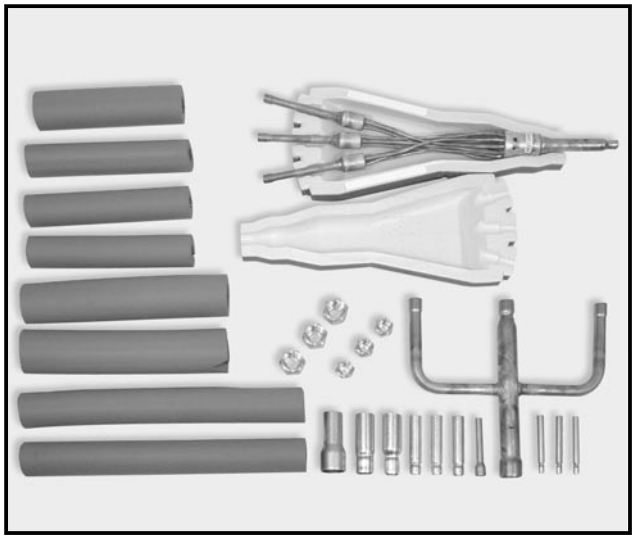
Distribution Pipe

MSDT-111R-E

Photo



Descriptions

3-branch pipe for Multi-System Triple use.(33:33:33)

Applicable Models

- PU-P140/200/250
- PUH-P140/200/250
- PUHZ-RP140/200/250

for 33:33:33 Triple use

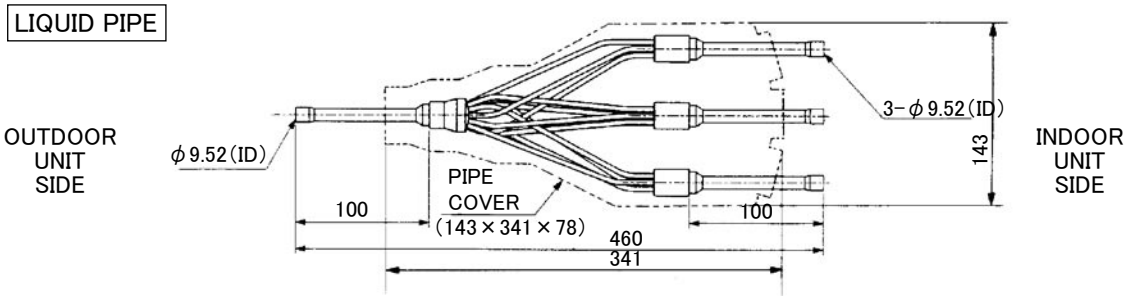
Specifications

Main body	Distribution ratio	Outdoor unit capacity is divided into three (33:33:33)
	Number of distribution pipes	1 each for liquid pipe and gas pipe
	Pipe material	Phosphate deoxidized copper C1220T-OL (JIS H3300)
Accessory	Pipe cover	Polyethylene foam molding (for liquid pipe) EPT sponge rubber type (for gas pipe)
	Joint	9 joints (5 types)

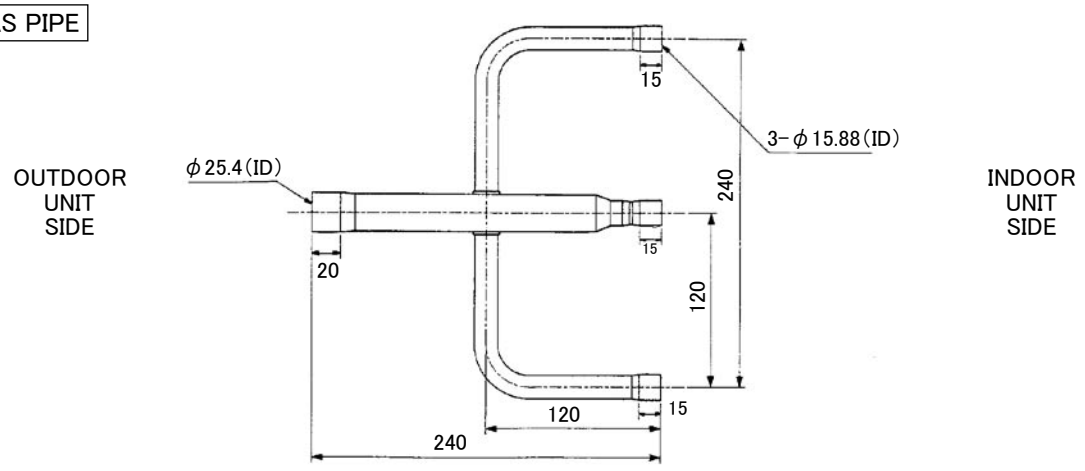
Dimensions

Unit : mm

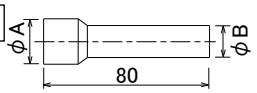
LIQUID PIPE



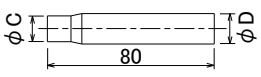
GAS PIPE



JOINT(Accessary)



ΦA(ID)	ΦB(OD)	Amount
12.7	9.52	1



ΦC(ID)	ΦD(OD)	Amount
12.7	15.88	3
19.05	25.4	1
6.35	9.52	3
15.88	25.4	1

How to Use / How to Install

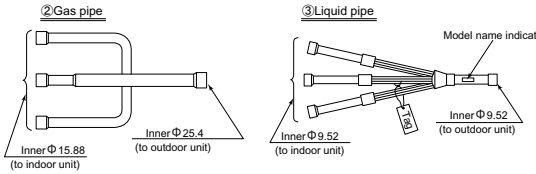
Package Air-conditioner Optional Parts Instruction Sheet for Simultaneous Triple Distributing Pipe exclusively used with Free Compo Multi-Units

MSDT-111R-E〔Indoor unit same-capacity triple 33:33:33〕…… Outdoor unit PU(H)-P6, 140GA type (R407C fixed speed)
Outdoor unit PUHZ-RP6, 140HA type (R410A power inverter)
Outdoor unit PUH-P8～10, 200～250MYA type (R407C fixed speed)
Outdoor unit PUHZ-RP8～10, 200～250HA type (R410A power inverter)

・ Make sure that you have all the following parts in packing box before beginning installation:

① Instruction sheet	② Gas pipe	③ Liquid pipe	④ Pipe cover (for gas pipe)	⑤⑥ Pipe covers (for gas pipe)	⑦ Pipe cover (for liquid pipe)	⑧⑨ Pipe covers	⑩ Bands	⑪ Joint	⑫ Flare nut
This sheet 1 sheet	1pc	1pc	With V cut 1pc	⑤Outer Φ50×250－1pc ⑥Outer Φ43×350－2pc	2pcs	⑧Outer Φ42×180－1pc ⑨Outer Φ38×200－3pcs	8pcs	See Table 1.	・1/4F‥3pcs ・1/2F‥3pcs For R410A indoor unit.

●See the following for the specifications of gas pipe ② and liquid pipe ③ :



※Procure the following at local site in addition to the above:
- ・Tape for heat insulator seal
- ・Extended pipe for refrigerant pipe

Joint specifications and provided numbers 〈Table 1〉

Sizes of joint pipe ends (mm)	Numbers provided
・ Outer Φ9.52－Inner Φ6.35	3
・ Outer Φ9.52－Inner Φ12.7	1
・ Outer Φ15.88－Inner Φ12.7	3
・ Outer Φ25.4－Inner Φ19.05	1
・ Outer Φ25.4－Inner Φ15.88	1
・ Outer Φ25.4－Inner Φ28.6	1

・ Pipe size and limit to refrigerant pipe

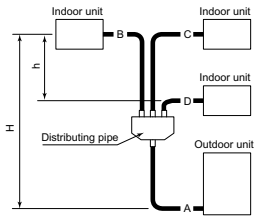
■For R407C fixed speed models **〈Table 2-1〉**

Outdoor unit capacity	Pipe size (mm)				Actual pipe length (m)			Height Difference (m)		Note 1 Number of bends
	Gas pipe side		Liquid pipe side		Indoor-Outdoor	A+B+C+D=	Indoor-Indoor	Indoor-Outdoor	Indoor-Indoor	
	Outdoor unit side	Indoor unit side	Outdoor unit side	Indoor unit side						
140 (6Hp)	Φ19.05 〈3/4〉	Φ15.88 〈5/8〉	Φ9.52 〈3/8〉	Φ9.52 〈3/8〉	—	50m or less	|B－C| = |B－D| = |C－D| = 8m or less	H = 40m or less	h = 1m or less	15 or less
200 (8Hp)	Φ25.4 〈1〉		Φ12.7 〈1/2〉		A + B = A + C = A + D = 50m or less	70m or less				
250 (10Hp)	Φ28.6 〈1-1/8〉									

■For R410A Power Inverter models **〈Table 2-2〉**

Outdoor unit capacity	Pipe size (mm)				Actual pipe length (m)			Height Difference (m)		Note 1 Number of bends
	Gas pipe side		Liquid pipe side		Indoor-Outdoor	A+B+C+D=	Indoor-Indoor	Indoor-Outdoor	Indoor-Indoor	
	Outdoor unit side	Indoor unit side	Outdoor unit side	Indoor unit side						
140 (6Hp)	Φ15.88 〈5/8〉	Φ12.7 〈1/2〉	Φ9.52 〈3/8〉	Φ6.35 〈1/4〉	—	75m or less	|B－C| = 8m or less	H = 30m or less	h = 1m or less	15 or less
200 (8Hp)	Φ25.4 〈1〉	Φ15.88 〈5/8〉		Φ9.52 〈3/8〉	A + B = A + C = A + D = 80m or less	80m or less		H = 40m or less		
250 (10Hp)	Φ28.6 〈1-1/8〉		Φ12.7 〈1/2〉							

〈Fig. 1〉



Note 1: Limit the number of bends for refrigerant pipes to 8 in each of the 〈A+B〉, 〈A+C〉 and 〈A+D〉 ranges.
※See the installation manual provided with the main unit for details on charge-less pipe length and refrigerant additional charge amount.

・ Pipe connections

1. Perform work, taking care with the following:
   - ・Be sure to check the combination pattern of indoor and outdoor units, joints to be used 〈Table 3〉, pipe size 〈Table 1〉 and joint used ⑪.
   - ・Be sure to observe the limits to refrigerant pipe length and number of bends 〈Table 2〉.
   - ・Insert the refrigerant pipe (procured at local site) and joint ⑪ into the expanded pipe portions of distributing pipe (this product) until they stop, and then connect them using anti-oxidization soldering.
   - ・There is no restriction on the orientation of distributing pipe (this product)during installation.
   - ・Take care that no foreign object, such as dust, enters during pipe connecting work.
   - ・Remove the tag of liquid pipe ③ after checking it.
2. Pipe connections
   - ・The provided joints ⑪ will be necessary depending on the capability of model used: See 〈Table 3〉, and connect the refrigerant piping.
   - ・Do not bend or widen the distributing pipe (liquid pipe).

Combination pattern of indoor and outdoor units and joints to be used:

■For R407C fixed speed **〈Table 3-1〉**

Outdoor unit	Indoor unit	Joint to be used
140 (6Hp)	50+50+50 (2+2+2)	・ Outer Φ25.4－inner Φ19.05〔outdoor gas pipe side〕×1, ・ outer φ15.88－inner φ12.7×3〔indoor gas pipe side〕
200 (8Hp)	60+60+60 (2.5+2.5+2.5)	・ Outer Φ9.52－inner Φ12.7〔indoor gas pipe side〕×3
250 (10Hp)	71+71+71 (3+3+3)	・ Outer Φ25.4－inner Φ28.6〔outdoor gas pipe side〕×1

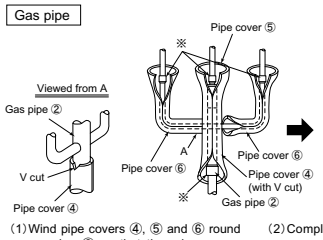
■For R410A Power Inverter **〈Table 3-2〉**

Outdoor unit	Indoor unit	Joint to be used
140 (6Hp)	50+50+50 (2+2+2)	・ Outer Φ25.4－inner Φ15.88〔outdoor gas pipe side〕×1, ・ outer Φ15.88－inner Φ12.7〔indoor gas pipe side〕×3, ・ outer φ9.52－inner Φ6.35〔indoor gas pipe side〕×3,
200 (8Hp)	60+60+60 (2.5+2.5+2.5)	No Joint is necessary
250 (10Hp)	71+71+71 (3+3+3)	・ Outer Φ9.52－inner Φ12.7〔outdoor liquid pipe side〕×1, ・ outer Φ25.4－inner Φ28.6〔outdoor gas pipe side〕×1

※Installation positions in brackets〔 〕.

・ Heat insulation work

Gas pipe

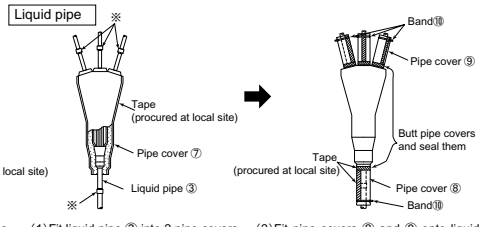


(1) Wind pipe covers ④, ⑤ and ⑥ round gas pipe ② so that there is no gap. Securely fit the V-cut portions of pipe cover ④ into the roots of pipe on both sides to install the pipe cover.

(2) Completely seal the openings of pipe covers ④, ⑤ and ⑥ using heat insulation seal tape (procured at local site). Wind seal tape round the pipe crossing portion in a crossed way so that there is no gap.

(3) Use band ⑩ to tighten the ends of each pipe cover.

Liquid pipe



(1) Fit liquid pipe ③ into 2 pipe covers ⑦, and then seal the mated portion of pipe covers ⑦ using heat insulation seal tape (procured at local site).

(2) Fit pipe covers ⑧ and ⑨ onto liquid pipe ③, and then securely seal the mated portion of pipe covers ⑦ using heat insulation seal tape (procured at local site).

(3) Use band ⑩ to tighten the ends of each pipe cover.

Notes:
1. Cut off any surplus pipe cover to make appropriate length.
2. Use pipe covers to completely cover the connection portions of refrigerant pipe (procured at local site), gas pipe ② and liquid pipe ③.
3. Cover the entire refrigerant pipe (procured at local site) with heat insulation material. When using generally available heat insulation material, make sure it is heat-resistant insulation material (at least 12 mm thick).

Please install contents other than this description on the main part of a product with an attached installation description, and use them as it.