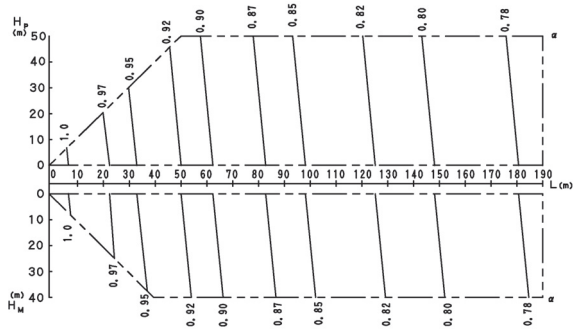
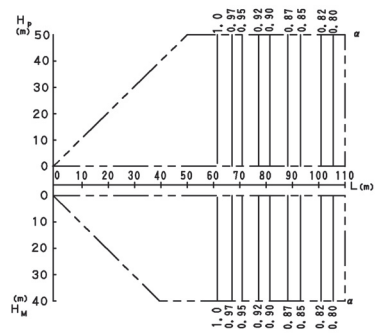
RXYQ10PY1K

- Rate of change in cooling capacity



- Rate of change in heating capacity



3D061980

NOTES

1 These figures illustrate the rate of change in capacity of 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 from the rate of change in capacity shown in the above figures.

2 With this outdoor unit, evaporating pressure constant control when cooling, and condensing pressure constant control when heating is carried out.

3 Method of calculating A/C (cooling / heating) capacity:
The maximum A/C of the system will be either the total A/C capacity of the indoor units obtained from capacity characteristic table or the maximum A/C capacity of outdoor units as mentioned below, whichever smaller.
Calculating A/C capacity of outdoor units

- Condition: Indoor unit combination ratio does not exceed 100%
  Maximum A./C capacity of outdoor units = A/C capacity of outdoor units obtained from performance characteristics table at the 100% combination x capacity change rate due to piping length to the farthest indoor unit
  Condition: Indoor unit combination ratio exceeds 100%
  Maximum A./C capacity of outdoor units = A/C capacity of outdoor units obtained from capacity characteristics table at the combination x capacity change rate due to piping length to the farthest indoor unit

4 When overall equivalent pipe length is 90m or more, the diameter of the main gas and liquid pipes (outdoor unit-branch sections) must be increased.
When level difference is 50m or more, the diameter of the main gas and liquid pipes (outdoor unit-brach sections) must be increased.
[Diameter of above case]

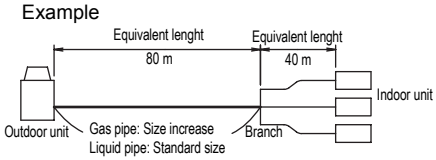
Model	gas	liquid
RXYQ10PY1K	ø 25.4*	ø12.7

*If on the site, use this size. Otherwise, not increased.

5 Read cooling / heating capacity rate of change in the above figures based on the following equivalent length.
Overall equivalent length = (Equivalent length to main pipe) x Correction factor + (Equivalent length after branching)
Choose a correction factor from the following table.
When cooling capacity is calculated: gas pipe size
When heating capacity is calculated: liquid pipe size.

Rate of change (object piping)	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5
Heating (liquid pipe)	1.0	0.2

6 Example



In the above case
(Cooling) Overall equivalent length = 80m x 0.5 + 40m = 80m
(Heating) Overall equivalent length = 80m x 0.2 + 40m = 56m
The rate of change in cooling capacity when Hp=0m is thus approximately 0.87
heating capacity when Hp=0m is thus approximately 1.00

EXPLANATION OF SYMBOLS

H_p : Level difference (m) between indoor and outdoor units where indoor unit in inferior position
H_M : Level difference (m) between indoor and outdoor units where indoor unit in superior position
L : Equivalent pipe length (m)
α : Rate of change in cooling / heating capacity

[Diameter of the main pipes (standard size)]

Model	gas	liquid
RXYQ10PY1K	ø 22.2	ø9.5

[Temper grade and thickness]

Temper grade	0 Type		1/2Type	
Outer diameter	ø 9.5	ø 12.7	ø22.2	ø25.4
Minimum Wall Thickness	0.80	0.80	0.80	0.80