Part 4 Outdoor Units

1.	Cool / Heat Selector	638
	1.1 KRC19-26A	638
2.	Fixing Box	639
	2.1 KJB111A	639
3.	REFNET Header	
	3.1 KHRJ26K11·17·18·37·40H	
	3.2 KHRP26M22·33·72·73H	
	3.3 KHRP25M33·72·73H	647
4.	REFNET Joint	
	4.1 KHRJ26K11·17·18·37·40·75T	
	4.2 KHRP26A22·33·72·73T	
	4.3 KHRP25A22·33·72·73T	
5.	1 3	
	5.1 BHF22M90·135	
	5.2 BHFP22P100·151	
	5.3 BHFP26P90 / 136	
_	5.4 BHFP22MA56 / 84, BHFP26MA56 / 84	
6.	Pipe Size Reducer	
	6.1 KHRP26M73TP·73HP 6.2 KHRJ26K40TP·40HP·75TP·76TP	
_		
7.	Central Drain Pan Kit	
	7.1 KWC26B160·280·450(E)	
_	• • • • • • • • • • • • • • • • • • • •	
8.	Central Drain Plug	
_		
9.	Wire Fixture for Preventing Overturning	
4.0	9.1 K-KYZP15C	
10).Fixture for Preventing Overturning	
	10.1 KPT-60B160	
11	Refrigerant Pipe Filter Kit	
	11.1 BHF26A450F	
12	2.Digital Pressure Gauge	
	12.1 BHGP26A1	
13	3.Strainer Kit	
	13.1 BWU26A15 / BWU26A20	708

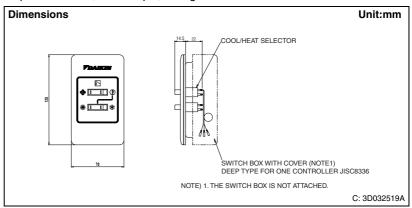
Cool / Heat Selector OH10-01

1. Cool / Heat Selector

1.1 KRC19-26A

This remote controller has a switch to enable selection of a heating or cooling operation for each outdoor unit or system. The controller can also be used to switch to the fan operation mode, for example, during moderate weather season.

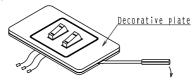




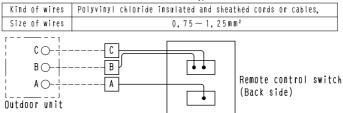
- Basically, this remote controller is not necessary for the Cooling/Heating VRV System and the Cooling Only VRV System.
- When the BS unit that automatically selects either cooling or heating operation mode is used in the manual mode, this remote controller can be connected to the BS unit.

Installation Point

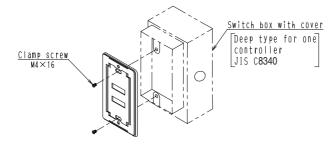
- 1. Remove the decorative plate.
 - Insert a (-) screwdriver in the gap between the concaved part of the decorative plate and the remote control switch to open it.



- 2. Provide the wiring between the remote control switch and the outdoor unit.
 - Connect terminals (A, B, C) on the back side of the remote control switch to terminals (A, B, C) on the outdoor unit.
 - ----shows field wiring,
 - Use the wires shown below ror the wiring.



3. Attach the remote control switch to the switch box (To be obtained locally) as shown below.



4. Attach the decorative plate.

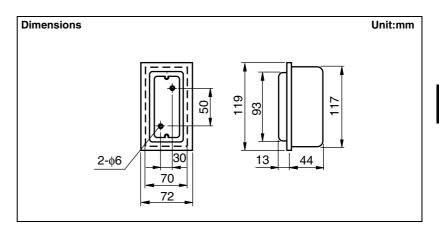
Note; The switch box and connecting wires are not attached.

C: 3P077945A

2. Fixing Box

2.1 KJB111A

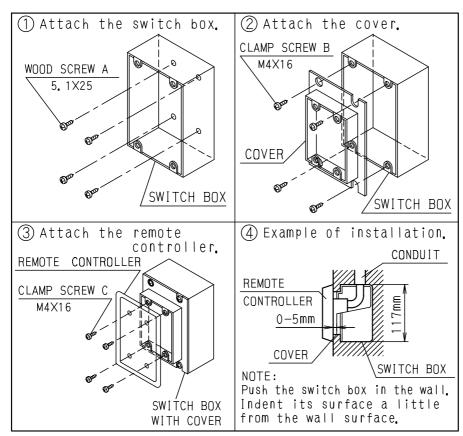




Component parts

	Name	Switch box	Cover	Wood screw A (5.1×25)	Clamp screw B (M4×16)
Q'ty	KJB111A	1	1	2	2
	Shape			OF THE	Open

Installation



NOTES:1. Refer to the installation of each remote controller.

- 2. Do not bind the lead wires for switch box with the power cord and the link wiring.
 - This may cause erratic operation.
- 3. The remote controller and the clamp screw C are one kit. They are sold separately and attach to the switch box.

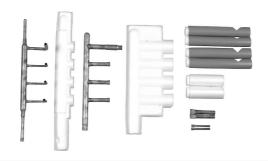
C: 3PA34878C

REFNET Header OH10-01

3. REFNET Header

3.1 KHRJ26K11·17·18·37·40H





REFNET HEADER INSTALLATION MANUAL (Except for JAPAN) KHRJ26K11H • 17H

■ This kit includes the following parts.

The Kit Thorago the fortuning factor							
	PARTS NAME						
KIT NAME	GAS SIDE HEADER	LIQUID SIDE HEADER	PLUGGING TUBES	INSULATION	INSULATION FOR GAS SIDE ENCLOSED PIPING	INSULATION FOR LIQUID SIDE PIPING	TAPE
KHRJ 26K11H			OF OF	e IIII		0	\Diamond
	One header	One header	2 each for gas/ liquid sides	1 each for gas/ liquid sides	2 pcs.	4 pcs.	16 Sheets
KHRJ 26K17H			000	e IIIIIII	0	03	\Diamond
	One header	One header	6 each for gas/ liquid sides	1 each for gas/ liquid sides	6 pcs.	8 pcs.	30 Sheets

(SELECTION PROCEDURE)

• Total the capacity of indoor unit in the downstream from it's HEADER and select the kit from the table below.

INDOOR UNIT TOTAL CAPACITY	KIT NAME
Less than 100	KHRJ26K11H
Not less than 100	KHRJ26K17H

For the model name of indoor unit which can be combined, refer to the installation manual attached to the product.

(Find the indoor unit capacity by calculation from the nominal capacity indicated on the model name according to the table below.)

INDOOR UNIT NOMINAL CAPACITY	CAPACITY
Type 20	20
Type 25	25
Type 32	31, 25
Type 40	40
Type 50	50
Type 63	62.5
Type 80	80
Туре 100	100
Туре 125	125

According to the following procedure, determine the piping Size at each part.

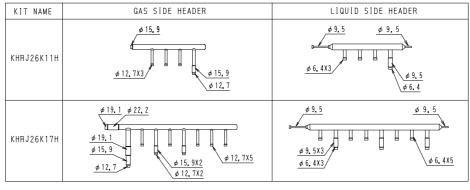
 Connect between the outdoor unit and the first HEADER according to the outdoor unit connection size.

OUTDOOR UNIT	GAS PIPE SIZE	LIQUID PIPE SIZE
TVBA 5 (HP)	# 10 1	405

 Connect between the HEADER and indoor unit according to the indoor unit connection size.

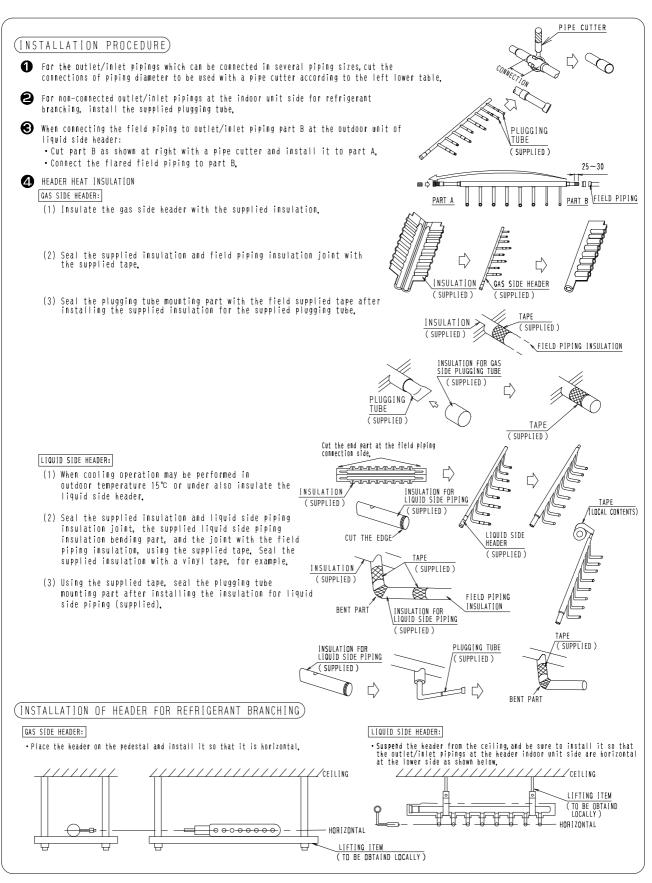
INGOOT WITE CONNECCTION OF		
INDOOR UNIT NOMINAL CAPACITY	GAS PIPE SIZE	LIQUID PIPE SIZE
Types 20 • 25 • 32 • 40	ø 12.7	ø 6. 4
Types 50 • 63 • 80	ø 15.9	ø 9.5
Types 100 • 125	ø 19. 1	ø 9. 5

The outlet/inlet piping sizes of refrigerant branching header of each kit are as shown in the table below,



3P234615

640



3P234615

REFNET Header OH10-01

REFNET HEADER INSTALLATION MANUAL (Except for JAPAN)

KHRJ26K18H • 37H • 40H

■ This kit includes the following parts.

		PARTS NAME					
KIT NAME	GAS SIDE HEADER	LIQUID SIDE HEADER	PLUGGING TUBES	INSULATION FOR HEADER	INSULATION FOR SUCTION GAS AND DISCHARGE GAS SIDE ENCLOSED PIPING	INSULATION FOR LIQUID SIDE PIPING	TAPE
KHRJ 26K18H 6 branches			4 each for gas/ liquid sides	1 each for gas/ liquid sides	∅4 pcs.	6 pcs.	23 Sheets
KHRJ 26K37H 8 branches			6 each for gas/ liquid sides	1 each for gas/ liquid sides	6 pcs.	8 pcs.	30 Sheets
KHRJ 26K40H 8 branches			6 each for gas/ liquid sides	1 each for gas/ liquid sides	6 pcs.	8 pcs.	45 Sheets

(SELECTION PROCEDURE)

• Total the capacity of indoor unit in the downstream from it's HEADER and select the kit from the table below.

INDOOR UNIT TOTAL CAPACITY	KIT NAME		
Less than 160	KHRJ26K18H (Maximum of 6 branching)		
Not less than 160, less than 330	KHRJ26K37H (Maximum of 8 branching)		
Not less than 330, less than 640	KHRJ26K40H (Maximum of 8 branching)+KHRJ26K40HP		

- VRV PLUS series, use KHRJ26K40H+KHRJ26K40HP
- for the model name of indoor unit which can be combined, refer to the installation manual attached to the product.

Find the indoor unit capacity `by calculation from the nominal capacity indicated on the model name according to the below, /

INDOOR UNIT NOMINAL CAPACITY	CAPACITY
Type 20	20
Type 25	25
Type 32	31.25
Type 40	40
Type 50	50
Type 63	62.5
Type 80	80
Type 100	100
Type 125	125
₩ Туре 200	200
₩ Туре 250	250

- Indoor unit(Type 200, 250) can not be connected the HEADER.
- ★ Connected indoor unit(Type 200, 250) after branching at upstream HEADER.
- According to the following procedure, determine the piping size at each part.
- · Connect between the outdoor unit and the first HEADER according to the outdoor unit connection size.

OUTDOOR UNIT	LIQUID PIPE SIZE	GAS PIPE SIZE
Type 8(HP)	ø 12.7	φ 25.4
Type 10(HP)	ø 12.7	φ 28.6

Connect between the outdoor unit and the first HEADER according to the outdoor unit connection size.

OUTDOOR	LIQUID PIPE	GAS PIPE
SYSTEM NAME	SIZE	SIZE
RXY16K	ø 15.9	φ 34.9
RXY18~20K	ø 19 . 1	φ 34.9
RXY24K	ø 19.1	φ 41.3

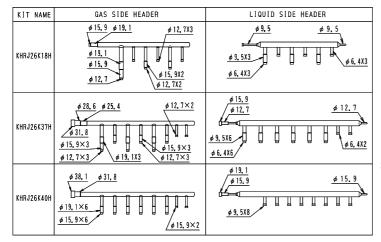
Connect between the HEADER and indoor unit according to the indoor unit connection size.

INDOOR UNIT	LIQUID PIPE	SUCTION GAS PIPE
NOMINAL CAPACITY	SIZE	SIZE
Type 20 • 25 • 32 • 40	Ø 6.4	φ12.7
Type 50 • 63 • 80	ø9.5	φ15 . 9
Type 100 • 125	Ø 9.5	¢19,1

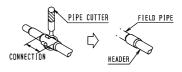
3P234616

(INSTALLATION PROCEDURE)

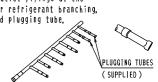
• The outlet/inlet piping sizes of refrigerant branching header of each kit are as shown in the table below.



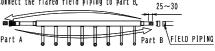
1) For the nutlet/inlet pipings which can be connected in several piping sizes, cut the connections of piping diameter to be used with a pipe cutter.



2) For non-connected outlet pipings at the indoor unit side for refrigerant branching. install the supplied plugging tube.



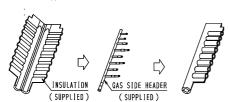
- 3) When connecting the field piping to inlet piping part B at the outdoor unit of liquid side header.
 - Cut part B as shown with a pipe cutter and install it to part A.
 - Connect the flared field piping to part B.



4)Heder heat insulation.

DISCHARGE/SUCTION GAS SIDE HEADER

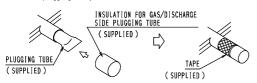
i) Insulate the discharge/suction gas side header with the supplied insulation.



ii)Seal the supplied insulation and field piping insulation junction with the field supplied tape.

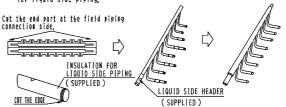


iii) Seal the plugging tube mounting part with the field supplied tape after installing the supplied insulation for the supplied plugging tube.

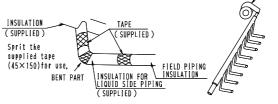


LIQUID SIDE HEADER

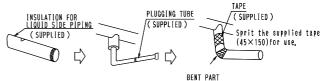
i) Insulate the header using the insulation for header and the insulation for liquid side piping.



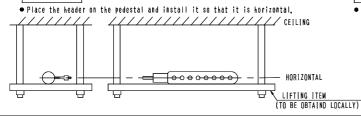
ii) Seal the supplied insulation and liquid side piping insulation joint, the supplied liquid side piping insulation bending part, and the joint with the field piping insulation, using the field supplied tape TAPE the field piping insulation, using the field supplied tape, (LOCAL CONTENTS) Seal the supplied insulation with a vinyl tape, for example



iii) Using the field supplied tape, seal the plugging tube mounting part after installing the insulation for liquid side piping (supplied).



5) INSTALLATION OF HEADER REFRIGERANT BRANCHING GAS SIDE HEADER



LIQUID SIDE HEADER

• Suspend the header from the ceiling, and be sure to install it so that the outlet/inlet pipings at the header indoor unit side are horizontal at the lower side as shown below.

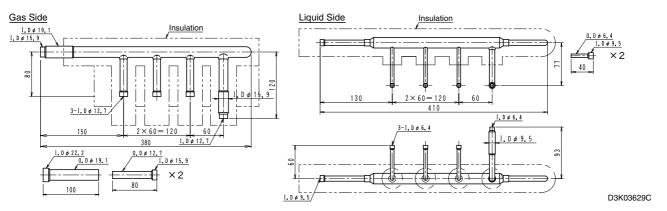


3P234616

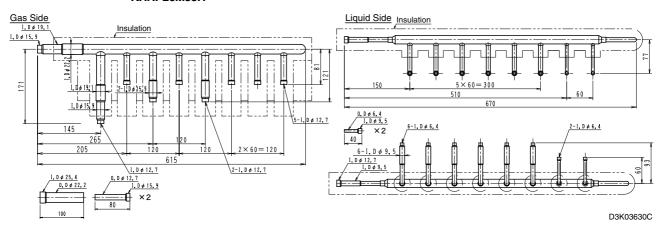
REFNET Header OH10-01

3.2 KHRP26M22·33·72·73H

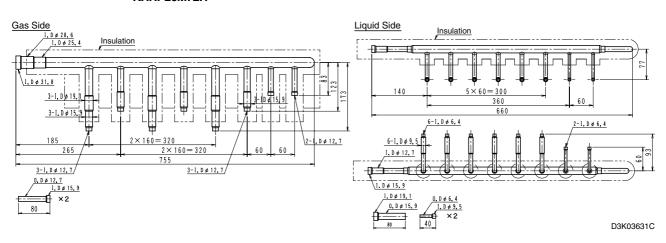
KHRP26M22H



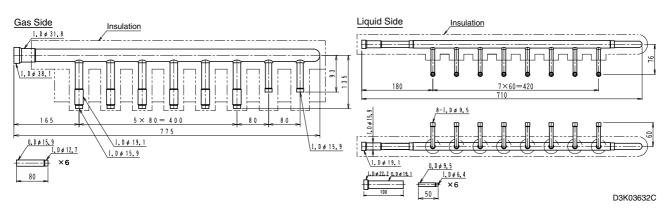
KHRP26M33H



KHRP26M72H



KHRP26M73H



Installation

■ THIS KIT INCLUDES THE FOLLOWING PARTS.

			S	H A P E			
KIT NAME	GAS SIDE HEADER	LIQUID SIDE HEADER	PLUGGING TUBES	REDUCER	INSULATION FOR HEADER	INSULATION FOR GAS SIDE ENCLOSED PIPING	INSULATION FOR Liquid side piping
KHRP 26M22H 4branches	1 PCS.	1 PCS.	2 each for gas/liquid sides	for gas sides (\$\phi 22. 2) \text{1pcs.} (\$\phi 15. 9) \text{2pcs.} for liquid sides (\$\phi 9. 5) \text{2pcs.}	1 each for gas/liquid sides	2 pcs.	4 PCS.
KHRP 26M33H 8branches	1 PCS.	1 PCS.	6 each for gas/liquid sides	for gas sides (\$\phi 25, 4)1pcs, (\$\phi 15, 9)2pcs, for Liquid sides	1 each for gas/liquid sides	6 pc s.	8 pcs.
KHRP 26M72H 8 branches	1 pcs.	1 pcs.	6 each for gas/liquid sides	for gas sides (∮15.9) 2 pcs. → for liquid sides	1 each for gas/liquid sides	6 pc s.	8 pcs.
KHRP 26M73H 8branches	1 pcs.	1 pcs.	<i>></i> >	6 pc s. for gas sides (\$12,7) for liquid sides (\$6,4)6pcs. (\$622,2)1pcs.	1 each for gas/liquid sides	6 pcs.	8 pcs.

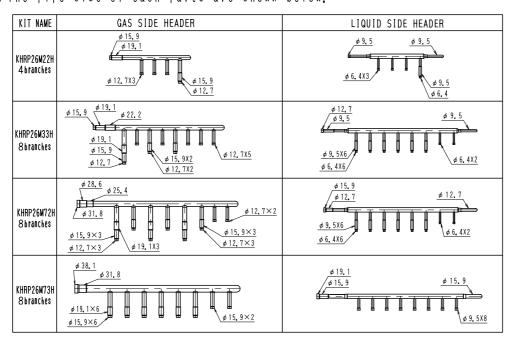
☆…Make sure gas side header and liquid side header are for R410A (Label for R410A is attached on each part.)

(SELECTION PROCEDURE)

According to the INSTALLATION MANUAL of outdoor unit.

(INSTALLATION PROCEDURE)

1 The pipe size of each parts are shown below.



3P113151C

REFNET Header OH10-01

● For the outlet/inlet pipings which can be connected in several piping sizes, cut the connections of piping diameter to be used with a pipe cutter according to the left lower table.

NOTE) 1. Cut in the center of the connections.

2. PIPE SIDE REDUCER

ex)When connecting the field pipe (ϕ 22.2) to inlet liquid side pipe of KHRP26M73H, use PIPE SIDE REDUCER.

For non-connected outlet pipings at the indoor unit side for refrigerant branching, install the supplied plugging tube.

When connecting the field piping to inlet piping part B at the outdoor unit of liquid side header.

• Cut part B as shown with a pipe cutter and install it to part A.

• Connect the flared field piping to part B.



PLUGGING TUBES

(SUPPLIED)

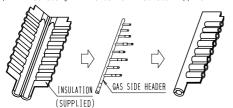
 Make sure to flow nitrogen gas through the pipe when brazing,

■ Insulation of HEADER

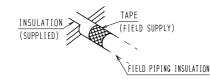
Be sure to insulate the gas and liquid side HEADER.

Note) The insulation of the refrigerant piping must be reinforced based on the environment of installation, Otherwise, dew may condensate on the surface of the insulation. For details, see Engineering Data,

GAS SIDE HEADER



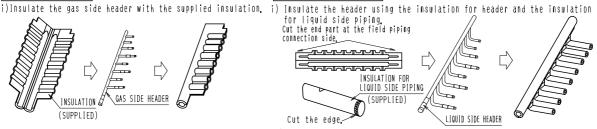
ii)Seal the supplied insulation and field piping insulation junction with the field supplied tape.



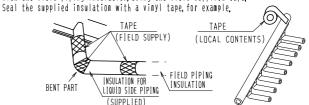
iii)Seal the plugging tube mounting part with the field supplied tape after installing the supplied insulation for the supplied plugging tube.



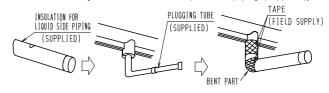
LIQUID SIDE HEADER



ii) Seal the supplied insulation and liquid side piping insulation joint, the supplied liquid side piping insulation bending part, and the joint with the field piping insulation, using the field supplied tape.

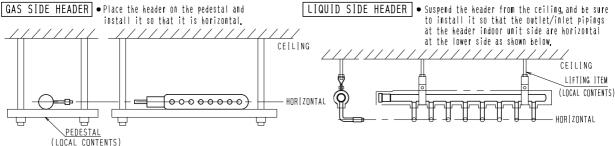


iii) Using the field supplied tape, seal the plugging tube mounting part after installing the insulation for liquid side piping (supplied).



(INSTALLATION PRECAUTIONS

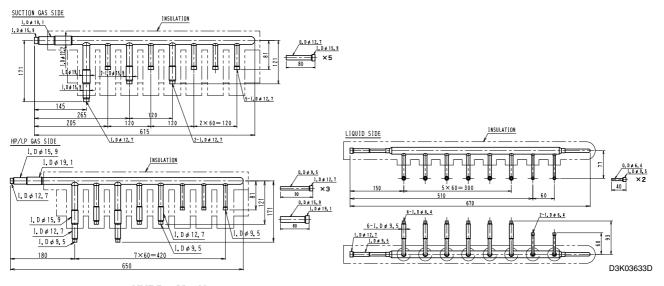
• Do not apply extra force on the piping part. The brazed part may be damaged and it may result in gas leakage,



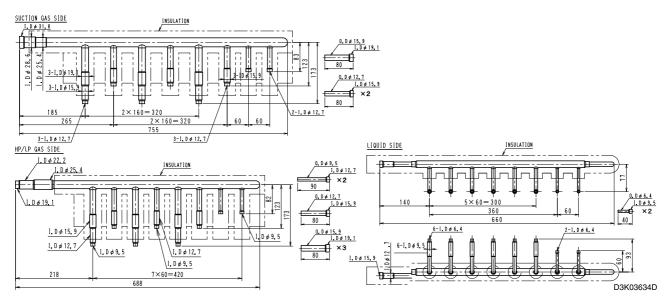
3P113151C

3.3 KHRP25M33·72·73H

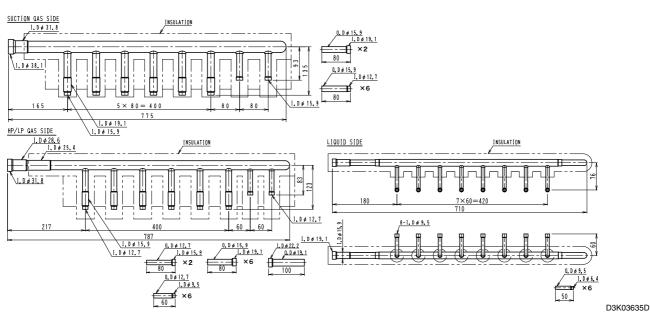
KHRP25M33H



KHRP25M72H



KHRP25M73H



REFNET Header OH10-01

Installation

■ THIS KIT INCLUDES THE FOLLOWING PARTS.

			S	H A P E				
KIT NAME	SUCTION GAS SIDE HEADER	DISCHARGE GAS(HP/LP GAS) SIDE HEADER	LIQUID SIDE HEADER	INSULATION FOR HEADER	PLUGGING TUBES	REDUCER	INSULATION FOR GAS SIDE ENCLOSED PIPING	INSULATION FOR Liquid side Piping
KHRP 25M33H 8branches	* 1 pcs.	1 pcs.	1 pcs.	2 pcs, for gas side	6 each for suction gas/ discharge gas (HP/LP gas)/ liquid sides	suction gas side (d15,9) 5pcs, discharge gas(HP/LP gas)side (d12,7) 3pcs, liquid side (d9,5) 2pcs,	1 2 pcs.	8 pcs.
KHRP 25M72H 8branches	1 pcs.	1 pcs.	1 pcs.	2 pcs, for gas side 1 pcs, for liquid side	6 each for suction gas/discharge gas (HP/LP gas)/liquid sides	suction gas (415, 1) lets, (415, 9) 2ptc., (415, 9) 2ptc., (415, 9) 2ptc., (415, 9) 1ptc., (41	1 2 pcs.	8 pcs.
KHRP 25M73H 8 branches	1 pcs,	1 pcs,	1 pcs.	2 pcs, for gas side 1 pcs, for liquid side	6 each for suction gas/ discharge gas (HP/LP gas// liquid sides	suction gas side (a15,1)	1 2 pcs.	8 pcs.

★…Make sure suction gas side header discharge gas(HP/LP gas) side and liquid side header are for R410A, (Label for R410A is attached on each part,)

(INTRODUCTION)

This kit is designed as a refrigerant branching kit for HEAT RECOVERY unit for installation in buildings.

- ◆Between outdoor unit and BS unit (upstream of BS unit), use 3 pipings. Use this kit for such branching application.
- Between BS unit and indoor unit (downstream of BS unit) and between REFNET HEADER and cooling-only indoor unit, use 2 pipings.

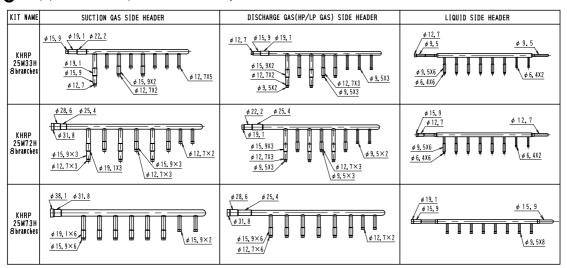
	3 pipings	2 pip	ings
	Upstream of BS unit	Downstream of BS unit	To cooling-only indoor unit
-	Suction gas side piping		
	Discharge gas(HP/LP gas)	Gas side piping	Suction gas side piping
	side piping	Liquid side piping	Liquid side piping
	Liquid side piping		

(SELECTION PROCEDURE)

According to the INSTALLATION MANUAL of outdoor unit.

(INSTALLATION PROCEDURE)

1 The pipe size of each parts are shown below.



3P113623D

PIPE CUTTER

For the outlet/inlet pipings which can be connected in several piping sizes, cut the connections of piping diameter to be used with a pipe cutter according to the left lower table.

NOTE) 1. Cut in the center of the connections.

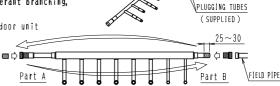
2. PIPE SIDE REDUCER

ex)When connecting the field pipe(ϕ 22, 2) to inlet liquid side pipe of KHRP25M73H, use PIPE SIDE REDUCER.

€ For non-connected outlet pipings at the indoor unit side for refrigerant branching, install the supplied plugging tube.

When connecting the field piping to inlet piping part B at the outdoor unit of liquid side header.

- Cut part B as shown with a pipe cutter and install it to part A. • Connect the flared field piping to part B.

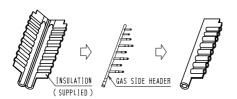


- · Make sure to flow nitrogen gas through the pipe when brazing.
- Insulation of HEADER

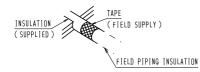
Be sure to insulate the gas and liquid side HEADER. Note) The insulation of the refrigerant piping must be reinforced based on the environment of installation. Otherwise, dew may condensate on the surface of the insulation. For details, see Engineering Data.

SUCTION/DISCHARGE GAS SIDE HEADER

i)Insulate the gas side header with the supplied insulation.



ii)Seal the supplied insulation and field piping insulation junction with the field supplied tape,

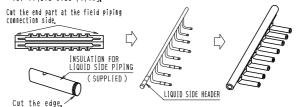


iii)Seal the plugging tube mounting part with the field supplied tape after installing the supplied insulation for the supplied plugging tube.

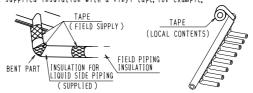


LIQUID SIDE HEADER

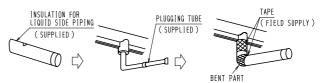
Insulate the header using the insulation for header and the insulation for liquid side piping.



ii) Seal the supplied insulation and liquid side piping insulation joint, the supplied liquid side piping insulation bending part, and the joint with the field piping insulation, using the field supplied tape. Seal the supplied insulation with a vinyl tape, for example.



iii) Using the field supplied tape, seal the plugging tube mounting part after installing the insulation for liquid side piping (supplied).

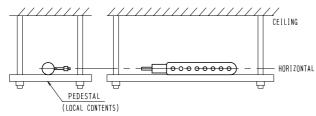


(INSTALLATION PROCEDURE

• Do not apply extra force on the piping part. The brazed part may be damaged and it may result in gas leakage.

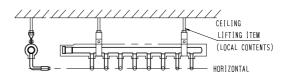
SUCTION/DISCHARGE GAS SIDE HEADER

• Place the header on the pedestal and install it so that it is horizontal.



LIQUID SIDE HEADER

Suspend the header from the ceiling, and be sure to install it so that
the outlet/inlet pipings at the header indoor unit side are horizontal
at the lower side as shown below.

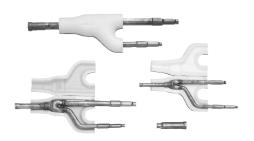


3P113623D

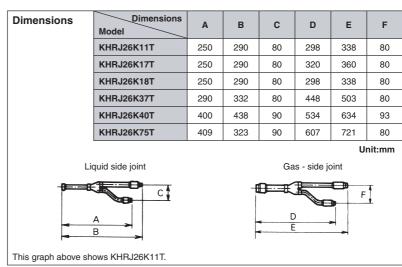
REFNET Joint OH10-01

4. REFNET Joint

4.1 KHRJ26K11·17·18·37·40·75T

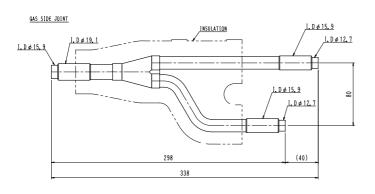


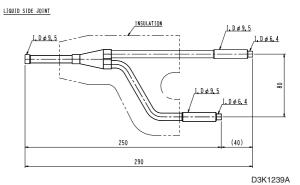
- Includes insulation. Makes it easy to insulate complicated branch points in no time flat.
- Connecting parts have already been expanded.
 Brazing is finished in a flash.



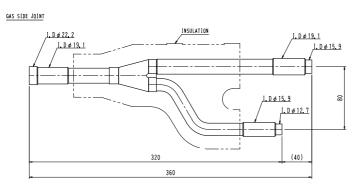
Iter	n	Model	KHRJ26K11T	KHRJ26K17T	KHRJ26K18T	KHRJ26K37T	KHRJ26K40T	KHRJ26K75T	
			φ6.4 φ9.5	φ6.4 φ9.5	φ6.4 φ6.4 φ9.5 φ9.5	φ 9.5 φ 6.4 φ12.7 φ 9.5 φ12.7	φ12.7 φ 9.5 φ15.9 φ15.9 φ19.1 φ19.1		
	Liquid side use	Joint (with insulation)	少) i	†** 	4 ⁴ 7 0 4	†** 	D D D D D D D		
meter				ф9.5	ф9.5	φ12.7 φ15.9	φ19.1 φ15.9		
n pipe dia			φ12.7 φ12.7 φ15.9 φ15.9	φ15.9 φ12.7 φ19.1 φ15.9	φ12.7 φ12.7 φ15.9 φ15.9 φ19.1	φ15.9 φ12.7 φ19.1 φ15.9 φ25.4 φ19.1	φ25.4 φ15.9 φ28.6 φ19.1 φ31.8 φ25.4		
Connection pipe diameter	Gas - side use	Joint (with insula- tion)		†** O \		4 0 4	4½ 0 4	D #44.5 D #31.8 D #31.8 D #31.8 D #44.5 D #44.5 D #32.7 D #3	
	g		φ19.1 φ15.9	φ19.1 φ22.2	φ19.1 φ15.9	φ25.4 φ28.6 φ31.8	ф31.8 ф38.1		
		Reducer	_	_	_	φ19.1→φ25.4 φ25.4→φ28.6	 φ 9.5→φ 6.4 φ15.9→φ12.7 φ25.4→φ28.6 φ31.8→φ38.1 	Liquid side : ϕ 12.7 \rightarrow ϕ 15.9 \rightarrow ϕ 19.1, ϕ 6.4 \rightarrow ϕ 9.5 \rightarrow ϕ 12.7 Gas side : ϕ 31.8 \rightarrow ϕ 38.1 \rightarrow ϕ 31.8, ϕ 12.7 \rightarrow ϕ 15.9\$ \rightarrow ϕ 19.1 \rightarrow ϕ 25.4	
Ma	Material		Polypropylene						
_	Insulation temperature		120°C						
Col	Color						White		
Coi	Component parts		Liquid - side joi Gas - side joint Insulation, Installation man	side joint, de joint, Gas - side joint, Insulation,					

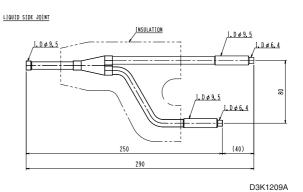
KHRJ26K11T



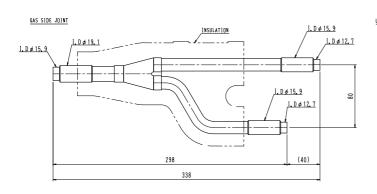


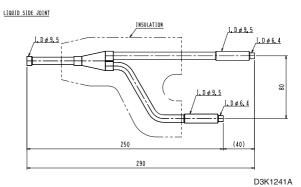
KHRJ26K17T





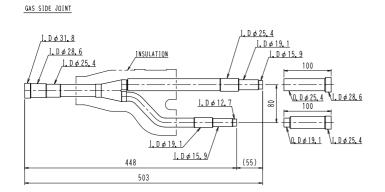
KHRJ26K18T

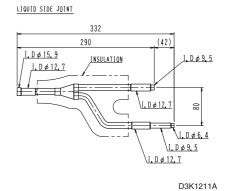




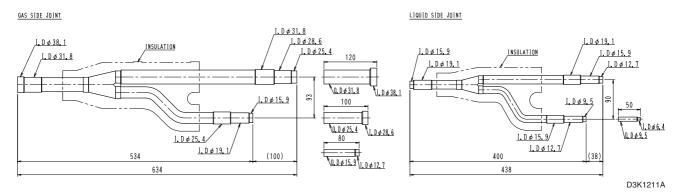
REFNET Joint OH10-01

KHRJ26K37T

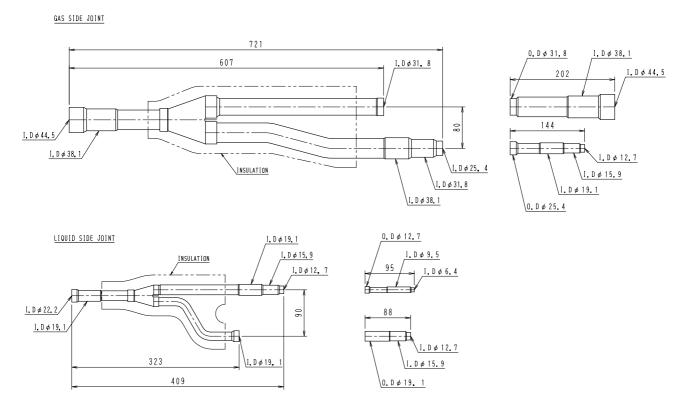




KHRJ26K40T



KHRJ26K75T



D3K1311B

KHRJ26K11.17T 4.1.1

REFNET JOINT INSTALLATION MANUAL (EXCEPT FOR JAPAN)

KHRJ26K17T KHRJ26K11T

■ THIS KIT INCLUDES THE FOLLOWING PARTS.

	KHRJ26K17T				KHRJ26K11T		
GAS SIDE JOINT	LIQUID SIDE JOINT	INSULATION	TAPE	GAS SIDE JOINT	LIQUID SIDE JOINT	INSULATION	TAPE
		(Gas side/liquid side)	8 sheets.			(Gas side/liquid side)	8 sheets.

SELECTION PROCEDURE

- 1 According to the following procedure, use KHRJ26K17T and KHRJ26K11T properly.

 Total the capacity of indoor unit in the down
 - stream from its JOINT and sclect the kit from the table below.

INDOOR UNIT TOTAL CAPACITY	KIT NAME
Less than 100	KHRJ26K11T
Not less than 100	KHRJ26K17T

• For the model name of indoor unit which can be combined, refer to the installation manual attached to the product.

(Find the indoor unit capacity by calculation from the nominal capacity indicated on the model name according to the table below.)

٦.

② According to the following procedure, determine the piping size at each part.

- •Connect between the outdoor unit and the first JOINT according to the pipe size of the outdoor unit.
- ex) For RSXY5HY1 Gas pipe size: ϕ 19.1 Liquid pipe size: ϕ 9.5
- Total the capacity of indoor unit in the down-stream and select the size between JOINTS from the table below.

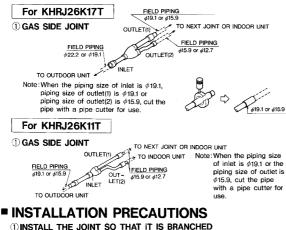
INDOOR UNIT TOTAL CAPACITY	GAS PIPE SIZE	LIQUID PIPE SIZE
LESS THAN 100	φ15.9	φ9.5
NOT LESS THAN 100	φ19.1	φ9.5

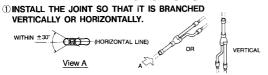
 Connect between the JOINT and indoor unit according to the indoor unit connection size

INDOOR UNIT NOMINAL CAPACITY	GAS PIPE SIZE	LIQUID PIPE SIZE
Type 20,25,32,40	φ12.7	φ6.4
Type 50,63,80	φ15.9	φ9.5
Type 100,125	φ19.1	φ9.5

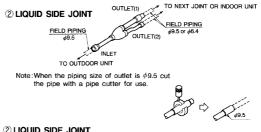
REFRIGERANT PIPING CONNECTION EXAMPLE	JOINT SELECTION PROCEDURE	PIPING	SIZE SELECTION PR	OCEDURE
CONNECTION EXAMPLE A □ REPNET JOINT OUTDOOR UNIT A B C D INDOOR UNIT 40 40 25 25 25 The figure in □ indicates the indoor unit capacity.	A: Total capacity of indoor unit in the downstream KHRJ26K17T 40+40+25+25+25=155>100 B: Total capacity of indoor unit in the downstream KHRJ26K17T 40+25+25+25+15>100 C: Total capacity of indoor unit in the downstream KHRJ26K11T 25+25+25+25+25+25+25+25+25+25+25+25+25+2	Between JOINT (A) and (B): Between JOINT (B) and (C): Between JOINT (C) and (D): Between JOINT (A – D) and indoor unit:	Total capacity of indoor unit in the downstream 40 + 25 + 25 + 25 - 115 > Total capacity of indoor unit in the downstream 25 + 25 + 25 - 75 < 100 Total capacity of indoor unit in the downstream 25 + 25 - 50 < 100 As per indoor unit connection size	Gas side piping ≠19.1 Gas side piping ≠9.5 Gas side piping ≠9.5 Liquid side piping ≠9.5 Gas side piping ≠9.5 Gas side piping ≠9.5 Cas side piping ≠9.5 Gas side piping ≠9.5 Liquid side piping ≠9.5 Liquid side piping ±0.5 Liquid side pip
CONNECTION EXAMPLE B OUTDOOR B C UNIT A 40 40 25 INDOOR UNIT D D 25 25 25 The figure in indicates the indoor unit capacity.	A: Total capacity of indoor unit in the downstream KHRJ26K17T 40+40+25+25+25=155>100 B: Total capacity of indoor unit in the downstream KHRJ26K17T 40+40+25=105>100 C: Total capacity of indoor unit in the downstream KHRJ26K11T 40+25=65<100 D: Total capacity of indoor unit in the downstream KHRJ26K11T 25+25=50<100	Between JOINT (A) and (B): Between JOINT (B) and (C): Between JOINT (A) and (D): Between JOINT (B ~ D) and indoor unit:	Total capacity of indoor unit in the downstream 40+40+25=105>100 Total capacity of indoor unit in the downstream 40+25=65<100 Total capacity of indoor unit in the downstream 25+25=50<100 As per indoor unit connection size	Gas side piping \$19.1 Liquid side piping \$9.5 Gas side piping \$15.9 Liquid side piping \$9.5 Gas side piping \$9.5 Gas side piping \$9.5 Gas side piping \$9.5 Gas side piping \$9.5 Liquid side piping \$0.5 Liquid side pi

■ INSTALLATION PROCEDURE

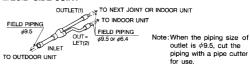




3 When the cooling operation may be performed with outdoor temperature 15°C or under, also insulate the liquid side.

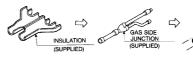






2 BE SURE TO INSULATE THE GAS SIDE JOINT.

Seal the insulation and field piping heat insulation joint with the supplied tape.

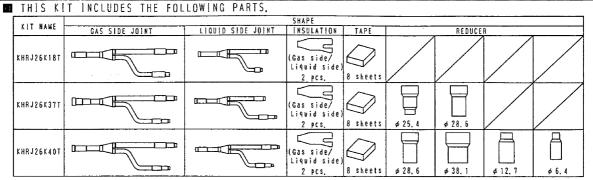




3P234462

KHRJ26K18-37-40T 4.1.2

JOINT INSTALLATION MANUAL for JAPAN) KHRJ26K18T·37T·40T Except



SELECTION PROCEDURE)

① According to the following procedure.

· First branch counted from the outdoor unit(Type8, 10), use KHRJ26K37T.

When using REFRET joint on the first branch counted from the function unit side.
 If system capacity is less than 640, use KHRJ26K4OT + KHRJ26K4OTP.

· Next Joint, total the capacity of indoor unit in the downstream from it is JOINT and select the

kit from the table 1.
For the model name of indoor unit which can be combined, refer to the installation manual attached to the product.

② According to the folloing procedure, determine

the piping size at each part. Connect between the outdoor unit and the first JOINT according to the outdoor unit connection size.

(Table 3)		(Unit:mm)
OUTDOOR UNIT	LIQUID PIPE SIZE	GAS PIPE SIZE
Type 8(HP)	ø 12.7	ø 25. 4
Type 10(HP)	-\$ 12.7	ø 28. 6

Total the capacity of indoor unit in the downstream and select the size between JOINTS from the table 4.

(Table 4)	(Unit:mm)
INDOOR - U NIT TOTAL CAPACITY	LIQUID PIPE SIZE	GAS PIPE SIZE
Less than 100	Ø 9. 5	Ø15.9
Not less than 100, less than 160	φ9.5	Ø19.1
Not less than 160, less than 330	φ12.7	Ø 25. 4
Not less than 330, less than 480	\$15.9	\$\phi 34.9
Not less than 480, less than 640	\$19.1	\$34.9
Not less than 640	Ø19, 1	\$41.3

INDOOR UNIT TOTAL CAPACITY	KIT NAME
Less than 160	KHRJ26K18T
Not less than 160, less than 330	KHRJ26K37T KHRJ26K40T
	KHRJ26K40TP

· Connect between the function unit and the first JOINT according to the function unit connection size.

(Table 3)		(Unit:mm)
OUTDOOR	LIQUID PIPE	GAS PIPE
SYSTEM NAME	512E	SIZE
RXY16K	ø 15.9	ø 34.9
RXY18~20K	ø 19. i	ø 34.9
RXY24K	ø 19, 1	ø 41. 3

(Find the indoor unit capacity by calculation from the nomina capacity indicated on the mode name according to the table 2.

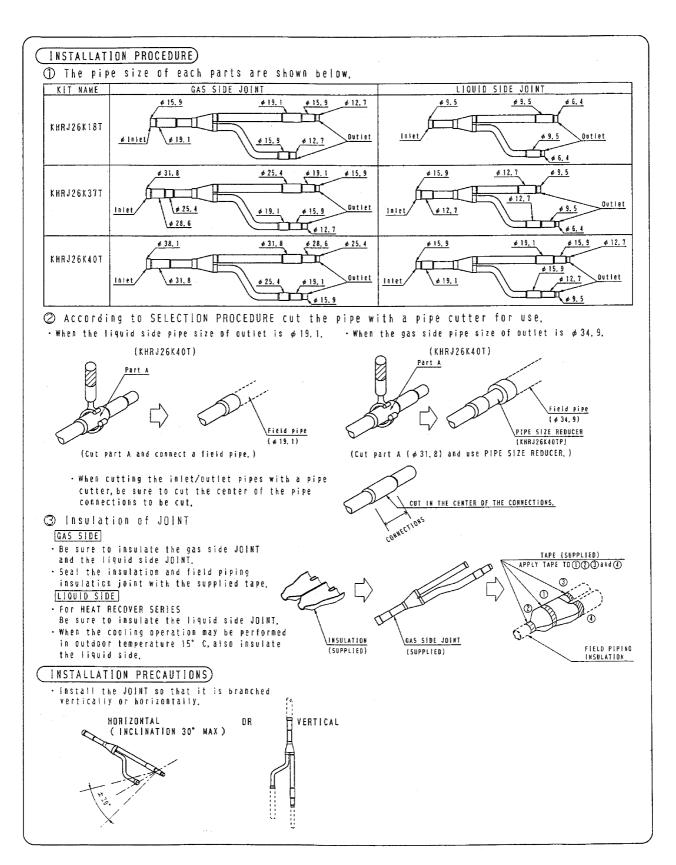
(Table 2)	
INDOOR UNIT HOMINAL CAPACITY	CAPACITY
Type 20	20
Type 25	25
Туре 32	31.25
Туре 40	40
Type 50	50
Туре 63	62.5
Type 80	80
Туре 100	100
Type 125	125
Туре 200	200
Туре 250	250

- Connect between the JOINT and indoor unit according

(Unit:mm)
LIQUID PIPE	GAS PIPE
SIZE	SIZE
Ø6.4	Ø12, 7
φ9.5	Ø15.9
φ9.5	Ø19.1
\$12.7	Ø 25. 4
Ø12.7	Ø 28.6
	\$12E \$12E \$6.4 \$9.5 \$9.5 \$9.5

Ţ	REFRIGERANT PIPING CONNECTION EXAMPLE	JUNCTION SELECTION PROCEDURE	PIPING	SIZE SELECTION PROCE	DURE
	CONNECTION EXAMPLE	A : First JOINT→KHRJ26K37T	-Between outdoor unit and first JOHNT (A)		table 3.
		B : Tetal capacity of indoor unit in the downstream—KHRJ26K37T 25+40+50+50+40+40+25=270<330	-Between JOINT (A) AND (B)	Total capacity of indoor unit→ in the downstream 25+40+50+50+40+40+25=270<330	Gas side piping: ø25.4 Liquid side piping: ø12.7
		C : Total capacity of indoor unit in the downstream-*KHRJ26K37T 40+50+50+40440+25=245<330	-Between JOINT (B) AND (C)	Total capacity of indoor unit→ in the downstream 40+50+50+40+40+25=245<330	Gas side piping: ø25,4 Liquid side piping: ø12,7
	r .	D: Total capacity of indoor unit in the downstream	-Between JOINT (C) AMD (D)	Total capacity of indoor voit→ in the downstream 50+50+40+40+25=205<330	Gas side piping: ø25,4 Liquid side piping: ø12,7
		E: Total capacity of indoor wait in the downstream>KHRJ26K18T 50±40+40+25=155<160	-Between JOINT (D) AND (E)	Total capacity of indoor unit→ in the downstream 50+40+40+25=155<160	Gas side piping: ø19,1 Liquíd side piping: ø9,5
	IMDOOR 40 25 40 50 50 40 40 25	F : Total capacity of indoor welt in the downstream→KHRJ26K18T 40+40+25=105<160	-Between JOINT (E) AND (F)	Total capacity of indoor unit→ in the downstream 40+40+25=105<160	Gas side pîping: ∲19, l Liquid side piping: ∲9,5
		G : Tota1 capacity of iadoor unit in the downstream→KHRJ26kiST 40+25=65<160	-Between JOINT (F) AND (G)	Total capacity of indoor unit→ in the downstream 40+25=65<160	Cas side piping: ∲15,9 Liquid side piping: ∲9,5
			- Between JOINT (A-G) and indoor unit	connection size →	Gas side piping Liquid side piping: As per the table S.

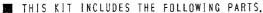
3P234463

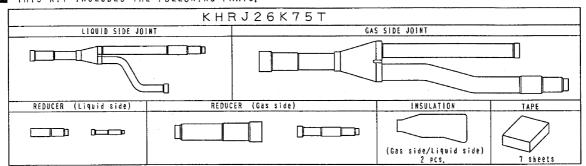


3P234463

4.1.3 KHRJ26K75T

REFNET JOINT INSTALLATION MANUAL (Except for JAPAN) KHRJ26K75T





(SELECTION PROCEDURE)

① According to the following procedure.

- When using REFNET joint on the first branch counted from the function unit side.
 If system capacity is less than 640, use KHRJ26K4OT + KHRJ26K4OTP.
 If system capacity is 640 or greater, use KHRJ26K75T + KHRJ26K75TP.
- Next JOINT total the capacity of indoor unit in the downstream from it is JOINT and select the kit from the table 1.

(Table 1)

INDOOR UNIT TOTAL CAPACITY	KIT NAME
Less than 100	KHRJ26K11T
Not less than 100, less than 160	KHRJ26K18T
Not less than 160, less than 330	KHRJ26K37T
Not less than 330, less than 640	KHRJ26K4OT + KHRJ26K4OTP
Not less than 640	KHRJ26K75T + KHRJ26K75TP

(Find the indoor unit capacity by calculation from the nominal capacity indicated on the model name according to the table 2.) (Table 2)

· ·	
INDOOR UNIT NOMINAL CAPACITY	CAPACITY
Type 20	20
Туре 25	25
Туре 32	31, 25
Type 40	40
Type 50	50
Type 63	62.5
Type 80	80
Type 100	100
Type 125	125
Type 200	200
Туре 250	250

- According to the folloing procedure, determine the piping size at each part.
 -Select the pipe size between
 Total the capacity of indoor unit in the
 Connect between the JOINT and
- Select the pipe size between function unit and the first JOINT downstream and select the size between JOINTS from the table 3. (Unit:mm) (Table 4)

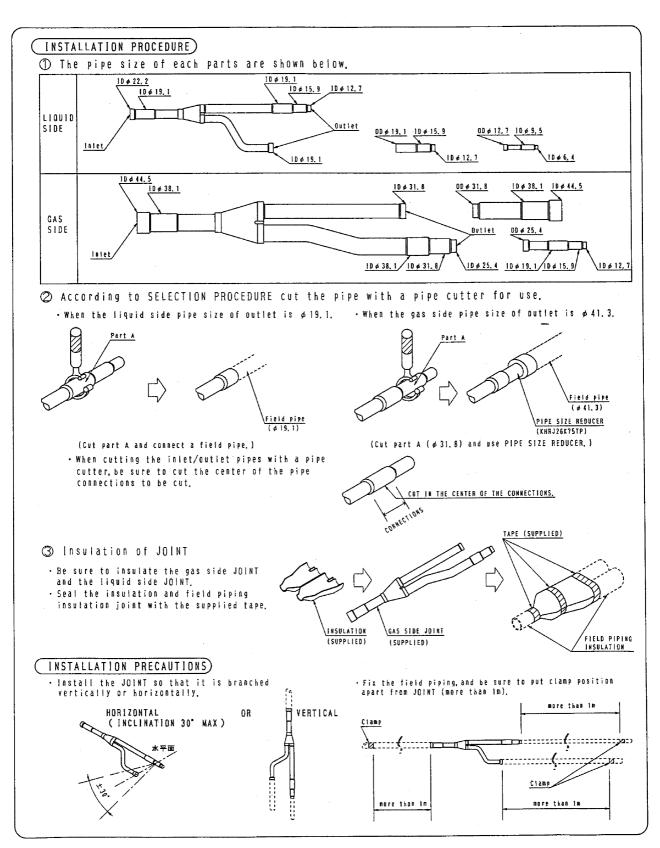
(Table 3)		(Usit:m
OUTDOOR	LIQUID PIPE	
SYSTEM NAME	SIZE	SIZE
RXY16K	\$15.9	$\phi 34, 9$
RXY18~20K	ø19, 1	ϕ 34, 9
RXY24K	Ø19.1	Ø41.3
RXY26~30K	Ø 22, 2	Ø41.3

(Table 4)		(Unit:mm
INDOOR UNIT TOTAL CAPACITY	LIQUID PIPE SIZE	GAS PIPI SIZE
Less than 100	φ9.5	Ø 15. 9
Not less than 100, less than 160	ø 9.5	ø19, 1
Not less than 160, less than 330	Ø12.7	Ø 25. 4
Not less than 330, less than 480	ø15.9	Ø 34.9
Not less than 480, less than 640	φ19.1	ø34.9
Not less than 640	ø19.1	Ø41,3

indoor unit acc		
(Table 5)		(Vait:mm)
	LIQUID PIPE	GAS PIPE
NOMINAL CAPACITY	SIZE	\$17E
Types 20 - 25 - 32 - 40	Ø 6.4	Ø 12. 7
Types 50 · 63 · 80	ø 9.5	ø 15, 9
Types 100 - 125	φ9.5	ø19,1
Types 200	\$12.7	\$25.4
Types 250	ø12,7	Ø 28. 6

REFRIGERANT PIPING CONNECTION EXAMPLE	JUNCTION SELECTION PROCEDURE	PIPING	SIZE SELECTION PROCEDURE
OUTDOOR SYSTEM NAME:RXY30K	A : First JOINT→KHRJ26K75T	 Between function unit and first JOINT (A): 	As per function unit—Gas/liquid side piping:As per connection size the table 3.
system capacity://u	B : Total capacity of indoor unit in the downstream→kHRJ26K4OT	-Between JOINT (A) AND (B):	Total capacity of indoor unit→ Gas side piping: ∮34.9 in the downstream Liquid side piping: ∮19, 50+80+50+80+50+80=520<640
PRY 10K BRY 10K BRY 10K	50+80+50+80+50+80+50+80=520<640 C: Total capacity of indoor unit in the downstream→KHRJ26K40T	-Between JOINT (B) AND (C):	Total capacity of indoor unit→ Gas side piping: #34, 9 in the downstream Liquid side piping: #15, 80+50+80+50+80+50+80+30+30+30+30+30+30+30+30+30+30+30+30+30
BUSK	80+50+80+50+80+50+80=470<640 □: Tetal capacity of indoor unit in the downstream→KHRJ26K40T 50+80+50+80+50+80=390<640	-Between JOINT (C) AND (D):	Total capacity of indoor unit→ Cas side piping: #34.9 in the downstream Liquid side piping: #15, 50480450480450480=390<480
	E: Total capacity of indoor unit in the downstream-XKRJ26K40T 804504804504805	- Between JOINT (D) AND (E):	Total capacity of indoor unit→ Gas side piping: ø34,9 in the downstream Liquid side piping: ø15,80+50+80+30+80=340<480
	F : Total capacity of indoor wait in the downstream→KHRJ26K37T 50+80+50+80=260<330	- Between JOINT (E) AND (F):	Total capacity of indoor unit→ Gas side piping: \$25.4 in the downstream Liquid side piping: \$12.50+80+50+80=260<330
The figure in indicates the indoor unit capacity.	G : Total capacity of indoor unit in the downstream→KHRJ26K37T 80+50+80=210<330	-Between JOINT (F) AND (G):	Total capacity of indoor unit→ Gas side piping: \$25.4 in the downstream Liquid side piping: \$12.80+50+80=210<330
	G : Total capacity of indoor unit in the downstream→KHRJ26K18T 50+80=130<160	- Between JOINT (G) AND (H):	Total capacity of indoor unit \rightarrow Gas side piping: ϕ 19, 1 in the downstream Liquid side piping: ϕ 9, 5 50 \pm 80 \pm 130 \pm 160
		Between JOINT (A~H) and indoor unit:	As per indoor unit→ Gas/liquid side piping:As pe connection size the table 5.

3P234468

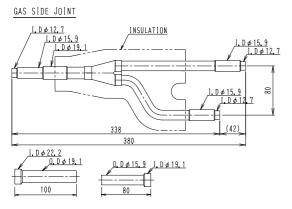


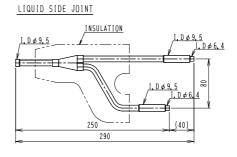
3P234468

REFNET Joint OH10-01

4.2 KHRP26A22·33·72·73T

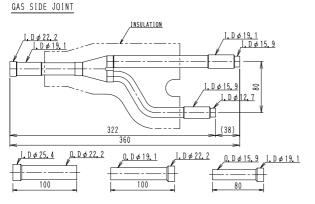
KHRP26A22T

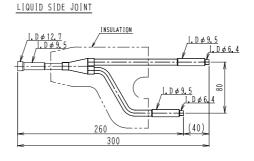




D3K05234A

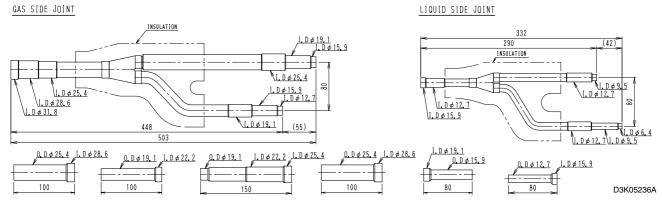
KHRP26A33T



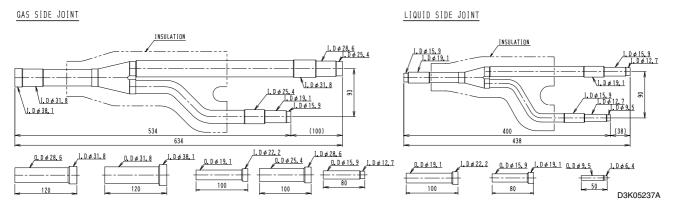


D3K05235B

KHRP26A72T



KHRP26A73T



Installation

REFNET JOINT INSTALLATION MANUAL (Except for JAPAN)
KHRP26A22T • 33T • 72T • 73T (FOR R410A)

THIS KIT INCLUDES THE FOLLOWING PARTS.

VIT NAME	SHAPE									
KIT NAME	GAS SIDE JOINT	LIQUID SIDE JOINT	INSULATION	REI	DUCER(FOR	GAS PII	PE)	REDUCERO	FOR LIQU	ID PIPE)
KHRP26A 22T	*	*	2 pcs.		[] \$\phi 22 , 2					
KHRP26A 33T			2 pcs.	[] \$\phi\$ 19, 1	[] \$\phi\$ 22, 2	φ 2] 25 . 4			
KHRP26A 72T			2 pcs.		φ 25 . 4/ φ 22	, 2	2 PCS.		[φ1	9, 1
KHRP26A 73T			2 pcs.	[] \$\phi\$ 12.7	□ □ □ φ 22, 2 φ 28,		 φ 38 . 1			

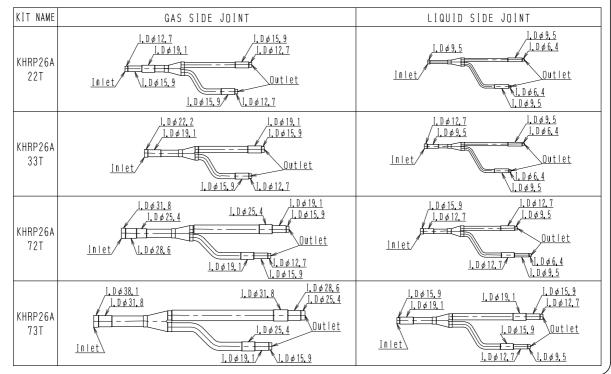
💥…Make sure gas side joint and liquid side joint are for R410A. (Label for R410A is attached on each part.)

SELECTION PROCEDURE

According to the INSTALLATION MANUAL of outdoor unit.

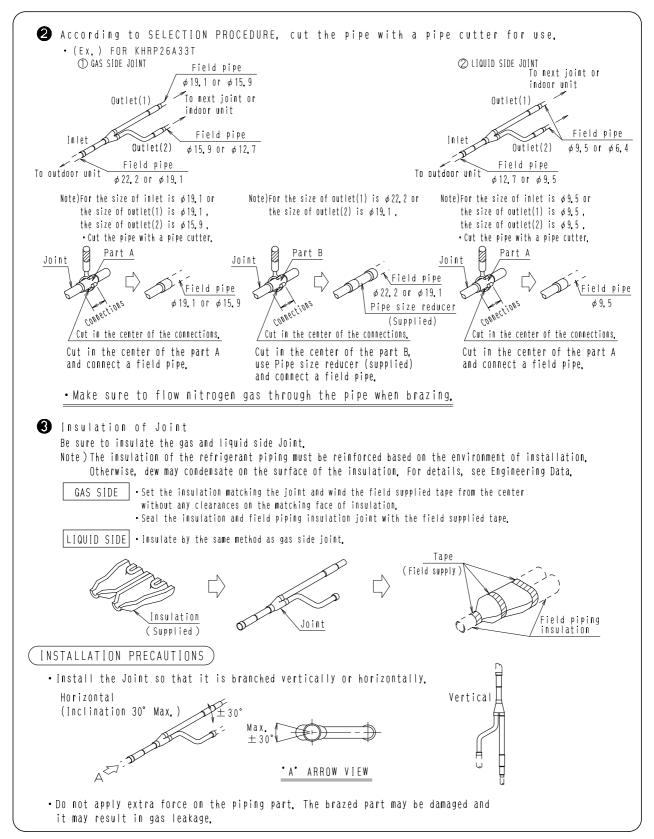
INSTALLATION PROCEDURE

The pipe size of each parts are shown below.



2P182411

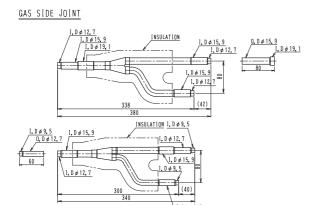
REFNET Joint OH10-01



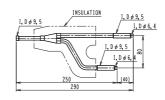
2P182411

4.3 KHRP25A22·33·72·73T

KHRP25A22T

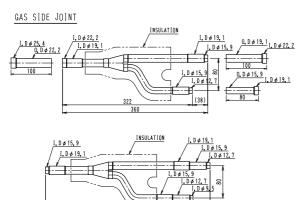


LIQUID SIDE JOINT

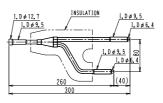


D3K05706

KHRP25A33T

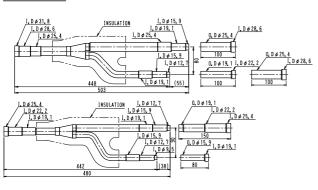


LIQUID SIDE JOINT



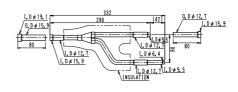
D3K05707

GAS SIDE JOINT



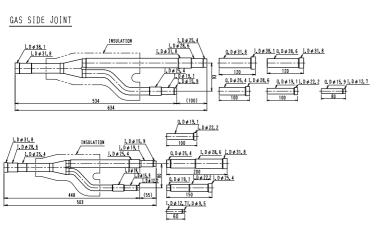
KHRP25A72T

LIQUID SIDE JOINT

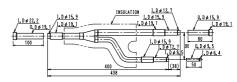


D3K05708

KHRP25A73T



LIQUID SIDE JOINT



D3K05709

REFNET Joint OH10-01

Installation

■ THIS KIT INCLUDES THE FOLLOWING PARTS.

		SHAPE		
KIT NAME	SUCTION GAS SIDE JOINT	HP/LP GAS SIDE JOINT	LIQUID SIDE JOINT	INSULATION
KHRP25A	*	*	*	
	REDUCER \$\phi 19.1	φ 9. 5		3 pcs.
KHRP25A 33T				
	REDUCER \$\phi 22. 2 \phi 25. 4 \phi 19. 1			3 pcs.
KHRP25A				-
	REDUCER	\$25, 4/22, 2 \$\phi\$ 19. 1	φ15, 9 φ19, 1	3 pcs.
KHRP25A				4
	REDUCER #12. 7 #22. 2 #28. 6 #31. 8 #38. 1	φ31, 8/28, 6 φ25, 4/22, 2 φ22, 2 φ9, 5	φ6. 4 φ19. 1 φ22. 2	3 pcs.

₩…Make sure suction gas side joint, HP/LP gas side and liquid side joint are for R410A. (Label for R410A is attached on each part.)

(INTRODUCTION)

This kit is designed as a refrigerant branching kit for HEAT RECOVERY unit for installation in buildings.

- ◆Between outdoor unit and BS unit (upstream of BS unit), use 3 pipings. Use this kit for such branching application.
- ◆Between BS unit and indoor unit (downstream of BS unit) and between REFNET JOINT and cooling-only indoor unit, use 2 pipings.

3 pipings	2 pipings			
Upstream of BS unit	Downstream of BS unit	To cooling-only indoor unit		
Suction gas side piping HP/LP gas side piping Liquid side piping	Gas side piping Liquid side piping	Suction gas side piping Liquid side piping		

(SELECTION PROCEDURE)

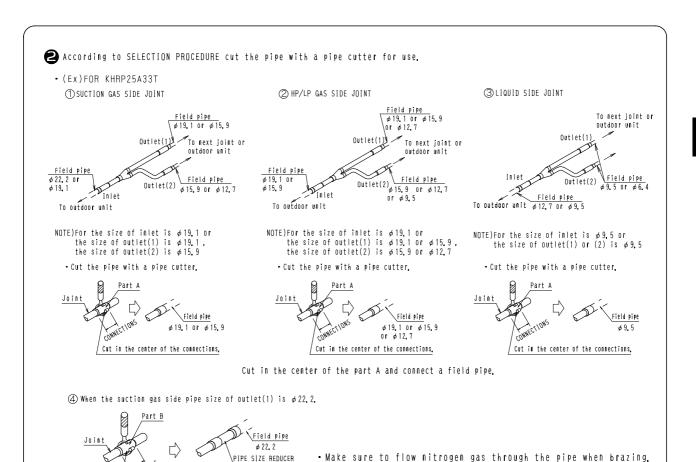
According to the INSTALLATION MANUAL of outdoor unit.

(INSTALLATION PROCEDURE)

The pipe size of each parts are shown below.

_			
KIT NAME	SUCTION GAS SIDE JOINT	HP/LP GAS SIDE JOINT	LIQUID SIDE JOINT
KHRP25A 22T	Dø12.7 Dø15.9 Dø15.9 Dø15.9 Dø15.9 Dø15.9 Dø15.9 Dø12.7	1. D \$12.7 1. D \$9.5	1. D # 9. 5 1. D # 9. 5 1. D # 9. 5 1. D # 9. 5 1. D # 9. 5
KHRP25A 33T	D # 15. 9 D # 19. 1 D # 19. 1 D # 19. 1 D # 15. 3 D # 15. 3/ D # 15. 3/ D # 15. 3/ D # 15. 3/		1.0 \(\frac{12.7}{1.0 \(\frac{9.5}{5} \) \(\frac{1.0 \(\frac{9.5}{5} \)}{1.0 \(\frac{9.5}{5} \) \(\frac{1.0 \(\frac{9.5}{5} \)}{1.0 \(\frac{9.5}{5} \)} \)
KHRP25A 72T	Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet Outlet	1. D \u03b4 25. 4	D \(\phi \) D \(\phi \) D \(\phi \) D \(\phi \) D \(\phi \)
KHRP25A 73T	1.0 ± 25.4 1.0 ± 31.8 1.0 ± 31.8 1.0 ± 31.8 1.0 ± 31.8 1.0 ± 31.8 1.0 ± 15.4 1.0 ± 15.4	1.0 \(\phi 31.8 \) 1.0 \(\phi 31.8 \) 1.0 \(\phi 32.5 \) 1.0 \(\phi 32.5 \) 1.0 \(\phi 32.5 \) 1.0 \(\phi 13.1 \) 1.0 \(1.0 \(\delta\) 1.0 \(\de

3P203737

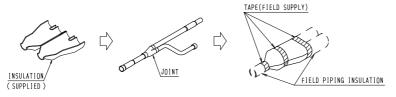


Cut in the center of the connections, Cut the center of the part B and use PIPE SIZE REDUCER,

- Insulation of JOINT
 - Be sure to insulate the suction/discharge gas and liquid side JOINT.

 Note) The insulation of the refrigerant piping must be reinforced based on the environment of installation.

 Otherwise, dew may condensate on the surface of the insulation. For details, see Engineering Data.
 - Seal the insulation and field piping insulation joint with the field supplied tape.



PIPE SIZE REDUCER

(INSTALLATION PRECAUTIONS)

• Install the JOINT so that it is branched vertically or horizontally.



• Do not apply extra force on the piping part. The brazed part may be damaged and it may result in gas leakage,

3P203737