



Applicable models: Slim Multi S Series

Package Air-conditioner Free Plan System Optional Parts

2-branch joint (CMY-Y62-G-E)



Always observe for safety

- Carefully read this section "Always observe for safety", and securely install the optional parts.
- Be sure to observe the cautions described here: They include critical contents for safety.
- The following indications show the classification of danger and possible consequences following incorrect installation.

WARNING Incorrect installation could lead to death or serious injury.

CAUTION Incorrect installation could lead to injury or damage to house and household articles.

- After installation, perform a test run and make sure that there is no abnormality, and ask your customer to keep this installation sheet with the instruction manual at all times. Also ask the customer to transfer these manuals to a new user if the user changes.

WARNING

Ask the dealer or specialist for installation.

Carefully install the panel according to this installation sheet.

- If installed incorrectly by user, water leak, electric shock, fire, etc. could result.

- Incorrect installation could cause water leak, electric shock, fire, etc.

Before performing installation (moving) and electrical work

Caution

Do not place polyethylene bags in reach of young children.

If electrical work is necessary, use only specified electric wires adapted with current capacity.

- Putting them over the head will block breathing passages, which could result in suffocation.

- Use of unsuitable wire could cause electric leak, overheating or fire.

Securely apply heat-insulation to refrigerant pipe so that no condensation occurs.

Securely perform drain piping work according to the installation manual so that no condensation occurs.

- If heat-insulation is inadequate, condensation could on the surface of pipes and dewdrops could accumulate on ceiling, floor or important goods.

- If piping work is incorrect, water leak may occur and ceiling, furniture, etc. may get wet.

1 Make sure that all the following parts are in packing box before performing work:

| | | | | | |
|----------------------|---------------------------|---------------------------|-----------------|--------------------|--------------------|
| (1) This instruction | (2) 2-branch joint (thin) | (3) 2-branch joint (thin) | (4) pipe cover | (5) pipe cover | (6) Pipe |
| | | | | | |
| | ×1 for liquid pipe | ×1 for gas pipe | ×1 | ×1 | ×2 for liquid pipe |
| (7) Pipe | (8) Pipe | (9) Pipe | (10) Pipe | (11) Pipe | (12) Pipe |
| | | | | | |
| φ15.88-φ12.7 | φ19.05-φ12.7 | φ19.05-φ15.88 | φ19.05-φ22.2 | φ12.7-φ9.52 | φ15.88-φ19.05 |
| ×1 for gas pipe | ×1 for gas pipe | ×2 for gas pipe | ×1 for gas pipe | ×2 for liquid pipe | ×1 for gas pipe |

Note: Procure the following at local site:

- (1) Tape for sealing heat insulator and (2) Extension pipe for refrigerant circuit.

2 Take care with the following when performing work:

1. Observe the restrictions in refrigerant piping length and number of installation indoor units that are described in outdoor unit installation manual.
2. Use anti-oxidization brazing to connect the 2-branch joint and pipes (6-12).
3. The 2-branch joint has stoppers: Insert the pipe to be connected all the way in until it stops.
4. There is not restriction on installation posture of 2-branch joint.
5. Take care that no foreign object, such as dust, enters the pipes during piping connection work.
6. Use heat insulator for all refrigerant pipes.

3 Selecting refrigerant pipe size and using 2-branch joint

1. Procure pipes to be connected at local site.
2. Determine the sizes of pipes at each portion according to Tables 1-3.
3. The 2-branch joint is designed so that all pipes with sizes selected in step 2 can be connected.

Perform connections referring to Fig. 1 and Tables 4-9.

Connect each pipe to match the size, appropriately judging the following: Use without any processing, or Use while connecting pipe.

Table 1 Size of pipe connected to outdoor unit

| Capacity of outdoor unit | (1) When using R410A refrigerant | | (2) When using R22/R407C refrigerant | |
|--------------------------|----------------------------------|----------|--------------------------------------|----------------|
| | Liquid pipe | Gas pipe | Liquid pipe | Gas pipe |
| Models -140 | φ 9.52 | φ 15.88 | Model 71 | φ 9.52 φ 15.88 |
| | | | Models 100-140 | φ 9.52 φ 19.05 |

Table 2 Size of pipe at branch

| Total capacity of downstage indoor units | (1) When using R410A refrigerant | | (2) When using R22/R407C refrigerant | |
|--|----------------------------------|----------|--------------------------------------|----------------|
| | Liquid pipe | Gas pipe | Liquid pipe | Gas pipe |
| All Models | φ 9.52 | φ 15.88 | Models 81- | φ 9.52 φ 19.05 |

Table 3 Size of pipe connected to indoor unit

| Capacity of indoor unit | (1) When using R410A refrigerant | | (2) When using R22/R407C refrigerant | |
|-------------------------|----------------------------------|----------|--------------------------------------|----------------|
| | Liquid pipe | Gas pipe | Liquid pipe | Gas pipe |
| Models 20-50 | φ 6.35 | φ 12.7 | Models 50-80 | φ 9.52 φ 15.88 |
| Models 63-140 | φ 9.52 | φ 15.88 | Models 100-140 | φ 9.52 φ 19.05 |

Table 4

| Pipe dia. of outdoor unit (liquid/gas) | φ9.52/φ15.88 | φ9.52/φ19.05 |
|--|------------------|--------------|
| Pipe type | Z dimension | Z dimension |
| Liquid pipe (thin) (Z) | Z dimension | Z dimension |
| Gas pipe (thick) (Z) | Connect pipe (9) | Z dimension |

Table 5

| Pipe dia. of indoor unit (liquid/gas) | φ6.35/φ12.7 | φ9.52/φ15.88 | φ9.52/φ19.05 |
|---------------------------------------|------------------|------------------|--------------|
| Pipe type | Connect pipe (6) | Z dimension | Z dimension |
| Liquid pipe (thin) (Z) | Connect pipe (6) | Z dimension | Z dimension |
| Gas pipe (thick) (Z) | Connect pipe (8) | Connect pipe (9) | Z dimension |

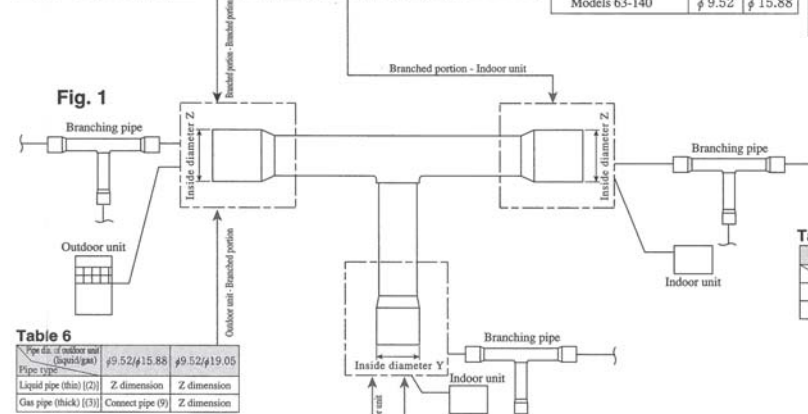


Table 6

| Pipe dia. of outdoor unit (liquid/gas) | φ9.52/φ15.88 | φ9.52/φ19.05 |
|--|------------------|--------------|
| Pipe type | Z dimension | Z dimension |
| Liquid pipe (thin) (Z) | Z dimension | Z dimension |
| Gas pipe (thick) (Z) | Connect pipe (9) | Z dimension |

Table 7

| Pipe dia. of outdoor unit (liquid/gas) | φ6.35/φ12.7 | φ9.52/φ15.88 | φ9.52/φ19.05 |
|--|------------------|--------------|-------------------|
| Pipe type | Connect pipe (6) | Y dimension | Y dimension |
| Liquid pipe (thin) (Z) | Connect pipe (6) | Y dimension | Y dimension |
| Gas pipe (thick) (Z) | Connect pipe (7) | Y dimension | Connect pipe (12) |

Table 8

| Pipe dia. of outdoor unit (liquid/gas) | φ9.52/φ15.88 | φ9.52/φ19.05 |
|--|--------------|-------------------|
| Pipe type | Y dimension | Y dimension |
| Liquid pipe (thin) (Z) | Y dimension | Y dimension |
| Gas pipe (thick) (Z) | Y dimension | Connect pipe (12) |

Table 9

| Pipe dia. | Liquid pipe | | Gas pipe | |
|-----------|-------------|--------|----------|-------|
| | Z | φ9.52 | φ19.05 | φ9.52 |
| Y | φ9.52 | φ15.88 | | |

4 Attaching pipe cover (heat insulator)

- Fit pipe cover (4) to liquid pipe (thin) (2) to attach it
- Use heat insulator sealing tape (procured at local site) to seal the butted portion of pipe cover (4) (see Fig.2).

Note 1: Use heat insulator for all refrigerant pipes (procured at local site), when using generally available heat insulator, buy heat-resistant heat insulator (thickness of at least 12mm).

Note 2: The pipe cover will slightly shrink at high temperatures: Use heat insulator with a lap margin.

Fig. 2 (liquid pipe)

