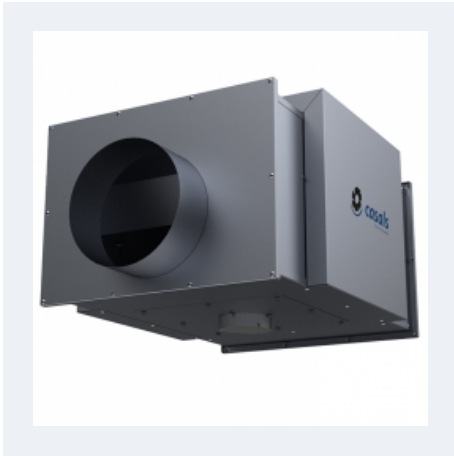


SBC-3 PLUS EEC



CENTRIFUGAL FAN IN SOUNDPROOF LOW PROFILE BOX WITH CIRCULAR FLANGES, WITH EXTERNAL ROTOR EC MOTOR

MANUFACTURING FEATURES

Inline ventilation box made of galvanized steel with circular connection flanges. 40mm thick rock wool insulation.

Self-cleaning impeller with back curved (backward) blades of high performance and single inlet, direct driven. Dynamically balanced to minimize noise and vibration. Polyamide reinforced impeller for models 125, 150 and 160 and aluminum plate for the rest.

High efficiency, low noise external rotor EC motor. Speed control through a 0-10V or PWM signal. Single-phase 230V 50/60Hz power supply for models 125 to 355 and three-phase 400V 50/60Hz for sizes 400 to 560. IP44 motor and class B insulation.

APPLICATIONS

Designed for duct installation, they are indicated for:

- Air renovations in bathrooms and small rooms.
- Perfect for false ceiling installation.

Working temperature range from -20°C to 60°C

Accessories



INT



PMR



REGC



TEJ
SB-3

Technical data

Single-phase motor

Code	Model	R.P.M.	Rated I. A 230V	Rated power kW	Max. Airflow m ³ /h	Sound db (A)**	Weight kg	Connect. diagram
SBCP3125EC	SBC-3 PLUS 125 EEC	3950	0,25	0,06	340	-	9	1
SBCP3150EC	SBC-3 PLUS 150 EEC	3570	0,73	0,10	550	-	13,50	1
SBCP3160EC	SBC-3 PLUS 160 EEC	3570	0,73	0,10	605	-	13,50	1
SBCP3200EC	SBC-3 PLUS 200 EEC	2500	1,00	0,15	1.120	-	20	1
SBCP3250EC	SBC-3 PLUS 250 EEC	2500	1,00	0,15	1.410	-	20	1
SBCP3315EC	SBC-3 PLUS 315 EEC	2500	1,00	0,15	1.600	-	20	1
SBCP3355EC	SBC-3 PLUS 355 EEC	2350	1,7	0,36	2.820	-	30,50	2

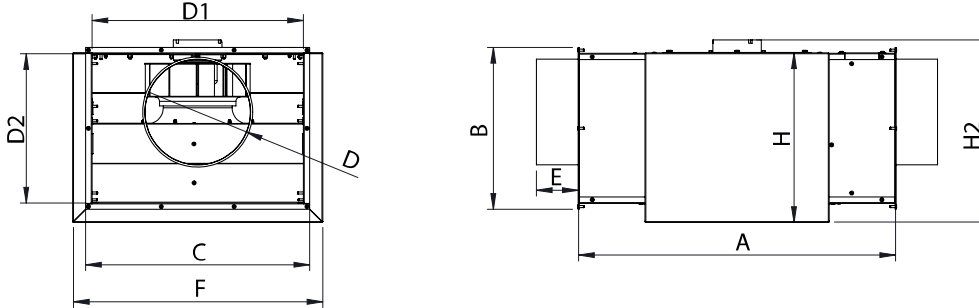
Three-phase motor

Code	Model	R.P.M.	Rated I. A 400V	Rated power kW	Max. Airflow m ³ /h	Sound db (A)**	Weight kg	Connect. diagram
SBCP3400EC	SBC-3 PLUS 400 EEC	2100	1,63	0,99	4.150	-	52	3
SBCP3450EC	SBC-3 PLUS 450 EEC	2100	1,63	0,99	5.000	-	52	3
SBCP3500EC	SBC-3 PLUS 500 EEC	1450	1,67	1,01	5.840	-	72	3
SBCP3560EC	SBC-3 PLUS 560 EEC	1450	1,67	1,01	6.210	-	72	3

Notes:

** Total sound pressure level at the point of maximum flow measured in dB(A) in the suction measured in free field at a distance of 6m from the source

Dimensions





Model	A	B	C	D	D1	D2	E	F	H
SBC-3 PLUS 125 EEC	522	184	334	125	300	150	98	392	199
SBC-3 PLUS 150 EEC	622	234	434	150	400	200	98	492	249
SBC-3 PLUS 160 EEC	622	234	434	160	400	200	98	492	249
SBC-3 PLUS 200 EEC	752	387	534	200	500	353	98	592	402
SBC-3 PLUS 250 EEC	752	387	534	250	500	353	98	592	402
SBC-3 PLUS 315 EEC	752	387	534	315	500	353	98	592	402
SBC-3 PLUS 355 EEC	902	434	634	355	600	400	98	693	450
SBC-3 PLUS 400 EEC	1052	534	734	400	700	500	98	793	550
SBC-3 PLUS 450 EEC	1052	534	734	450	700	500	98	793	550
SBC-3 PLUS 500 EEC	1352	635	834	500	800	601	98	893	651
SBC-3 PLUS 560 EEC	1352	635	834	560	800	601	98	893	651

Model	H2
SBC-3 PLUS 125 EEC	225
SBC-3 PLUS 150 EEC	274.5
SBC-3 PLUS 160 EEC	274.5
SBC-3 PLUS 200 EEC	431
SBC-3 PLUS 250 EEC	431
SBC-3 PLUS 315 EEC	431
SBC-3 PLUS 355 EEC	491
SBC-3 PLUS 400 EEC	605
SBC-3 PLUS 450 EEC	605
SBC-3 PLUS 500 EEC	706
SBC-3 PLUS 560 EEC	706


Wiring diagram


Wiring diagram N° 1

Nº	Signal Señal	Colour Color	Specification Especificación
1	L	Brown Marrón	AC 220V/50Hz
2	N	Blue Azul	AC 220V/50Hz
3	Pe	Yellow-Green Amarillo-Verde	


Nº	Signal Señal	Colour Color	Specification Especificación
1	GND	Blue Azul	
2	Vsp	Yellow Amarillo	0-10 V/PWM
3	Vcc	Red Rojo	DC 10V
4	FG	White Blanco	1 Pulse/R


Wiring diagram N° 2

Nº	Signal Señal	Colour Color	Specification Especificación
1	L	Brown Marrón	AC 220V-50/60 Hz
2	N	Blue Azul	AC 220V-50/60 Hz
3	Pe	Yellow-Green Amarillo-Verde	

Nº	Signal Señal	Colour Color	Specification Especificación
1	GND	Blue Azul	
2	Vsp	Yellow Amarillo	0-10 V/PWM
3	Vcc	Red Rojo	DC 10V
4	FG	White Blanco	12 Pulse/R

Wiring diagram Nº 3

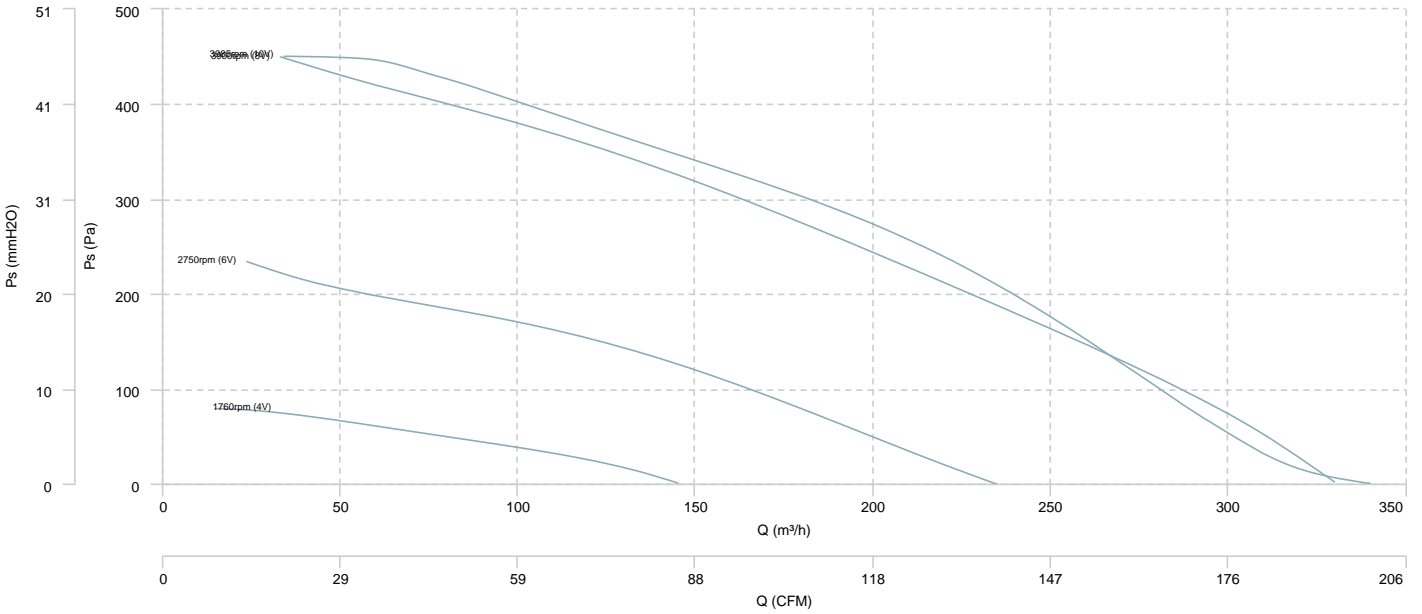
Nº	Signal Señal	Colour Color	Specification Especificación
1	L1	Black Negro	AC380V-50/60Hz
2	L2	Black Negro	AC380V-50/60Hz
3	L3	Black Negro	AC380V-50/60Hz
4	Pe	Yellow-Green Amarillo-Verde	

Nº	Signal Señal	Colour Color	Specification Especificación
1	Vcc	Red Rojo	DC10V
2	Vsp	Yellow Amarillo	0-10VDC/PWM
3	GND	Blue Azul	
4	FG	White Blanco	12 Pulse/R

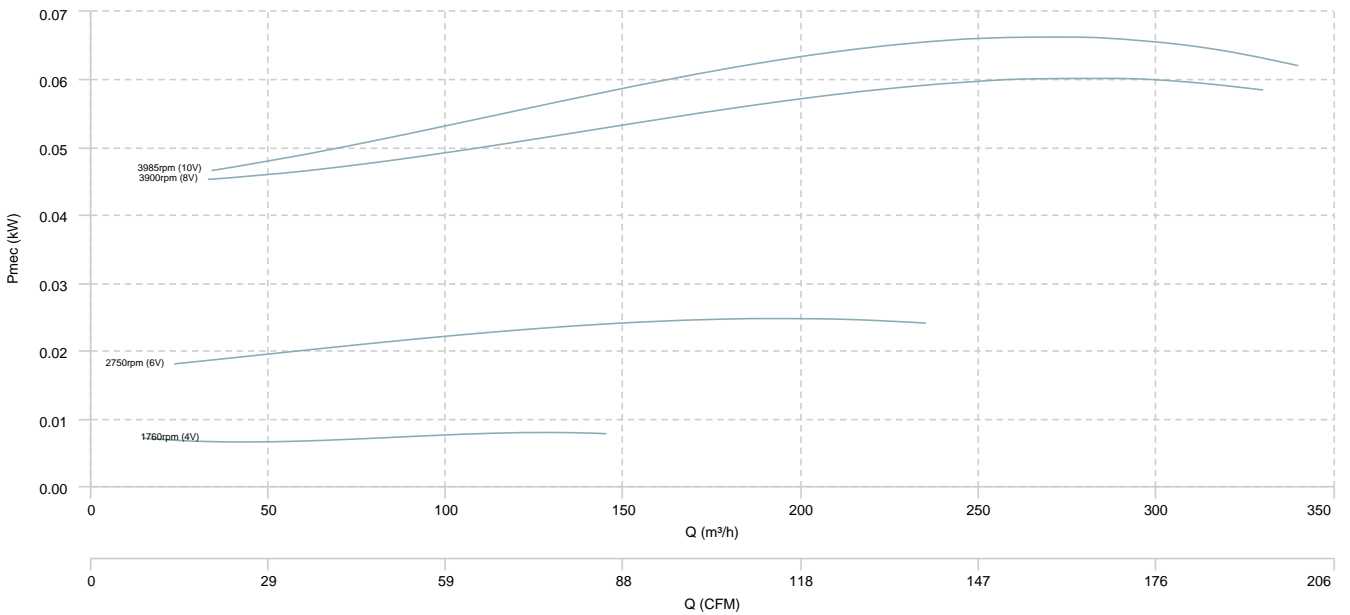
CHARACTERISCTIC CURVE

SBC-3 PLUS 125 EEC

AIR FLOW - PRESSURE

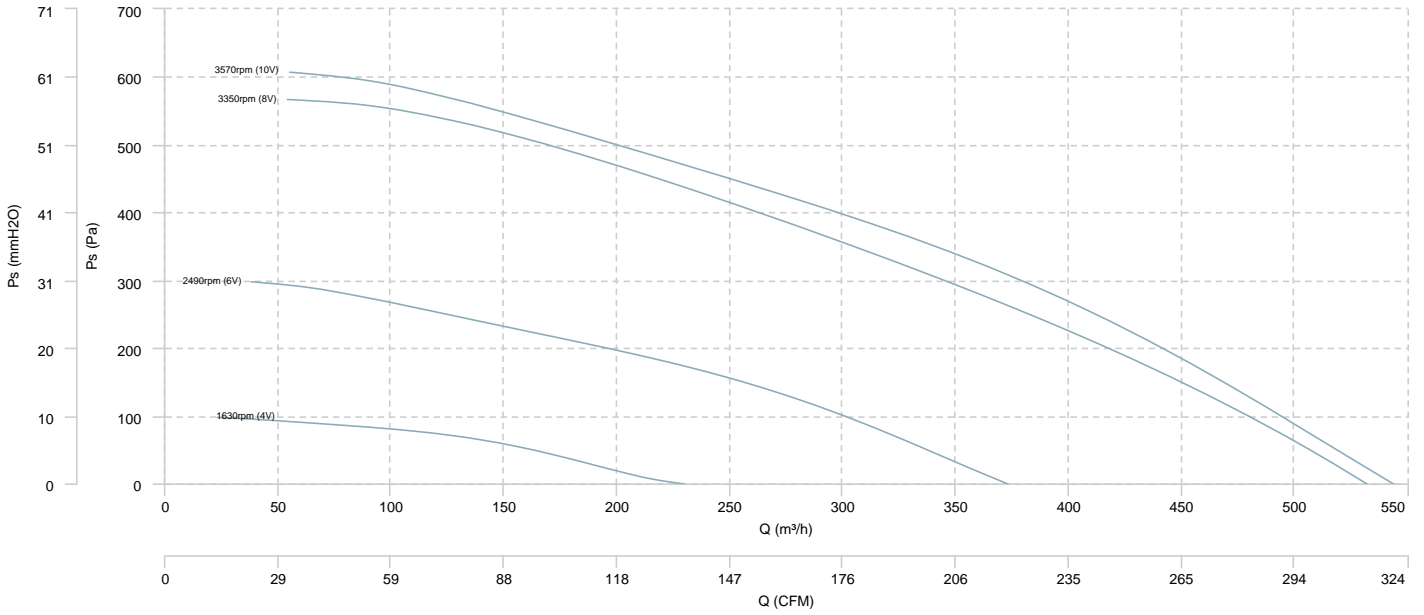


AIR FLOW - MECHANICAL POWER

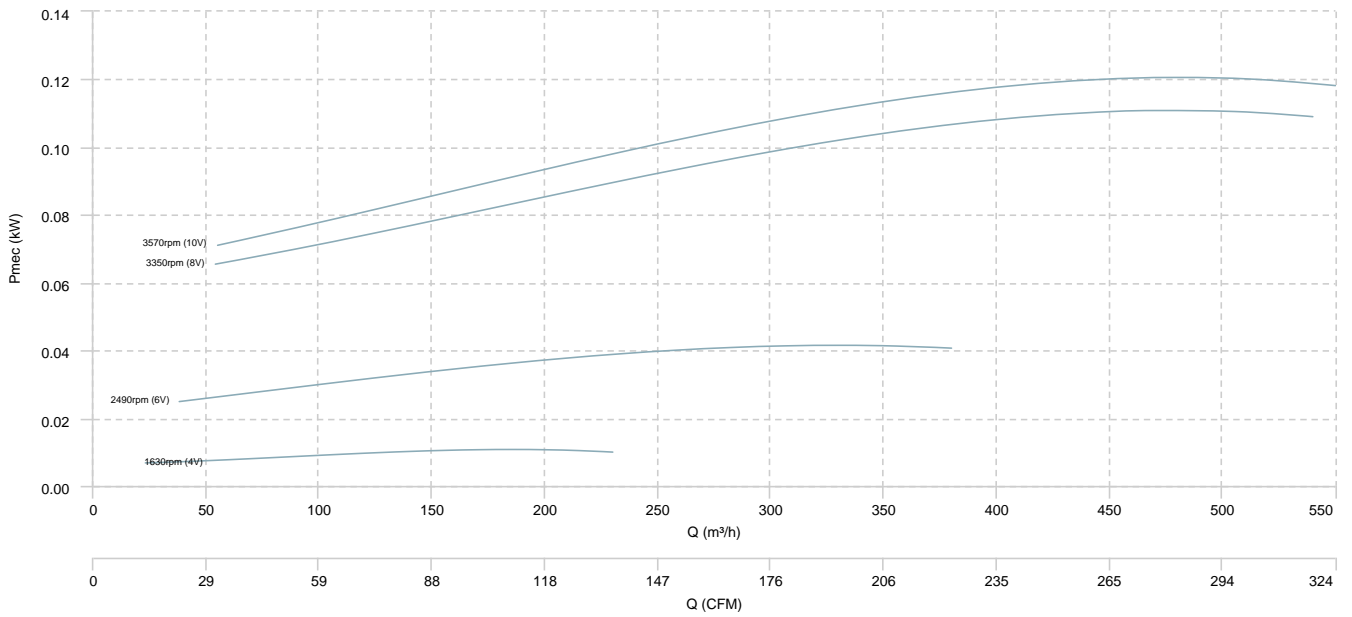


SBC-3 PLUS 150 EEC

AIR FLOW - PRESSURE

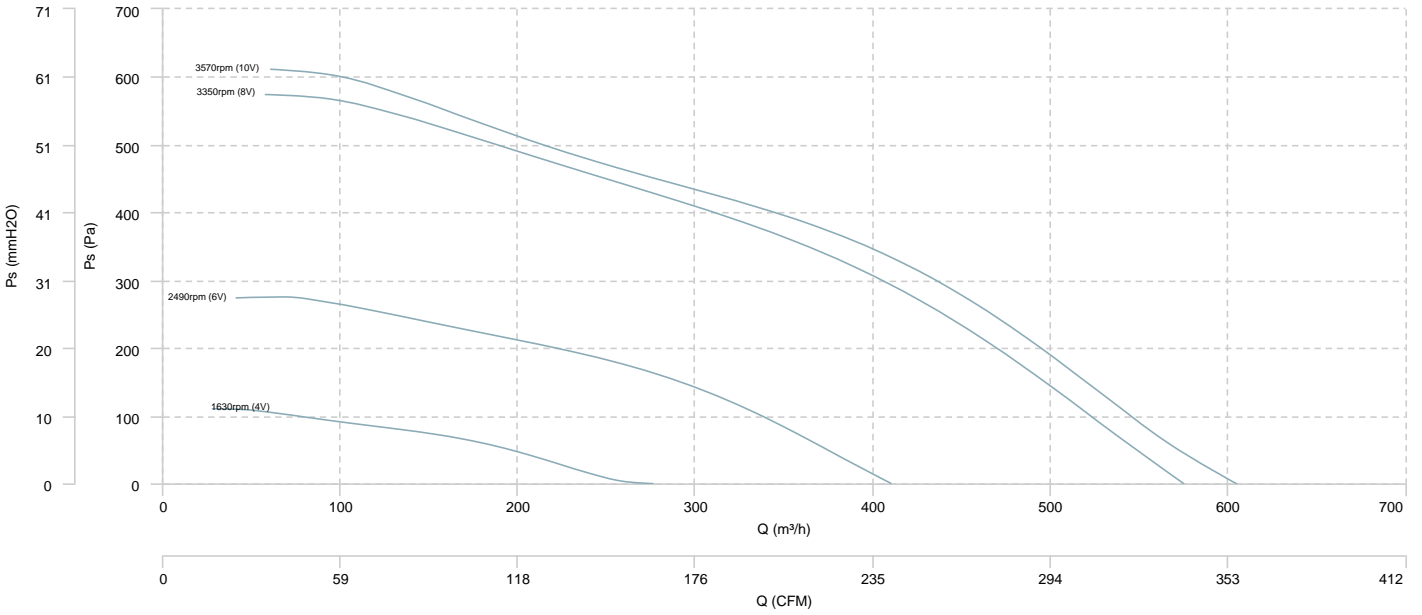


AIR FLOW - MECHANICAL POWER

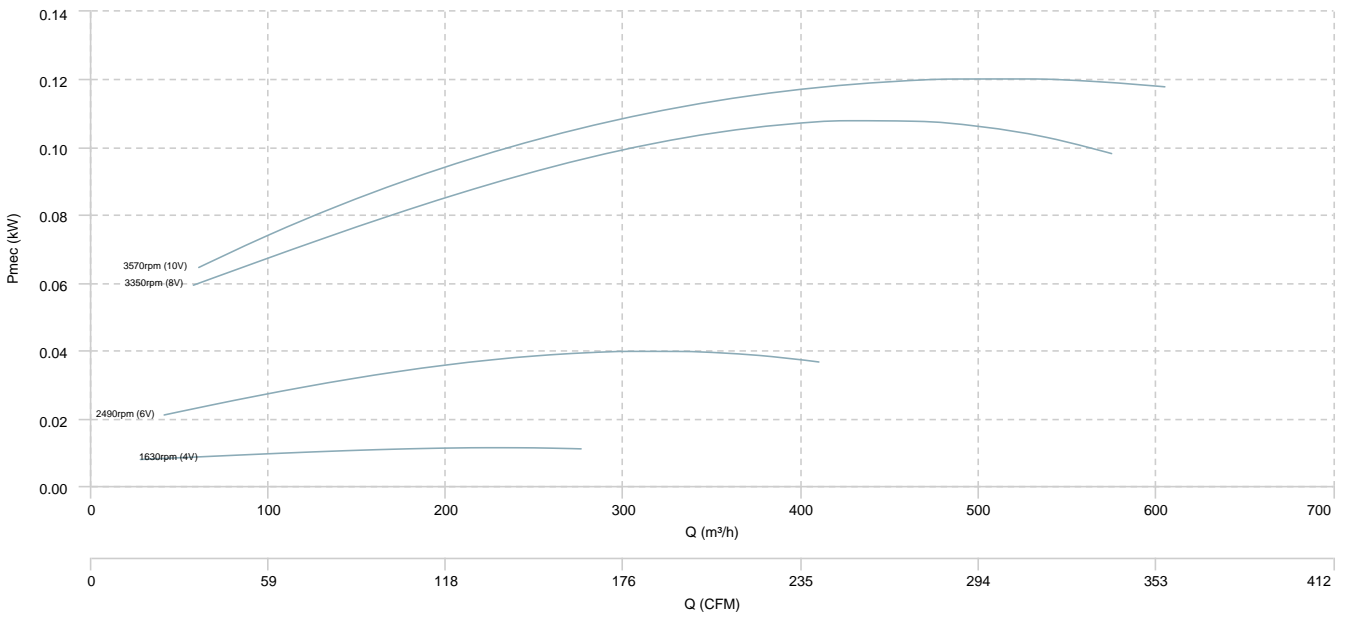


SBC-3 PLUS 160 EEC

AIR FLOW - PRESSURE

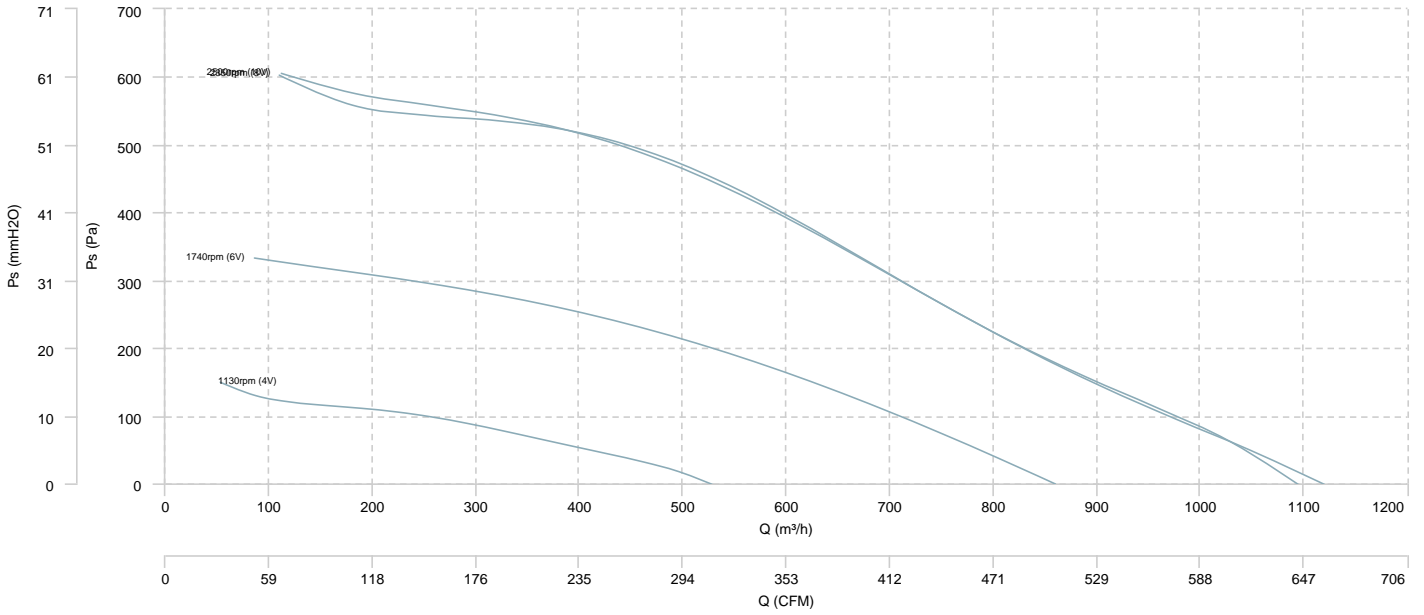


AIR FLOW - MECHANICAL POWER

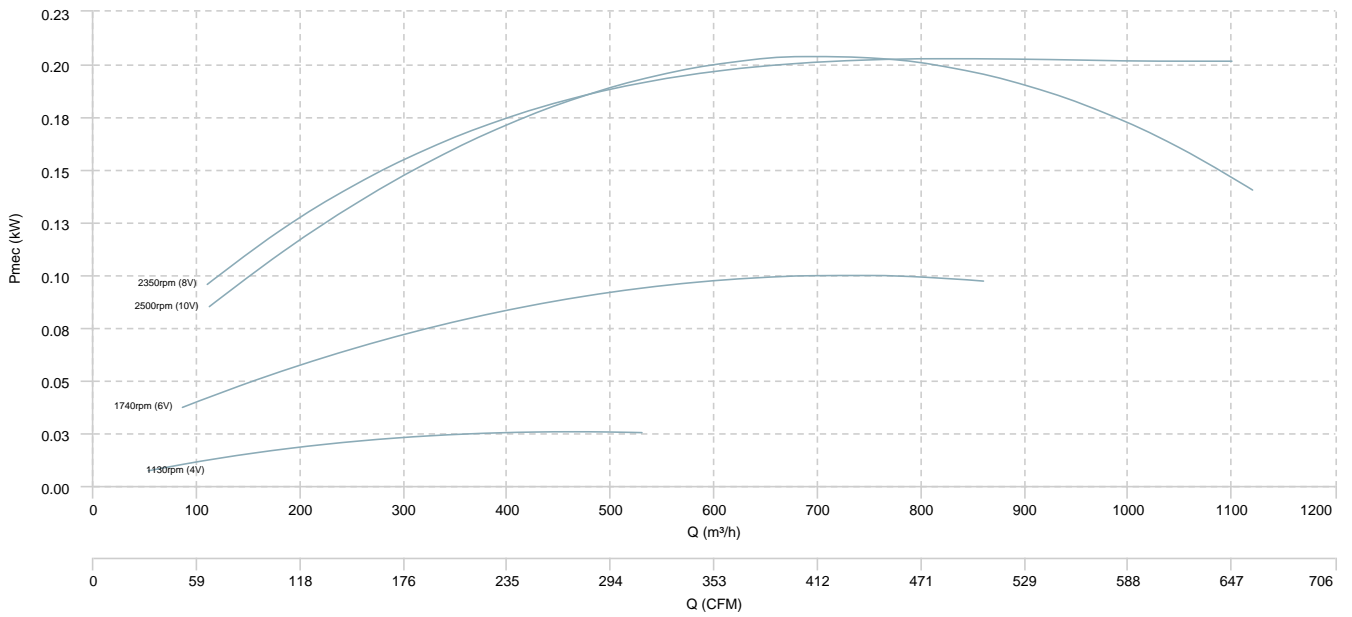


SBC-3 PLUS 200 EEC

AIR FLOW - PRESSURE

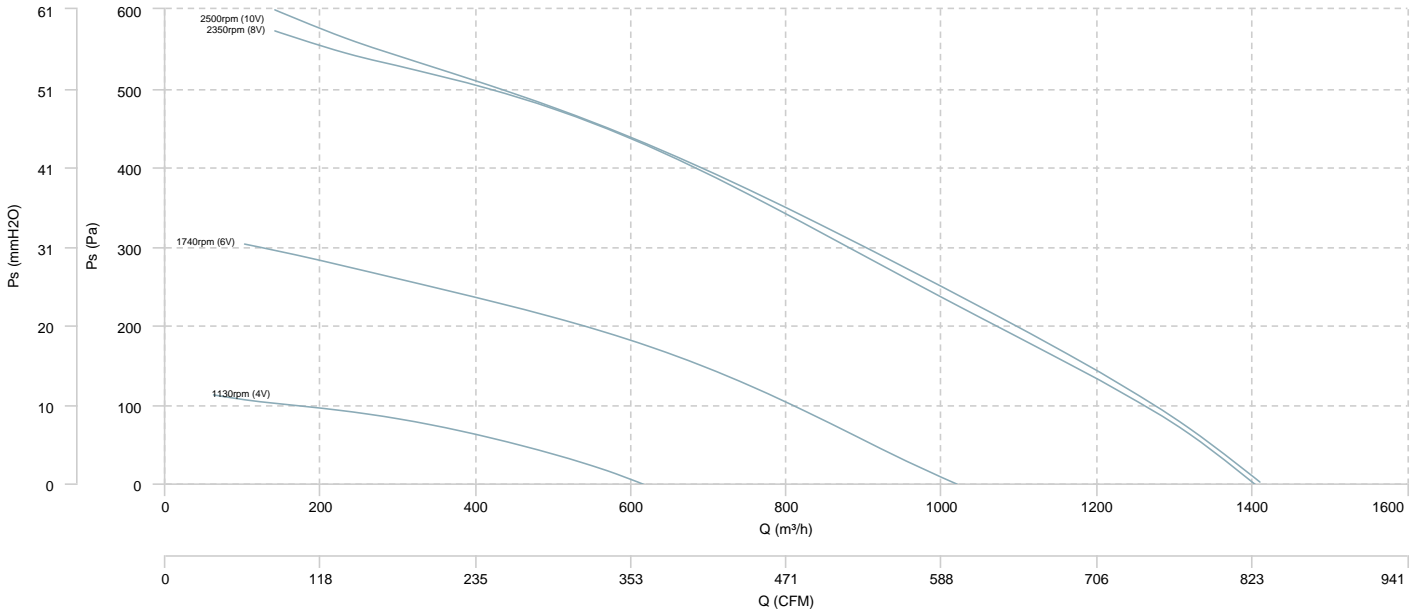


AIR FLOW - MECHANICAL POWER

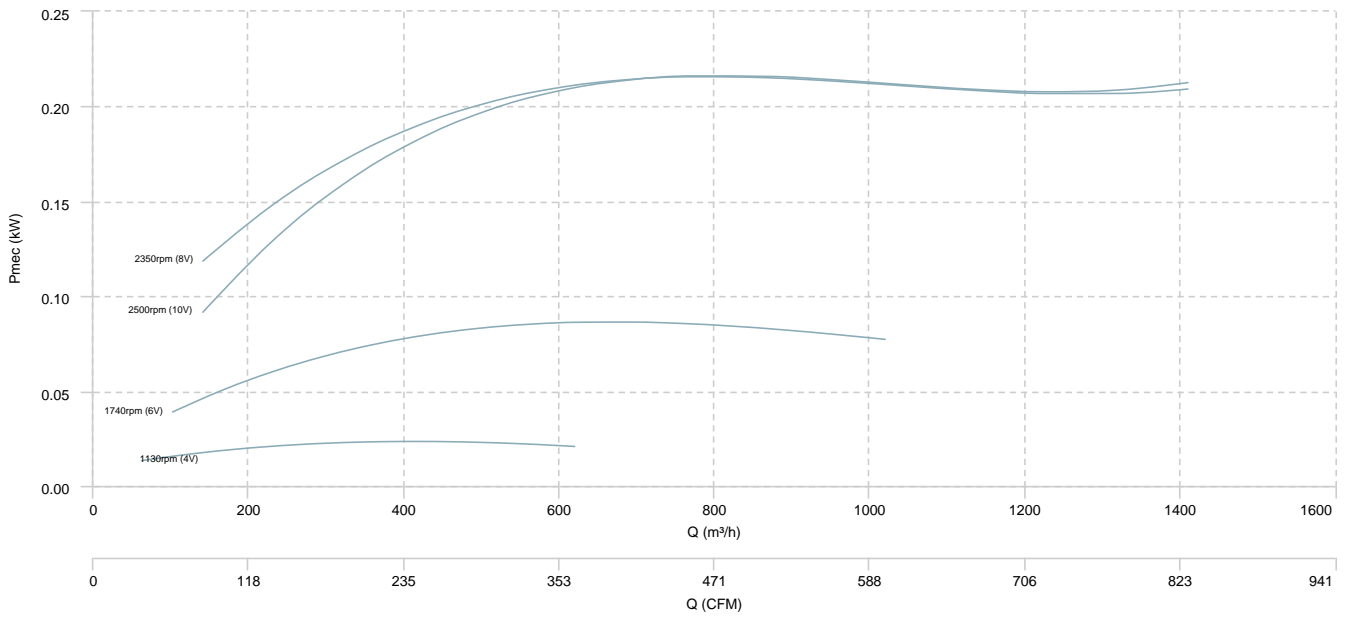


SBC-3 PLUS 250 EEC

AIR FLOW - PRESSURE

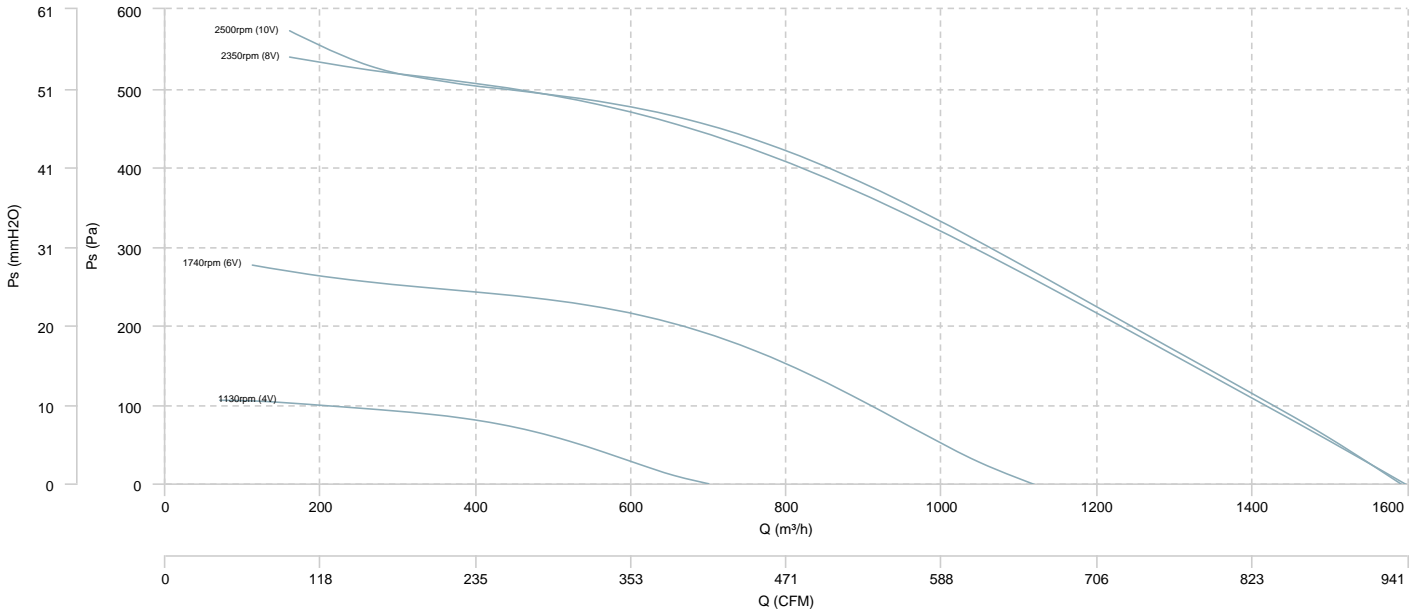


AIR FLOW - MECHANICAL POWER

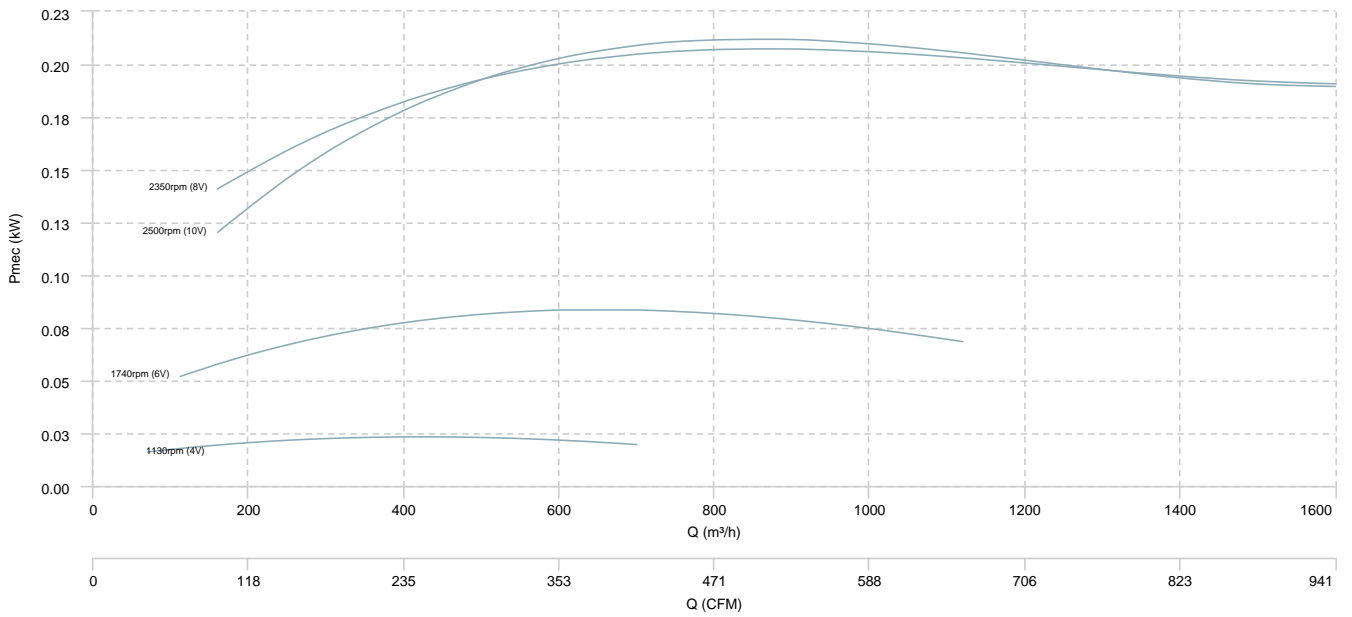


SBC-3 PLUS 315 EEC

AIR FLOW - PRESSURE

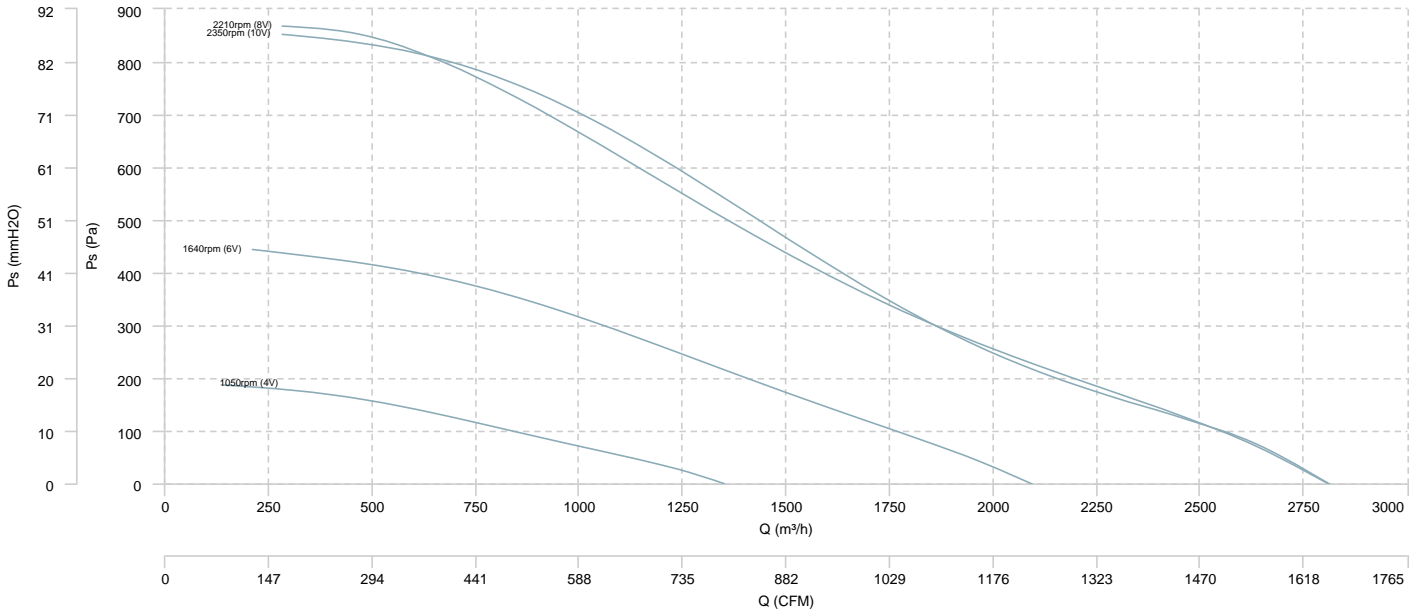


AIR FLOW - MECHANICAL POWER

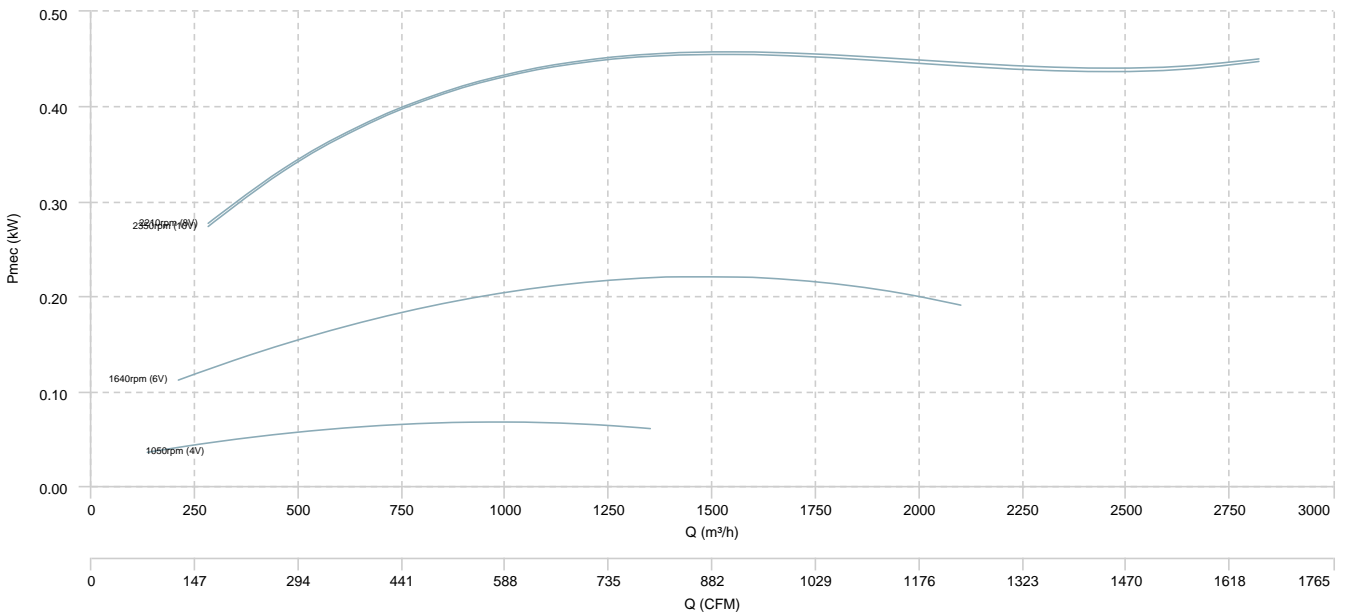


SBC-3 PLUS 355 EEC

AIR FLOW - PRESSURE

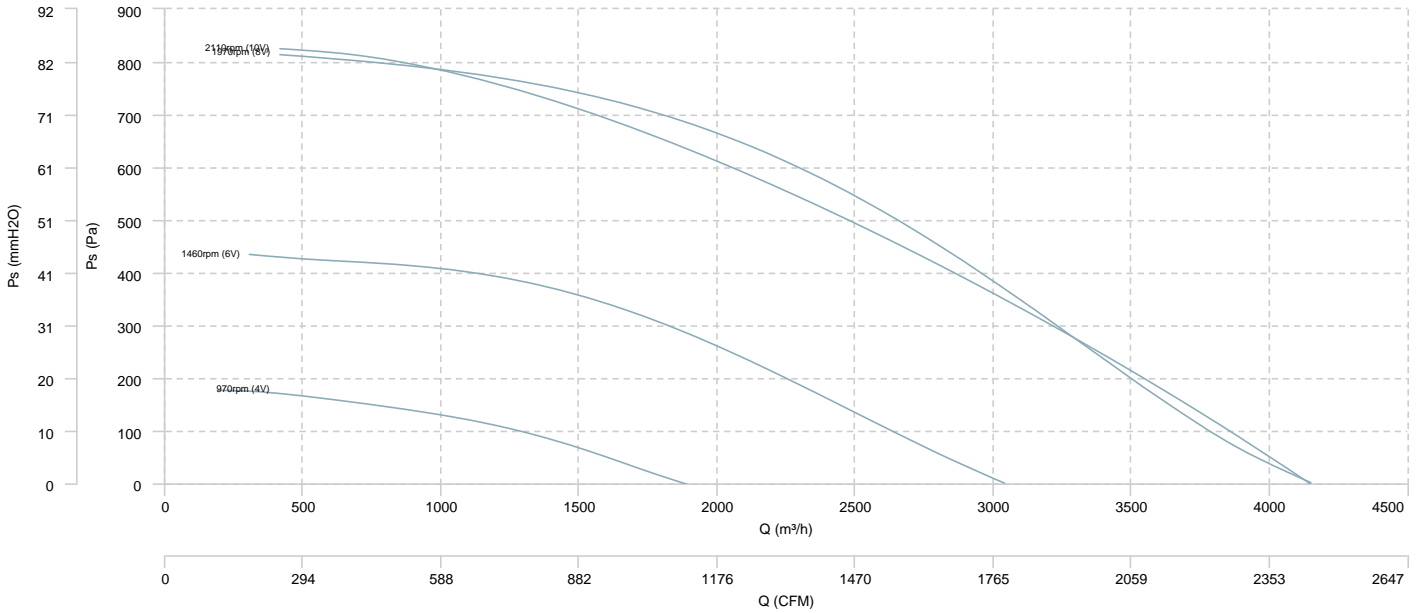


AIR FLOW - MECHANICAL POWER

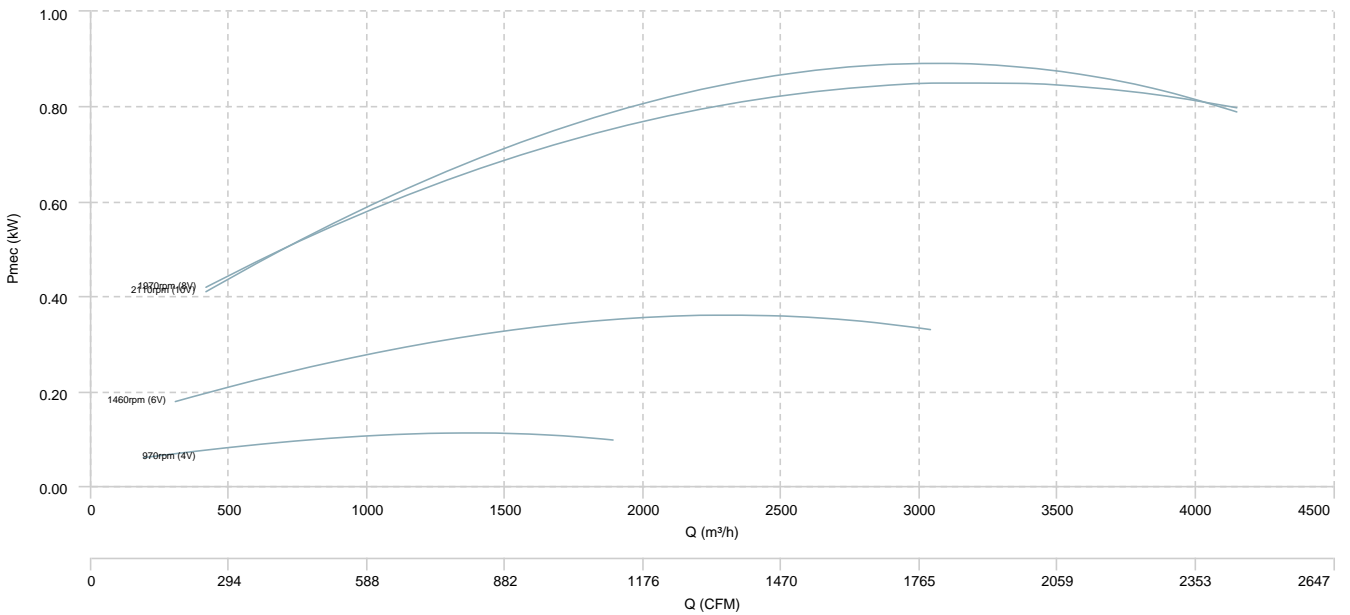


SBC-3 PLUS 400 EEC

AIR FLOW - PRESSURE

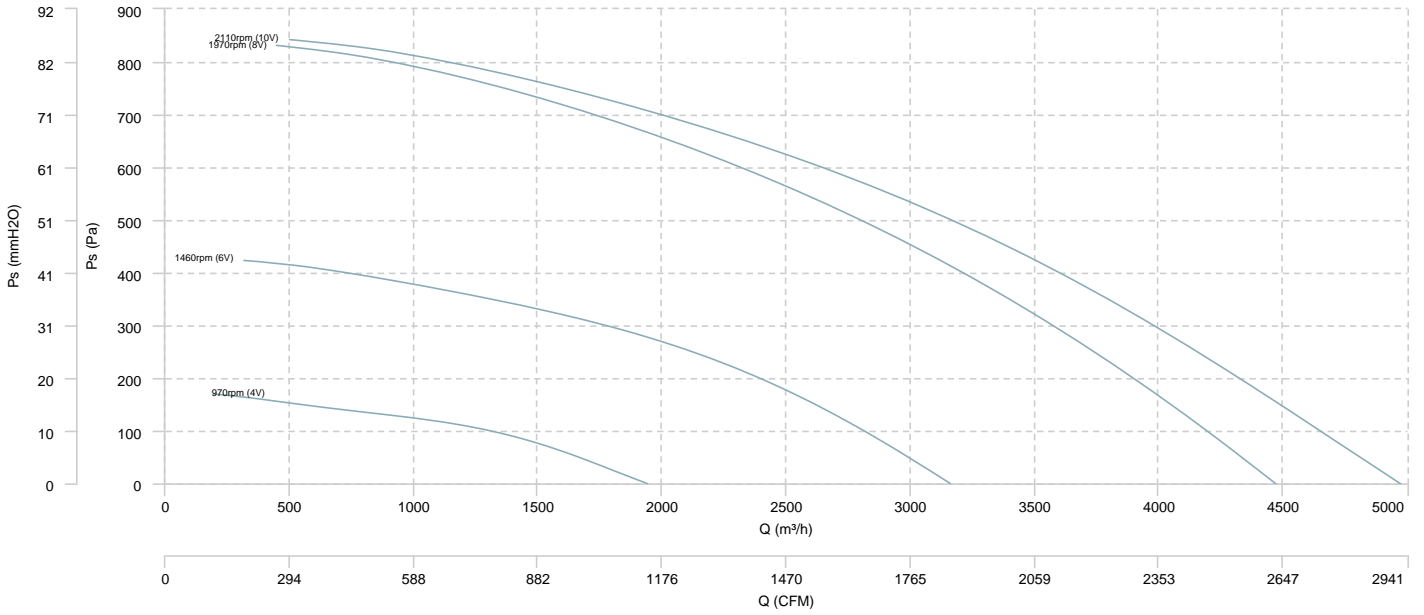


AIR FLOW - MECHANICAL POWER

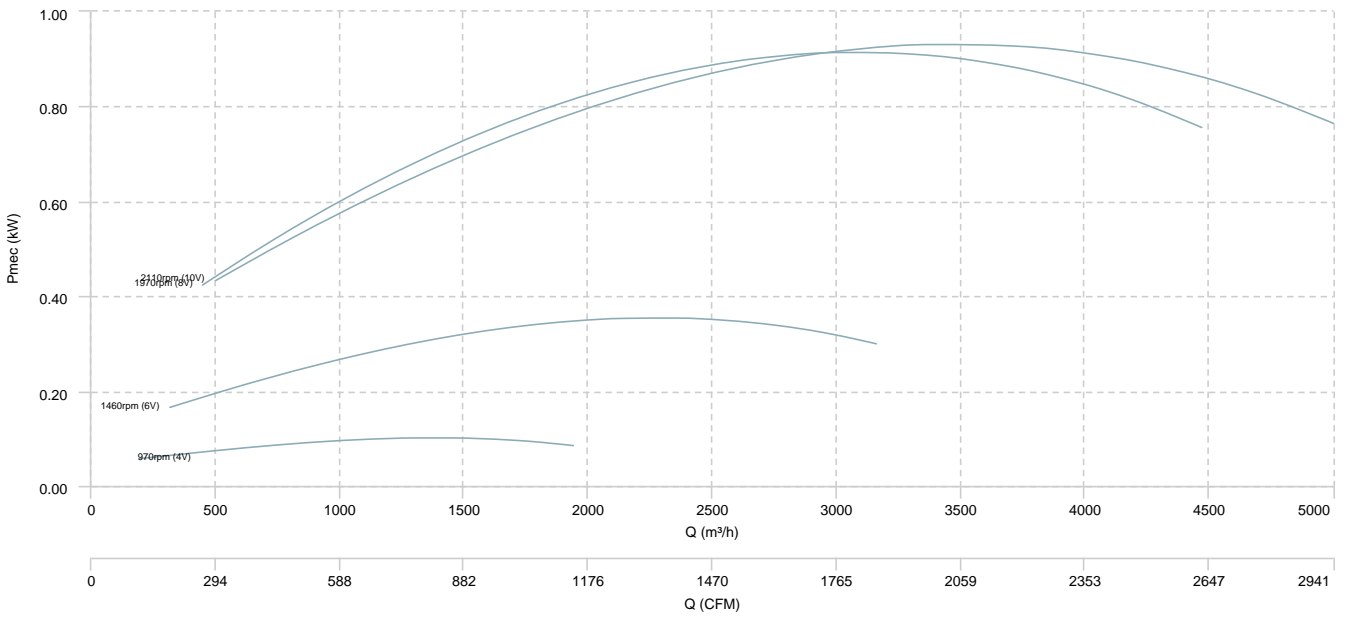


SBC-3 PLUS 450 EEC

AIR FLOW - PRESSURE

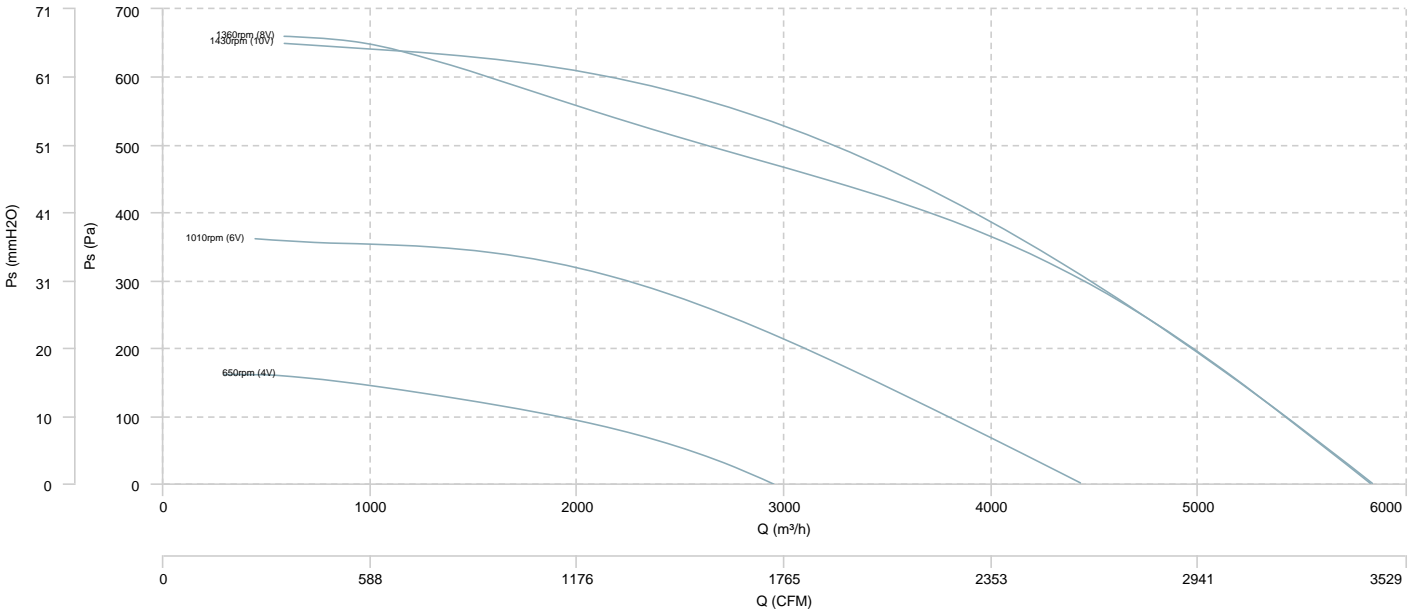


AIR FLOW - MECHANICAL POWER

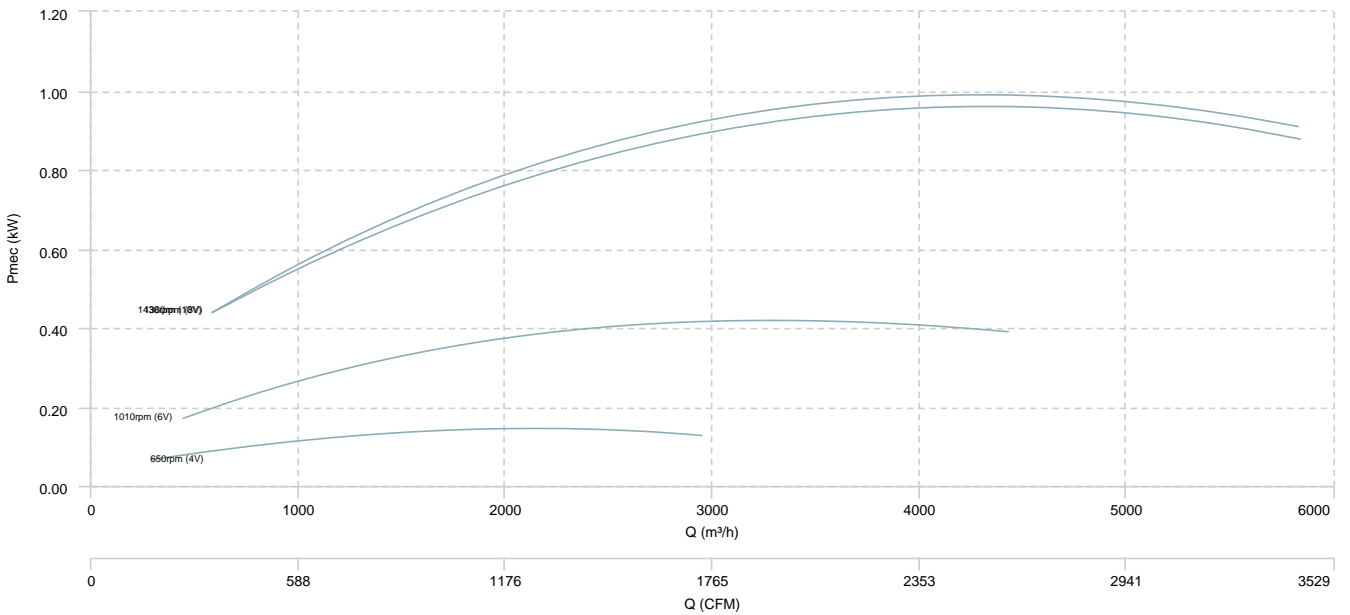


SBC-3 PLUS 500 EEC

AIR FLOW - PRESSURE

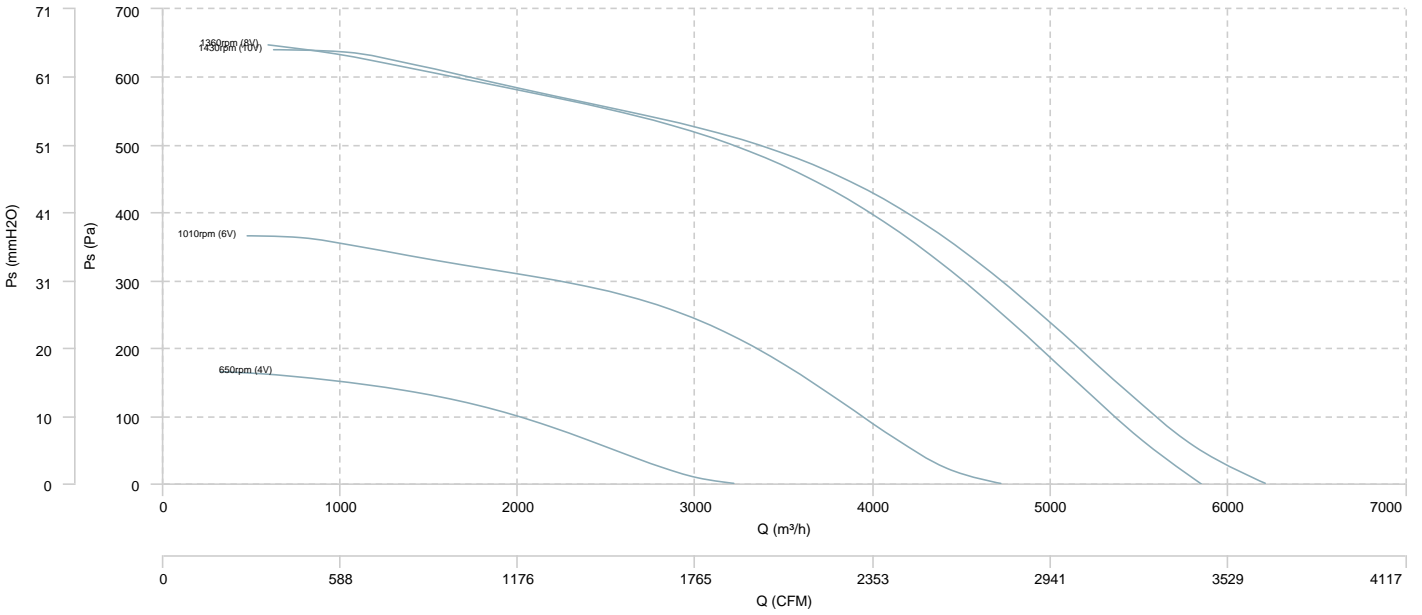


AIR FLOW - MECHANICAL POWER

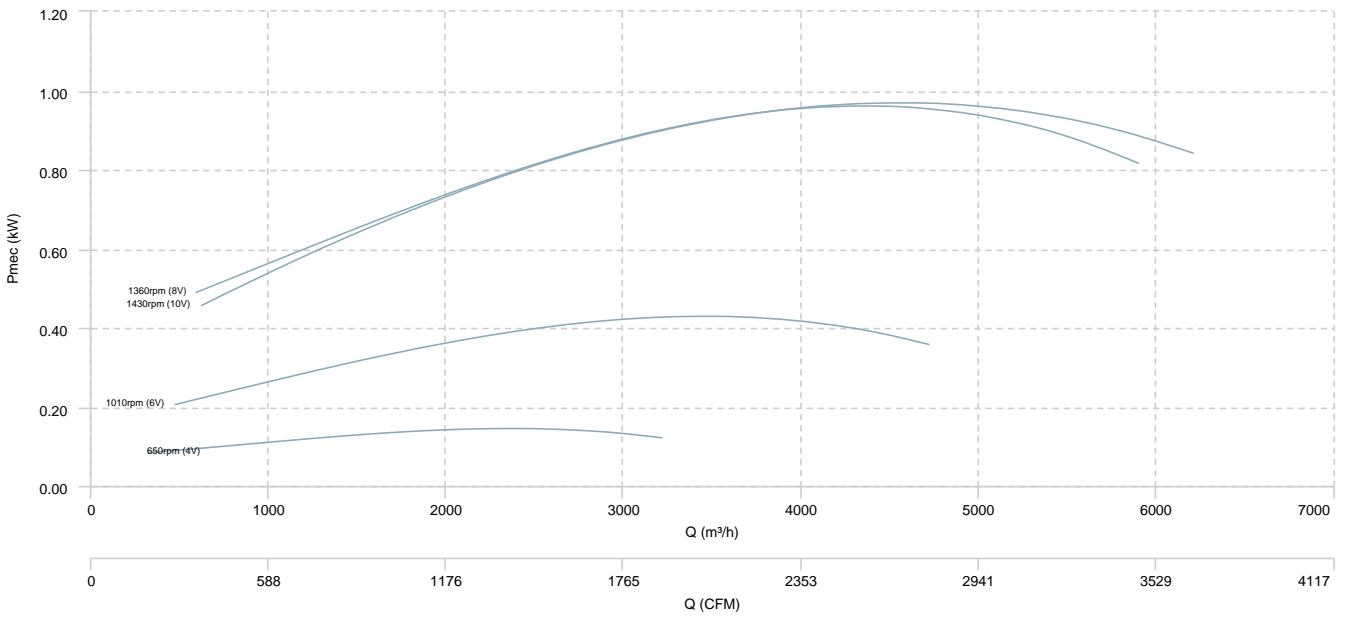


SBC-3 PLUS 560 EEC

AIR FLOW - PRESSURE



AIR FLOW - MECHANICAL POWER



Sound data

Sound power Lw dB (A)										
Model		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Total
SBC-3 PLUS 125 EEC (2270rpm (5V))	Radiated	-	22	12	29	41	46	51	41	52
SBC-3 PLUS 150 EEC (1630rpm (4V))	Radiated	-	2	9	24	37	45	48	41	50
SBC-3 PLUS 160 EEC (1630rpm (4V))	Radiated	-	2	9	24	37	45	48	41	50
SBC-3 PLUS 200 EEC (1130rpm (4V))	Radiated	-	-	14	38	45	48	47	39	52
SBC-3 PLUS 250 EEC (1130rpm (4V))	Radiated	-	-	14	38	45	48	47	39	52
SBC-3 PLUS 315 EEC (1440rpm (5V))	Radiated	-	6	20	44	51	54	53	45	58
SBC-3 PLUS 355 EEC (1050rpm (4V))	Radiated	-	-	17	33	43	44	39	31	47
SBC-3 PLUS 400 EEC (970rpm (4V))	Radiated	-	13	29	46	51	53	47	39	56
SBC-3 PLUS 450 EEC (970rpm (4V))	Radiated	-	13	29	46	51	53	47	39	56
SBC-3 PLUS 500 EEC (650rpm (4V))	Radiated	-	15	31	35	45	47	40	30	49
SBC-3 PLUS 560 EEC (650rpm (4V))	Radiated	-	15	31	35	45	47	40	30	49

Notes:

* To calculate the sound power level at different rpm from those indicated above, use the following formula:

$$Lw \text{ dB(A)}_{rpmA} = Lw \text{ dB(A)}_{rpmB} + 52.5 \cdot \log_{10} \frac{rpmA}{rpmB}$$

erp data

ERP

Fan type	Unit for non-residential ventilation (LOT 6)
Typology	Static
Others	Outlet and Inlet free discharge
Type of driver	-

Model	Motor power (kW)	Maximum efficiency point data						
		Eff. Heat recovery (%)	Max. efficiency (%)	Pabs (kW)	Air Flow (m ³ /h)	Ps (Pa)	Speed (m/s)	SFP (W/m ³ /s)
SBC-3 PLUS 200 EEC (2350rpm (8V))	0,15	-	33,82	0,19	508,93	464,74	4.5	1.392,57
SBC-3 PLUS 200 EEC (2500rpm (10V))	0,15	-	33,84	0,19	481,35	475,86	4.26	1.392,57
SBC-3 PLUS 250 EEC (2350rpm (8V))	0,15	-	35,84	0,22	747,69	367,59	4.23	1.015,84
SBC-3 PLUS 250 EEC (2500rpm (10V))	0,15	-	36,40	0,22	765,47	365,13	4.33	1.015,84
SBC-3 PLUS 315 EEC (2350rpm (8V))	0,15	-	43,94	0,21	872,89	377,19	3.11	848,27
SBC-3 PLUS 315 EEC (2500rpm (10V))	0,15	-	44,45	0,21	898,58	379,98	3.2	848,27
SBC-3 PLUS 355 EEC (1640rpm (6V))	0,36	-	43,52	0,20	944,65	329,99	2.65	1.353,26
SBC-3 PLUS 355 EEC (2210rpm (8V))	0,36	-	42,76	0,45	1.218,67	564,20	3.42	1.353,26
SBC-3 PLUS 355 EEC (2350rpm (10V))	0,36	-	45,17	0,45	1.187,23	621,36	3.33	1.353,26
SBC-3 PLUS 400 EEC (1460rpm (6V))	0,99	-	45,43	0,33	1.485,99	358,88	3.28	1.472,30
SBC-3 PLUS 400 EEC (1970rpm (8V))	0,99	-	48	0,77	1.977,97	668,83	4.37	1.472,30
SBC-3 PLUS 400 EEC (2110rpm (10V))	0,99	-	43,02	0,80	1.953,22	621,54	4.32	1.472,30
SBC-3 PLUS 450 EEC (1460rpm (6V))	0,99	-	45,15	0,34	1.719,09	306,43	3	1.237,08
SBC-3 PLUS 450 EEC (1970rpm (8V))	0,99	-	45,77	0,87	2.321,67	598,88	4.05	1.237,08
SBC-3 PLUS 450 EEC (2110rpm (10V))	0,99	-	51,17	0,88	2.549,76	615,99	4.45	1.237,08
SBC-3 PLUS 500 EEC (650rpm (4V))	1,01	-	39,19	0,14	1.601,31	116	2.27	1.055,36
SBC-3 PLUS 500 EEC (1010rpm (6V))	1,01	-	47,75	0,39	2.230,45	299,90	3.16	1.055,36
SBC-3 PLUS 500 EEC (1360rpm (8V))	1,01	-	44,08	0,95	3.213,85	447,54	4.55	1.055,36
SBC-3 PLUS 500 EEC (1430rpm (10V))	1,01	-	49,75	0,90	3.081,96	518,10	4.36	1.055,36
SBC-3 PLUS 560 EEC (650rpm (4V))	1,01	-	42,40	0,13	1.459,83	132,67	1.65	1.005,74
SBC-3 PLUS 560 EEC (1010rpm (6V))	1,01	-	49,93	0,39	2.327,14	294	2.62	1.005,74
SBC-3 PLUS 560 EEC (1360rpm (8V))	1,01	-	50,08	0,89	3.109,02	508,79	3.51	1.005,74
SBC-3 PLUS 560 EEC (1430rpm (10V))	1,01	-	51,38	0,90	3.219,73	510,60	3.63	1.005,74