

VRV4

Heat pump

Piping restrictions ·3/3·

System pattern Allowed connection ratio (CR)  Other combinations are not allowed.	Total		Allowed capacity			
	Capacity	Indoor unit quantity (VRV, RA, AHU, Hydrobox)	·VRV DX· indoor unit	·RA DX· indoor unit	Hydrobox unit	Air handling unit (AHU)
·VRV DX· indoor units only	50~130%	Max.64	50~130%	-	-	-
·VRV DX· indoor unit + ·RA DX·	80~130%	Max.32 <sup>(1)</sup>	0~130%	0~130%	-	-
·RA DX· indoor unit	80~130%	Max.32 <sup>(1)</sup>	-	80~130%	-	-
·VRV DX· indoor unit + ·LT hydrobox·	50~130%	Max.32 <sup>(2)</sup>	50~130%	-	0~80%	-
·VRV DX· indoor unit + ·AHU((EKE XV+ EKEQ*)/(EKE XV+ EKEACBVE)· Mix <sup>(4)</sup>	50~110% <sup>(3)</sup>	Max.64 <sup>(2)</sup>	50~110%	-	-	0~60%
AHU only (·EKEQ*+ EKE XV·) Pair + multi <sup>(4)</sup>	90~110% <sup>(3)</sup>	Max.64 <sup>(2)(6)</sup>	-	-	-	90~110% <sup>(3)</sup>
AHU only (·EKEACBVE+ EKE XV·) Pair + multi <sup>(4)</sup>	65/75 <sup>(5)</sup> ~110% <sup>(3)</sup>	Max.64 <sup>(2)(6)</sup>	-	-	-	65/75 <sup>(5)</sup> ~110% <sup>(3)</sup>

Remark

- (1) There is no restriction on the number of connectable ·BP· boxes.
- (2) For connection with ·AHU·  
·EKE XV/EKE XV· kits are also considered indoor units.
- (3) Restrictions regarding the air handling unit capacity
- (4) Pair AHU = system with 1 air handling unit connected to one outdoor unit system  
Multi AHU = system with multiple air handling units connected to one outdoor unit system  
Mixed AHU = mix of AHU units and ·VRV DX· indoor units connected to one outdoor system
- (5) ·75% ~ 110%·: default situation  
·65% ~ 75%·: Allowed if stricter AHU volume limitations are valid.  
Refer to the databook of ·EKEACBVE· for details.
- (6) Number of AHUs that can be connected in case of pair or multi layout depends on the control types:
  - ·X·-control is possible (up to ·3· [·(EKE XV+EKEQFA\*)· or ·(EKE XV + EKEACBVE)· boxes] can be connected to one outdoor unit (system)).
  - ·Y·-control is possible (up to ·3· [·(EKE XV+EKEQFA\*)· or ·(EKE XV + EKEACBVE)· boxes] can be connected to one outdoor unit (system)).
  - ·W·-control is possible (up to ·3· [·(EKE XV+EKEQFA\*)· or ·(EKE XV + EKEACBVE)· boxes] can be connected to one outdoor unit (system)).
  - ·Z·'-control is possible (the allowed number of [·EKE XV + EKEACBVE· boxes] is determined by the connection ratio and the capacity of the outdoor unit.
  - ·Z·-control is possible (the allowed number of [·EKE XV + EKEQMA· boxes] is determined by the connection ratio and the capacity of the outdoor unit.

About ventilation applications

- I. ·FXMQ MF· units are considered air handling units, following air handling unit limitations.  
Maximum connection ratio when combined with ·VRV DX· indoor units: <30·%.  
Maximum connection ratio when only air handling units are connected: <100·%.  
For information on the operation range, refer to the documentation of the ·FXMQ MF· unit.
- II. ·Biddle· air curtains are considered air handling units, following air handling unit limitations:  
For information on the operation range, refer to the documentation of the ·Biddle· unit.
- III. [·(EKE XV + EKEQ)/ (EKE XV + EKEACBVE)·] units combined with an air handling unit are considered air handling units, following a p  
For information on the operation range, refer to the documentation of the ·(EKE XV-EKEQ)/(EKE XV-EKEACBVE)· unit.
- IV. ·VKM· units are considered to be regular ·VRV DX· indoor units.