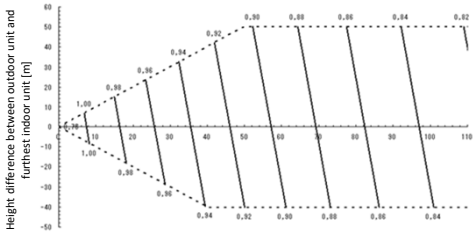
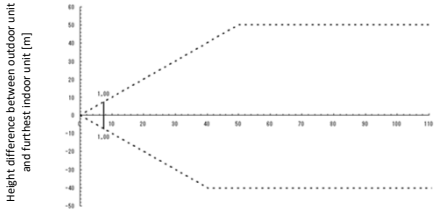
RXMLQ8T

Correction ratio for cooling capacity



Correction ratio for heating capacity



Notes

1. These figures illustrate the capacity correction factor due to the piping length for a standard indoor unit system at maximum load (with the thermostat set to maximum), under standard conditions.
   Moreover, under partial load conditions, there is only a minor deviation for the capacity correction ratio, as shown in the above figures.

2. With this outdoor unit, the following control is used:
   - in case of cooling: constant evaporating pressure control
   - in case of heating: constant condensing pressure control

3. Method of calculating the capacity of the outdoor units.
   The maximum capacity of the system will be either the total capacity of the indoor units or the maximum capacity of the outdoor units as mentioned below, whichever is less.

Condition Indoor connection ratio ≤ 100%.

Maximum capacity of outdoor units	=	Capacity of outdoor units from capacity table at 100% connection ratio.
	x	Correction ratio of piping to furthest indoor unit

Condition Indoor connection ratio > 100%.

Maximum capacity of outdoor units	=	Capacity of outdoor units from capacity table at installed connection ratio.
	x	Correction ratio of piping to furthest indoor unit

4. When the level difference is 50 m or more and the equivalent piping length is 90 m or more, the diameter of the main gas and liquid pipes (outdoor unit - branch sections) must be increased.
   Refer to installation manual ·3D079540 / 3D79543·
   For the new diameters, see below.

Model	Gas pipe	Liquid pipe
8HP	22,2	12,7

5. When the pipe length after the first refrigerant branch kit is more than 40 m, the pipe size between the first and the final branch kit must be increased (only for VRV DX indoor units).
   For details, see the installer reference guide.

** See the installation manual for allowed system setups and the rules for dedicated indoor connection types.*

Diameter of the main pipes (standard size)

Model	Gas pipe	Liquid pipe
8HP	19,1	9,5

6. The equivalent lengths from the graphs above were obtained with the following calculation:

Equivalent piping length [m]	=		
Equivalent length of the main pipe		x	Correction factor
+			
Equivalent length of the branch pipes			

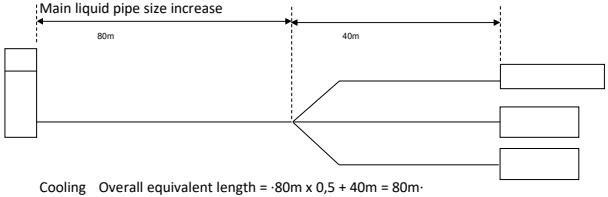
Choose the correction factor from the following table.

When calculating the cooling capacity: gas pipe size
When calculating the heating capacity: liquid pipe size

	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1,0	0,5
Heating (liquid pipe)	1,0	0,5

Example

Main gas pipe size increase
Main liquid pipe size increase
Equivalent length of the branch pipes



Cooling Overall equivalent length = ·80m x 0,5 + 40m = 80m·
Heating Overall equivalent length = ·80m x 0,5 + 40m = 80m·

The change rate of the cooling capacity when the height difference = 0 is about ·0,86·
The change rate of the heating capacity when the height difference = 0 is about ·1,0·