

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



VKM80-100GB(M)

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	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	
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	HeightxWidthxD	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	dB(A)	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	dB(A)	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	PT3/4 external thread							
Current	Maximum fuse amps (MFA)		A	1~/50/220-240 15							