

INSTALLATION MANUAL

DB68-13128A-00

- Please read 'Safety Precautions' described in the installation manual of the product.
- Check the following parts in the package.
 - For further information of the piping material and size of the refrigerant pipes, refer to the installation manual of the VRF (Variable Refrigerant Flow).

California Proposition 65 Warning (US)

WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov.

Branch joints

Y-joint

Liquid side

V1IDBP01PR	V1IDBP02PR	V1IDBP03PR	V1IDBP04PR	V1IDBP05PR	V1IDBP06PR	V1IDBP07PR

Gas side

V1IDBP01PR	V1IDBP02PR	V1IDBP03PR	V1IDBP04PR	V1IDBP05PR	V1IDBP06PR	V1IDBP07PR

Reducer

Model name	Total indoor unit's capacities
V1IDBP01PR	15.0 kW (51 MBH) and below
V1IDBP02PR	Over 15.0~40.0 kW (51~136 MBH) and below
V1IDBP03PR	Over 40.0~45.0 kW (136~154 MBH) and below
V1IDBP04PR	Over 45.0~70.3 kW (154~240 MBH) and below
V1IDBP05PR	Over 70.3~98.4 kW (240~336 MBH) and below
V1IDBP06PR	Over 98.4~135.2 kW (336~461 MBH) and below
V1IDBP07PR	Over 135.2 kW (461 MBH)

Y-joint for HR (High pressure gas)

V1IDBP08HR	V1IDBP09HR	V1IDBP10HR	V1IDBP07HR

Reducer

Model name	Total indoor unit's capacities
V1IDBP08HR	22.4 kW (76 MBH) and below
V1IDBP09HR	Over 22.4~70.3 kW (76~240 MBH) and below
V1IDBP10HR	Over 70.3~135.2 kW (240~461 MBH) and below
V1IDBP07HR	Over 135.2 kW (461 MBH)

Header joint

Liquid side

V1HDRK11PR	V1HDRK12PR	V1HDRK13PR

Gas side

V1HDRK11PR	V1HDRK12PR	V1HDRK13PR

Reducer

Model name	Total indoor unit's capacities	The maximum quantity of connection
V1HDRK11PR	45.0 kW (154 MBH) and below	4
V1HDRK12PR	70.3 kW (240 MBH) and below	8
V1HDRK13PR	Over 70.3 kW (240 MBH)	8

Outdoor joint

Liquid side

V1ODBP14HP	V1ODBP16HR	V1ODBP15HP	V1ODBP17HR

Gas side

V1ODBP14HP	V1ODBP16HR	V1ODBP15HP	V1ODBP17HR

Reducer

Model name	Total outdoor unit's capacities
V1ODBP14HP	Below 135.2 kW (48HP, 461.3 MBH)
V1ODBP16HR	
V1ODBP15HP	Above 140.2 kW (50HP, 478.4 MBH)
V1ODBP17HR	

Outdoor joint for HR (High pressure gas)

V1ODBP14HR	V1ODBP15HP

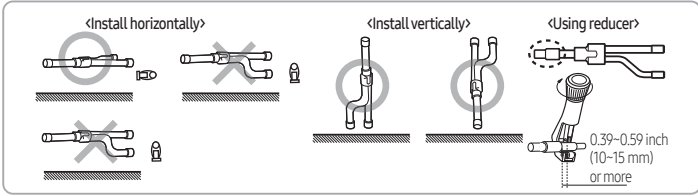
Reducer

Model name	Total outdoor unit's capacities
V1ODBP14HR	Below 135.2 kW(48HP, 461.3MBH)
V1ODBP15HP	Above 140.2 kW(50HP, 478.4 MBH)

Connecting Method

Installing the Y-joint

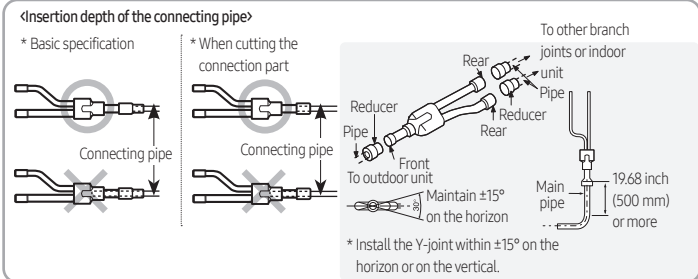
Install the Y-joint 'horizontally' or 'vertically'.



- Use connection part of Y-joint or provided reducer by cutting them in accordance with diameter of connecting pipe.
- Make certain 0.39~0.59 inch (10~15 mm) or more for reducer which connected with pipe.
- Remove burr on cut part of reducer. It is impossible to connect reducer with pipe, if pipe is deformed or reducer is untrimmed.

CAUTION

- Keep a minimum distance of 19.68 inch (500 mm) or more before connecting a branch joint.

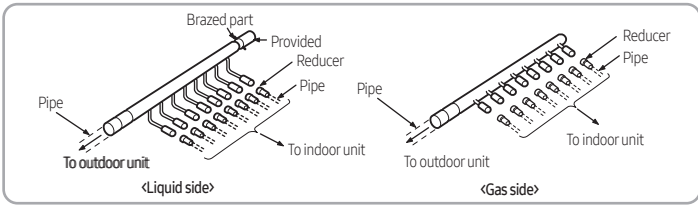


CAUTION

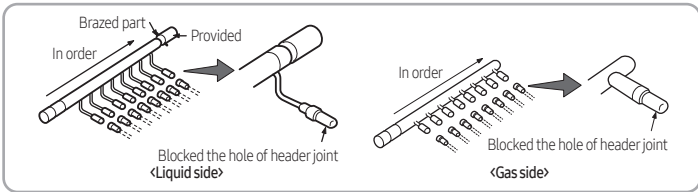
- Do not insert the pipe deeply into the Y-joint. (Do not insert more than 2.75 inch (70 mm).)

Installing the Header joint

1. Select the reducer fitted on the diameter of the pipe.

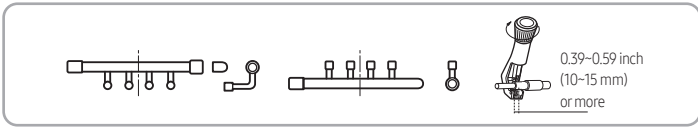


2. Block the reducer that is not used by brazing the cap if the number of connected indoor unit is fewer than header joint holes.



NOTE

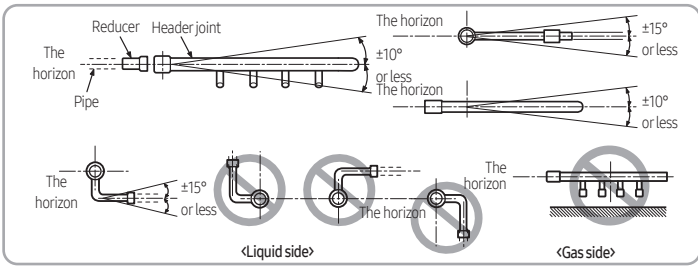
- Connect the header joint to the pipe by cutting the provided reducer properly.



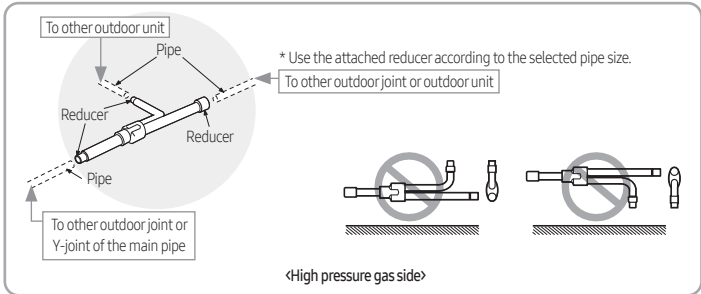
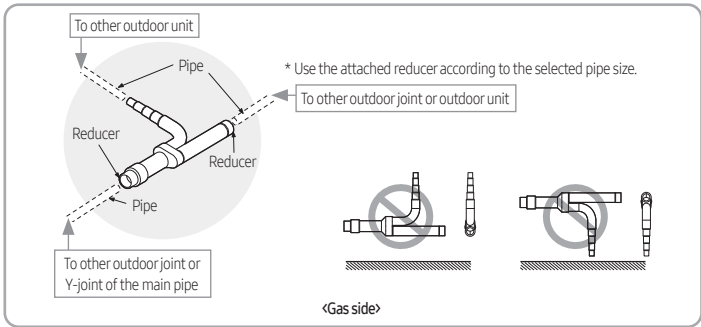
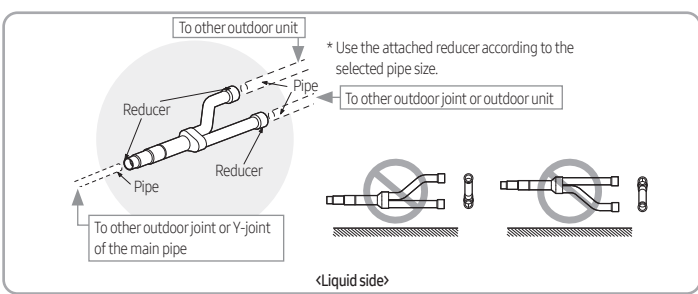
CAUTION

- Connect the header joint in order respecting the number of the indoor unit.
- Connect the indoor unit as the highest capacity comes first.

3. Install the header joint horizontally.

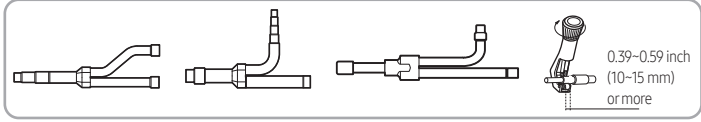


Installing the Outdoor joint

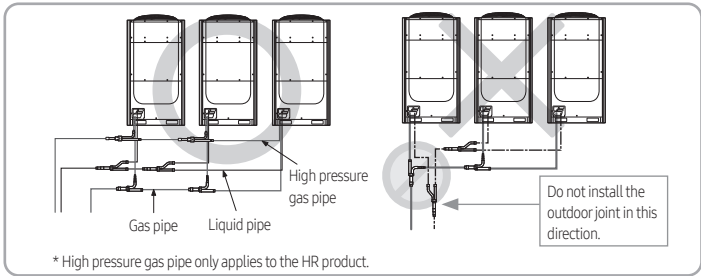


NOTE

- Connect the Outdoor joint to the pipe by cutting the outlet of the Outdoor joint or provided reducer properly.



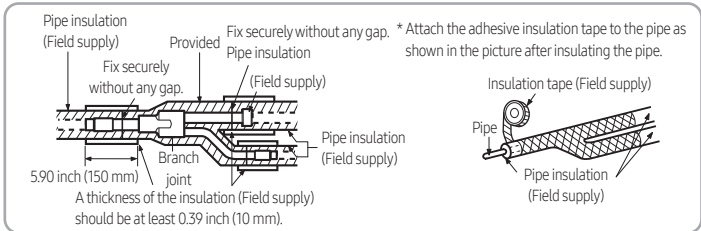
Installation of outdoor joints



Insulating the branch joint

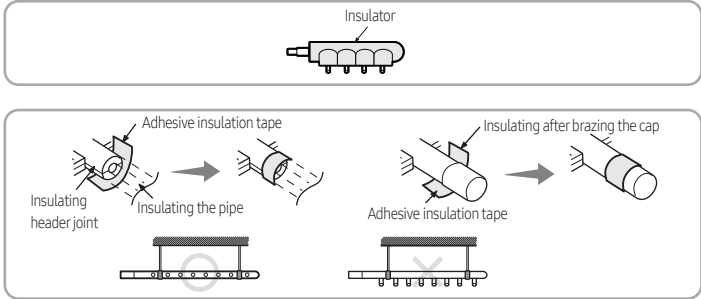
Y-joint & liquid side & gas side of the outdoor unit

- Attach the insulation provided with a branch joint to the insulation supplied in the field without a gap. Wrap the connected part with an insulation (Field supply) of a thickness of at least 0.39 inch (10 mm).
- Use an insulation with the heat resisting temperature over 248 °F (120°C). Wrap the branch joint with an insulation of a thickness of at least 0.39 inch (10 mm).
- When insulating in high humidity(higher than 86 °F (30°C), 80%), wrap the supplied insulation with more than 0.39 inch (10 mm) of extra insulation such as Polyethylene Foam or other similar material.
- Wrap the connected part between the Outdoor joint and the gas side of the outdoor unit to prevent it from defrosting. Wrap gas side pipe of the outdoor unit wholly to prevent it from dewing.



Header joint

- Cover the connected part and fasten the header joint using a cable tie.
- Insulate the header joint and the brazed part and wrap the connected part with an adhesive insulation tape to prevent it from dewing.



MANUEL D'INSTALLATION

- Veillez lire les "mesures de sécurité" énoncées dans le manuel d'installation du produit.
- Vérifiez que les pièces suivantes sont présentes dans l'emballage.
 - Pour en savoir plus sur le matériel de tuyauterie et la taille des tuyaux de fluide frigorigène, reportez-vous au manuel d'installation du système DRV (débit de réfrigérant variable).

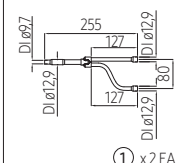
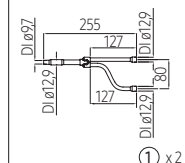
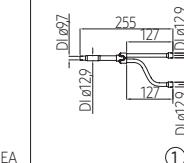
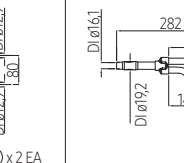
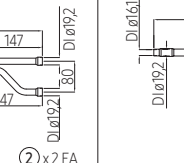
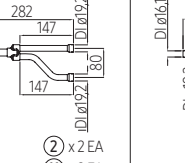
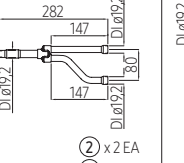
Avertissement Proposition 65 de Californie (E.-U.)

AVERTISSEMENT : Cancer et Troubles de l'appareil reproducteur - www.P65Warnings.ca.gov.

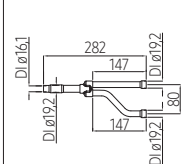
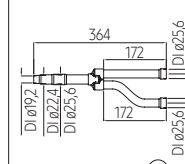
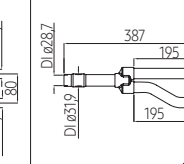
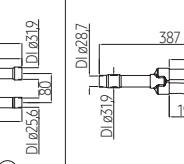
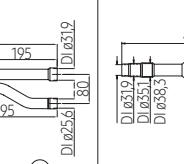
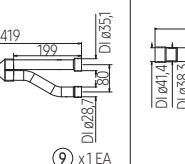
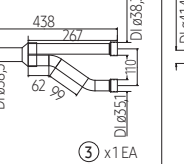
Raccords de dérivation

Raccord Y

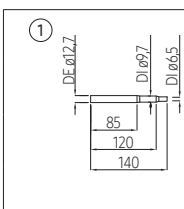
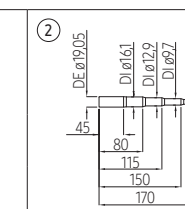
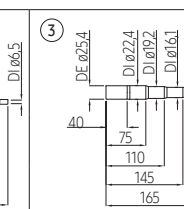
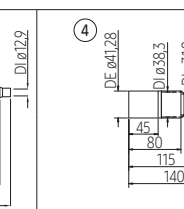
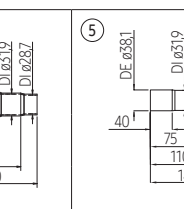
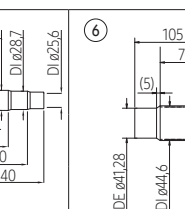
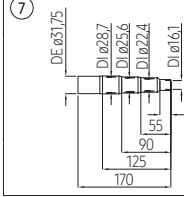
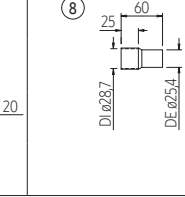
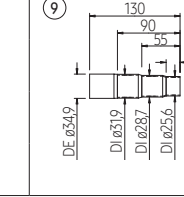
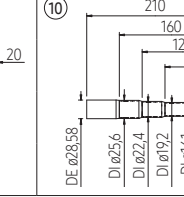
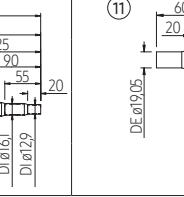
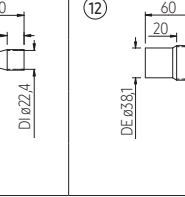
Côté liquide

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① x2 EA	① x2 EA	① x2 EA	② x2 EA	② x2 EA ⑩ x2 EA	② x2 EA ⑩ x2 EA	① x1 EA ③ x2 EA

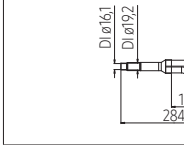
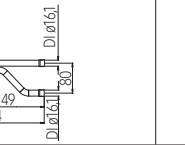
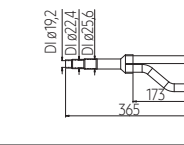
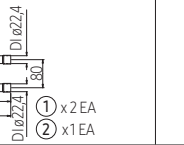
Côté gaz

V1IDBP01PR	V1IDBP02PR	V1IDBP03PR	V1IDBP04PR	V1IDBP05PR	V1IDBP06PR	V1IDBP07PR
						
② x2 EA	③ x2 EA ⑥ x2 EA	⑤ x1 EA ⑦ x1 EA	② x1 EA	⑨ x1 EA ⑫ x1 EA ⑬ x1 EA	③ x1 EA ⑤ x1 EA ⑨ x1 EA ⑫ x1 EA	③ x1 EA ④ x1 EA ⑤ x1 EA ⑥ x1 EA

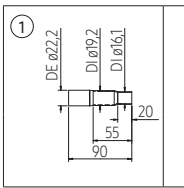
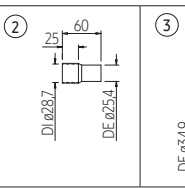
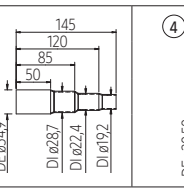
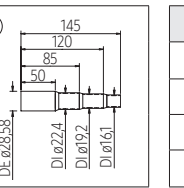
Réduction

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Raccord Y pour gaz haute pression

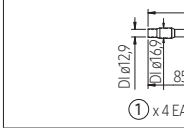
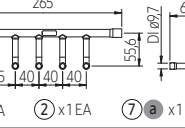
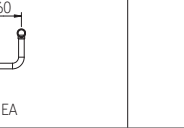
V1IDBP08HR	V1IDBP09HR	V1IDBP10HR	V1IDBP07HR
			
	① x2 EA ② x1 EA	③ x1 EA ④ x1 EA	③ x2 EA

Réduction

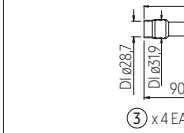
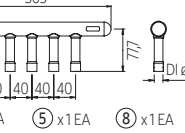
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Raccord de collecteur

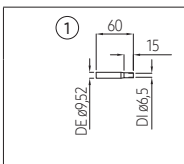
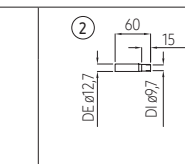
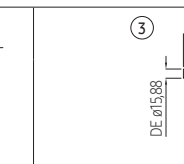
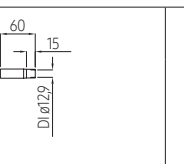
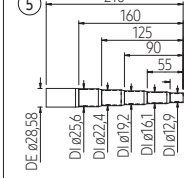
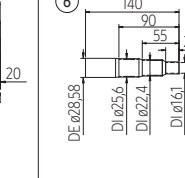
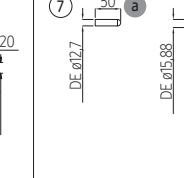
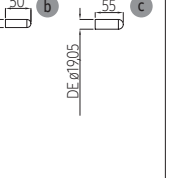
Côté liquide

V1HDRK11PR	V1HDRK12PR	V1HDRK13PR
		
① x4 EA ② x1 EA ⑦ x1 EA	① x8 EA ④ x1 EA ⑦ x1 EA	① x8 EA ⑦ x1 EA

Côté gaz

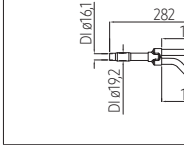
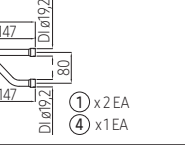
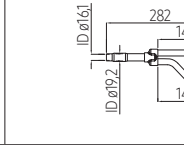
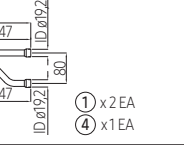
V1HDRK11PR	V1HDRK12PR	V1HDRK13PR
		
⑤ x4 EA ⑤ x1 EA ⑧ x1 EA	③ x8 EA ⑥ x1 EA ⑧ x2 EA	③ x8 EA ⑧ x2 EA

Réduction

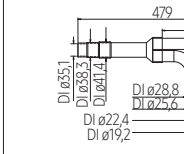
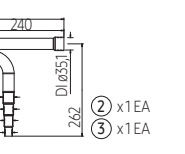
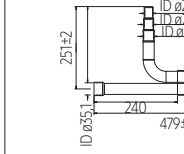
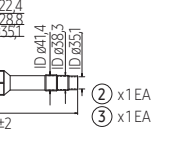
				Nom du modèle V1HDRK11PR V1HDRK12PR V1HDRK13PR	Capacités totales de l'unité intérieure Égale ou inférieure à 45,0 kW (154 MBH) Égale ou inférieure à 70,3 kW (240 MBH) Plus de 70,3 kW (240 MBH)	Nombre maximal de raccords 4 8 8
						

Raccord extérieur

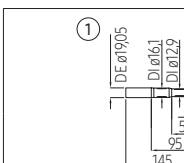
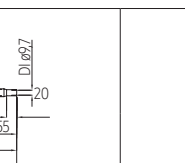
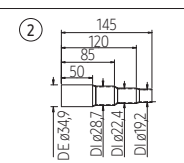
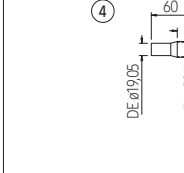
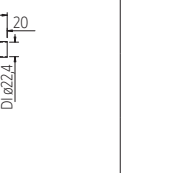
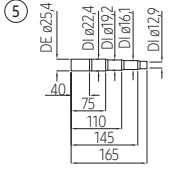
Côté liquide

V1ODBP14HP	V1ODBP16HR	V1ODBP15HP	V1ODBP17HR
			
① x2 EA ④ x1 EA	① x2 EA ④ x1 EA	⑤ x2 EA	⑤ x2 EA

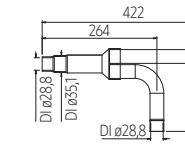
Côté gaz

V1ODBP14HP	V1ODBP16HR	V1ODBP15HP	V1ODBP17HR
			
② x1 EA ③ x1 EA	② x1 EA ③ x1 EA	④ x1 EA	④ x1 EA

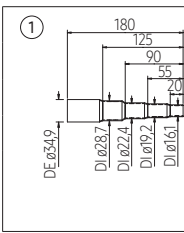
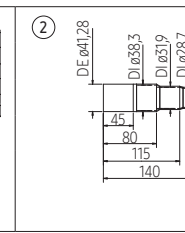
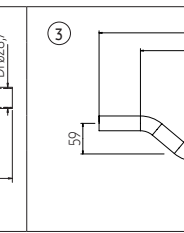
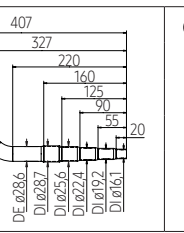
Réduction

			Nom du modèle V1ODBP14HP V1ODBP16HR V1ODBP15HP V1ODBP17HR	Capacités totales de l'unité extérieure En dessous de 135,2 kW (48 CV, 461,3 MBH) Au-dessus de 140,2 kW (50 CV, 478,4 MBH)
				

Raccord extérieur pour gaz haute pression

V1ODBP14HR	V1ODBP15HP
	
① x1 EA ③ x1 EA	② x1 EA ③ x1 EA ④ x2 EA

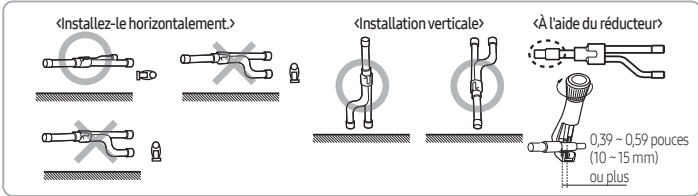
Réduction

				Nom du modèle V1ODBP14HR V1ODBP15HP	Capacités totales de l'unité extérieure En dessous de 135,2 kW (48 HP, 461,3 MBH) Au-dessus de 140,2 kW (50 CV, 478,4 MBH)
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Méthode de raccordement

Installation avec raccord Y

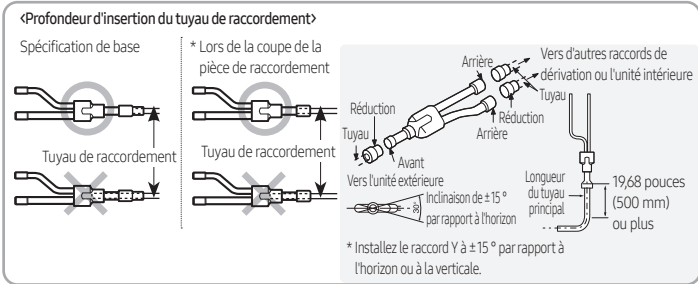
Installez le raccord Y "horizontalement" ou "verticalement".



- Utilisez la pièce de raccordement du raccord Y ou le réducteur fourni en le coupant selon le diamètre du tuyau de raccordement.
- Veillez à disposer d'au moins 0,39 à 0,59 po (10 à 15 mm) pour le réducteur raccordé au tuyau.
- Retirez les bavures sur la partie coupée du réducteur. Il est impossible de raccorder le réducteur au tuyau si ce dernier est déformé ou si le réducteur n'est pas correctement ébavuré.

MISE EN GARDE

- Maintenez une distance minimale de 19,68 po (500 mm) avant le raccordement au raccord de dérivation.

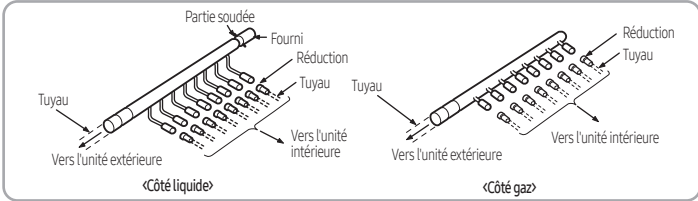


MISE EN GARDE

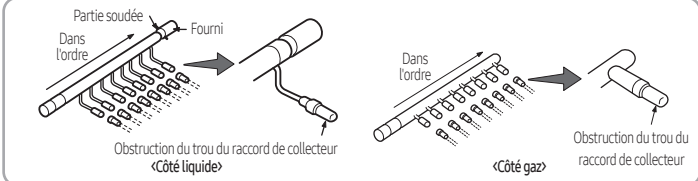
- N'insérez pas le tuyau profondément dans le raccord Y. (L'insertion ne doit pas dépasser 2,75 po [70 mm].)

Installation du raccord de collecteur

- Sélectionnez le réducteur adapté au diamètre du tuyau.

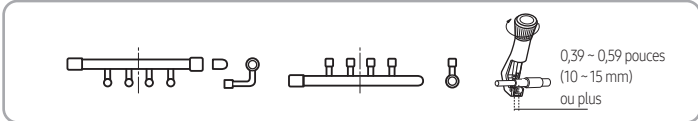


- Obstruez le réducteur non utilisé en brasant le bouchon si le nombre d'unités intérieures raccordées est inférieur au nombre de trous du raccord de collecteur.



REMARQUE

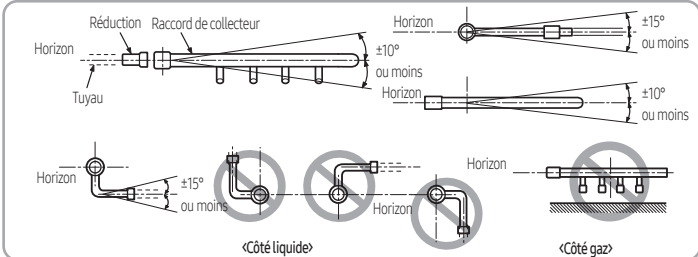
- Raccordez le raccord de collecteur au tuyau en coupant convenablement le réducteur fourni.



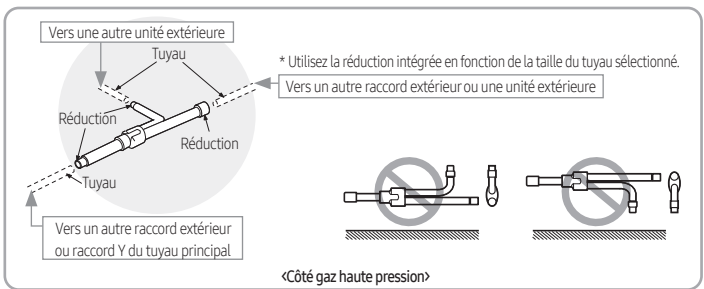
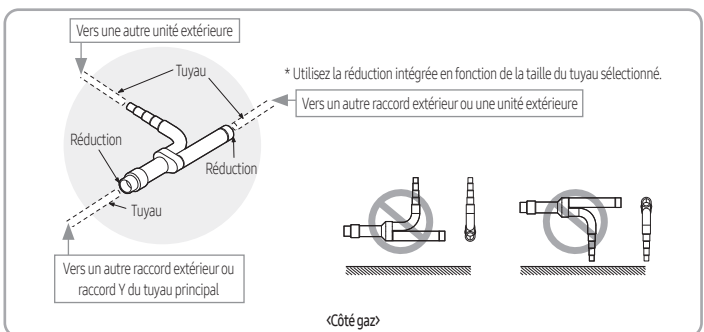
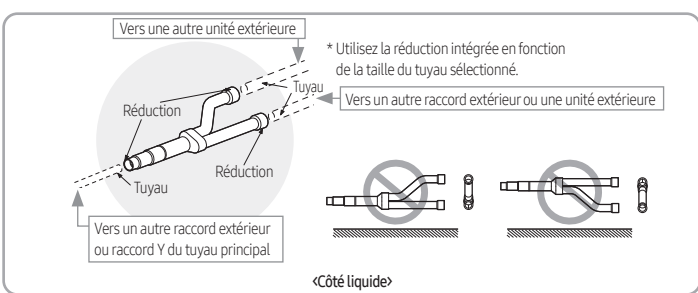
MISE EN GARDE

- Raccordez le raccord de collecteur dans l'ordre en respectant le numéro de l'unité intérieure.
- Raccordez l'unité intérieure en commençant par la plus grande capacité.

- Installez le raccord de collecteur horizontalement.

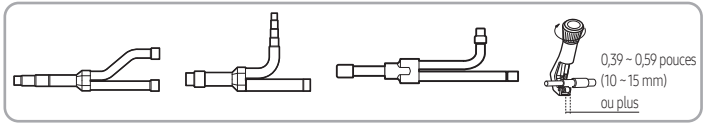


Installation du raccord extérieur

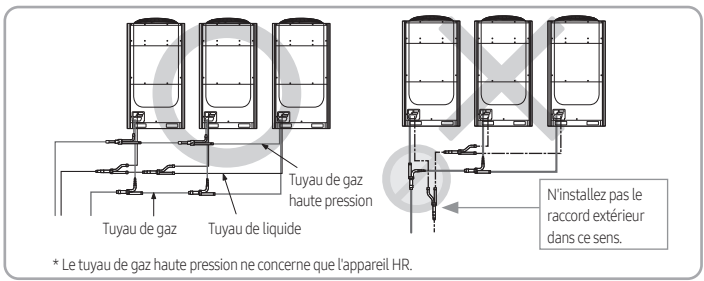


REMARQUE

- Raccordez le raccord extérieur au tuyau en coupant la prise du raccord extérieur ou en utilisant la réduction fournie.



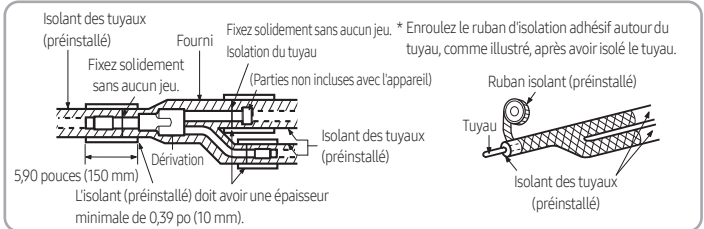
Installation des raccords extérieurs



Isolation du raccord de dérivation

Raccord Y et tuyaux côté liquide et côté gaz de l'unité extérieure

- Fixez l'isolant fourni avec le raccord de dérivation à l'isolant préinstallé, sans laisser d'espace. Enveloppez la partie raccordée avec un isolant (préinstallé) d'une épaisseur d'au moins 0,39 po (10 mm).
- Utilisez un isolant dont la température de résistance à la chaleur est supérieure à 248 °F (120 °C). Enveloppez le raccord de dérivation avec un isolant d'une épaisseur d'au moins 0,39 po (10 mm).
- En cas d'isolation dans des conditions d'humidité élevée (supérieure à 86 °F [30 °C], 80 %), enveloppez l'isolant fourni avec une couche d'isolant supplémentaire minimale de 0,39 po (10 mm), comme de la mousse de polyéthylène ou un autre matériau semblable.
- Enveloppez la partie raccordée entre le raccord extérieur et le tuyau côté gaz de l'unité extérieure pour éviter qu'elle ne dégivre. Enveloppez entièrement le tuyau côté gaz de l'unité extérieure pour empêcher la formation de condensation.



Raccord de collecteur

- Couvrez la partie raccordée et fixez le raccord de collecteur à l'aide d'un serre-câbles.
- Isolez le raccord de collecteur et la partie brasée, puis enveloppez la partie raccordée avec de l'adhésif isolant pour empêcher la formation de condensation.

