

MTRL ATEX



ATEX MEDIUM PRESSURE WITH BACKWARD 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.
- Single inlet backward impeller with self-cleaning system made of Fe360 sheet statically and dynamically balanced. Impellers are painted with polyester primer that resists temperatures up to 300°C.
- ATEX standard asynchronous motor. ATEX certified according to the zone. Squirrel-cage motor with class F insulation. Manufactured with standard voltages: 230/400V 50Hz for three phase motors up to 4kW and 400/690V 50Hz for higher powers.
- Motorized fan with base frame (configuration 12), full equipped fans including: motor, pulleys, belts, belts guard and shaft guard.

Accessories



AB



AC



AVR



AVS



BA-400



**BADS
ATEX**



**BIDS
ATEX**



EI



FS



**INT
ATEX**



JE 45



RI



SFC

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.
- Exhaust after filters, separators and cyclones.
- Clean air or slightly dusty air transport.
- Working temperature: ambient from -20°C to 40°C, transported air according to the ATEX classification.

UNDER REQUEST

- Fans for 60Hz and special voltages.
- Inox 304 (normal or electropolished finish)
- Inox 316 (normal or electropolished finish)
- Split casing (for big sizes)
- Drain plug.
- Frontal foot

Technical data

Three-phase motor

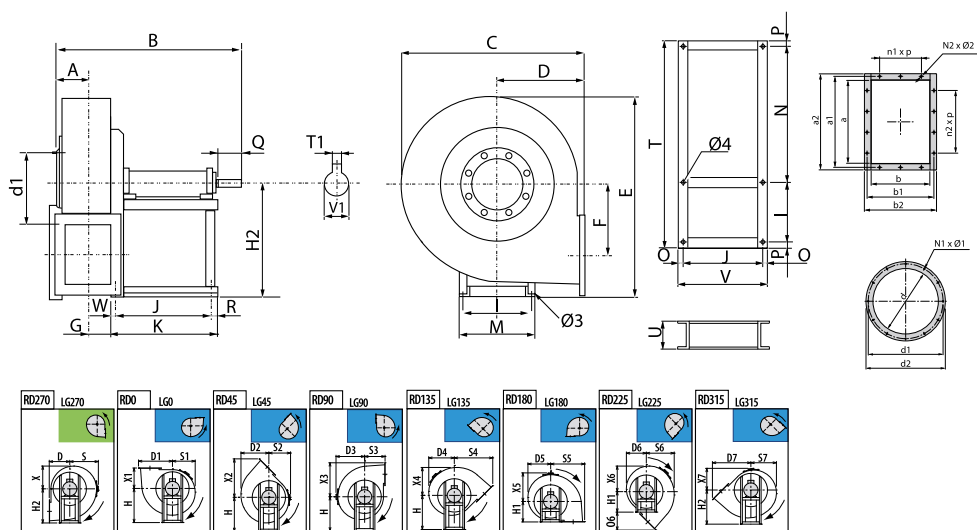
Code	Model	RPM	Min. Rated power kW	Max. Rated power kW	Max. Airflow m³/h	Sound db (A)**	Weight kg	Connect. diagram
	MTRL 250 ATEX	1700rpm - 3500rpm	0,37	3,00	2.960	60	32	1
	MTRL 280 ATEX	1500rpm - 3500rpm	0,37	3,00	3.800	-	46	1
	MTRL 310 ATEX	1350rpm - 3500rpm	0,55	4,00	6.120	64	50	1
	MTRL 350 ATEX	1200rpm - 3500rpm	0,55	4,00	7.960	68	76	1
	MTRL 400 ATEX	1100rpm - 3500rpm	1,50	11,00	12.670	72	92	1
	MTRL 450 ATEX	950rpm - 3300rpm	2,20	15,00	16.750	76	105	1
	MTRL 500 ATEX	850rpm - 3000rpm	2,20	15,00	19.190	76	145	1
	MTRL 560 ATEX	750rpm - 2600rpm	3,00	22,00	25.570	77	196	1
	MTRL 630 ATEX	700rpm - 2300rpm	3,00	22,00	32.780	77	239	1
	MTRL 710 ATEX	600rpm - 2100rpm	5,50	37,00	43.820	78	360	1
	MTRL 800 ATEX	550rpm - 1900rpm	5,50	45,00	52.910	79	442	1
	MTRL 900 ATEX	500rpm - 1700rpm	11,00	55,00	66.730	79	570	1
	MTRL 1000 ATEX	500rpm - 1400rpm	11,00	55,00	74.170	78	800	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
MTRL 250 ATEX	94	530	471	195	313	255	276	235	212
MTRL 280 ATEX	105	620	505	200	356	287	305	262	230
MTRL 310 ATEX	117	644	557	225	397	316	332	288	256
MTRL 350 ATEX	130	816	630	255	437	359	375	325	289
MTRL 400 ATEX	147	869	685	285	487	387	400	353	311
MTRL 450 ATEX	163	902	765	320	542	435	445	398	354
MTRL 500 ATEX	183	1047	862	360	597	490	502	450	401

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

Model	J	K	M	N1xØ1	N2xØ2	O	O6	P	Q
MTRL 250 ATEX	210	282	255	Nº8 M6x20	10x12	17	164	13,5	40
MTRL 280 ATEX	284	347	324	Nº8 M6x20	10x12	23	193	18	50
MTRL 310 ATEX	284	347	324	Nº8 M6x20	10x12	23	215	18	50

Model	J	K	M	N1xØ1	N2xØ2	O	O6	P	Q
MTRL 350 ATEX	407	485	400	Nº8 M8x25	10x12	28	237	13	60
MTRL 400 ATEX	407	485	400	Nº8 M8x25	14x12	28	258	23	80
MTRL 450 ATEX	407	485	400	Nº8 M8x25	14x12	28	289	23	-
MTRL 500 ATEX	477	560	418	Nº8 M10x30	14x12	33	316	27	110

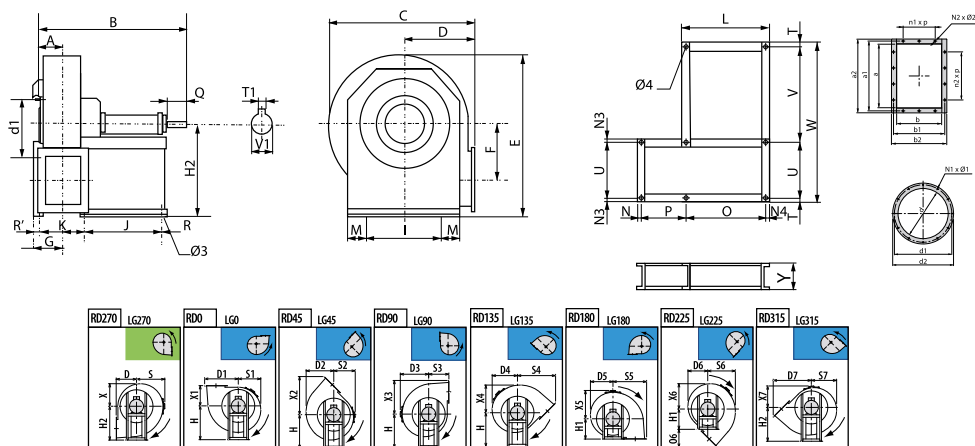
Model	R	S	S1	S2	S3	S4	S5	S6	S7
MTRL 250 ATEX	-	276	212	215	195	359	313	255	235
MTRL 280 ATEX	-	305	230	226	200	393	356	287	262
MTRL 310 ATEX	-	332	256	253	225	440	397	316	288
MTRL 350 ATEX	-	375	289	278	255	492	437	359	325
MTRL 400 ATEX	-	400	311	306	285	543	487	387	353
MTRL 450 ATEX	-	445	354	342	320	609	542	435	398
MTRL 500 ATEX	33	502	401	380	360	676	597	490	450

Model	T	T1	U	V	V1	W	X	X1	X2
MTRL 250 ATEX	6	6	80	19	19	55	212	195	359
MTRL 280 ATEX	8	8	100	24	24	40	230	200	393
MTRL 310 ATEX	8	8	100	24	24	40	256	255	440
MTRL 350 ATEX	8	8	120	28	28	50	289	255	492
MTRL 400 ATEX	10	10	120	38	38	50	311	285	543
MTRL 450 ATEX	10	10	120	38	38	50	354	320	609
MTRL 500 ATEX	12	12	140	42	42	50	401	360	676

Model	X3	X4	X5	X6	X7	a	a1	a2	b
MTRL 250 ATEX	313	255	276	235	215	258	292	328	185
MTRL 280 ATEX	356	287	305	262	226	288	332	368	205
MTRL 310 ATEX	397	316	332	288	253	322	366	402	229
MTRL 350 ATEX	437	359	375	325	278	361	405	441	256
MTRL 400 ATEX	487	387	400	353	306	404	448	484	288
MTRL 450 ATEX	542	435	445	398	342	453	497	533	322
MTRL 500 ATEX	597	490	502	450	380	507	551	587	361

Model	b1	b2	d	d1	d2	n1xp	n2xp	Ø3	Ø4
MTRL 250 ATEX	219	255	255	292	325	1x112	2x112	10	12
MTRL 280 ATEX	249	285	285	332	365	1x125	2x125	12	15
MTRL 310 ATEX	273	309	320	366	400	1x125	2x125	12	15
MTRL 350 ATEX	300	336	360	405	440	1x125	2x125	14	15
MTRL 400 ATEX	332	368	405	448	485	2x125	3x125	14	15

Model	b1	b2	d	d1	d2	n1xp	n2xp	Ø3	Ø4
MTRL 450 ATEX	366	402	455	497	535	2x125	3x125	14	15
MTRL 500 ATEX	405	441	505	551	585	2x125	3x125	17	18



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

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

Model	J	K	L	M	N	N1	N1xØ1	N2xØ2	N3
MTRL 560 ATEX	477	488	543	30	23	33	Nº16 M10x30	14x14	30
MTRL 630 ATEX	477	537	543	30	23	33	Nº16 M10x30	14x14	30

Model	N4	O	O6	P	Q	R	S	S1	S2
MTRL 560 ATEX	33	477	354	488	110	33	570	485	425
MTRL 630 ATEX	33	477	393	537	110	33	630	540	476

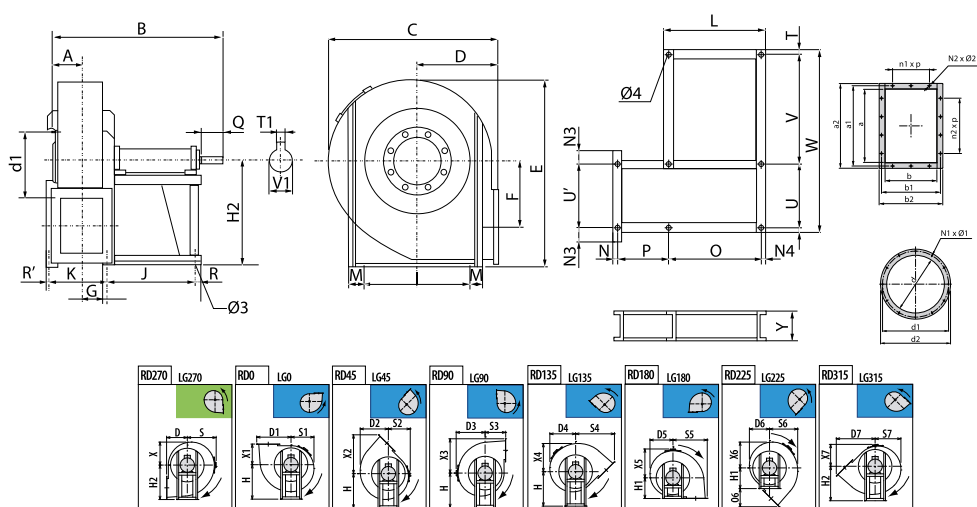
Model	S3	S4	S5	S6	S7	T	T1	U	V
MTRL 560 ATEX	400	754	667	555	542	14	14	632	678
MTRL 630 ATEX	450	843	742	619	603	30	14	702	708

Model	V1	W	X	X1	X2	X3	X4	X5	X6
MTRL 560 ATEX	48	1370	485	400	754	667	555	570	542

Model	V1	W	X	X1	X2	X3	X4	X5	X6
MTRL 630 ATEX	48	1470	540	450	843	742	619	630	603

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

Model	d1	d2	n1xp	n2xp	Ø3	Ø4
MTRL 560 ATEX	629	665	2x160	3x160	17	18
MTRL 630 ATEX	698	735	2x160	3x160	17	18



Model	A	B	C	D	D1	D2	D3	D4	D5
MTRL 710 ATEX	257	1340	1190	500	835	719	690	662	586
MTRL 800 ATEX	287	1422	1342	560	939	811	782	749	652
MTRL 900 ATEX	322	1491	1500	630	1047	905	870	835	723
MTRL 1000 ATEX	360	1710	1686	710	1171	1015	976	936	815

Model	D6	D7	E	F	G	H	H1	H2	I
MTRL 710 ATEX	497	944	1436	427	314	850	500	670	772
MTRL 800 ATEX	562	1061	1602	478	345	950	630	755	862
MTRL 900 ATEX	633	1186	1783	538	399	850	630	850	962
MTRL 1000 ATEX	718	1330	1995	607	458	950	710	950	1056

Model	J	K	L	M	N	N1	N1xØ1	N2xØ2	N3
MTRL 710 ATEX	551	600	629	27	27	39	Nº16 M10x30	16x14	71

Model	J	K	L	M	N	N1	N1xØ1	N2xØ2	N3
MTRL 800 ATEX	551	662	629	32	47	39	Nº16 M10x30	14x14	91
MTRL 900 ATEX	551	731	629	32	47	39	Nº16 M10x30	18x14	91
MTRL 1000 ATEX	607	803	697	36	67	45	Nº16 M10x30	18x14	92

Model	N4	O	O6	P	Q	R	R'	S	S1
MTRL 710 ATEX	39	551	444	600	110	39	27	690	586
MTRL 800 ATEX	39	551	501	662	110	39	47	782	652
MTRL 900 ATEX	39	551	556	731	110	39	47	870	723
MTRL 1000 ATEX	45	607	620	803	140	45	67	976	815

Model	S2	S3	S4	S5	S6	S7	T	T1	U
MTRL 710 ATEX	497	500	944	835	719	662	27	14	772
MTRL 800 ATEX	562	560	1061	939	811	749	32	16	862
MTRL 900 ATEX	633	630	1186	1047	905	835	32	16	962
MTRL 1000 ATEX	718	710	1330	1171	1015	936	36	18	1056

Model	U'	V	V1	W	X	X1	X2	X3	X4
MTRL 710 ATEX	772	807	48	1633	586	500	944	835	719
MTRL 800 ATEX	862	842	55	1768	91	560	1061	939	811
MTRL 900 ATEX	962	987	55	2013	723	630	1186	1047	905
MTRL 1000 ATEX	1056	1036	65	2164	815	710	1330	1171	1015

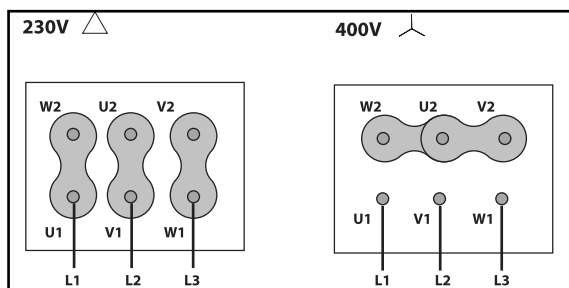
Model	X5	X6	X7	Y	a	a1	a2	b	b1
MTRL 710 ATEX	690	662	497	180	715	775	815	507	567
MTRL 800 ATEX	782	749	562	180	801	871	921	569	639
MTRL 900 ATEX	870	835	633	180	898	968	1018	638	708
MTRL 1000 ATEX	976	936	718	200	1007	1077	1127	715	785

Model	b2	d	d1	d2	n1xp	n2xp	Ø3	Ø4
MTRL 710 ATEX	607	715	775	815	2x160	4x160	19	20
MTRL 800 ATEX	689	805	861	905	2x200	3x200	19	20
MTRL 900 ATEX	758	905	958	1005	3x200	4x200	19	20
MTRL 1000 ATEX	835	1007	1067	1107	3x200	4x200	19	20

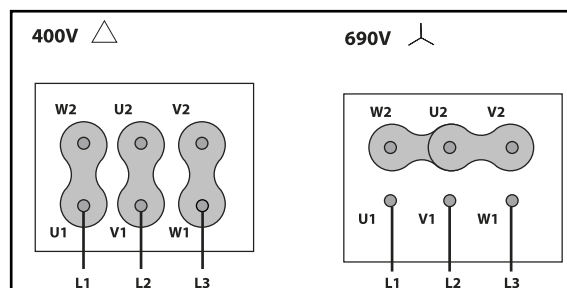
Wiring diagram

Wiring diagram Nº 1

230/400V



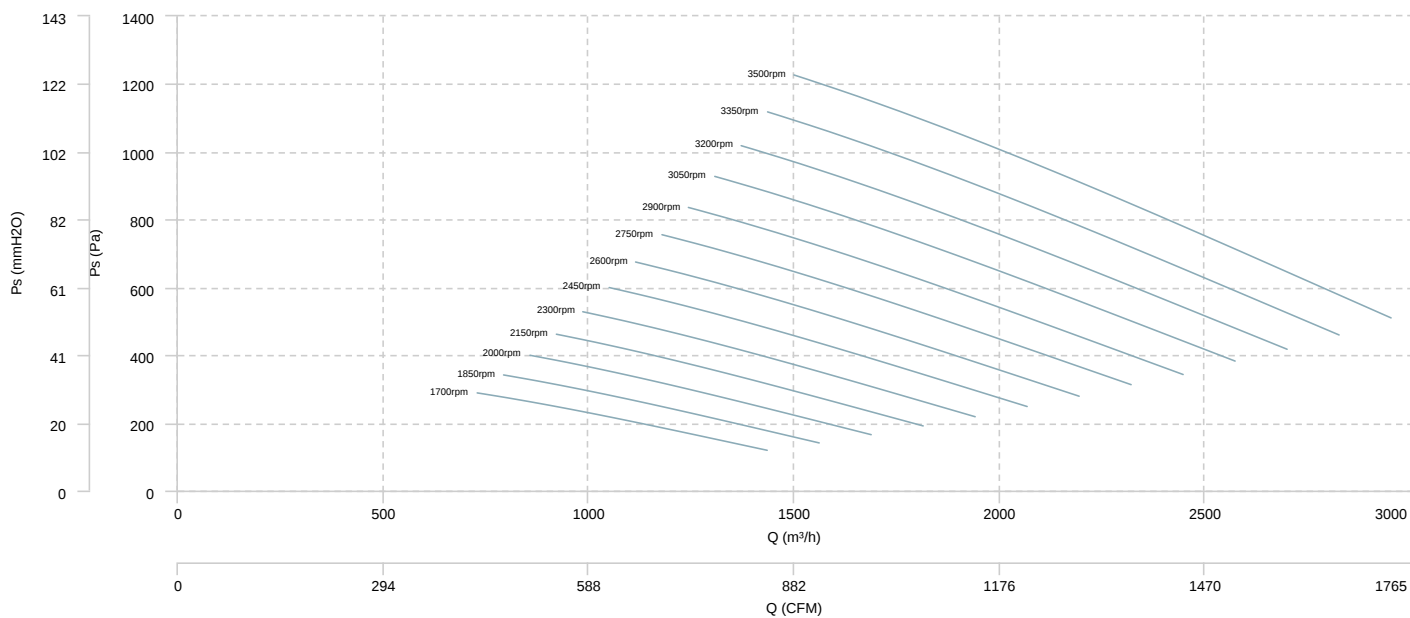
400/690V



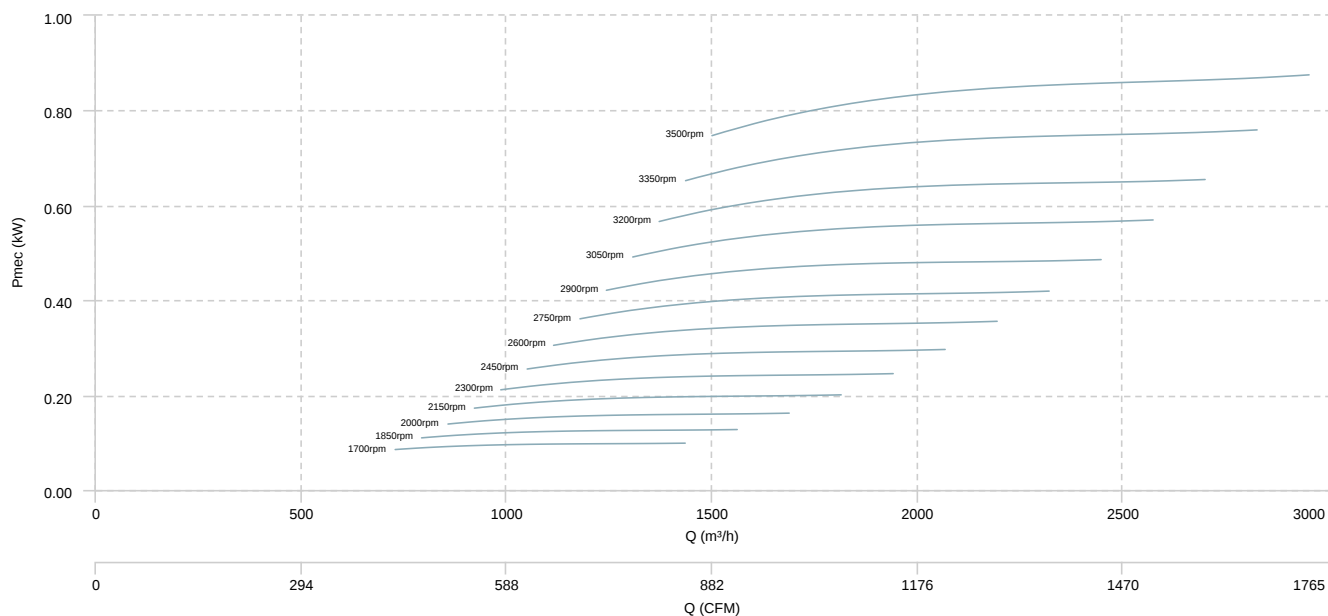
CHARACTERISCTIC CURVE

MTRL 250 ATEX

AIR FLOW - PRESSURE

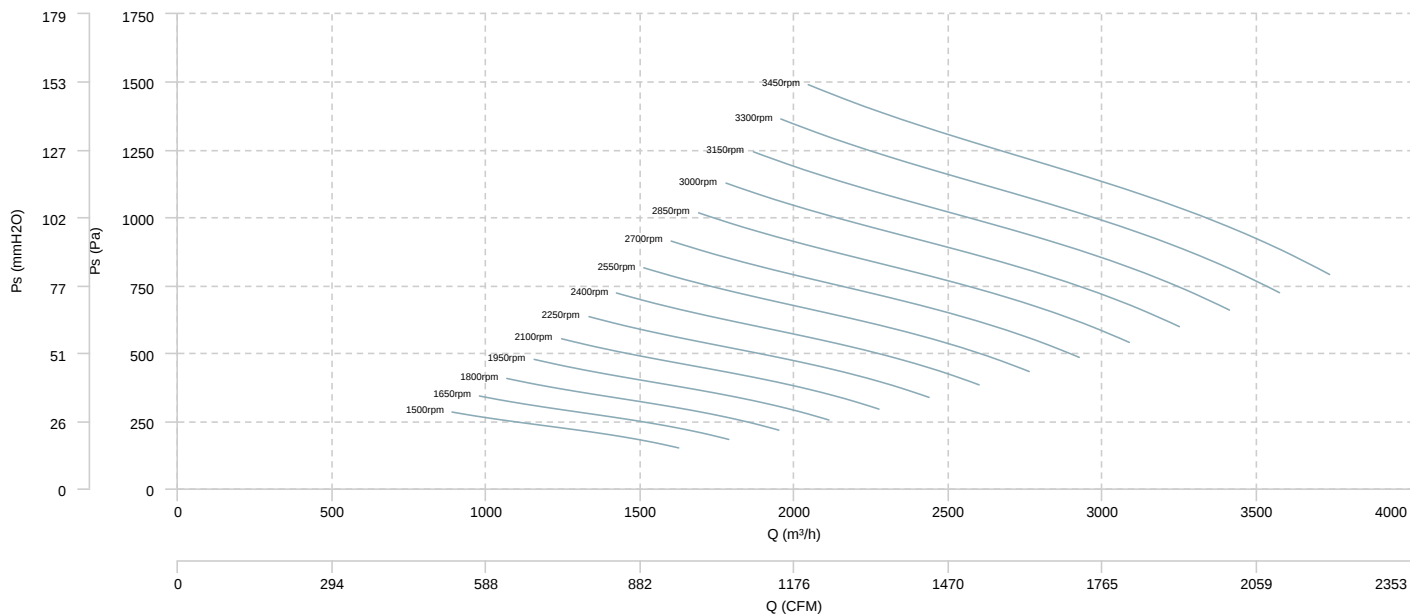


AIR FLOW - MECHANICAL POWER

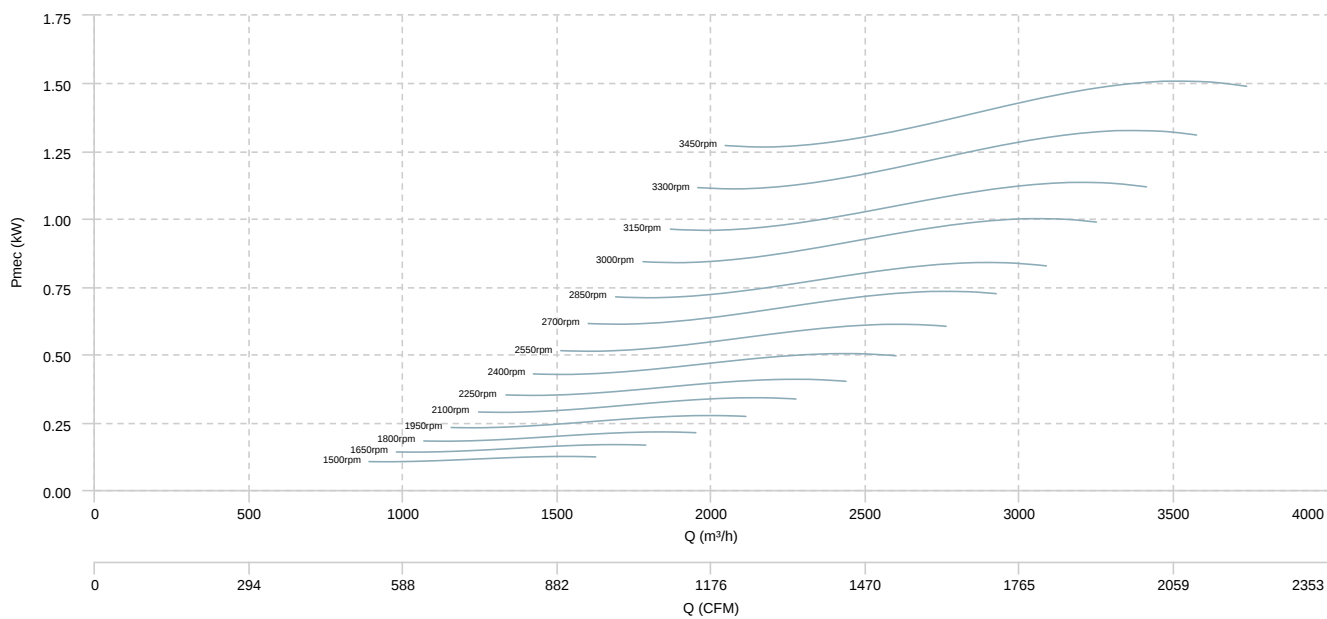


MTL 280 ATEX

AIR FLOW - PRESSURE

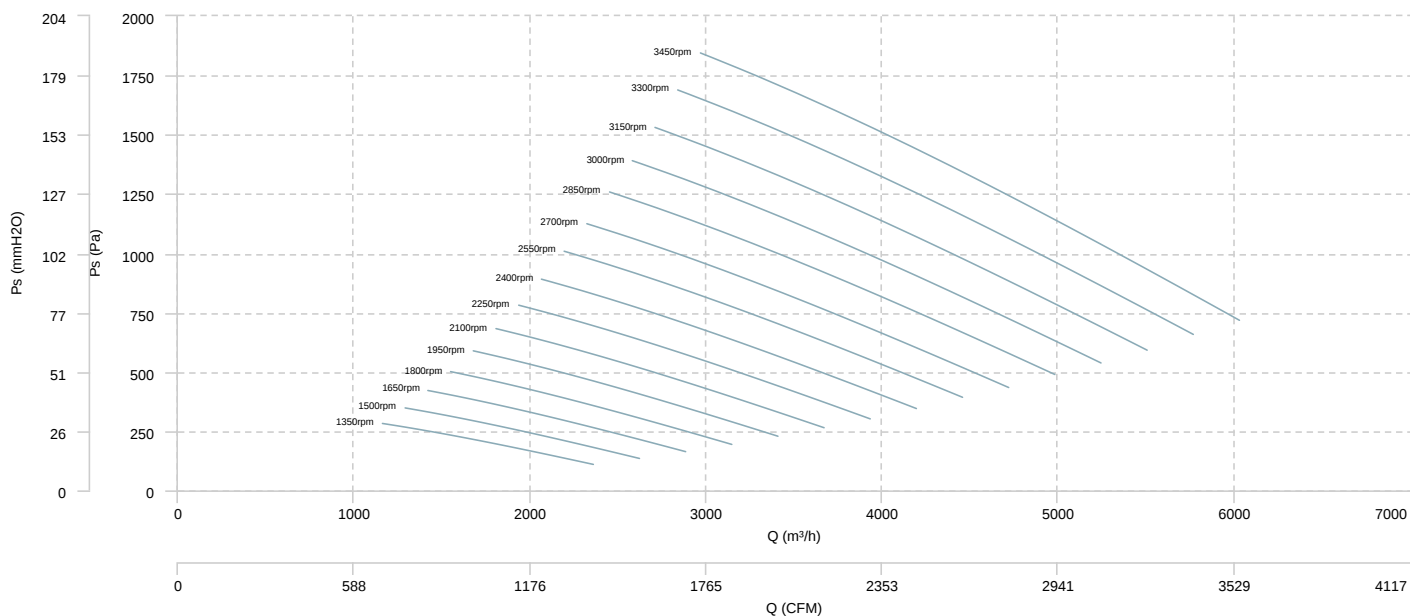


AIR FLOW - MECHANICAL POWER

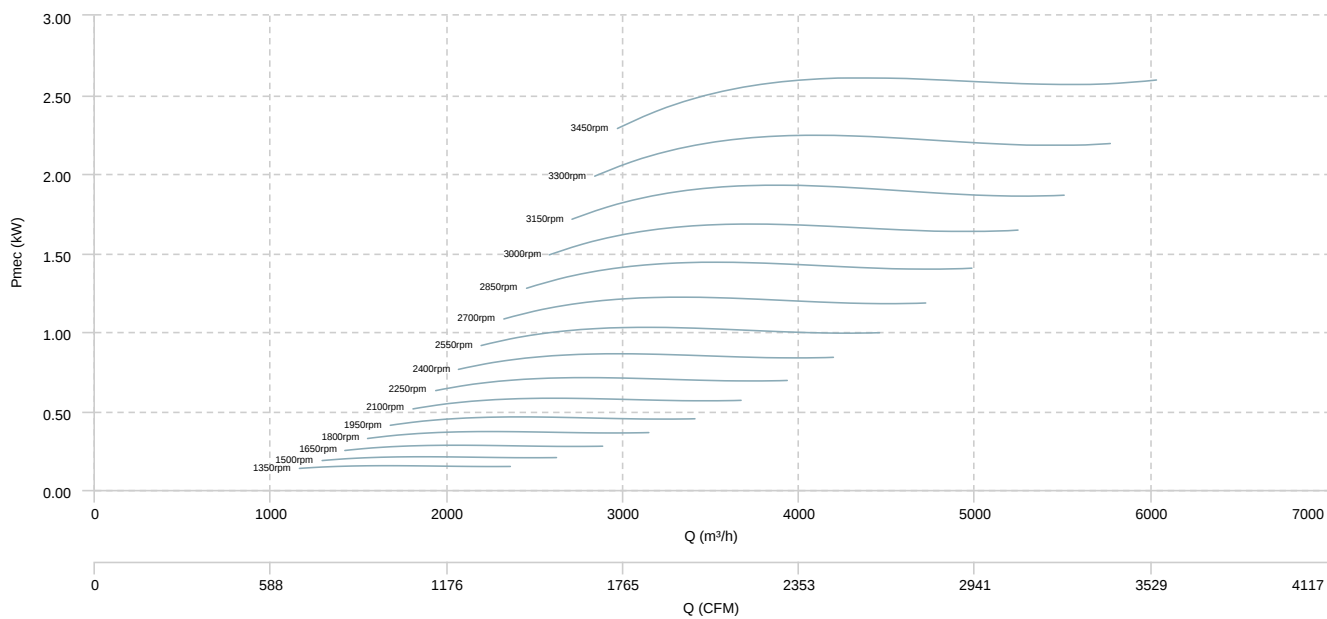


MTRL 310 ATEX

AIR FLOW - PRESSURE

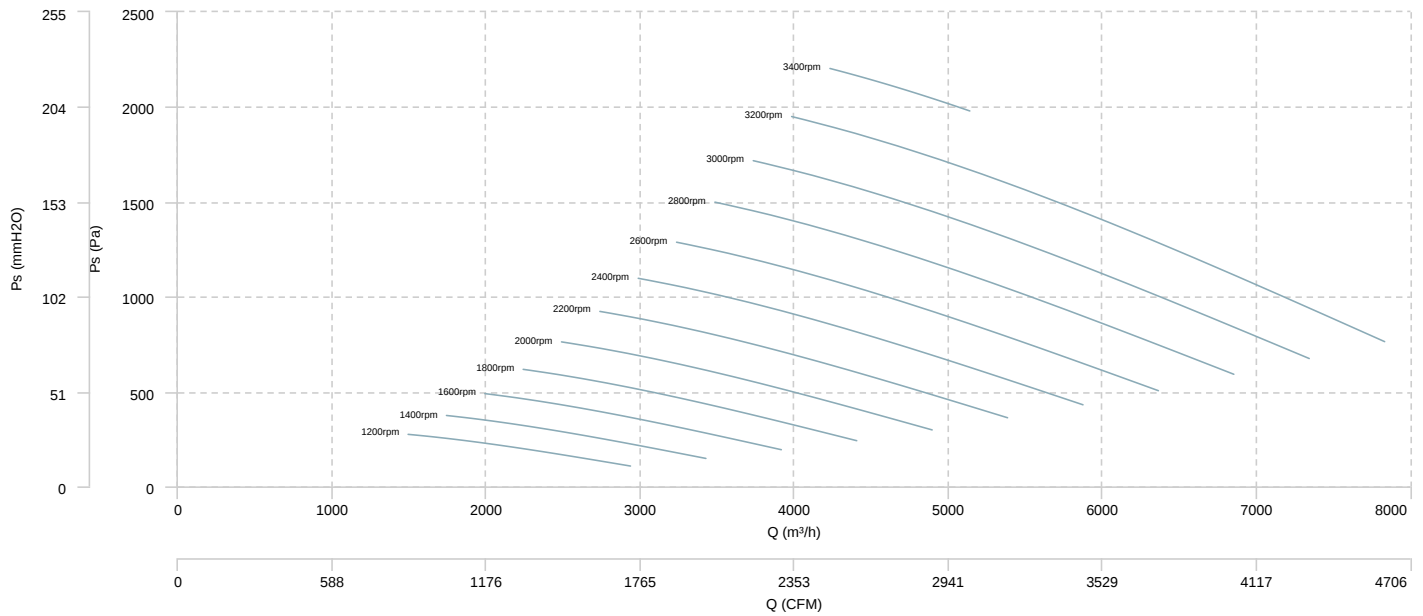


AIR FLOW - MECHANICAL POWER

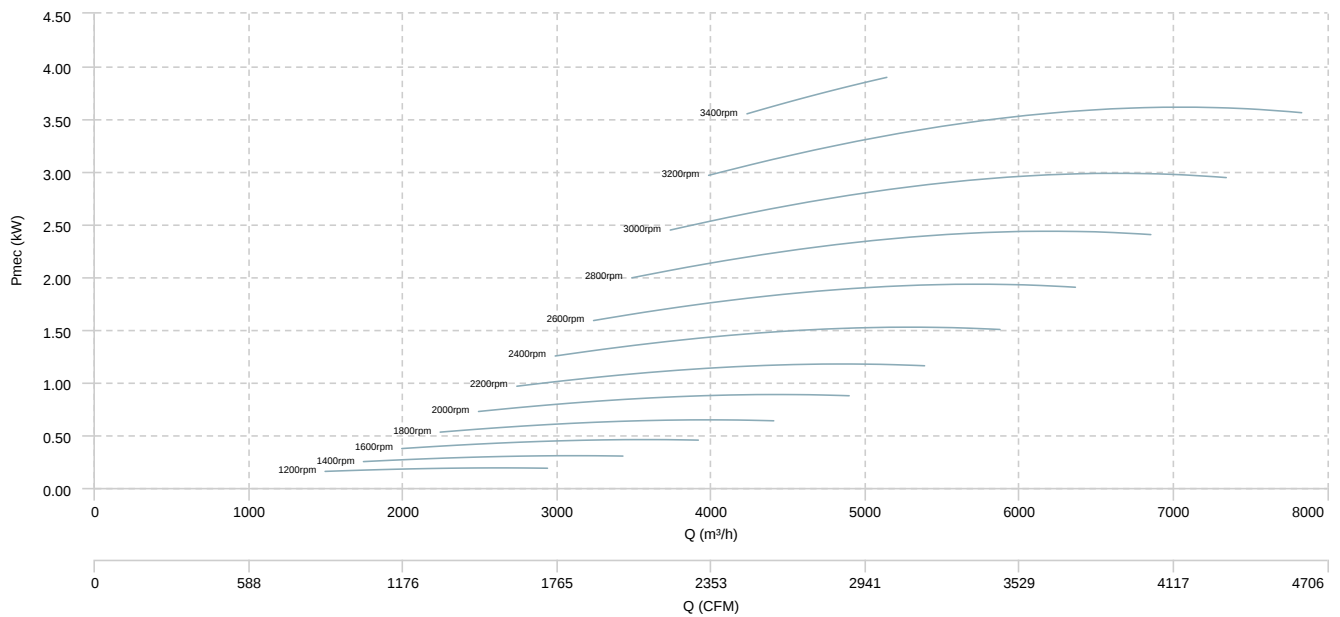


MTRL 350 ATEX

AIR FLOW - PRESSURE

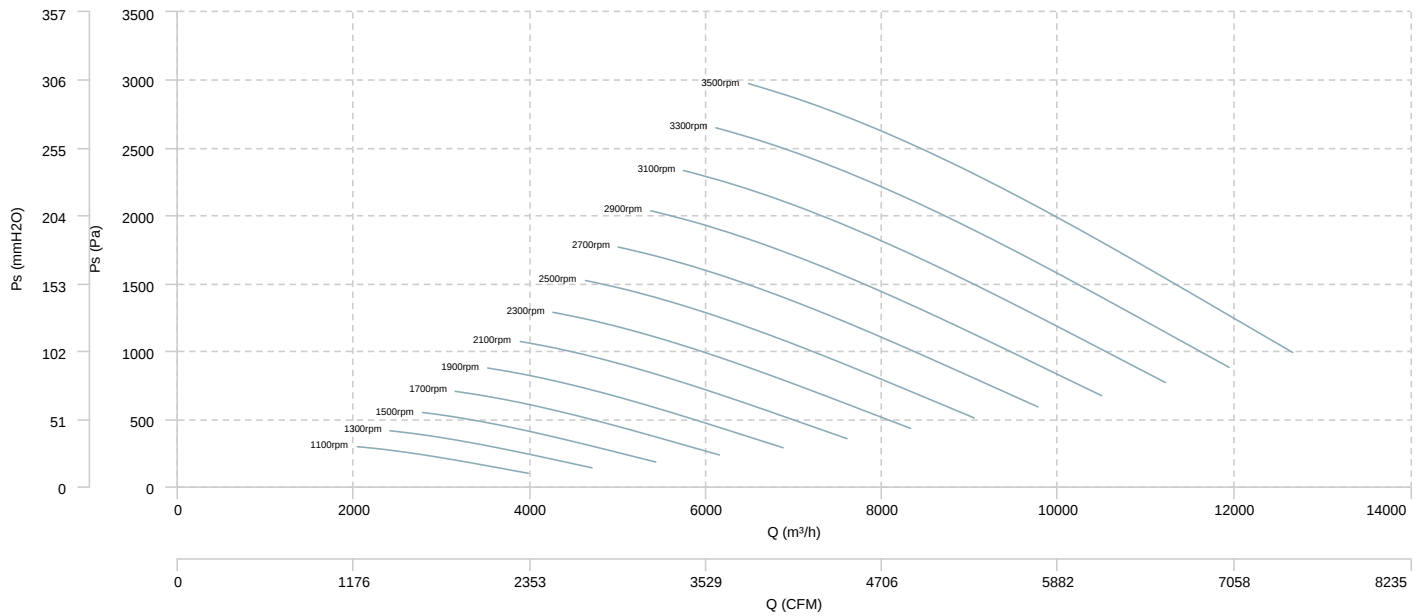


AIR FLOW - MECHANICAL POWER

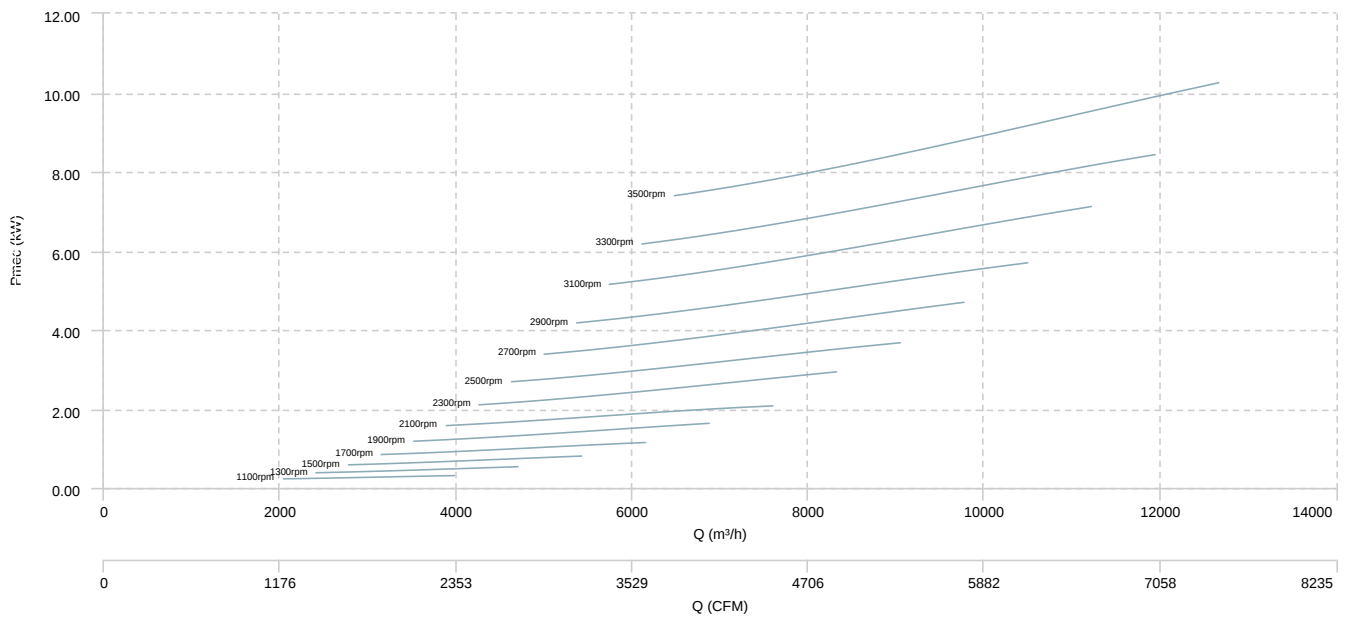


MTRL 400 ATEX

AIR FLOW - PRESSURE

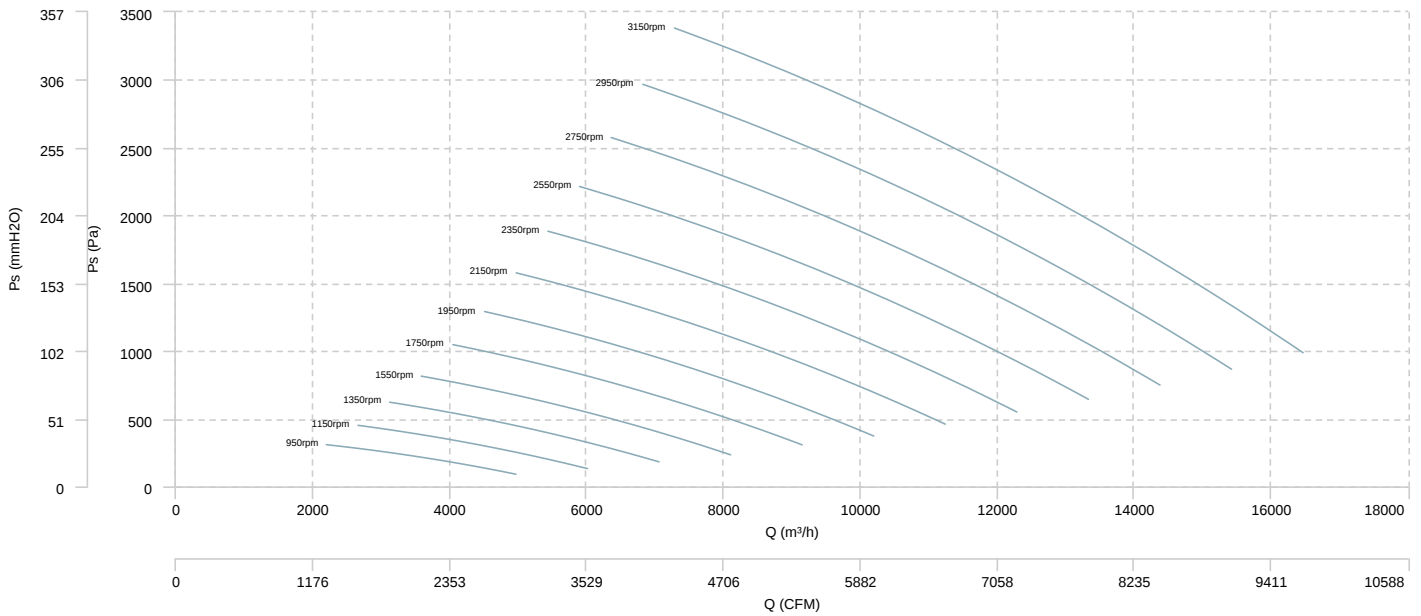


AIR FLOW - MECHANICAL POWER

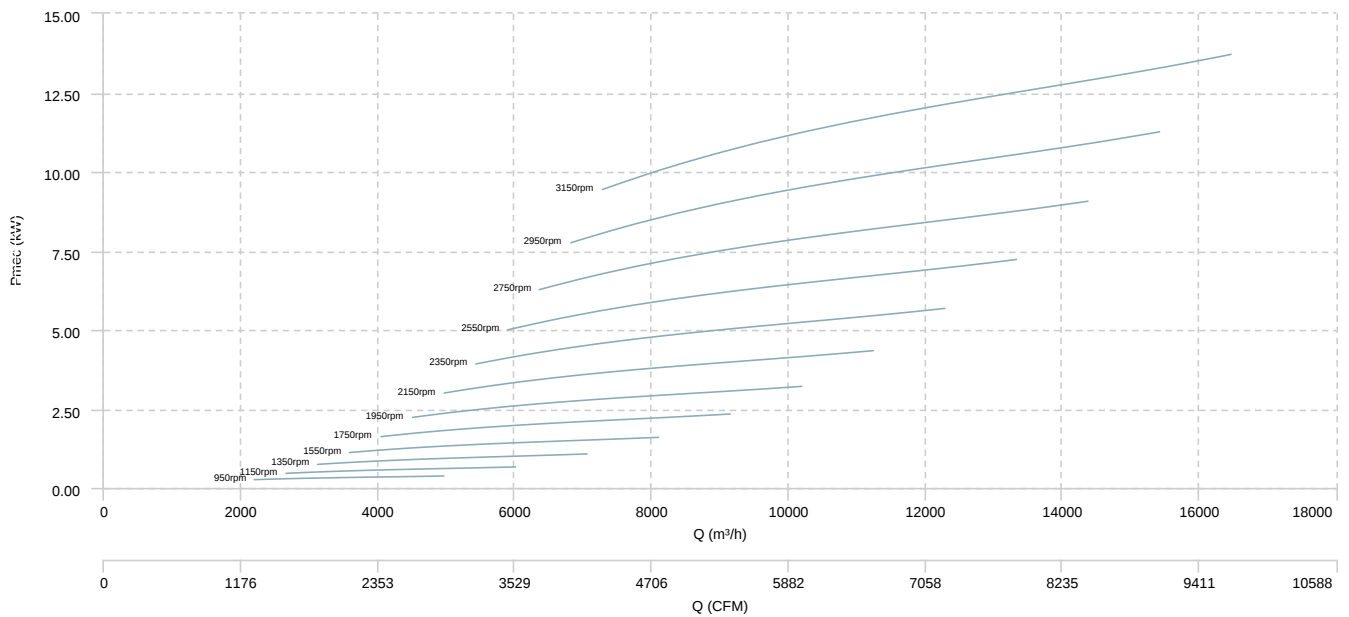


MTRL 450 ATEX

AIR FLOW - PRESSURE

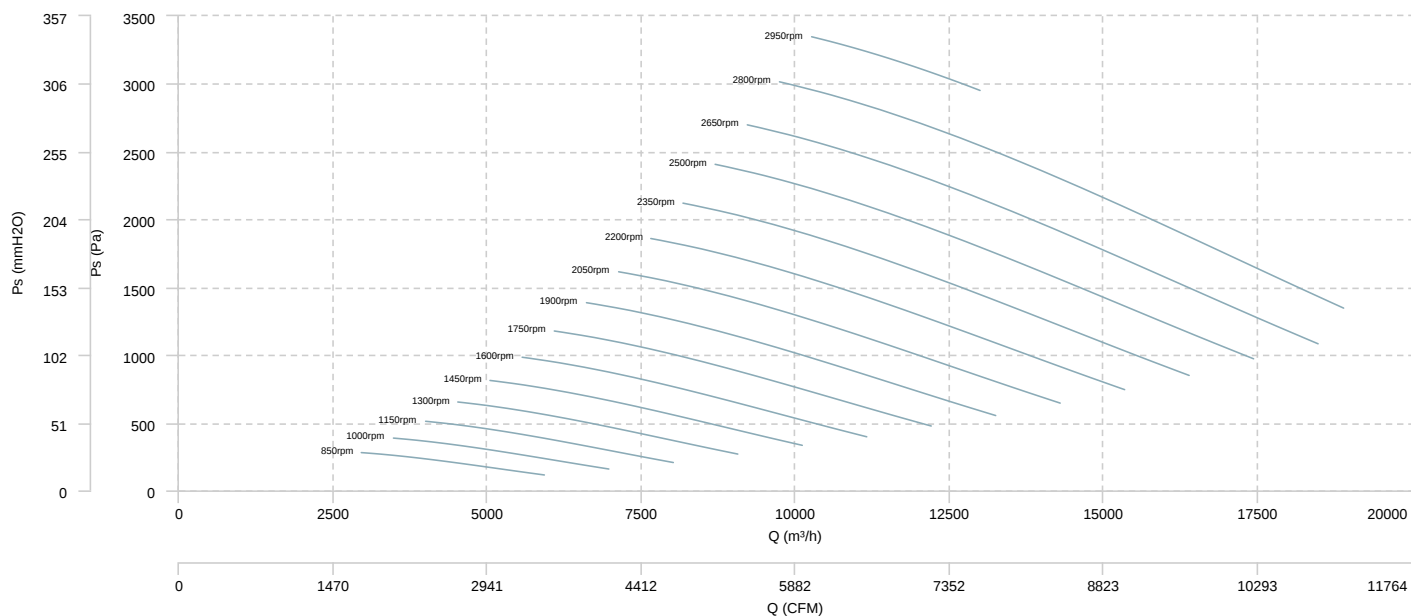


AIR FLOW - MECHANICAL POWER

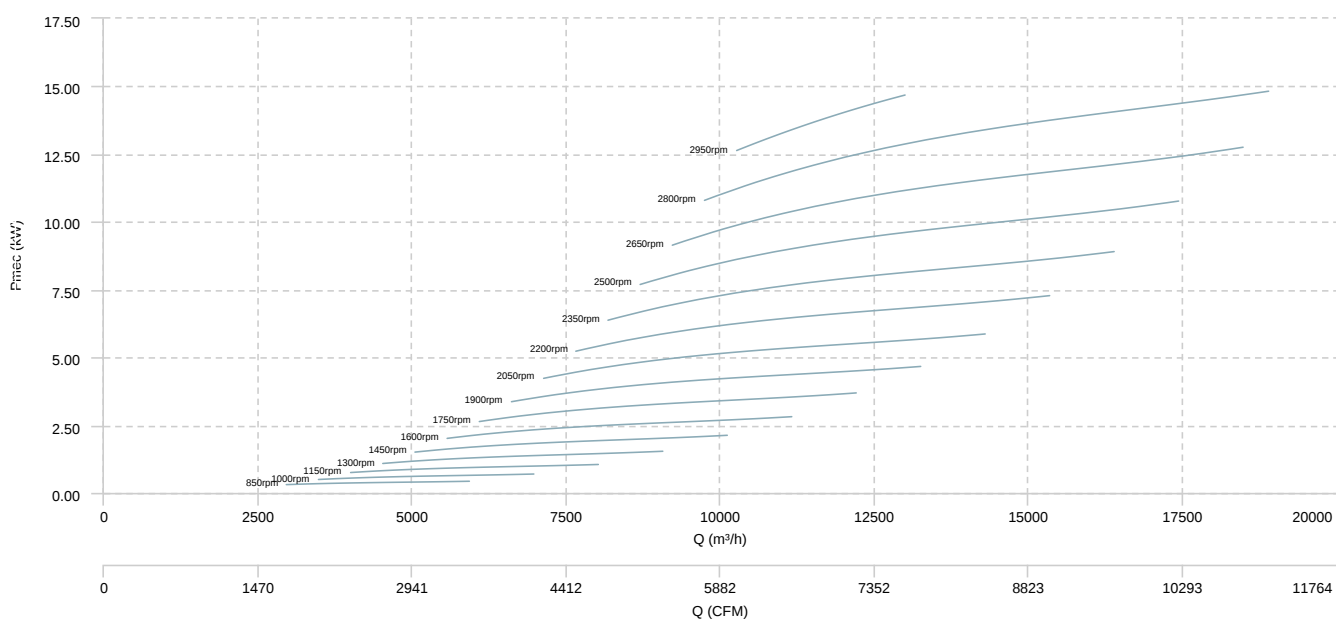


MTRL 500 ATEX

AIR FLOW - PRESSURE

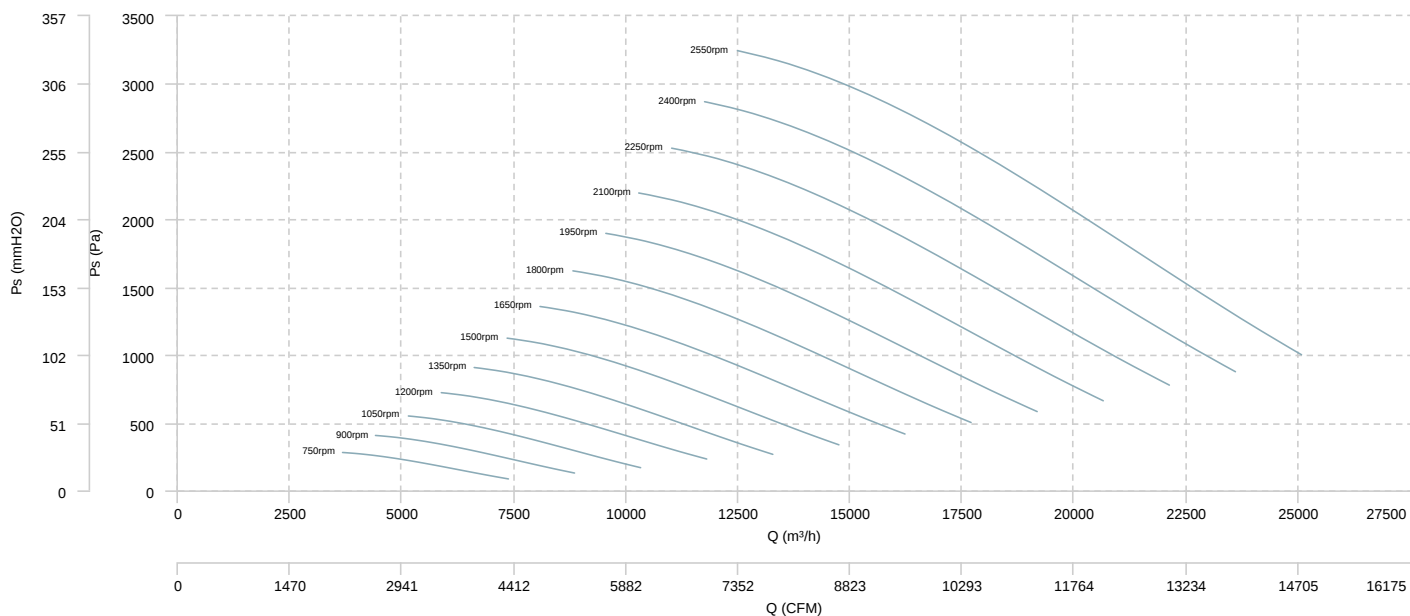


AIR FLOW - MECHANICAL POWER

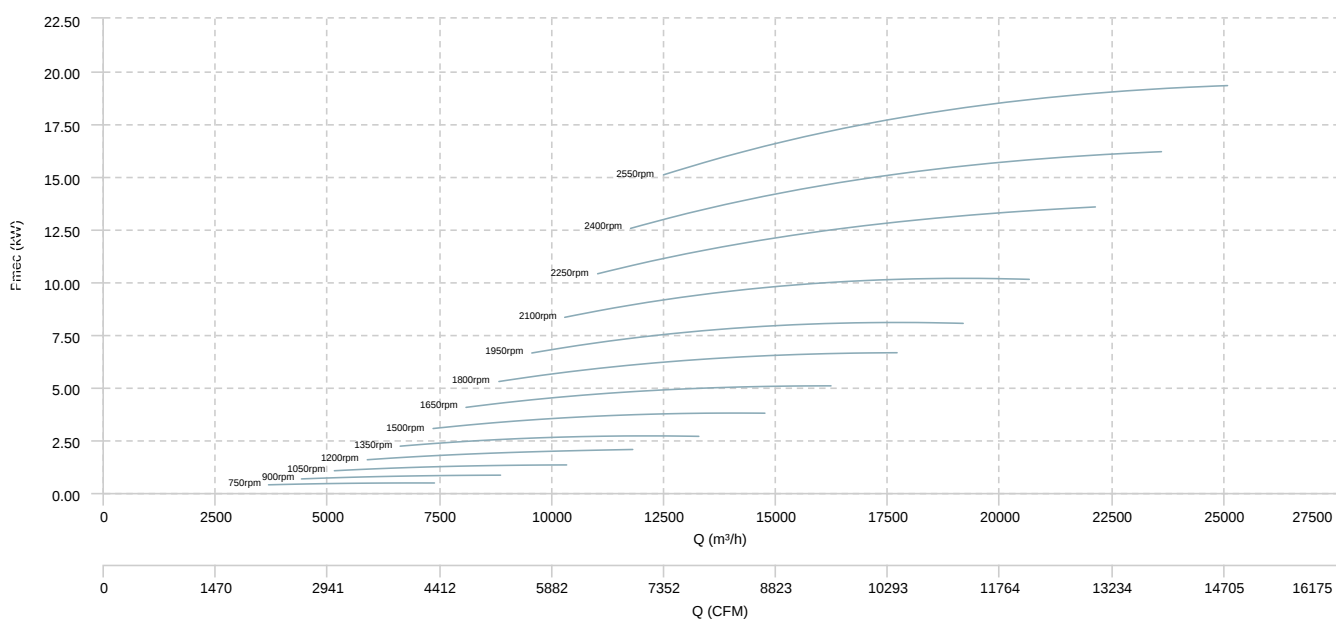


MTRL 560 ATEX

AIR FLOW - PRESSURE

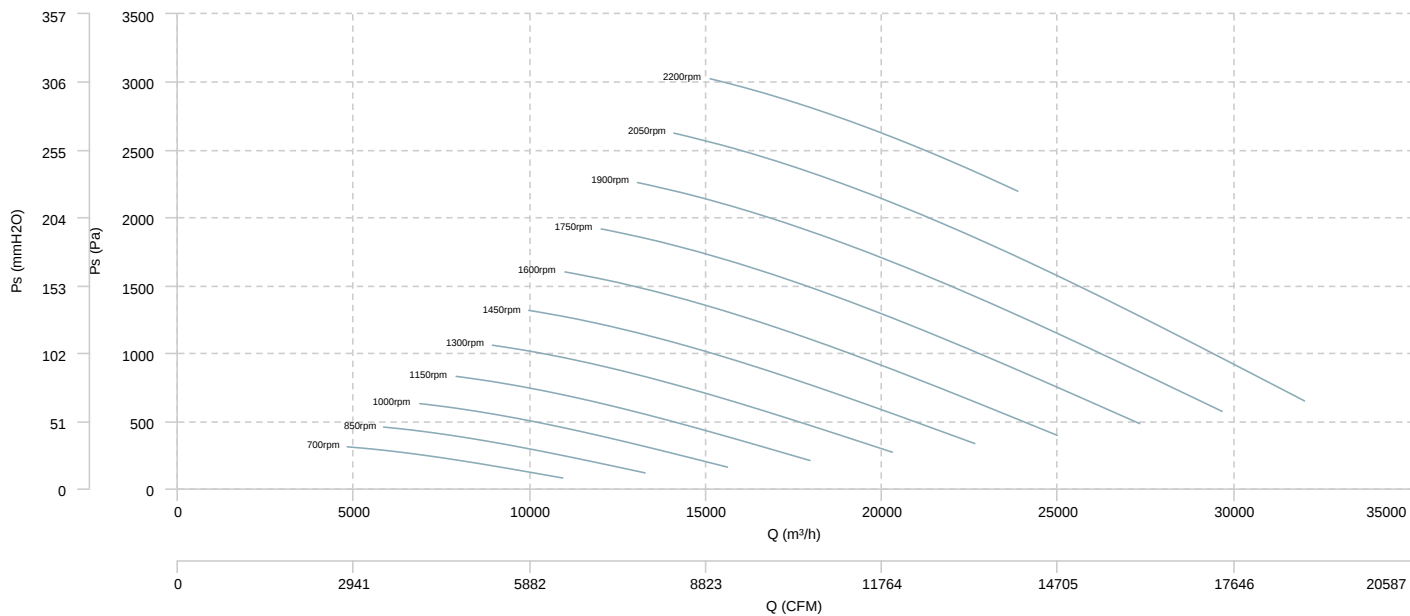


AIR FLOW - MECHANICAL POWER

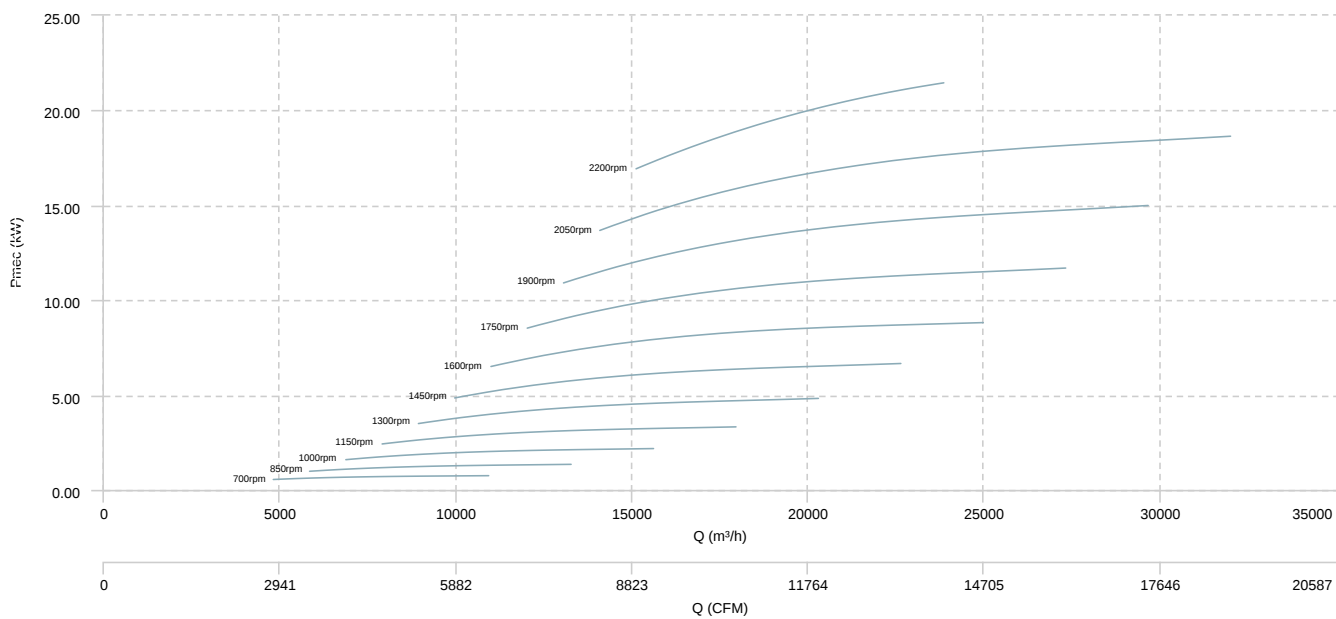


MTRL 630 ATEX

AIR FLOW - PRESSURE

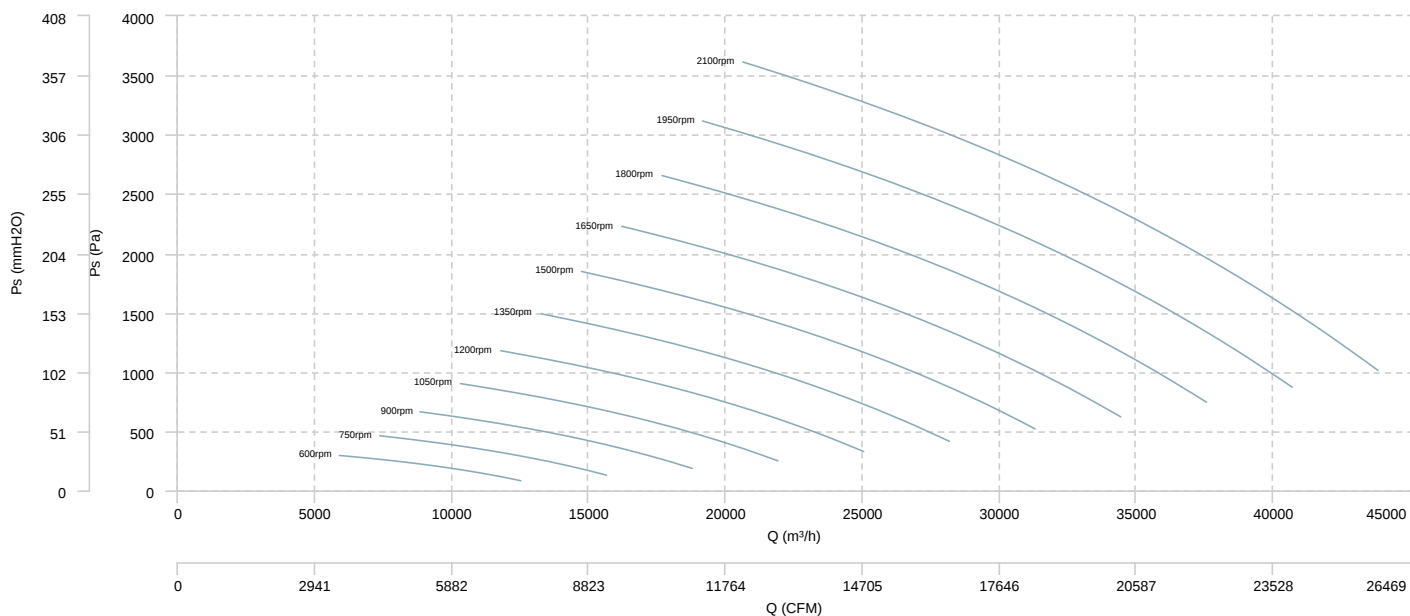


AIR FLOW - MECHANICAL POWER

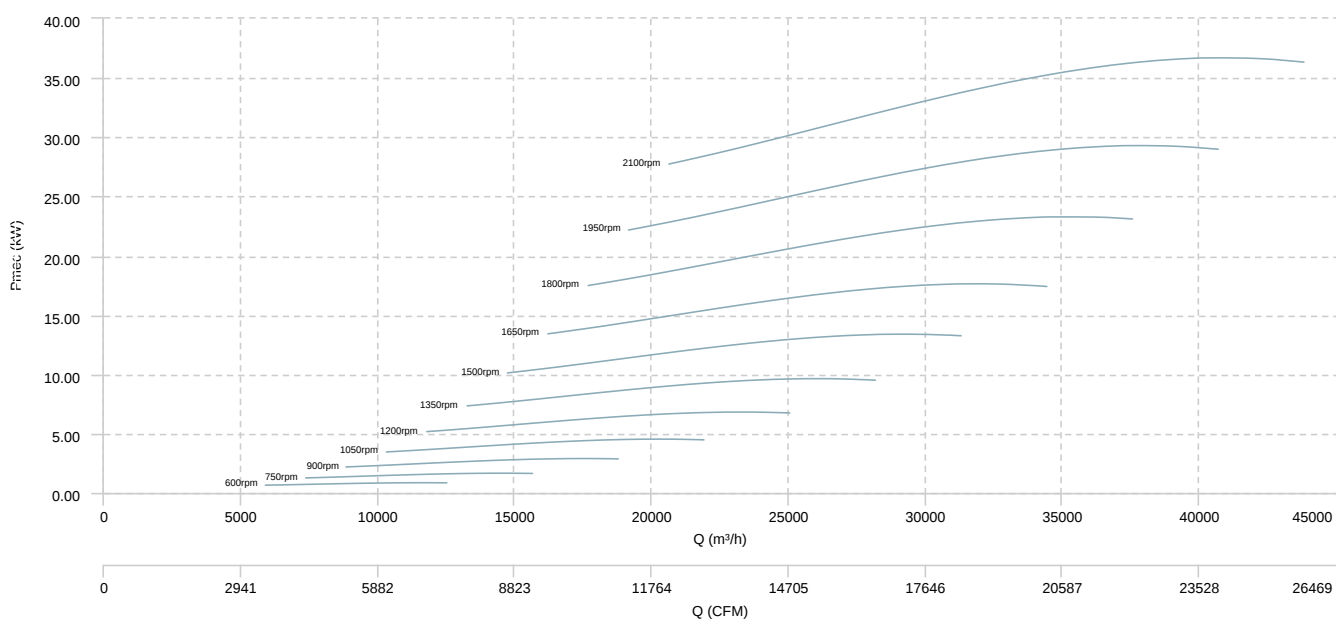


MTRL 710 ATEX

AIR FLOW - PRESSURE

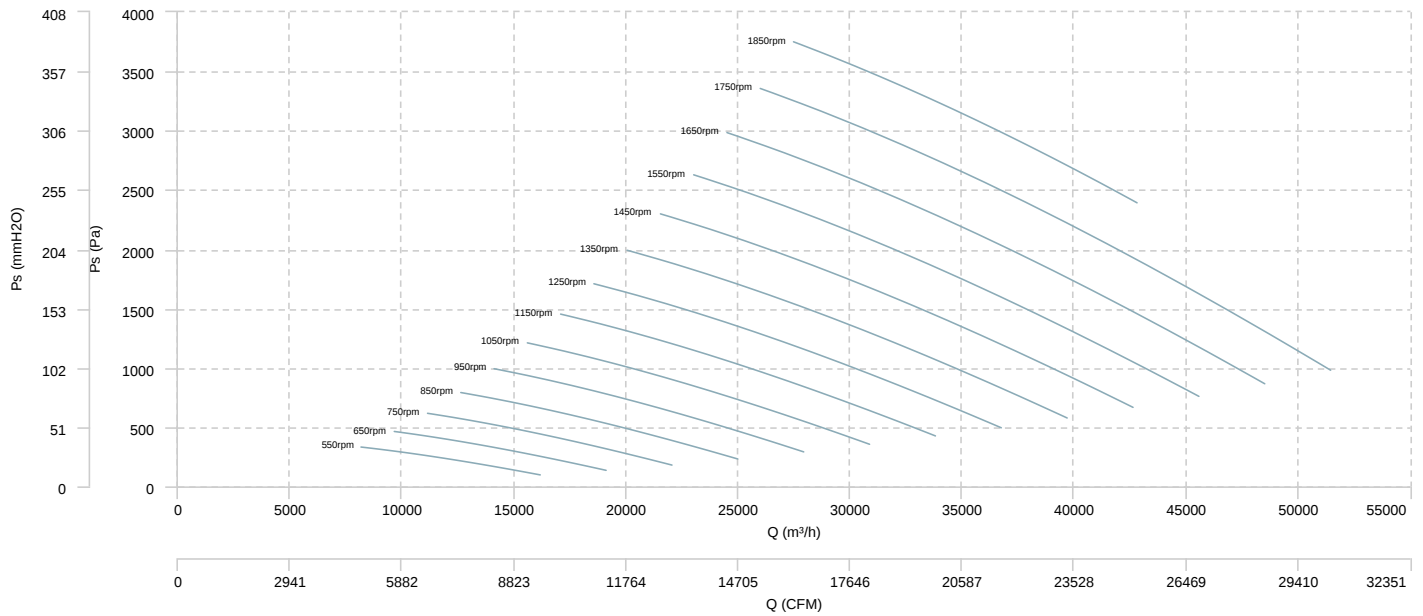


AIR FLOW - MECHANICAL POWER

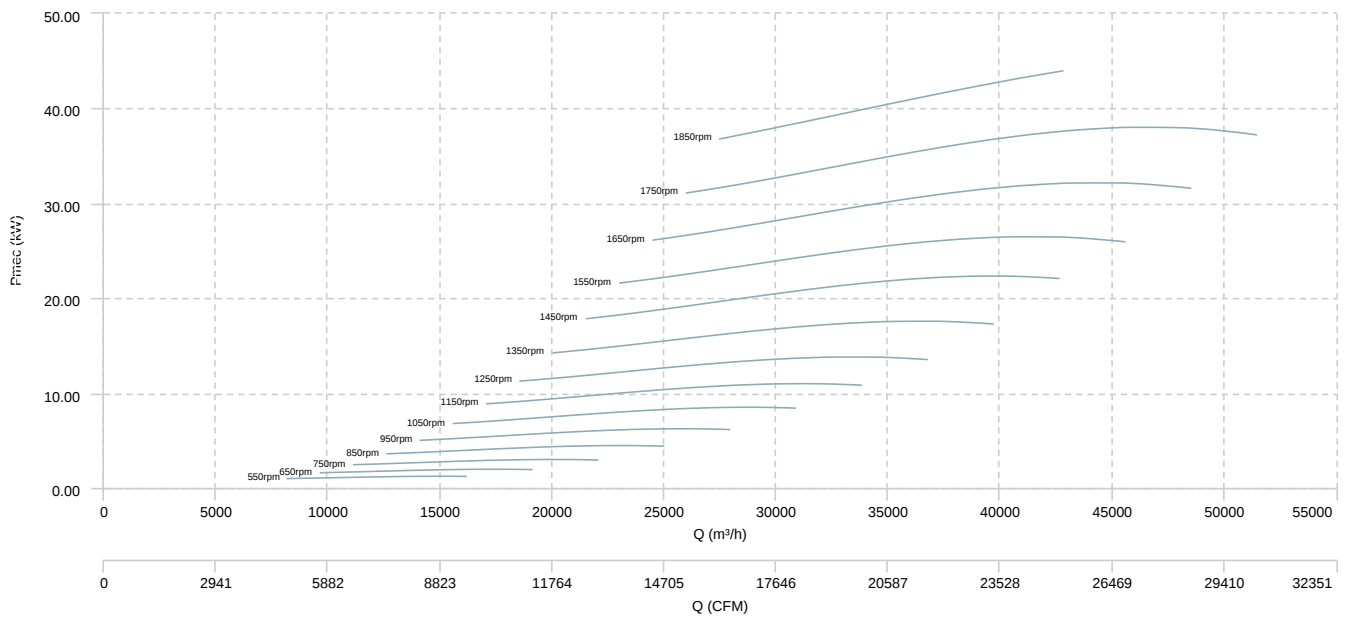


MTRL 800 ATEX

AIR FLOW - PRESSURE

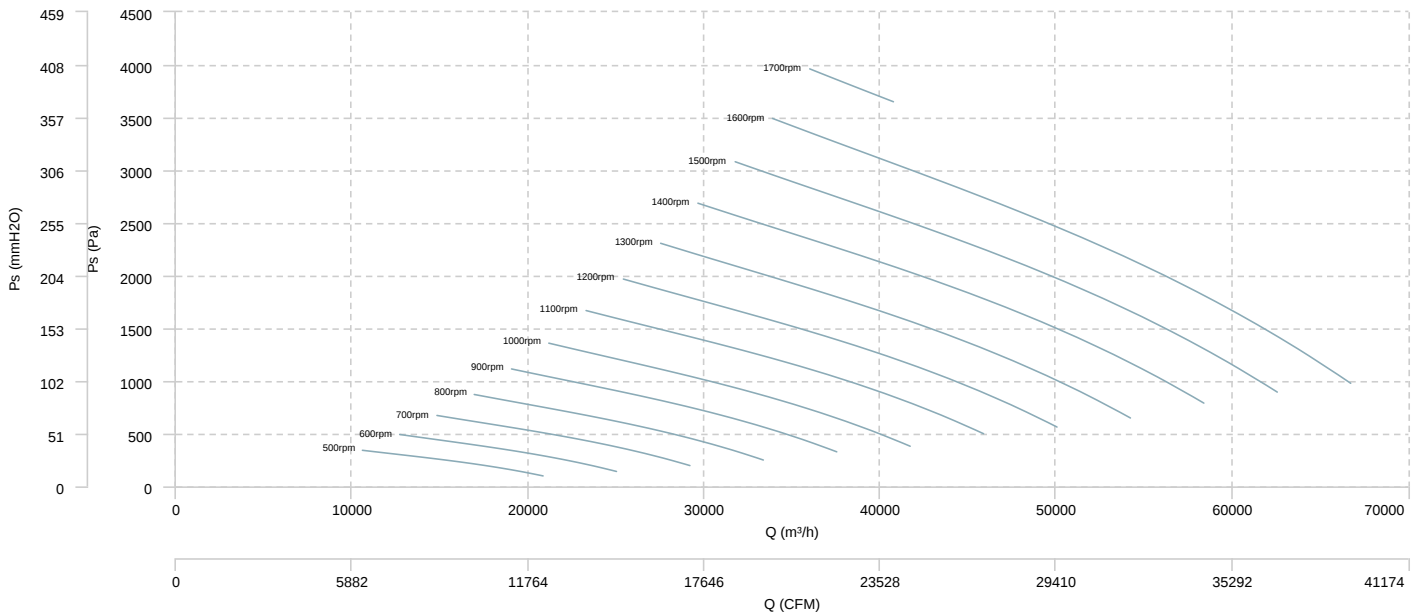


AIR FLOW - MECHANICAL POWER

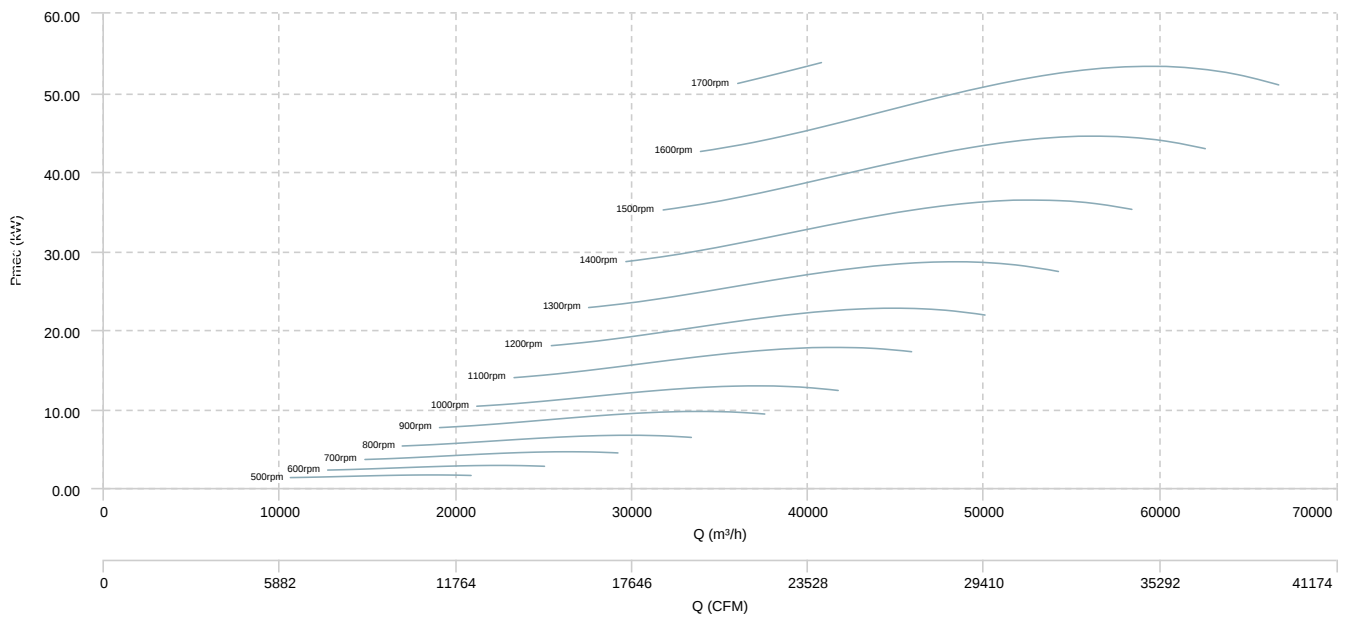


MTRL 900 ATEX

AIR FLOW - PRESSURE

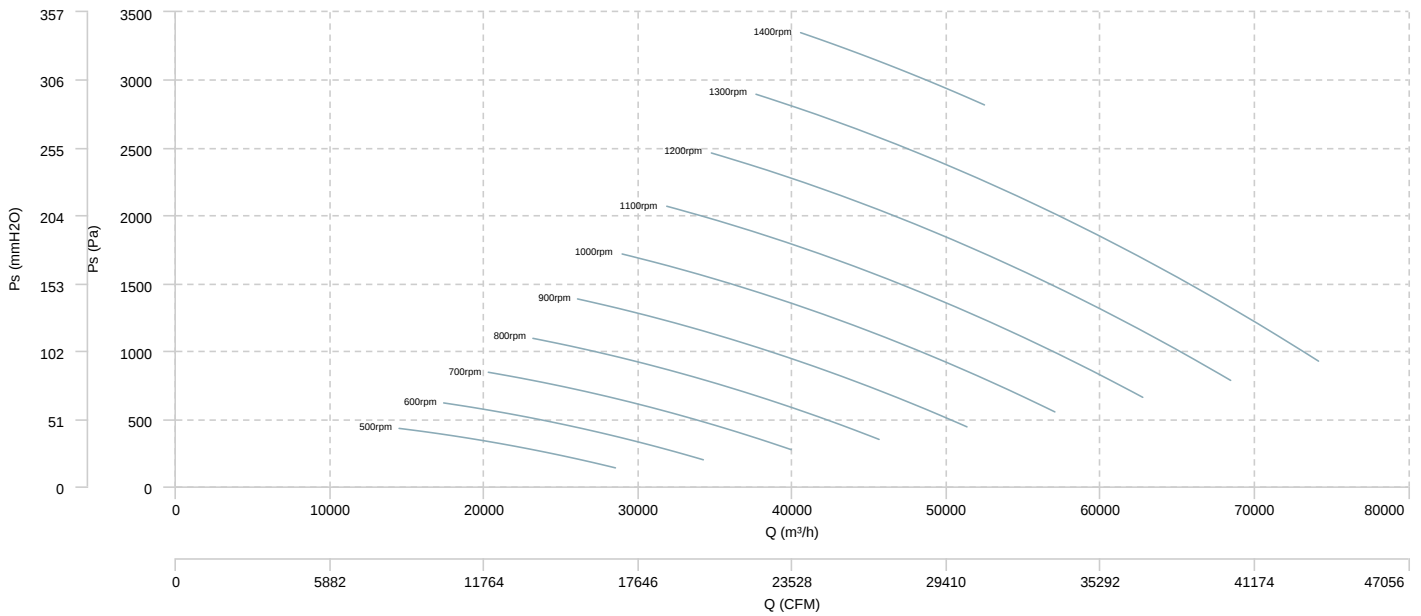


AIR FLOW - MECHANICAL POWER

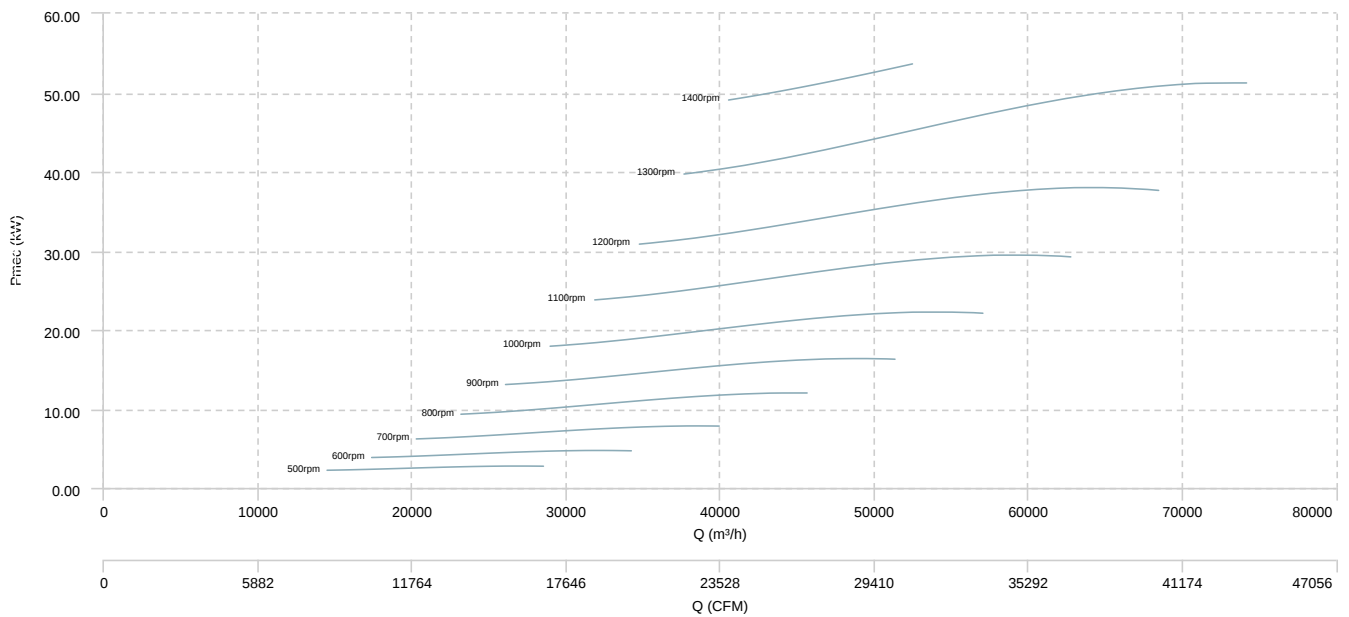


MTRL 1000 ATEX

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
MTRL 250 ATEX (1700rpm)	Inlet	42	54	61	65	66	61	55	52	70
MTRL 280 ATEX (1500rpm)	Inlet	56	62	66	67	63	56	53	71	-
MTRL 310 ATEX (1350rpm)	Inlet	42	54	61	65	66	61	54	51	70
MTRL 350 ATEX (1200rpm)	Inlet	44	56	62	66	67	63	56	53	71
MTRL 400 ATEX (1100rpm)	Inlet	46	58	64	68	69	64	58	55	73
MTRL 450 ATEX (950rpm)	Inlet	48	60	66	70	71	67	60	57	75
MTRL 500 ATEX (850rpm)	Inlet	47	59	66	70	71	66	59	56	75
MTRL 560 ATEX (750rpm)	Inlet	49	61	67	71	72	67	61	58	76
MTRL 630 ATEX (700rpm)	Inlet	49	61	68	72	73	68	61	58	77
MTRL 710 ATEX (600rpm)	Inlet	49	61	68	72	73	68	61	58	77
MTRL 800 ATEX (550rpm)	Inlet	50	62	69	73	74	69	63	60	78
MTRL 900 ATEX (500rpm)	Inlet	51	63	70	74	75	70	64	61	79
MTRL 1000 ATEX (500rpm)	Inlet	54	66	72	76	77	73	66	63	81

Notes:

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

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