RYYQ-U
RYMQ-U

VRV4
Heat pump
Piping restrictions ·1/3·

For the reference drawing, see page ·2/3·.		Maximum piping length			Maximum height difference			Total piping length
		Longest pipe (A+[B,G,E,J]) Actual / (Equivalent)	After first branch (B,G,E,J) Actual	After first branch (for multi-outdoor) (D) Actual / (Equivalent)	Indoor-to-outdoor (3) (H1) Outdoor above indoor / (indoor above outdoor)	Indoor-to-indoor (H2)	Outdoor-to-outdoor (H3)	
Standard ·VRV DX· indoor units only Standard multi-combination		165/(190)m(8)	40m(1)	10/(13)m	50/(40)m(3)	30m	5m	1000m
All multi-outdoor-unit combinations except		135/(160)m(8)	40m(1)	10/(13)m	50/(40)m(3)	30m	5m	500m
·Hydrobox· connection		135/(160)m(8)	40m	10/(13)m	50/(40)m	15m	5m	300-500m(5)
·RA· connection		100/(120)m(8)	50m(2)	-	50/(40)m	15m	-	250m
·AHU· connection	Pair	50/(55)m(4)	40m	10/13m	40/(40)m	-	5m	150m(9)
	Multi (6)	165/(190)m(8)	40m	10/13m	40/(40)m	15m	5m	1000m
	Mix (7)	165/(190)m(8)	40m	10/13m	40/(40)m	15m	5m	1000m

Remark

For standard multi-outdoor-unit combinations, see ·3D079534·.

(1) If all conditions below are met, the limitation can be extended up to 90 m
   a. The piping length between all indoor units and the nearest branch kit is ≤ 40m.
   b. It is necessary to increase the size of the gas and liquid piping.
      If the increased pipe size is larger than the pipe size of the main pipe, also increase the size of the main pipe.
   c. When the piping size is increased, the piping length has to be counted as double.
      The total piping length has to be within limitations.
   d. The piping length difference between the nearest indoor unit from the first branch to the outdoor unit and the farthest indoor unit to the outdoor unit is ≤ ·40·m.

(2) If the piping length between the first branch and the ·BP· box or ·VRV· indoor unit is more than ·20·m, increase the length of the gas and liquid piping between the first branch and the ·BP· box or ·VRV· indoor unit.

(3) An extension to up to ·90· m is possible without an additional option kit. Respect the following conditions:
   -> If the outdoor units are positioned higher than the indoor units:
   a. Size up the liquid piping
   b. A dedicated setting on the outdoor unit is required.
   -> If the outdoor units are positioned lower than the indoor units:
   a. 40~60m Minimum connection ratio: ·80%·
      60~65m Minimum connection ratio: ·90%·
      65~80m Minimum connection ratio: ·100%·
      80~90m Minimum connection ratio: ·110%·
   b. Size up the liquid piping
      A dedicated setting on the outdoor unit is required.

(4) The allowable minimum length is ·5· m.

(5) In case of multi-outdoor-unit combinations.

(6) Multiple air handling units (AHU)(·EKEXV · + ·EKEQ · kits) or (AHU)(·EKEXVA · + ·EKEACBVE· kits).

(7) Mix of ·AHU· units and ·VRV DX indoor·

(8) If the equivalent piping length between is > ·90·m, size up the main liquid and gas piping.

(9) Up to ·3· piping branches are possible in case of an AHU with an interlaced heat exchanger.