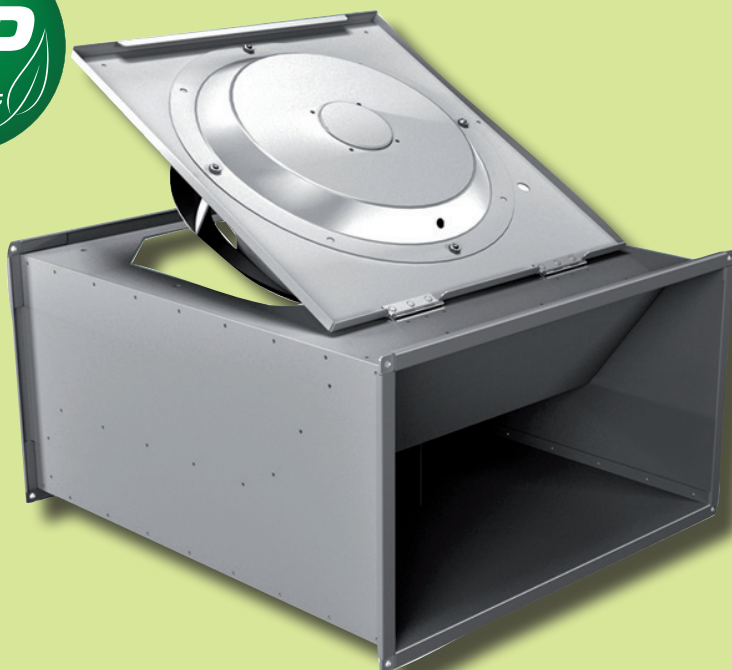


Rectangular Duct Fans - KATANA and KATANA Plus



Features

- Sizes from 400x200 and 1000x500 mm diameter
- Air flow 11,160 m³/h (3.1 m³/s)
- Static pressures up to 920 Pa
- Maximum temperature up to 70°C
- Controllable external rotor motors
- Horizontal or vertical mounting

Electrical Supply

220 - 240V / 50Hz / 1 Ph
380 - 420V / 50Hz / 3 Ph

Sizes

225, 250, 280, 315, 355, 400, 450, 500 and 560.

Features and Construction

The Katana is a centrifugal in-line duct fan which can be mounted in any position. Constructed from galvanized sheet metal. The flange is drilled to allow for ease of installation for mounting in any position.

Katana Plus - Insulated option available please add (A) to selection.

Impeller

Aluminum backward curved centrifugal impeller.

Motor

External rotor motor directly coupled class F, IP54 except model 200 which is IP44. Motor-impeller dynamically balanced according to ISO 1940.

Can be linked star / delta for operation at low / high speed.

Speed Controllers

Controllable using auto-transformers (please see page 99).

Accessories

The range of accessories include flexible connectors, silencers, filters, flanges, shutters and dampers (please see pages 86-88).

Product Code

Katana 225-2-1(A)

- Katana = Product Name
- 225 = Impeller diameter size
- 2 = 2 pole or 4 pole
- 1 = 1 phase or 3 phase
- (A) = Acoustically lined version, Katana Plus only

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Tel: 011/3836886, 3085740
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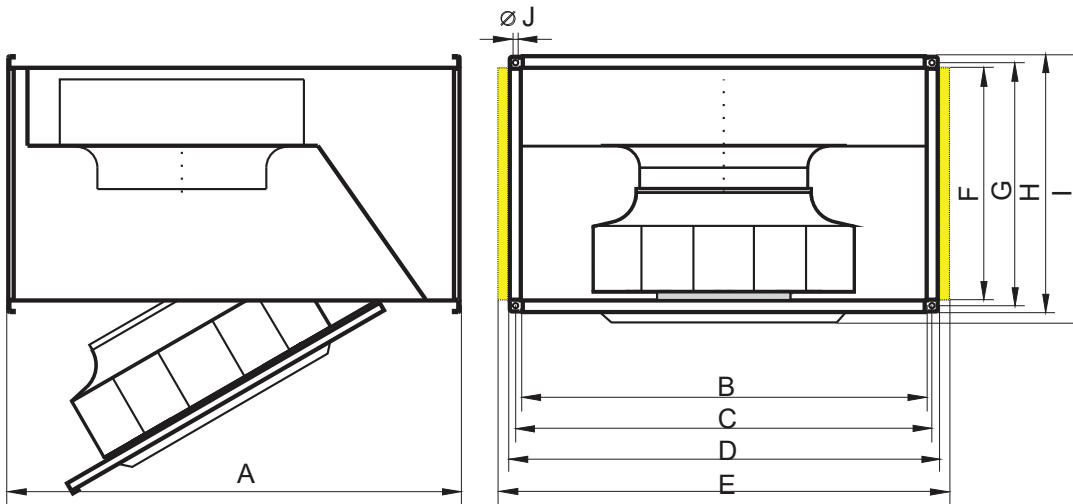


Electrical Details and Sound Levels

Product Code	Product Number	Speed rpm	Motor Frame	Electrical Supply	Electrical Current			Wiring Diagrams	Maximum Operating Temp °C	ErP Compliant		Inlet	** Speed Controllers
					Motor (kW)	Full Load Current (A)	Starting Current (A)			Pass	FMEG (36=Pass)		
KATANA 225-2-1 (A)	RS225201	2640	Integral	220-240v/50Hz/1ph	0.12	0.52	0.94	01.009	50	Yes	Ex	54	✓
KATANA 250-2-1 (A)	RS250201	2410	Integral	220-240v/50Hz/1ph	0.24	1.04	1.66	01.009	45	Yes	Ex	56	✓
KATANA 280-2-1 (A)	RS280201	2580	Integral	220-240v/50Hz/1ph	0.73	3.2	6.72	01.024	60	Yes	Ex	66	✓
KATANA 280-2-3 (A)	RS280203	2440	Integral	380-420v/50Hz/3ph	0.62	1	2.5	01.006	65	Yes	Ex	65	✓
KATANA 315-4-1 (A)	RS315401	1325	Integral	220-240v/50Hz/1ph	0.165	0.73	1.39	01.024	50	Yes	Ex	49	✓
KATANA 315-4-3 (A)	RS315403	1340	Integral	380-420v/50Hz/3ph	0.15	0.33	0.92	01.006	70	Yes	Ex	49	✓
KATANA 355-4-1 (A)	RS355401	1300	Integral	220-240v/50Hz/1ph	0.32	1.45	2.9	01.024	40	Yes	Ex	54	✓
KATANA 355-4-3 (A)	RS355403	1300	Integral	380-420v/50Hz/3ph	0.29	0.55	1.54	01.006	60	Yes	Ex	54	✓
KATANA 400-4-1 (A)	RS400401	1370	Integral	220-240v/50Hz/1ph	0.54	2.6	6.5	01.024	45	Yes	Ex	56	✓
KATANA 400-4-3 (A)	RS400403	1310	Integral	380-420v/50Hz/3ph	0.49	0.9	2.88	01.006	40	Yes	Ex	56	✓
KATANA 450-4-1 (A)	RS450401	1265	Integral	220-240v/50Hz/1ph	0.71	3.25	6.5	01.024	50	Yes	Ex	58	✓
KATANA 450-4-3 (A)	RS450403	1355	Integral	380-420v/50Hz/3ph	0.78	1.55	3.87	01.006	55	Yes	Ex	58	✓
KATANA 500-4-1 (A)	RS500401	1300	Integral	220-240v/50Hz/1ph	1.62	7.3	16.06	01.024	40	Yes	Ex	66	✓
KATANA 500-4-3 (A)	RS500403	1390	Integral	380-420v/50Hz/3ph	1.7	3.5	15.05	01.006	55	Yes	Ex	66	✓
KATANA 560-4-3 (A)	RS560403	1340	Integral	380-420v/50Hz/3ph	2.4	4.5	18.9	01.006	45	Yes	Ex	67	✓

*Sound power levels are average dBA at 3 metres distance over sphere, under free field conditions and are presented for comparative purposes only. Values taken at the mid point on the wave at the highest point. **For speed controllers, please see page 99.

Drawings and Dimensions

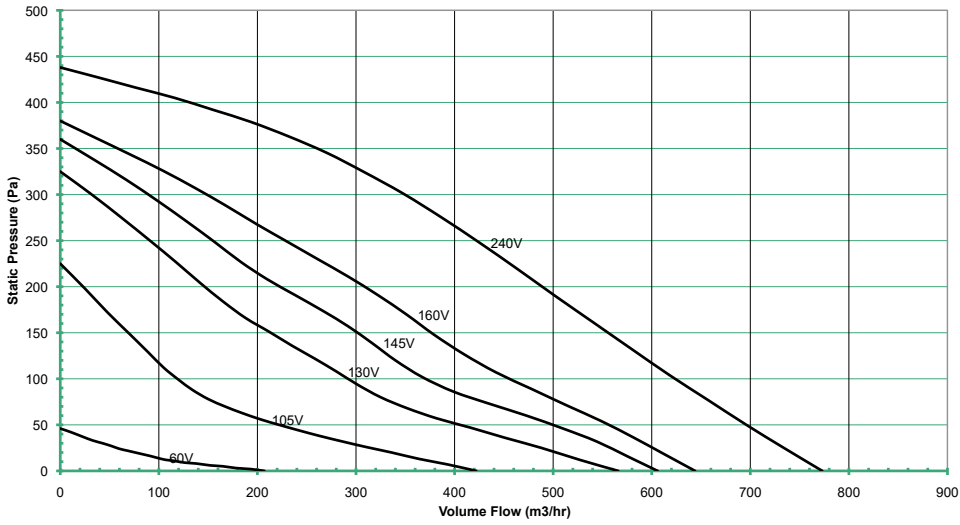


Product Code	A	B	c	D	E (optional)	F	G	H	I	J	Weight Max (kg)
KATANA 225-2-1 (A)	445	400	420	440	-	200	220	240	242	9	12.5
KATANA 250-2-1 (A)	445	400	420	440	-	200	220	240	242	9	14
KATANA 280-2-1 (A)	530	500	520	540	580	250	270	290	292	9	26.5
KATANA 280-2-3 (A)	530	500	520	540	580	250	270	290	292	9	24.5
KATANA 315-4-1 (A)	530	500	520	540	580	250	270	290	292	9	23
KATANA 315-4-3 (A)	530	500	520	540	580	250	270	290	292	9	23
KATANA 355-4-1 (A)	700	600	620	640	680	350	370	390	410	9	35
KATANA 355-4-3 (A)	700	600	620	640	680	350	370	390	410	9	34
KATANA 400-4-1 (A)	700	600	620	640	680	350	370	390	415	9	38
KATANA 400-4-3 (A)	700	600	620	640	680	350	370	390	415	9	36
KATANA 450-4-1 (A)	780	700	720	740	780	400	420	440	460	9	50
KATANA 450-4-3 (A)	780	700	720	740	780	400	420	440	460	9	50
KATANA 500-4-1 (A)	880	800	820	840	880	500	520	540	574	9	72
KATANA 500-4-3 (A)	880	800	820	840	880	500	520	540	574	9	72
KATANA 560-4-3 (A)	982	1000	1020	1040	1080	500	520	540	573	9	96

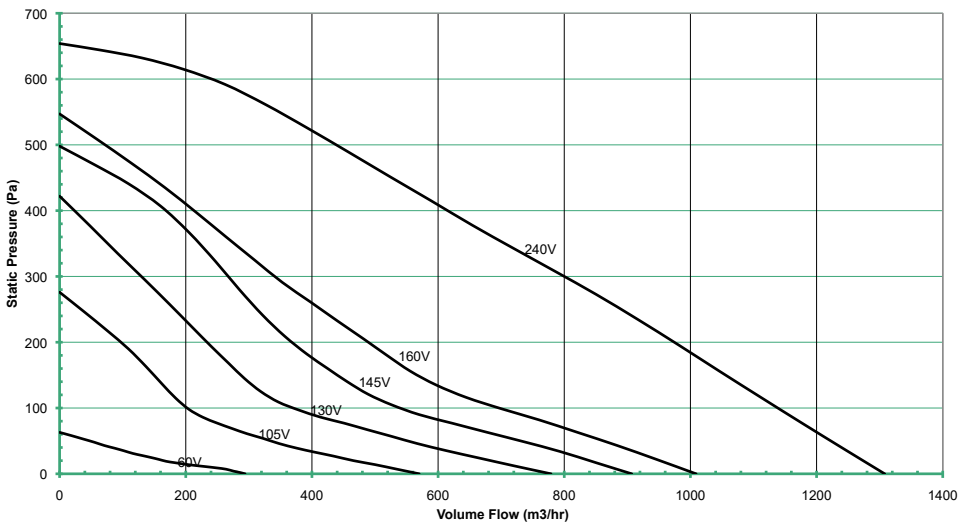
*E is only available on the Katana Plus (Insulated option)
All dimensions shown in mm

Performance Data

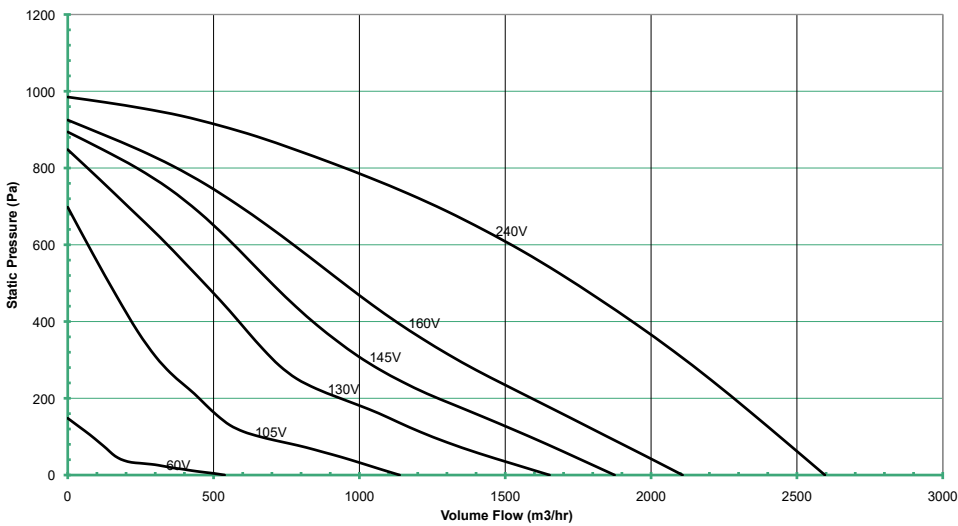
KATANA 225-2-1(A)



KATANA 250-2-1(A)

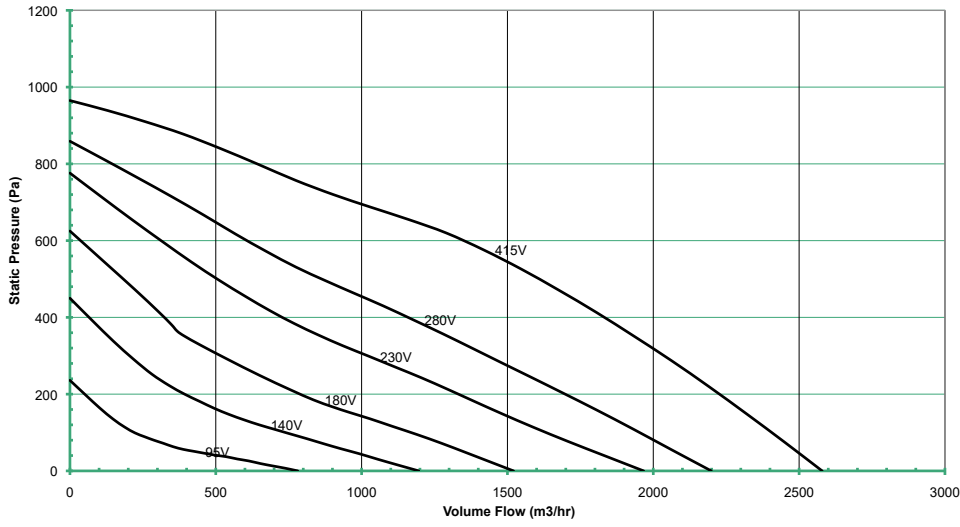


KATANA 280-2-1(A)

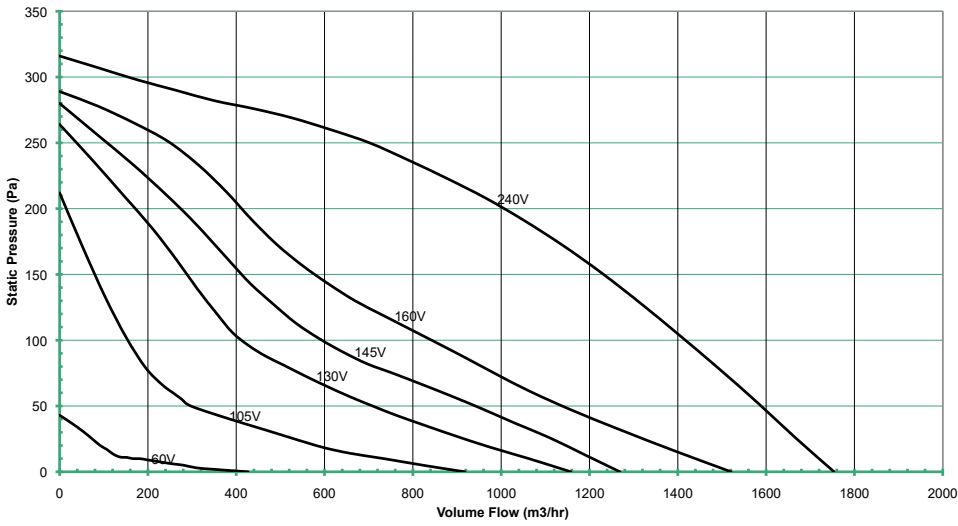


Performance Data

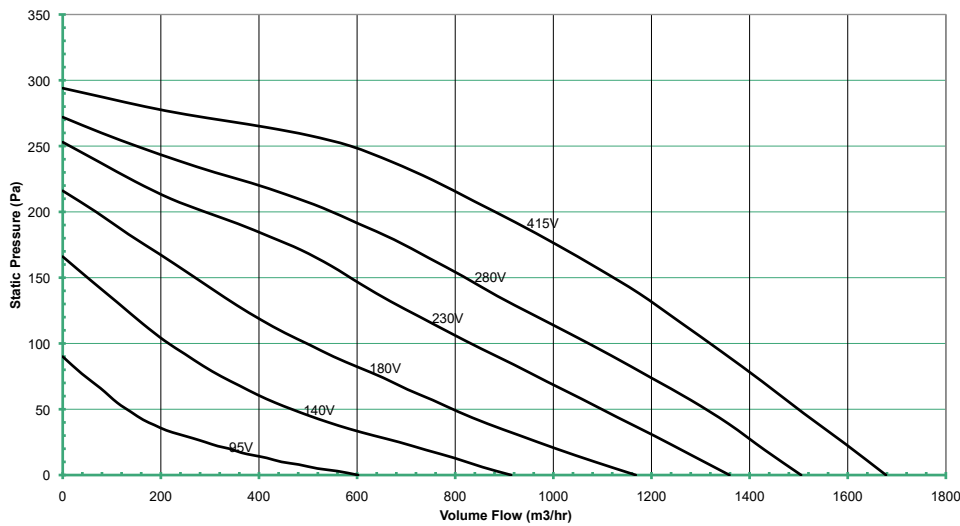
KATANA 280-2-3 (A)



KATANA 315-4-1(A)

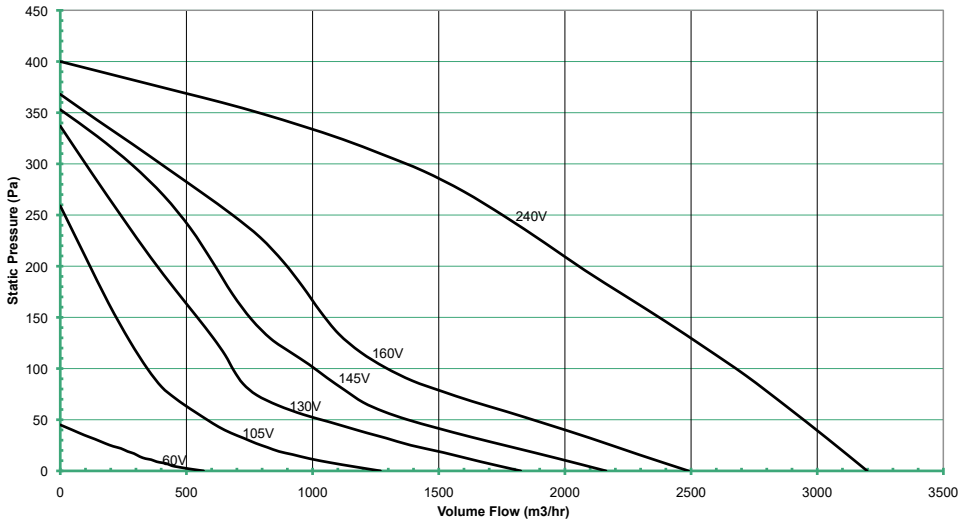


KATANA 315-4-3 (A)

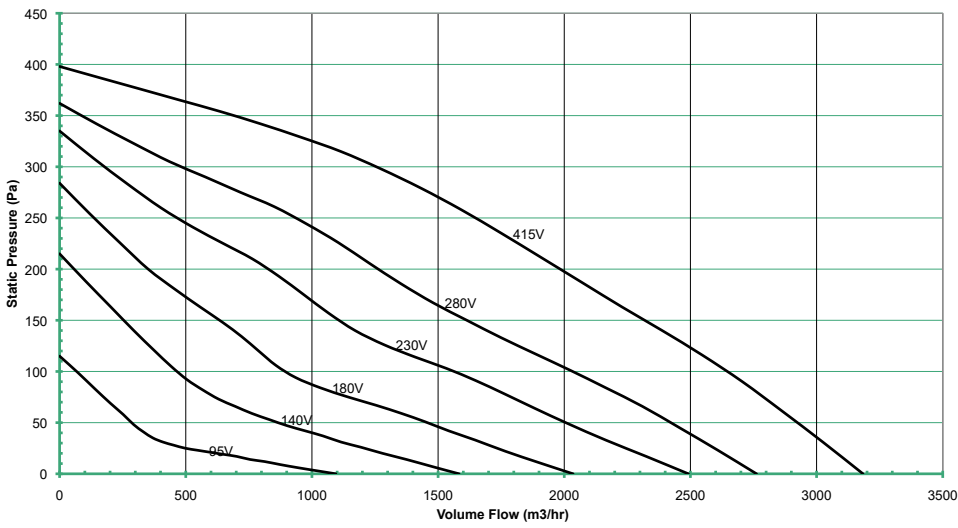


Performance Data

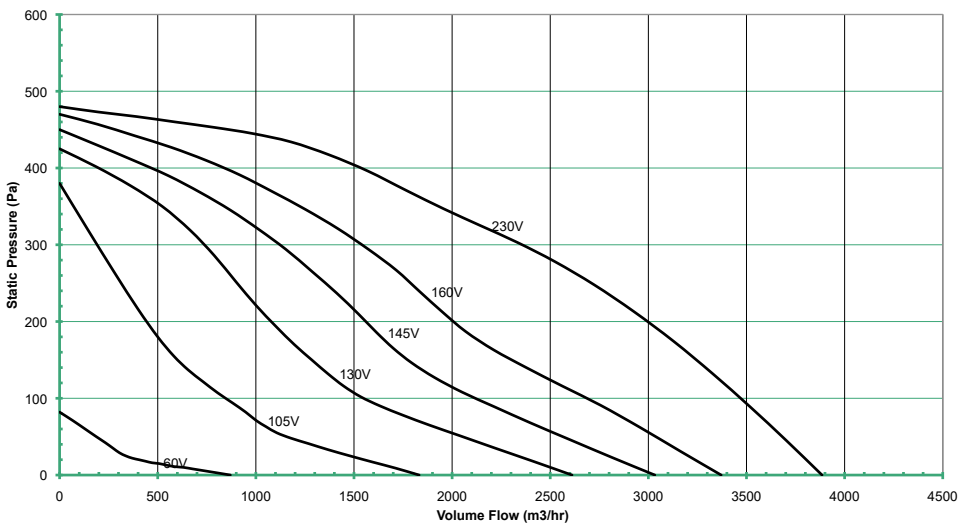
KATANA 355-4-1(A)



KATANA 355-4-3 (A)

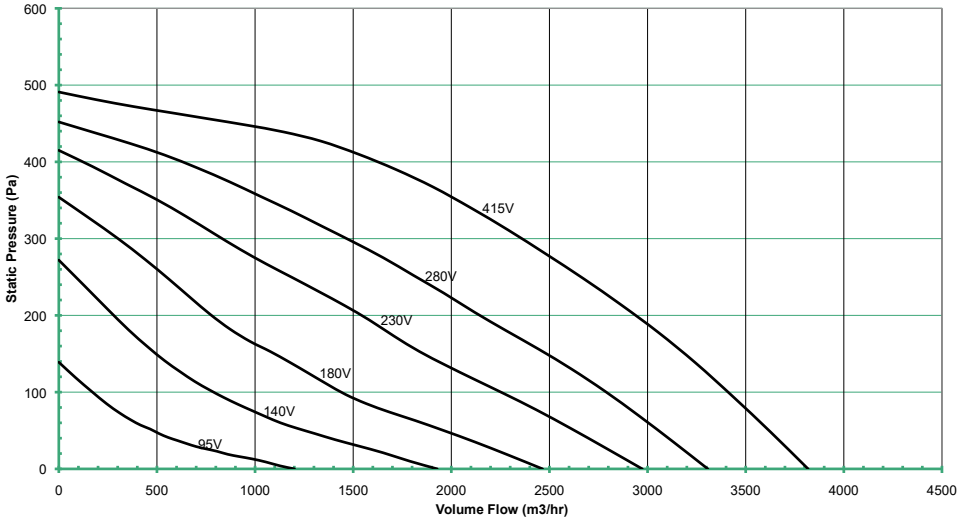


KATANA 400-4-1(A)

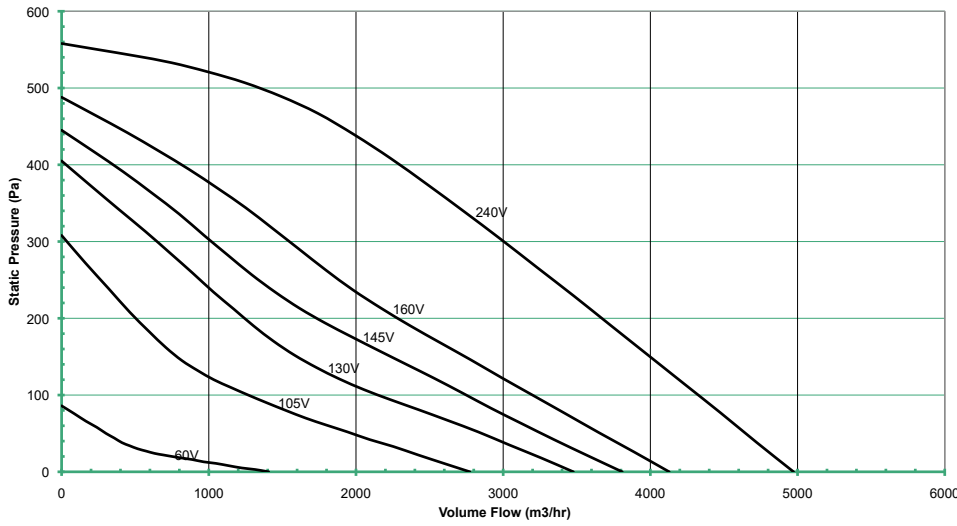


Performance Data

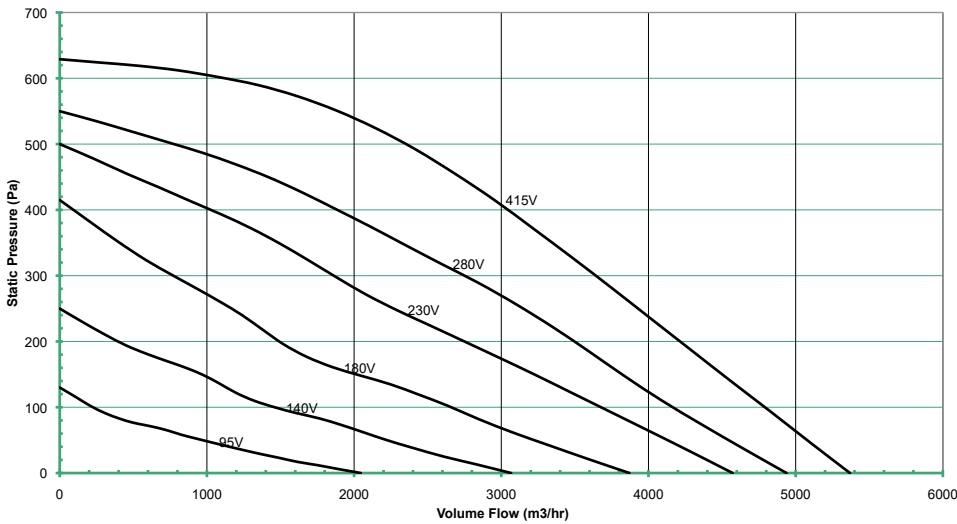
KATANA 400-4-3 (A)



KATANA 450-4-1(A)

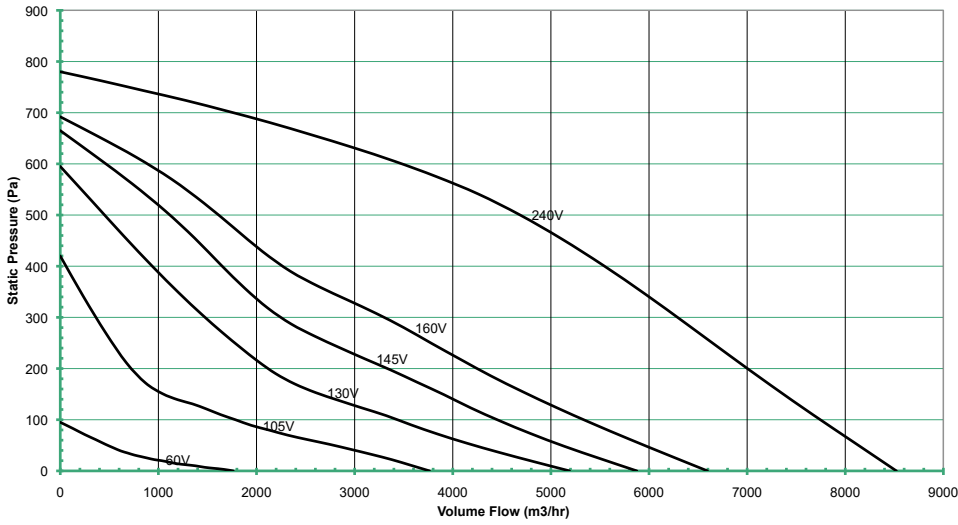


KATANA 450-4-3 (A)

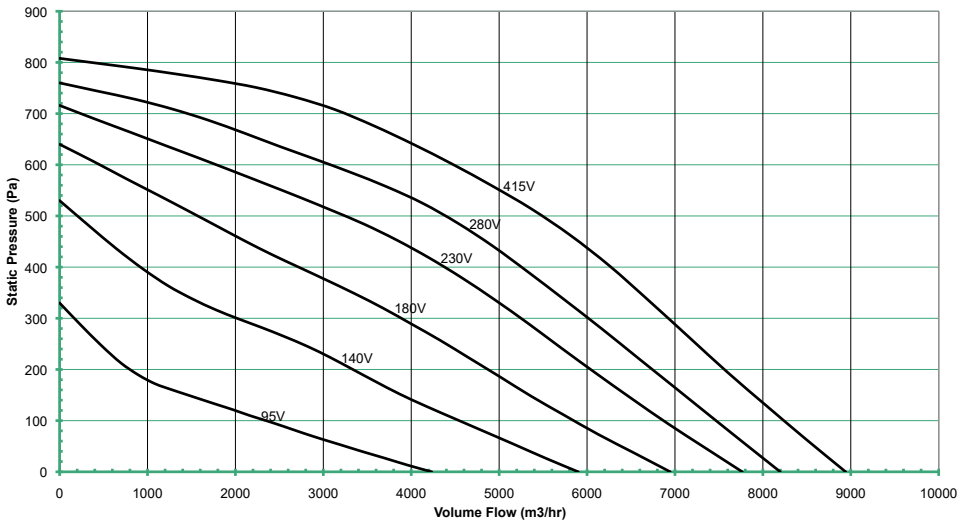


Performance Data

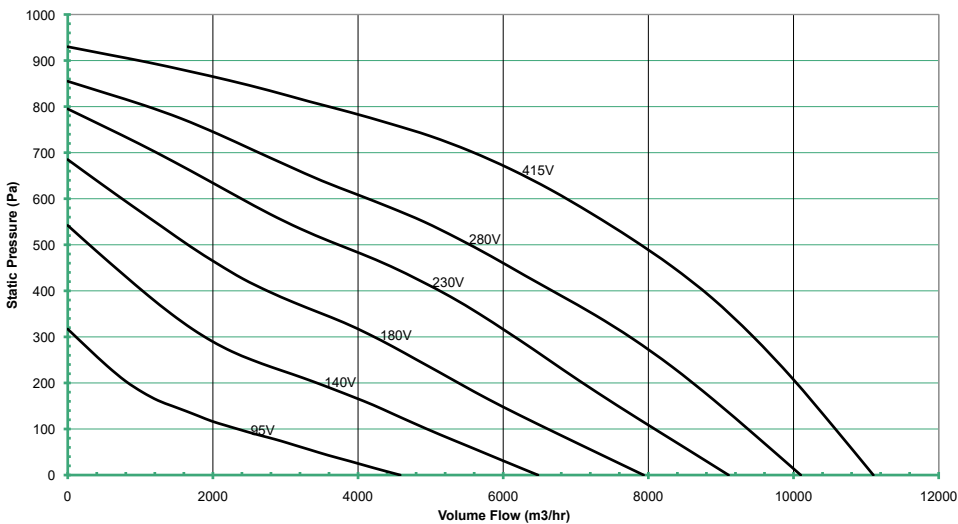
KATANA 500-4-1(A)



KATANA 500-4-3 (A)

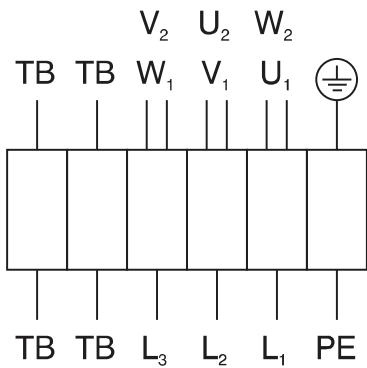


KATANA 560-4-3 (A)



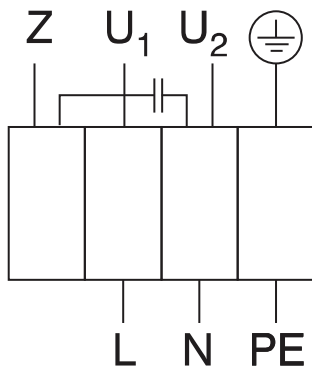
Wiring Diagrams

01.006



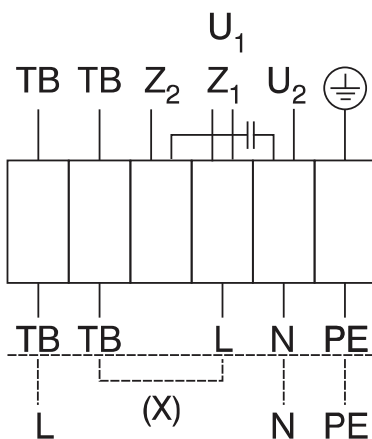
- U₁ brown
- V₁ blue
- W₁ black
- U₂ red
- V₂ grey
- W₂ orange
- TB white
- PE yellow-green

01.009



- U₁ blue
- U₂ black
- Z brown
- PE yellow-green

01.024



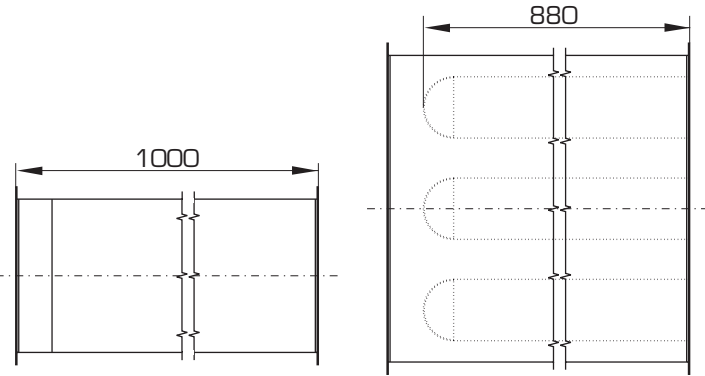
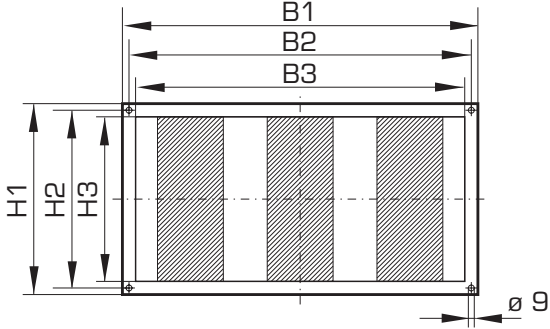
- U₁ brown
- U₂ blue
- Z₁ black
- Z₂ orange
- TB white
- PE yellow-green

clockwise

Accessories

RSA - Duct Sound Attenuator

Duct sound attenuator with frame made of galvanized sheet steel. Sound trap with incombustible mineral wool according to DIN 4102 class A, Ex version with perforated steel. This guarantees a high sound insulation and due to aerodynamic optimized guide plates lower pressure losses. Max. air speed 20 m/s, max. temperature 100°C, max. pressure from -800 to 1000 Pa.



Duct size in cm	Product Number	B1	B2	B3	H1	H2	H3	Number of sound traps
40/20	enq	440	420	400	240	220	200	2
50/25	enq	540	520	500	290	270	250	3
50/30	enq	540	520	500	340	320	300	3
60/30	enq	640	620	600	340	320	300	3
60/35	enq	640	620	600	390	370	350	3
70/40	enq	740	720	700	440	420	400	3
80/50	enq	840	820	800	540	520	500	3
100/50	enq	1040	1020	1000	540	520	500	4

Duct size in cm	Attenuation values in dB								Average sound absorbing rate
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz		
40/20	7	12	23	30	32	28	20	19 dB(A)	
50/25	6	10	23	29	31	27	21	15 dB(A)	
50/30	6	11	23	30	31	27	20	17 dB(A)	
60/30	7	10	23	30	32	23	20	15 dB(A)	
60/35	8	10	24	32	33	18	18	14 dB(A)	
70/40	5	8	17	23	26	17	17	12 dB(A)	
80/50	5	8	19	27	27	15	15	13 dB(A)	
100/50	4	10	12	18	19	12	12	11 dB(A)	

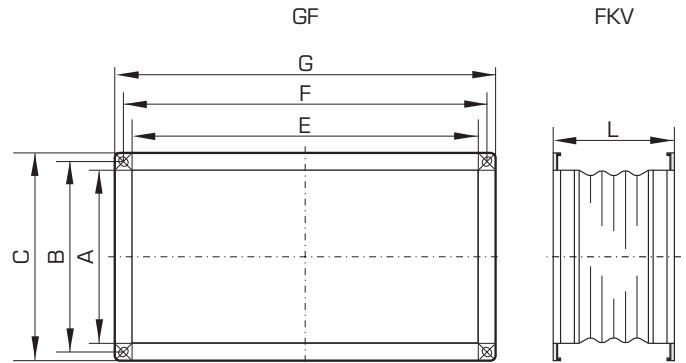
RFC - Flexible Duct Connection

Flexible duct connection with flange frame made of galvanized sheet steel. Flexible middle section made from PVC woven cloth with a temperature range of up to +70°C. Electroconductive and therefore also suitable for explosion proof fans.



RCF - Flange

Harmonized flange made of galvanized sheet steel for temperatures of up to +120°C, suited for Ex-applications.



Product Size	Product Code RCF	Product Code RFC	A	B	C	E	F	G	L min
200	B1100363	B1100373	200	220	240	400	420	440	140
225	B1100364	B1100374	250	270	290	500	520	540	140
250	B1100365	B1100375	300	320	340	500	520	540	140
280	B1100366	B1100376	300	320	340	600	620	640	140
315	B1100367	B1100377	350	370	390	600	620	640	140
355	B1100368	B1100378	400	420	440	700	720	740	140
400	B1100369	B1100379	500	520	540	800	820	840	140
450	B1100370	B1100380	500	520	540	900	920	940	140
500	B1100371	B1100381	550	570	590	900	920	940	140
560	B1100372	B1100382	500	520	540	1000	1020	1040	140

All dimensions shown in mm