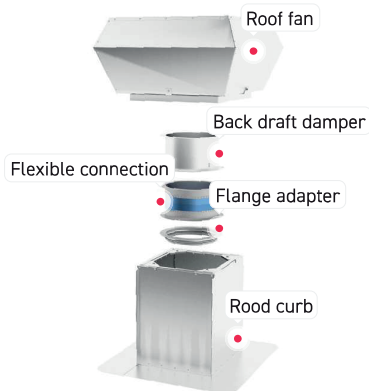
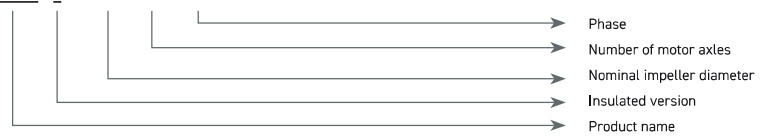




VSV

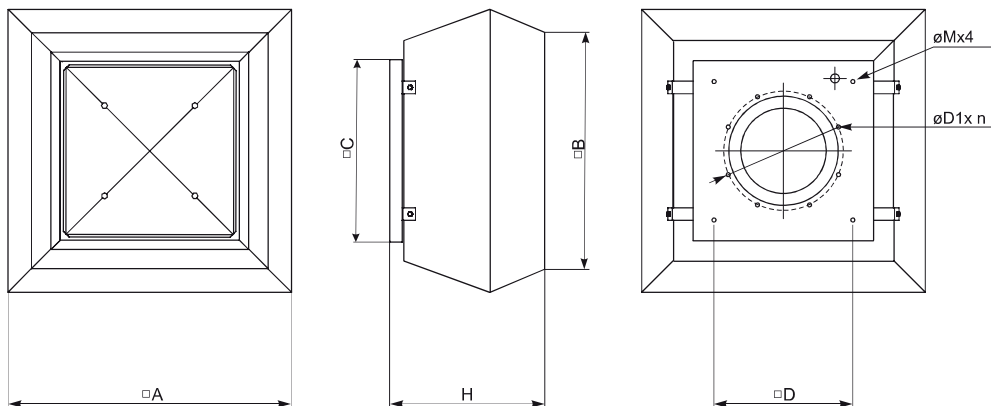


VSVI

Application	Roof fans VSV/VSVI are used for extraction of contaminated air from warehousing, industrial, commercial and other build-ings. Motorized impeller is protected with a meshwork grille which protects from external objects that could cause mechani-cal damage to the impeller. Not suitable for polluted air, aggressive and explosive gases. A casing is from a galvanized steel.
Features	> 9 sizes; > Airflow up to 18500 m³/h; > Vertical exhaust; > Backward-curved plastic or galvanized steel impeller; > Casing from galvanized steel; > Cost-effective.
Sizes	250, 311, 355, 400, 450, 500, 560, 630.
Construction	> Casing: galvanized steel or aluminum; > Motor protected from external objects; > Fan: centrifugal impeller and external rotor motor; > Motor protection with built-in thermal-contact; > Motor protection class: IP44/ IP54 depending on unit; > Acoustic and thermal insulation - 50 mm (VSVI only); > Terminal box protection class: IP55.
Installation	 Roof fan Back draft damper Flexible connection Flange adapter Rood curb > Device can be connected to pull air directly from ventilated room or air duct system. > Not suitable for polluted air or volatile and explosive gases.
Speed control options	> Electronic voltage controller (phase cut); > Voltage controlled speed controller.
VSV 311 4 L1  Phase Number of motor axles Nominal impeller diameter Insulated version Product name	

VSV | VSVI

Roof fans with AC-type motor

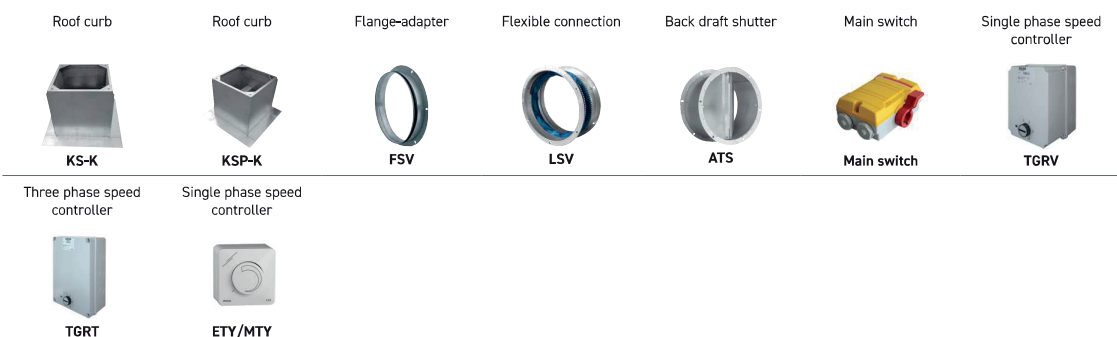


Type	Dimensions [mm]							
	□ A	□ B	□ C	H	øM	□ D	øD1	n
VSV 250	405	330	355	255	M6	245	230	6
VSV 311	555	470	435	323	M6	330	285	6
VSV 355	720	618	595	420	M8	450	438	6
VSV 400	720	618	595	420	M8	450	438	6
VSV 450	900	700	665	485	M8	535	438	6
VSV 500	900	700	665	485	M8	535	438	6
VSV 560	1150	972	939	609	M8	750	605	8
VSV 630	1150	972	939	609	M8	750	605	8

Type	Dimensions [mm]							
	□ A	□ B	□ C	H	øM	□ D	øD1	n
VSVI 311	675	567	435	369	M6	330	285	6
VSVI 355	844	716	595	422	M8	450	438	6
VSVI 400	844	716	595	422	M8	450	438	6
VSVI 450	966	817	665	488	M8	535	438	6
VSVI 500	966	817	665	488	M8	535	438	6
VSVI 560	1265	1033	939	611	M8	750	605	8
VSVI 630	1265	1033	939	611	M8	750	605	8

Type	Accessories								
	KS-K	KSP-K	FSV	LSV	ATS	Main switch	TGRV	TGRT	ETY/MTY
VSV 250-2S L1	250	250	250	250	250	BW225 DP	1,5	-	1,5
VSV/VSVI 311-4 L1	311	311	311	311	311	BW225 DP	1,5	-	1,5
VSV/VSVI 311-4 L3	311	311	311	311	311	BWS316 Y TPN	-	1	-
VSV/VSVI 355-4 L1	355-400	355-400	355-500	355-500	355-500	BW225 DP	2	-	2,5
VSV/VSVI 355-4 L3	355-400	355-400	355-500	355-500	355-500	BWS316 Y TPN	-	1	-
VSV/VSVI 400-4 L1	355-400	355-400	355-500	355-500	355-500	BW225 DP	3	-	4
VSV/VSVI 400-4 L3	355-400	355-400	355-500	355-500	355-500	BWS316 Y TPN	-	1	-
VSV/VSVI 450-4 L1	450-500	450-500	355-500	355-500	355-500	BW225 DP	5	-	-
VSV/VSVI 450-4 L3	450-500	450-500	355-500	355-500	355-500	BWS316 Y TPN	-	2	-
VSV/VSVI 500-4 L3	450-500	450-500	355-500	355-500	355-500	BWS316 Y TPN	-	4	-
VSV/VSVI 560-4 L3	560-630	560-630	560-630	560-630	560-630	BWS316 Y TPN	-	5	-
VSV/VSVI 630-6 L3	560-630	560-630	560-630	560-630	560-630	BWS316 Y TPN	-	4	-

Accessories

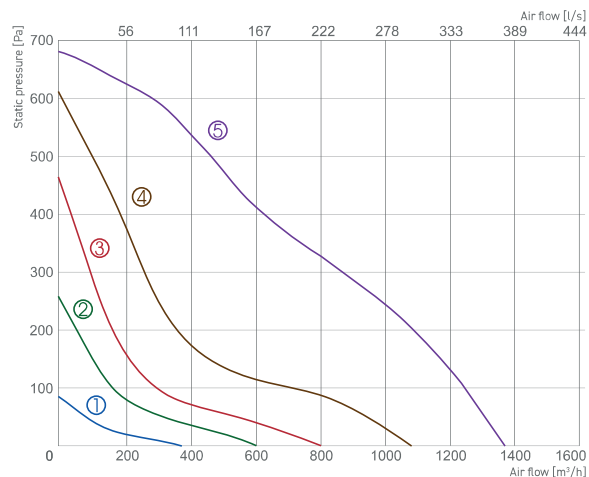


VSV 250-2S L1

1. 80V | 2. 120V | 3. 140V | 4. 171V | 5. 230V

VSV 250-2S L1	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	70	47	60	62	65	63	63	59
Outlet	73	48	63	64	68	65	66	61

Measured at 1215 m³/h, 120 Pa

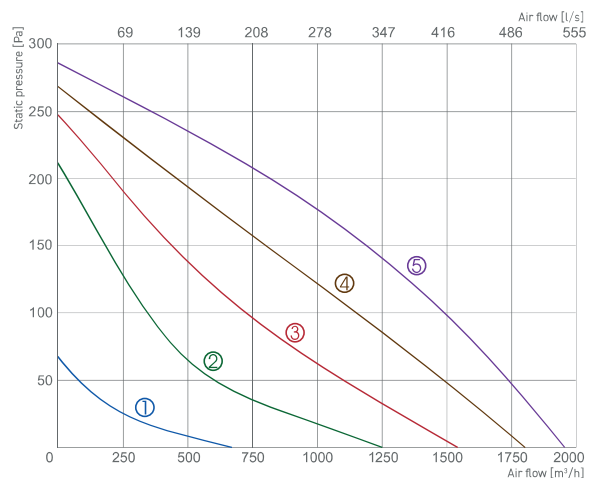


VSV | VSVI 311-4 L1

1. 80V | 2. 120V | 3. 140V | 4. 171V | 5. 230V

VSV VSVI 311-4 L1	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	67	50	54	58	59	64	55	43
Outlet	69	52	56	60	61	66	57	47

Measured at 1580 m³/h, 100 Pa



VSV | VSVI 311-4 L3

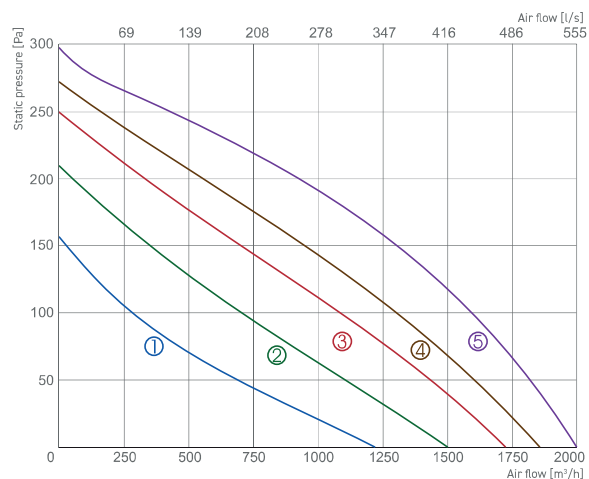
1. 130V | 2. 170V | 3. 220V | 4. 270V | 5. 400V

VSV 311-4 L3	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	70	51	62	68	60	52	54	43
Outlet	69	52	60	67	59	60	53	44

Measured at 1706 m³/h, 75 Pa

VSVI 311-4 L3	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	69	50	62	67	58	52	53	41
Outlet	68	50	59	66	58	58	53	43

Measured at 1706 m³/h, 75 Pa

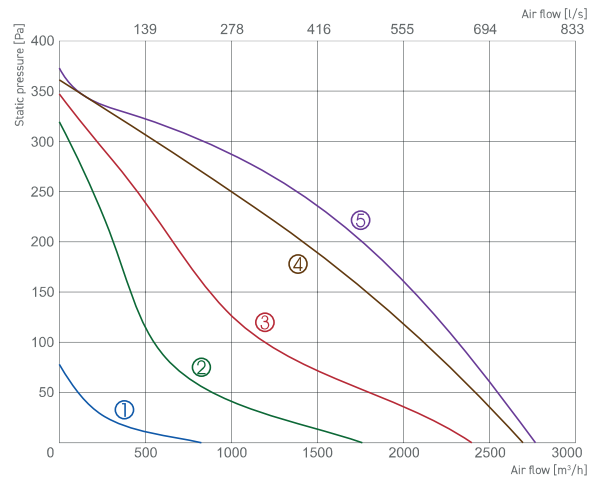


VSV | VSVI 355-4 L1

1. 80V | 2. 120V | 3. 140V | 4. 171V | 5. 230V

VSV VSVI 355-4 L1	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	69	56	57	62	62	64	63	51
Outlet	72	58	59	64	65	66	65	53

Measured at 2600 m³/h, 110 Pa



VSV | VSVI 355-4 L3

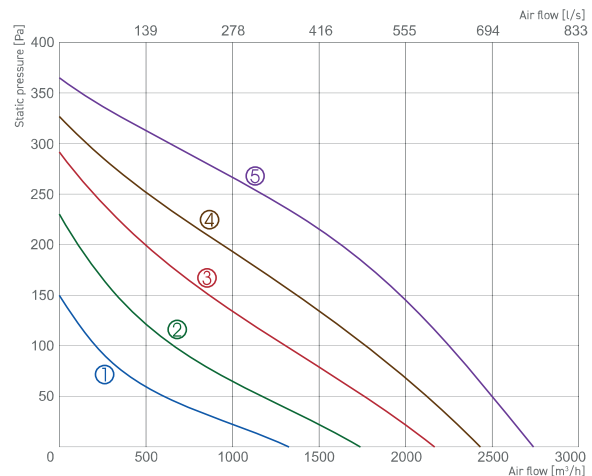
1. 130V | 2. 170V | 3. 220V | 4. 270V | 5. 400V

VSV 355-4 L3	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	65	52	56	60	57	57	53	56
Outlet	66	55	57	60	59	59	51	55

Measured at 2278 m³/h, 102 Pa

VSVI 355-4 L3	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	64	51	54	60	56	56	51	56
Outlet	65	55	58	63	51	59	54	58

Measured at 2278 m³/h, 102 Pa



Fan		250-2S L1	311-4 L1	311-4 L3	355-4 L1	355-4 L3
Art.No.	VSV	GVEVSV037	GVEVSV038	GVEVSV002	GVEVSV039	GVEVSV004
	VSVI	-	GVEVSVI038	GVEVSVI002	GVEVSVI039	GVEVSVI004
Electrical data						
Phase/Voltage/Frequency	[V/Hz]	~1,230/50	~1,230/50	~1,230/50	~1,230/50	~3,400/50
Max. power consumption	[kW]	0,219	0,170	0,153	0,310	0,243
Max. current	[A]	0,90	0,70	0,35	1,30	0,44
Capacitor	[µF]	5	4	-	7	-
Wiring diagram		No. 5	No.6	No.2	No.6	No.2
Fan speed controller		TGRV 1,5/ETY-1,5	TGRV 1,5/ETY-1,5	TGRT 1	TGRV 2/ETY-2,5	TGRT 1
Technical data						
Max. airflow	[m³/h]	1450	1910	2010	3020	2740
Fan impeller speed	[min⁻¹]	2704	1333	1370	1322	1340
Weight	[kg]	9	18/26	19/26	31/39	30/38
Ambient temperature limits	[°C]	-20/50	-40/70	-15/60	-40/70	-15/60
Impeller		Backwards curved	Backwards curved	Backwards curved	Backwards curved	Backwards curved
Protection class: motor		IP44	IP44	IP44	IP44	IP54
Protection class: terminal box		IP55	IP55	IP55	IP55	IP55
Ecodesign data						
Classification*		NRVU	NRVU	NRVU	NRVU	NRVU
Sound power level	[dB(A)]	71	67	67/65	68	64/62
Nominal flow rate	[m³/s]	0,26	0,36	0,33	0,61	0,46
Nominal external pressure	[Pa]	285	160	170	185	207
Static efficiency of fans used in accordance with Regulation No 327/2011	[%]	32,8	35,2	36,9	38,2	39,0
ErP Compliance		2018	2018	2018	2018	2018

* NRVU - non-residential ventilation unit.

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VSV | VSVI

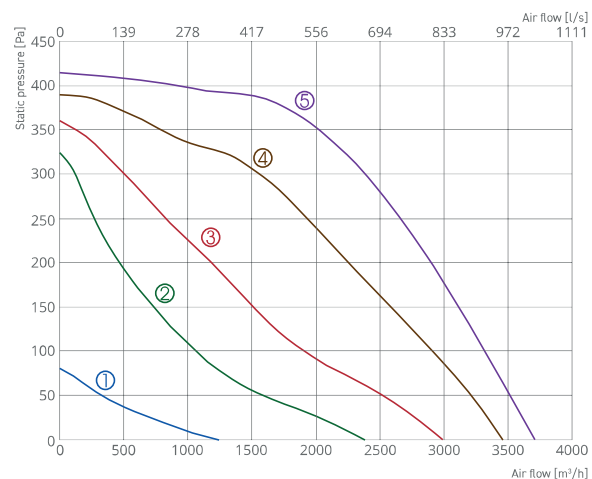
Roof fans with AC-type motor

VSV | VSVI 400-4 L1

1. 80V | 2. 120V | 3. 140V | 4. 171V | 5. 230V

VSV VSVI 400-4 L1	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	72	55	60	63	62	62	58	63
Outlet	74	57	62	66	64	65	70	65

Measured at 3000 m³/h, 170 Pa



VSV | VSVI 400-4 L3

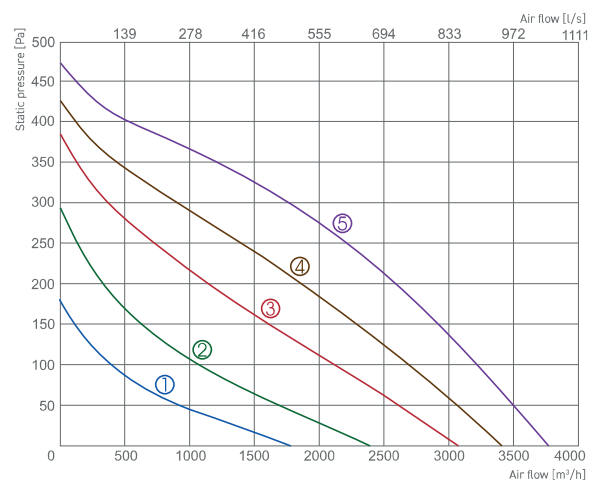
1. 130V | 2. 170V | 3. 220V | 4. 270V | 5. 400V

VSV 400-4 L3	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	70	55	65	66	61	56	59	54
Outlet	70	57	65	63	60	61	61	52

Measured at 3009 m³/h, 145 Pa

VSVI 400-4 L3	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	69	54	65	65	59	56	58	52
Outlet	68	56	63	63	59	60	59	50

Measured at 3009 m³/h, 145 Pa

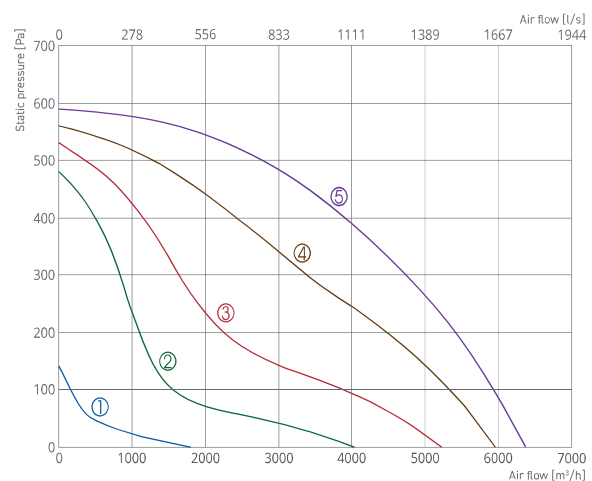


VSV | VSVI 450-4 L1

1. 80V | 2. 120V | 3. 140V | 4. 171V | 5. 230V

VSV VSVI 450-4 L1	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	73	58	61	64	67	69	61	53
Outlet	74	59	62	66	69	70	63	55

Measured at 5400 m³/h, 200 Pa

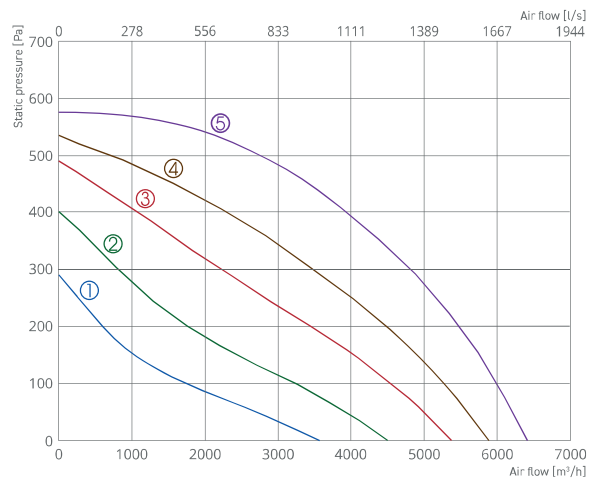


The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VSV | VSVI 450-4 L3

1. 130V | 2. 170V | 3. 220V | 4. 270V | 5. 400V

VSV VSVI 450-4 L3	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	73	58	61	64	67	69	61	53
Outlet	74	60	63	66	69	70	63	55
Measured at 5450 m³/h, 200 Pa								



Fan		400-4 L1	400-4 L3	450-4 L1	450-4 L3
Art.No.	VSV	GVEVSV040	GVEVSV006	GVEVSV041	GVEVSV042
	VSVI	GVEVSVI040	GVEVSVI006	GVEVSVI041	GVEVSVI042
Electrical data					
Phase/Voltage/Frequency	[V/Hz]	~1, 230/50	~3, 400/50	~1, 230/50	~3, 400/50
Max. power consumption	[kW]	0,540	0,436	0,890	0,652
Max. current	[A]	2,30	0,77	3,80	1,10
Capacitor	[µF]	12	-	20	-
Wiring diagram		No.7	No.2	No.6	No.2
Fan speed controller		TGRV 3/MTY-4	TGRT 1	TGRV 5	TGRT 2
Technical data					
Max. airflow	[m³/h]	3700	3770	6360	6410
Fan impeller speed	[min⁻¹]	1398	1320	1449	1353
Weight	[kg]	33/42	32/41	50/62,5	48/61
Ambient temperature limits	[°C]	-40/70	-15/60	-40/50	-40/60
Impeller		Backwards curved	Backwards curved	Backwards curved	Backwards curved
Protection class: motor		IP44	IP54	IP54	IP54
Protection class: terminal box		IP55	IP55	IP55	IP55
Ecodesign data					
Classification*		NRVU	NRVU	NRVU	NRVU
Sound power level	[dB(A)]	73	68/66	80	74
Nominal flow rate	[m³/s]	0,64	0,63	1,35	1,22
Nominal external pressure	[Pa]	314	255	286	352
Static efficiency of fans used in accordance with Regulation No 327/2011	[%]	39,8	37,1	44,9	47,8
ErP Compliance		2018	2018	2018	2018

* NRVU - non-residential ventilation unit.

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VSV | VSVI

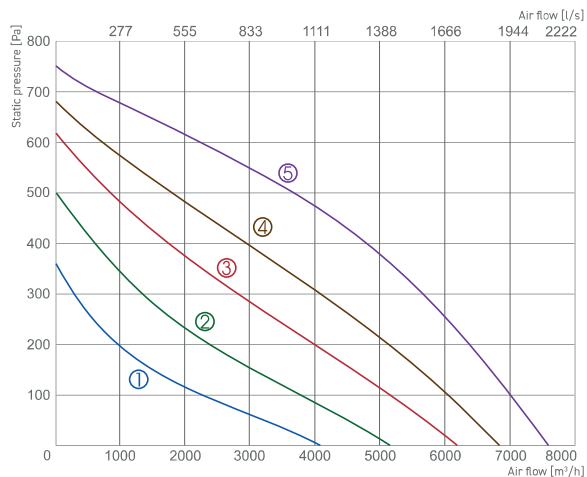
Roof fans with AC-type motor

VSV | VSVI 500-4 L3

1. 130V | 2. 170V | 3. 220V | 4. 270V | 5. 400V

VSV VSVI 500-4 L3	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	74	60	63	66	68	69	63	55
Outlet	76	62	65	68	70	71	65	57

Measured at 6200 m³/h, 250 Pa

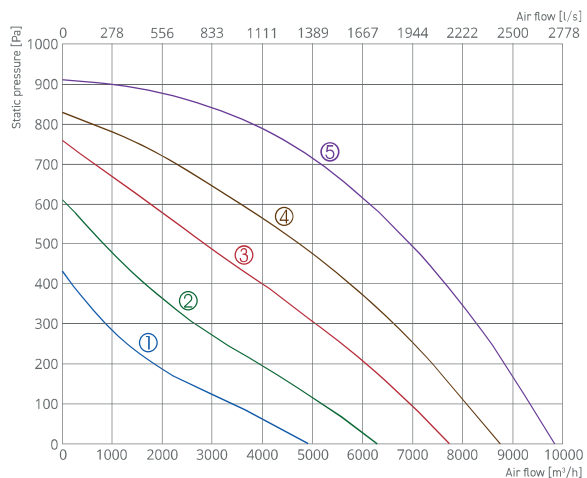


VSV | VSVI 560-4 L3

1. 130V | 2. 170V | 3. 220V | 4. 270V | 5. 400V

VSV VSVI 560-4 L3	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	85	65	71	72	74	83	76	63
Outlet	87	67	73	75	76	85	79	67

Measured at 8600 m³/h, 250 Pa



VSV | VSVI 630-6 L3

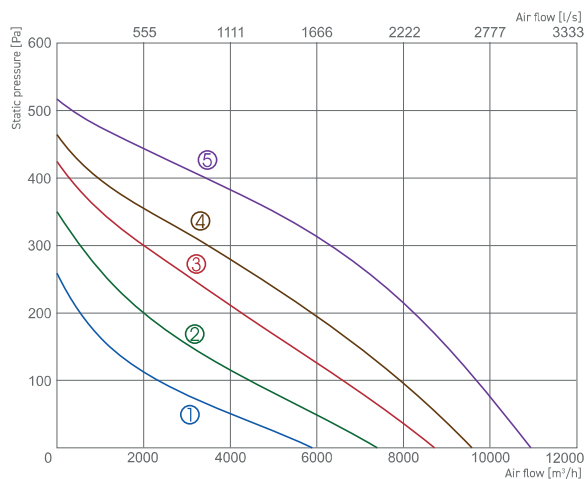
1. 130V | 2. 170V | 3. 220V | 4. 270V | 5. 400V

VSV 630-6 L3	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	73	58	69	68	59	62	58	58
Outlet	73	59	71	63	62	61	61	58

Measured at 8003 m³/h, 201 Pa

VSVI 630-6 L3	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	72	56	68	67	59	60	58	57
Outlet	72	58	69	63	60	60	61	56

Measured at 8003 m³/h, 201 Pa

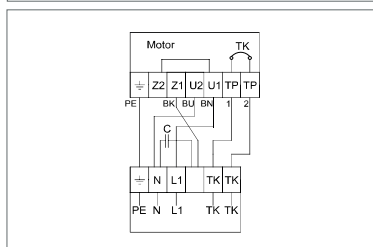
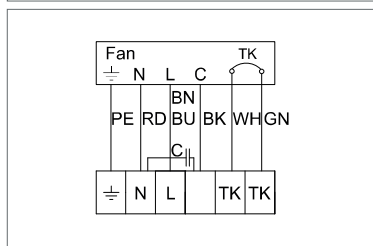
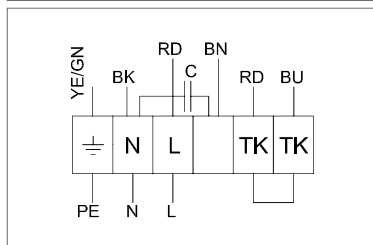
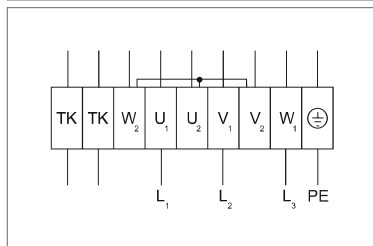
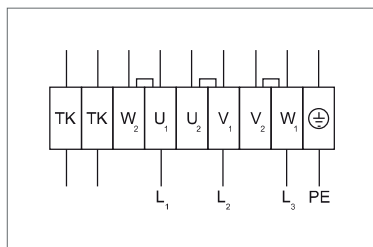


The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

Fan		500-4 L3	560-4 L3	630-6 L3
Art.No.	VSV	GVEVSV043	GVEVSV044	GVEVSV011
	VSVI	GVEVSVI043	GVEVSVI044	GVEVSVI031
Electrical data				
Phase/Voltage/Frequency	[V/Hz]	~3, 400/50	~3, 400/50	~3, 400/50
Max. power consumption	[kW]	1,250	1,470	3,900
Max. current	[A]	2,80	2,40	6,60
Capacitor	[µF]	-	-	-
Wiring diagram		No.2	No.8	No.2
Fan speed controller		TGRT 4	TGRT 5	TGRT11
Technical data				
Max. airflow	[m³/h]	7570	9830	10890
Fan impeller speed	[min⁻¹]	1360	1355	1360
Weight	[kg]	56/65	91/109	109/124
Ambient temperature limits	[°C]	-15/60	-40/50	-15/50
Impeller		Backwards curved	Backwards curved	Backwards curved
Protection class: motor		IP54	IP54	IP54
Protection class: terminal box		IP55	IP55	IP55
Ecodesign data				
Classification*		NRVU	NRVU	NRVU
Sound power level	[dB(A)]	72	80	74
Nominal flow rate	[m³/s]	1,31	1,76	1,76
Nominal external pressure	[Pa]	440	579	308
Static efficiency of fans used in accordance with Regulation No 327/2011	[%]	44,1	47,4	44,1
ErP Compliance		2018	2018	2018

* NRVU - non-residential ventilation unit.

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.



Wiring diagram No. 2 (Δ - 3~230V)

U₁ - brown
V₁ - blue
W₁ - black
U₂ - red
V₂ - grey
W₂ - orange
TK - white
PE - yellow-green

Wiring diagram No. 2 (Y - 3~400V)

U₁ - brown
V₁ - blue
W₁ - black
U₂ - red
V₂ - grey
W₂ - orange
TK - white
PE - yellow-green

Wiring diagram No. 5

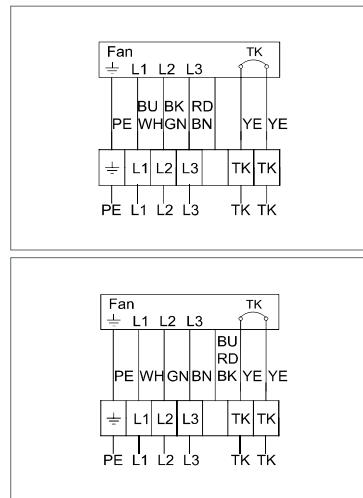
⏏ - protective earth
PE, L1, N - line voltage 230V
C - capacitor
TK - jumper

Wiring diagram No. 6

PE - green-yellow
RD - red
BN - brown
BU - blue
BK - black
WH - white
GN - green

Wiring diagram No. 7

PE - green-yellow
BN - brown
BU - blue
BK - black



The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.