

SPLIT TYPE ROOM AIR CONDITIONER WALL MOUNTED type

SERVICE MANUAL

Models Outdoor Unit
※ Serial No. Starting with T000001~
(Compressor Recipro type)

Indoor unit	Outdoor unit
ASU18C1	AOU18C1
ASU18R1	AOU18R1
ASU24C1	AOU24C1
ASU24R1	AOU24R1
ASU30C1	AOU30C1

Models Outdoor Unit
※ Serial No. Starting with T800001~
(Compressor Rotary type)

Indoor unit	Outdoor unit
ASU18C1	AOU18C1
ASU18R1	AOU18R1
	AOU18R1A
ASU24C1	AOU24C1
ASU24R1	AOU24R1
	AOU24R1A

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S P E C I F I C A T I O N S

Outdoor Unit
Serial No. starting with T00xxxx ~

TYPE		COOL	COOL & HEAT	COOL	COOL & HEAT	COOL
INDOOR UNIT		ASU18C1	ASU18R1	ASU24C1	ASU24R1	ASU30C1
OUTDOOR UNIT		AOU18C1	AOU18R1	AOU24C1	AOU24R1	AOU30C1
COOLING CAPACITY	(BTU / h)	18,000 - 17,000	17,500 - 16,500	23,000 - 22,500	23,000 - 22,500	29,500 - 28,700
HEATING CAPACITY	(BTU / h)	-----	18,000 - 17500	-----	23,500 - 22,500	-----

ELECTRICAL DATA

POWER SOURCE		(V)	230 / 208				
FREQUENCY		(Hz)	60				
RUNNING CURRENT (A)	COOLING		7.6 - 8.2	7.8 - 8.5	10.0 - 10.8	9.9 - 10.7	15.0 - 16.0
	HEATING		-----	7.2 - 7.5	-----	8.9 - 9.7	-----
INPUT WATTS (kW)	COOLING		1.70 - 1.65	1.75 - 1.71	2.20 - 2.15	2.23 - 2.19	3.15 - 3.05
	HEATING		-----	1.58 - 1.53	-----	2.02 - 1.98	-----
E.E.R. (BTU / h.W)	COOLING		10.6 - 10.3	10.0 - 9.65	10.5 - 10.5	10.3 - 10.3	9.37 - 9.41
	HEATING		-----	11.3 - 11.4	-----	11.6 - 11.4	-----
MOISTURE REMOVAL	(ℓ / hr)		2.0	1.8	2.7	2.7	4.3
AIR CIRCULATION - Hi	(m ³ / hr)		800	800	1,100	1,100	1,100

COMPRESSOR

TYPE		Hermetic type, Permanent split condenser, 2 poles, Single phase, Induction motor, Recipro				
CODE		H25B18QABCA	H25B18QABCA	H25B24QABCA	H25B24QABCA	H25B35QABCA
REFRIGERANT	R-22 (g)	1,700	2,250	2,200	2,350	1,900

FAN MOTOR

POWER SOURCE		(V)	230 / 208				
INDOOR UNIT	TYPE (r.p.m.)		MFA-18FPH	MFA-18FPH	MFA-30FPH	MFA-30FPH	MFA-18FPH
	HI-SPEED (r.p.m.)		960 - 870	960 - 870	1,260 - 1,160	1,260 - 1,160	1,260 - 1,160
	MED-SPEED (r.p.m.)		840 - 750	840 - 750	1,130 - 1,030	1,130 - 1,030	1,130 - 1,030
	LO-SPEED (r.p.m.)		720 - 580	720 - 580	990 - 870	990 - 870	990 - 870
OUTDOOR UNIT	TYPE (r.p.m.)		MFB-24FP	MFB-24FP	MFB-24FP	MFB-24FP	MFB-30BP
			735	735	735	735	790

DIMENSIONS

INDOOR UNIT	HEIGHT inch (mm)	12 - 19/32" (320)	12 - 19/32" (320)	12 - 19/32" (320)	12 - 19/32" (320)	12 - 19/32" (320)
	WIDTH inch (mm)	49 - 7/32" (1,250)	49 - 7/32" (1,250)	49 - 7/32" (1,250)	49 - 7/32" (1,250)	49 - 7/32" (1,250)
	DEPTH inch (mm)	7 - 11/16" (195)	7 - 11/16" (195)	7 - 11/16" (195)	7 - 11/16" (195)	7 - 11/16" (195)
OUTDOOR UNIT	HEIGHT inch (mm)	25 - 1/8" (643)	25 - 1/8" (643)	25 - 1/8" (643)	25 - 1/8" (643)	45 - 11/32" (1,152)
	WIDTH inch (mm)	33 - 1/32" (840)	33 - 1/32" (840)	33 - 1/32" (840)	33 - 1/32" (840)	37 - 1/32" (940)
	DEPTH inch (mm)	13 - 1/4" (336)	13 - 1/4" (336)	13 - 1/4" (336)	13 - 1/4" (336)	14 - 9/16" (370)

WEIGHTS

INDOOR UNIT	GROSS / NET lbs (kg)	55 / 40 (25 / 18)	55 / 40 (25 / 18)	55 / 40 (25 / 18)	55 / 40 (25 / 18)	55 / 40 (25 / 18)
OUTDOOR UNIT		163 / 145 (74 / 66)	165 / 147 (75 / 67)	165 / 147 (75 / 67)	167 / 150 (76 / 68)	238 / 207 (108 / 94)

REFRIGERANT CHARGING

PIPE LENGTH		25 ft. (7.5 m)	33 ft. (10 m)	49 ft. (15 m)	66 ft. (20 m)	83 ft. (25 m)	98 ft. (30 m)
FULL CHARGE AMOUNT	ASU18C1	1,700 g (60.0 oz.)	1,730 g (61.1 oz.)	1,790 g (63.2 oz.)	1,850 g (65.3 oz.)	-----	-----
	ASU18R1	2,250 g (79.4 oz.)	2,335 g (82.4 oz.)	2,505 g (88.4 oz.)	2,675 g (94.4 oz.)	-----	-----
	ASU24C1	2,200 g (77.6 oz.)	2,230 g (78.7 oz.)	2,290 g (80.8 oz.)	2,350 g (82.9 oz.)	-----	-----
	ASU24R1	2,350 g (82.9 oz.)	2,435 g (85.9 oz.)	2,605 g (91.9 oz.)	2,775 g (97.9 oz.)	-----	-----
	ASU30C1	1,900 g (67.0 oz.)	1,943 g (68.5 oz.)	2,028 g (71.5 oz.)	2,113 g (74.5 oz.)	2,198 g (77.5 oz.)	2,283 g (80.5 oz.)

Note : It is the case that 7.5 m are exceeded, when using a connection pipe other than in the table, charge additional refrigerant with 34 g (1.20 oz.) / 3.3 ft. (1 m) for 18R, 24R Models and 12 g (0.42 oz.) / 3.3 ft (1 m) for 18C, 24C Models and 17 g (0.60 oz.) / 3.3 ft (1 m) for 30C Model as the criteria.

Outdoor Unit
Serial No. T800001~

TYPE		COOL	COOL & HEAT	COOL	COOL & HEAT
INDOOR UNIT		ASU18C1	ASU18R1	ASU24C1	ASU24R1
OUTDOOR UNIT		AOU18C1	AOU18R1, AOU18R1A	AOU24C1	AOU24R1, AOU24R1A
COOLING CAPACITY	(BTU / h)	18,000 - 17,000	17,500 - 16,500	23,000 - 22,500	23,000 - 22,500
HEATING CAPACITY	(BTU / h)	-----	18,000 - 17500	-----	23,500 - 22,500

ELECTRICAL DATA

POWER SOURCE	(V)	230 / 208			
FREQUENCY	(Hz)	60			
RUNNING CURRENT (A)	COOLING	8.3 - 9.1	8.2 - 8.9	10.7 - 11.7	10.5 - 11.3
	HEATING	-----	8.0 - 8.5	-----	9.9 - 10.4
INPUT WATTS (kW)	COOLING	1.91 - 1.87	1.89 - 1.84	2.41 - 2.40	2.34 - 2.29
	HEATING	-----	1.82 - 1.77	-----	2.18 - 2.13
E.E.R. (BTU / h.W)	COOLING	9.4 - 9.0	9.26 - 8.97	10.7 - 11.7	9.82 - 9.83
	HEATING	-----	9.89 - 9.89	-----	10.8 - 10.6
MOISTURE REMOVAL	(ℓ / hr)	2.0	1.8	2.7	2.7
AIR CIRCULATION - Hi	(m ³ / hr)	800	800	1,000	1,000

COMPRESSOR

TYPE	Hermetic type, Permanent split condenser, 2 poles, Single phase, Induction motor			
CODE	PH28NSGT	PH28NSGT	PH33NTJT	PH33NTJT
REFRIGERANT R-22 (g)	1,700	1,900	2,000	2,200

FAN MOTOR

POWER SOURCE	(V)	230 / 208			
INDOOR UNIT	TYPE (r.p.m.)	MFA-18FPHT	MFA-18FPHT	MFA-30FPHT	MFA-30FPHT
	HI-SPEED (r.p.m.)	960 - 870	960 - 870	1,260 - 1,160	1,260 - 1,160
	MED-SPEED (r.p.m.)	840 - 750	840 - 750	1,130 - 1,030	1,130 - 1,030
	LO-SPEED (r.p.m.)	720 - 580	720 - 580	990 - 870	990 - 870
OUTDOOR UNIT	TYPE	MFB-24FP	MFB-24FP	MFB-24FP	MFB-24FP
	(r.p.m.)	735	735	735	735

DIMENSIONS

INDOOR UNIT	HEIGHT inch (mm)	12 - 19/32" (320)	12 - 19/32" (320)	12 - 19/32" (320)	12 - 19/32" (320)
	WIDTH inch (mm)	49 - 7/32" (1,250)	49 - 7/32" (1,250)	49 - 7/32" (1,250)	49 - 7/32" (1,250)
	DEPTH inch (mm)	7 - 11/16" (195)	7 - 11/16" (195)	7 - 11/16" (195)	7 - 11/16" (195)
OUTDOOR UNIT	HEIGHT inch (mm)	25 - 1/8" (643)	25 - 1/8" (643)	25 - 1/8" (643)	25 - 1/8" (643)
	WIDTH inch (mm)	33 - 1/32" (840)	33 - 1/32" (840)	33 - 1/32" (840)	33 - 1/32" (840)
	DEPTH inch (mm)	13 - 1/4" (336)	13 - 1/4" (336)	13 - 1/4" (336)	13 - 1/4" (336)

WEIGHTS

INDOOR UNIT	GROSS / NET lbs (kg)	55 / 40 (25 / 18)	55 / 40 (25 / 18)	55 / 40 (25 / 18)	55 / 40 (25 / 18)
OUTDOOR UNIT		163 / 145 (74 / 66)	165 / 147 (75 / 67)	165 / 147 (75 / 67)	167 / 150 (76 / 68)

REFRIGERANT CHARGING

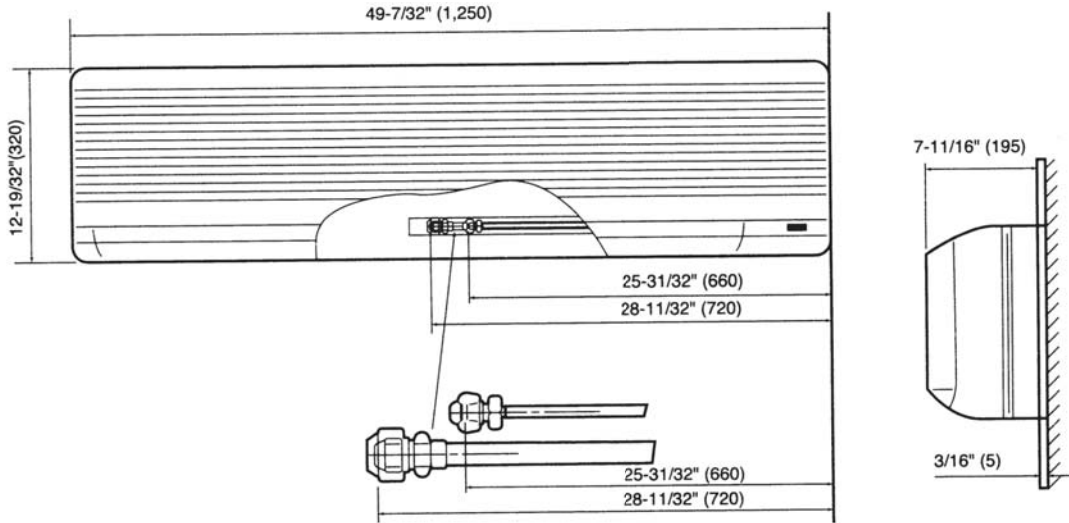
PIPE LENGTH		25 ft. (7.5 m)	33 ft. (10 m)	49 ft. (15 m)	66 ft. (20 m)
FULL CHARGE AMOUNT	ASU18C1	1,700 g (60.0 oz.)	1,736 g (61.2 oz.)	1,808 g (63.7 oz.)	1,880 g (66.3 oz.)
	ASU18R1	1,900 g (67.0 oz.)	1,985 g (70.0 oz.)	2,155 g (76.0 oz.)	2,325 g (82.0 oz.)
	ASU24C1	2,000 g (67.0 oz.)	2,030 g (71.6 oz.)	2,060 g (72.7 oz.)	2,120 g (74.8 oz.)
	ASU24R1	2,200 g (77.6 oz.)	2,285 g (80.6 oz.)	2,455 g (86.6 oz.)	2,625 g (92.6 oz.)

Note : It is the case that 7.5 m are exceeded, when using a connection pipe other than in the table, charge additional refrigerant with 34 g (1.20 oz.) / 3.3 ft. (1 m) for 18R, 24R Models and 14.4 g (0.51 oz.) / 3.3 ft (1 m) for 18C Model and 12 g (0.42 oz.) / 3.3 ft (1 m) for 24C Model as the criteria.

OUTLINE AND DIMENSIONS

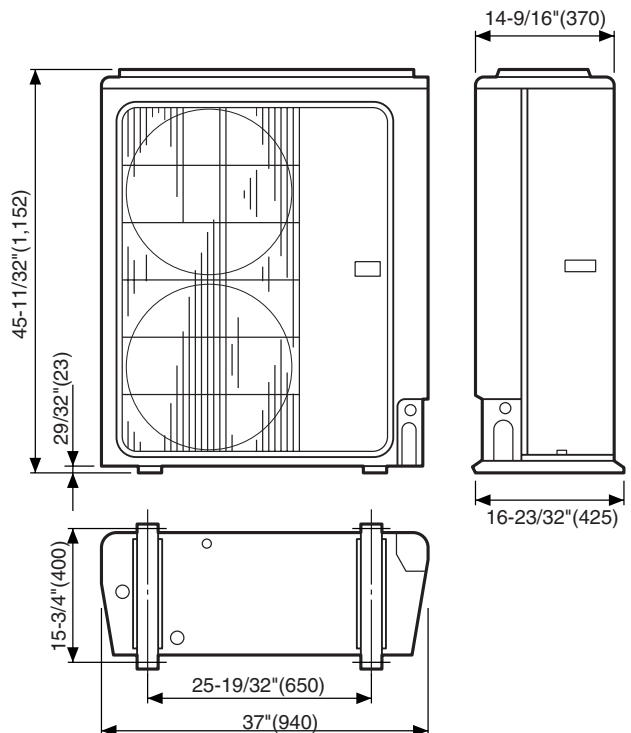
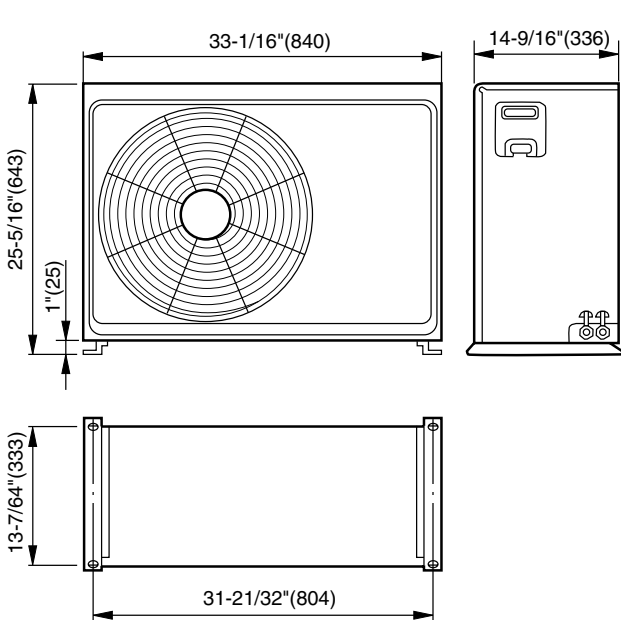
Models : ASU18C1, ASU18R1
 ASU24C1, ASU24R1
 ASU30C1

Unit : inch (mm)



Models : AOU18C1, AOU18R1, AOU18R1A
 AOU24C1, AOU24R1, AOU24R1A

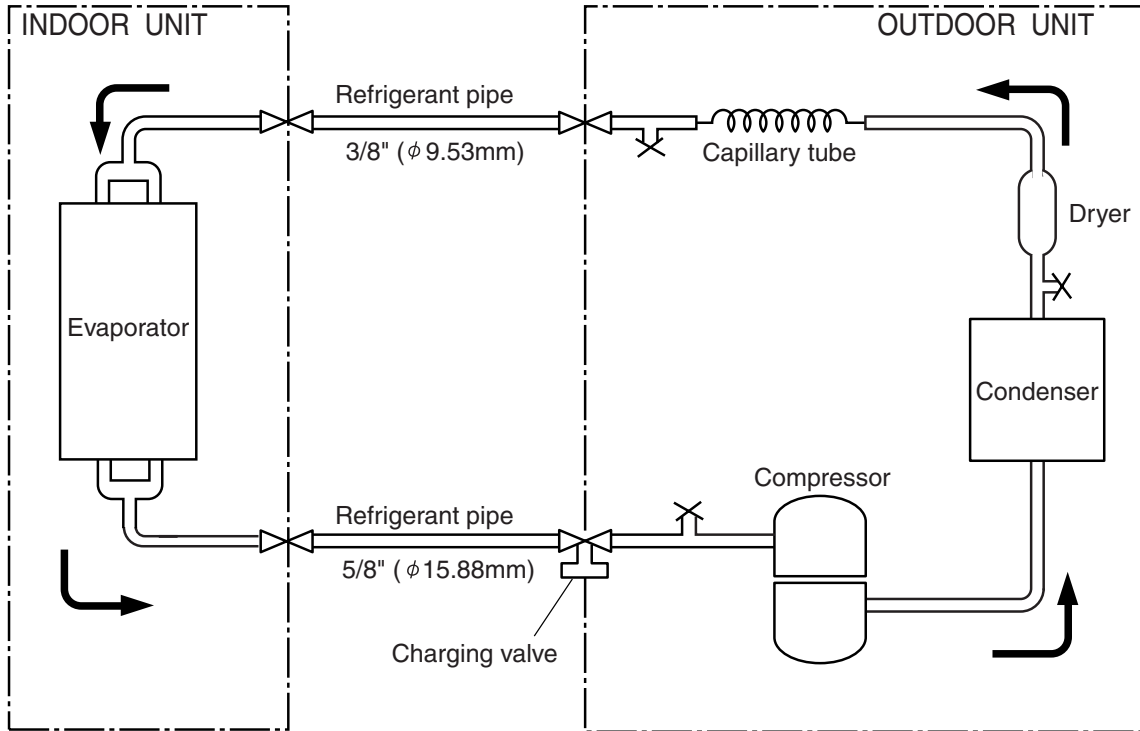
Model : AOU30C1



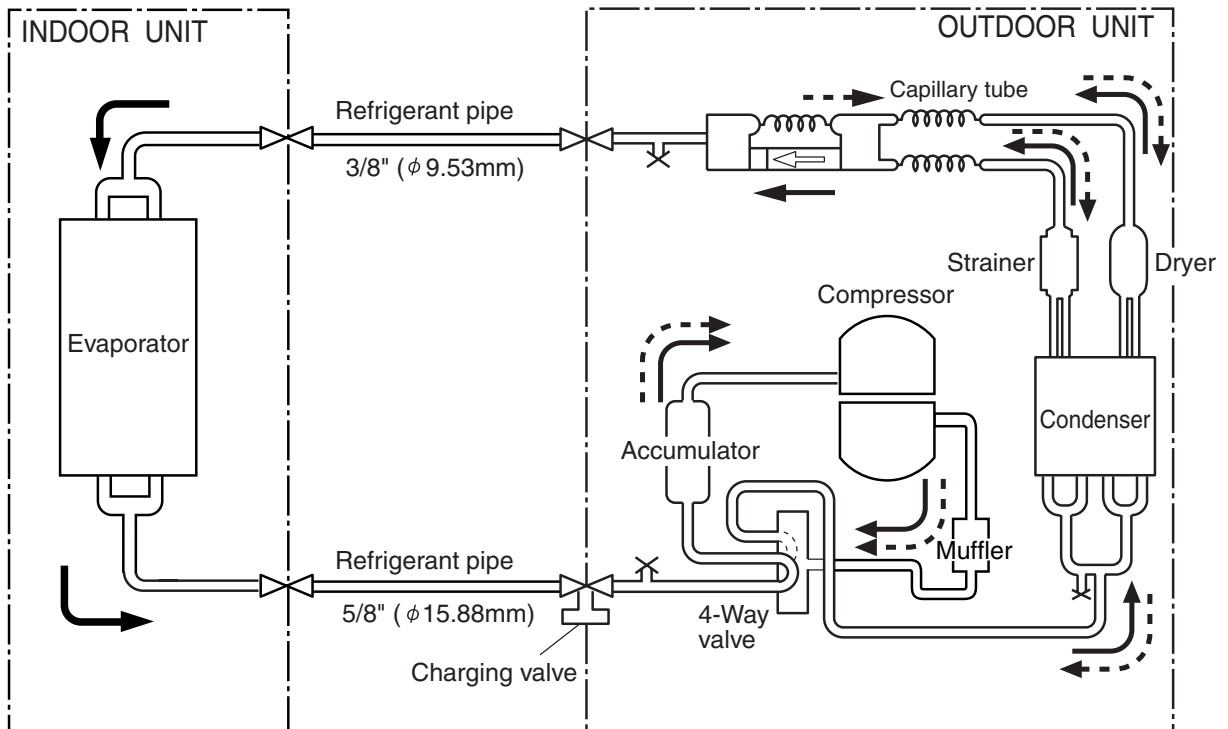
REFRIGERANT SYSTEM DIAGRAM



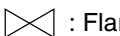
Outdoor Unit
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Models : ASU18C1 / AOU18C1



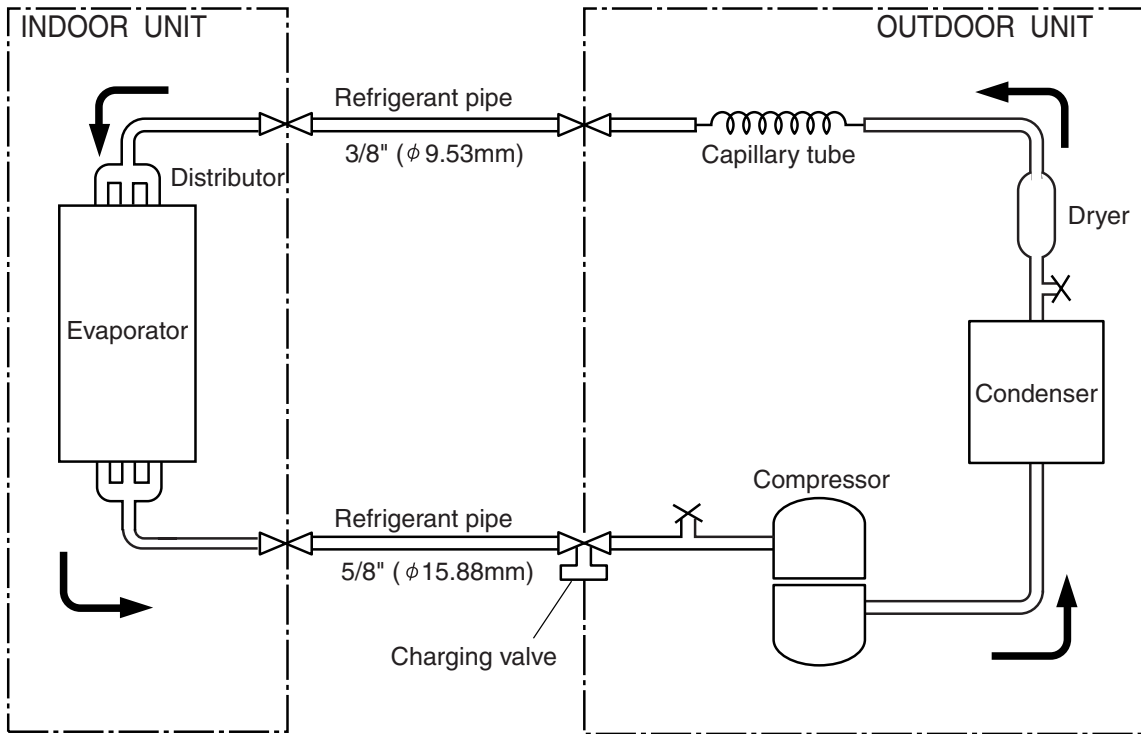
Models : ASU18R1 / AOU18R1



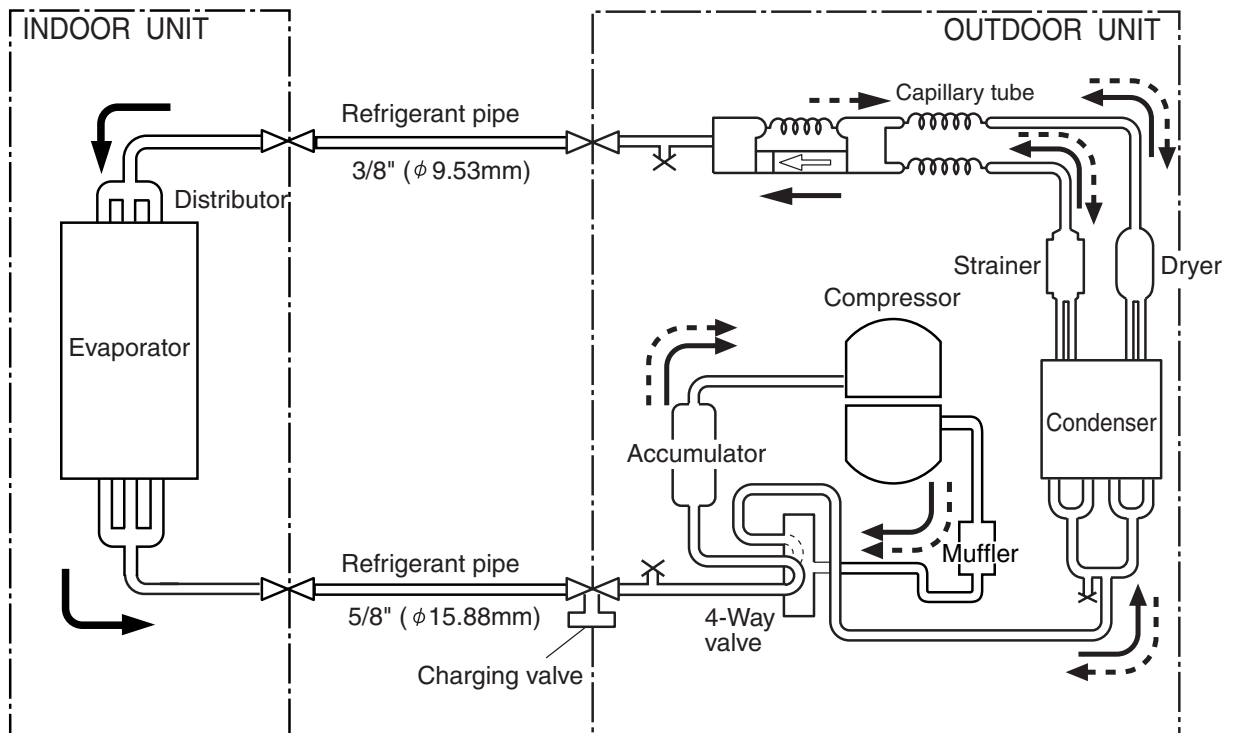
 Cooling
 Heating
 : Flare coupling

Outdoor Unit
Serial No. T000001~

Models : ASU24C1 / AOU24C1

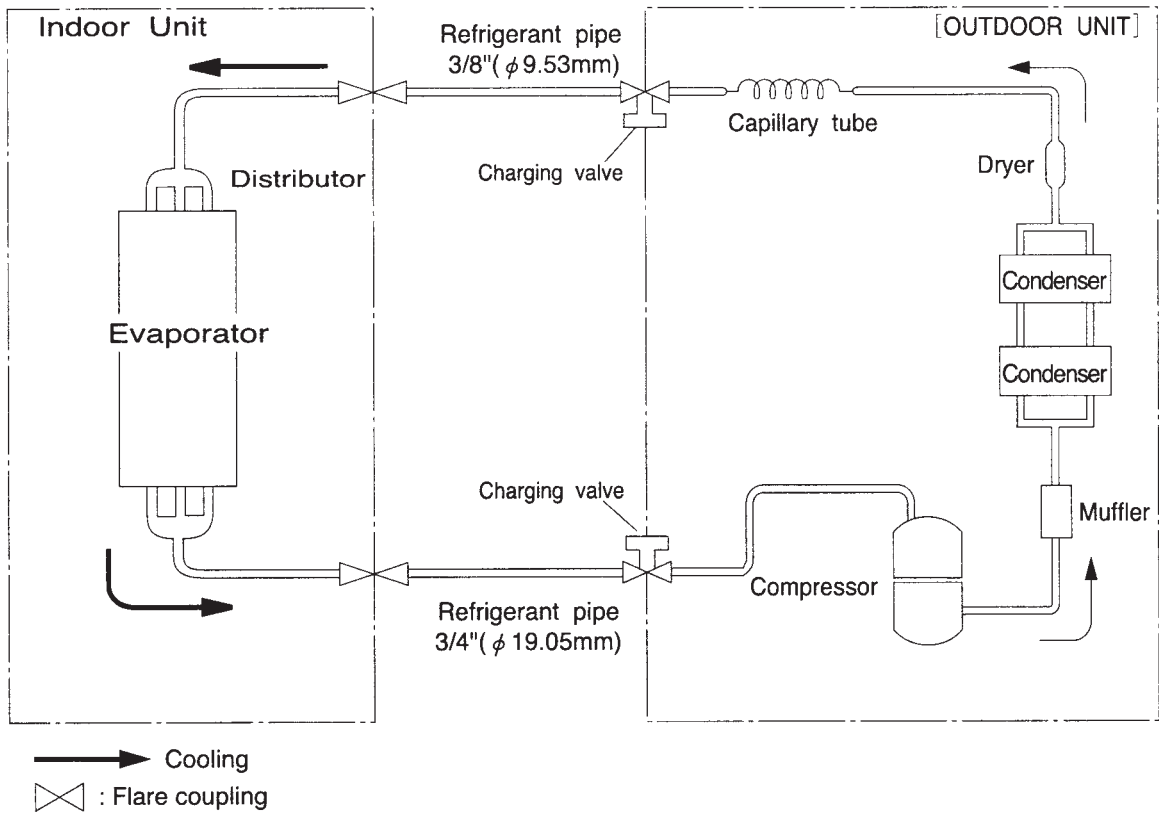


Models : ASU24R1 / AOU24R1



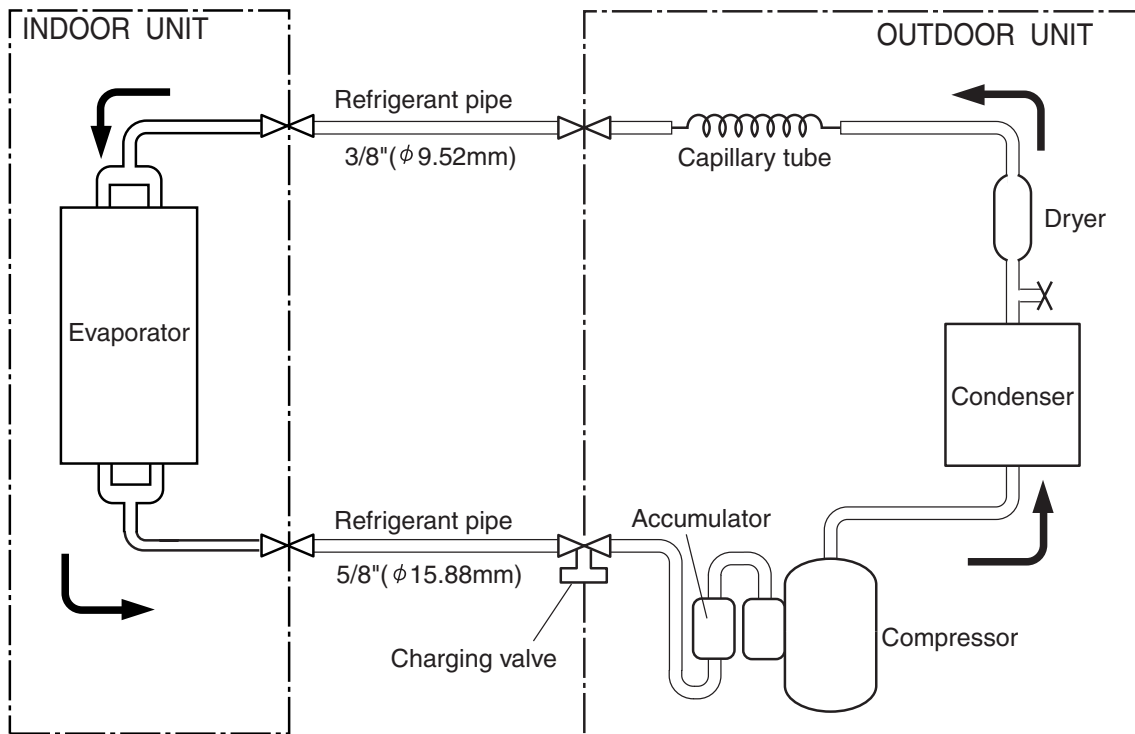
→ Cooling
- - - Heating
⊗ : Flare coupling

Models : ASU30C1 / AOU30C1

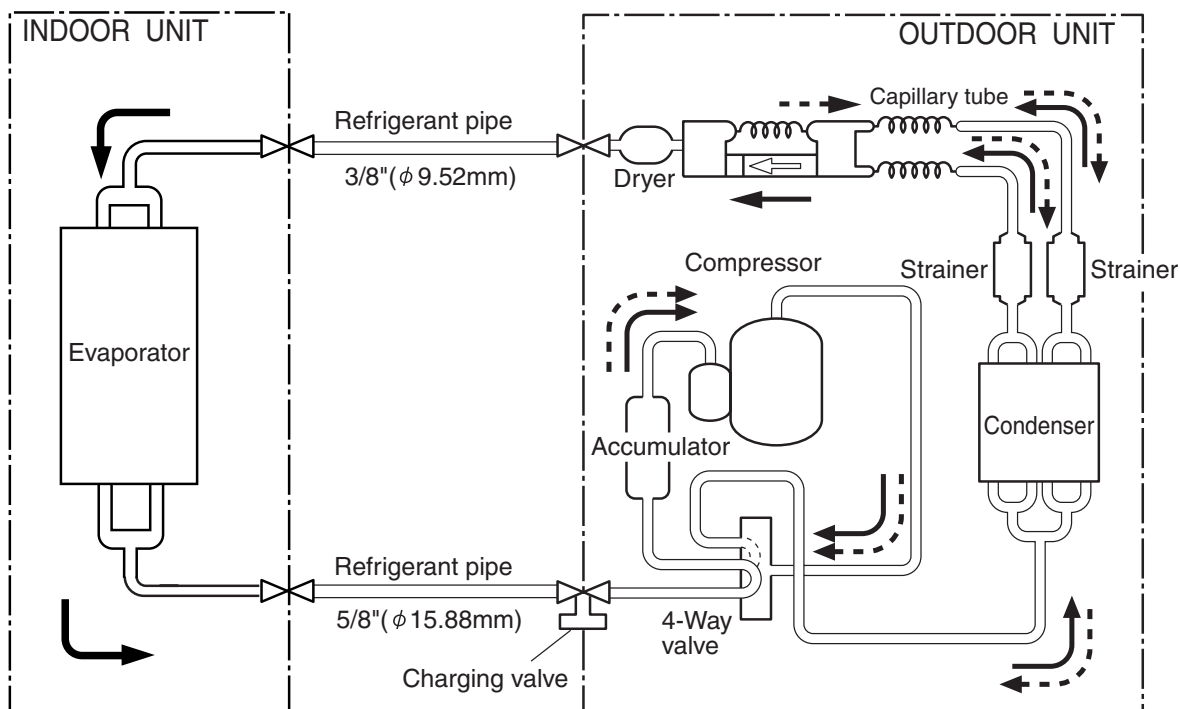


Outdoor Unit
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Models : ASU18C1 / AOU18C1



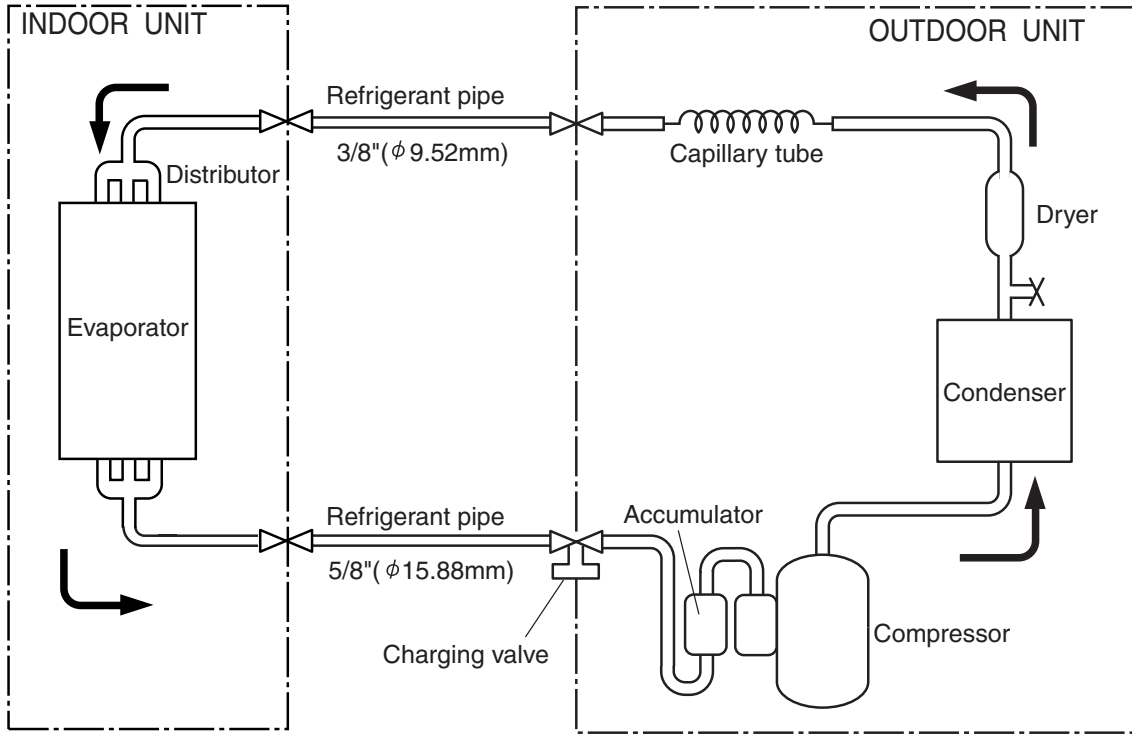
Models : ASU18R1 / AOU18R1
ASU18R1 / AOU18R1A



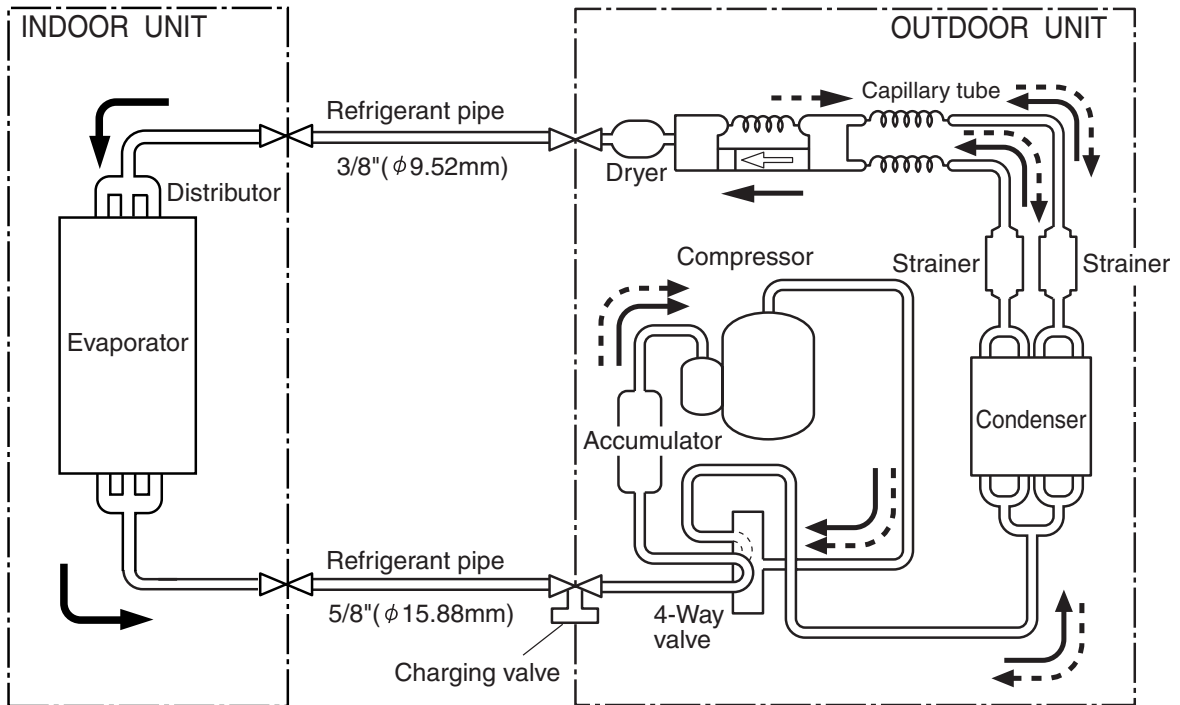
→ Cooling
- - - Heating
⊗ : Flare coupling




Outdoor Unit
Serial No. T800001~

Models : ASU24C1 / AOU24C1



Models : ASU24R1 / AOU24R1
ASU24R1 / AOU24R1A



 Cooling
 Heating
 : Flare coupling