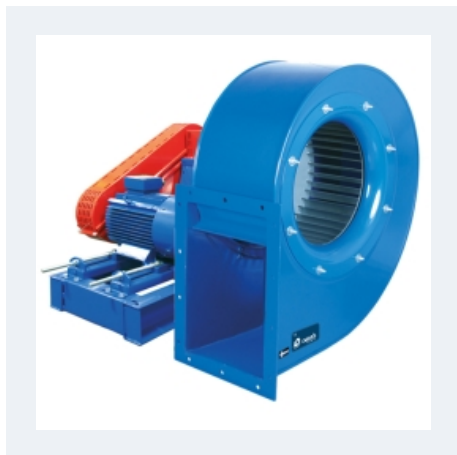


MTCA



MEDIUM PRESSURE FAN WITH FORWARD IMPELLER AND BELT TRANSMISSION

MANUFACTURING FEATURES:

- Fan made of Fe360 sheet. The fan paint finish is based on a Qualicoat polyester powder coating stoved at 200°C, with an average film thickness of 70 microns. Average heat resistance of coating is 180°C with peaks of 200°C.
- Fully welded housing.
- Single inlet forward curved impeller made of Fe360 sheet statically and dynamically balanced. Impellers are painted with polyester primer that resists temperatures up to 300°C.
- Motorized fan with base frame (configuration 12). Full equipped fans including: motor, pulleys, belts, belts guard and shaft guard. Fitted over a base plate.
- It allows adjusting the orientation locally from models 220 to 630. Models sizes from 710 to 1000 size the orientation is fixed.

- Available positions (to be indicated in case of order): LG270, LG0, LG45, LG90, LG135, LG180, LG225, LG315, RD0, RD45, RD90, RD135, RD180, RD225, RD270, RD315.
- The indicated codes correspond to the model in position LG270

APPLICATIONS:

- Designed for inline installation, they are suitable for:
- Industrial applications, extraction or injection of air.
 - Cooling of machines and parts.
 - Clean air and pneumatic transport.
 - Maximum working temperature: carried air: 200°C, ambient 60°C.

UNDER REQUEST

- Fans for 60Hz and special voltages.
- 2 speed motor.
- Fan with free shaft (configuration 1) or with motor supported on the pedestal side (configuration 9).
- C4 coating painting
- Hot dip galvanized
- Special steel (Cor-Ten A, Hardox...)
- Inox 304 (normal or electropolished finish)
- Inox 316 (normal or electropolished finish)
- Cooling wheel
- Anticaloric paint
- Reinforced housing
- Fully welded housing (waterproof)
- Welded impeller
- Insulated housing
- Split casing (for big sizes)
- Inspection door to facilitate maintenance and cleaning
- Drain plug.
- Airtight axle
- Frontal foot
- Double suction flange
- Available in non-sparking air passage and standard motor.
- Other brands of motors.

Accessories



AB



AC



AVR



AVS



BA-400



BADS



BIDS



EI



FS



INT



JE 45



RA



RI



SFC

Technical data

Three-phase motor

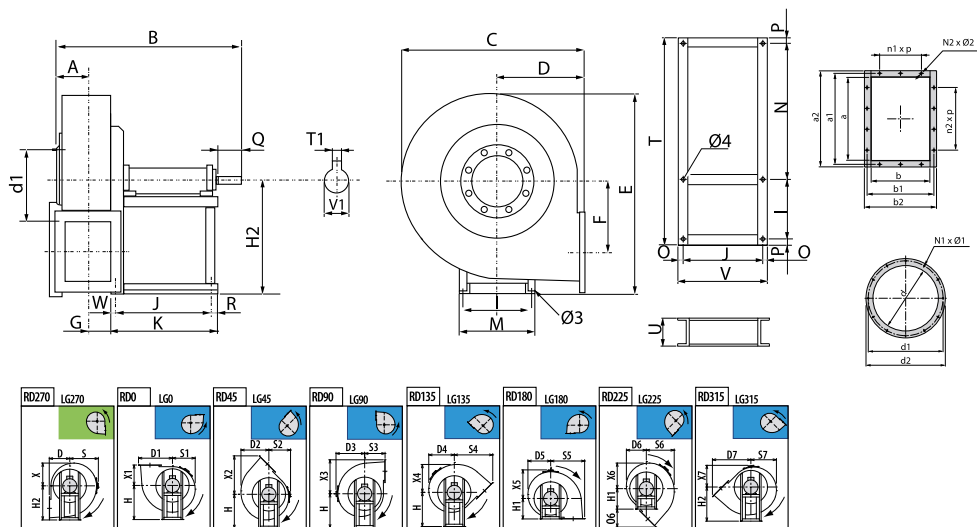
Code	Model	RPM	Min. Rated power kW	Max. Rated power kW	Max. Airflow m³/h	Sound db (A)**	Weight kg	Connect. diagram
5048022__R__	MTCA 220	1200 - 3500 (turb Clase III)	0,37	2,20	3.390	62	27	1
5048025__R__	MTCA 250	1100 - 3300 (turb Clase III)	0,37	3,00	4.390	64	31	1
5048028__R__	MTCA 280	950 - 2600 (turb Clase II)	0,37	3,00	5.010	60	36	1
5048031__R__	MTCA 310	850 - 2400 (turb Clase II)	0,55	4,00	6.290	66	45	1
5048035__R__	MTCA 350	1100 - 2650 (turb Clase III)	0,55	7,50	15.000	72	73	1
5048040__R__	MTCA 400	700 - 2100 (turb Clase II)	2,20	15,00	14.710	71	88	1
5048045__R__	MTCA 450	600 - 1800 (turb Clase II)	2,20	15,00	17.840	71	100	1
5048050__R__	MTCA 500	550 (turb Clase II) - 1700 (turb Clase II)	3,00	22,00	22.220	71	120	1
5048056__R__	MTCA 560	500 (turb Clase II) - 1500 (turb Clase II)	4,00	30,00	30.330	69	182	1
5048063__R__	MTCA 630	450 (turb Clase II) - 1300 (turb Clase II)	5,50	30,00	34.040	70	223	1

Notes:

* The motor is not included in fan weight

** 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	D3	D4	D5
MTCA 220	85	512	440	180	286	235	260	220	196
MTCA 250	94	530	471	195	313	255	276	235	212
MTCA 280	105	620	505	200	356	287	305	262	230
MTCA 310	117	644	557	225	397	316	332	288	256
MTCA 350	130	816	630	255	437	359	375	325	289
MTCA 400	147	869	685	285	487	387	400	353	311
MTCA 450	163	902	765	320	542	435	445	398	354
MTCA 500	183	1047	862	360	597	490	502	450	401

Model	D6	D7	E	F	G	H	H1	H2	I
MTCA 220	200	330	496	135	86	300	180	300	228
MTCA 250	215	359	527	149	96	315	195	315	228
MTCA 280	226	393	605	172	105	375	200	375	288
MTCA 310	253	440	656	196	117	400	225	400	288
MTCA 350	278	492	739	216	131	450	255	450	355
MTCA 400	306	543	811	245	147	500	285	500	355
MTCA 450	342	609	914	275	165	560	320	560	355
MTCA 500	380	676	1001	303	185	600	360	600	364

Model	J	K	M	N	N1	N2	O	O6	P
MTCA 220	210	282	255	445	8	8	177	150	13,5
MTCA 250	210	282	255	445	8	10	17	164	13,5
MTCA 280	284	347	324	576	12	10	23	193	18
MTCA 310	284	347	324	576	8	10	23	215	18

Model	J	K	M	N	N1	N2	O	O6	P
MTCA 350	407	485	400	610	8	10	28	237	23
MTCA 400	407	485	400	610	12	14	28	258	23
MTCA 450	407	485	400	610	12	14	28	289	23
MTCA 500	477	560	418	632	12	14	33	316	27

Model	Q	R	S	S1	S2	S3	S4	S5	S6
MTCA 220	40	17	260	196	200	180	330	286	235
MTCA 250	40	17	276	212	215	195	359	313	255
MTCA 280	50	23	305	230	226	200	393	356	287
MTCA 310	50	23	332	256	253	225	440	397	316
MTCA 350	60	28	375	289	278	255	492	437	359
MTCA 400	80	28	400	311	306	285	543	487	387
MTCA 450	80	28	445	354	342	320	609	542	435
MTCA 500	110	33	502	401	380	360	676	597	490

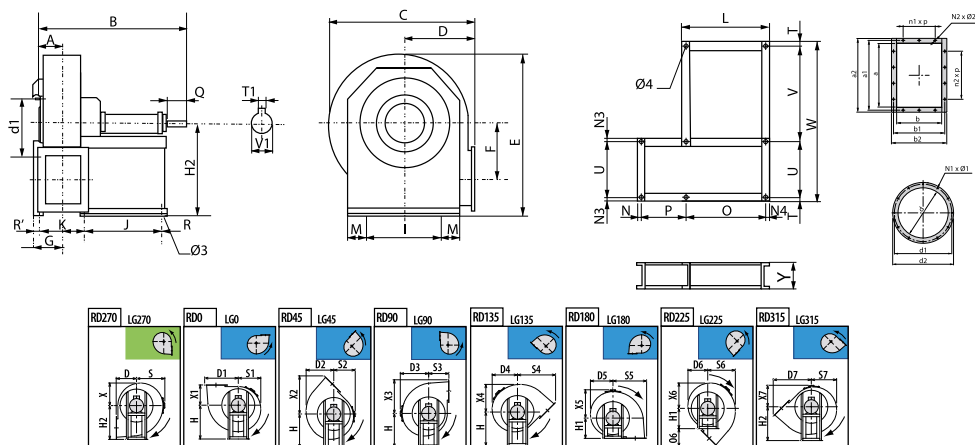
Model	S7	T	T1	U	V	V1	W	X	X1
MTCA 220	220	700	6	80	244	19	55	196	180
MTCA 250	235	700	6	80	244	19	55	212	195
MTCA 280	262	900	8	100	330	24	40	230	200
MTCA 310	288	900	8	100	330	24	40	256	255
MTCA 350	325	1010	8	120	463	28	50	289	255
MTCA 400	353	1010	10	120	463	38	50	311	285
MTCA 450	398	1010	10	120	463	38	50	354	320
MTCA 500	450	1050	12	140	543	42	50	401	360

Model	X2	X3	X4	X5	X6	X7	a	a1	a2
MTCA 220	330	286	235	260	220	200	231	265	301
MTCA 250	359	313	255	276	235	215	258	292	328
MTCA 280	393	356	287	305	262	226	288	332	368
MTCA 310	440	397	316	332	288	253	322	366	402
MTCA 350	492	437	359	375	325	278	361	405	441
MTCA 400	543	487	387	400	353	306	404	448	484
MTCA 450	609	542	435	445	398	342	453	497	533
MTCA 500	676	597	490	502	450	380	507	551	587

Model	b	b1	b2	d	d1	d2	n1xp	n2xp	Ø1
MTCA 220	166	200	236	228	265	298	1x112	1x112	8
MTCA 250	185	219	255	255	292	325	1x112	2x112	10
MTCA 280	205	249	285	285	332	365	1x125	2x125	12
MTCA 310	229	273	309	320	366	400	1x125	2x125	12
MTCA 350	256	300	336	360	405	440	1x125	2x125	12

Model	b	b1	b2	d	d1	d2	n1xp	n2xp	Ø1
MTCA 400	288	332	368	405	448	485	2x125	3x125	12
MTCA 450	322	366	402	455	497	535	2x125	3x125	12
MTCA 500	361	405	441	505	551	585	2x125	3x125	14

Model	Ø2	Ø3	Ø4
MTCA 220	12	10	12
MTCA 250	12	10	12
MTCA 280	12	12	15
MTCA 310	12	12	15
MTCA 350	12	14	15
MTCA 400	12	14	15
MTCA 450	12	14	15
MTCA 500	12	17	18



Model	A	B	C	D	D1	D2	D3	D4	D5
MTCA 560	205	1177	970	400	667	555	570	542	485
MTCA 630	230	1233	1080	450	742	619	630	603	540

Model	D6	D7	E	F	G	H	H1	H2	I
MTCA 560	425	754	1155	332	255	670	400	670	632
MTCA 630	476	843	1290	373	280	750	450	750	702

Model	J	K	L	M	N	N1	N2	N3	N4
MTCA 560	477	488	543	30	23	12	14	30	33
MTCA 630	477	537	543	30	23	12	14	30	33

Model	O	O6	P	Q	R	R'	S	S1	S2
MTCA 560	477	354	488	110	33	23	570	485	425
MTCA 630	477	393	537	110	33	23	630	540	476

Model	S3	S4	S5	S6	S7	T	T1	U	V
MTCA 560	400	754	667	555	542	30	14	632	678
MTCA 630	450	843	742	619	603	30	14	702	708

Model	V1	W	X	X1	X2	X3	X4	X5	X6
MTCA 560	48	1370	485	400	754	667	555	570	542
MTCA 630	48	1470	540	450	843	742	619	630	603

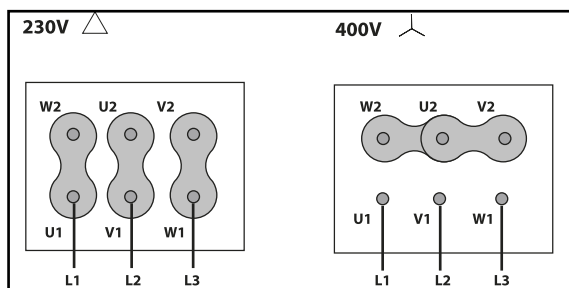
Model	X7	Y	a	a1	a2	b	b1	b2	d
MTCA 560	425	160	569	629	669	404	464	504	565
MTCA 630	476	160	638	698	738	453	513	553	635

Model	d1	d2	n1xp	n2xp	Ø1	Ø2	Ø3	Ø4
MTCA 560	629	665	2x160	3x160	14	14	17	18
MTCA 630	698	735	2x160	3x160	14	14	17	18

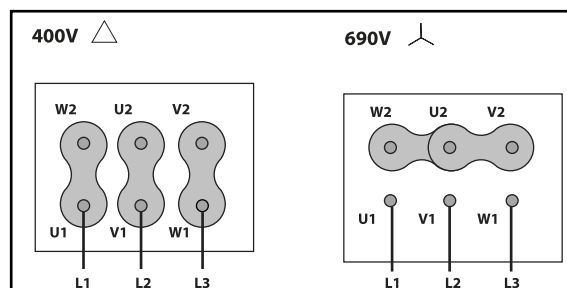
Wiring diagram

Wiring diagram N° 1

230/400V



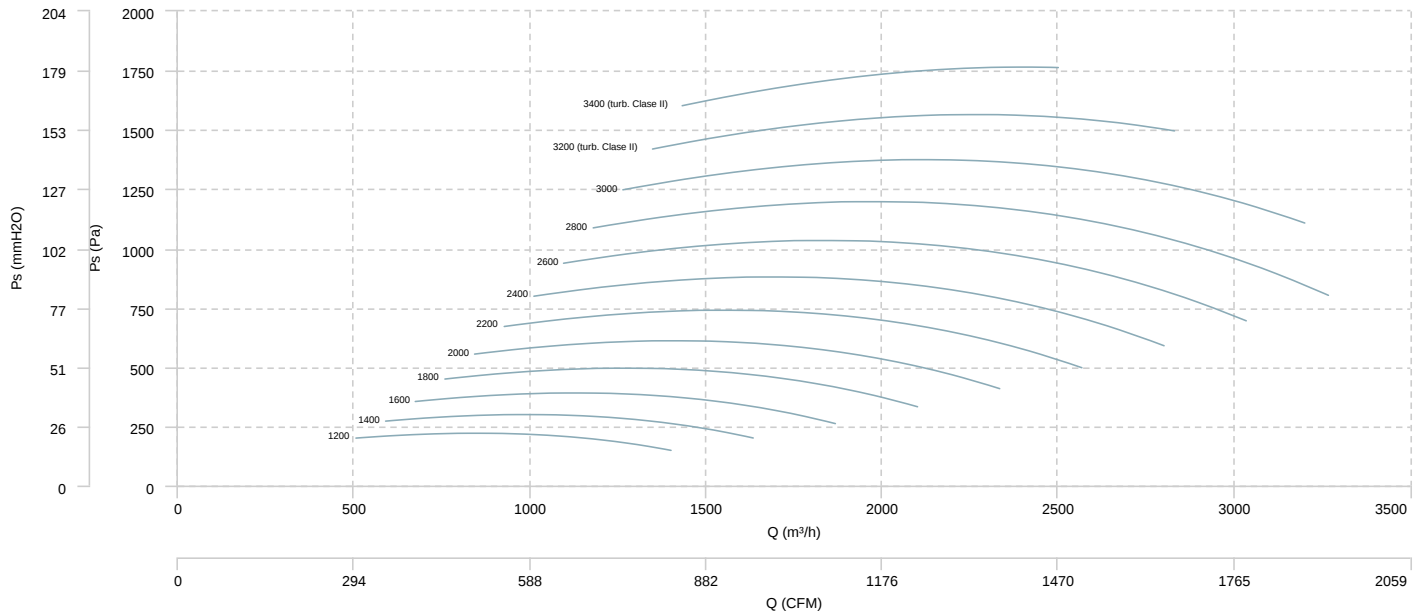
400/690V



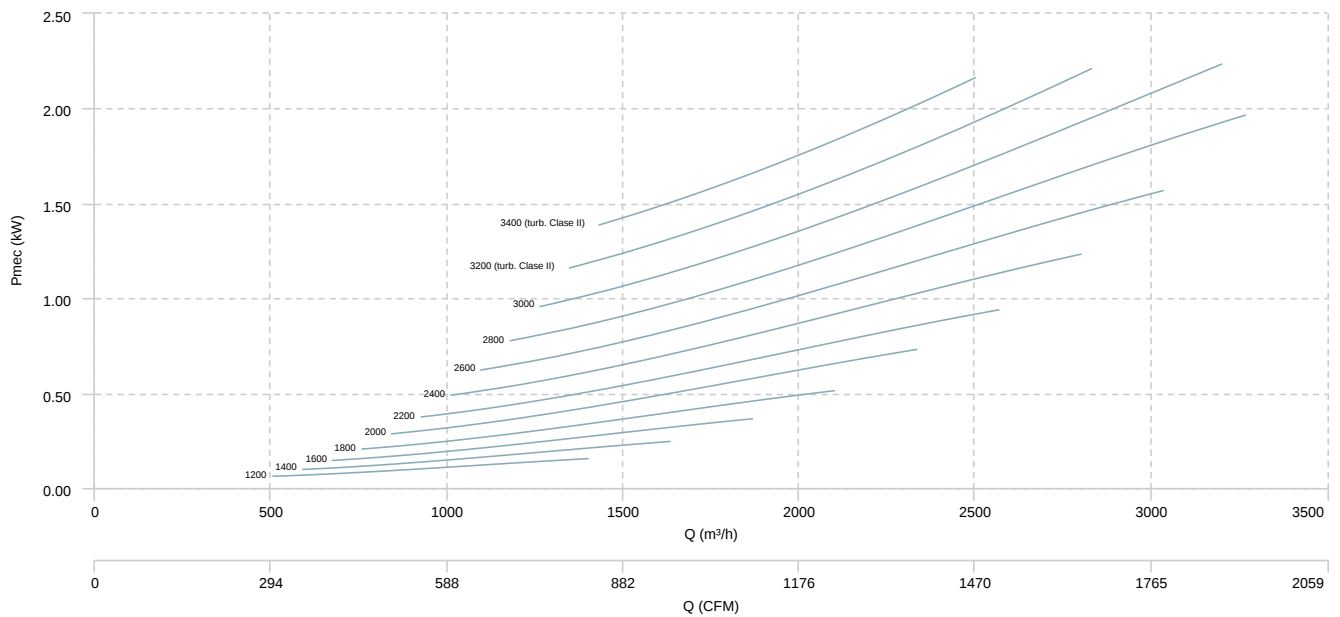
CHARACTERISCTIC CURVE

MTCA 220

AIR FLOW - PRESSURE

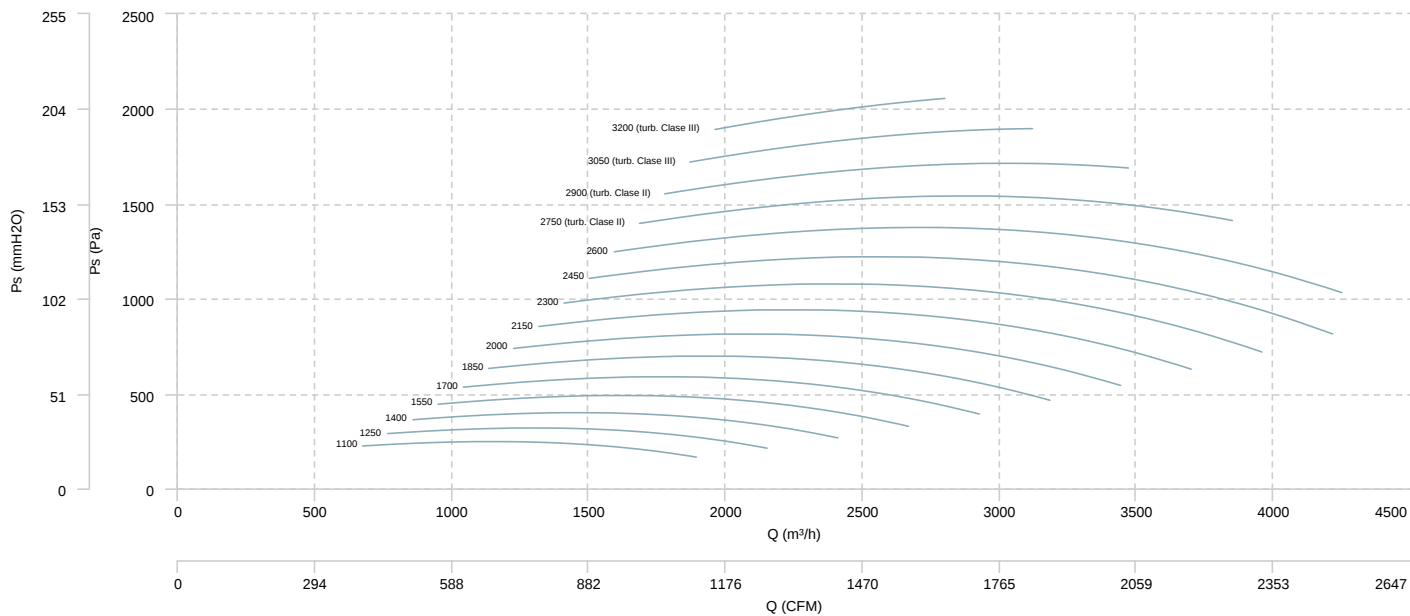


AIR FLOW - MECHANICAL POWER

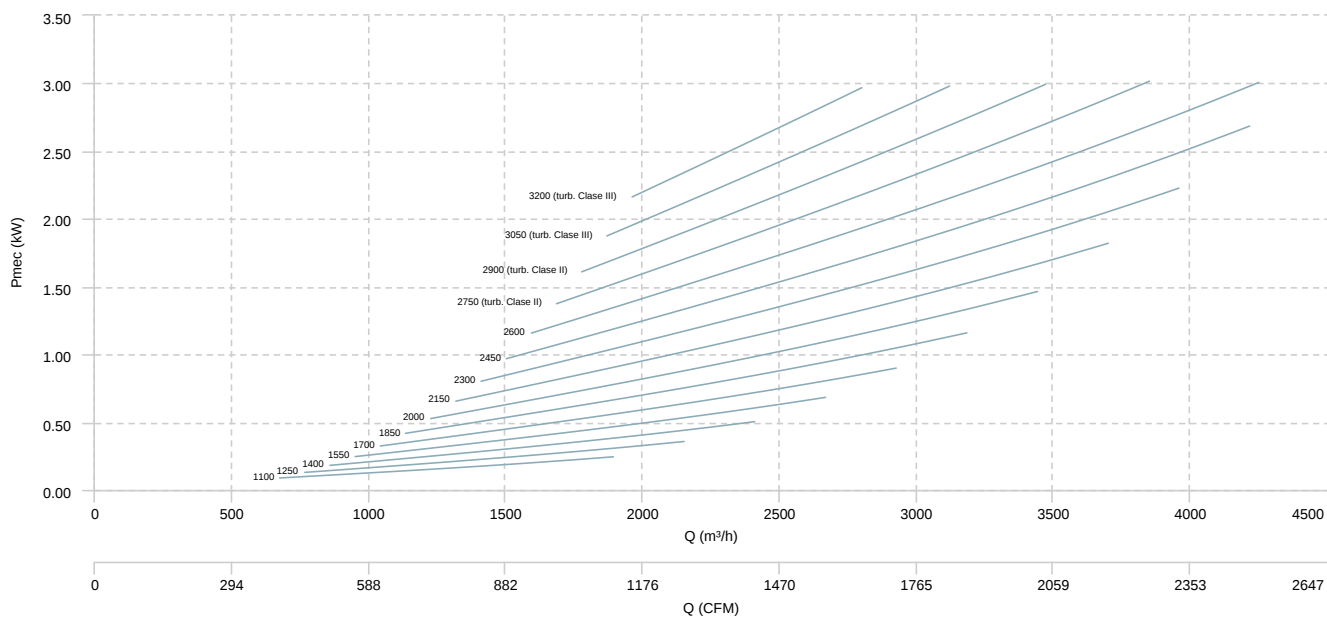


MTCA 250

AIR FLOW - PRESSURE

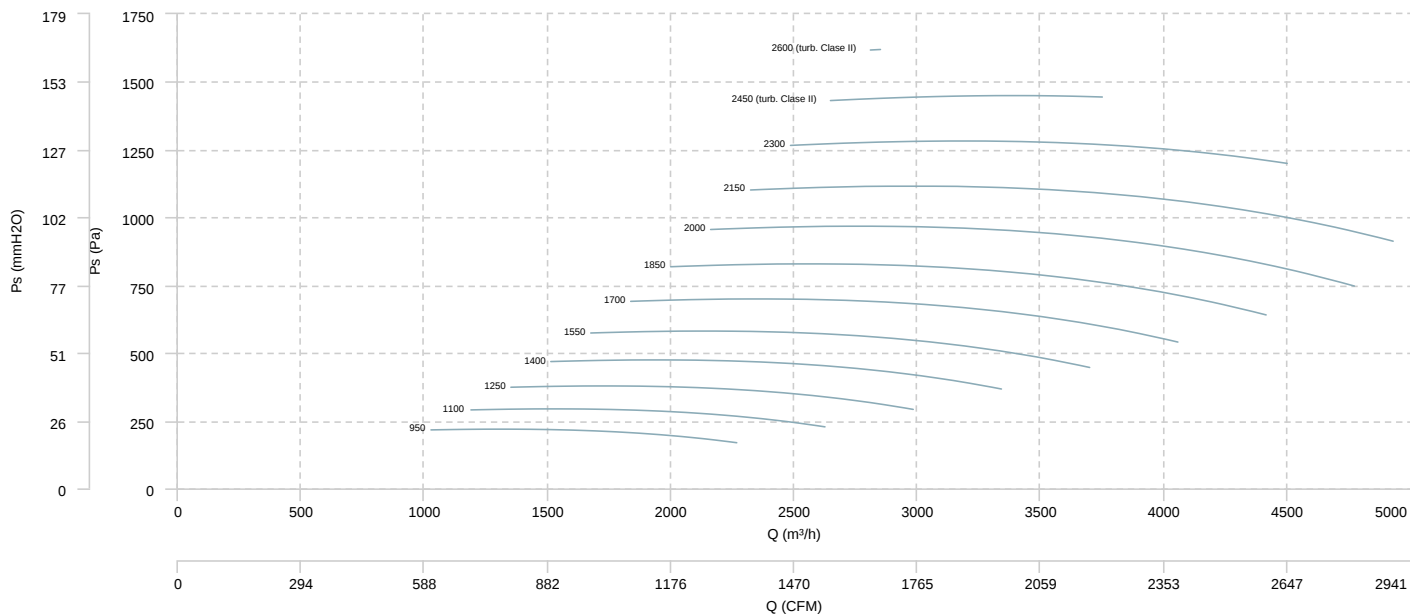


AIR FLOW - MECHANICAL POWER

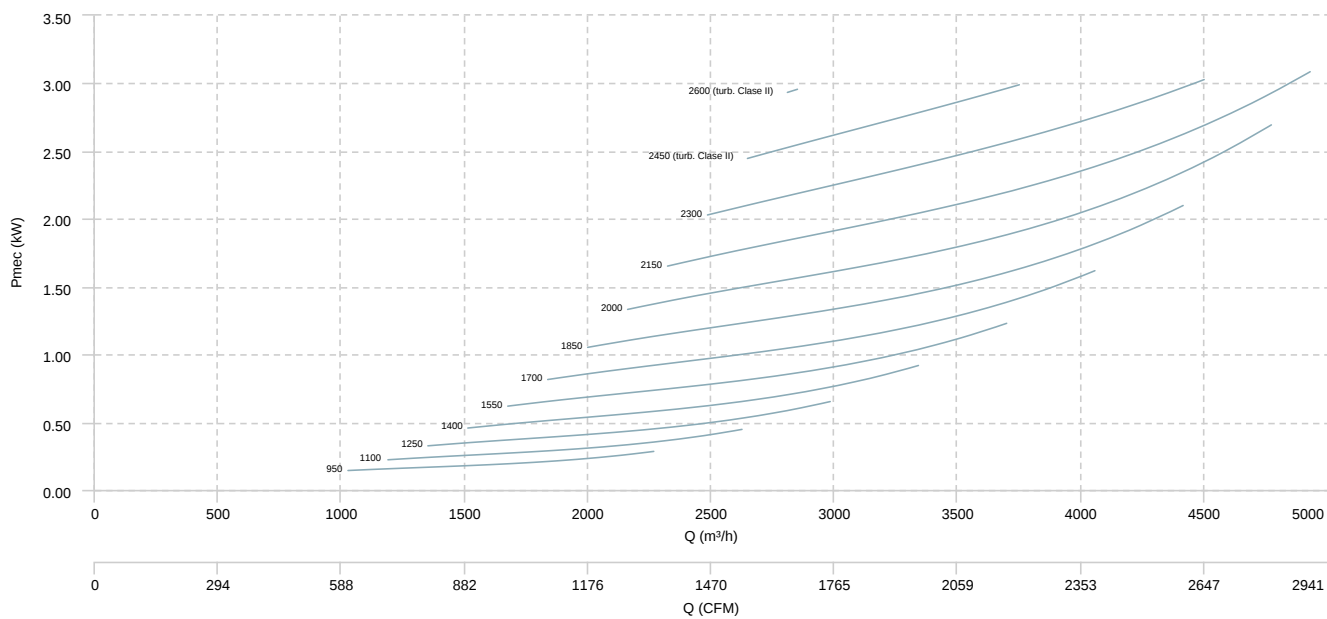


MTCA 280

AIR FLOW - PRESSURE

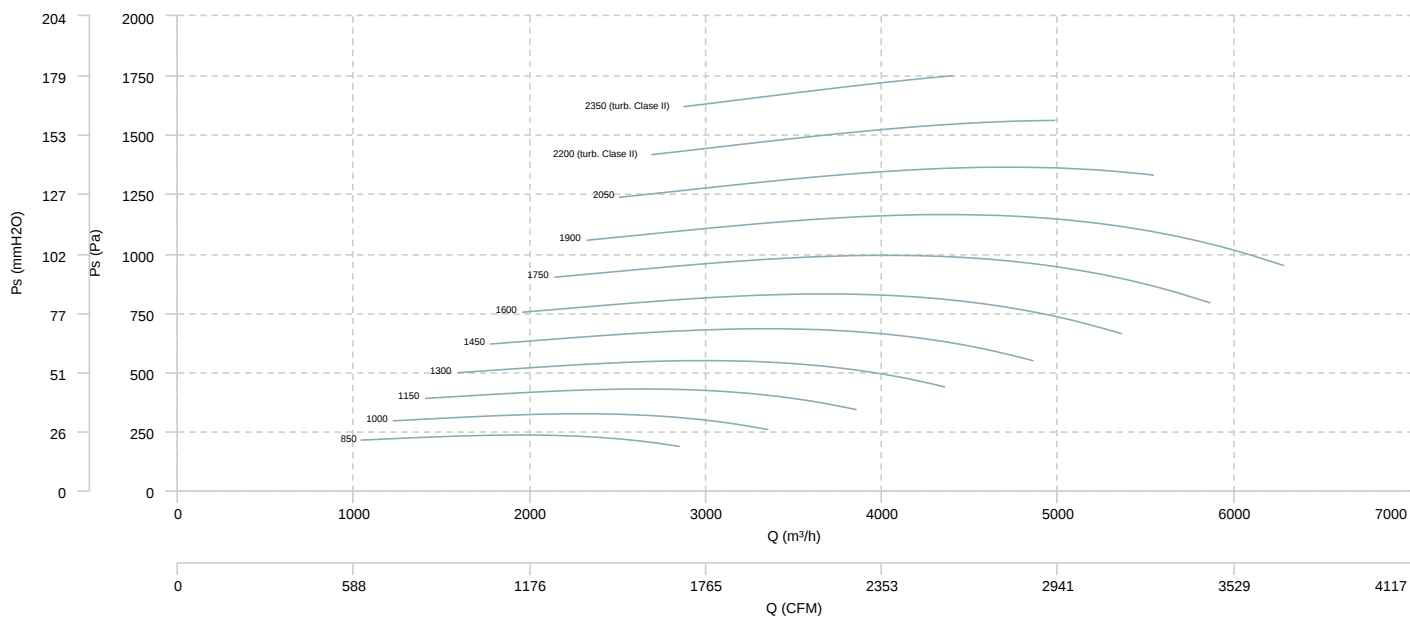


AIR FLOW - MECHANICAL POWER

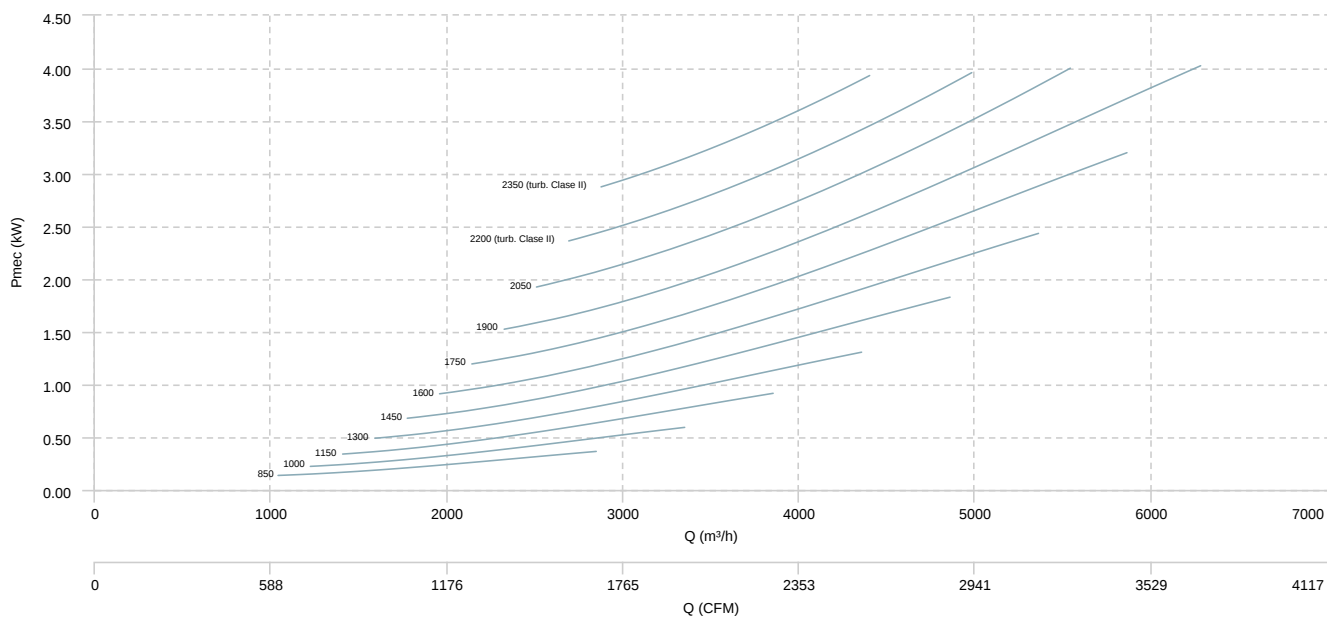


MTCA 310

AIR FLOW - PRESSURE

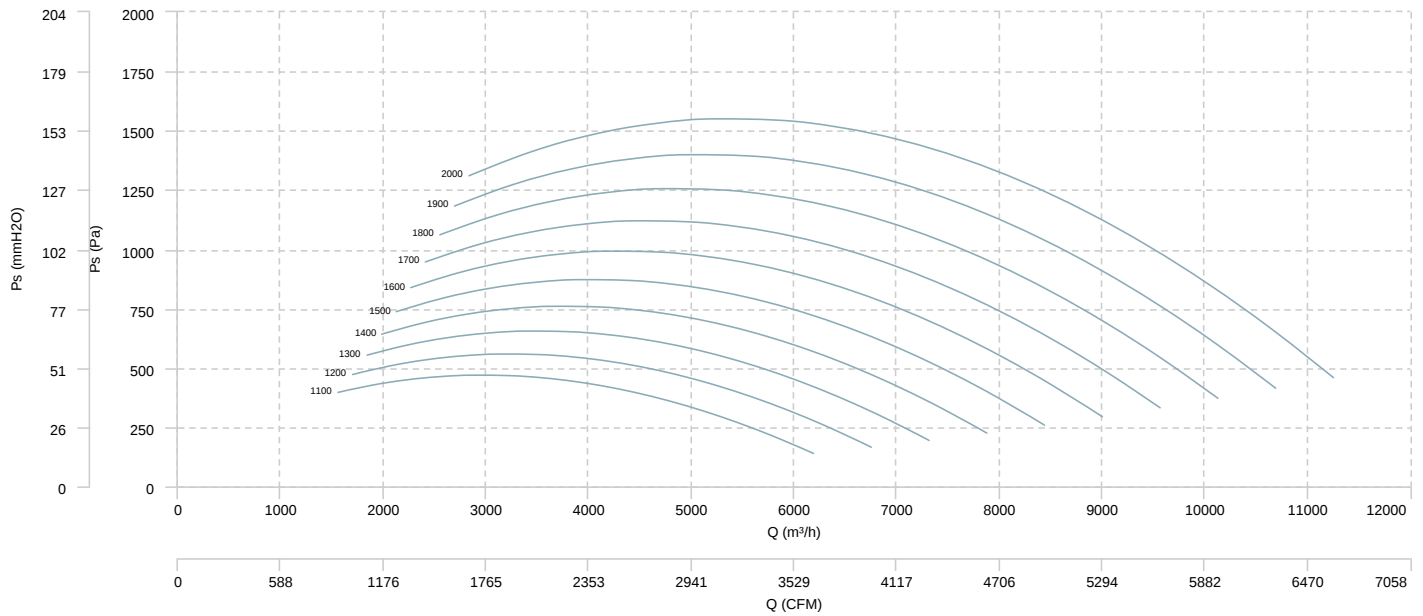


AIR FLOW - MECHANICAL POWER

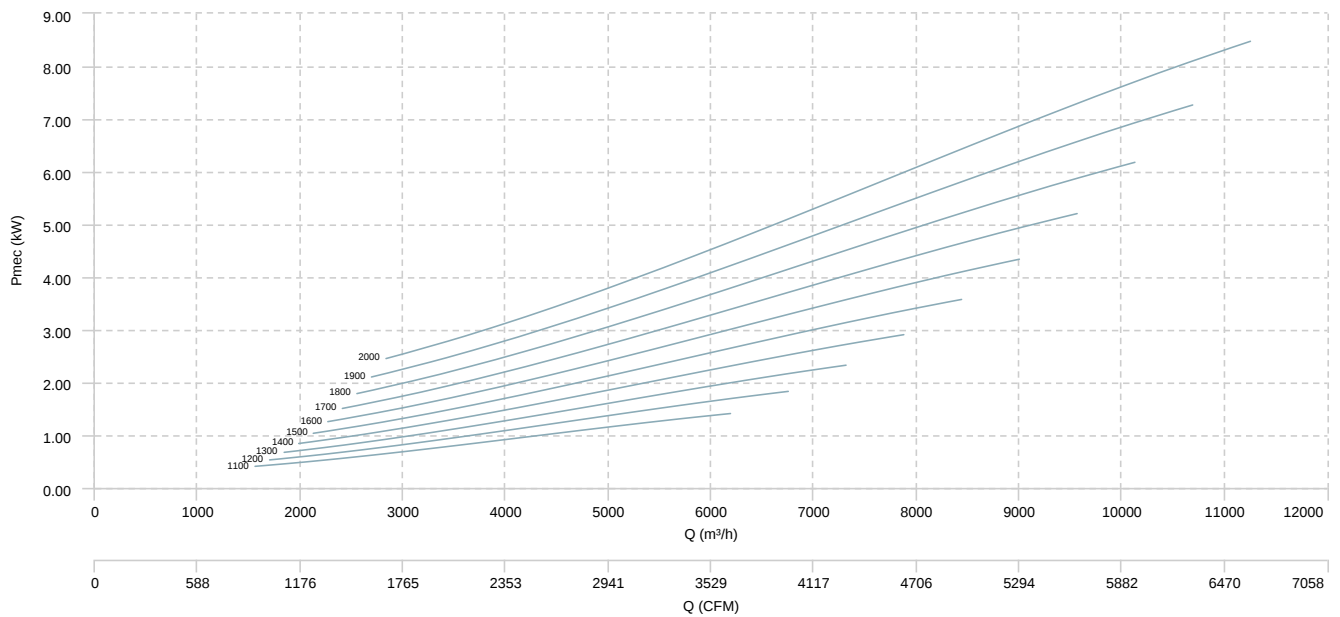


MTCA 350

AIR FLOW - PRESSURE

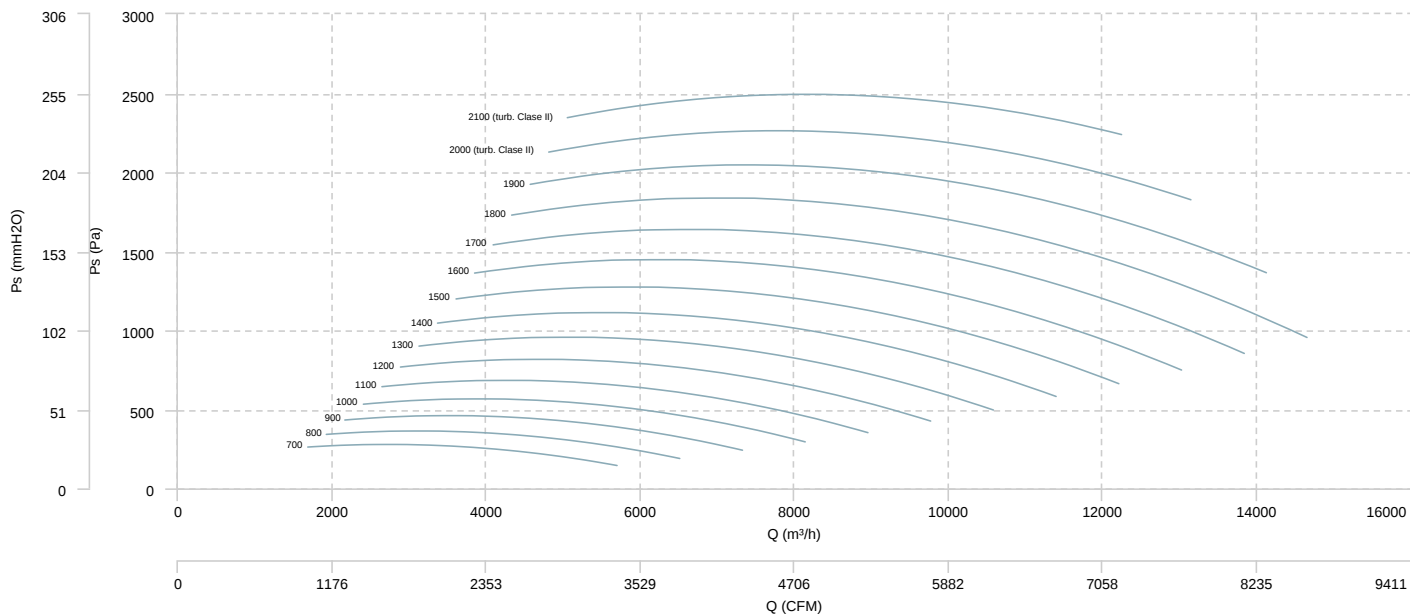


AIR FLOW - MECHANICAL POWER

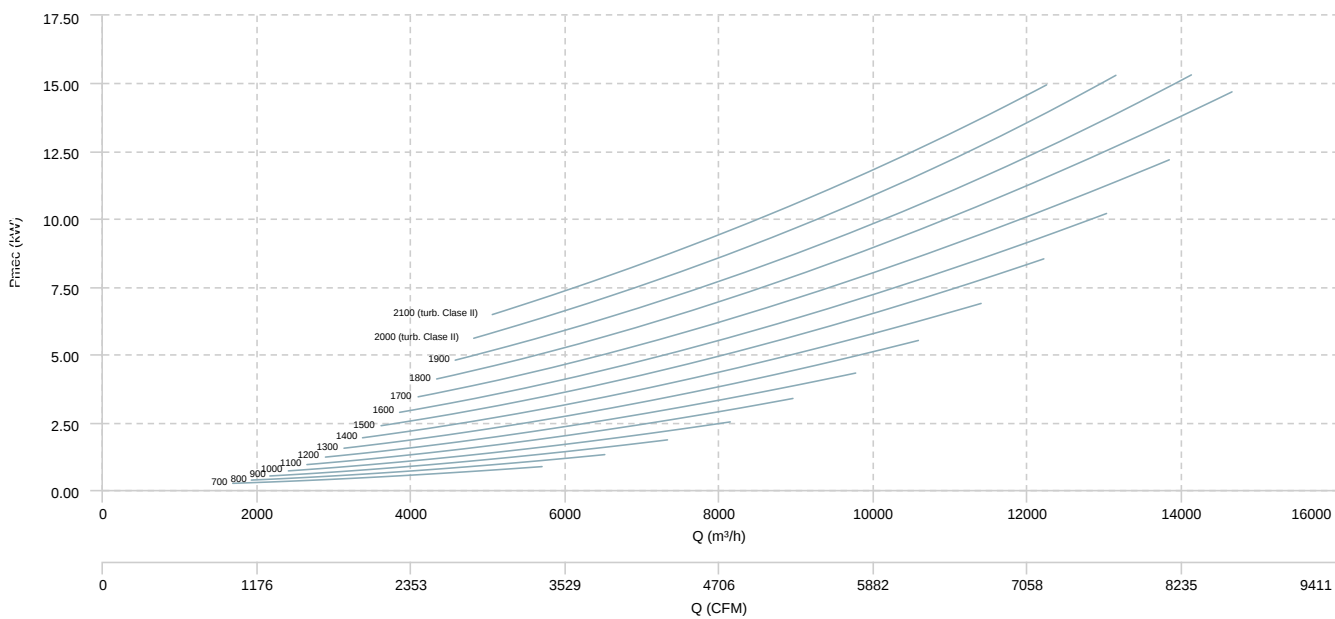


MTCA 400

AIR FLOW - PRESSURE

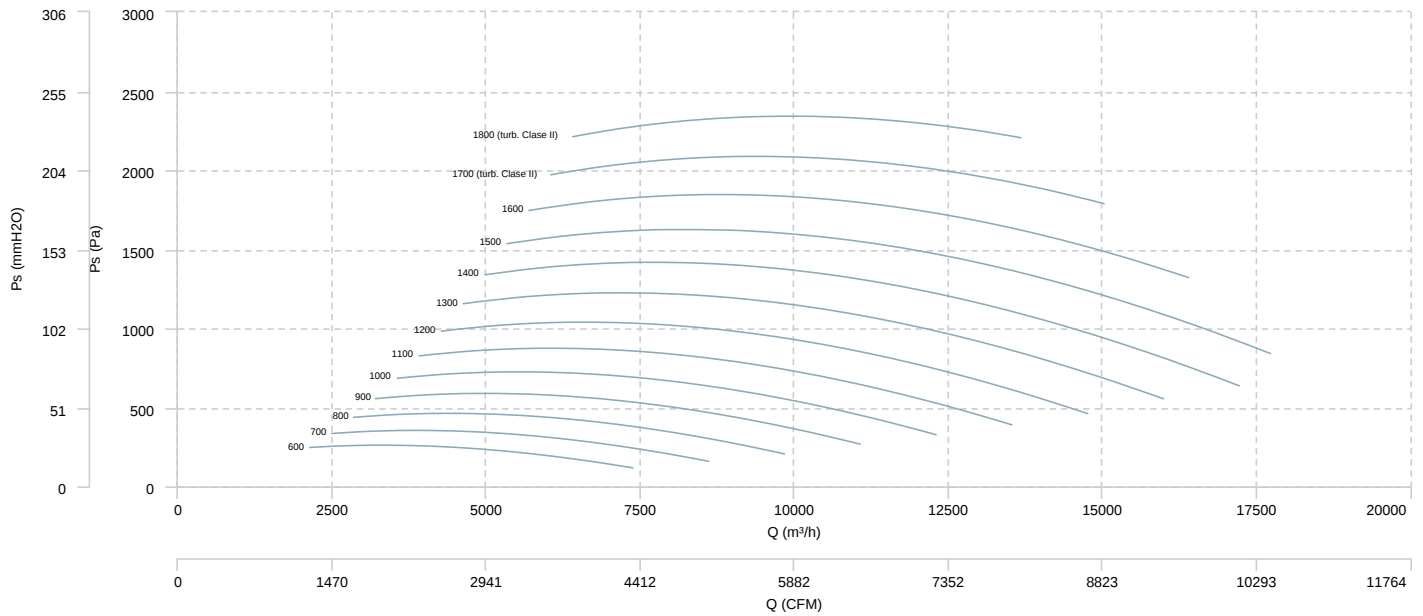


AIR FLOW - MECHANICAL POWER

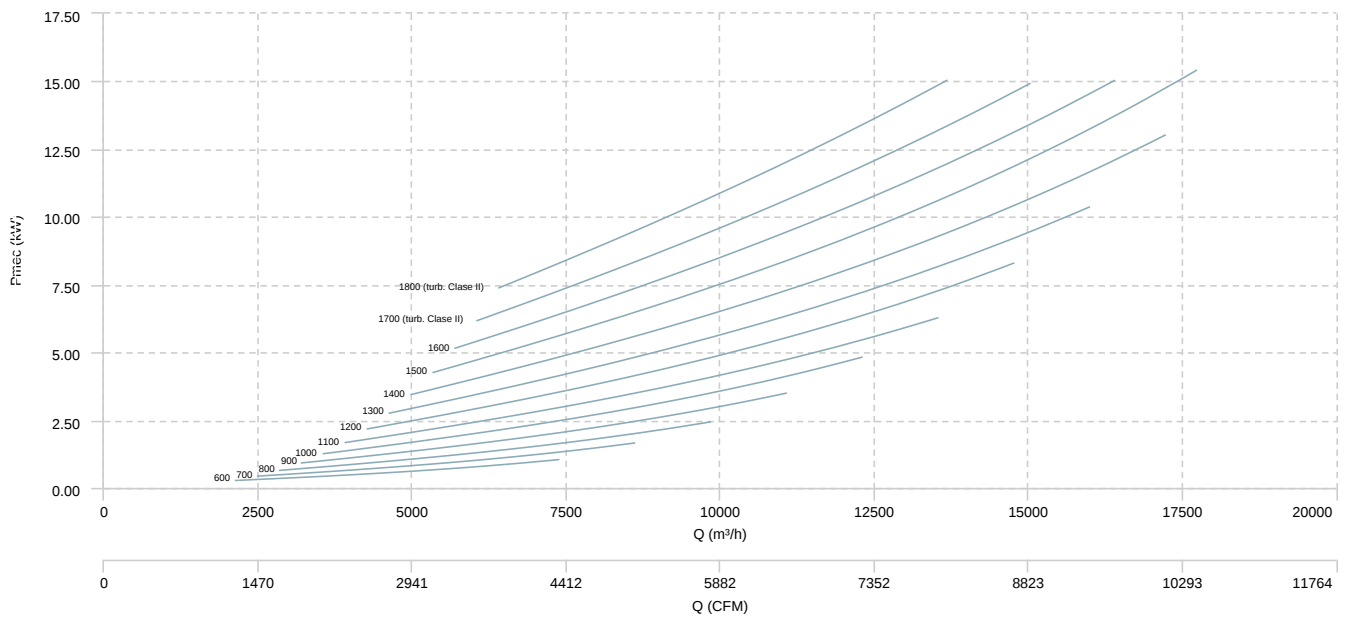


MTCA 450

AIR FLOW - PRESSURE

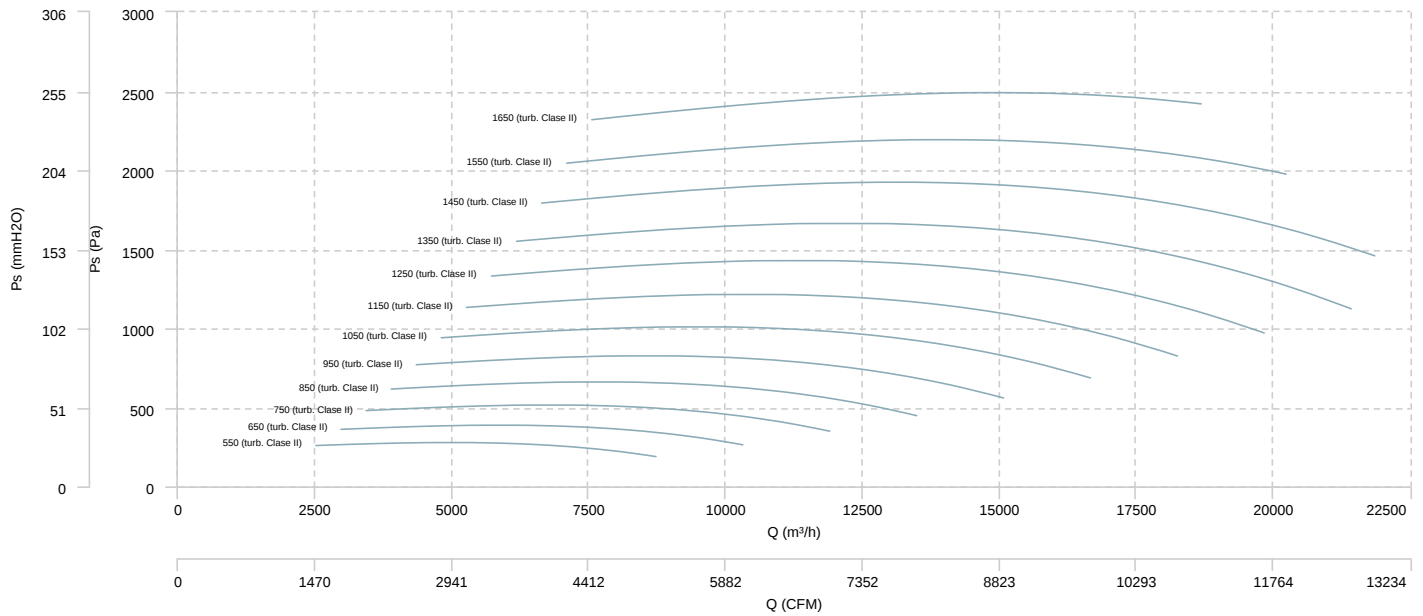


AIR FLOW - MECHANICAL POWER

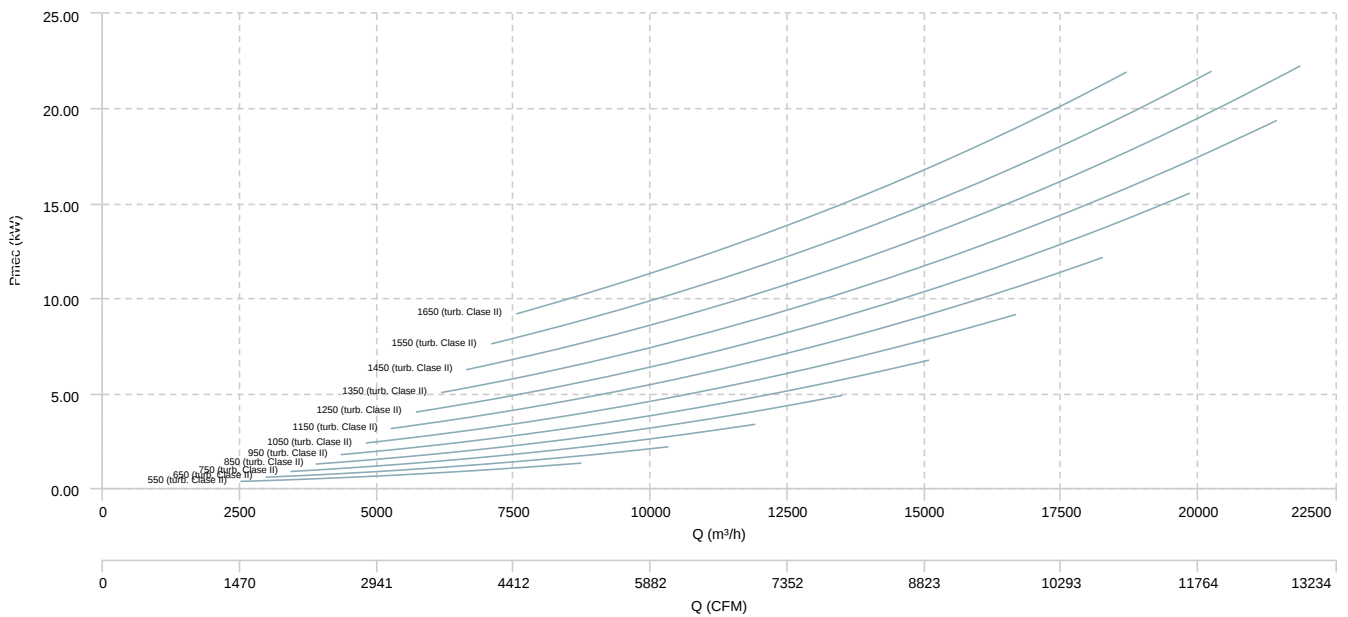


MTCA 500

AIR FLOW - PRESSURE

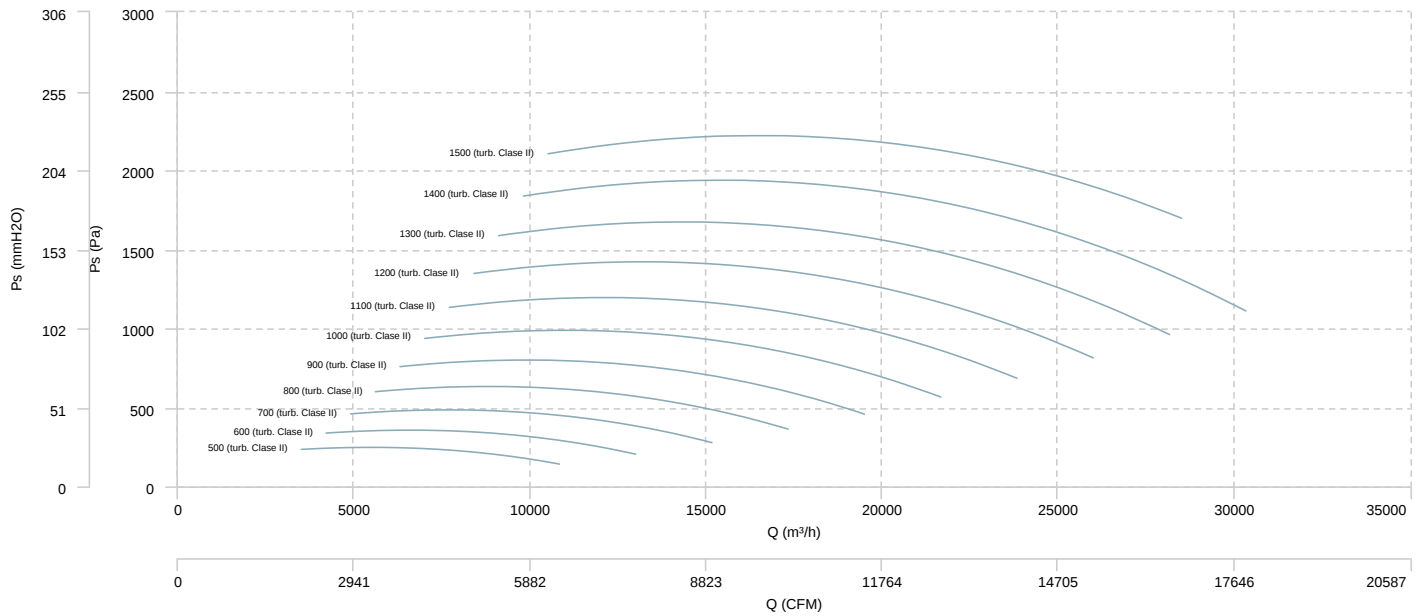


AIR FLOW - MECHANICAL POWER

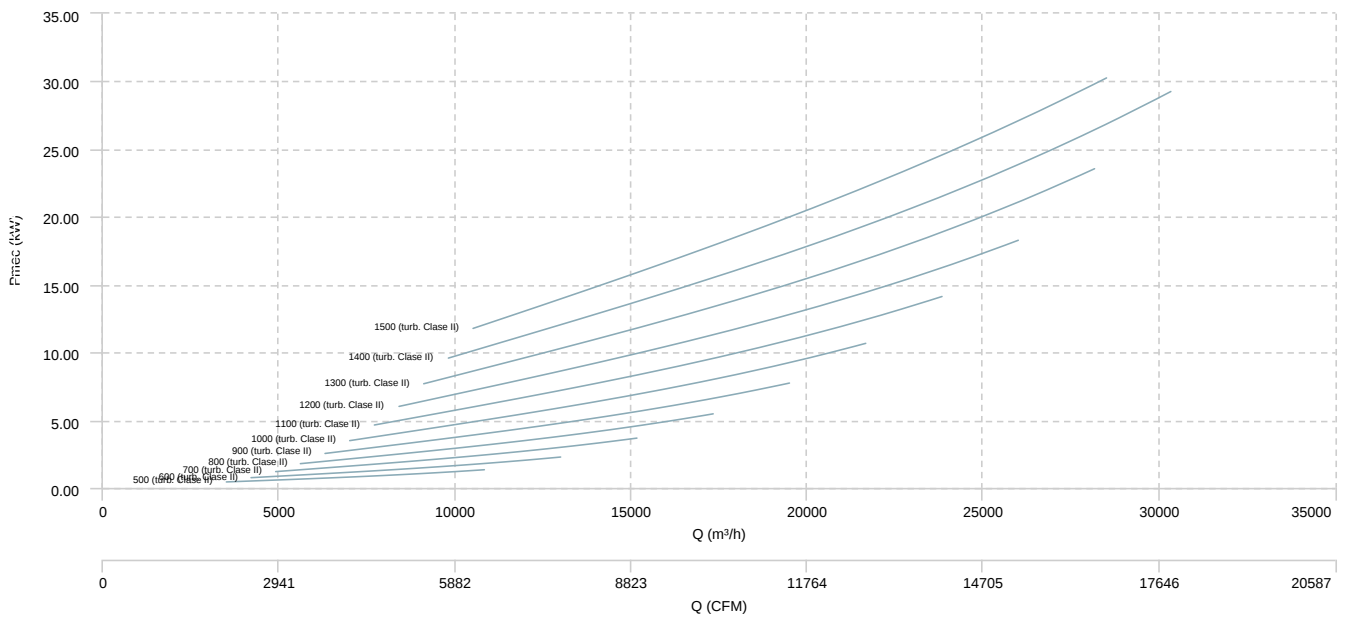


MTCA 560

AIR FLOW - PRESSURE

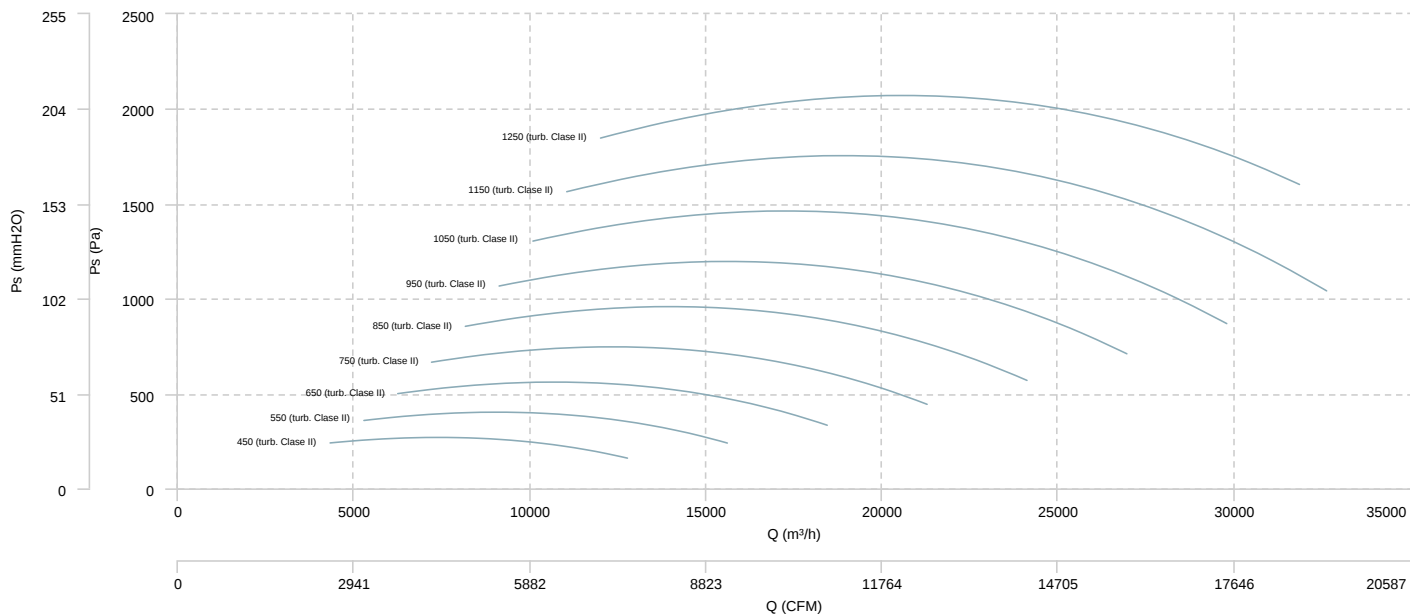


AIR FLOW - MECHANICAL POWER

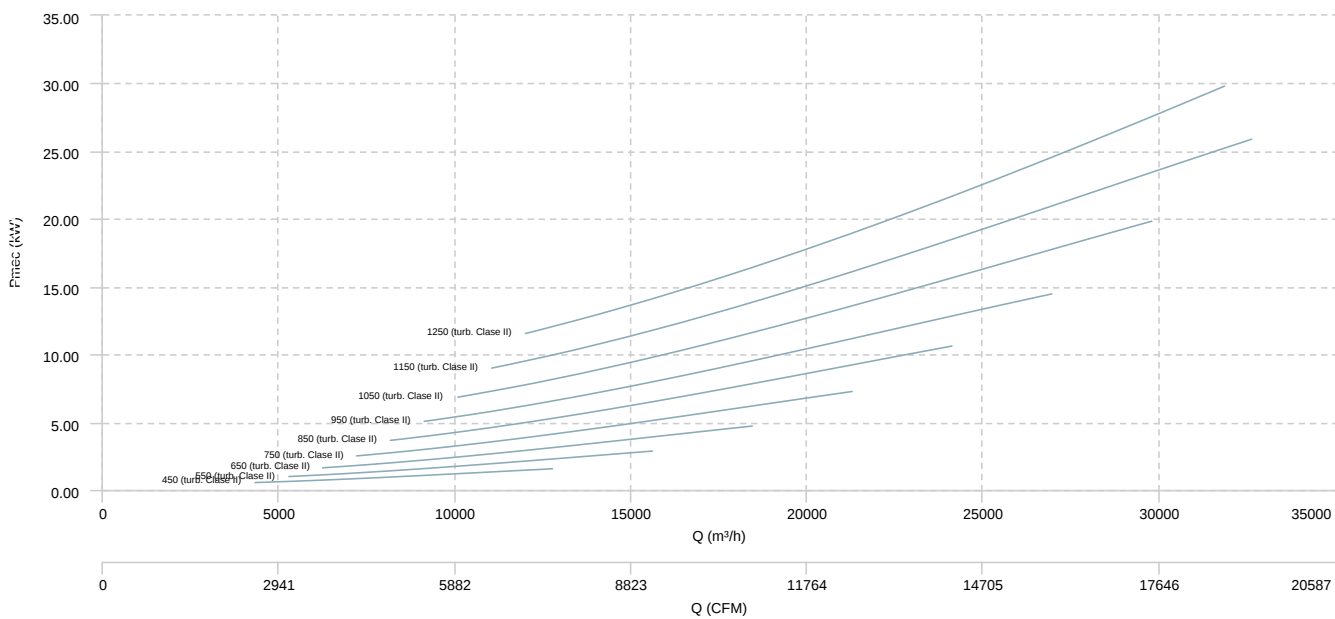


MTCA 630

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
MTCA 220 (1200)	Inlet	36	48	55	59	60	55	49	46	64
MTCA 250 (1100)	Inlet	38	50	57	61	62	57	51	48	66
MTCA 280 (950)	Inlet	37	49	55	59	60	56	49	46	64
MTCA 310 (850)	Inlet	42	54	60	64	65	61	54	51	70
MTCA 350 (1100)	Inlet	50	62	69	73	74	69	63	60	78
MTCA 400 (700)	Inlet	45	57	63	68	68	64	57	54	73
MTCA 450 (600)	Inlet	45	57	64	68	69	64	58	55	73
MTCA 500 (550 (turb. Clase II))	Inlet	45	53	58	67	68	64	57	54	72
MTCA 560 (500 (turb. Clase II))	Inlet	43	55	62	66	67	62	56	53	71
MTCA 630 (450 (turb. Clase II))	Inlet	46	58	65	69	70	65	59	56	74

Notes:

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

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