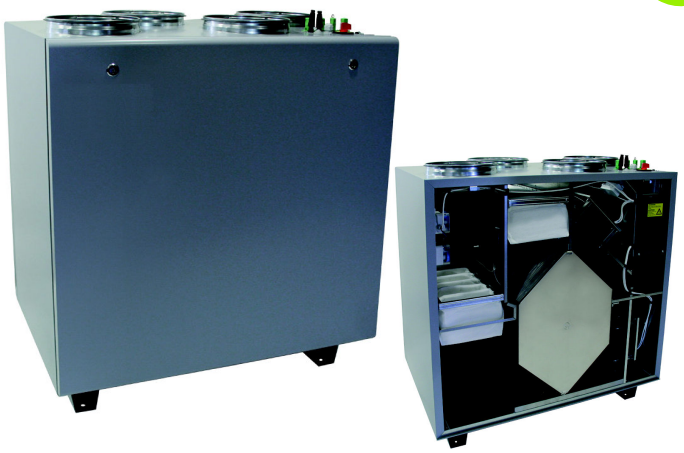
MultiCross®
Wärmerückgewinnungstechnik

GS-VK



Lüftungsgerät mit Wärmerückgewinnung

mit vertikaler Luftführung

Kompaktlüftungsgerät mit Wärmerückgewinnung und vertikaler Luftführung.

Komplett mit zwei freilaufenden energiesparenden Hochleistungslaufrädern mit EC-Motoren sowie einem hocheffizienten Gegenstromwärmetauscher als Almg3 mit automatischem Bypass.

Gehäuse:
Das Gehäuse besteht aus doppelschaligen in RAL 7040 beschichteten Zinkblechen 1,0 mm mit einer Dämmung von: 30 mm - 50mm. Einfache Gerätewartung durch frontseitige Türe.
Der Außenluftanschluss kann wahlweise links oder rechts bestellt werden.
Funktionsteile herausziehbar. Montage wandhängend.
4 Anschlussstutzen oberhalb am Gerät, jeweils mit Gummidichtung.

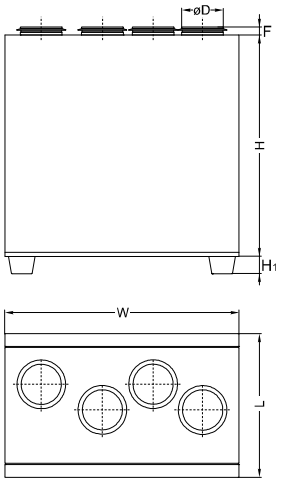
Ventilator:
Die Drehzahlstufen können stufenlos über die Uhrzeit frei eingestellt werden.
Zulufttemperatur einstellbar von 0-30 °C.
Zur Wärmerückgewinnung dient ein hocheffizienter Gegenstromwärmetauscher aus Aluminium mit niedrigem Druckverlust und getrennten Luftströmen.
Die motorbetriebene temperaturgesteuerte Bypassklappe dient zur automatischen Sommerfunktion.
Das Lüftungsgerät ist mit einer Kondensatwanne und Siphon ausgestattet.

Filter:
Zuluft mit Taschenfilter F5, Abluft mit Taschenfilter F5.
Die Differenzdosen sind bereits im Gerät montiert und verdrahtet.

Optionale Lieferung mit Pumpenwarmwasser- oder Elektro-Nachheizregister möglich.

GS-VK

GS-VK 200 - 1900



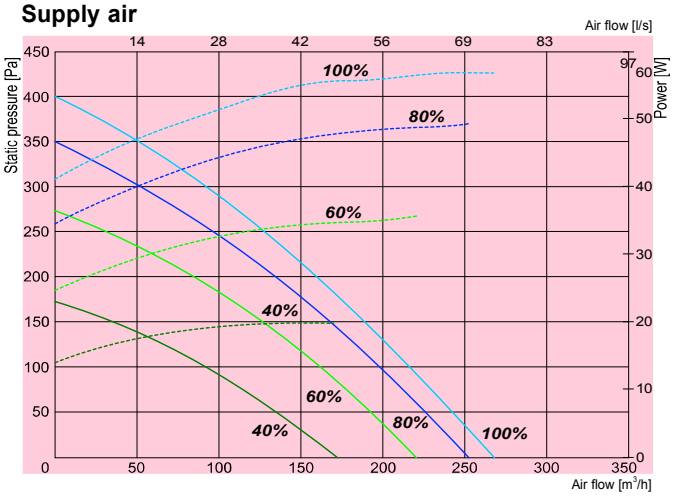
Type	Dimensions [mm]					
	L	W	H	øD	H_1	F
GS-VK 200	410	595	716	125	-	30
GS-VK 400	596	635	800	160	-	30
GS-VK 700	670	1000	980	250	126	30
GS-VK 1200	760	1350	1200	315	126	40
GS-VK 1900	800	2000	1600	400	140	70

Type	Accessories													
	UNI PRO TPC	1141 RC02-F2 KFF-U	AKS	AVS	AVA	AP SKG	PS	SP	SSB *Heating*	SSB *Cooling*	RMG 80/60^{0}C	RMG 60/40^{0}C	VVP/VXP 80/60^{0}C	VVP/VXP 60/40^{0}C
GS-VK-200-E	+	+	125	-	125	125	600	*	-	-	-	-	-	-
GS-VK-200-W	+	+	125	125	125	125	600	**	61	81	3-0,63-4	3-0,63-4	45.10-0,63	45.10-0,63
GS-VK-400-E	+	+	160	-	160	160	600	*	-	-	-	-	-	-
GS-VK-400-W	+	+	160	160	160	160	600	**	61	81	3-0,63-4	3-0,63-4	45.10-0,63	45.10-0,63
GS-VK-700-E	+	+	250	-	250	250	int	*	-	-	-	-	-	-
GS-VK-700-W	+	+	250	250	250	250	int	**	61	81	3-1,0-4	3-0,63-4	45.10-1,0	45.10-0,63
GS-VK-1200-E	+	+	315	-	315	315	int	*	-	-	-	-	-	-
GS-VK-1200-W	+	+	315	int	315	315	int	**	61	81	3-0,63-4	3-0,63-4	45.10-0.63	45.10-0.63
GS-VK-1900-E	+	+	400	-	400	400	int	*	-					
GS-VK-1900-W	+	+	400	400	400	400	int	**	61					

* - 227S - 230 - 05
** - 341-230-05

GS-VK

Supply air

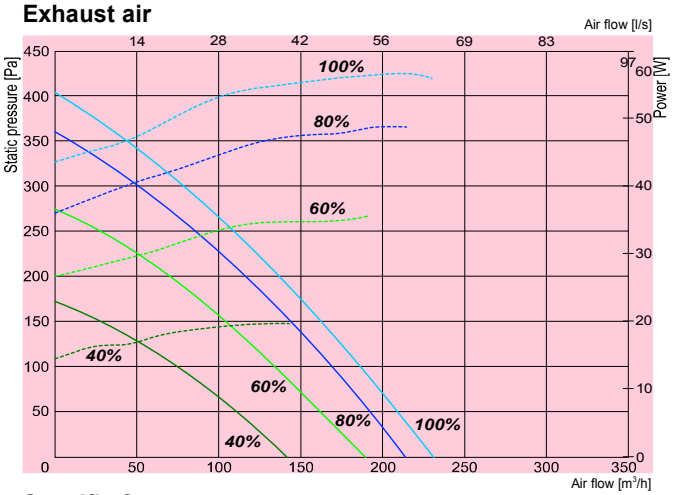


GS-VK-200-E

Performance

Power consumption

Exhaust air

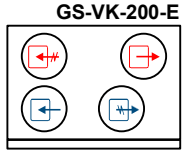


GS-VK-200-E

Performance

Power consumption

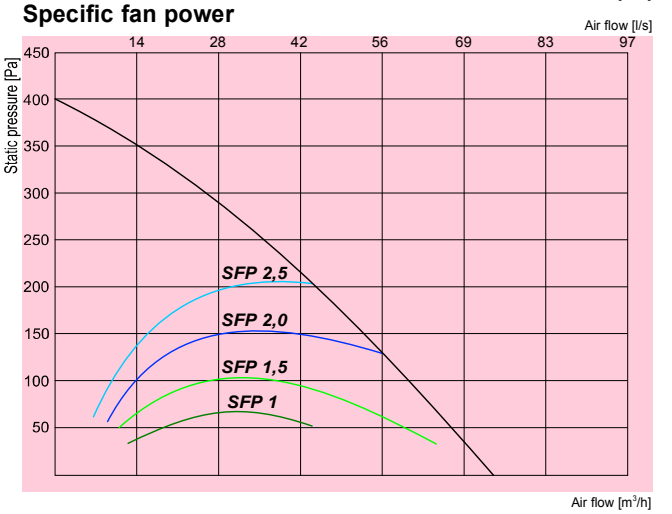
GS-VK-200-E



View from inspection side

Exhaust air | Extract air | Fresh air | Supply air

Specific fan power

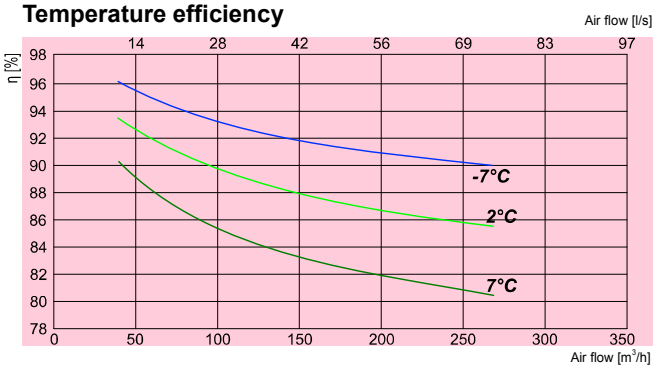


			GS-VK-200-E
Heater	-phase/voltage	[50Hz/VAC]	~1, 230
	-power consumption	[kW]	1,2
EC fans	-phase/voltage	[50Hz/VAC]	~1, 230
	- control input	[VDC]	0-10
exhaust	-power/current	[kW/A]	0,057/0,47
	-fan speed	[min^{-1}]	4480
supply	-power/current	[kW/A]	0,057/0,47
	-fan speed	[min^{-1}]	4480
Thermal efficiency			82%
Max power consumption		[kW/A]	1,314/5,71
Automatic control			integrated
Filter class	-exhaust		G3
	-supply		F5
Thermal insulation		[mm]	30
Weight		[kg]	44,7

Air flow temperature range from -7°C to +40°C

Designed for operation indoors only

Temperature efficiency



Extract air = 20°C/60% RH - Outdoor air = -7°C/90% RH
Balance between supply air/extract air = 1.0

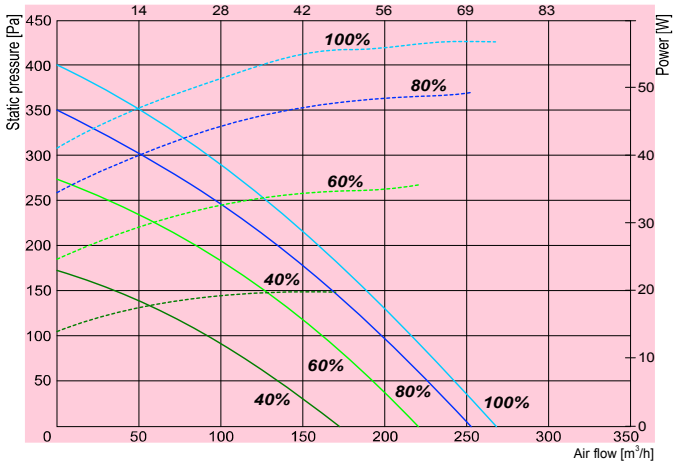
Extract air = 20°C/60% RH - Outdoor air = 2°C/90% RH
Balance between supply air/extract air = 1.0

Extract air = 20°C/60% RH - Outdoor air = 7°C/90% RH
Balance between supply air/extract air = 1.0

Temperature efficiency measured according EN 308.

GS-VK

Supply air

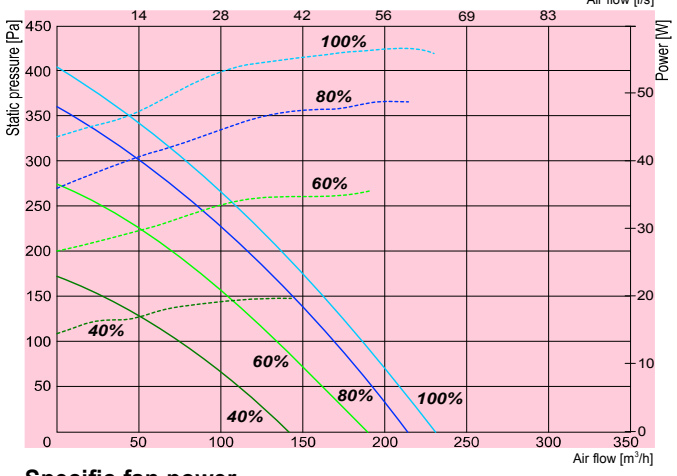


GS-VK-200-W

Performance

Power consumption

Exhaust air

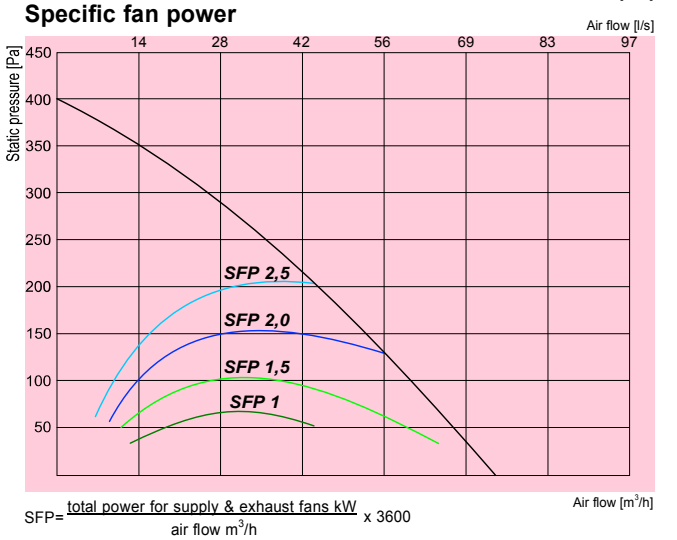


GS-VK-200-W

Performance

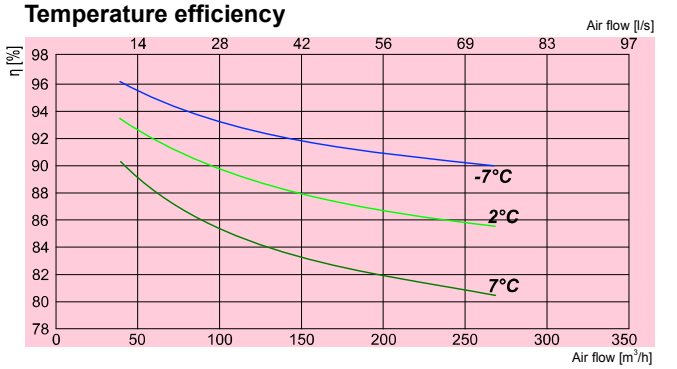
Power consumption

Specific fan power

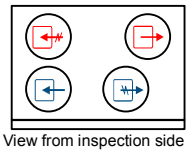


SFP= $\frac{\text{total power for supply \& exhaust fans kW}}{\text{air flow m}^3\text{/h}}$ x 3600

Temperature efficiency



GS-VK-200-W



View from inspection side

Exhaust air | Extract air | Fresh air | Supply air

			GS-VK-200-W
Water heater			AVS 125
EC fans	-phase/voltage	[50Hz/VAC]	~1, 230
	- control input	[VDC]	0-10
exhaust	-power/current	[kW/A]	0,057/0,47
	-fan speed	[min^{-1}]	4480
supply	-power/current	[kW/A]	0,057/0,47
	-fan speed	[min^{-1}]	4480
Thermal efficiency			82%
Max power consumption		[kW/A]	0,114/0,94
Automatic control			integrated
Filter class	-exhaust		G3
	-supply		F5
Thermal insulation		[mm]	30
Weight		[kg]	44,7

Air flow temperature range from -7°C to +40°C
Designed for operation indoors only

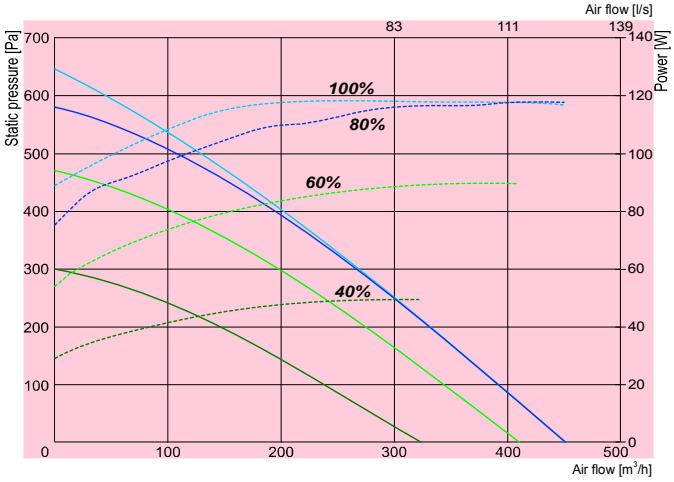
Extract air = 20°C/60% RH - Outdoor air = -7°C/90% RH
Balance between supply air/extract air = 1.0

Extract air = 20°C/60% RH - Outdoor air = 2°C/90% RH
Balance between supply air/extract air = 1.0

Extract air = 20°C/60% RH - Outdoor air = 7°C/90% RH
Balance between supply air/extract air = 1.0

Temperature efficiency measured according EN 308.

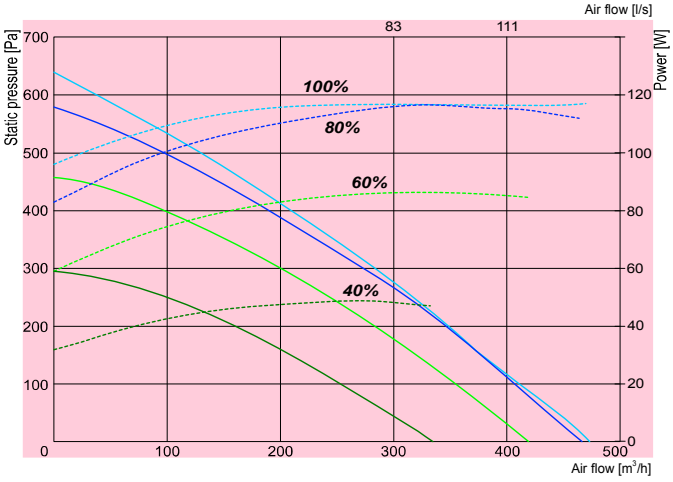
GS-VK



GS-VK-400-E

Performance

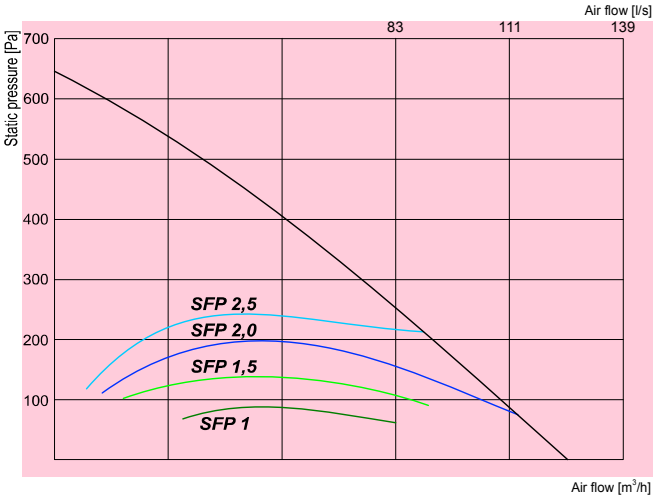
Power consumption



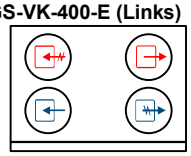
GS-VK-400-E

Performance

Power consumption

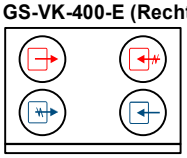


GS-VK-400-E (Links)



View from inspection side

GS-VK-400-E (Rechts)



View from inspection side

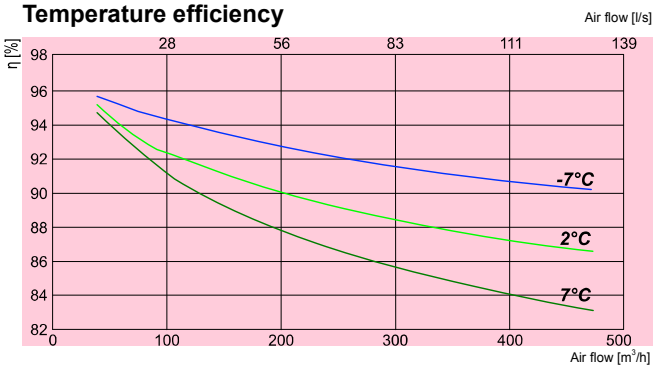
Exhaust air | Extract air | Fresh air | Supply air

			GS-VK-400-E
Heater	-phase/voltage	[50Hz/VAC]	~1, 230
	-power consumption	[kW]	2,4
EC fans	-phase/voltage	[50Hz/VAC]	~1, 230
	- control input	[VDC]	0-10
exhaust	-power/current	[kW/A]	0,117/0,97
	-fan speed	[min^{-1}]	4500
supply	-power/current	[kW/A]	0,117/0,97
	-fan speed	[min^{-1}]	4500
Thermal efficiency			91%
Max power consumption		[kW/A]	2,63/11,43
Automatic control			integrated
Filter class	-exhaust		G3
	-supply		F5
Thermal insulation		[mm]	30
Weight		[kg]	50,0

Air flow temperature range from -7°C to +40°C

Designed for operation indoors only

Temperature efficiency



Extract air = 20°C/60% RH - Outdoor air = -7°C/90% RH
Balance between supply air/extract air = 1.0

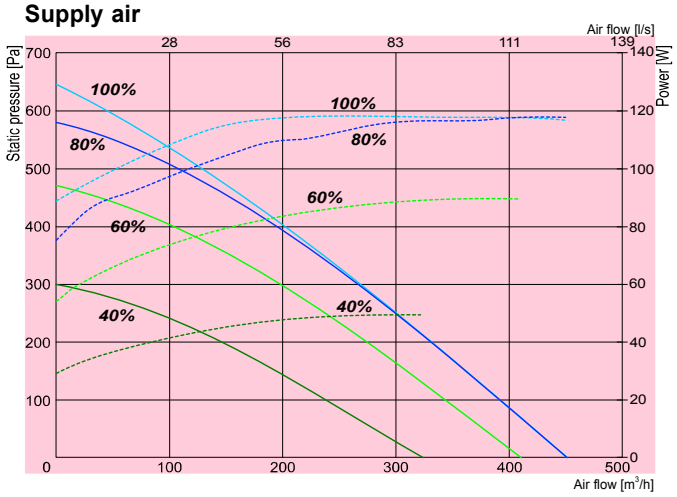
Extract air = 20°C/60% RH - Outdoor air = 2°C/90% RH
Balance between supply air/extract air = 1.0

Extract air = 20°C/60% RH - Outdoor air = 7°C/90% RH
Balance between supply air/extract air = 1.0

Temperature efficiency measured according EN 308.

GS-VK

Supply air

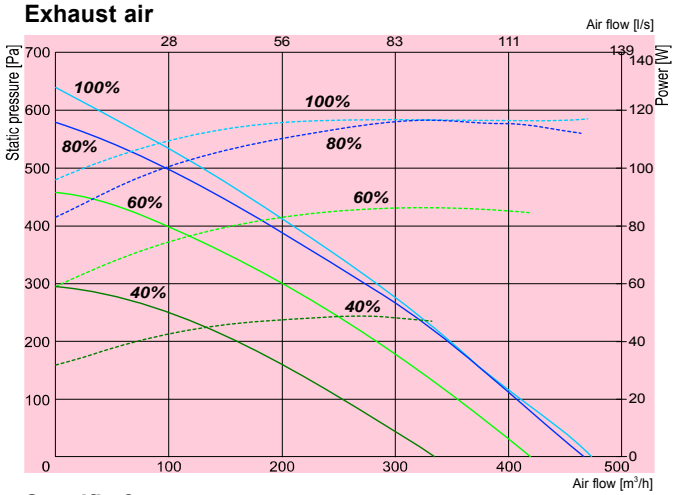


GS-VK-400-W

Performance

Power consumption

Exhaust air

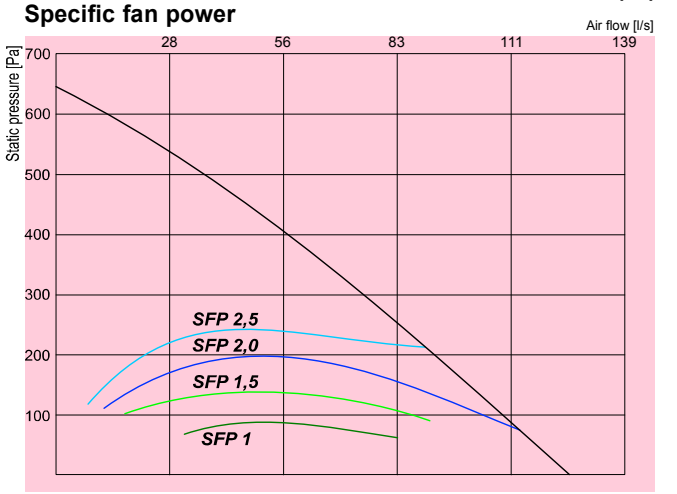


GS-VK-400-W

Performance

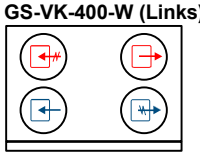
Power consumption

Specific fan power



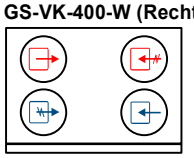
$$SFP = \frac{\text{total power for supply \& exhaust fans kW}}{\text{air flow m}^3\text{/h}} \times 3600$$

GS-VK-400-W (Links)



View from inspection side

GS-VK-400-W (Rechts)



View from inspection side

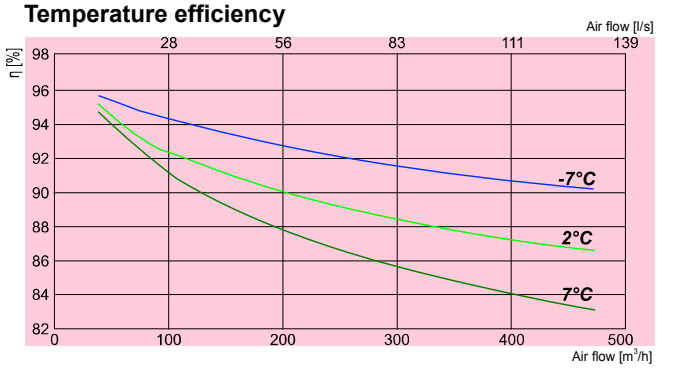
Exhaust air | Extract air | Fresh air | Supply air

			GS-VK-400-W
Water heater			AVS 160
EC fans	-phase/voltage	[50Hz/VAC]	~1, 230
	- control input	[VDC]	0-10
exhaust	-power/current	[kW/A]	0,117/0,97
	-fan speed	[min^{-1}]	4500
supply	-power/current	[kW/A]	0,117/0,97
	-fan speed	[min^{-1}]	4500
Thermal efficiency			91%
Max power consumption		[kW/A]	0,234/1,94
Automatic control			integrated
Filter class	-exhaust		G3
	-supply		F5
Thermal insulation		[mm]	30
Weight		[kg]	50,0

Air flow temperature range from -7°C to +40°C

Designed for operation indoors only

Temperature efficiency



Extract air = 20°C/60% RH - Outdoor air = -7°C/90% RH
Balance between supply air/extract air = 1.0

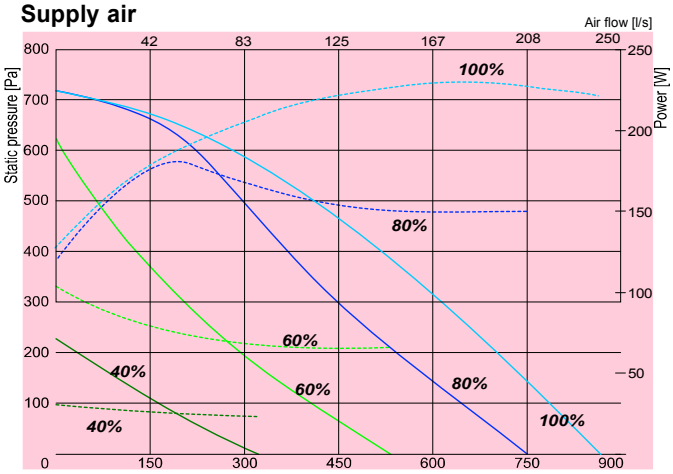
Extract air = 20°C/60% RH - Outdoor air = 2°C/90% RH
Balance between supply air/extract air = 1.0

Extract air = 20°C/60% RH - Outdoor air = 7°C/90% RH
Balance between supply air/extract air = 1.0

Temperature efficiency measured according EN 308.

GS-VK

Supply air

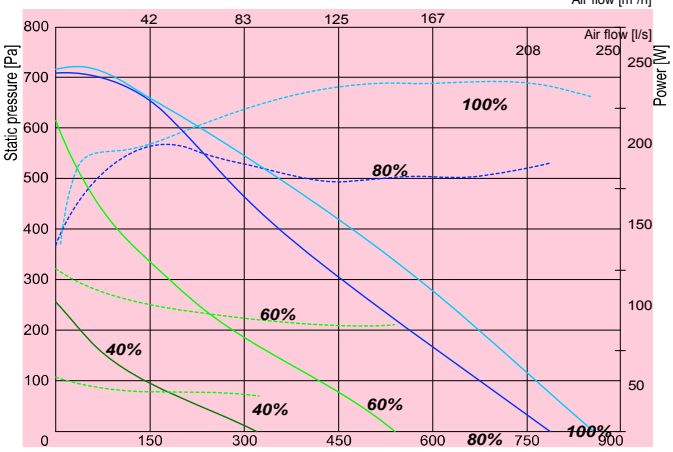


GS-VK-700-E

Performance

Power consumption

Exhaust air

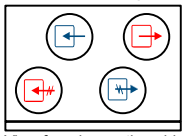


GS-VK-700-E

Performance

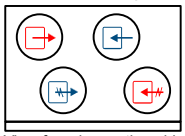
Power consumption

GS-VK-700-E (Links)



View from inspection side

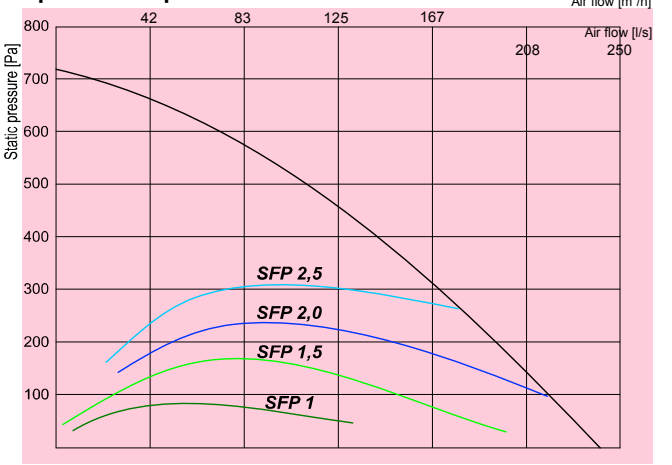
GS-VK-700-E (Rechts)



View from inspection side

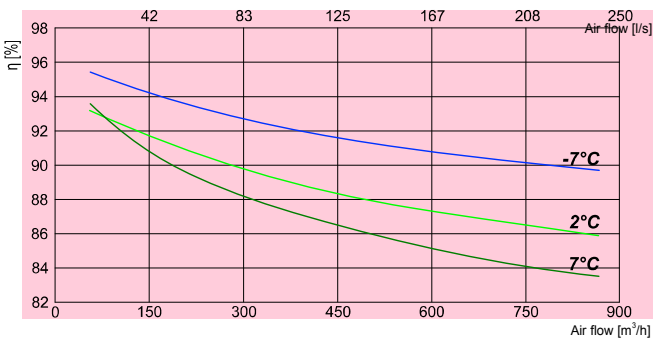
Exhaust air Extract air Fresh air Supply air

Specific fan power



$$SFP = \frac{\text{total power for supply \& exhaust fans kW}}{\text{air flow m}^3/\text{h}} \times 3600$$

Temperature efficiency



			GS-VK-700-E
Heater	-phase/voltage	[50Hz/VAC]	~1,230
	-power consumption	[kW]	1,2
EC fans	-phase/voltage	[50Hz/VAC]	~1,230
exhaust	-power/current	[kW/A]	0,218/1,64
	-fan speed	[min^{-1}]	3380
supply	-power/current	[kW/A]	0,230/1,66
	-fan speed	[min^{-1}]	3380
Thermal efficiency			91%
Max power consumption		[kW/A]	1,65/7,17
Automatic control			integrated
Filter class	-exhaust		F5
	-supply		F5
Thermal insulation		[mm]	30
Weight		[kg]	110,0

Air flow temperature range from -7°C to +40°C
Designed for operation indoors only

Extract air = 20°C/60% RH - Outdoor air = -7°C/90% RH
Balance between supply air/extract air = 1.0

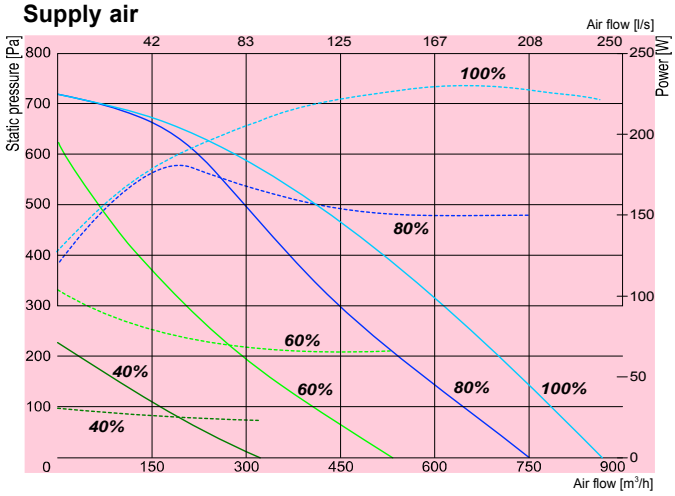
Extract air = 20°C/60% RH - Outdoor air = 2°C/90% RH
Balance between supply air/extract air = 1.0

Extract air = 20°C/60% RH - Outdoor air = 7°C/90% RH
Balance between supply air/extract air = 1.0

Temperature efficiency measured according EN 308.

GS-VK

Supply air

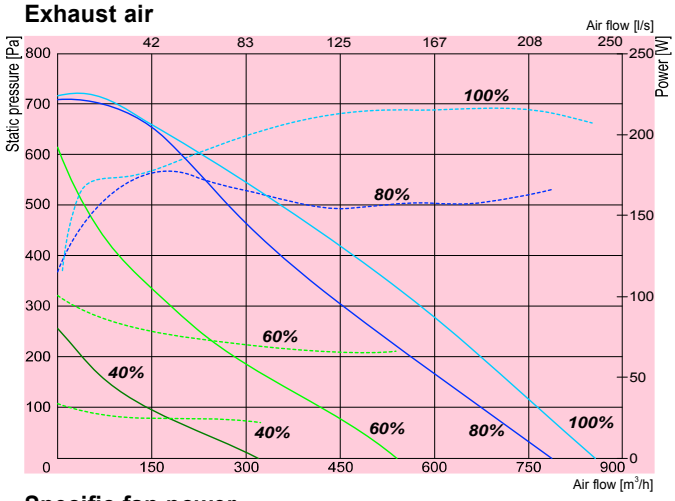


GS-VK-700-W

Performance

Power consumption

Exhaust air

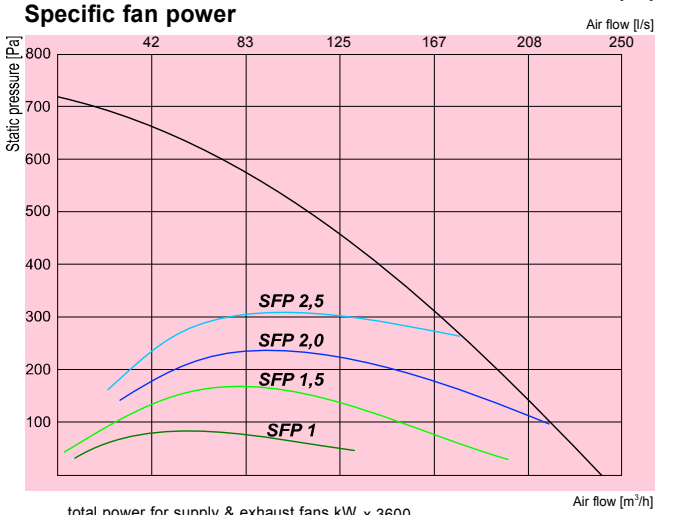


GS-VK-700-W

Performance

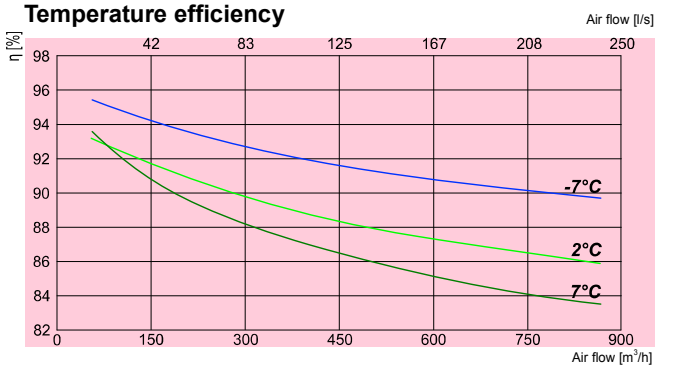
Power consumption

Specific fan power

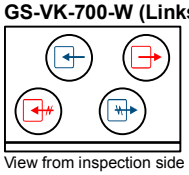


$$SFP = \frac{\text{total power for supply \& exhaust fans kW}}{\text{air flow m}^3/\text{h}} \times 3600$$

Temperature efficiency

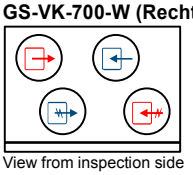


GS-VK-700-W (Links)



View from inspection side

GS-VK-700-W (Rechts)



View from inspection side

Exhaust air | Extract air | Fresh air | Supply air

			GS-VK-700-W
Water heater			AVS 250
EC Fans	-phase/voltage	[50Hz/VAC]	~1,230
exhaust	-power/current	[kW/A]	0,218/1,64
	-fan speed	[min^{-1}]	3380
supply	-power/current	[kW/A]	0,230/1,66
	-fan speed	[min^{-1}]	3380
Motor protection class			IP44
Thermal efficiency			91%
Max power consumption		[kW/A]	0,448/1,95
Automatic control			integrated
Filter class	-exhaust		F5
	supply		F5
Thermal insulation		[mm]	30
Weight		[kg]	110,0

Air flow temperature range from -7°C to +40°C
Designed for operation indoors only

Extract air = 20°C/60% RH - Outdoor air = -7°C/90% RH
Balance between supply air/extract air = 1.0

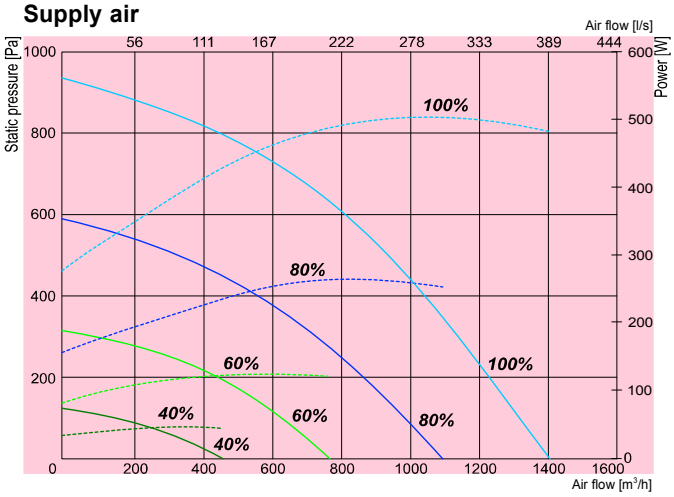
Extract air = 20°C/60% RH - Outdoor air = 2°C/90% RH
Balance between supply air/extract air = 1.0

Extract air = 20°C/60% RH - Outdoor air = 7°C/90% RH
Balance between supply air/extract air = 1.0

Temperature efficiency measured according EN 308.

GS-VK

Supply air

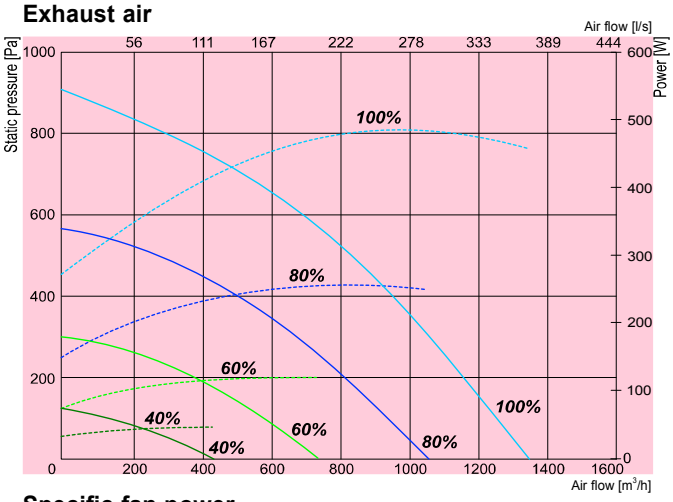


GS-VK-1200-E

Performance

Power consumption

Exhaust air

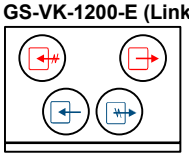


GS-VK-1200-E

Performance

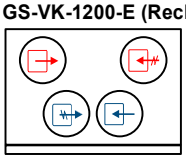
Power consumption

GS-VK-1200-E (Links)



View from inspection side

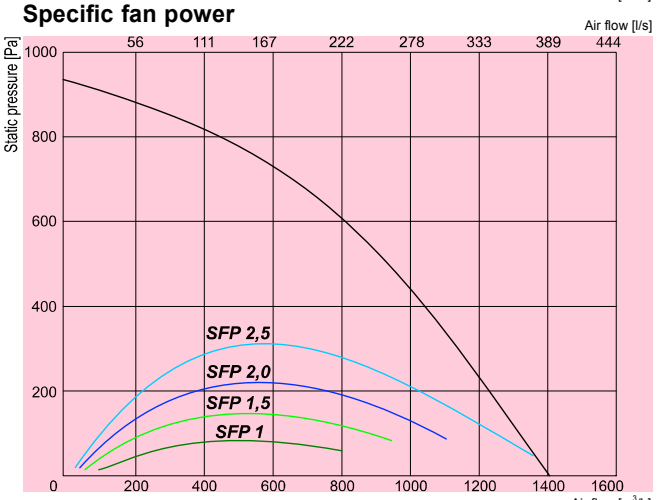
GS-VK-1200-E (Rechts)



View from inspection side

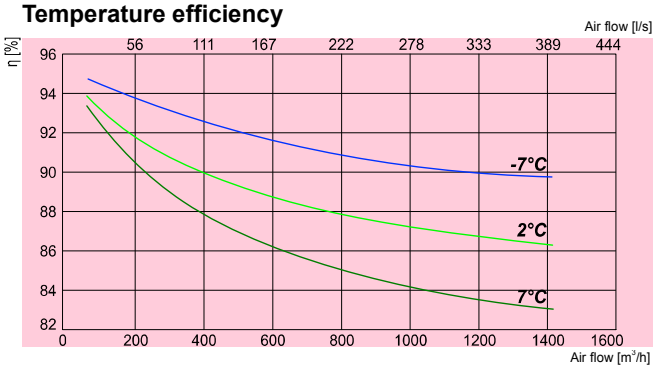
Exhaust air | Extract air | Fresh air | Supply air

Specific fan power



$$SFP = \frac{\text{total power for supply \& exhaust fans kW}}{\text{air flow m}^3\text{/h}} \times 3600$$

Temperature efficiency



			GS-VK-1200-E
Heater	-phase/voltage	[50Hz/VAC]	~1,230
	-power consumption	[kW]	1,2
EC fans	-phase/voltage	[50Hz/VAC]	~1,230
exhaust	-power/current	[kW/A]	0,480/2,21
	-fan speed	[min^{-1}]	3100
supply	-power/current	[kW/A]	0,501/2,3
	-fan speed	[min^{-1}]	3100
Thermal efficiency			91%
Max power consumption		[kW/A]	2,2/9,57
Automatic control			integrated
Filter class	-exhaust		F5
	-supply		F5
Thermal insulation		[mm]	50
Weight		[kg]	152,0

Air flow temperature range from -7°C to +40°C
Designed for operation indoors only

Extract air = 20°C/60% RH - Outdoor air = -7°C/90% RH
Balance between supply air/extract air = 1.0

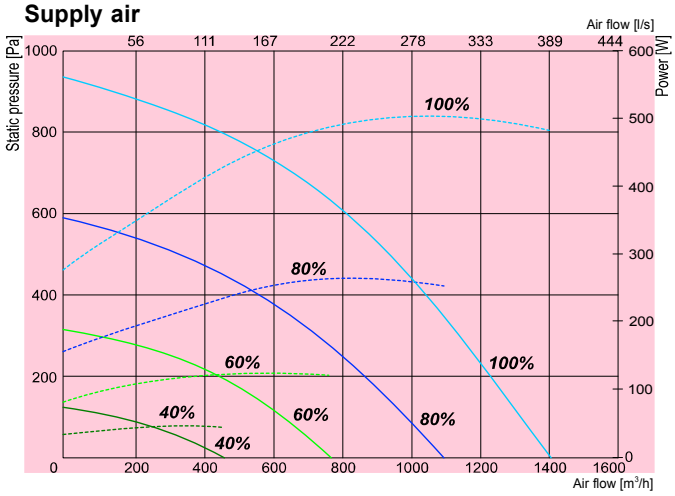
Extract air = 20°C/60% RH - Outdoor air = 2°C/90% RH
Balance between supply air/extract air = 1.0

Extract air = 20°C/60% RH - Outdoor air = 7°C/90% RH
Balance between supply air/extract air = 1.0

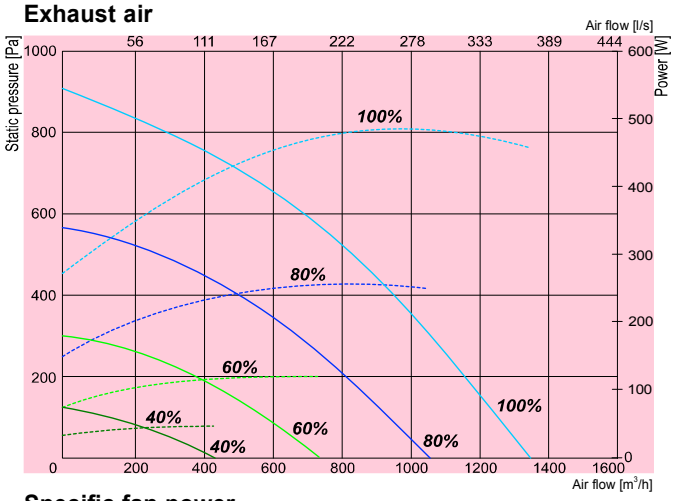
Temperature efficiency measured according EN 308.

GS-VK

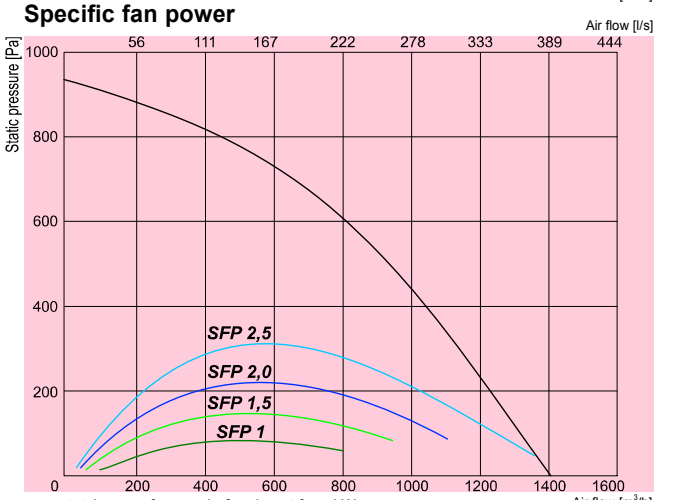
Supply air



Exhaust air

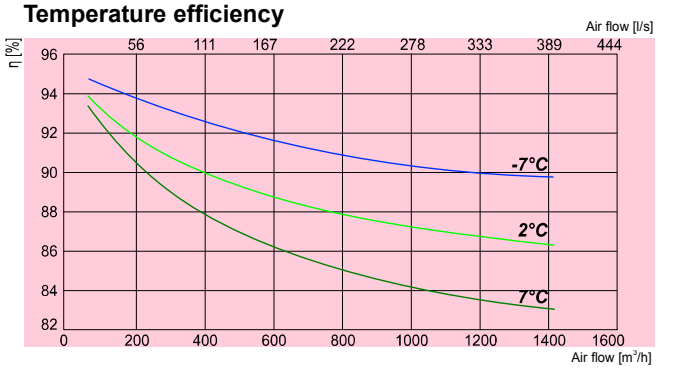


Specific fan power



$$SFP = \frac{\text{total power for supply \& exhaust fans kW}}{\text{air flow m}^3\text{/h}} \times 3600$$

Temperature efficiency



GS-VK-1200-W

——— Performance

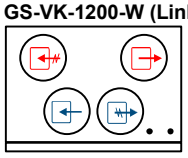
--------- Power consumption

GS-VK-1200-W

——— Performance

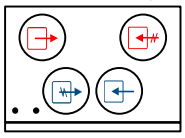
--------- Power consumption

GS-VK-1200-W (Links)



View from inspection side

GS-VK-1200-W (Rechts)



View from inspection side

Exhaust air | Extract air | Fresh air | Supply air

			GS-VK-1200-W
Water heater	-power	[kW]	4,04
	-water temp. T_{in}/T_{out}	[°C]	80/60
	-water flow rate	[l/s]	0,05
	-water pressure drop	[kPa]	4,9
	- kvs value	[m³/h]	0,82
EC Fans	-phase/voltage	[50Hz/VAC]	~1,230
exhaust	-power/current	[kW/A]	0,480/2,21
	-fan speed	[min⁻¹]	3100
supply	-power/current	[kW/A]	0,501/2,3
	-fan speed	[min⁻¹]	3100
Motor protection class			IP44
Thermal efficiency			91%
Max power consumption		[kW/A]	0,98/4,26
Automatic control			integrated
Filter class	-exhaust		F5
	supply		F5
Thermal insulation		[mm]	50
Weight		[kg]	152,0

Air flow temperature range from -7°C to +40°C
Designed for operation indoors only

——— Extract air = 20°C/60% RH - Outdoor air = -7°C/90% RH
Balance between supply air/extract air = 1.0

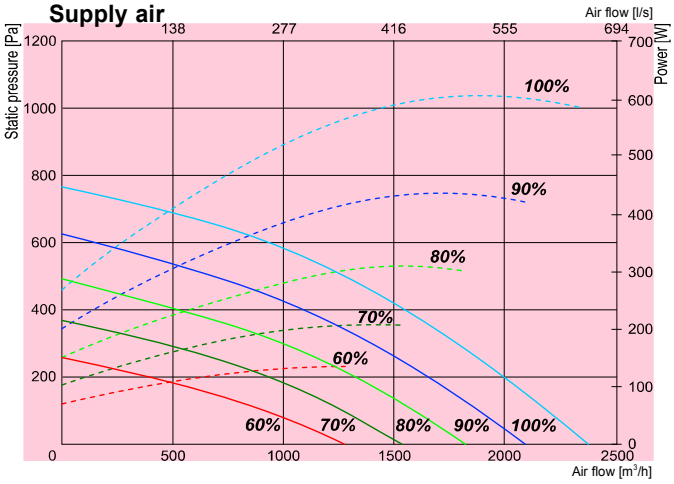
——— Extract air = 20°C/60% RH - Outdoor air = 2°C/90% RH
Balance between supply air/extract air = 1.0

——— Extract air = 20°C/60% RH - Outdoor air = 7°C/90% RH
Balance between supply air/extract air = 1.0

Temperature efficiency measured according EN 308.

GS-VK

Supply air

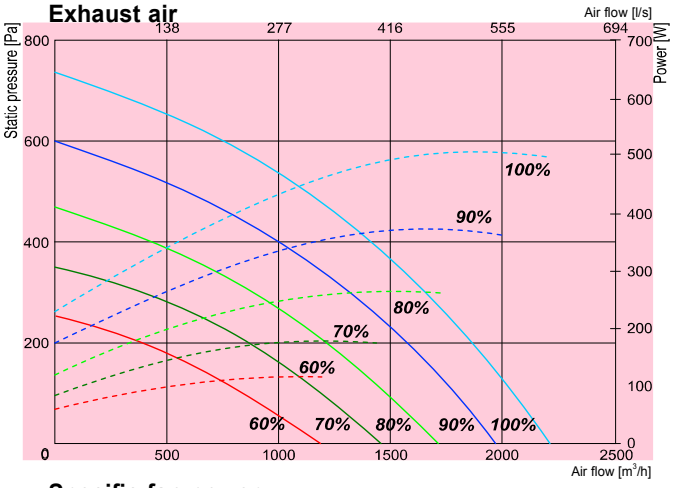


GS-VK-1900-E

Performance

Power consumption

Exhaust air

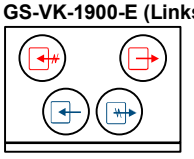


GS-VK-1900-E

Performance

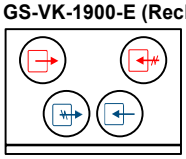
Power consumption

GS-VK-1900-E (Links)



View from inspection side

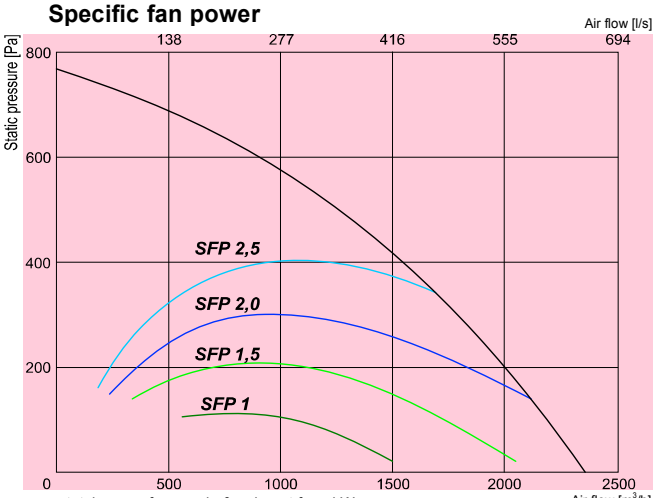
GS-VK-1900-E (Rechts)



View from inspection side

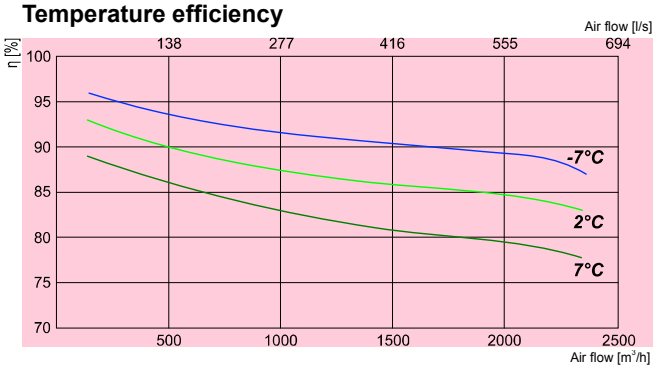
Exhaust air | Extract air | Fresh air | Supply air

Specific fan power



$$SFP = \frac{\text{total power for supply \& exhaust fans kW}}{\text{air flow m}^3\text{/h}} \times 3600$$

Temperature efficiency



			GS-VK-1900-E
Heater	-phase/voltage	[50Hz/VAC]	~1,230
	-power consumption	[kW]	2,0
EC fans	-phase/voltage	[50Hz/VAC]	~1,230
exhaust	-power/current	[kW/A]	0,585/2,61
	-fan speed	[min^{-1}]	2600
supply	-power/current	[kW/A]	0,597/2,68
	-fan speed	[min^{-1}]	2600
Thermal efficiency			92%
Max power consumption		[kW/A]	3,2/14
Automatic control			integrated
Filter class	-exhaust		F5
	-supply		F5
Thermal insulation		[mm]	50
Weight		[kg]	290,0

Air flow temperature range from -7°C to +40°C
Designed for operation indoors only

Extract air = 20°C/60% RH - Outdoor air = -7°C/90% RH
Balance between supply air/extract air = 1.0

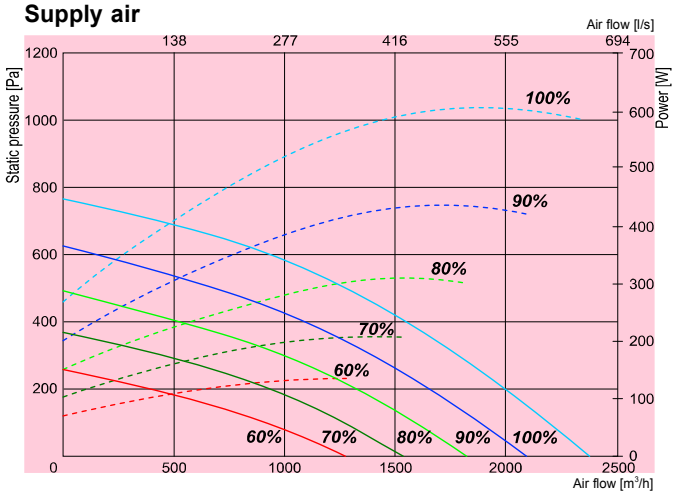
Extract air = 20°C/60% RH - Outdoor air = 2°C/90% RH
Balance between supply air/extract air = 1.0

Extract air = 20°C/60% RH - Outdoor air = 7°C/90% RH
Balance between supply air/extract air = 1.0

Temperature efficiency measured according EN 308.

GS-VK

Supply air

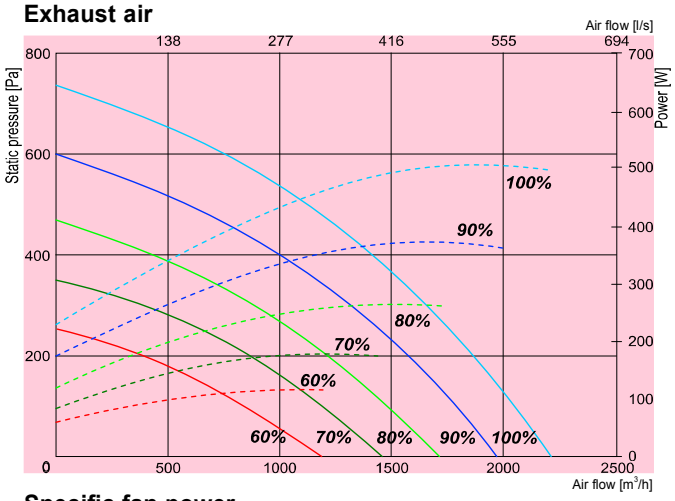


GS-VK-1900-W

Performance

Power consumption

Exhaust air

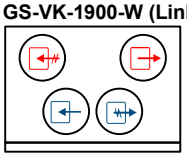


GS-VK-1900-W

Performance

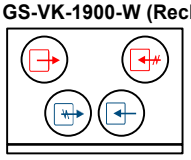
Power consumption

GS-VK-1900-W (Links)



View from inspection side

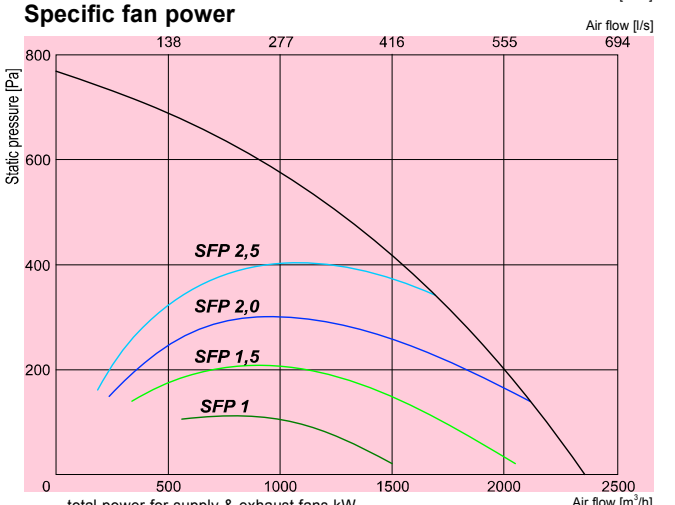
GS-VK-1900-W (Rechts)



View from inspection side

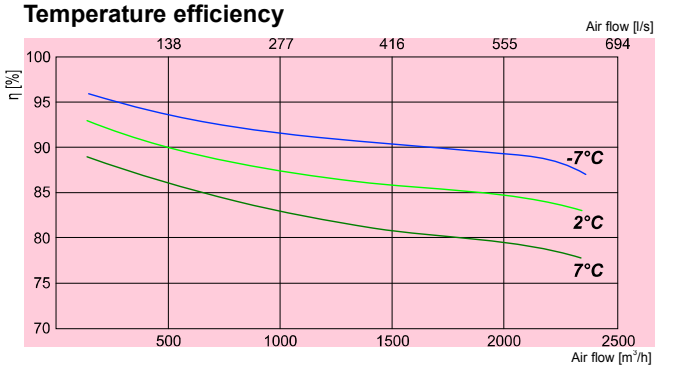
Exhaust air | Extract air | Fresh air | Supply air

Specific fan power



$$SFP = \frac{\text{total power for supply \& exhaust fans kW}}{\text{air flow m}^3\text{/h}} \times 3600$$

Temperature efficiency



			GS-VK-1900-W
Water heater			AVA 400, AVS 400
EC Fans	-phase/voltage	[50Hz/VAC]	~1,230
exhaust	-power/current	[kW/A]	0,585/2,61
	-fan speed	[min^{-1}]	2600
supply	-power/current	[kW/A]	0,597/2,68
	-fan speed	[min^{-1}]	2600
Motor protection class			IP-54
Thermal efficiency			92%
Max power consumption		[kW/A]	1,18/5,29
Automatic control			integrated
Filter class	-exhaust		F5
	supply		F5
Thermal insulation		[mm]	50
Weight		[kg]	290,0

Air flow temperature range from -7°C to +40°C
Designed for operation indoors only

Extract air = 20°C/60% RH - Outdoor air = -7°C/90% RH
Balance between supply air/extract air = 1.0

Extract air = 20°C/60% RH - Outdoor air = 2°C/90% RH
Balance between supply air/extract air = 1.0

Extract air = 20°C/60% RH - Outdoor air = 7°C/90% RH
Balance between supply air/extract air = 1.0

Temperature efficiency measured according EN 308.