MTRM ATEX

Accessories


AB


AC


AVR


AVS


BA-400


BADS ATEX


BIDS ATEX


EI


FS


INT ATEX


JE 45


RI


SFC

ATEX MEDIUM PRESSURE WITH BACKWARD IMPELLER AND BELT TRASMISSION

MANUFACTURING FEATURES:

• Fan made of Fe360 sheet.The fan paint finish is based on a Qualicoat polyester powder coating stoved at 200ºC, with an average film thickness of 70 microns. Average heat resistence of coating is 180ºC with peaks of 200ºC.
• Fully welded housing.
• Single inlet backward impeller with self-cleaning system, manufactured of rolled steel sheet and polyester powder finishing.Impellers are painted with polyester primer that resists temperatures up yo 300ºC.
• 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.

• 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.
• Exhaust after filters, separators and cyclones.
• Dusty air or with low load of granulated materials.
• Working temperature: ambient from -20ºC to 40ºC, transported air according to the ATEX clasifiaction.

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

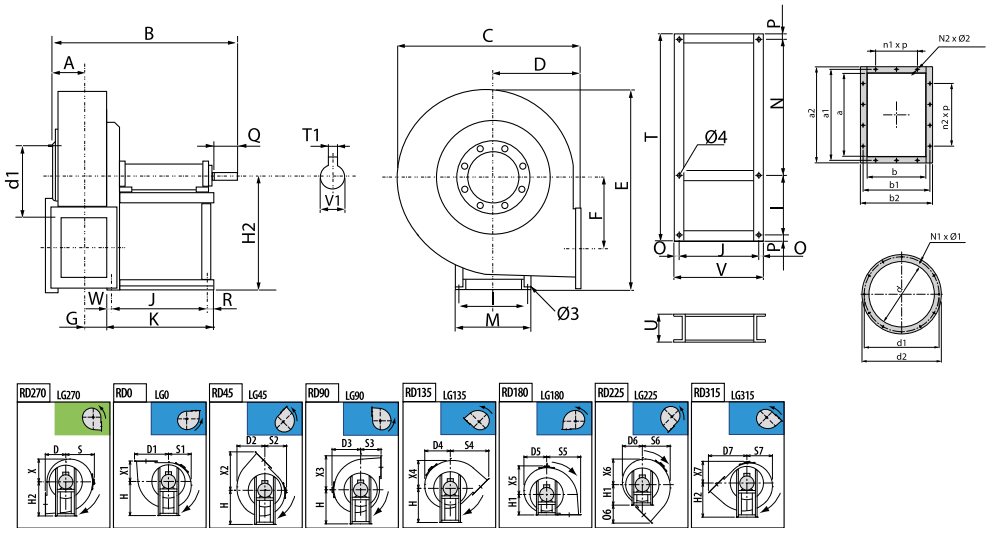
Technical data

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
	MTRM 220 ATEX	2800rpm - 6300rpm	0,37	2,20	1.000	88	20	1
	MTRM 250 ATEX	2800rpm - 6300rpm	0,37	3,00	1.560	92	25	1
	MTRM 280 ATEX	2550rpm - 5600rpm	0,37	4,00	2.180	94	40	1
	MTRM 310 ATEX	2250rpm - 5000rpm	0,55	4,00	3.080	92	45	1
	MTRM 350 ATEX	2000rpm - 4500rpm	0,55	7,50	4.200	110	75	1
	MTRM 400 ATEX	1600rpm - 4000rpm	0,55	9,00	7.160	88	86	1
	MTRM 450 ATEX	1400rpm - 3600rpm	1,10	15,00	8.910	83	98	1
	MTRM 500 ATEX	1400rpm - 3400rpm	2,20	22,00	13.020	88	115	1
	MTRM 560 ATEX	1250rpm - 3300rpm	4,00	30,00	17.980	90	194	1
	MTRM 630 ATEX	1250rpm - 3050rpm	4,00	37,00	19.180	107	229	1
	MTRM 710 ATEX	950rpm - 2750rpm	5,50	55,00	23.350	108	346	1
	MTRM 800 ATEX	850rpm - 2400rpm	5,50	55,00	32.510	106	421	1
	MTRM 900 ATEX	800rpm - 2200rpm	7,50	55,00	40.570	99	517	1
	MTRM 1000 ATEX	700rpm - 1900rpm	11,00	90,00	51.350	100	746	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
MTRM 220 ATEX	59	455	391	165	232	200	226	190	175
MTRM 250 ATEX	86	496	471	195	314	255	276	235	212
MTRM 280 ATEX	95	592	505	200	353	287	305	262	231
MTRM 310 ATEX	105	635	557	225	393	316	332	228	256
MTRM 350 ATEX	115	806	630	255	437	359	385	325	288
MTRM 400 ATEX	127	820	685	285	487	387	400	353	311
MTRM 450 ATEX	141	847	765	320	542	435	445	398	354
MTRM 500 ATEX	157	985	862	360	597	490	502	450	400

Model	D6	D7	E	F	G	H	H1	H2	I
MTRM 220 ATEX	190	280	475	150	55	255	165	300	228
MTRM 250 ATEX	215	360	527	175	77	315	195	315	228
MTRM 280 ATEX	226	391	606	202	86	375	200	375	288
MTRM 310 ATEX	253	489	656	229	96	400	225	400	288
MTRM 350 ATEX	278	437	738	253	106	450	255	450	355
MTRM 400 ATEX	306	546	811	286	118	500	285	500	355
MTRM 450 ATEX	342	609	914	321	132	560	320	560	355
MTRM 500 ATEX	380	677	1000	355	148	600	360	600	364

Model	J	K	M	N	N1xØ1	N2xØ2	O	O6	P
MTRM 220 ATEX	210	288	255	-	Nº4 M6x20	4x8	17	115	13,5
MTRM 250 ATEX	210	282	255	-	Nº8 M6x20	8x12	17	165	13,5

Model	J	K	M	N	N1xØ1	N2xØ2	O	O6	P
MTRM 280 ATEX	284	347	324	-	Nº8 M6x20	8x12	23	191	18
MTRM 310 ATEX	284	347	324	256	Nº8 M6x20	10x12	18	212	18
MTRM 350 ATEX	407	485	400	610	Nº8 M8x25	10x12	28	234	22,5
MTRM 400 ATEX	407	485	400	-	Nº8 M8x25	10x12	28	261	22,5
MTRM 450 ATEX	407	485	400	-	Nº8 M8x25	10x12	28	289	22,5
MTRM 500 ATEX	477	560	418	-	Nº8 M8x25	14x12	33	317	27

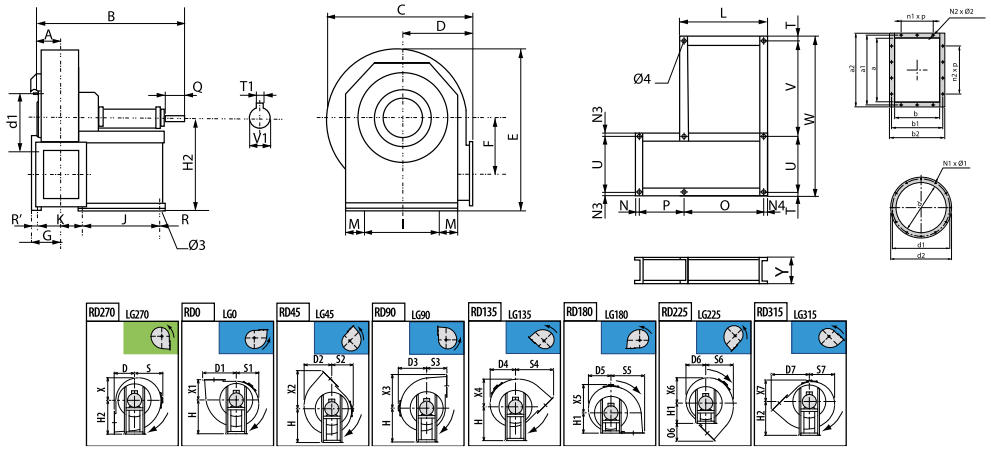
Model	Q	R	S	S1	S2	S3	S4	S5	S6
MTRM 220 ATEX	40	17	226	175	190	165	280	232	200
MTRM 250 ATEX	40	17	276	212	215	195	360	314	255
MTRM 280 ATEX	50	23	305	231	226	200	391	353	287
MTRM 310 ATEX	50	23	332	256	253	225	437	396	316
MTRM 350 ATEX	60	28	375	288	278	255	489	437	359
MTRM 400 ATEX	80	28	400	311	306	285	543	487	387
MTRM 450 ATEX	80	28	445	354	342	320	609	542	435
MTRM 500 ATEX	110	33	502	400	380	360	676	597	490

Model	S7	T	T1	U	V	V1	W	X	X1
MTRM 220 ATEX	190	6	6	80	19	19	61	175	165
MTRM 250 ATEX	235	6	6	80	19	19	55	212	195
MTRM 280 ATEX	262	8	8	100	24	24	40	231	200
MTRM 310 ATEX	288	900	8	100	330	24	40	256	225
MTRM 350 ATEX	325	1010	8	120	463	28	50	288	255
MTRM 400 ATEX	353	10	10	120	38	38	50	311	285
MTRM 450 ATEX	398	10	10	120	38	38	50	354	320
MTRM 500 ATEX	450	12	12	140	42	42	50	400	360

Model	X2	X3	X4	X5	X6	X7	a	a1	a2
MTRM 220 ATEX	280	232	200	226	190	190	124	145	164
MTRM 250 ATEX	360	314	255	276	235	215	207	241	277
MTRM 280 ATEX	391	353	287	305	262	226	231	265	301
MTRM 310 ATEX	437	393	316	332	288	253	258	292	328
MTRM 350 ATEX	489	437	359	375	325	278	288	332	368
MTRM 400 ATEX	543	487	387	400	353	306	322	366	402
MTRM 450 ATEX	609	542	435	445	398	342	361	405	441
MTRM 500 ATEX	677	597	490	502	450	380	404	448	484

Model	b	b1	b2	d	d1	d2	n1xp	n2xp	Ø3
MTRM 220 ATEX	103	125	143	130	165	190	-	-	10
MTRM 250 ATEX	148	182	218	185	219	250	1x112	1x112	10
MTRM 280 ATEX	166	200	236	205	241	275	1x112	1x112	12
MTRM 310 ATEX	185	219	255	228	265	298	1x112	2x112	12
MTRM 350 ATEX	205	249	285	255	292	325	1x125	2x125	14
MTRM 400 ATEX	229	273	309	285	332	365	1x125	2x125	14
MTRM 450 ATEX	256	300	336	320	366	400	1x125	2x125	14
MTRM 500 ATEX	288	332	368	360	405	440	2x125	3x125	17

Model	Ø4
MTRM 220 ATEX	12
MTRM 250 ATEX	12
MTRM 280 ATEX	15
MTRM 310 ATEX	15
MTRM 350 ATEX	15
MTRM 400 ATEX	15
MTRM 450 ATEX	15
MTRM 500 ATEX	18



Model	A	B	C	D	D1	D2	D3	D4	D5
MTRM 560 ATEX	177	1058	970	400	657	555	570	542	485
MTRM 630 ATEX	195	1102	1080	450	733	619	630	603	550

Model	D6	D7	E	F	G	H	H1	H2	I
MTRM 560 ATEX	425	747	1155	390	214	670	400	670	632
MTRM 630 ATEX	476	836	439	1300	234	750	450	750	702

Model	J	K	L	M	N	N1xØ1	N2xØ2	N3	N4
MTRM 560 ATEX	477	943	543	30	23	Nº12 M8x25	14x12	30	33
MTRM 630 ATEX	477	983	543	30	23	Nº12 M8x25	14x12	30	33

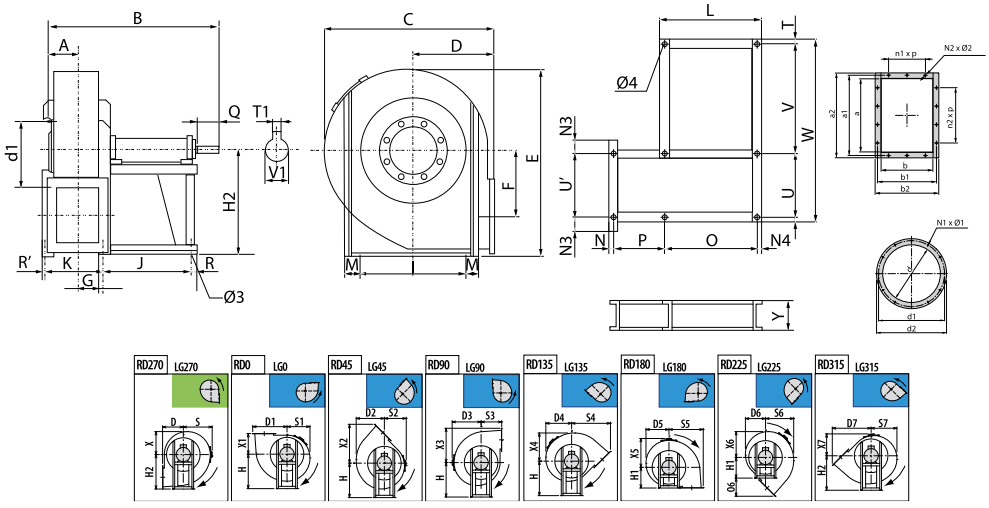
Model	O	O6	P	Q	R	S	S1	S2	S3
MTRM 560 ATEX	477	347	410	110	33	570	485	425	400
MTRM 630 ATEX	477	386	450	110	33	630	550	476	450

Model	S4	S5	S6	S7	T	U	V	W	X
MTRM 560 ATEX	747	667	555	542	14	632	678	1370	30
MTRM 630 ATEX	836	733	619	603	14	702	708	1470	550

Model	X1	X2	X3	X4	X5	X6	X7	Y	a
MTRM 560 ATEX	400	747	657	555	570	542	425	160	453
MTRM 630 ATEX	450	836	733	619	630	603	476	160	507

Model	a1	a2	b	b1	b2	d	d1	d2	n1xp
MTRM 560 ATEX	497	533	361	405	441	405	448	485	2x125
MTRM 630 ATEX	551	587	361	405	441	455	497	535	2x125

Model	n2xp	Ø3	Ø4
MTRM 560 ATEX	3x125	17	18
MTRM 630 ATEX	3x125	17	18



Model	A	B	C	D	D1	D2	D3	D4	D5
MTRM 710 ATEX	216	1241	1190	500	835	719	690	662	565
MTRM 800 ATEX	241	1306	1342	560	929	811	782	749	641
MTRM 900 ATEX	275	1360	1500	630	1038	905	870	835	721
MTRM 1000 ATEX	308	1565	1686	710	1171	1015	976	936	814

Model	D6	D7	E	F	G	H	H1	H2	I
MTRM 710 ATEX	497	944	1415	500	262	670	500	670	772
MTRM 800 ATEX	562	1053	1591	560	307	755	560	755	862
MTRM 900 ATEX	633	1180	1781	630	334	850	630	850	962
MTRM 1000 ATEX	718	1330	1994	710	385	950	710	950	1056

Model	J	K	L	M	N	N1xØ1	N2xØ2	N3	N4
MTRM 710 ATEX	551	497	629	71	27	Nº12 M8x25	14x14	71	39
MTRM 800 ATEX	551	546	629	91	39	Nº12 M8x25	14x14	91	39
MTRM 900 ATEX	551	600	629	91	39	Nº12 M10x30	16x14	91	39
MTRM 1000 ATEX	607	657	697	99	67	Nº16 M10x30	14x14	99	45

Model	O	O6	P	Q	R	R'	S	S1	S2
MTRM 710 ATEX	551	444	497	110	39	27	690	565	497
MTRM 800 ATEX	551	493	546	110	39	47	782	641	562
MTRM 900 ATEX	551	550	600	110	39	47	870	721	633
MTRM 1000 ATEX	657	620	607	140	45	67	976	814	718

Model	S3	S4	S5	S6	S7	T	U	U'	V
MTRM 710 ATEX	500	944	835	719	662	14	772	772	807
MTRM 800 ATEX	560	1053	929	811	749	32	862	862	842
MTRM 900 ATEX	630	1180	1038	905	835	32	962	962	987
MTRM 1000 ATEX	710	1330	1171	1015	936	18	1056	1056	1036

Model	V1	W	X	X1	X2	X3	X4	X5	X6
MTRM 710 ATEX	48	1633	565	500	944	835	719	690	662
MTRM 800 ATEX	55	1768	641	560	1053	929	811	782	749
MTRM 900 ATEX	55	2013	721	630	1180	1038	905	870	835
MTRM 1000 ATEX	65	2164	814	710	1330	1171	1015	976	936

Model	X7	Y	a	a1	a2	b	b1	b2	d
MTRM 710 ATEX	497	180	569	629	669	404	464	504	505
MTRM 800 ATEX	562	180	638	698	738	453	513	553	565

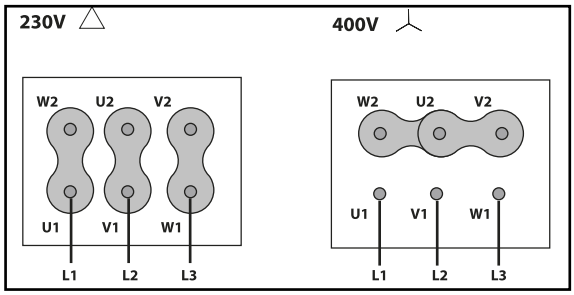
Model	X7	Y	a	a1	a2	b	b1	b2	d
MTRM 900 ATEX	633	180	715	775	815	507	567	607	635
MTRM 1000 ATEX	718	200	801	871	921	569	639	689	715

Model	d1	d2	n1xp	n2xp	Ø3	Ø4
MTRM 710 ATEX	551	585	2x160	3x160	19	20
MTRM 800 ATEX	629	665	2x160	3x160	19	20
MTRM 900 ATEX	698	735	2x160	4x160	19	20
MTRM 1000 ATEX	775	815	2x200	3x200	19	20

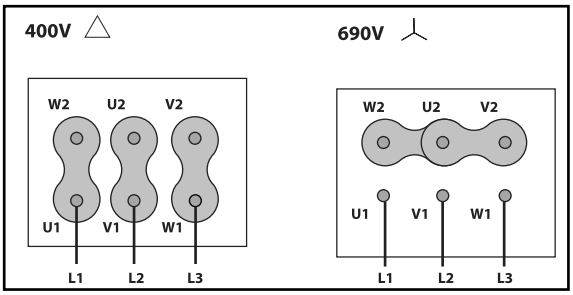
Wiring diagram

Wiring diagram Nº 1

230/400V



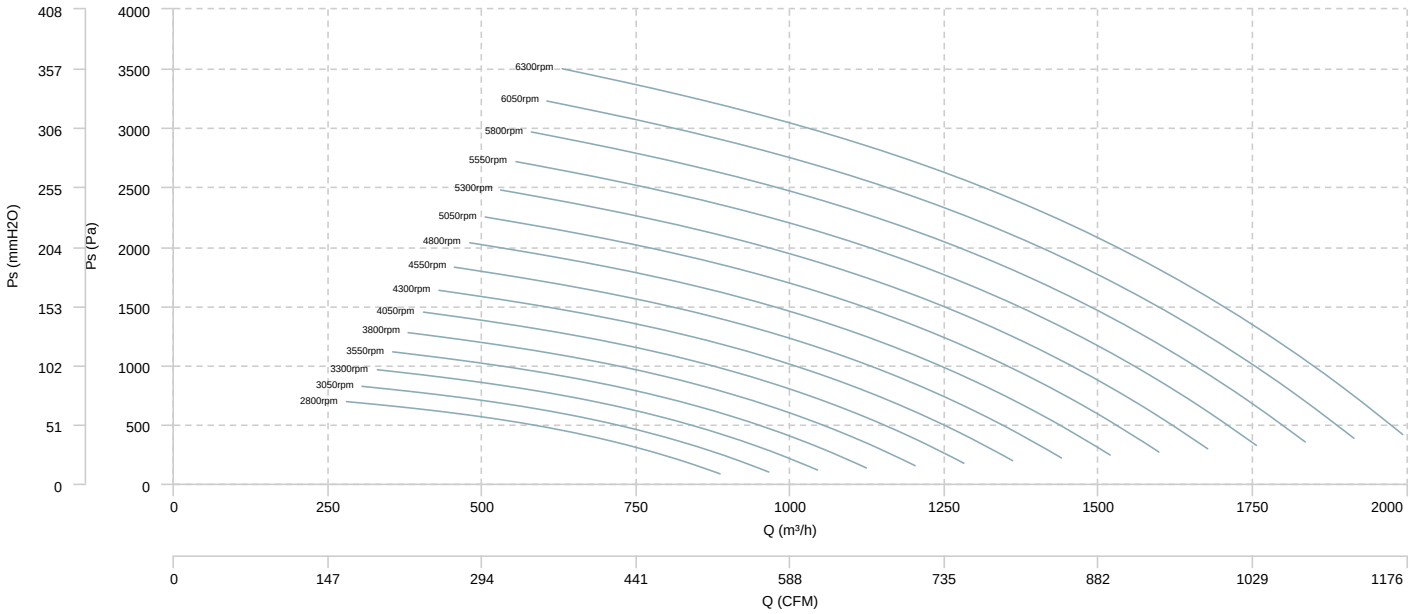
400/690V



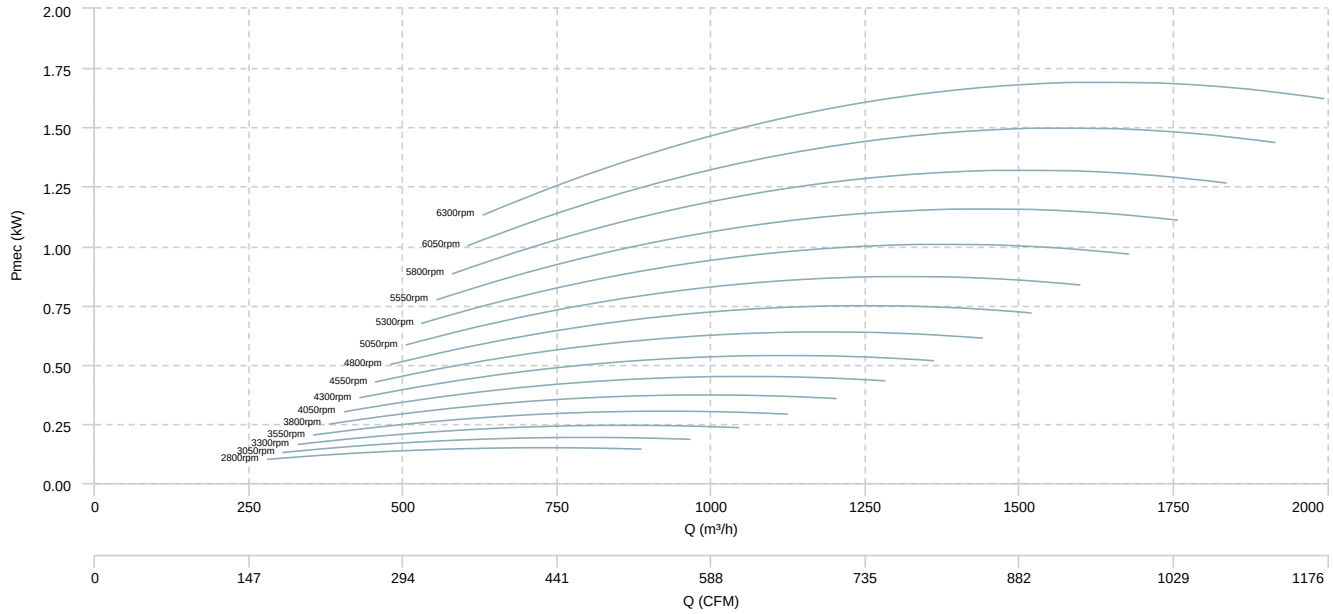
CHARACTERISCTIC CURVE

MTRM 220 ATEX

AIR FLOW - PRESSURE

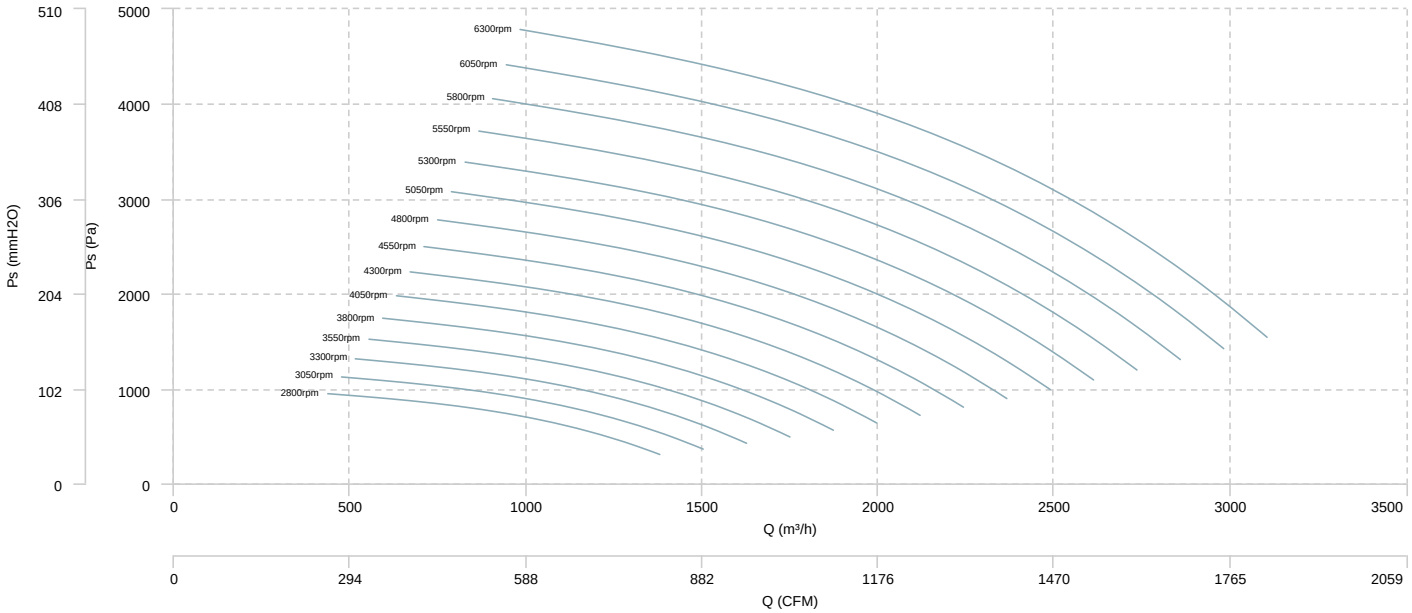


AIR FLOW - MECHANICAL POWER

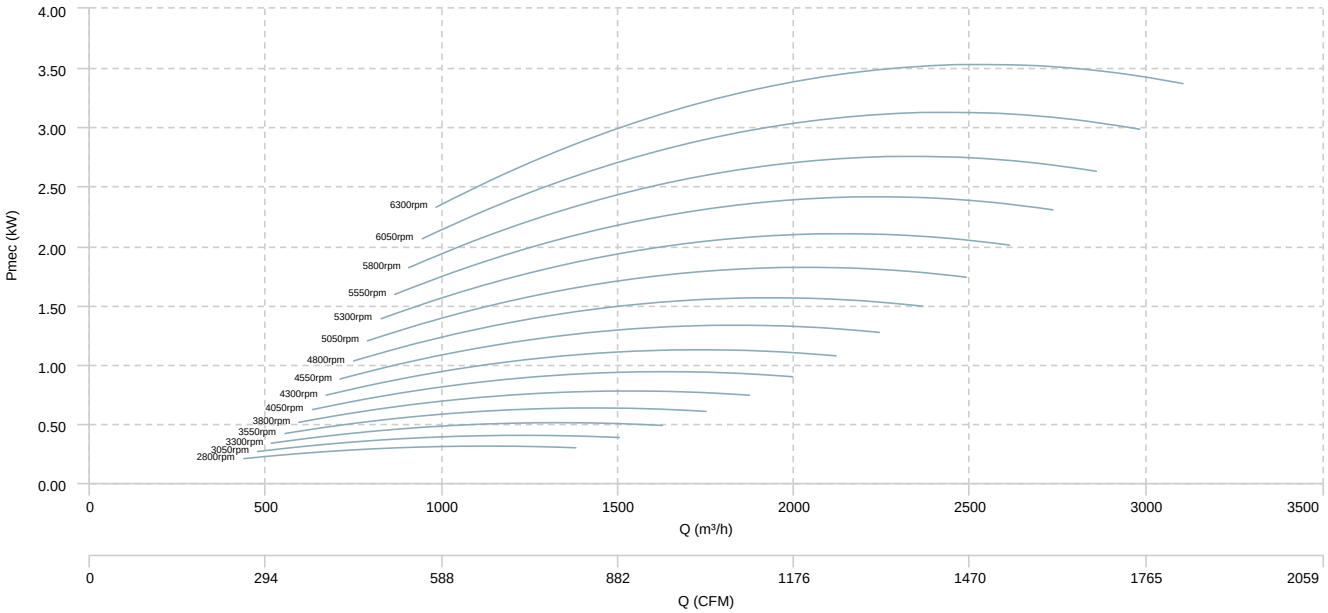


MTRM 250 ATEX

AIR FLOW - PRESSURE



AIR FLOW - MECHANICAL POWER



MTRM 280 ATEX

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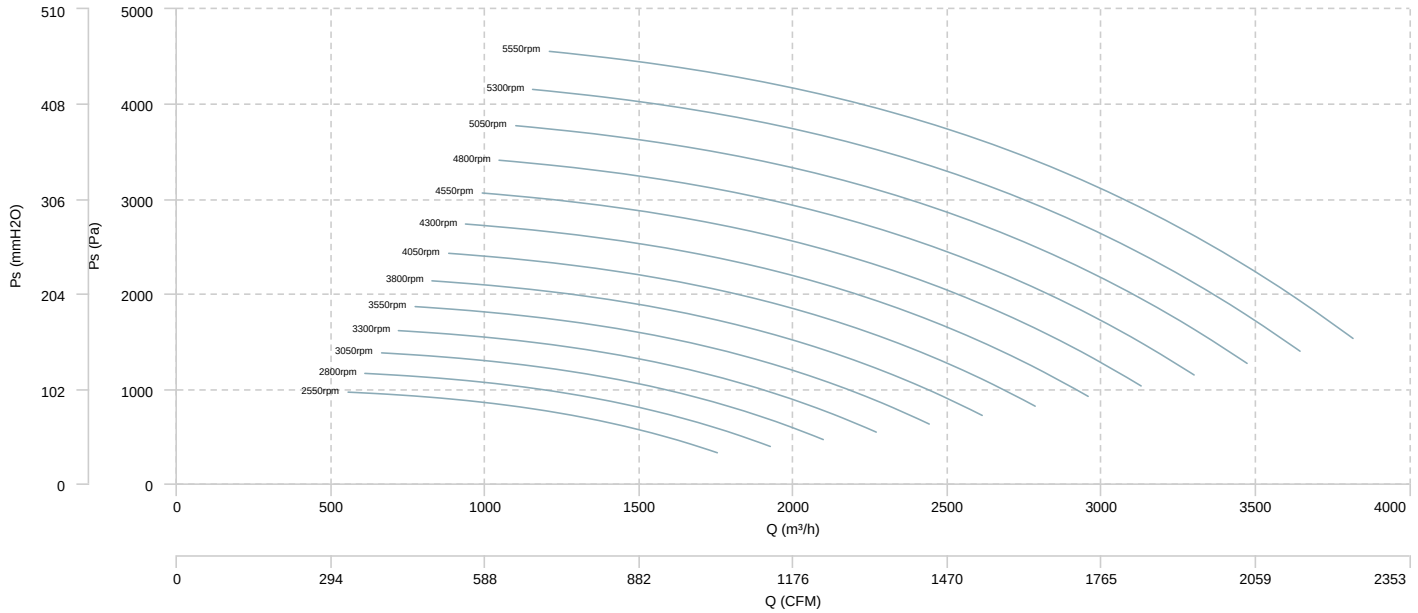

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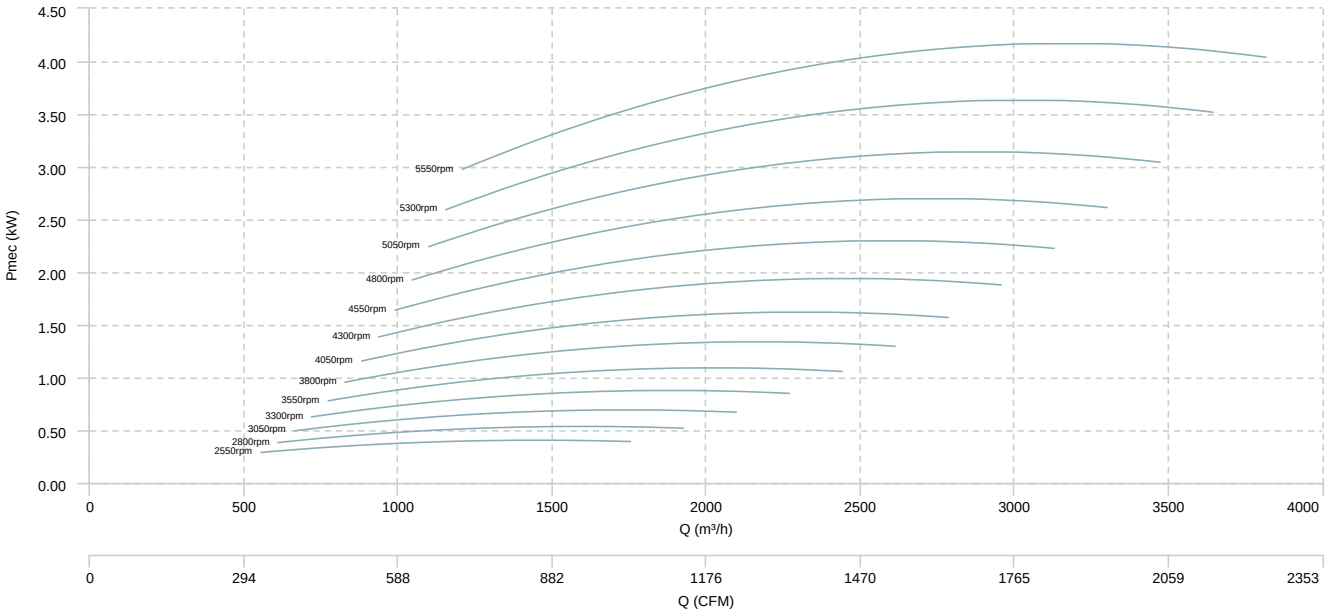

MTRM 310 ATEX

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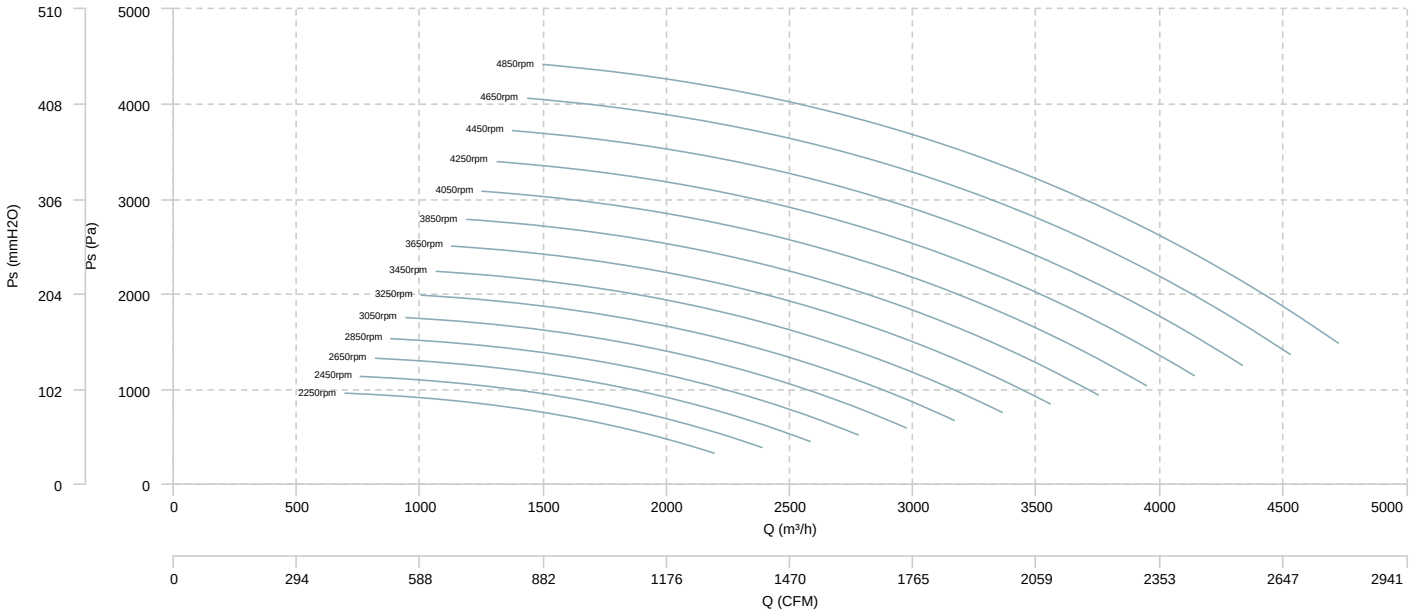
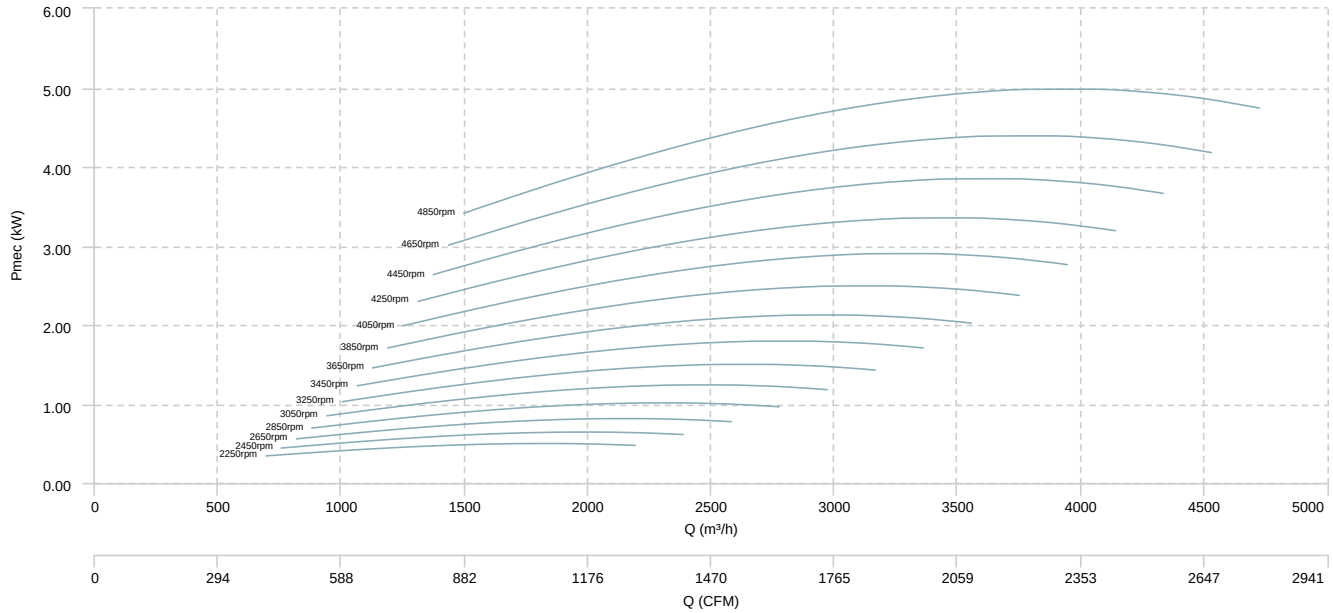
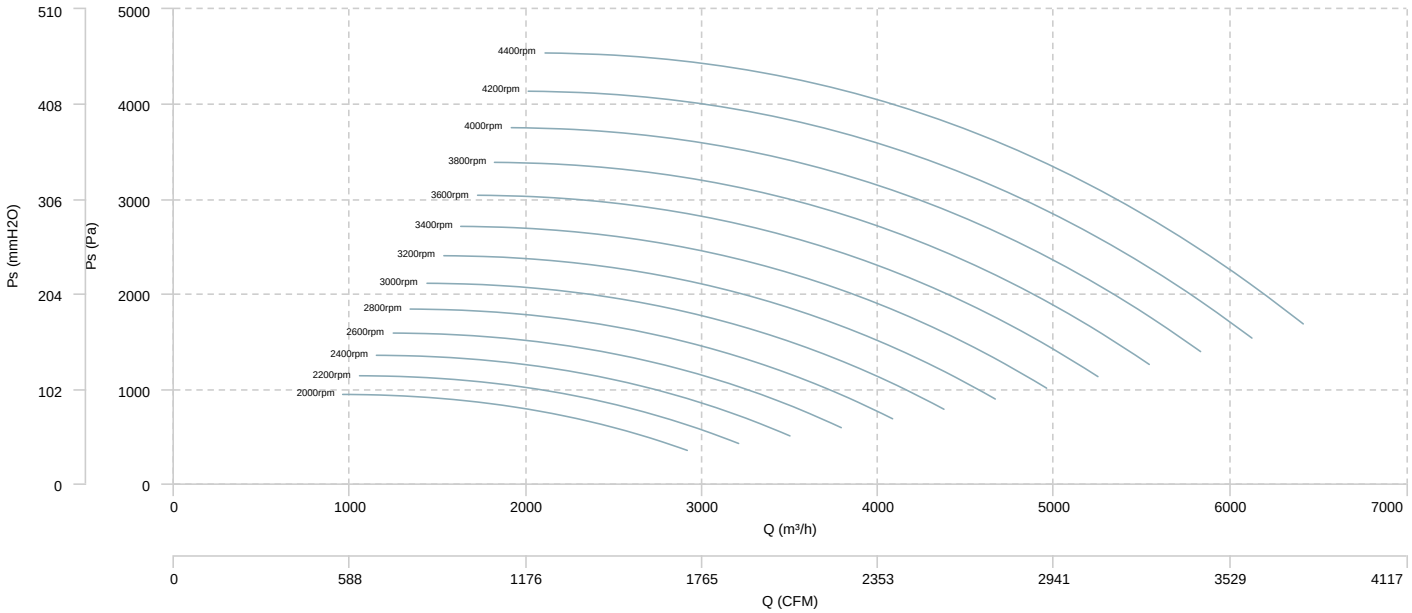


AIR FLOW - MECHANICAL POWER

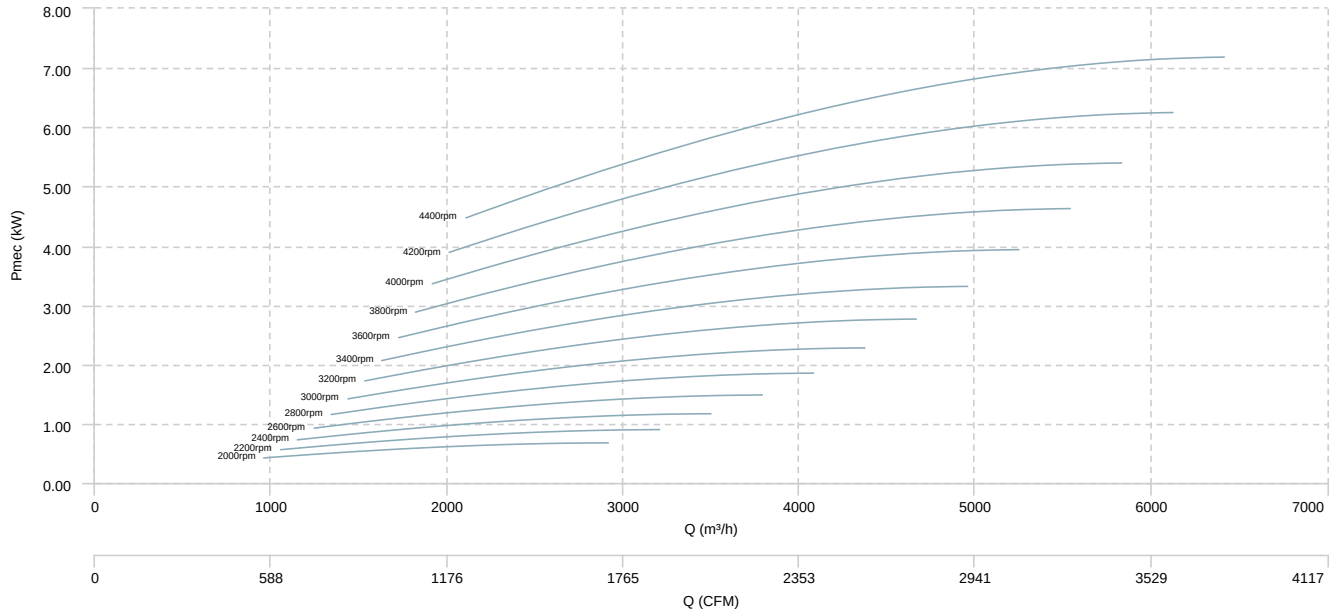


MTRM 350 ATEX

AIR FLOW - PRESSURE

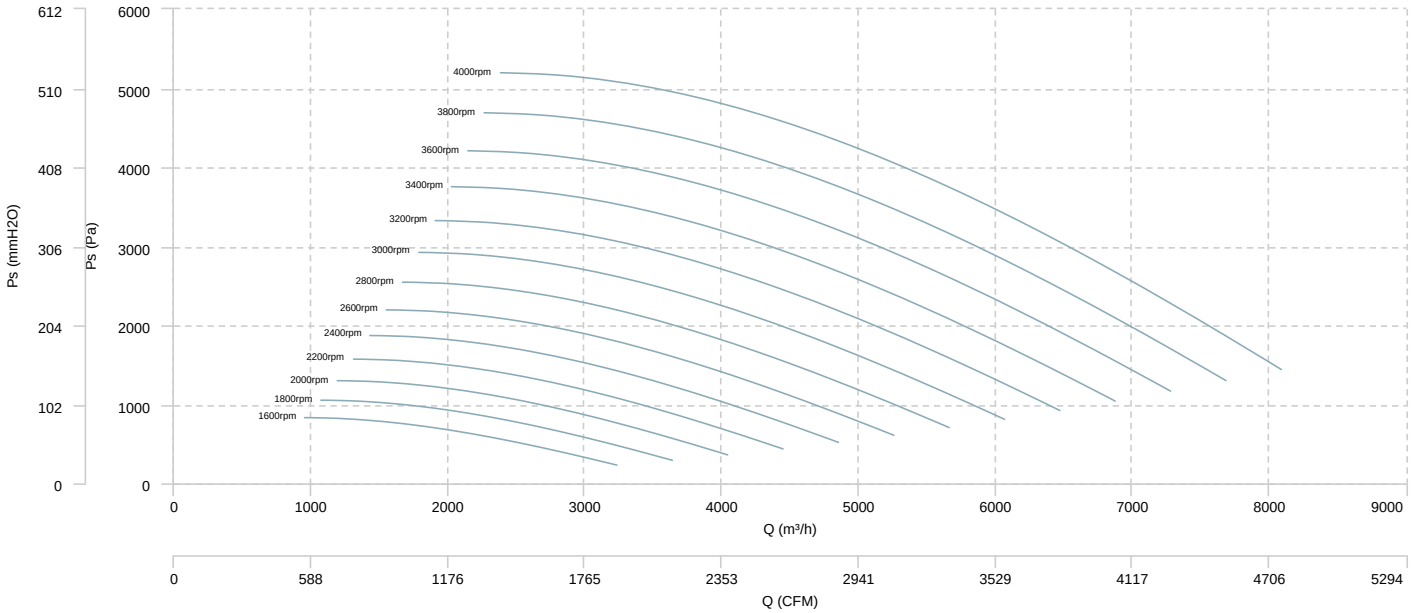


AIR FLOW - MECHANICAL POWER

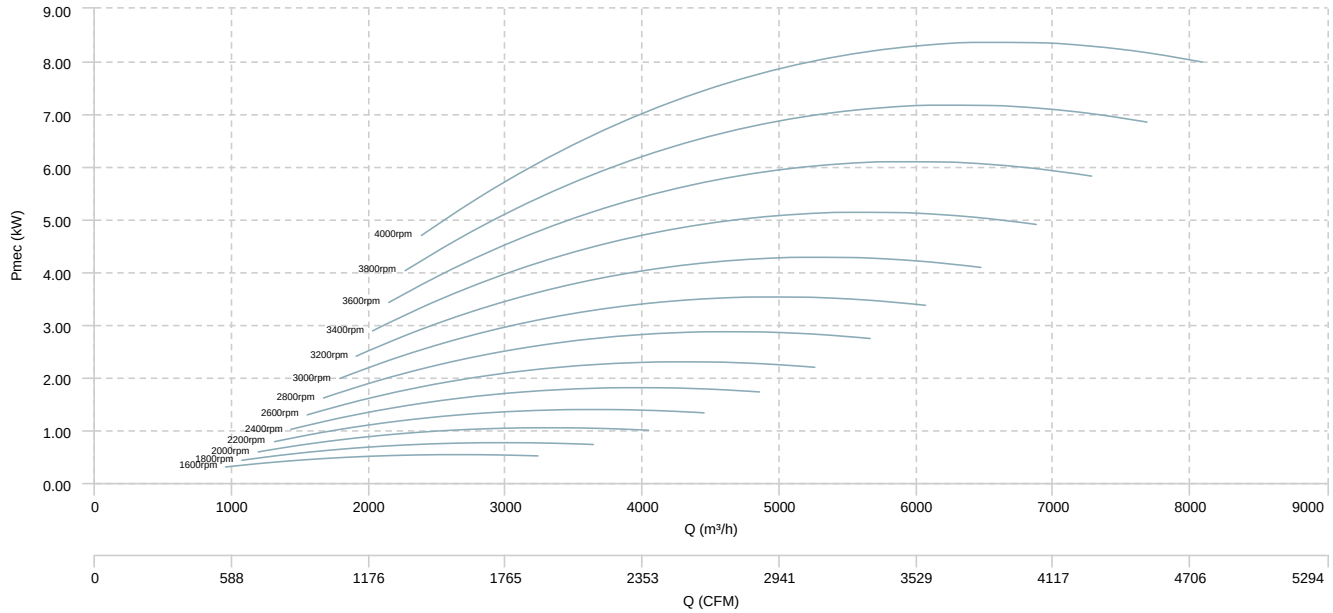


MTRM 400 ATEX

AIR FLOW - PRESSURE

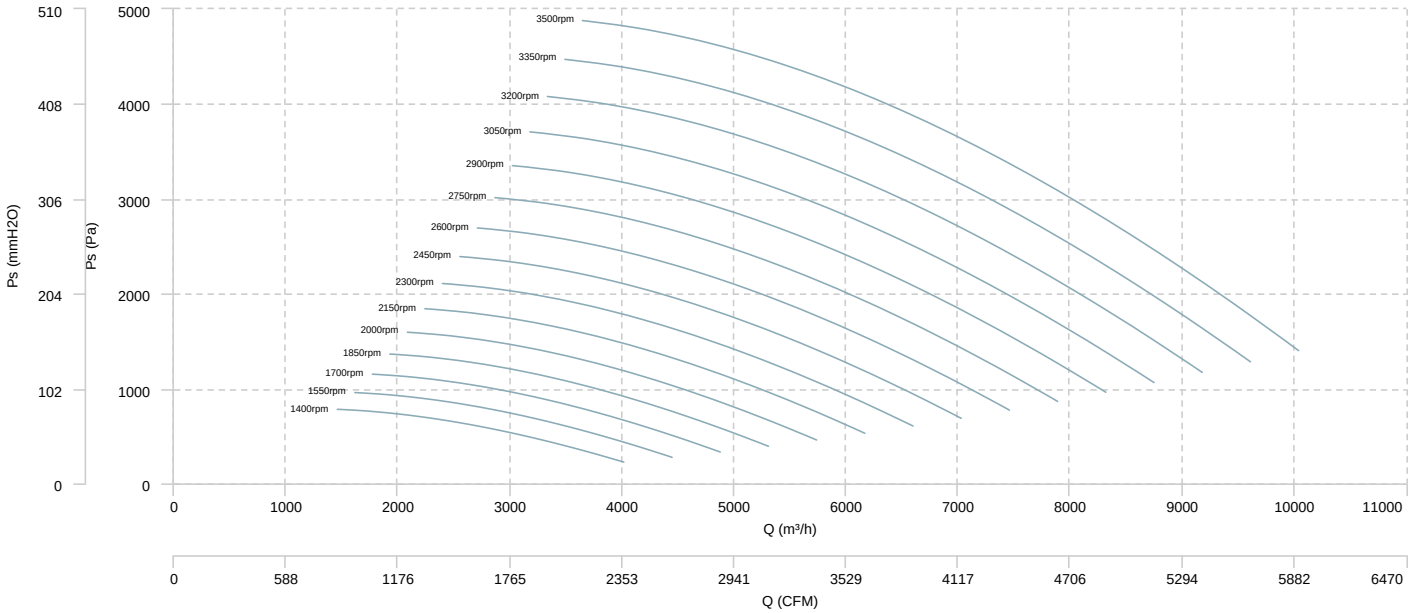


AIR FLOW - MECHANICAL POWER

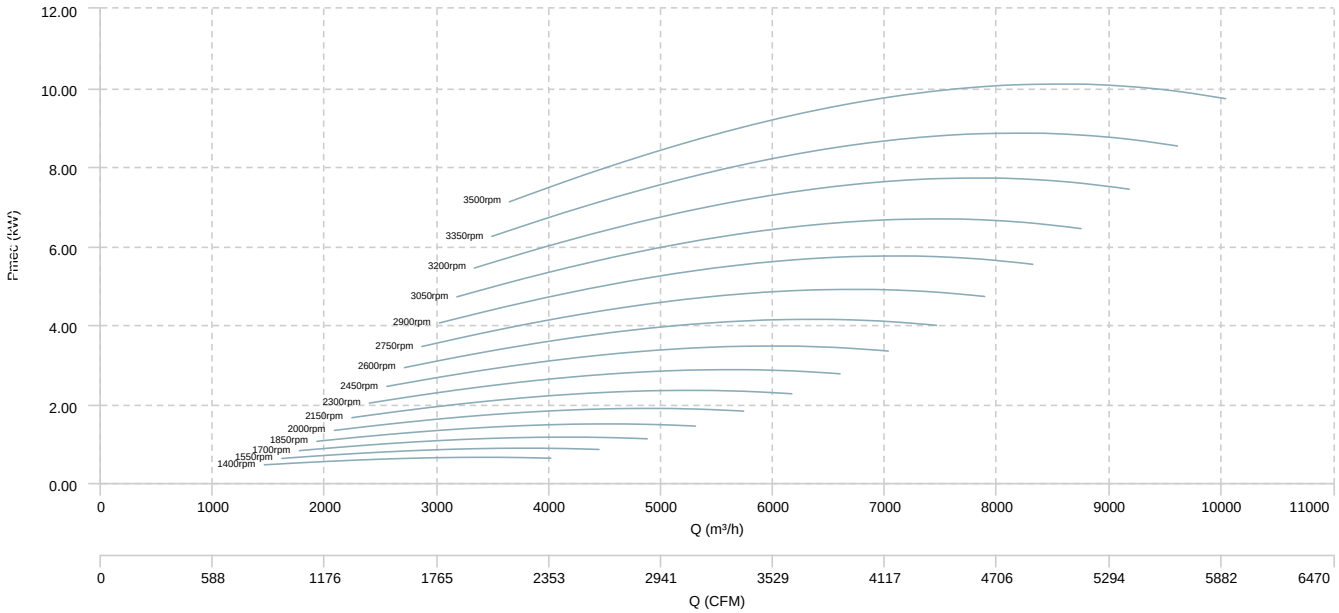


MTRM 450 ATEX

AIR FLOW - PRESSURE

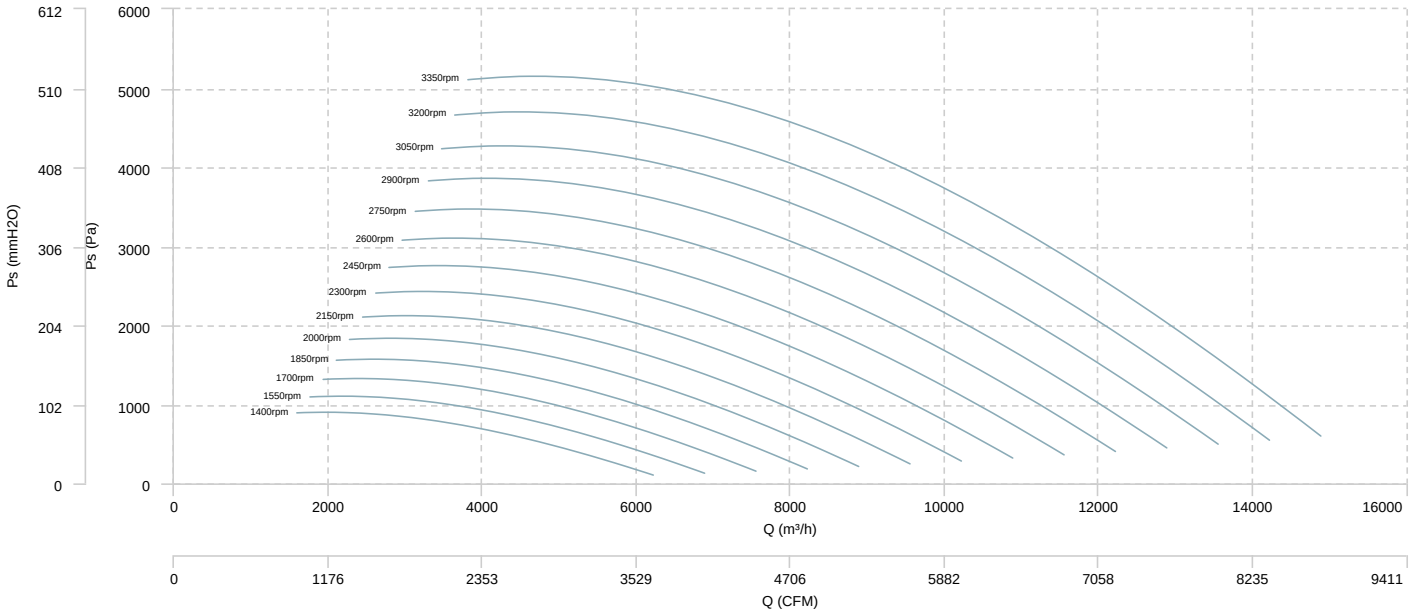


AIR FLOW - MECHANICAL POWER

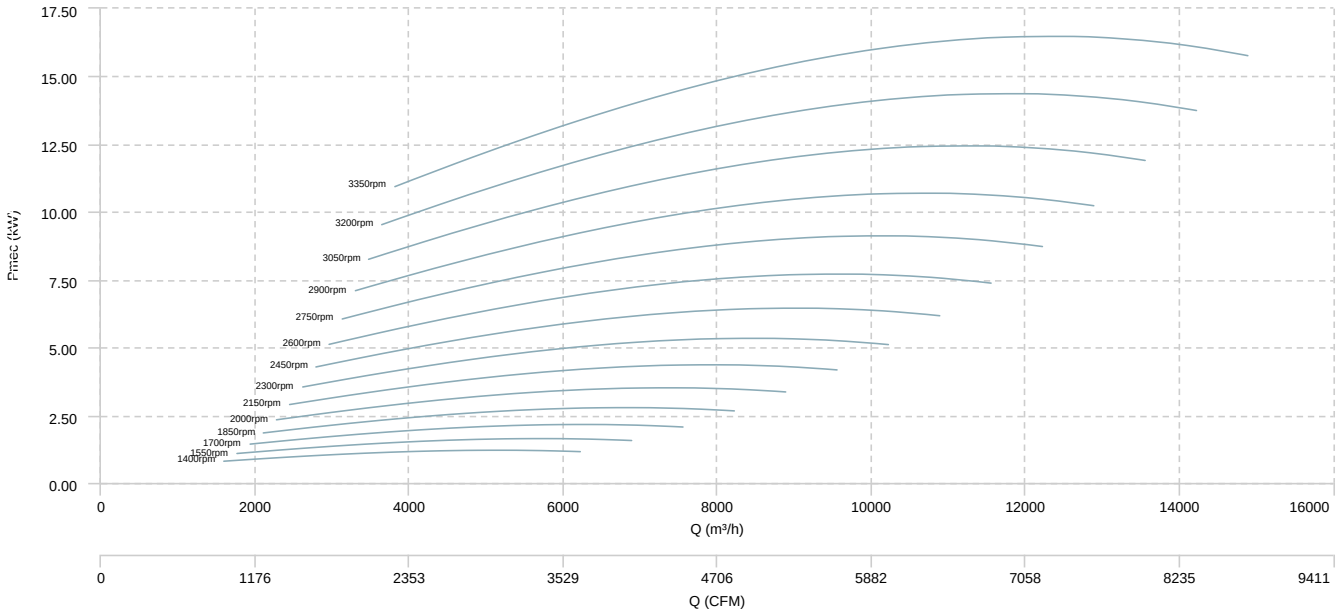


MTRM 500 ATEX

AIR FLOW - PRESSURE

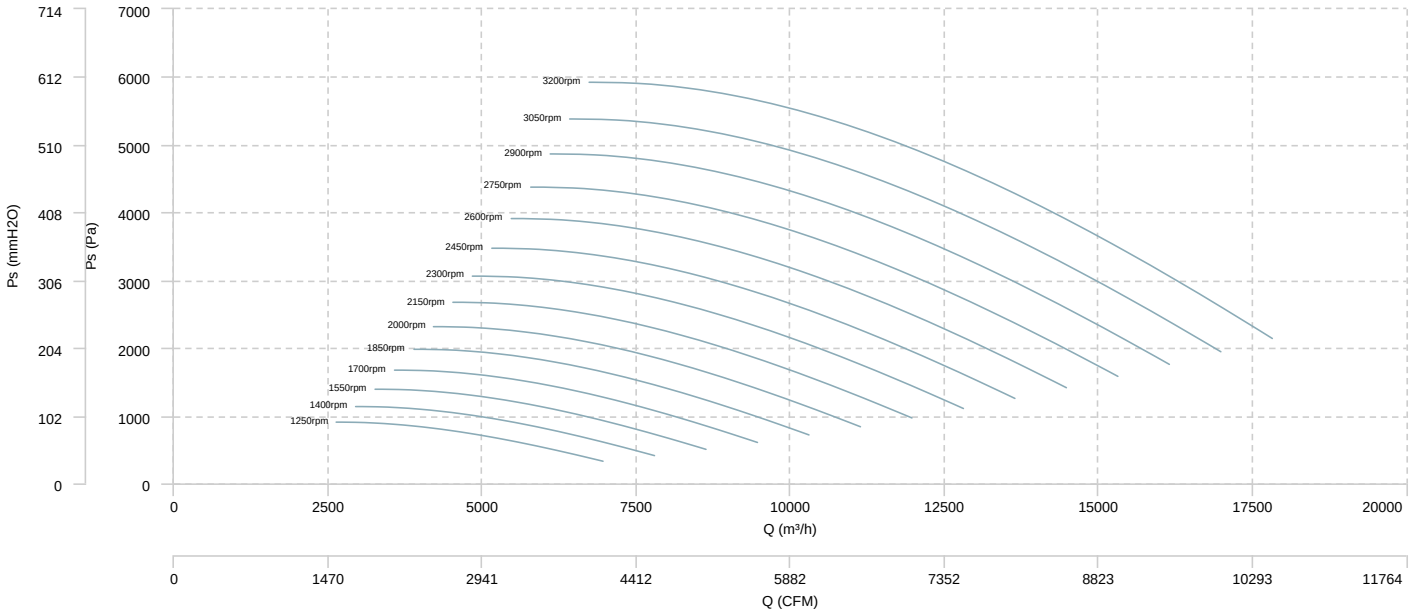


AIR FLOW - MECHANICAL POWER

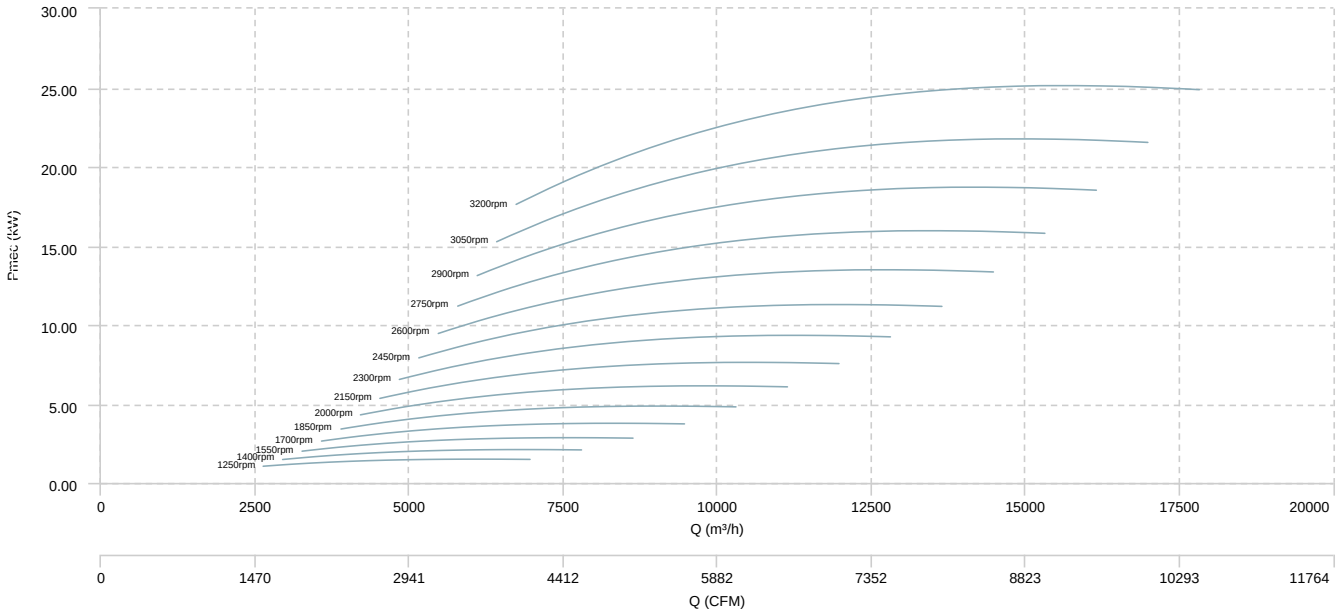


MTRM 560 ATEX

AIR FLOW - PRESSURE

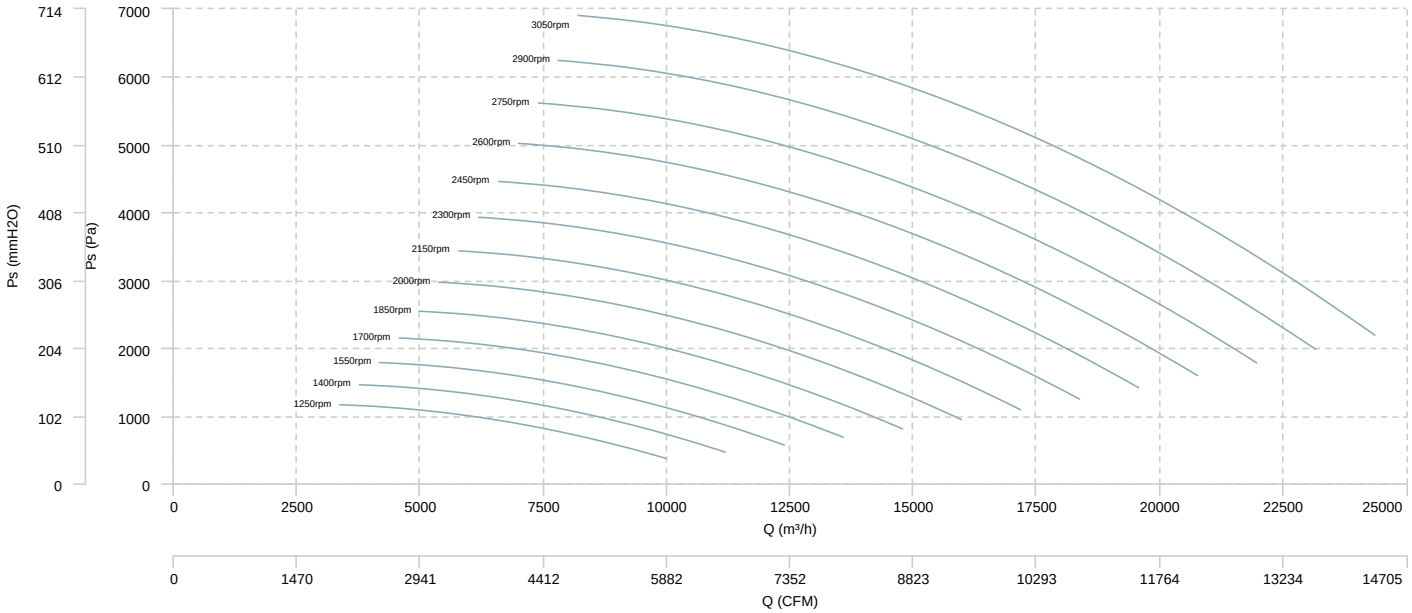


AIR FLOW - MECHANICAL POWER

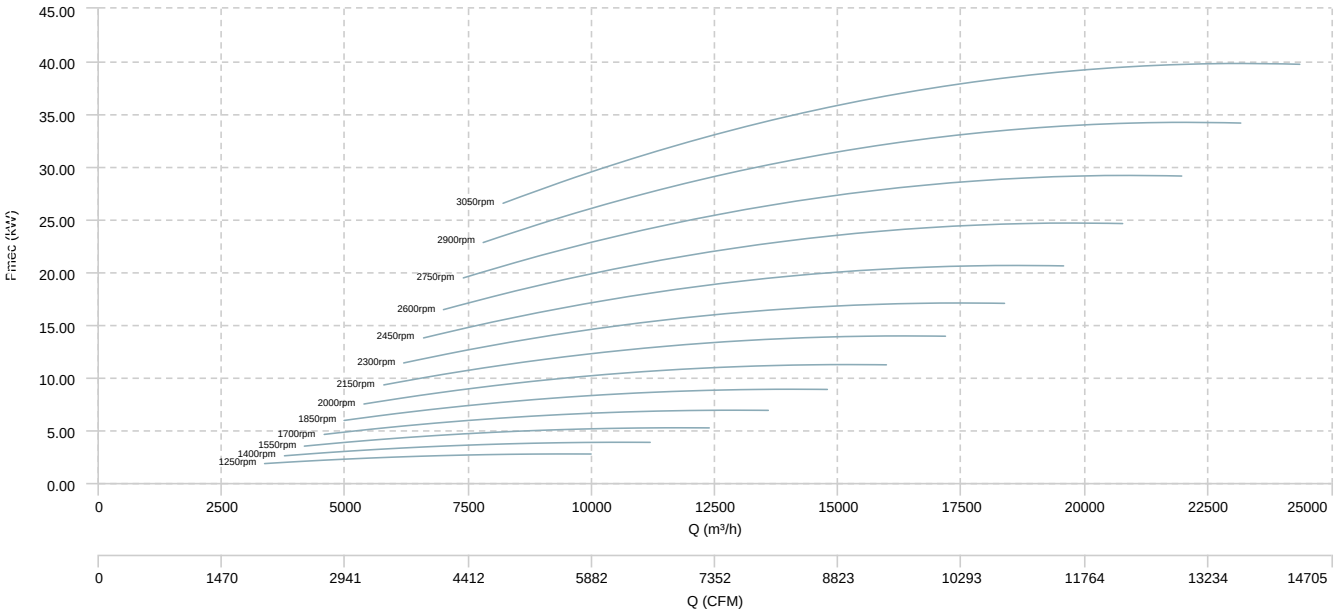


MTRM 630 ATEX

AIR FLOW - PRESSURE

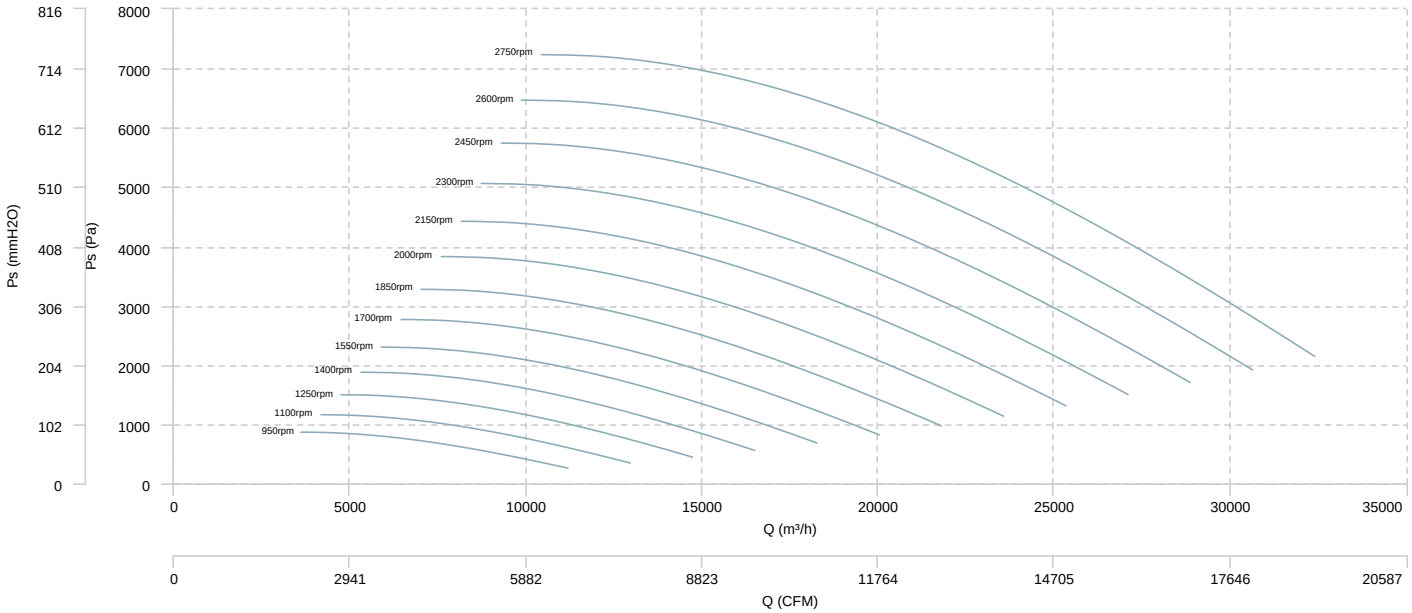


AIR FLOW - MECHANICAL POWER

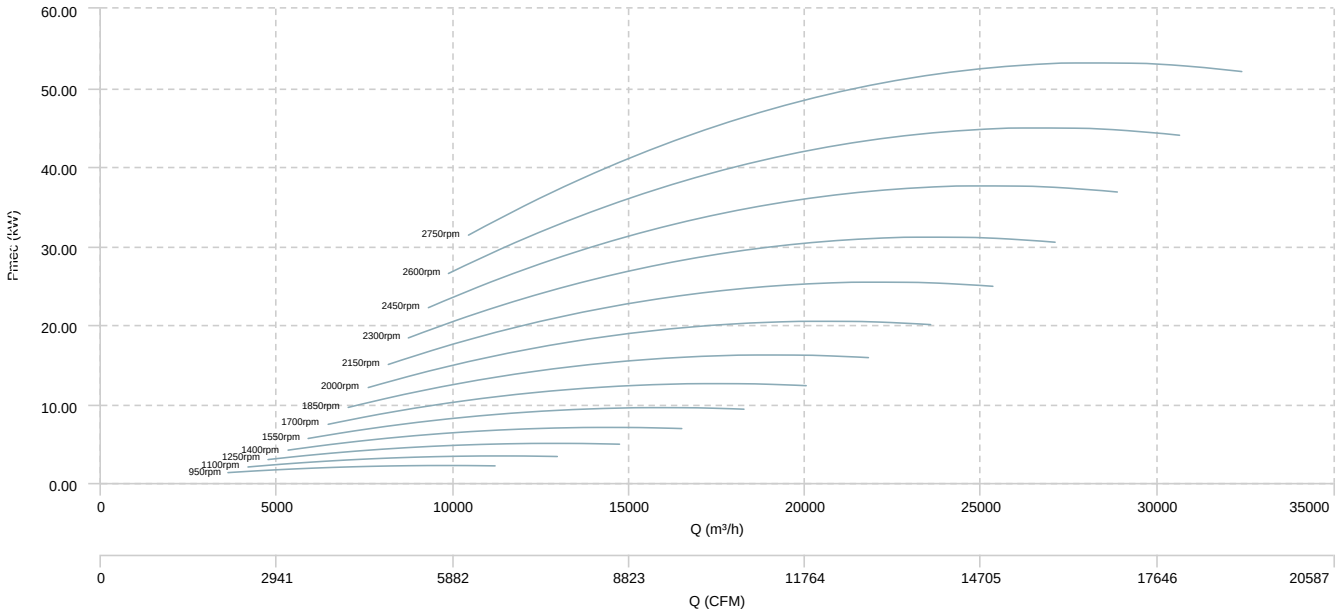


MTRM 710 ATEX

AIR FLOW - PRESSURE

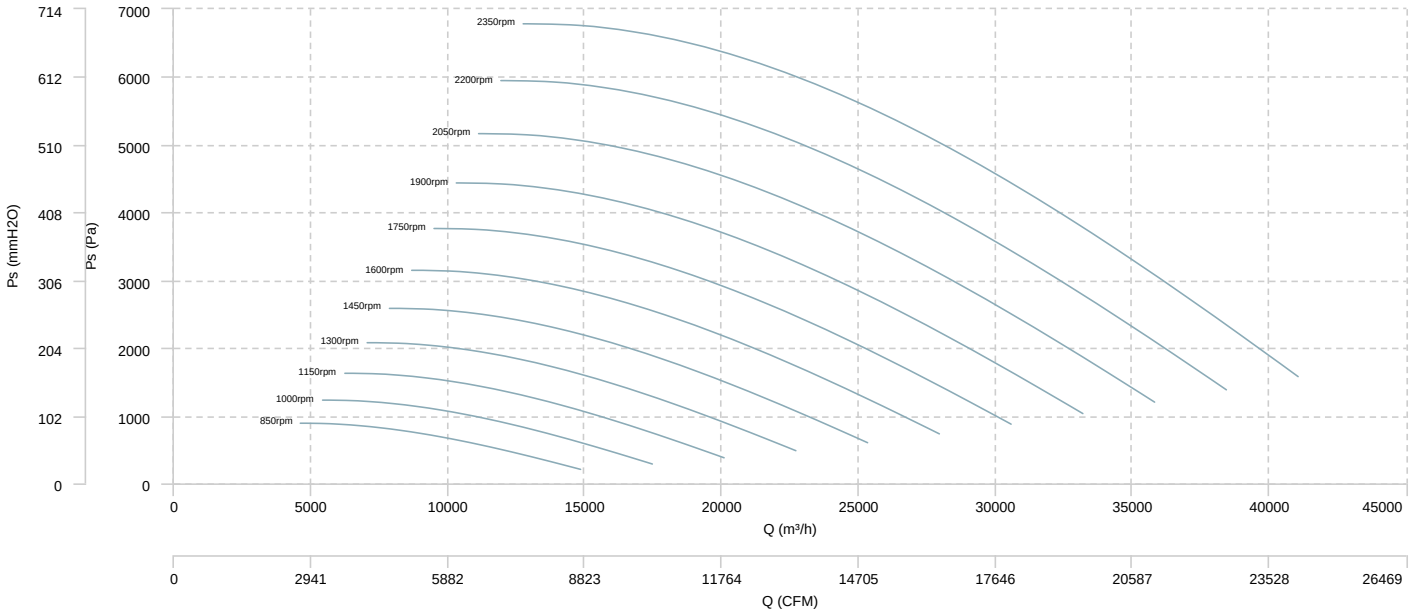


AIR FLOW - MECHANICAL POWER

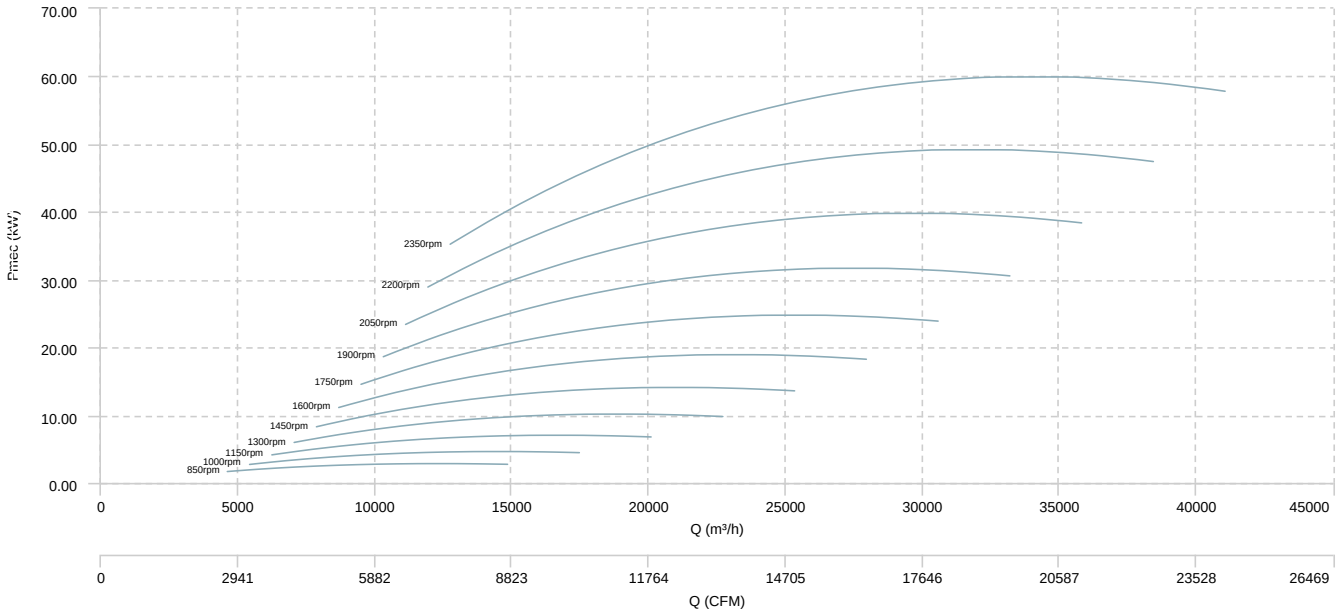


MTRM 800 ATEX

AIR FLOW - PRESSURE

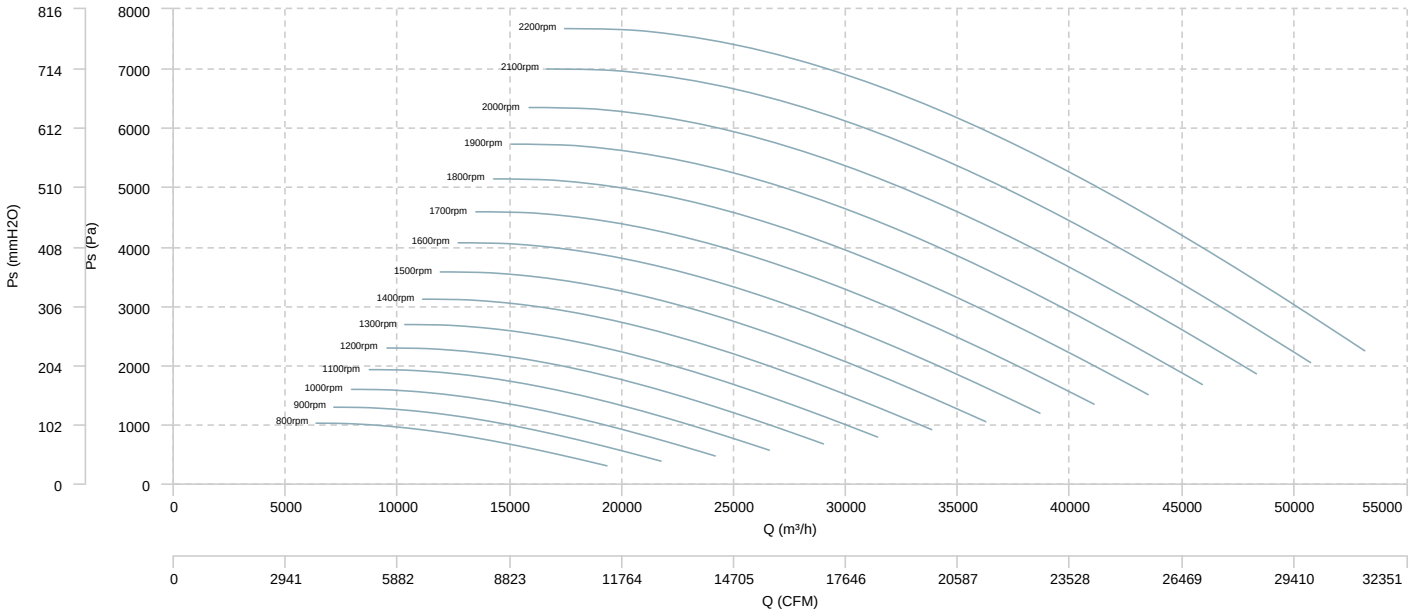


AIR FLOW - MECHANICAL POWER

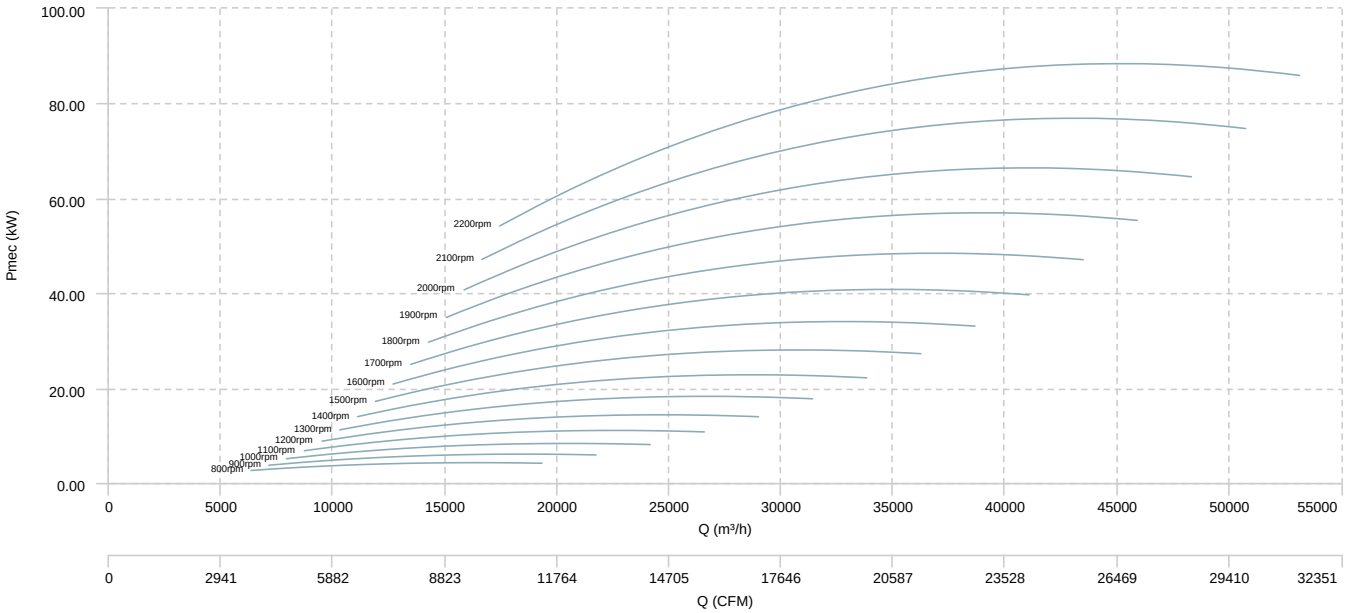


MTRM 900 ATEX

AIR FLOW - PRESSURE

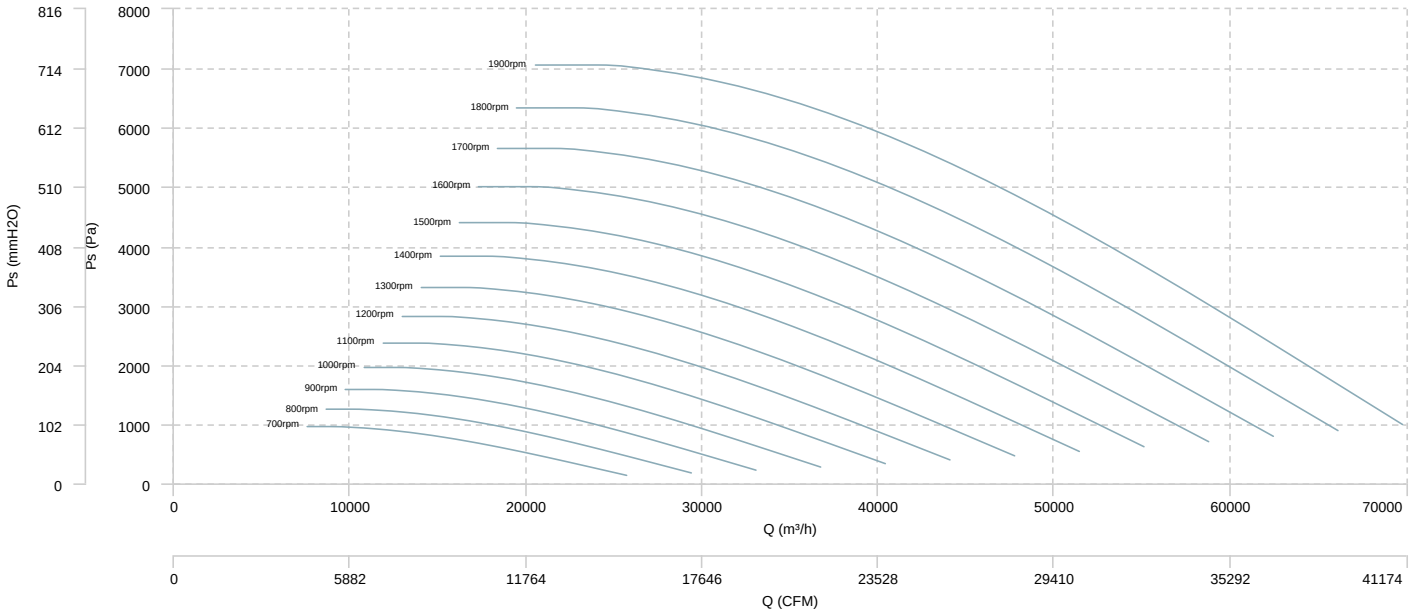


AIR FLOW - MECHANICAL POWER

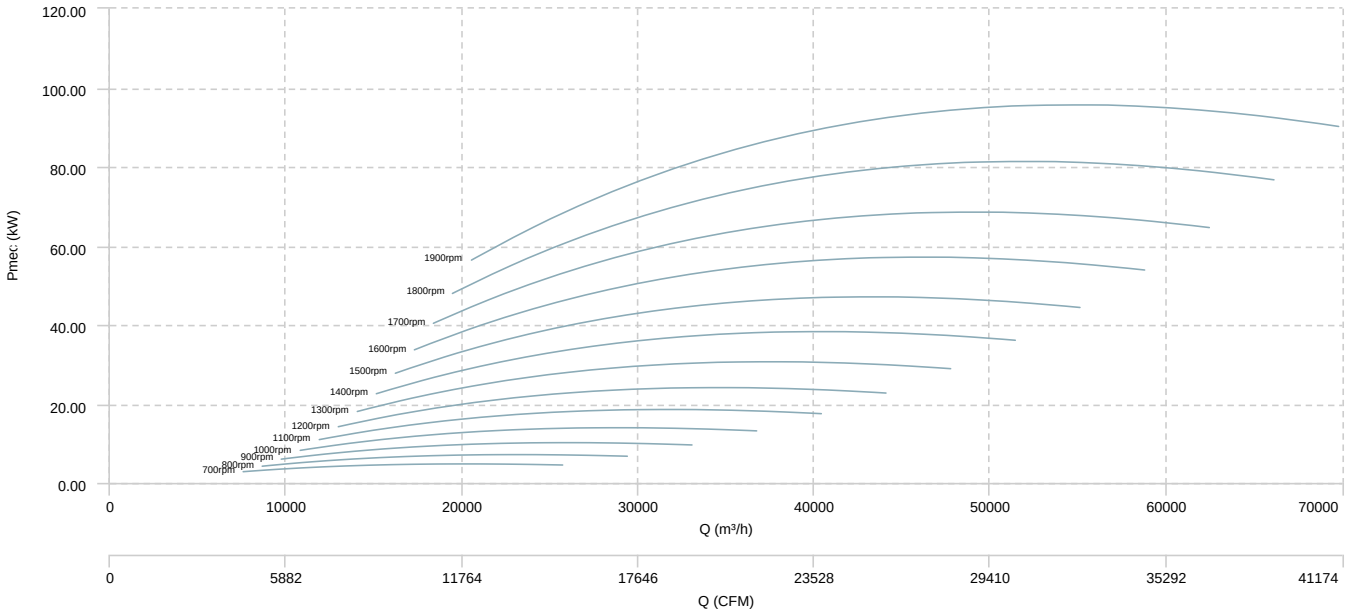


MTRM 1000 ATEX

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**
MTRM 220 ATEX (2800rpm)	Inlet	65	80	87	88	91	89	79	69	96
	Outlet	65	80	87	88	91	89	79	69	96
	Radiated	50	62	68	72	73	69	62	52	78
MTRM 250 ATEX (2800rpm)	Inlet	69	84	91	92	95	92	83	73	99
	Outlet	69	84	91	92	95	92	83	73	99
	Radiated	54	66	798	76	77	72	66	56	81
MTRM 280 ATEX (2550rpm)	Inlet	71	86	94	95	98	95	86	76	102
	Outlet	71	86	94	95	98	95	86	76	102
	Radiated	56	68	75	79	80	75	69	59	84
MTRM 310 ATEX (2250rpm)	Inlet	69	84	91	92	95	93	83	73	99
	Outlet	69	84	91	92	95	93	83	73	99
	Radiated	54	66	72	76	77	73	66	56	81
MTRM 350 ATEX (2000rpm)	Inlet	87	102	109	110	113	110	101	91	117
	Outlet	87	102	109	110	113	110	101	91	117
	Radiated	72	84	90	94	95	90	84	74	99
MTRM 400 ATEX (1600rpm)	Inlet	62	77	85	86	89	86	77	67	93
	Outlet	62	77	85	86	89	86	77	67	93
	Radiated	47	59	66	70	71	66	60	50	75
MTRM 450 ATEX (1400rpm)	Inlet	57	72	80	81	84	81	72	62	88
	Outlet	57	72	80	81	84	81	72	62	88
	Radiated	42	54	61	65	66	61	55	45	70
MTRM 500 ATEX (1400rpm)	Inlet	63	78	86	87	90	87	78	68	94
	Outlet	63	78	86	87	90	87	78	68	94
	Radiated	48	60	67	71	72	67	61	51	76
MTRM 560 ATEX (1250rpm)	Inlet	63	78	85	86	89	87	77	67	93
	Outlet	63	78	85	86	89	87	77	67	93
	Radiated	48	60	66	70	71	67	60	50	76
MTRM 630 ATEX (1250rpm)	Inlet	82	97	104	106	108	106	96	87	113
	Outlet	82	97	104	106	108	106	96	87	113
	Radiated	67	79	85	90	90	86	79	70	95
MTRM 710 ATEX (950rpm)	Inlet	80	95	102	103	106	103	94	84	110
	Outlet	80	95	102	103	106	103	94	84	110
	Radiated	65	77	83	87	88	83	77	67	92
MTRM 800 ATEX (850rpm)	Inlet	78	93	100	101	104	102	92	82	108
	Outlet	78	93	100	101	104	102	92	82	108
	Radiated	63	75	81	85	86	82	75	65	90

Sound power Lw dB (A)										
Model		**63 Hz**	**125 Hz**	**250 Hz**	**500 Hz**	**1000 Hz**	**2000 Hz**	**4000 Hz**	**8000 Hz**	**Total**
MTRM 900 ATEX (800rpm)	Inlet	71	86	93	95	97	95	85	76	102
	Outlet	71	86	93	95	97	95	85	76	102
	Radiated	56	68	74	79	79	75	68	59	84
MTRM 1000 ATEX (700rpm)	Inlet	73	88	96	97	100	97	87	78	104
	Outlet	73	88	96	97	100	97	87	78	104
	Radiated	58	70	77	81	82	77	70	61	86

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

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