

Energy recovery ventilation, humidification and air processing

Post heating or cooling of fresh air for lower load on the air conditioning system

- › Energy saving ventilation using indoor heating, cooling and moisture recovery
- › Creates a high quality indoor environment by pre conditioning of incoming fresh air
- › Humidification of the fresh air results in comfortable indoor humidity level, even during heating
- › Free cooling possible when outdoor temperature is below indoor temperature (eg. during nighttime)
- › Low energy consumption thanks to DC fan motor
- › Prevent energy losses from over-ventilation while improving indoor air quality with optional CO₂ sensor
- › Shorter installation time thanks to easy adjustment of nominal air flow rate, so less need for dampers compared with traditional installation
- › Specially developed heat exchange element with High Efficiency Paper (HEP)
- › Can operate in over- and under pressure



Ventilation		VKM-GB/VKM-GBM		50GB	80GB	100GB	50GBM	80GBM	100GBM	
Power input - 50Hz	Heat exchange mode	Nom.	Ultra high/High/Low	kW	0.270/0.230/0.170	0.330/0.280/0.192	0.410/0.365/0.230	0.270/0.230/0.170	0.330/0.280/0.192	0.410/0.365/0.230
	Bypass mode	Nom.	Ultra high/High/Low	kW	0.270/0.230/0.140	0.330/0.280/0.192	0.410/0.365/0.230	0.270/0.230/0.170	0.330/0.280/0.192	0.410/0.365/0.230
Fresh air conditioning load	Cooling			kW	4.71 / 1.91 / 3.5	7.46 / 2.96 / 5.6	9.12 / 3.52 / 7.0	4.71 / 1.91 / 3.5	7.46 / 2.96 / 5.6	9.12 / 3.52 / 7.0
	Heating			kW	5.58 / 2.38 / 3.5	8.79 / 3.79 / 5.6	10.69 / 4.39 / 7.0	5.58 / 2.38 / 3.5	8.79 / 3.79 / 5.6	10.69 / 4.39 / 7.0
Temperature exchange efficiency - 50Hz	Ultra high/High/Low			%	76/76/77.5	78/78/79	74/74/76.5	76/76/77.5	78/78/79	74/74/76.5
Enthalpy exchange efficiency - 50Hz	Cooling	Ultra high/High/Low		%	64/64/67	66/66/68	62/62/66	64/64/67	66/66/68	62/62/66
	Heating	Ultra high/High/Low		%	67/67/69	71/71/73	65/65/69	67/67/69	71/71/73	65/65/69
Operation mode	Heat exchange mode / Bypass mode / Fresh-up mode									
Heat exchange system	Air to air cross flow total heat (sensible + latent heat) exchange									
Heat exchange element	Specially processed non-flammable paper									
Humidifier	System	Natural evaporating type								
Dimensions	Unit	HeightxWidthxDepth	mm	387x1,764x832	387x1,764x1,214		387x1,764x832	387x1,764x1,214		
Weight	Unit		kg	94	110	112	100	119	123	
Casing	Material	Galvanised steel plate								
Fan-Air flow rate - 50Hz	Heat exchange mode	Ultra high/High/Low	m ³ /h	500/500/440	750/750/640	950/950/820	500/500/440	750/750/640	950/950/820	
	Bypass mode	Ultra high/High/Low	m ³ /h	500/500/440	750/750/640	950/950/820	500/500/440	750/750/640	950/950/820	
Fan-External static pressure - 50Hz	Ultra high/High/Low		Pa	210/170/140	210/160/110	150/100/70	200/150/120	205/155/105	110/70/60	
Air filter	Type	Multidirectional fibrous fleeces								
Sound pressure level - 50Hz	Heat exchange mode	Ultra high/High/Low	dBA	39/37/35	41.5/39/37	41/39/36.5	38/36/34	40/37.5/35.5	40/38/35.5	
	Bypass mode	Ultra high/High/Low	dBA	40/38/35.5	41.5/39/37	41/39/36.5	39/36/34.5	41/38/36	41/39/35.5	
Operation range	Around unit		°CDB	0°C~40°CDB, 80% RH or less						
	Supply air		°CDB	-15°C~40°CDB, 80% RH or less						
	Return air		°CDB	0°C~40°CDB, 80% RH or less						
	On coil temperature	Cooling/Max./Heating/Min.	°CDB	-15/43			-15/43			
Refrigerant	Control	Electronic expansion valve								
	Type	R-410A								
	GWP	2,087.5								
Connection duct diameter			mm	200	250		200		250	
Piping connections	Liquid	OD	mm	6.35						
	Gas	OD	mm	12.7						
	Water supply		mm	6.4						
	Drain		mm	-						
Power supply	Phase/Frequency/Voltage		Hz/V	1~/50/220-240						
Current	Maximum fuse amps (MFA)		A	15						