, Power, 230V, T3-230

Location No.	Part No.	Description
13	43158081	Transformer, Power
14	43160289	Terminal, Block, 4P
15	43096124	Bushing
19	43169228	Sensor
22	43154143	Relay, 2Y2F-L

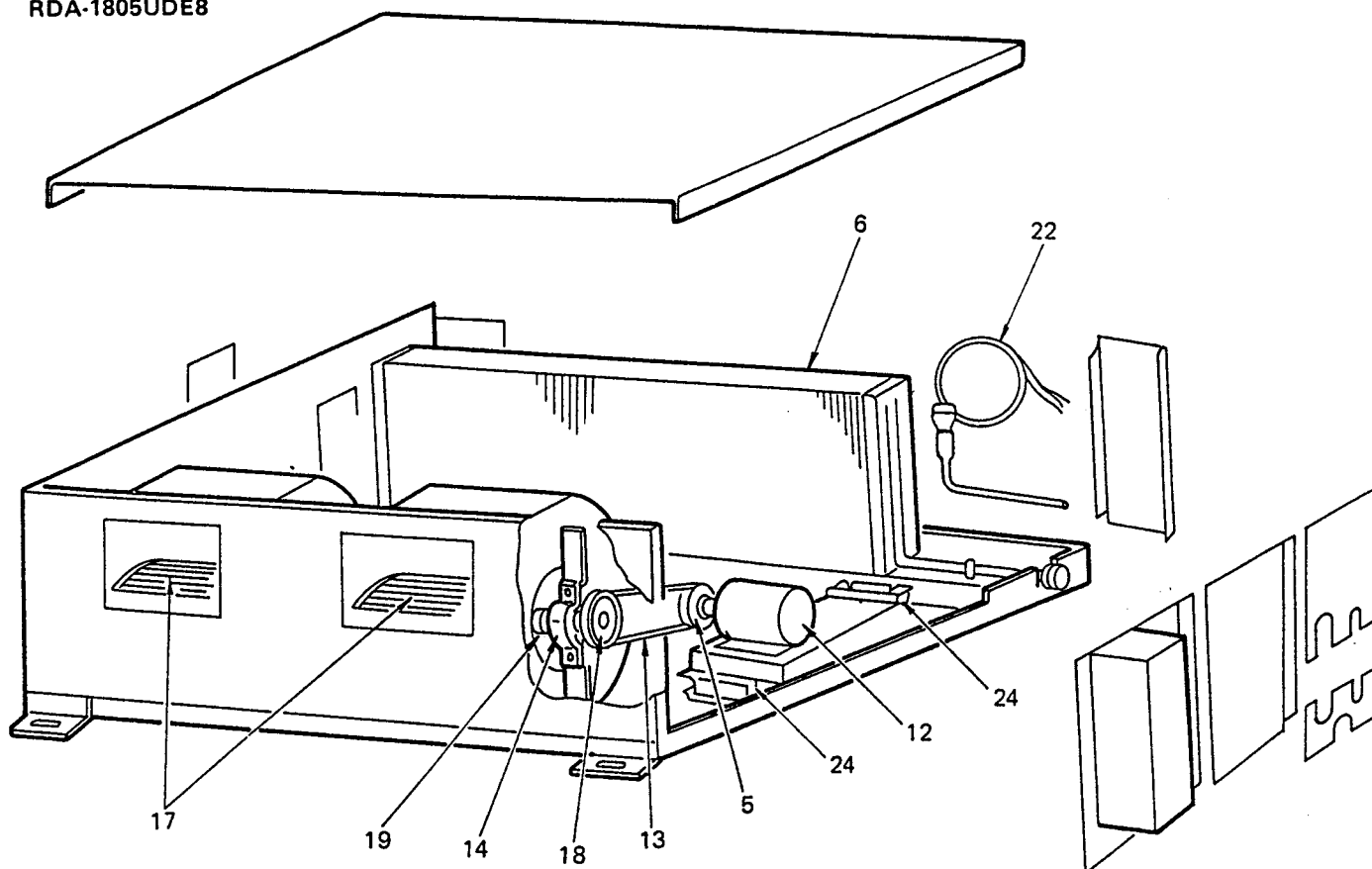
8-2 Outdoor unit
RDA-S1255E8



Location No.	Part No.	Description
1	43120129	Fan, Propeller
2	43140506	Compressor, YH506JA
3	43143393	Condenser, Lower
4	43143394	Condenser, Upper
5	43146367	Switch, High, Pressure
6	43121273	Motor, AC 230V, 50Hz, Fan
7	43121287	Motor, AC 230V, 50Hz, Fan
8	43160264	Terminal Block
9	43062086	Cover, Electric Parts
10	43191169	Guard-Fan
11	43152312	Magnetic-switch

Location No.	Part No.	Description
12	43060324	Terminal Block, 3P
13	43155055	Capacitor, Electrolytic
14	43155047	Capacitor, Electrolytic
15	43146200	Packed Valve, 3/4"
16	43146219	Packed Valve, 3/8"
17	43119368	Hanger
18	43149194	Block
19	43145064	Dryer
20	43049132	Base, Spring, B
21	43149212	Base, Spring, A
22	43149198	Spring, Buffer

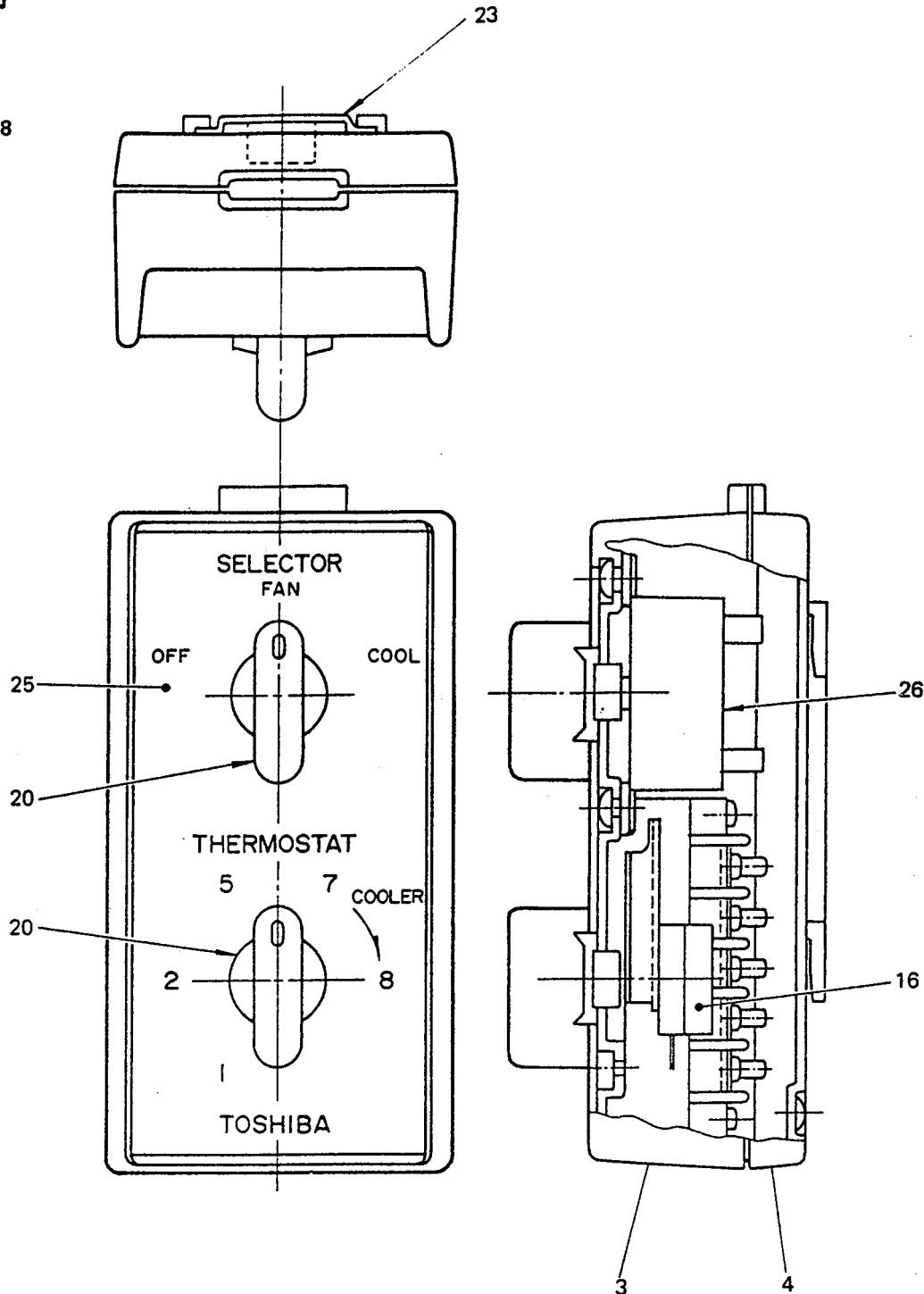
8-3 Indoor unit
RDA-1805UDE8



Location No.	Part No.	Description
5	43124181	Pulley, 99-VA-1
6	43144459	Evaporator
12	43121329	Motor, AC 400/400, 440V, 50/60Hz, Fan
13	43123066	Belt
14	43125097	Bearing, Ball

Location No.	Part No.	Description
17	43120109	Fan, Sirocco
18	43124182	Pulley
19	43139016	Ring Stopper
22	43047492	Tube, Capillary
24	43195203	Cushion Rubber, Base

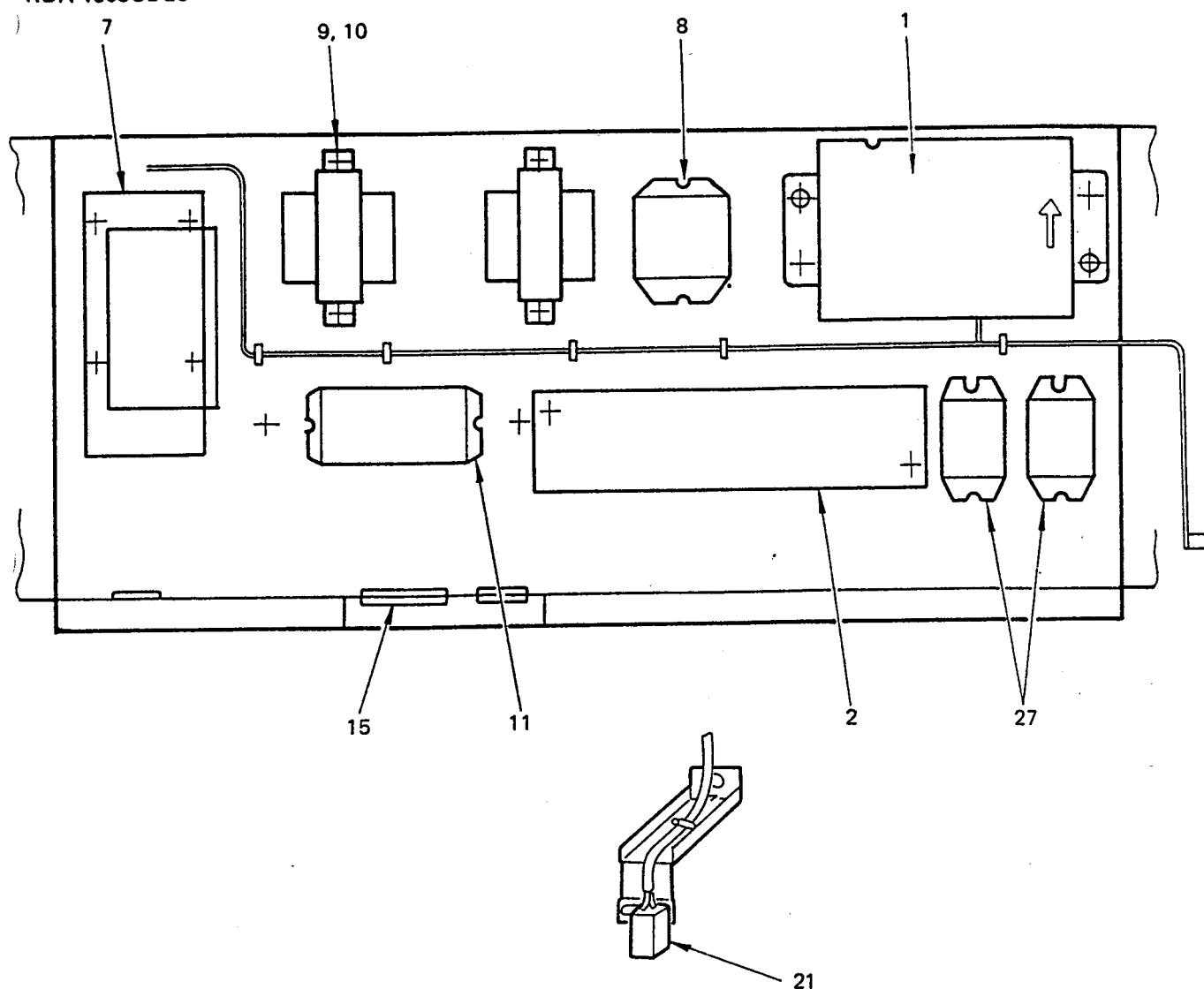
RDA-1805UDE8



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

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

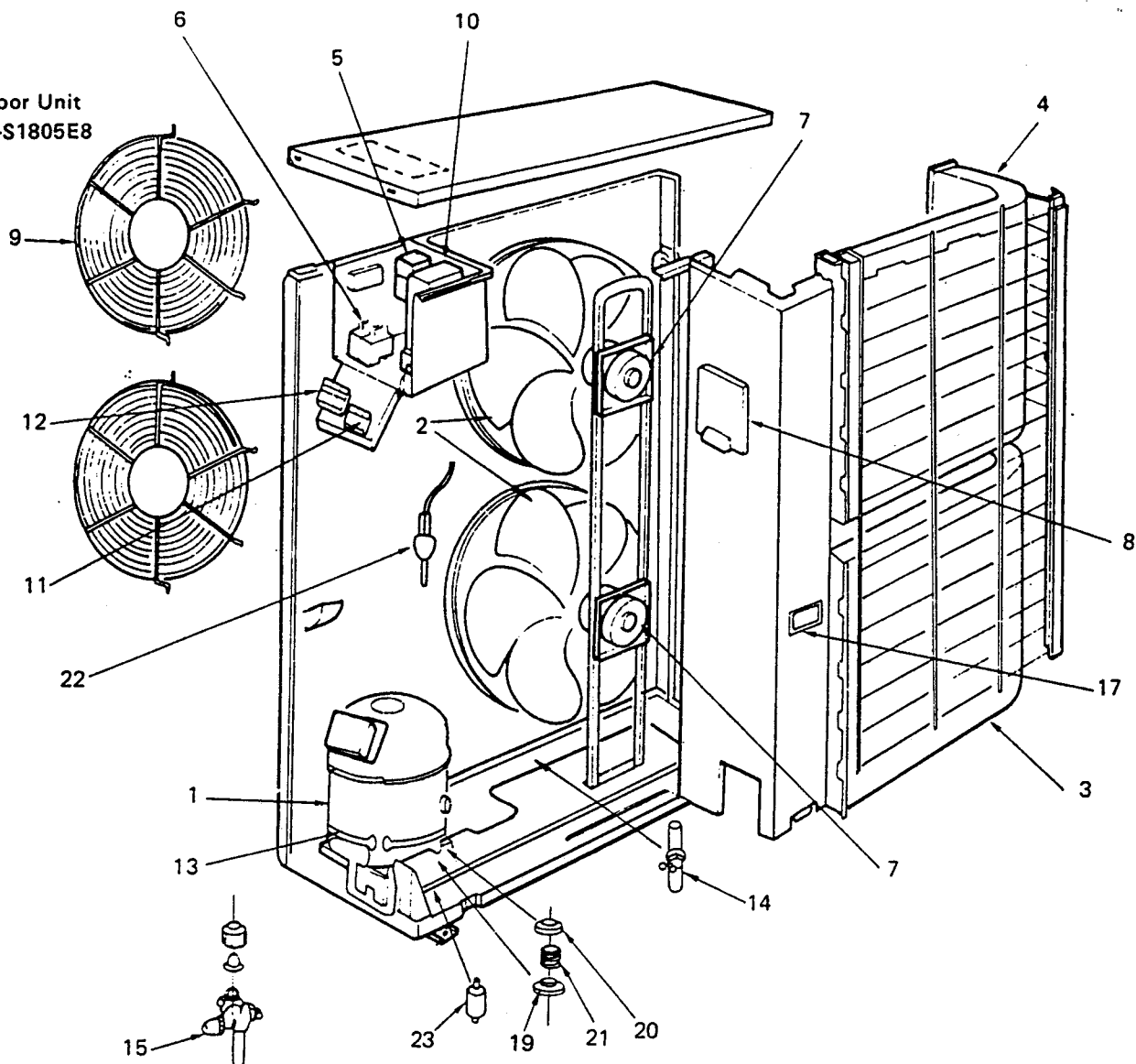
RDA-1805UDE8



Location No.	Part No.	Description
1	43150093	Thermostat
2	43160226	Terminal, Block
7	43152272	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

8-4 Outdoor Unit
RDA-S1805E8



Location No.	Part No.	Description
1	43140606	Compressor, YH750JA
2	43120129	Fan, Propeller
3	43143452	Condenser, Lower
4	43143453	Condenser, Upper
5	43754814	Relay, Overload
6	43055258	Run Capacitor, Fan Motor
7	43121326	Motor, AC 220V, 50/60Hz, Fan
8	43062086	Cover, Electric Parts
9	43191169	Guard-fan
10	43152315	Magnetic-switch
11	43060324	Terminal Block, 3P

Location No.	Part No.	Description
12	43160269	Terminal Block, 4P
13	43157078	Heater, Crank Case
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

TOSHIBA CORPORATION

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