## **MITSUBISHI**

Applicable models: Slim Multi S Series

# Package Air-conditioner Free Plan System Optional Parts

4-branch header (CMY-Y64-G-E) 8-branch header (CMY-Y68-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 classifications for danger, and possible consequences following incorrect handling.

MARNING Incorrect handling could lead to death or serious injury. **⚠** CAUTION

•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.

Incorrect handling could lead to injury or damage to house and household articles

## **⚠ WARNING**

### Ask the dealer or specialist for installation.

•If installed incorrectly by user, water leak, electric shock, fire,

Carefully install the panel according to this installation sheet.

•Incorrect installation could cause water leak, electric shock,

Before performing installation (moving) and electrical work

# **⚠** CAUTION

Do not place polyethylene bags in reach of young children •Putting them over the head will block breathing passages,

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

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

- If heat-insulation is inadequate, condensation could occur on the surface of pipes and dewdrops could accumulate on ceiling, floor or important goods.
- ●Use of unsuitable wire could cause electric leak, overheating or fire.
- Securely perform drain piping work according to the installation manual so that no condensation occurs.
- If piping work is incorrect, water leak may occur and ceiling furniture, etc may get wet.

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

(1) This instruction sheet	(2) Header 1 (thin)	(3) Header 2 (thick)	(4) Pipe cover 1	(5) Pipe cover 2	(6) Band		
ODGO NO XI		Market XI	×2	×2 for CMY-Y64 ×6 for CMY-Y68	×4		
(7) Plug 1	(8) Plug 2	(9) Plug 3 *	(10) Plug 4 *	(11) Pipe 1	(12) Pipe 2 *		
φ6.35×45 ℓ φ12.7×50 ℓ		φ9.52×50 ℓ	φ15.88×50 ℓ	φ19.05→φ15.88	φ15.88→φ12.7		
			6)				
×1 for CMY-Y64 ×3 for CMY-Y68	×1 for CMY-Y64 ×3 for CMY-Y68	×1 for CMY-Y64	×1 for CMY-Y64	×1 for CMY-Y64 ×1 for CMY-Y68	×2 for CMY-Y64		
(13) Pipe 3 *	(14) Pipe 4	(15) Pipe 5 *	(16) Pipe 6	(17) Cover 1			
φ9.52→φ6.35	$52 \rightarrow \phi 6.35$ $\phi 15.88 \rightarrow \phi 19.05$		φ12.7→φ9.52				
×2 for CMY-Y64	×1 for CMY-Y64 ×1 for CMY-Y68	×1 for CMY-Y64	×1 for CMY-Y68	×10 for CMY-Y64 ×18 for CMY-Y68			

- 1: Components 9,10,12,13,15 marked \* are not provided with 8-branch header (CMY-Y68).
- 2: Illustrations of components 2-4 are for 4-branch header.
- 3: Procure the following at local site: 1. Tape for sealing heat insulator and 2. Extension tube for refrigerant circuit. 4. Use the 4-branch header when branching 3 tubes or more; 8-branch header when branching 5 tubes or more.

### 2 Take care with the following when performing work:

- 1. Observe the restrictions in refrigerant tube length and number of installation indoor units that are described in outdoor unit installation manual.
- 2. The tubes branched using header cannot be further branched: Be sure to connect them to indoor units.
- 3. Use anti-oxidization brazing to connect header and tubes, plugs or pipes.
- 4. The header has stoppers: Insert the pipe to be connected all the way in until it stops.
- 5. There is no restriction on installation posture of header.
- 6. Take care that no foreign object, such as dust, enters the tubes during tube connection work.
- 7. Use heat insulator for all refrigerant tubes.

## 3 Selecting refrigerant tube size and using header

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

Perform connections referring to Fig. 1 and Tables 4-7.

Connect each pipe to match the size, appropriately judging the

Use without any processing, Use with part cut, or Use while connecting

- 4. Braze the provided plugs 1-4 (7)-(10) to stop up the pipe openings in headers which are not used.
- 5. If pipes are cut using pipe cutter, etc., deburr the tubes, remove any foreign object, and then connect the tubes.

### Table 1 Size of tube connected to outdoor unit

(1) When using R410A refrigerant

when using R+10/1	(2) **11		
apability of outdoor unit	Liquid pipe	Gas pipe	Capabi
Models -140	10.52	φ 15.88	Mod
Models -140	φ 9.52	φ 13.00	Mod

_	(2) When using R22/R40/C refrigerant										
e	Capability of outdoor unit	Liquid pipe	Gas pipe								
3	Model 71	φ 9.52	φ 15.88								
	Models 100-140	φ 9.52	φ 19.05								

### Table 2 Size of tube at branch

(1) When using R410A refrigerant Total capacity of downstream indoor units Liquid pipe Gas pipe  $\phi 9.52 | \phi 15.88$ All Models

(2) When using P22/P407C refrigeren

(2) When using R22/R407C terrigerant										
Total capacity of downstream indoor units	Liquid pipe	Gas pipe								
Models -80	φ 9.52	φ 15.88								
Models 81-	φ 9.52	φ 19.05								

### Table 3 Size of tube connected to indoor unit

 $\phi 9.52 | \phi 15.88$ 

(1) When using R410A refrigerant Capacity of indoor unit | Liquid pipe | Gas pipe Models 20-50  $\phi 6.35 | \phi 12.7$ 

Models 63-140

(2) When using R22/R407C refrigerant Capacity of indoor unit | Liquid pipe | Gas pipe Models 20-40 | \$\phi 6.35 | \$\phi 12.7 Models 50-80  $\phi 9.52 | \phi 15.88$ Madala 100 140 10.52 / 10.05

tion	4-branch header	Liquid pipe [(2) header 1 (thin)]	Use with Z dimension	TT 54.67.11 1	Cut to Y dimension				Mod	lels 100-	140	φ 9.52	φ 19.05
ped bol	(CMY-Y64)	Gas pipe [(3) header 2 (thick)]	Connect (11) pipe 1	Use with Z dimension	Use with Z dimension								
sranc	8-branch header	Liquid pipe [(2) header 1 (thin)]	Connect (16) pipe 6	Connect (16) pipe 6		Table 7			Pipe dia.				
5	(CMY-Y68)	Gas pipe [(3) header 2 (thick)]	Connect (11) pipe 1	Use with Z dimension	Use with Z dimension				4-branch (0	CMY-Y64)	8-branch (0	CMY-Y68)	
port		Note: When cutting to Y dim	ension, fix X dimensi	on securely, and use	a pipe cutter, etc. to co	」 ut it.			Liquid pipe	Gas pipe	Liquid pipe	Gas pipe	
Branched					_			Z	φ9.52	φ19.05	φ12.7	φ19.05	
Bra I		<b>→</b>	1 .					Y	φ12.7	φ22.2	_	φ22.2	
	Bı	anching pipe	<b>→</b> N	>	İ		Fig. 1	X	10	20	_	20	
	, _	Ţ <u> </u>			j	(2)/(3) 4-branch		W	10	15	10	15	
					İ			V	φ9.52	φ15.88	φ9.52	φ15.88	
		##		.,,				U	φ6.35	φ12.7	φ6.35	φ12.7	
	0-		<b>→</b>	X	ļ <del> </del>	_		Т	φ9.52	¢15.88	φ6.35	φ12.7	
	Ou	tdoor unit	'						,	,		7	
				(11) pipe 1	(12) p			4) pipe 4	(15) pipe 5	(16) pipe 6			
			(2)/(3) 8-branch	neader	'		<u>f</u>	ø15	.88 49	9.52 →	¢15.88		Ø12.7 ₩
				l A A A	U				∃ ⊦	<del></del>		$\square$	
portion			д д г		ļ			<u> </u>	_  L	_    <sub>-</sub>			
					1	<b>`</b>	∮15.88	ø12	—i i. 1.7 ¢6		ø19.05	i <del> i</del> ∮12.7	i <del> i</del> ø9.52
chec	7	able 5			$\downarrow$		Table 6						
-1st branched	-	Pipe dia. of outdoor unit			10 501100 0	4-branch header (CMY-Y64)  8-branch header (CMY-Y68)	Pipe dia. of indoor unit Pipe type (liquid/gas)	φ6.35/9	612.7   φ9	.52/ø15.88	φ9.52/¢	319.05 ø1	2.7/ø19.05
t - Is		Pipe type (liquid/gas) \$\phi 9.52/6			\$9.52 <b>/</b> \$22.2	оори	Liquid pipe [(2) header 1 (thin)] Co	onnect (1	3) pipe 3		Use with T o	limension Cont	nect (15) pipe 5
ır unı	4-branch header	Liquid pipe [(2) header 1 (thin)] Use with Z	dimension Use with Z dime	Cut to Y dimension	Use with Z dimension	4-branch header (CMY-Y64)	Gas pipe [(3) header 2 (thick)] Co		Use	with T dimensio	n	4) pipe 4 Con	
opti	(CMY-Y64)	Gas pipe [(3) header 2 (thick)] Connect (			Cut to Y dimension	porti		milect (1	2) pipe 2		Connect (1	4) pipe 4 Com	icci (14) pipe 4
Õ	8-branch header	Liquid pipe [(2) header 1 (thin)] Connect (	16) pipe 6 Connect (16) pi		Connect (16) pipe 6	8-branch header	Liquid pipe [(2) header 1 (thin)] U	se with T	limension	><	`>	·/   `	$\times$
Į	1	Gas pipe [(3) header 2 (thick)] Connect (	11) pipe 1 Use with Z dimer	Use with Z dimension	Cut to Y dimension	(CMY-Y68)	Gas pipe [(3) header 2 (thick)]						
	(L N	ote: When cutting to Y dimension	, fix X dimension sec	rely, and use a pipe	cutter, etc. to cut it.	Common	Liquid pipe [(2) header 1 (thin)]	a with H .	with U dimension   Cut to V dime				nt to V dimension d connect (15) pipe 5
		, and the second					Gas pipe [(3) header 2 (thick)]	c widi U	annension Cut	io v dilliciisio	Cut to v aim		t to V dimension d connect (14) pipe 4
						Ī	Note: When cutting to V dime	nsion, 1	fix W dimen	sion secure	ly, and use	a pipe cutte	r, etc. to cut it.

\$\psi 12.7\\$19.05

4 Attaching pipe cover (heat insulator)

Fig. 2-1 Fig. 2-2

1) Fit (2) (thin) or (3) (thick) header in (4) pipe cover 1, remove the paper pasted in the shaded position from (4) pipe cover 1, and then place the other (4) pipe cover 1 onto (2) (thin) or (3) (thick) header.

2) Use (6) bands to bind both ends of indoor unit branches of (4) pipe cover 1 as shown above.

3) Attach (5) pipe cover 2 to the openings which were stopped up by (7)-(10) plugs. Use tape (procured at local site) to securely seal

cured at local site

Fig. 2-3

the butted portion of heat insulators, and then wind (17) cover 1 around this portion.