

## MTGR



### MEDIUM PRESSURE FAN 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.
- Fully welded or joined housing.
- Single inlet backward curved impeller made of Fe360 sheet statically and dynamically balanced. Impellers are painted with epoxy primer that resists temperatures up to 300°C.
- Motorized fan with basement (configuration 12). Full equipped fans including: motor, pulleys, belts, belts guard and shaft guard. Fitted over a base plate.
- Standard orientation LG270.
- It allows adjusting the orientation locally from models 400 to 630. Models sizes from 710 to 2000 size the orientation is fixed.

#### APPLICATIONS:

Designed for inline installation, they are suitable for:

- Industrial applications, extraction or injection of air.
- Cooling of machines and parts.
- Clean and slightly dusty air transport.
- Exhaust after filters, separators and cyclones.
- Pneumatic transport.
- Maximum working temperature: carried air: 200°C, ambient: 60°C.

#### UNDER REQUEST:

- 60Hz fans and special voltages.
- 2 speed motors.
- Fan with free shaft (configuration 1) or with motor supported on the pedestal side (configuration 9).
- Flameproof or explosionproof fans with ATEX certificated motors.
- Fan for air working temperatures up to 350°C with R/R (cooling impeller).
- Hot dip galvanised or stainless steel fans.
- Orientation: RD0, RD45, RD90, RD135, RD180, RD225, RD270, RD315, LG0, LG45, LG90, LG135, LG180, LG225, LG315.

## Accessories



AC



BAD



EI



INT



JE-45



RA



RI

## Technical data

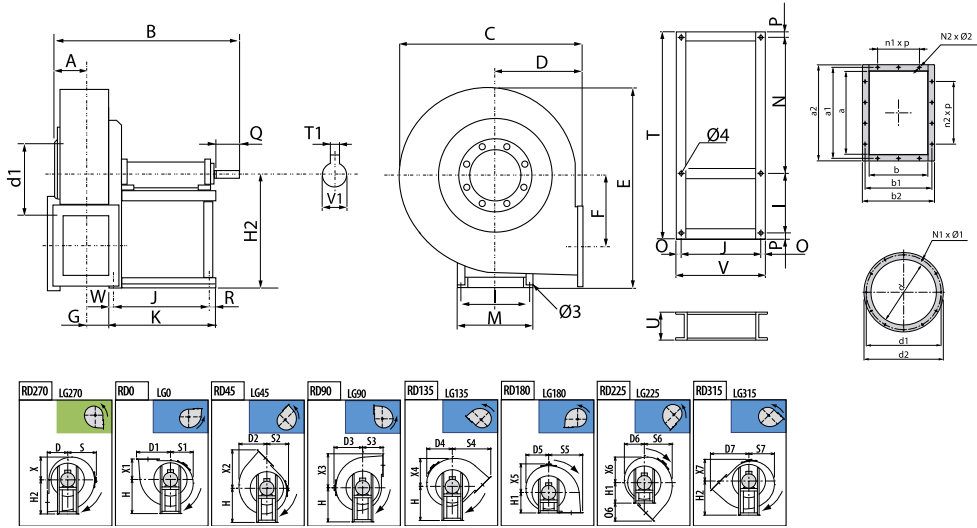
### Three-phase motor

Code	Model	R.P.M.	Rated I. (A) 400V	Rated power kW	Max. Airflow m3/h	Sound db (A)*	Weight	Connect. diagram
5047040__R__	MTGR 400	3500	-	9	4.690	42	80	1
5047045__R__	MTGR 450	3500	-	11	6.220	46	95	1
5047050__R__	MTGR 500	3500	-	15	9.320	49	135	1
5047056__R__	MTGR 560	3500	-	22	13.260	49	187	1
5047063__R__	MTGR 630	3500	-	37	18.640	50	218	1
5047071__R__	MTGR 710	3200	-	55	24.890	52	336	1
5047080__R__	MTGR 800	2900	-	75	32.950	52	400	1
5047090__R__	MTGR 900	2400	-	75	38.360	71	489	1
5047100__R__	MTGR 1000	2200	-	90	46.480	69	694	1
5047112__R__	MTGR 1120	1900	-	90	53.650	70	945	1
5047125__R__	MTGR 1250	1800	-	160	76.780	70	1.147	1
5047140__R__	MTGR 1400	1600	-	200	95.190	75	1.628	1
5047160__R__	MTGR 1600	1400	-	200	111.860	74	1.888	1
5047180__R__	MTGR 1800	1250	-	315	150.670	76	2.670	1
5047200__R__	MTGR 2000	1100	-	315	179.650	83	3.600	1

**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	D3	D4	D5
MTGR 400	105	776	685	285	483	387	400	353	315
MTGR 450	115	795	765	320	541	435	445	398	354
MTGR 500	131	956	862	360	597	490	502	450	400

Model	D6	D7	E	F	G	H	H1	H2	I
MTGR 400	306	543	815	319	97	500	285	500	355
MTGR 450	342	609	914	357	107	560	320	560	355
MTGR 500	380	676	1000	396	119	600	360	600	364

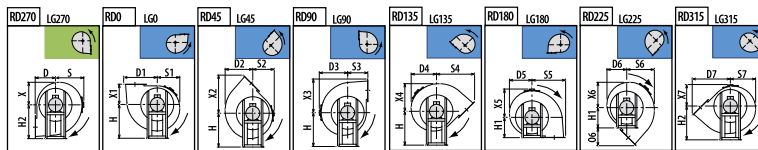
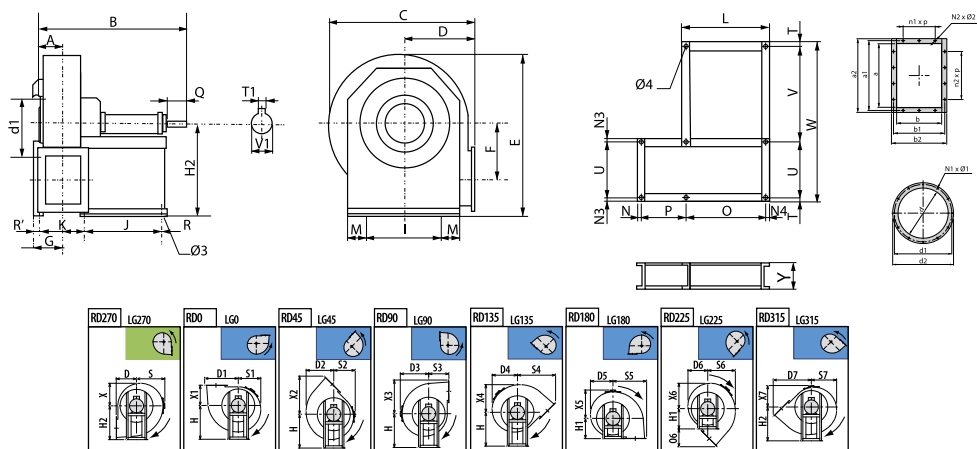
Model	J	K	M	N1xØ1	N2xØ2	O	O6	P	Q
MTGR 400	407	485	400	8x10	10x12	28	258	23	80
MTGR 450	407	485	400	8x12	10x12	28	289	23	80
MTGR 500	477	560	418	8x12	10x12	33	316	27	110

Model	R	S	S1	S2	S3	S4	S5	S6	S7
MTGR 400	28	400	315	306	285	543	483	387	353
MTGR 450	28	445	354	342	320	609	541	435	398
MTGR 500	33	502	400	380	360	676	597	490	450

Model	T	T1	U	V	V1	W	X	X1	X2
MTGR 400	10	10	120	38	38	50	315	285	543
MTGR 450	10	10	120	38	38	50	354	320	609
MTGR 500	12	12	140	42	42	50	400	360	676

Model	X3	X4	X5	X6	X7	a	a1	a2	b
MTGR 400	483	387	400	353	306	258	292	328	185
MTGR 450	541	435	445	398	342	288	332	368	205
MTGR 500	597	490	502	450	380	322	366	402	229

Model	b1	b2	d	d1	d2	n1xp	n2xp	Ø3	Ø4
MTGR 400	219	255	255	292	325	1x112	2x112	14	15
MTGR 450	249	285	285	332	365	1x125	2x125	14	15
MTGR 500	273	309	320	366	400	1x125	2x125	17	18



Model	A	B	C	D	D1	D2	D3	D4	D5
MTGR 560	142	1031	970	400	657	555	570	542	485
MTGR 630	158	1069	1080	450	732	619	630	603	540

Model	D6	D7	E	F	G	H	H1	H2	I
MTGR 560	425	747	1155	436	181	670	400	670	632
MTGR 630	476	836	1290	490	197	750	450	750	702

Model	J	K	L	M	N1	N1xØ1	N2xØ2	N3	N4
MTGR 560	477	341	543	30	33	8x12	10x12	30	33
MTGR 630	477	372	543	30	33	12x12	14x12	30	33

Model	O	O6	P	Q	R	S	S1	S2	S3
MTGR 560	477	347	341	110	33	570	485	425	400
MTGR 630	477	386	372	110	33	630	540	476	450

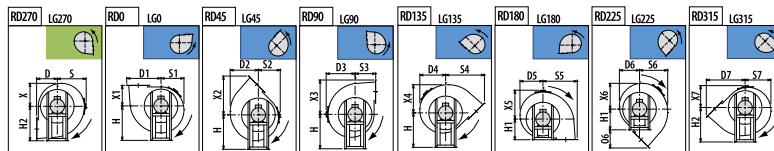
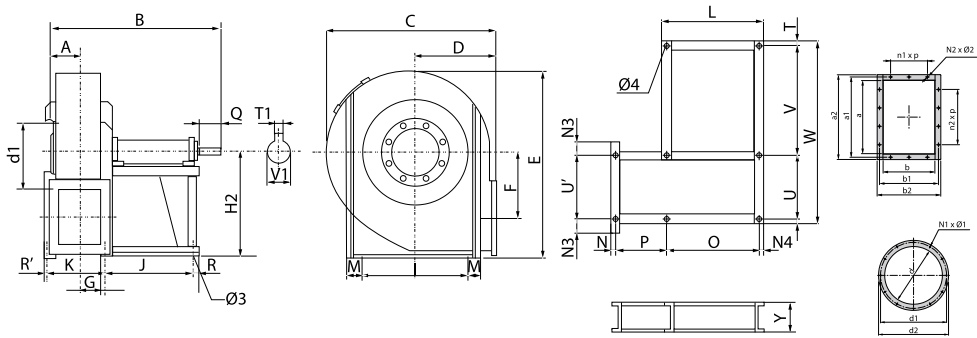
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Model	S4	S5	S6	S7	T	T1	U	V	V1
MTGR 560	747	657	555	542	30	14	632	678	48
MTGR 630	836	732	619	603	30	14	702	708	48

Model	W	X	X1	X2	X3	X4	X5	X6	X7
MTGR 560	1370	485	400	747	657	555	570	542	425
MTGR 630	1470	540	450	836	732	619	630	603	476

Model	Y	a	a1	a2	b	b1	b2	d	d1
MTGR 560	160	361	405	441	256	300	336	360	405
MTGR 630	160	404	448	484	288	332	368	405	448

Model	d2	n1xp	n2xp	Ø3	Ø4
MTGR 560	440	1x125	2x125	17	18
MTGR 630	485	2x125	3x125	17	18



Model	A	B	C	D	D1	D2	D3	D4	D5
MTGR 710	185	1158	1190	500	825	719	690	662	596
MTGR 800	199	1214	1342	560	919	811	782	749	672
MTGR 900	221	1257	1500	630	1038	905	870	835	721
MTGR 1000	246	1449	1686	710	1160	1015	976	936	813
MTGR 1120	277	1649	1884	800	1300	1123	1084	1037	932
MTGR 1250	310	1710	2114	900	1464	1270	1214	1163	1048
MTGR 1400	344	1887	2325	1000	1625	1395	1325	1272	1145
MTGR 1600	387	2175	2620	1120	1814	1572	1500	1434	1277
MTGR 1800	431	2270	2760	1250	2030	1790	1710	1610	1470

Model	A	B	C	D	D1	D2	D3	D4	D5
MTGR 2000	600	2395	3300	1400	2267	1970	1900	1811	1634

Model	D6	D7	E	F	G	H	H1	H2	I
MTGR 710	497	937	1446	558	221	670	500	670	772
MTGR 800	562	1045	1622	625	260	755	560	755	862
MTGR 900	633	1179	1781	703	282	850	630	850	962
MTGR 1000	718	1322	1993	791	326	950	710	950	1056
MTGR 1120	793	1487	2252	891	353	1060	800	1060	1178
MTGR 1250	898	1671	2548	1003	384	1190	900	1190	1310
MTGR 1400	990	1856	2845	1116	449	1320	1000	1320	1450
MTGR 1600	1085	2075	3177	1250	488	1500	1120	1500	1640
MTGR 1800	1300	2322	3590	1395	531	1650	1250	1650	1830
MTGR 2000	1455	2595	3994	1563	599	1850	1400	1850	2030

Model	J	K	L	M	N	N1	N1xØ1	N2xØ2	N3
MTGR 710	551	415	629	27	27	39	12x12	14x12	71
MTGR 800	551	454	629	32	47	39	12x14	14x12	91
MTGR 900	551	497	629	32	47	39	12x14	14x14	91
MTGR 1000	607	541	697	36	67	45	12x14	14x14	99
MTGR 1120	760	632	850	45	55	45	16x14	16x14	111
MTGR 1250	760	694	850	45	55	45	16x14	14x14	110
MTGR 1400	780	783	890	55	85	55	16x14	18x14	120
MTGR 1600	917	890	1047	60	75	65	24x14	18x14	120
MTGR 1800	917	986	1047	60	65	65	24x14	20x18	130
MTGR 2000	917	1083	1047	60	85	65	24x17	24x18	170

Model	N4	O	O6	P	Q	R	R'	S	S1
MTGR 710	39	551	437	415	110	39	27	690	596
MTGR 800	39	551	485	454	110	39	47	782	672
MTGR 900	39	551	549	497	110	39	47	870	721
MTGR 1000	45	607	612	541	140	45	67	976	813
MTGR 1120	45	760	687	632	140	45	45	1084	932
MTGR 1250	45	760	771	694	140	45	55	1214	1048
MTGR 1400	55	780	856	783	170	55	85	1325	1145
MTGR 1600	65	917	955	890	210	65	75	1500	1277
MTGR 1800	65	917	1072	986	210	65	65	1710	1470
MTGR 2000	65	917	1195	1083	210	65	85	1900	1634

Model	S2	S3	S4	S5	S6	S7	T	T1	U
MTGR 710	497	500	937	825	719	662	27	14	772

Model	S2	S3	S4	S5	S6	S7	T	T1	U
MTGR 800	562	560	1045	919	811	749	32	16	862
MTGR 900	633	630	1179	1038	905	835	32	16	962
MTGR 1000	718	710	1322	1160	1015	936	36	18	1056
MTGR 1120	793	800	1487	1300	1123	1037	45	20	1178
MTGR 1250	898	900	1671	1464	1270	1163	45	20	1310
MTGR 1400	990	1000	1856	1625	1395	1272	55	22	1450
MTGR 1600	1085	1120	2075	1814	1572	1434	60	25	1640
MTGR 1800	1300	1250	2322	2030	1790	1610	60	28	1830
MTGR 2000	1455	1400	2595	2267	1970	1811	60	28	2030

Model	U'	V	V1	W	X	X1	X2	X3	X4
MTGR 710	772	807	48	1633	596	500	937	825	719
MTGR 800	862	842	55	1768	672	560	1045	919	811
MTGR 900	962	987	55	2013	721	630	1179	1038	905
MTGR 1000	1056	1036	65	2164	813	710	1322	1160	1015
MTGR 1120	1178	1066	75	2334	932	800	1487	1300	1123
MTGR 1250	1310	1230	75	2630	1048	900	1671	1464	1270
MTGR 1400	1450	1240	80	2800	1145	1000	1856	1625	1395
MTGR 1600	1640	1205	90	2965	1277	1120	2075	1814	1572
MTGR 1800	1830	1295	100	3245	1470	1250	2311	2030	1790
MTGR 2000	2030	1350	100	3500	1634	1400	2595	2267	1970

Model	X5	X6	X7	Y	a	a1	a2	b	b1
MTGR 710	690	662	497	180	453	497	533	322	366
MTGR 800	782	749	562	180	507	551	587	361	405
MTGR 900	870	835	633	180	569	629	669	404	464
MTGR 1000	976	936	718	200	638	698	738	453	513
MTGR 1120	1084	1037	793	220	715	775	815	507	567
MTGR 1250	1214	1163	898	220	801	871	921	569	639
MTGR 1400	1325	1272	990	220	898	968	1018	638	708
MTGR 1600	1500	1434	1085	220	1007	1077	1127	715	785
MTGR 1800	1710	1610	1300	250	1130	1210	1270	801	881
MTGR 2000	1900	1811	1455	250	1267	1347	1407	898	978

Model	b2	d	d1	d2	n1xp	n2xp	Ø3	Ø4
MTGR 710	402	455	497	535	2x125	3x125	19	20
MTGR 800	441	505	551	585	2x125	3x125	19	20
MTGR 900	504	565	629	665	2x160	3x160	19	20
MTGR 1000	553	635	698	735	2x160	3x160	19	20
MTGR 1120	607	715	775	815	2x160	4x160	24	25

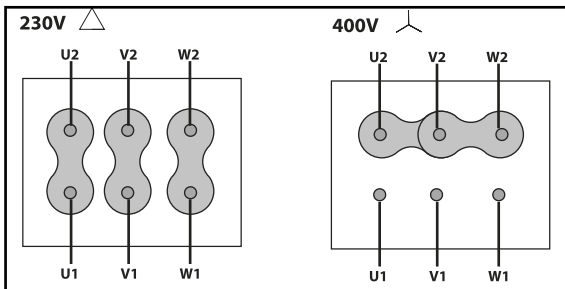
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MTGR 1250	689	805	861	905	2x200	3x200	24	25
MTGR 1400	758	905	958	1005	3x200	4x200	24	25
MTGR 1600	835	1007	1067	1107	3x200	4x200	28	30
MTGR 1800	941	1130	1200	1250	3x200	5x200	28	30
MTGR 2000	1038	1260	1337	1380	4x200	6x200	28	30



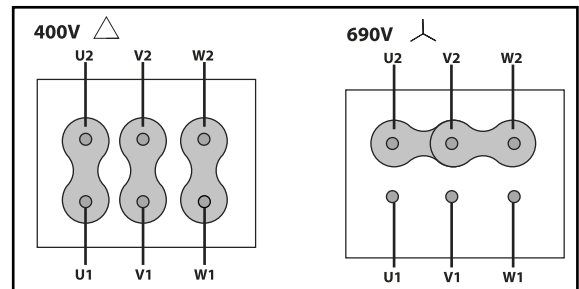
# Wiring diagram

DIAGRAM Nº 1

230/400V



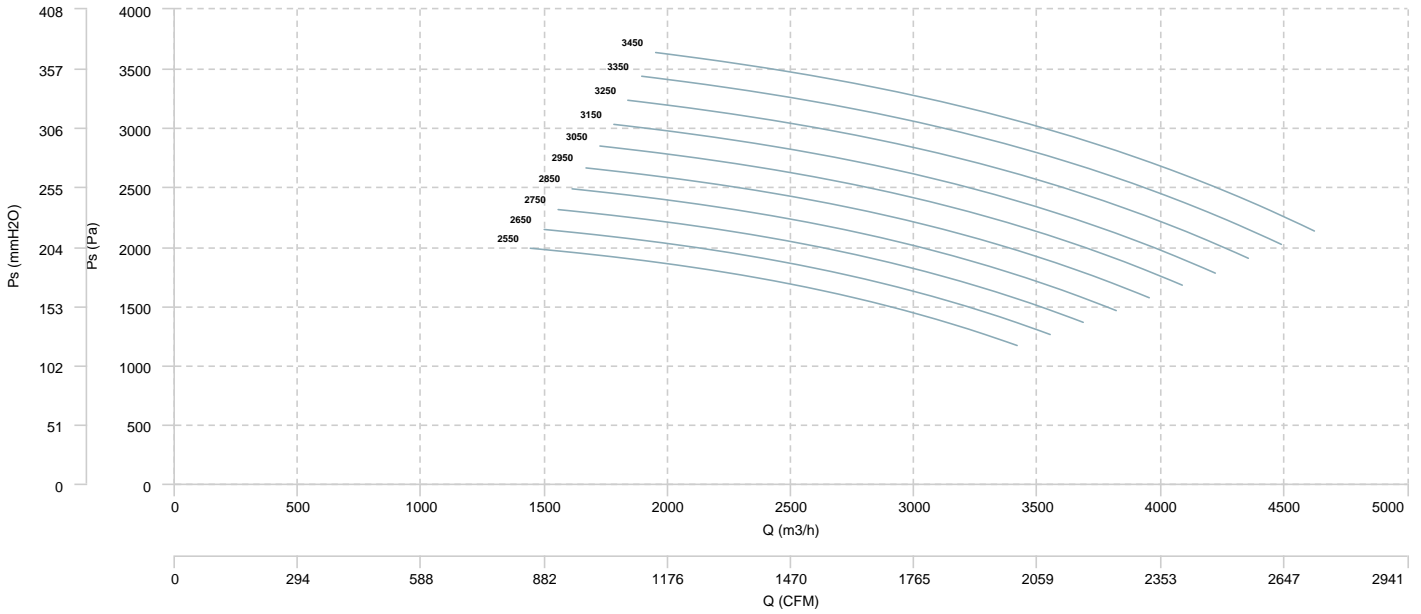
400/690V



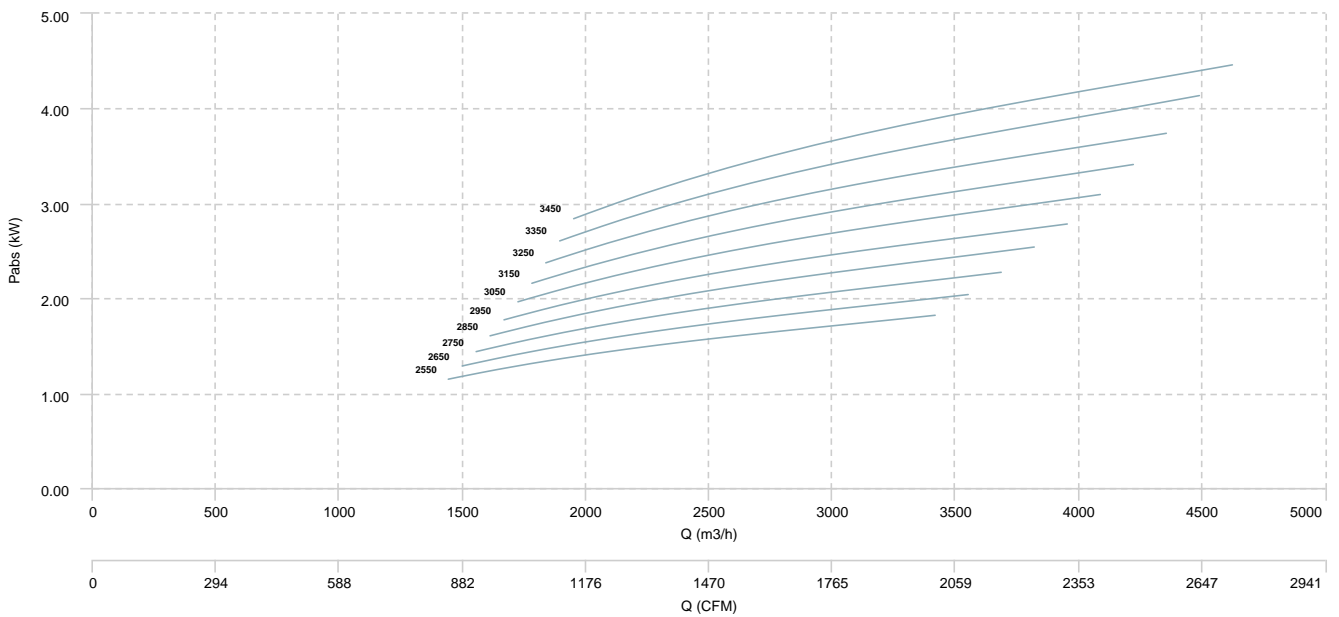
# CHARACTERISCTIC CURVE

MTGR 400

## AIR FLOW - PRESSURE

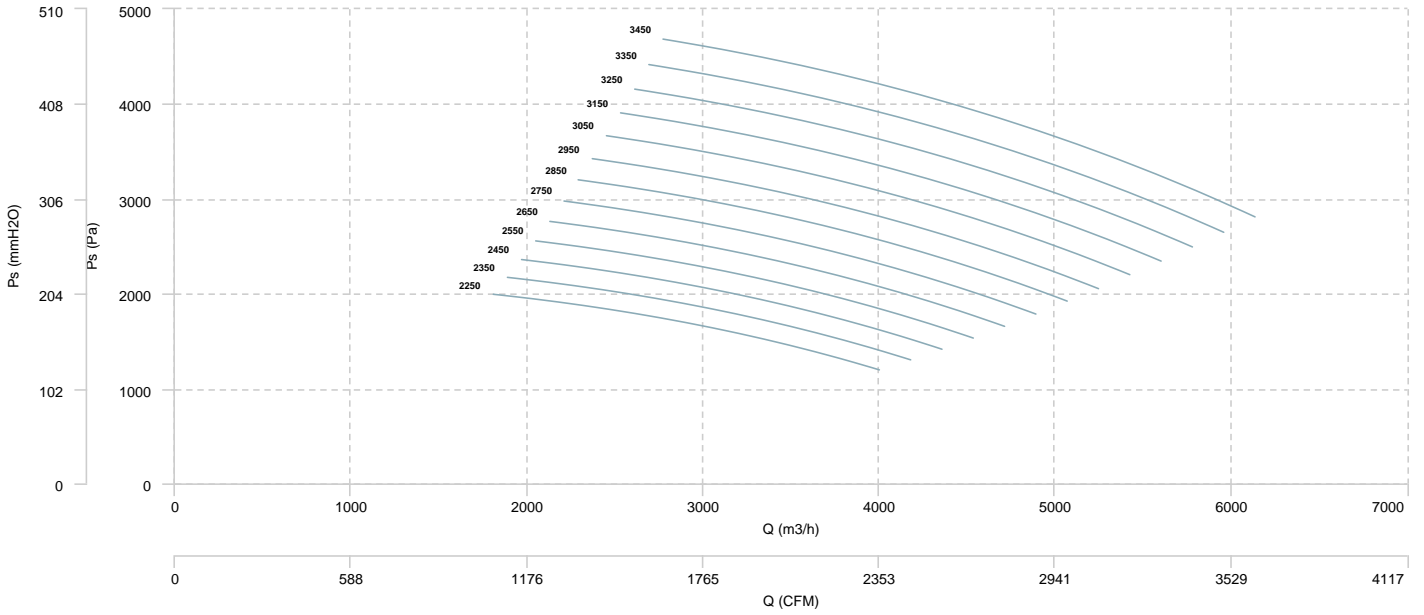


## AIR FLOW - MECHANICAL POWER

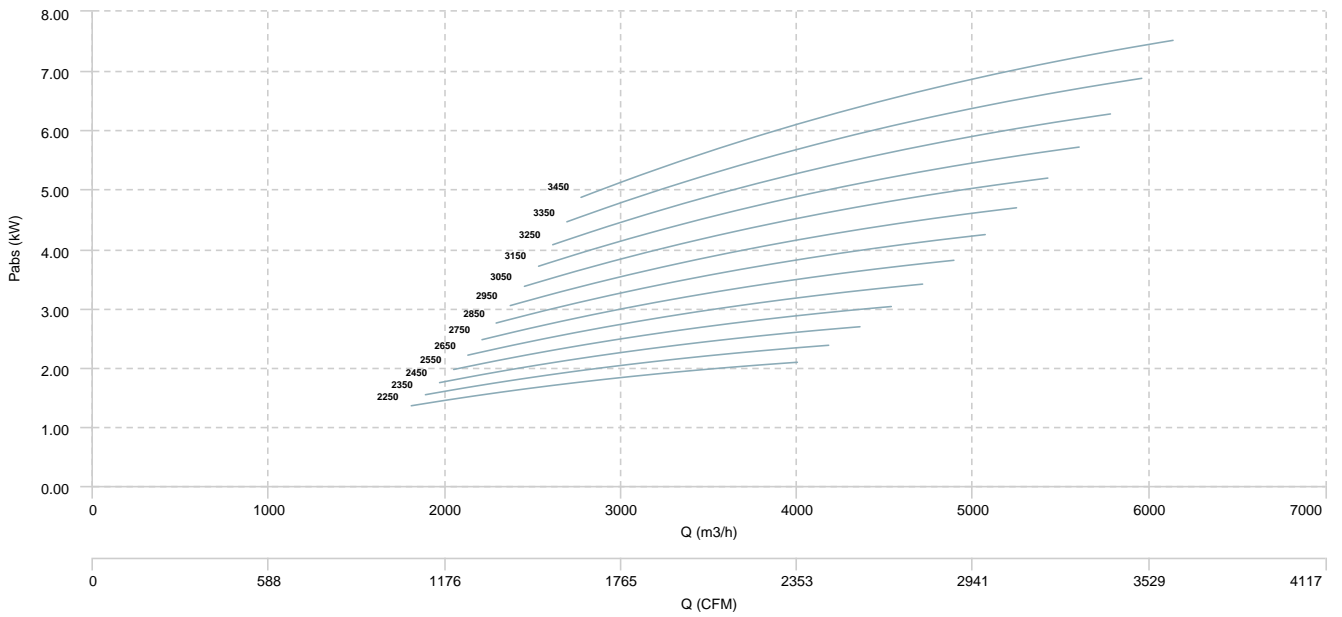


## MTGR 450

### AIR FLOW - PRESSURE

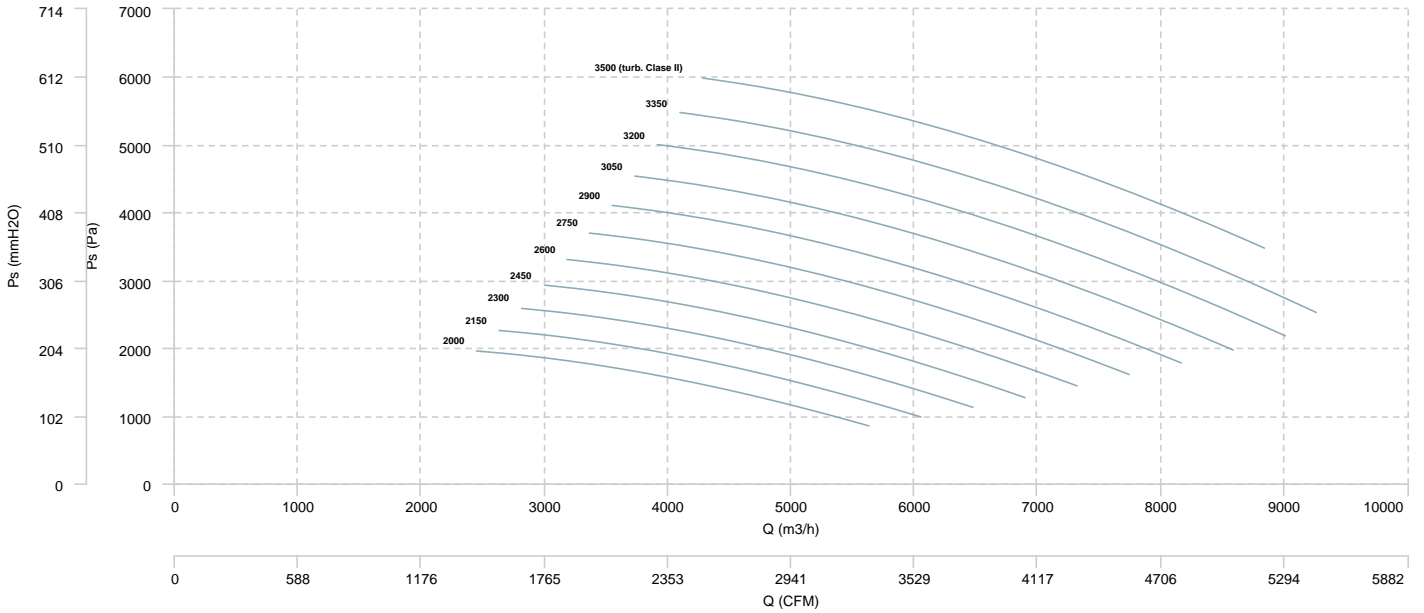


### AIR FLOW - MECHANICAL POWER

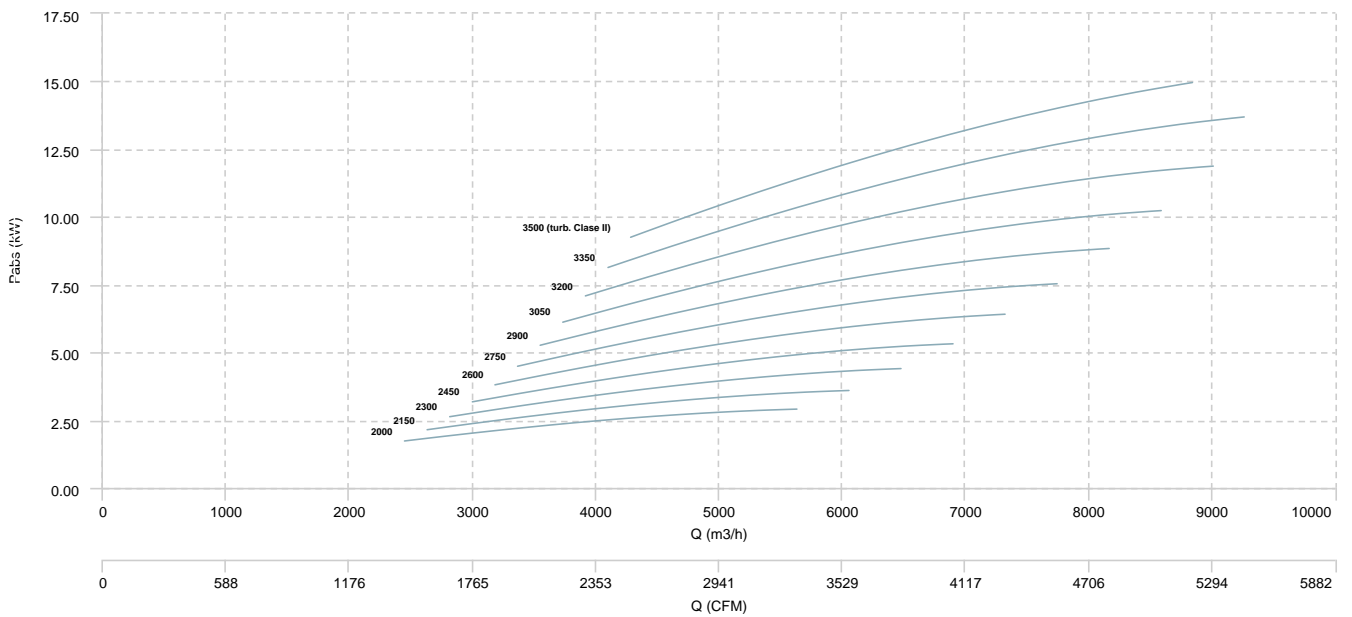


## MTGR 500

### AIR FLOW - PRESSURE

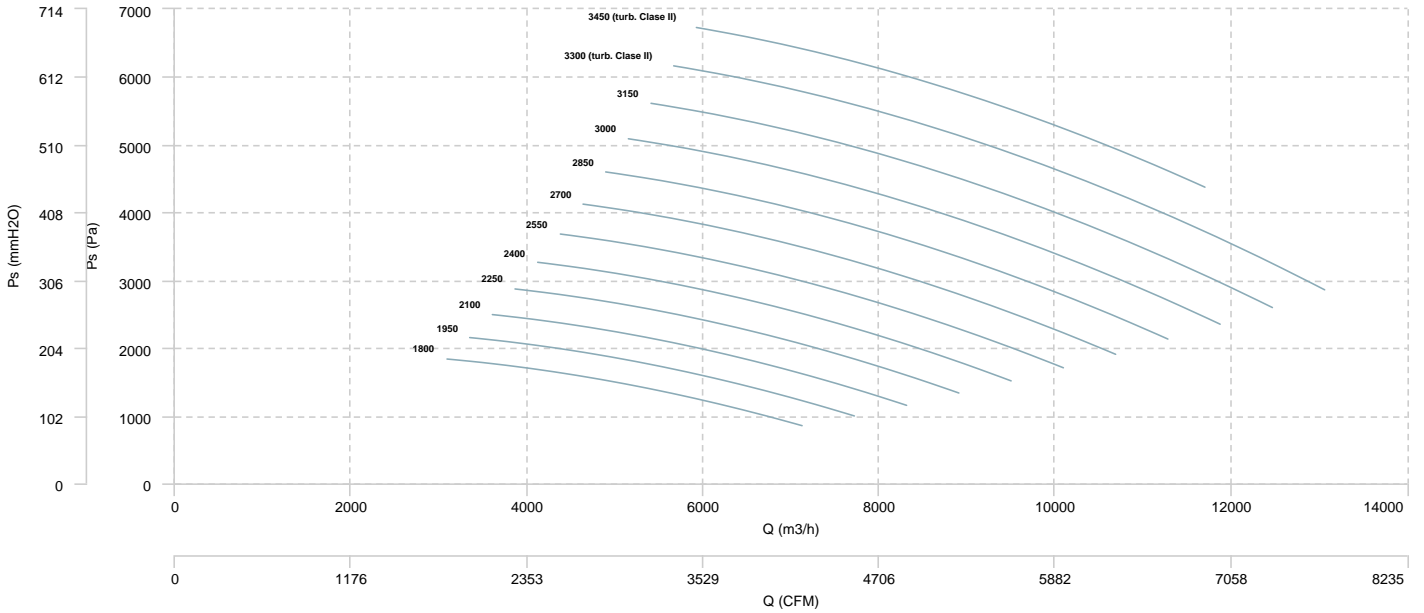


### AIR FLOW - MECHANICAL POWER

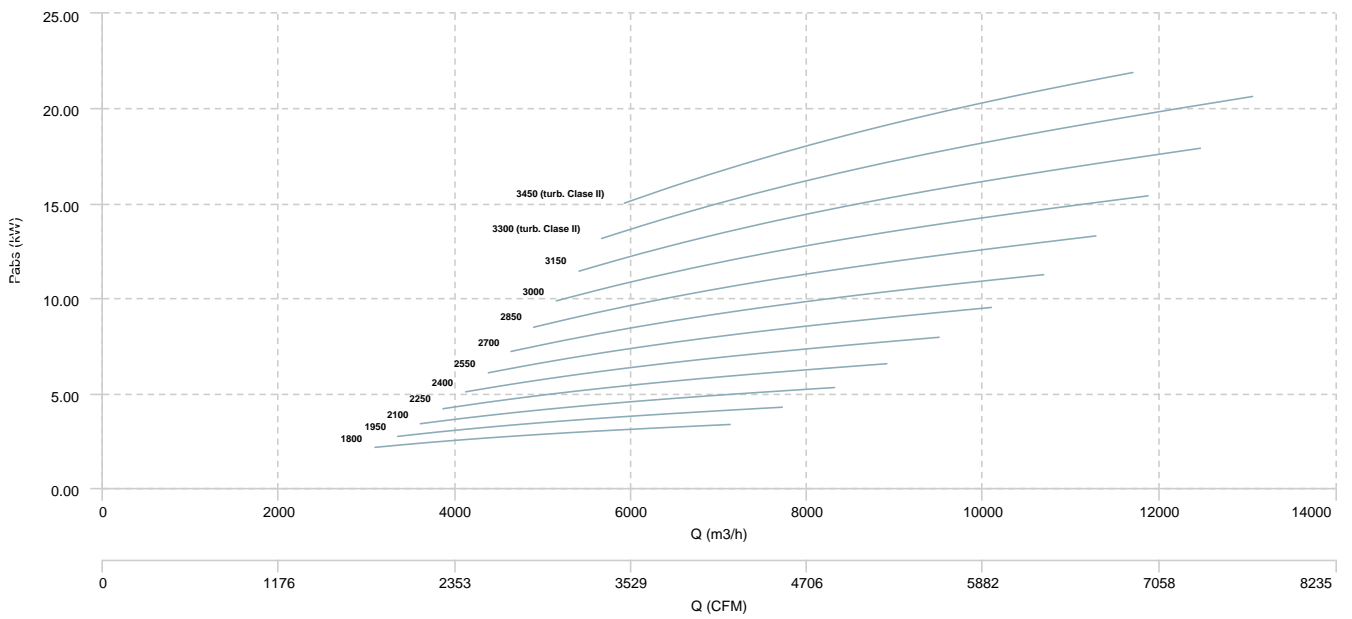


MTGR 560

## AIR FLOW - PRESSURE

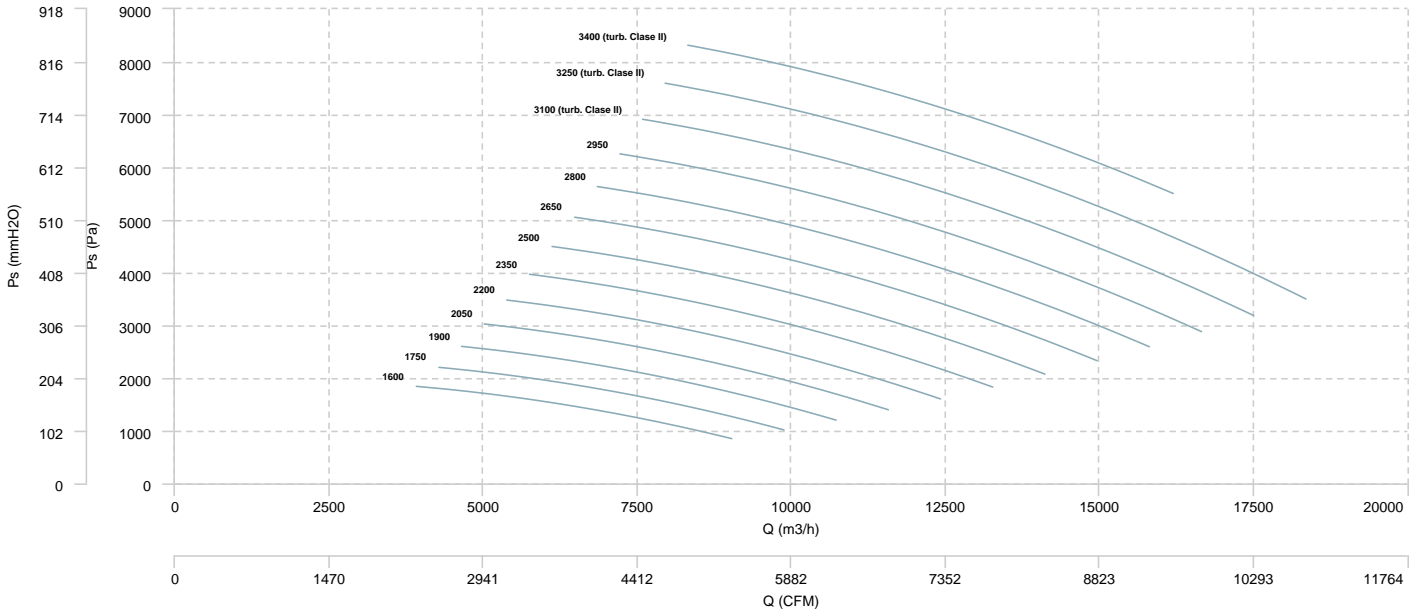


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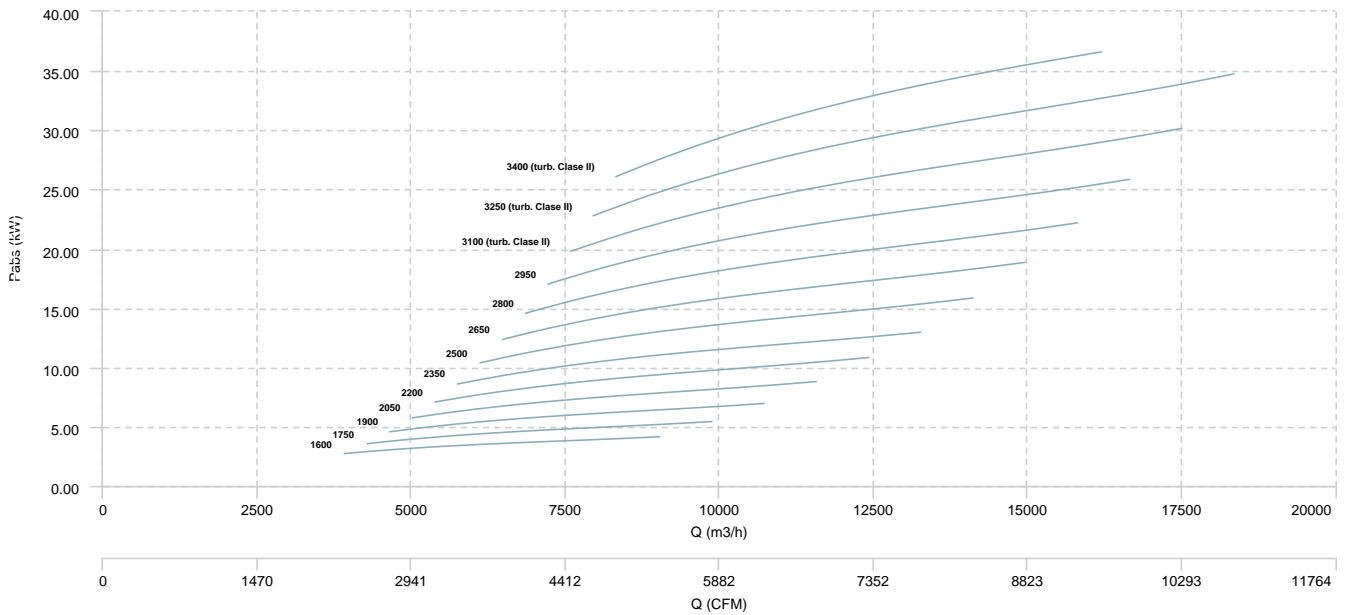


MTGR 630

## AIR FLOW - PRESSURE

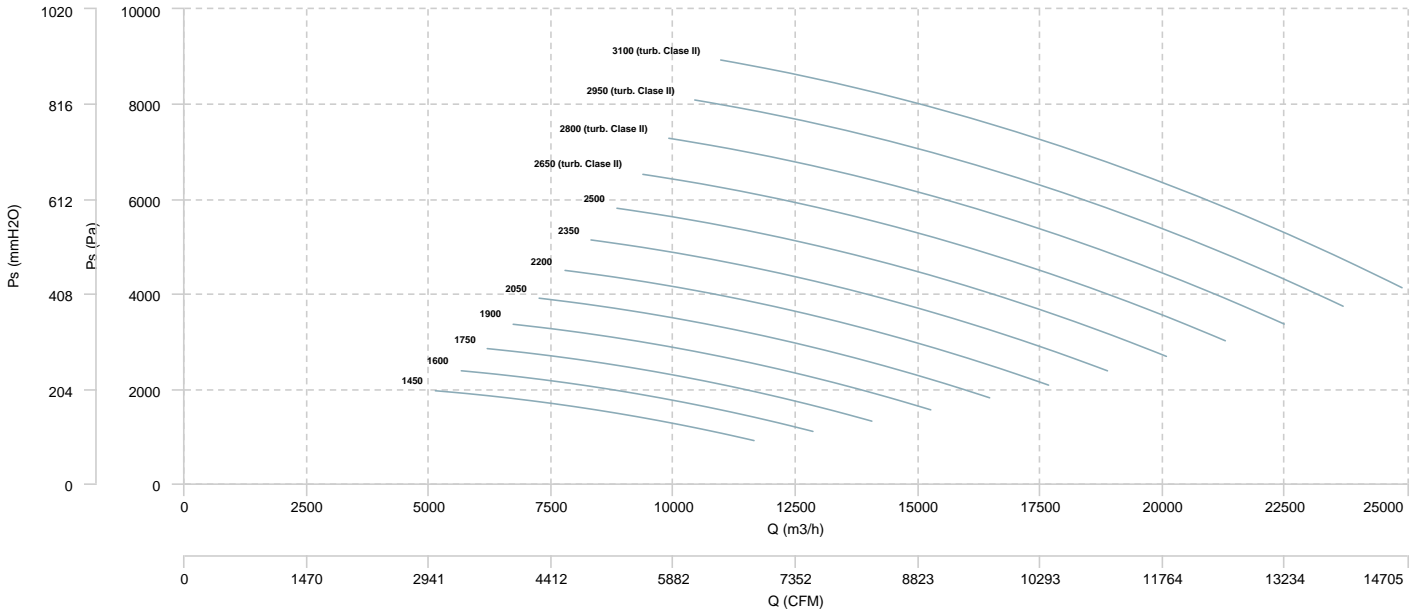


## AIR FLOW - MECHANICAL POWER

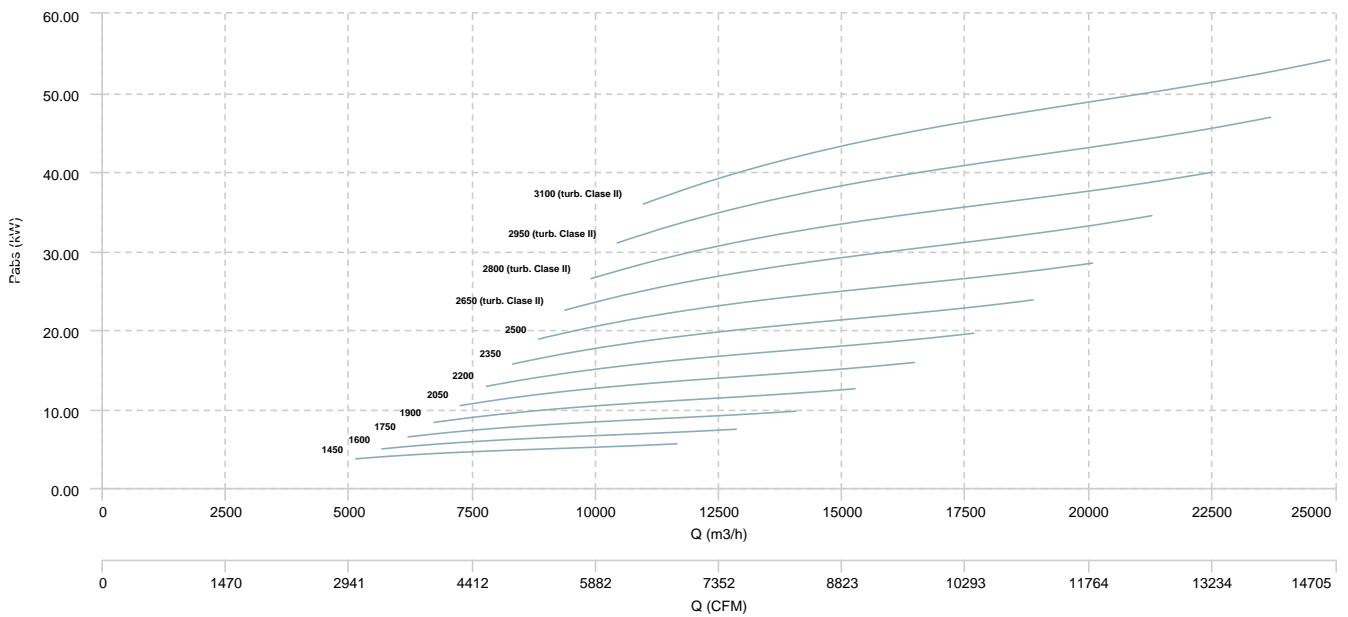


MTGR 710

## AIR FLOW - PRESSURE

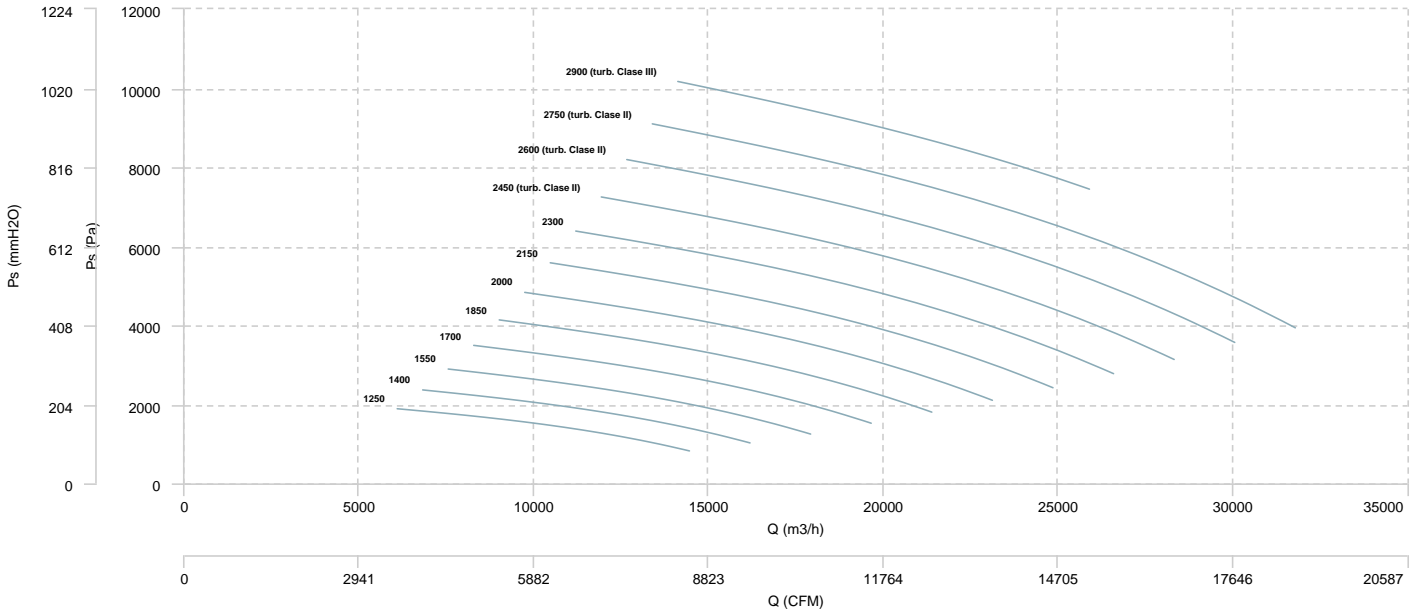


## AIR FLOW - MECHANICAL POWER

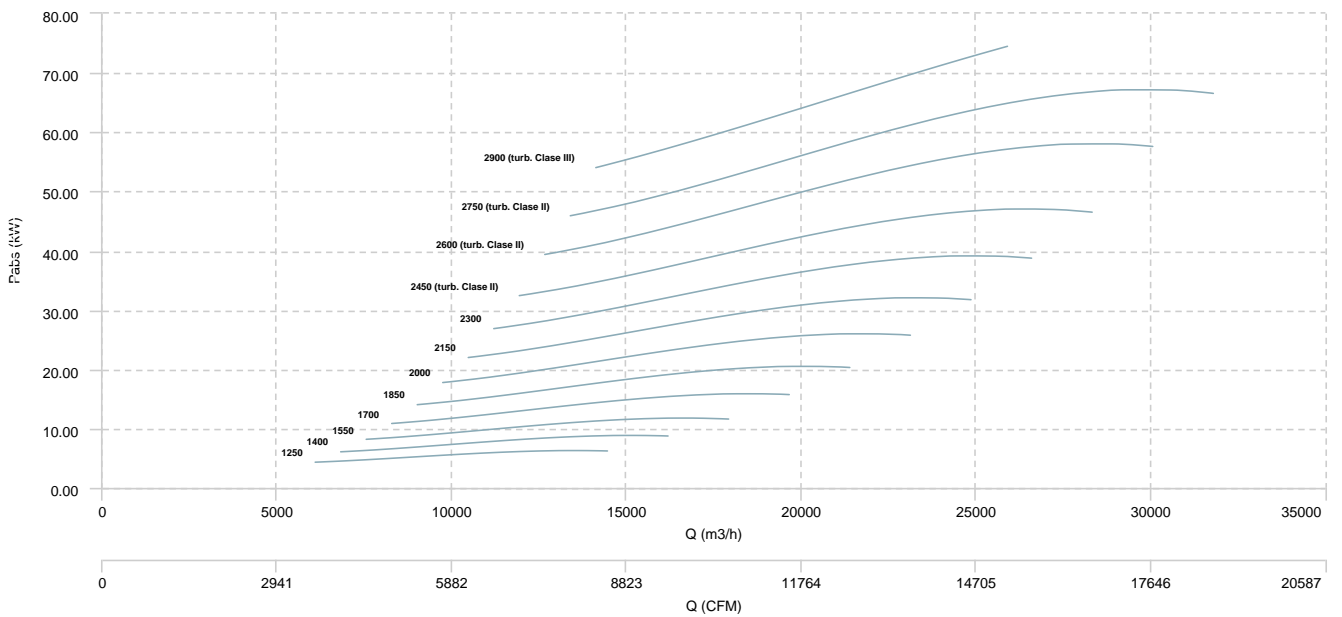


MTGR 800

## AIR FLOW - PRESSURE



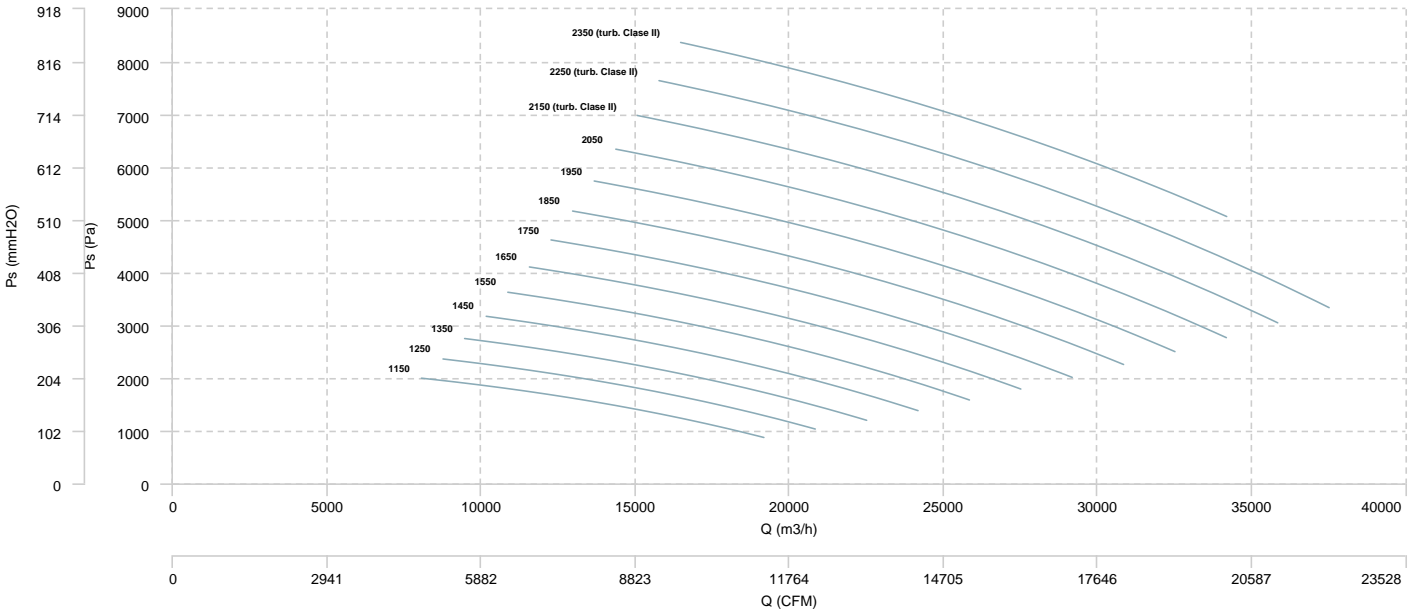
## AIR FLOW - MECHANICAL POWER



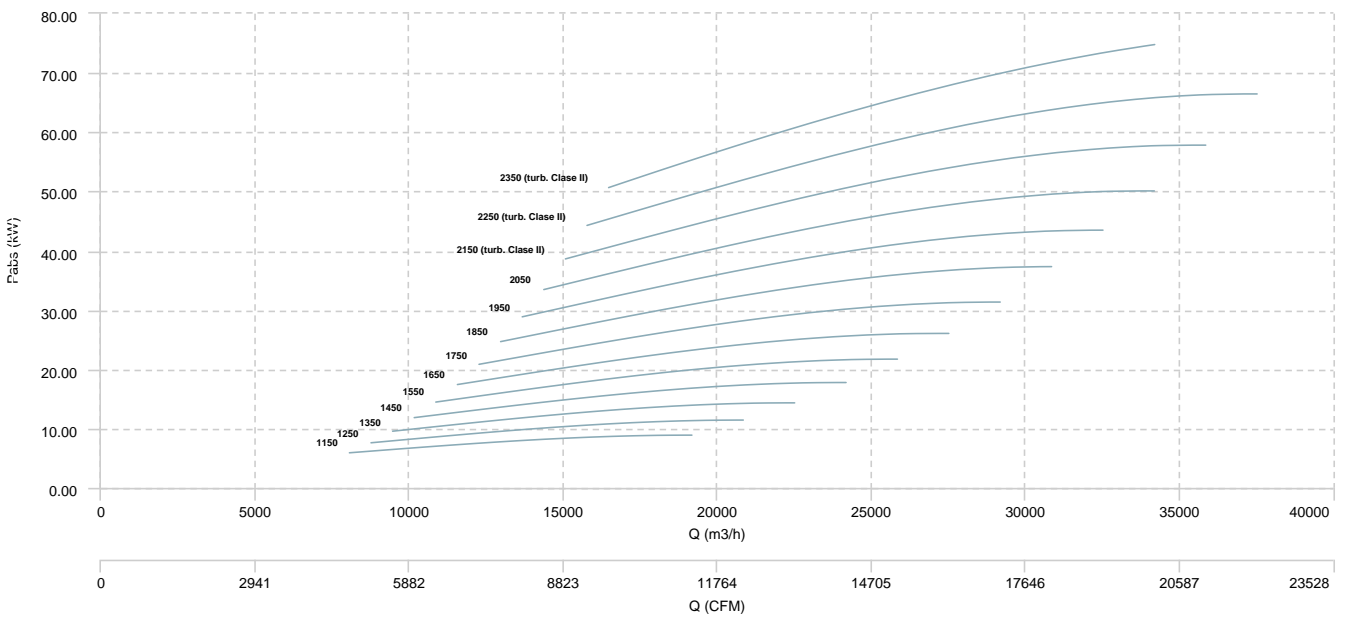


MTGR 900

## AIR FLOW - PRESSURE

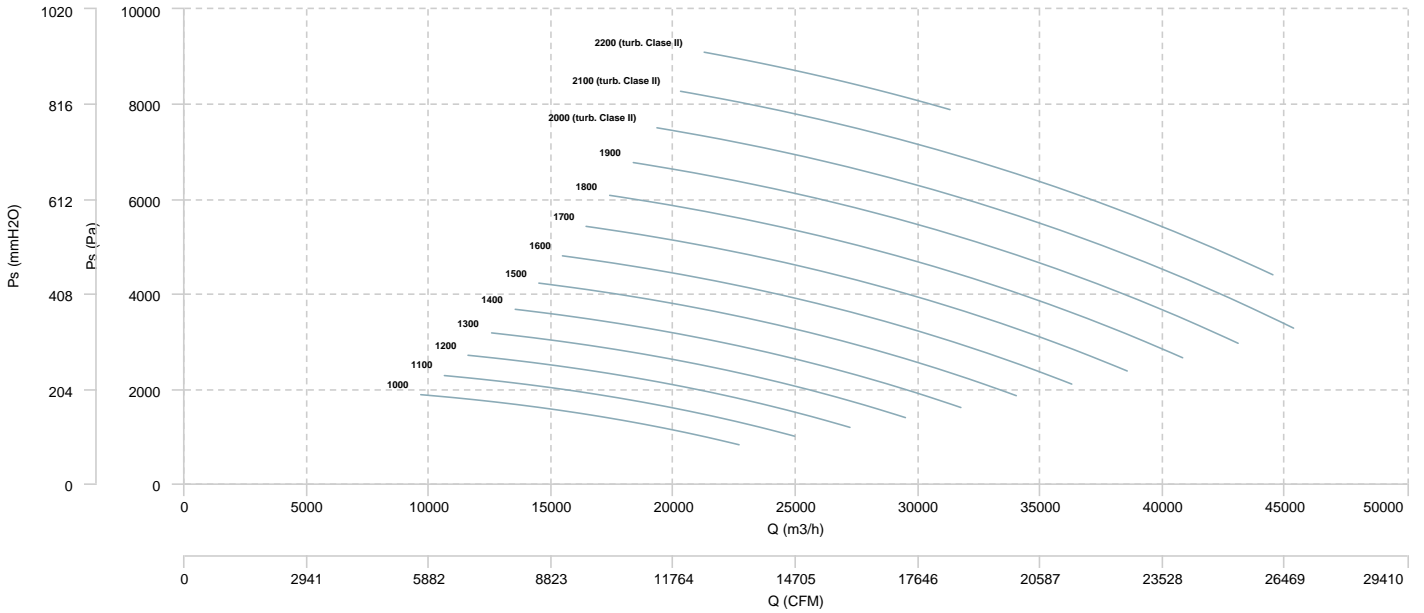


## AIR FLOW - MECHANICAL POWER

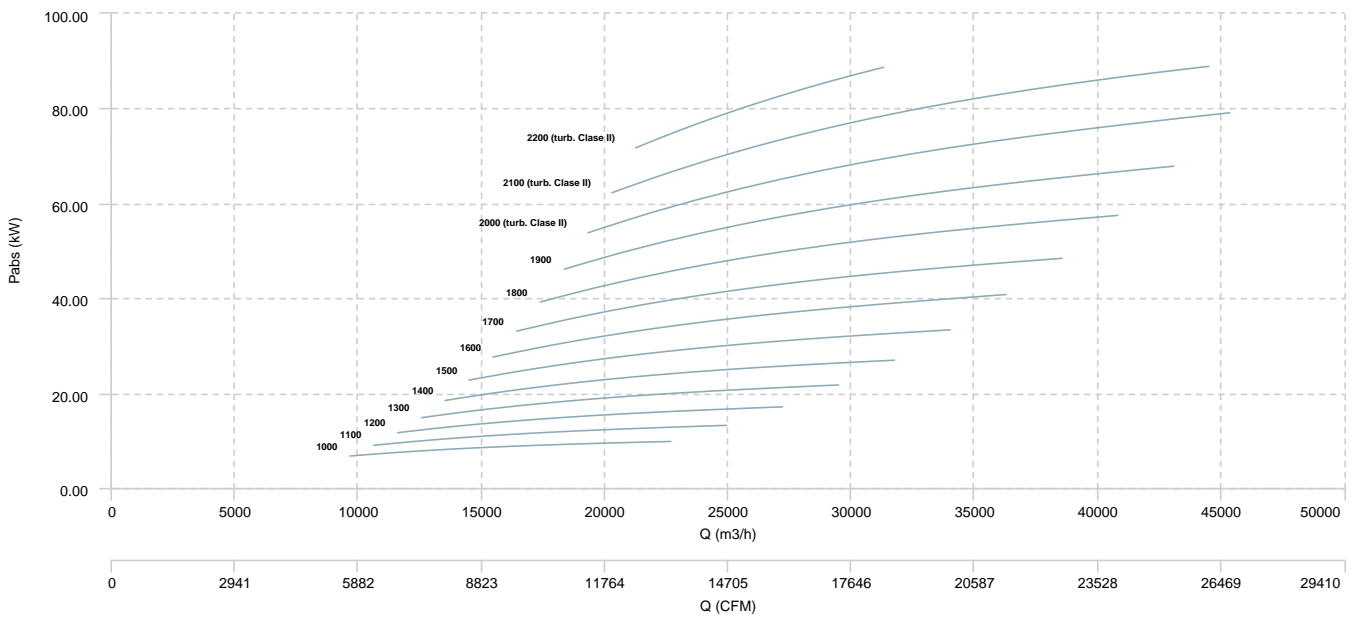


## MTGR 1000

### AIR FLOW - PRESSURE

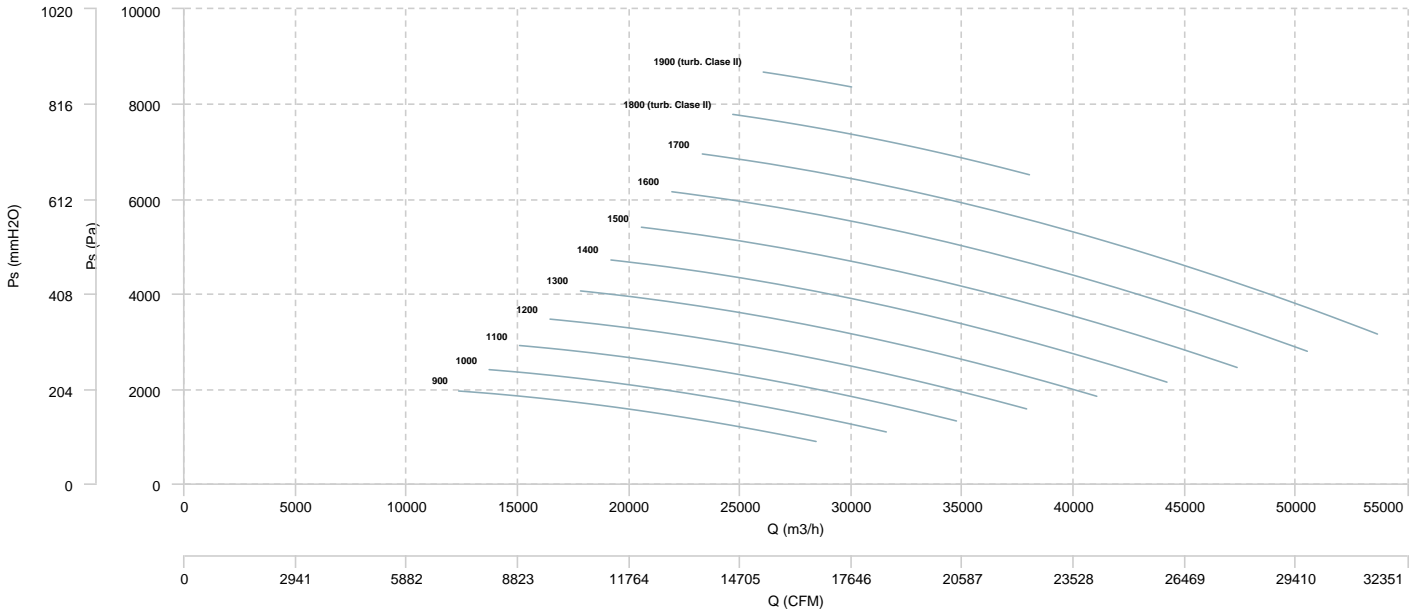


### AIR FLOW - MECHANICAL POWER

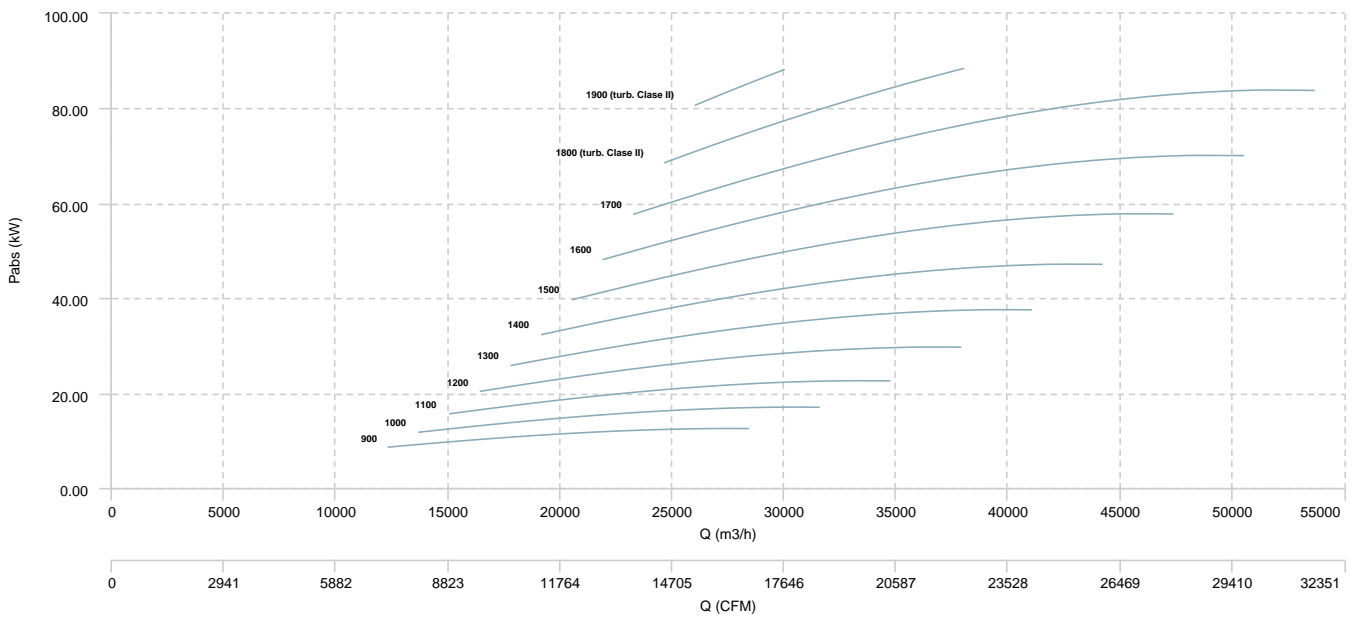


MTGR 1120

## AIR FLOW - PRESSURE

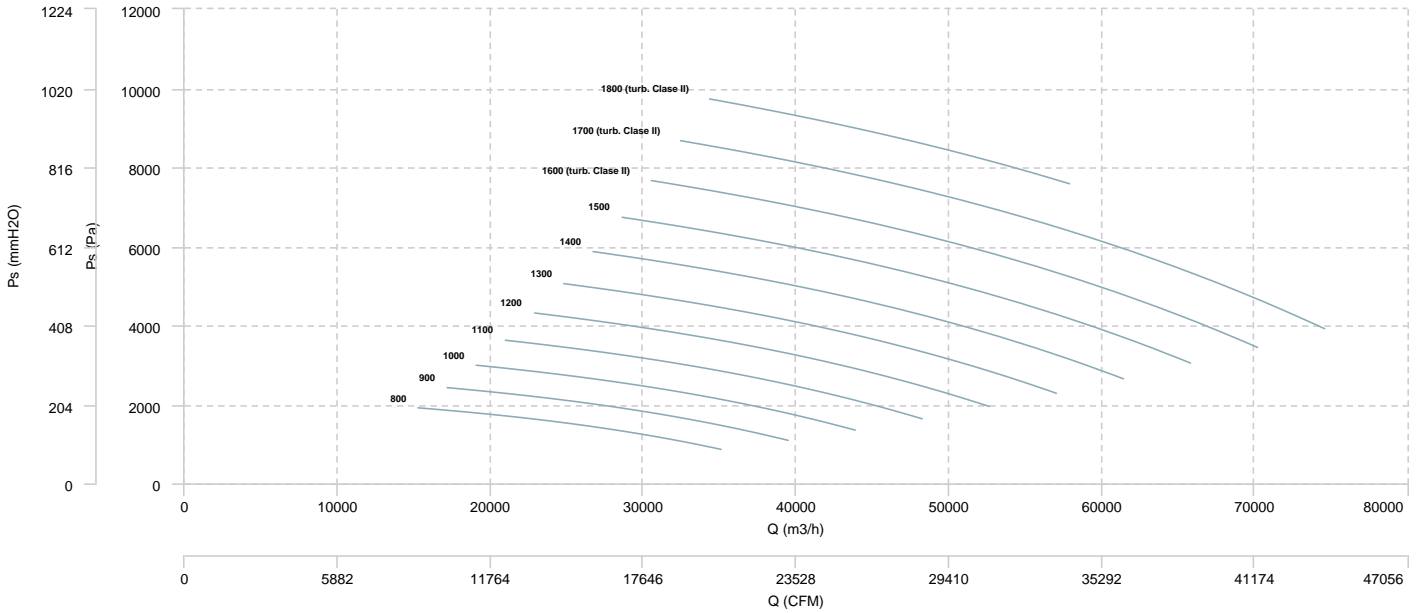


## AIR FLOW - MECHANICAL POWER

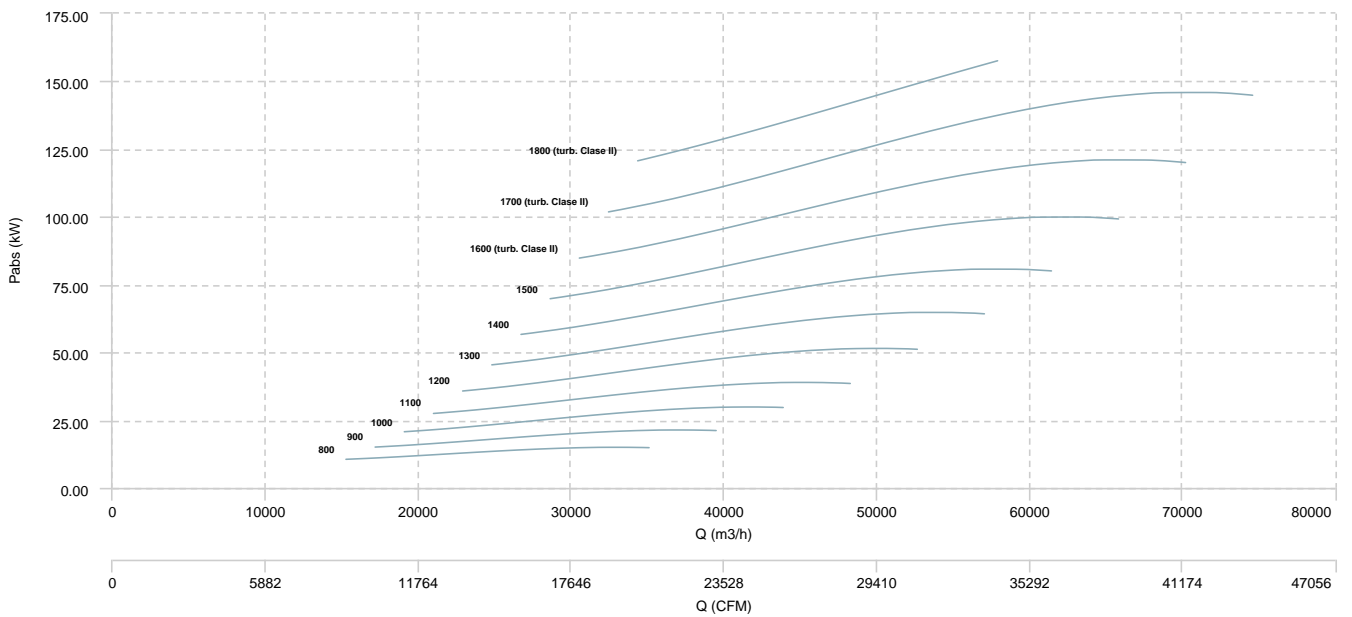


MTGR 1250

## AIR FLOW - PRESSURE

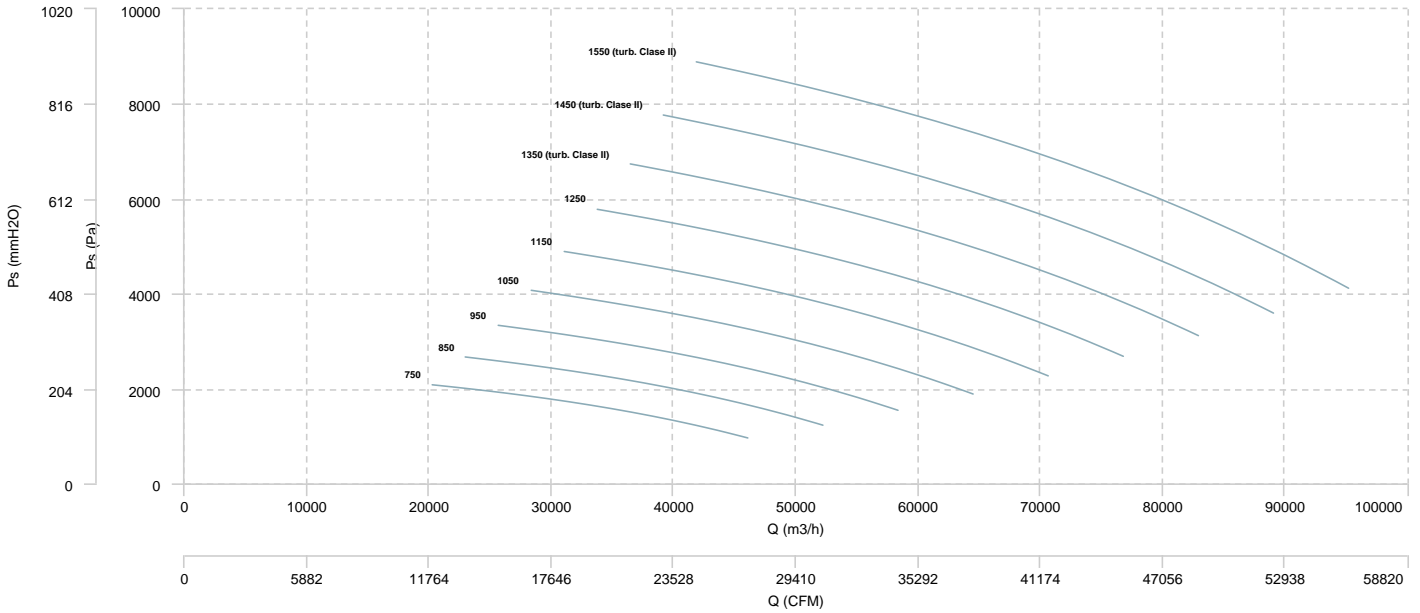


## AIR FLOW - MECHANICAL POWER

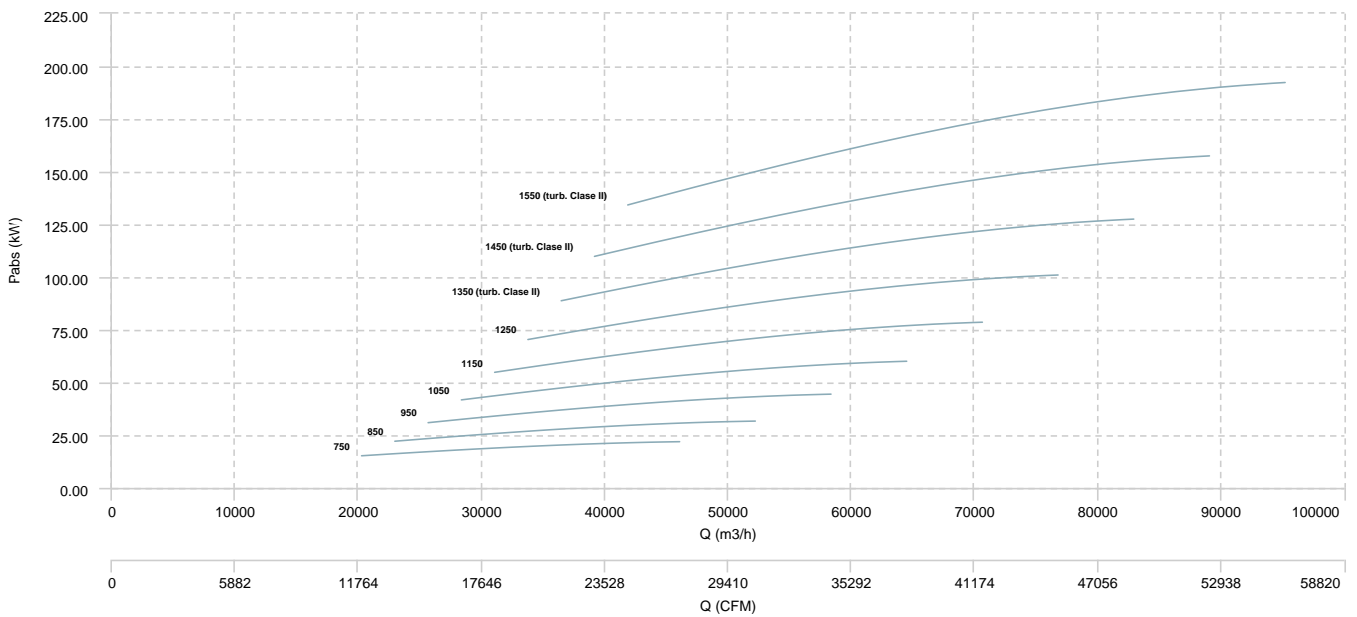


## MTGR 1400

### AIR FLOW - PRESSURE

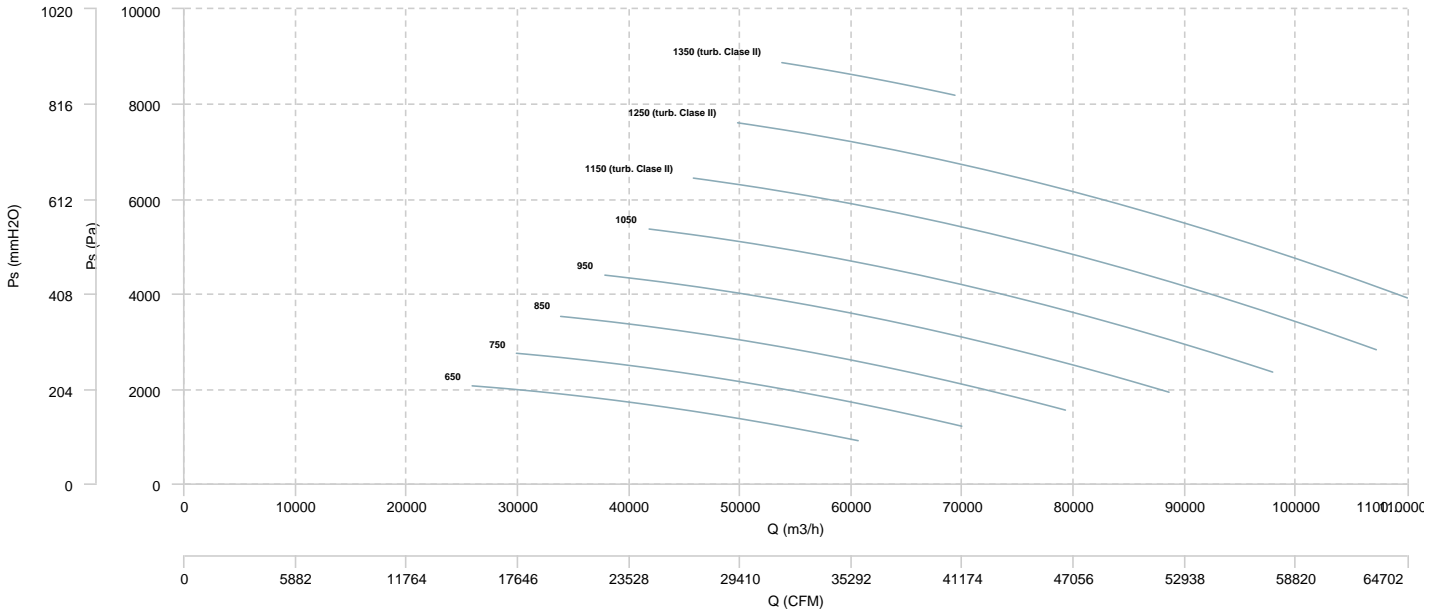


### AIR FLOW - MECHANICAL POWER

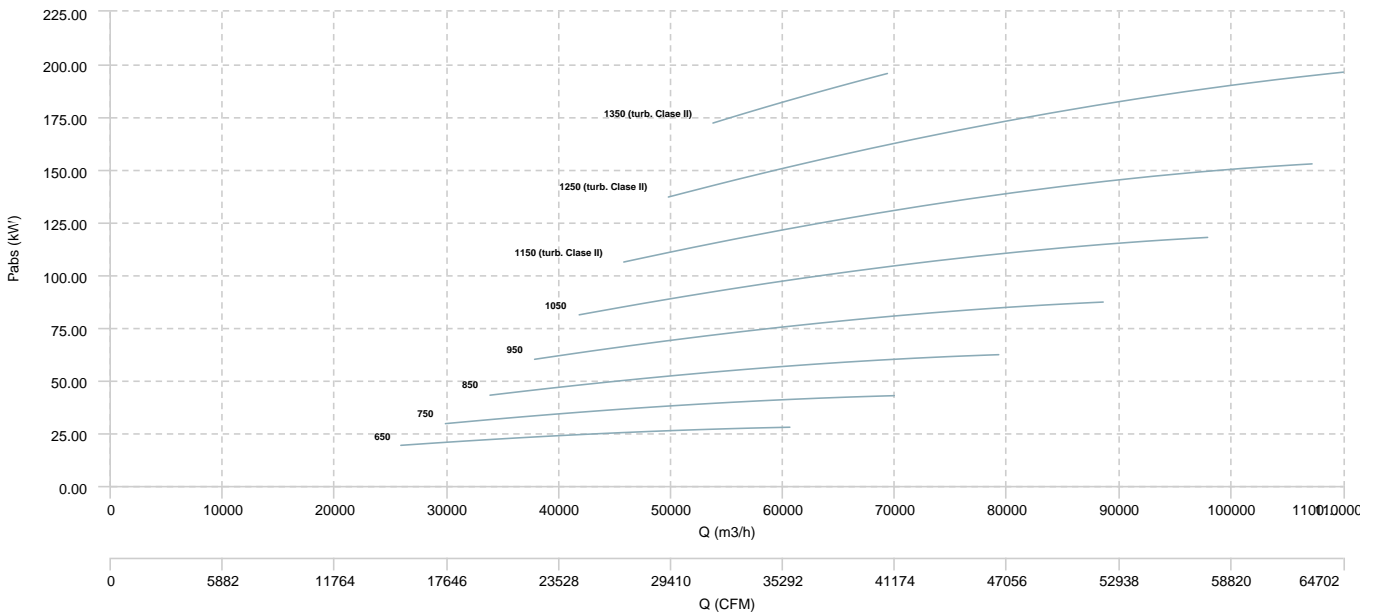


MTGR 1600

## AIR FLOW - PRESSURE

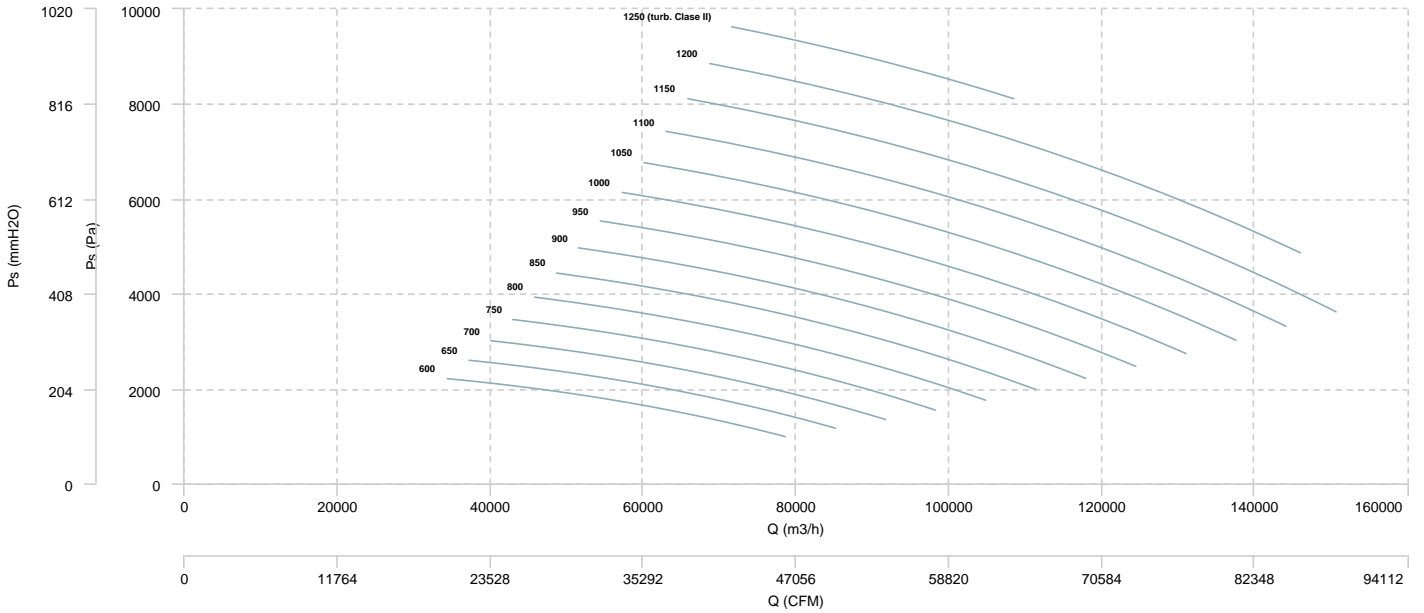


## AIR FLOW - MECHANICAL POWER

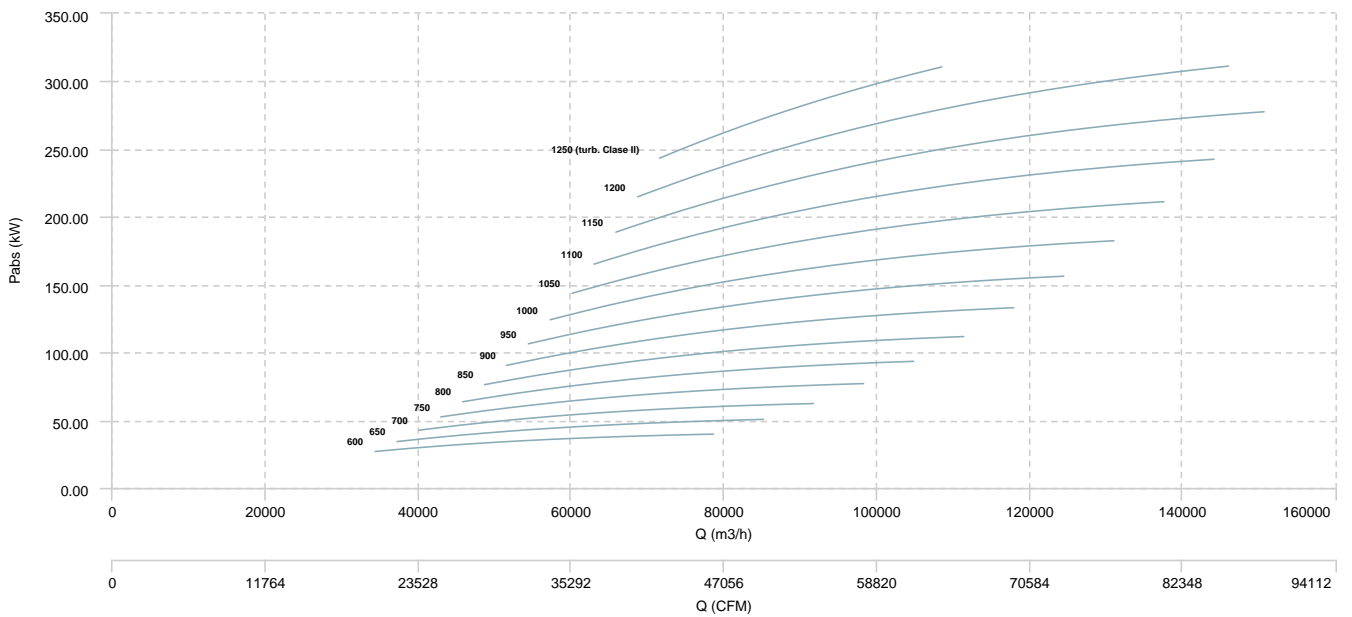


MTGR 1800

## AIR FLOW - PRESSURE

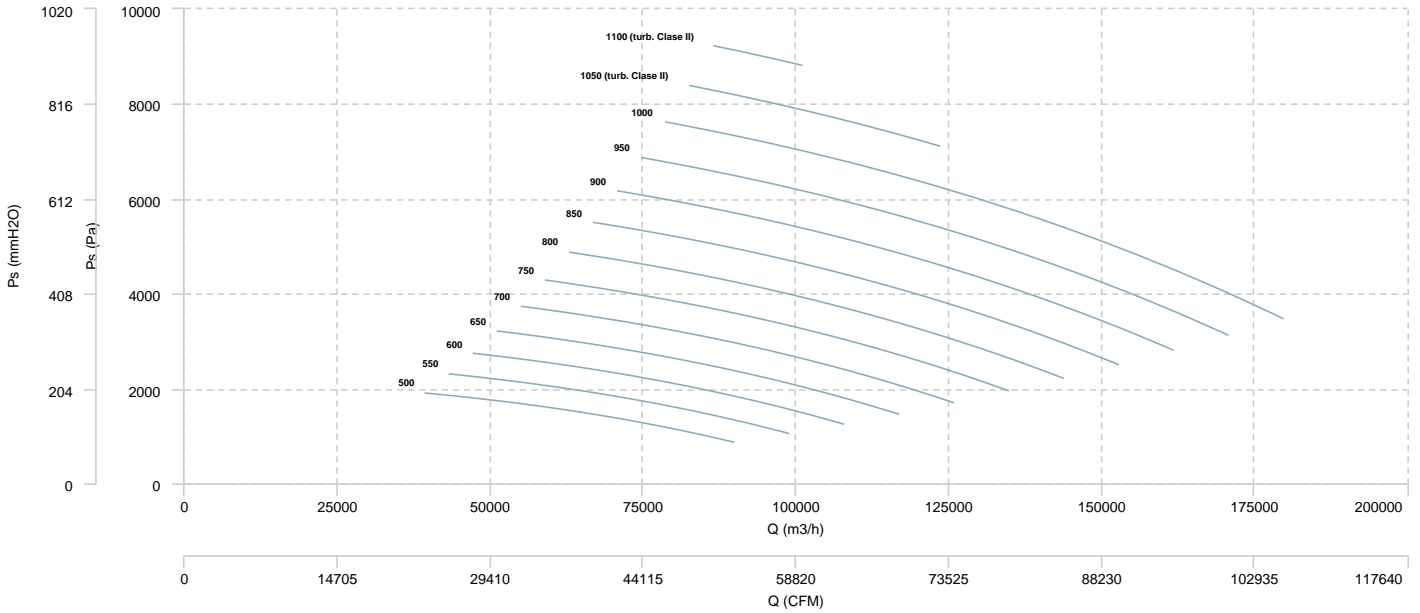


## AIR FLOW - MECHANICAL POWER

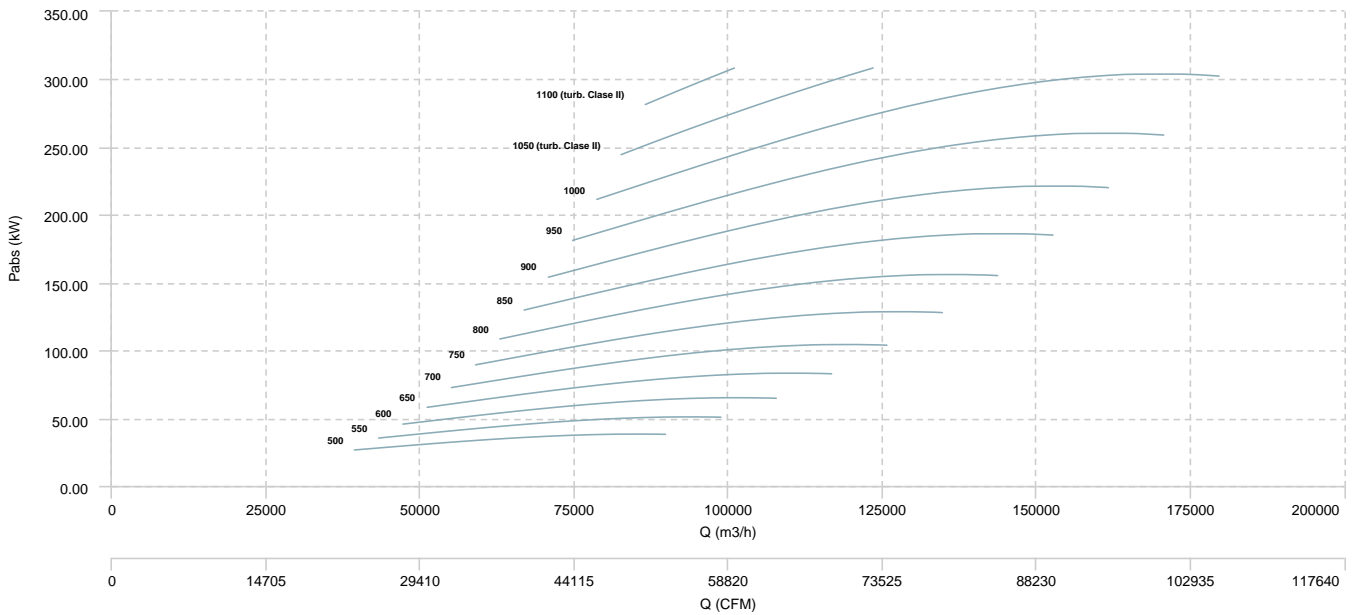


MTGR 2000

## 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
MTGR 400 (2550 RPM)	Inlet	56	68	74	78	79	75	68	65	83
MTGR 450 (2250 RPM)	Inlet	60	72	78	82	83	78	72	69	87
MTGR 500 (2000 RPM)	Inlet	63	75	81	85	86	81	75	72	90
MTGR 560 (1800 RPM)	Inlet	63	75	81	85	86	82	75	72	91
MTGR 630 (1600 RPM)	Inlet	64	76	82	86	87	83	76	73	91
MTGR 710 (1450 RPM)	Inlet	66	78	85	89	90	85	79	76	94
MTGR 800 (1250 RPM)	Inlet	66	78	84	88	89	85	78	75	93
MTGR 900 (1150 RPM)	Inlet	70	82	88	92	93	88	82	79	97
MTGR 1000 (1000 RPM)	Inlet	67	79	86	90	91	86	79	76	95
MTGR 1120 (900 RPM)	Inlet	69	81	87	91	92	88	81	78	96
MTGR 1250 (800 RPM)	Inlet	70	82	89	93	94	89	82	79	96
MTGR 1400 (750 RPM)	Inlet	73	85	92	96	97	92	86	83	101
MTGR 1600 (650 RPM)	Inlet	73	85	91	95	96	91	85	82	100
MTGR 1800 (600 RPM)	Inlet	74	86	93	97	98	93	87	84	102
MTGR 2000 (500 RPM)	Inlet	81	93	100	104	105	100	94	91	109

**Notes:**

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

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