

ENKELROOF EEC



ROOF FAN WITH ABS COWL

MANUFACTURING FEATURES:

- ABS protection cowl easily removable for motor and impeller maintenance thanks to the integrated folding system. The ABS cowl is characterized by its toughness, impact resistance and ability to withstand extreme temperatures. 100% of the ABS used in the cowl is recycled.
- Structure in anticorrosive galvanized steel and support frame for adaptation to the roof with anti-bird protection grid.
- High-efficiency backward-curved blade impeller with self-cleaning system. Reinforced polyamide impeller for models 155, 190 and 220. The rest of the models in aluminum.
- EC technology uses integral electronic control to ensure that the motor always runs at optimal load and ensures efficient energy utilization. It incorporates an external rotor EC motor with high efficiency and low noise level. Speed control through a 0-10V or PWM signal. 230V 50/60Hz single-phase power supply for models 155 to 310 and 400V 50/60Hz three-phase power supply for sizes 355 and 450. IP54 and motor class B insulation.

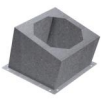
Accessories



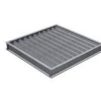
AC



BAD



BTI



CMP-H
HT



KV
ENKEL
ROOF



PMR



REGC



SIL C
MINI C

APPLICATIONS

Designed for deck or roof mounting, they are indicated for:

- Smoke extraction.
- Air renewal in all types of buildings and industries.
- Working temperature range from -25°C to 60°C.

UNDER REQUEST

- Fan (size between 250 and 450) with k-factor reading.

*Available in June

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
ENKREC155	ENKELROOF 150 EEC	3950	0,25	0,06	460	-	5	1
ENKREC190	ENKELROOF 190 EEC	3570	0,73	0,10	760	-	5	1
ENKREC220	ENKELROOF 220 EEC	2600	0,6	0,08	870	-	7	1
ENKREC250	ENKELROOF 250 EEC	2500	1,00	0,15	1.640	-	9	1
ENKREC310	ENKELROOF 315 EEC	2350	1,7	0,36	3.160	-	16	2

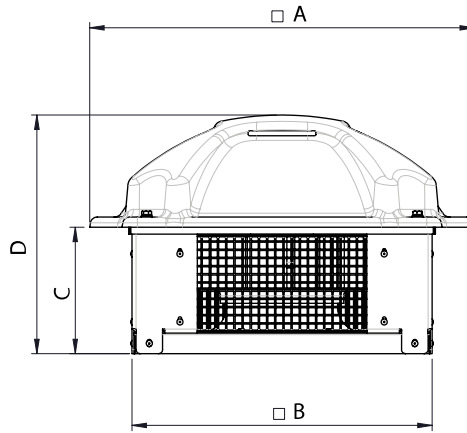
Three-phase motor

Code	Model	R.P.M.	Rated I. A 400V	Rated power kW	Max. Airflow m ³ /h	Sound db (A)**	Weight kg	Connect. diagram
ENKREC355	ENKELROOF 355 EEC	2100	1,63	0,99	4.890	-	17,50	3
ENKREC450	ENKELROOF 450 EEC	1450	1,67	1,01	6.955	-	19	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
ENKELROOF 150 EEC	435	341	96	211
ENKELROOF 190 EEC	435	341	86.5	206.5
ENKELROOF 220 EEC	565	441	113.5	273,5
ENKELROOF 250 EEC	565	441	185.5	305
ENKELROOF 315 EEC	765	601	194	559
ENKELROOF 355 EEC	765	601	280.5	645.5
ENKELROOF 450 EEC	765	601	337.5	702.5


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

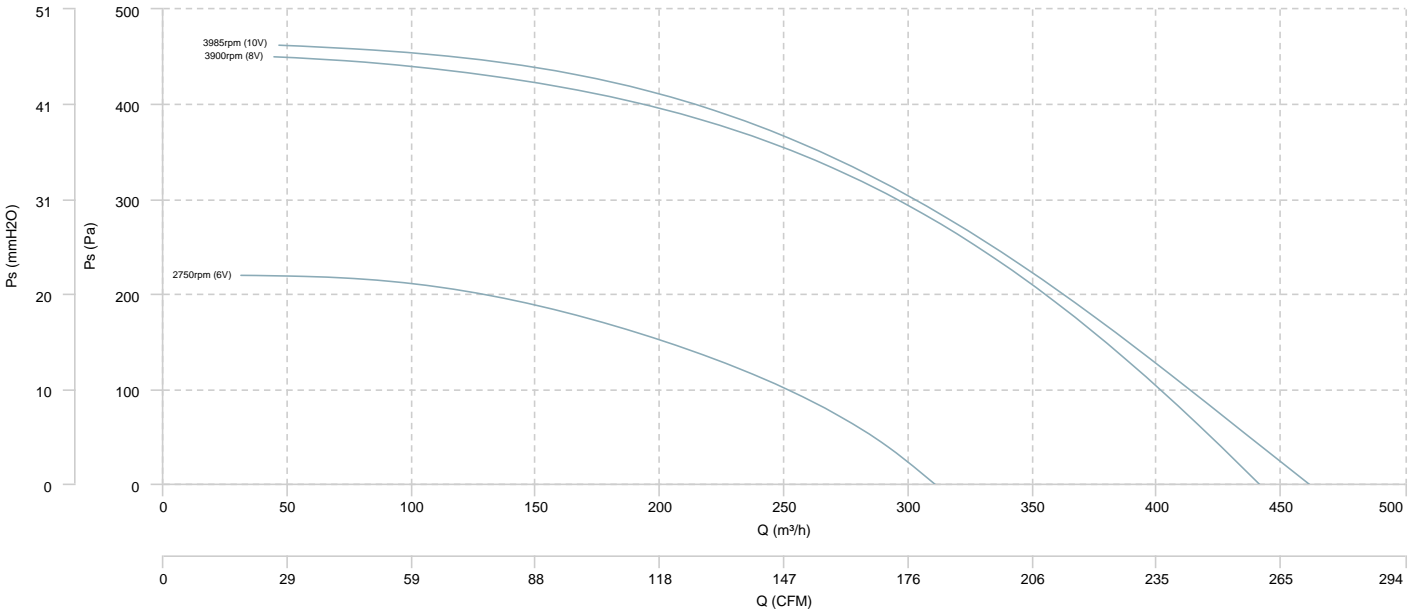
Nº	Signal Señal	Colour Color	Specification Especificación
1	L1	Black Negro	AC380V-50/60Hz
2	L2	Black Negro	AC380V-50/60Hz
3	L3	Black Negro	AC380V-50/60Hz
4	Pe	Yellow-Green Amarillo-Verde	

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

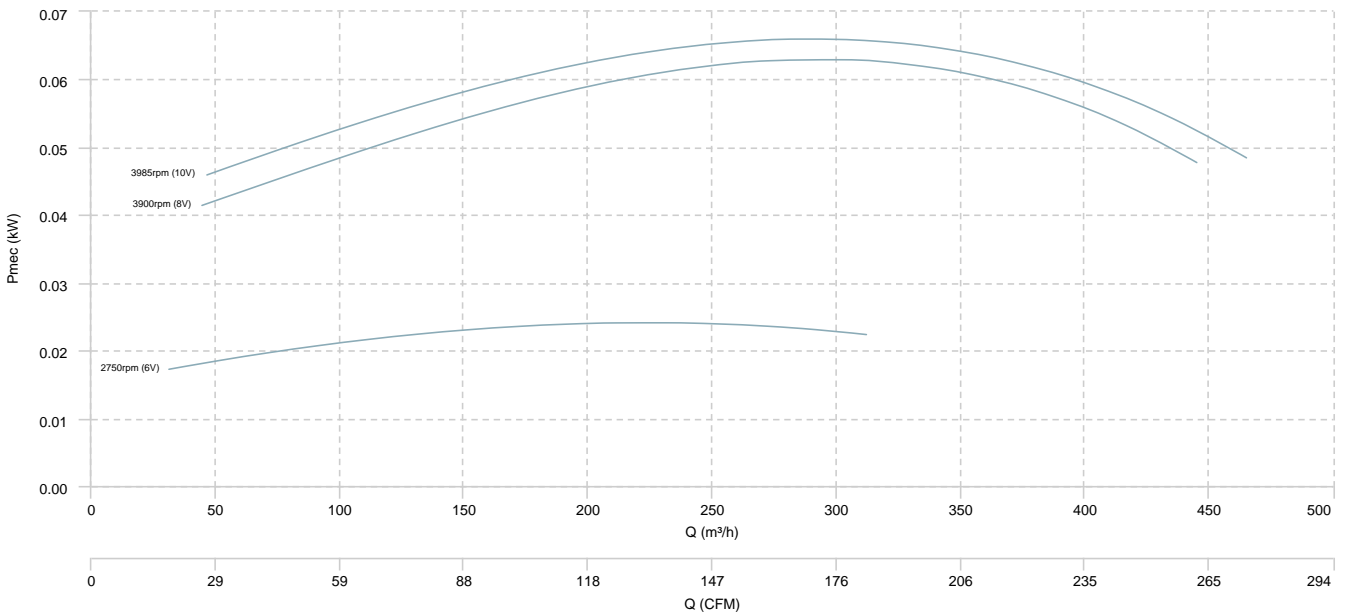
CHARACTERISCTIC CURVE

ENKELROOF 150 EEC

AIR FLOW - PRESSURE

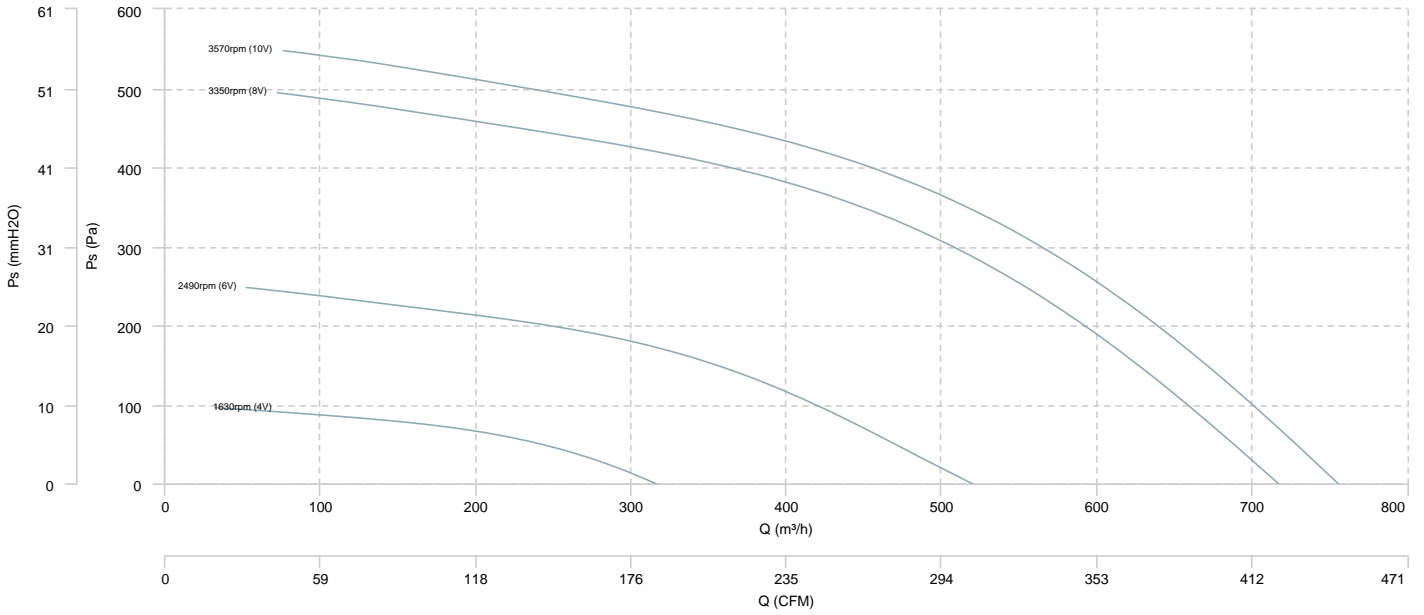


AIR FLOW - MECHANICAL POWER

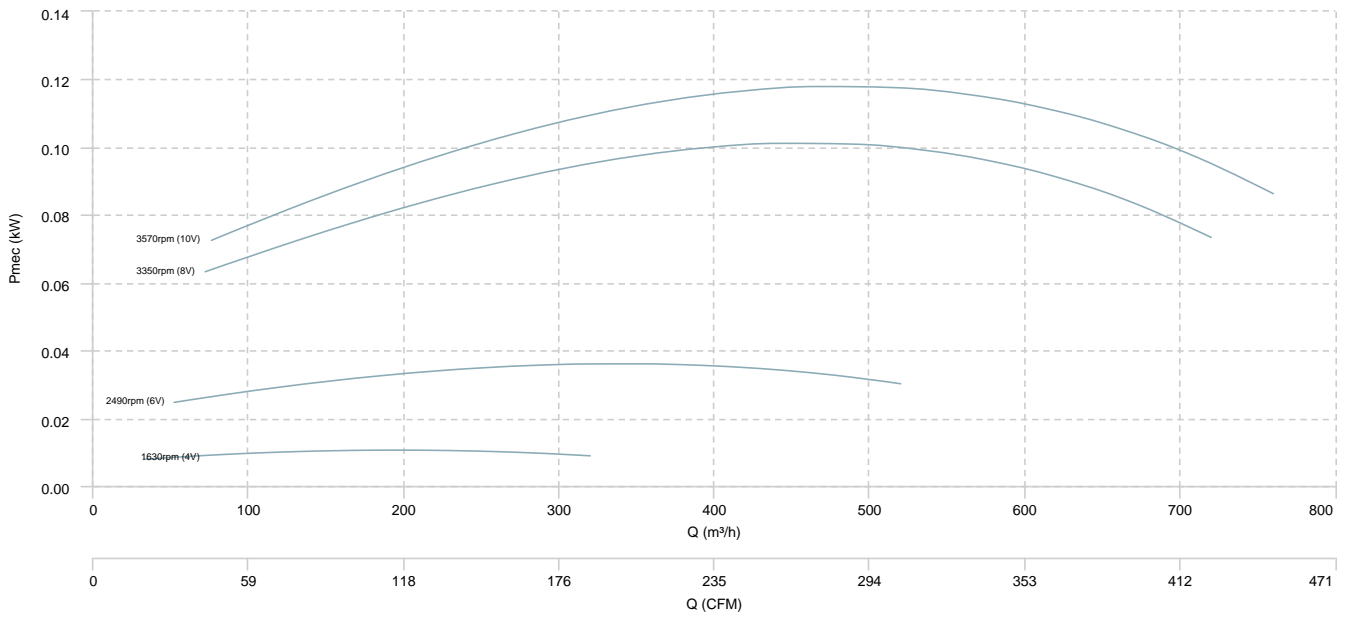


ENKELROOF 190 EEC

AIR FLOW - PRESSURE

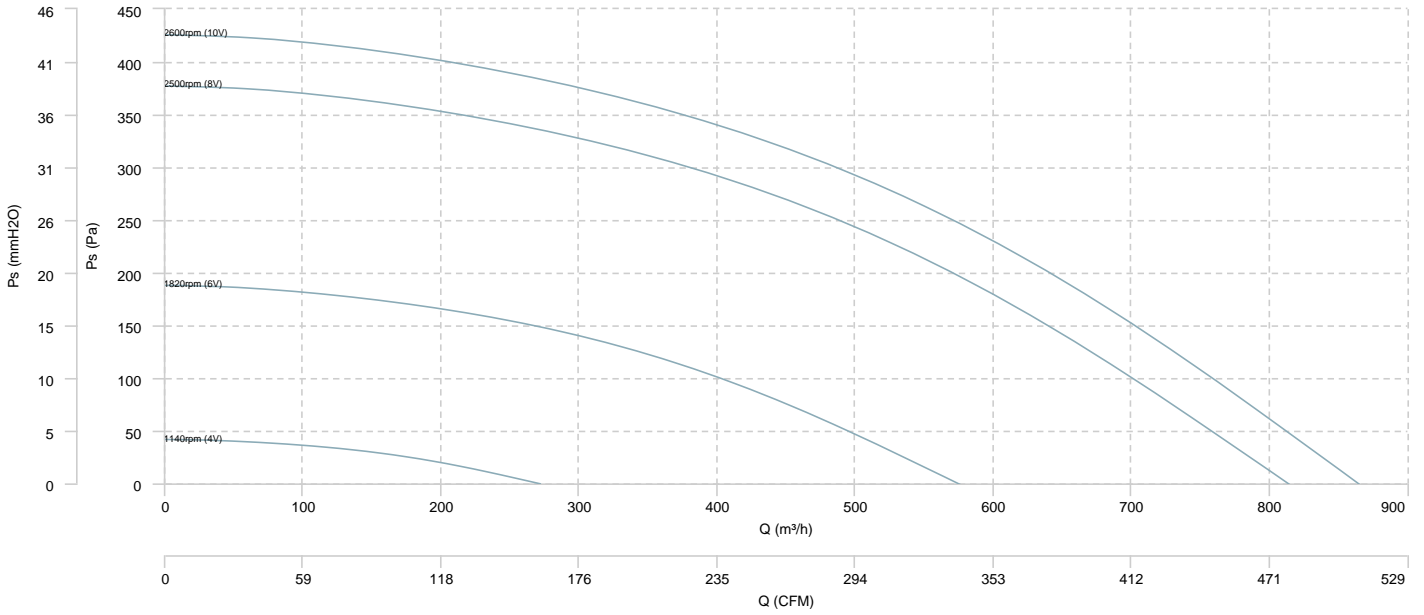


AIR FLOW - MECHANICAL POWER

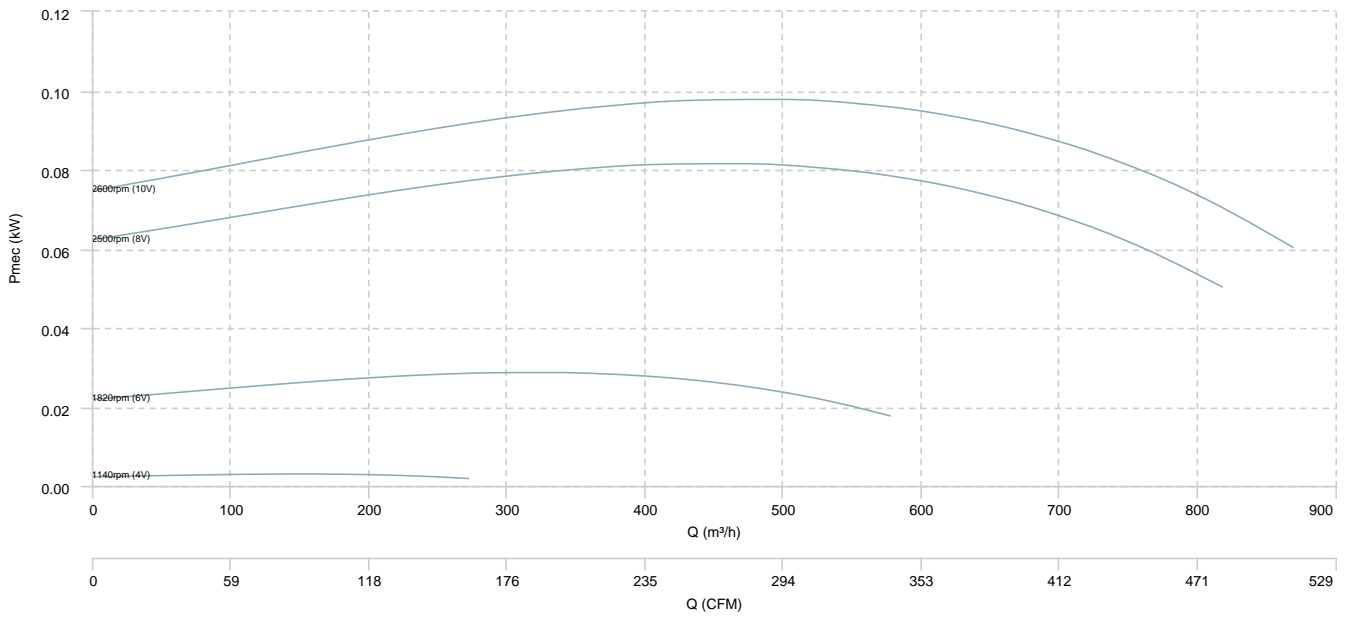


ENKELROOF 220 EEC

AIR FLOW - PRESSURE

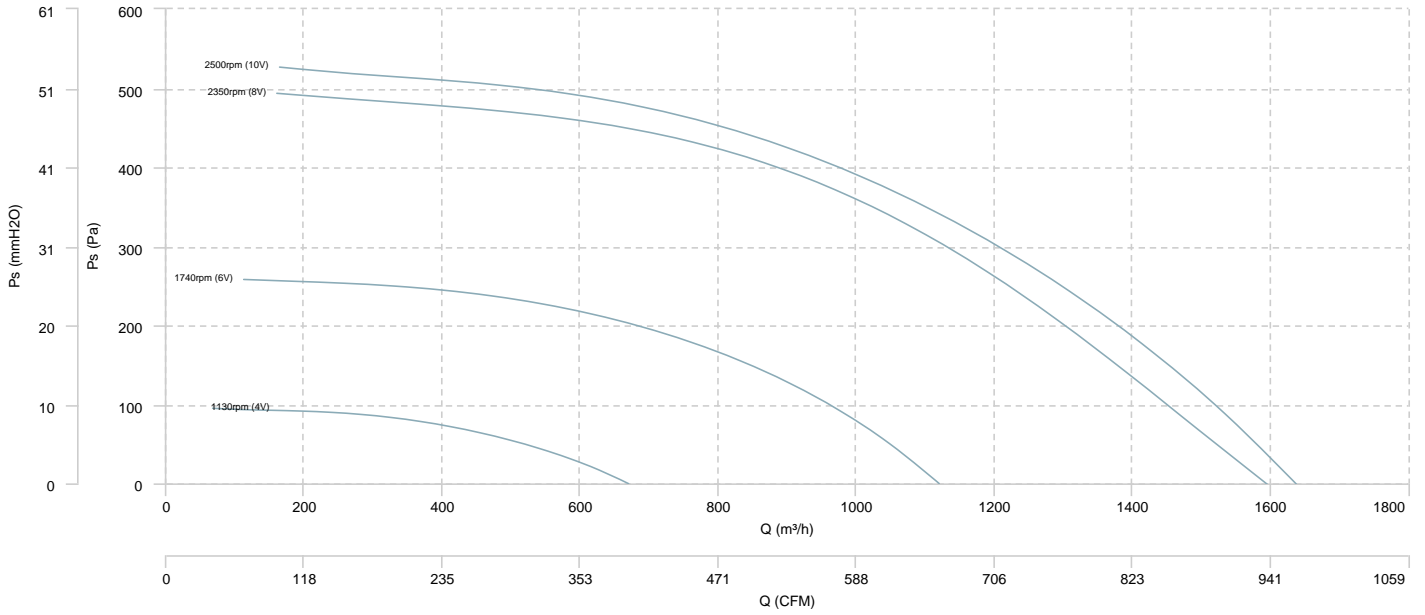


AIR FLOW - MECHANICAL POWER

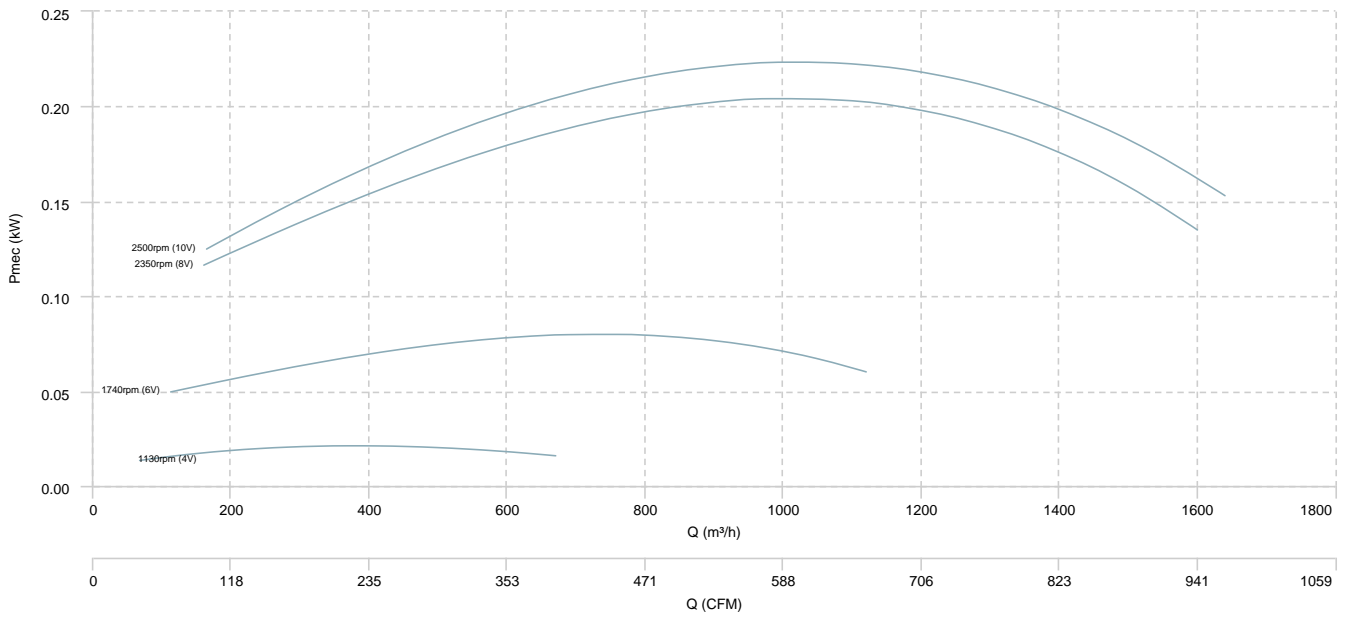


ENKELROOF 250 EEC

AIR FLOW - PRESSURE

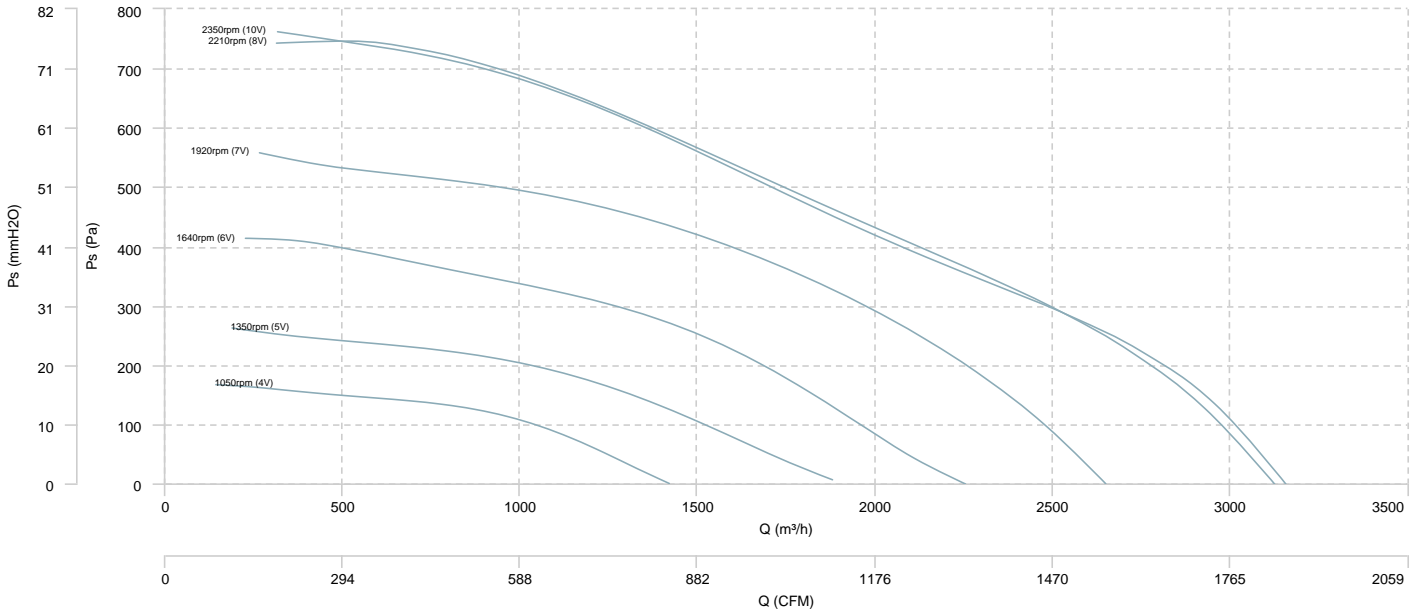


AIR FLOW - MECHANICAL POWER

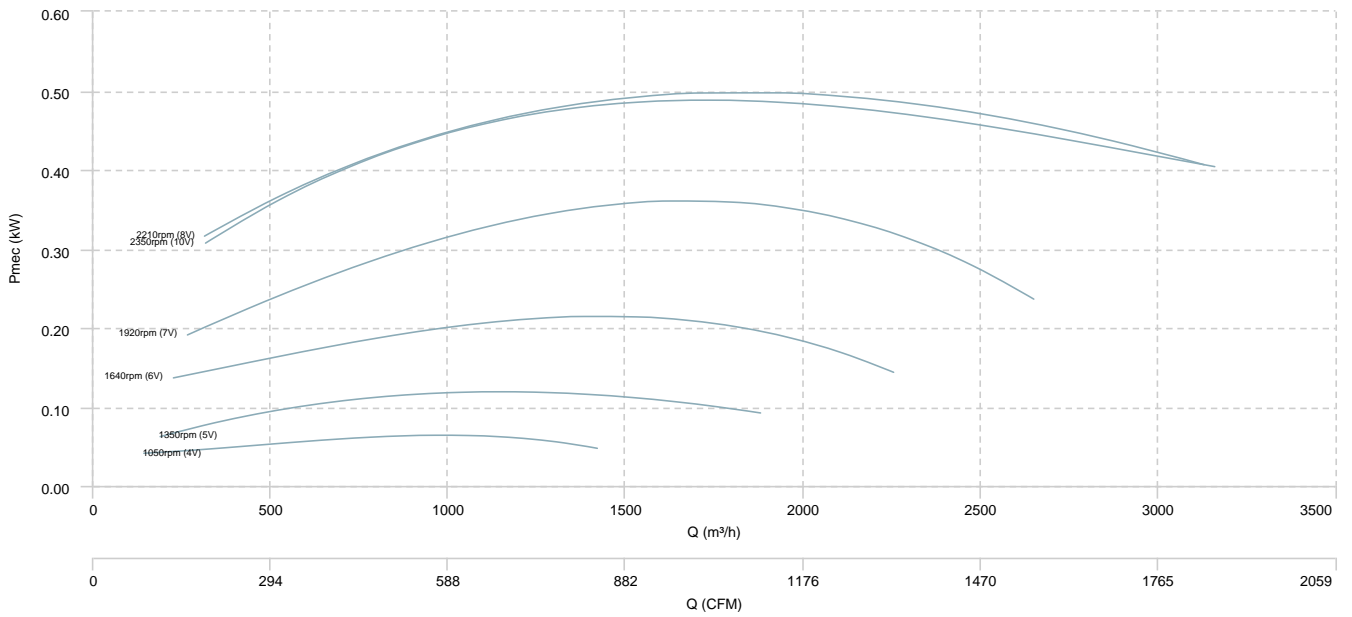


ENKELROOF 315 EEC

AIR FLOW - PRESSURE

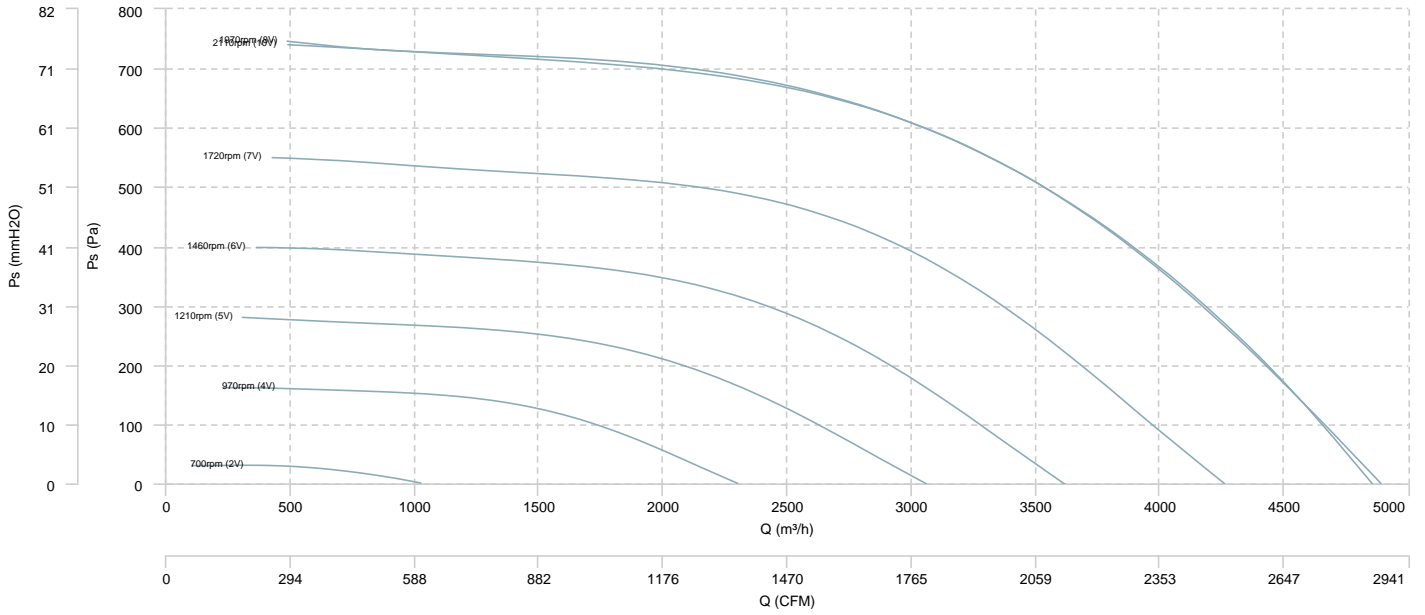


AIR FLOW - MECHANICAL POWER

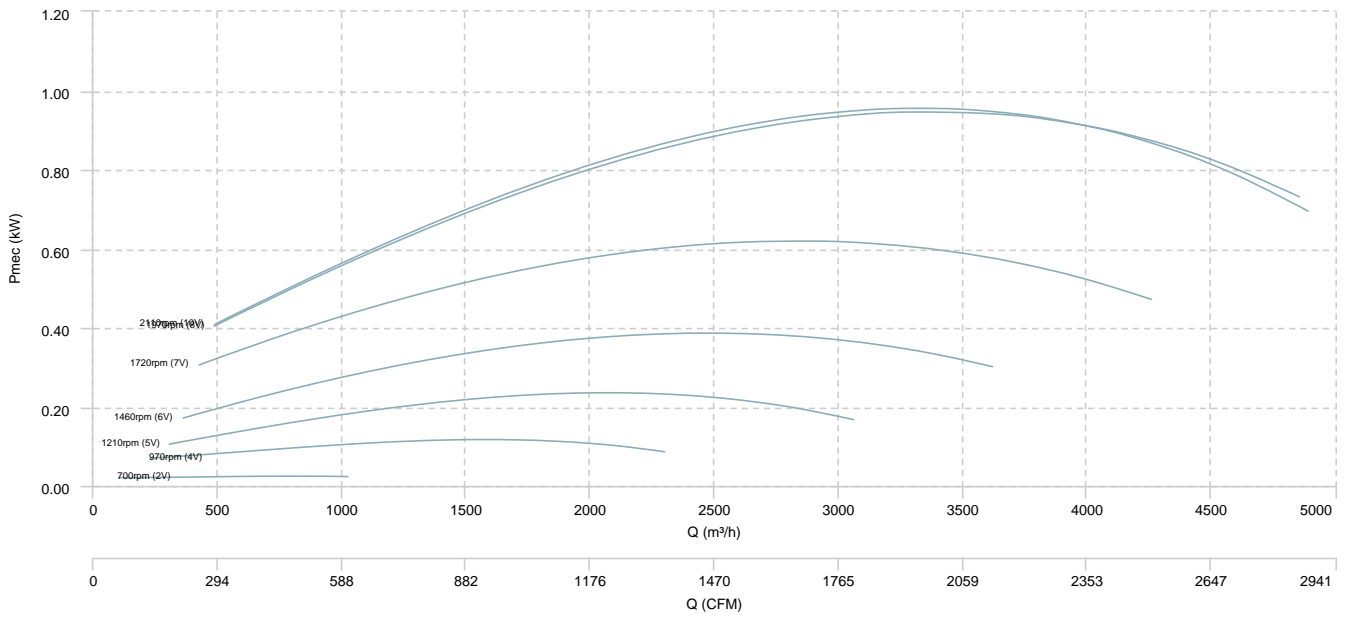


ENKELROOF 355 EEC

AIR FLOW - PRESSURE

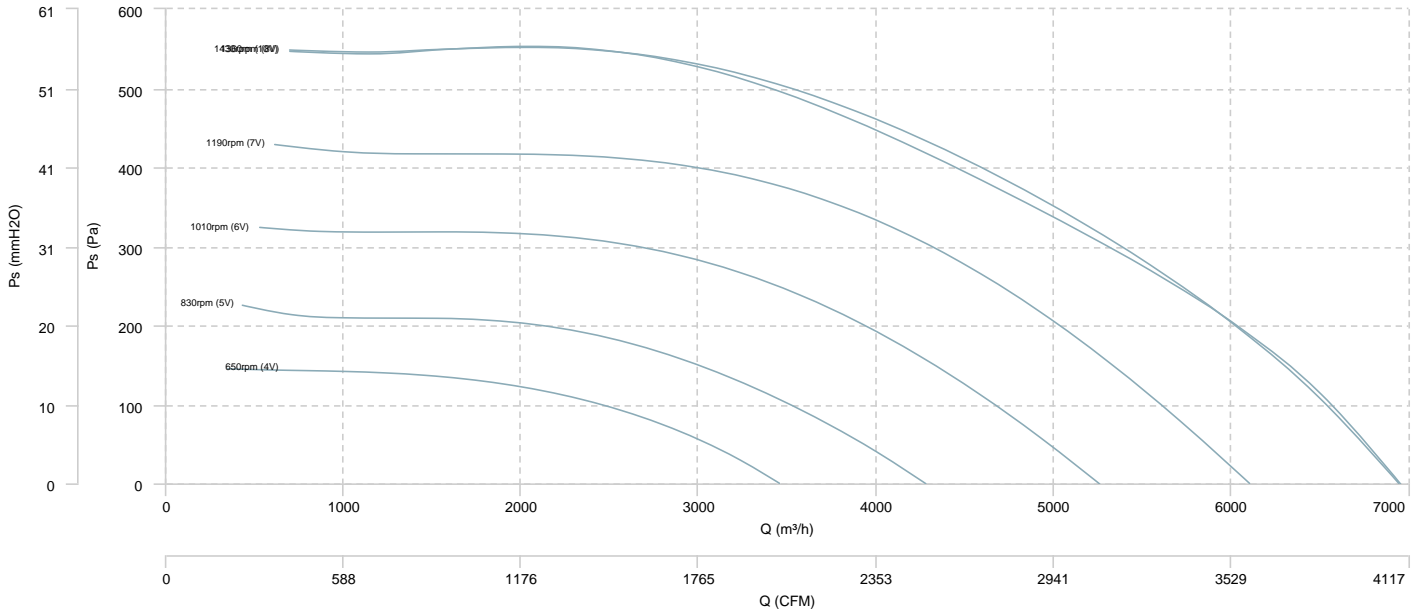


AIR FLOW - MECHANICAL POWER

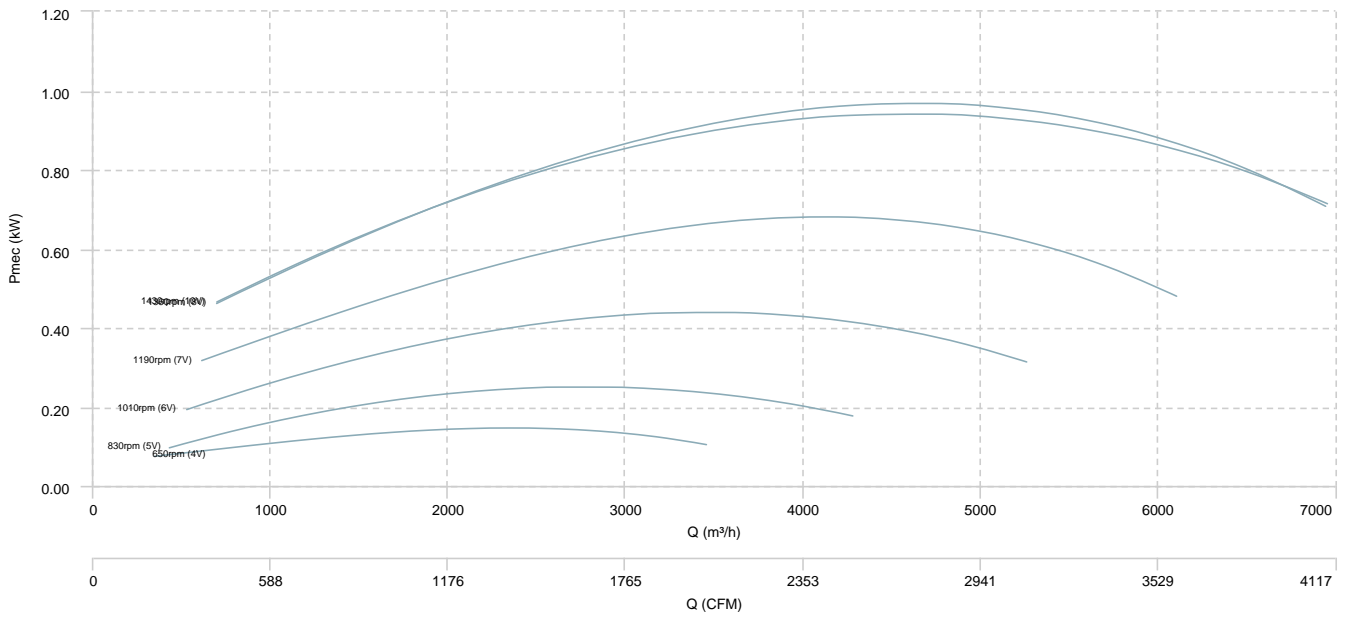


ENKELROOF 450 EEC

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
ENKELROOF 150 EEC (2750rpm (6V))	Radiated	-	32	22	39	51	56	61	51	63
ENKELROOF 190 EEC (1630rpm (4V))	Radiated	-	8	15	30	43	51	54	47	56
ENKELROOF 220 EEC (1140rpm (4V))	Radiated	-	7	18	37	47	53	54	46	57
ENKELROOF 250 EEC (1130rpm (4V))	Radiated	-	6	20	44	51	54	53	45	58
ENKELROOF 315 EEC (1050rpm (4V))	Radiated	-	4	23	39	49	50	45	37	53
ENKELROOF 355 EEC (700rpm (2V))	Radiated	-	11	27	44	49	51	45	37	55
ENKELROOF 450 EEC (650rpm (4V))	Radiated	-	21	37	41	51	53	46	36	55

Notes:

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

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