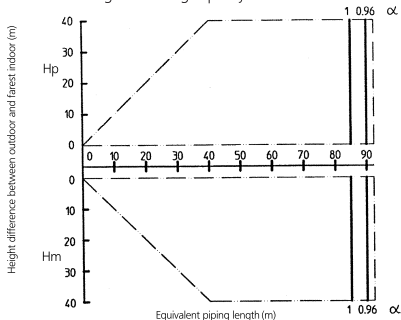
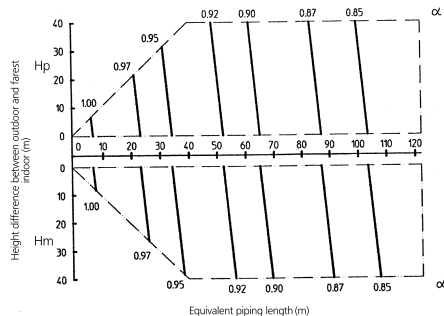


# EMRQ16A Capacity correction

## 1. Rate of change in heating capacity



## 2. Rate of change in cooling capacity



### [Notes capacity correction]

- These figures illustrate the rate of change in capacity  $\alpha$  of a standard indoor unit system at nominal load under standard conditions. Moreover, under partial load conditions there is only a minor deviation from the rate of change in capacity shown in the figures above.
- With this indoor unit, constant evaporating pressure control during cooling and constant condensing pressure control during heating is carried out
- Method of calculating capacity Connection ratio = 100%  
 $[\text{Capacity}] = [\text{Capacity under 100\% connection ratio (Capacity table)}] \times [\text{Correction factor for capacity } \alpha \text{ due to piping length to farrest indoor unit}]$

### [Explanation of symbols]

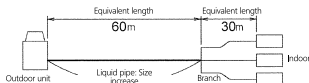
- Hp: level difference (m), between indoor and outdoor unit (outdoor unit is on highest location)  
 Hm: level difference (m), between indoor and outdoor (outdoor unit is on lowest location)

### [Notes equivalent piping length connection]

- When overall equivalent piping length is 90m or more, the diameter of the main liquid pipes must be increased
- $[\text{Overall equivalent piping length}] = [\text{Equivalent piping length to main pipe}] \times [\text{Correction factor } (\beta)] + [\text{Equivalent length after branching}]$

Model	Liquid standard	Liquid increase	Correction factor ( $\beta$ ) (heating)	Correction factor ( $\beta$ ) (cooling)
EMRQ16*	12,7 $\phi$	15,9 $\phi$	0,3	1

### [EXAMPLE]



- A, Overall equivalent piping length =  $60\text{m} \times 0,3 + 30 = 48\text{m}$  (heating:  $\beta=0,3$ )  
 B, Overall equivalent piping length =  $60\text{m} \times 1 + 30 = 90\text{m}$  (cooling:  $\beta=1$ )  
 C, The correction factor for capacity when  $H = 0\text{m}$ :  $\alpha=1$  (heating)  
 D, The correction factor for capacity when  $H = 0\text{m}$ :  $\alpha=0,87$  (cooling)