

## CLIBOS-TR



CENTRIFUGAL FAN TO REACT, DRIVEN TO TRANSMISSION FOR THE RECIRCULATION OF HOT GASES

CONSTRUCTIVE FEATURES:

- Centrifugal transmission fan of medium pressure type plug fan.
- Insulated box made of carbon laminated steel, protected against corrosion by powder coating of anticaloric painting. Finish C3.
- High density rock wool insulation, 145Kg/m<sup>3</sup>, thickness 150mm..
- Self-cleaning turbine and reinforced impeller of backward (reaction) high performance blades manufactured in carbon laminated steel dynamically balanced to minimize noise and vibrations. Anti-heat paint of black color.
- Transmission Assembly with protections according to ISO 13857 standard.
- High efficiency belt without maintenance.
- Heavy duty waterproof monobloc.
- IE3 motor for continuous operation (S1) Squirrel cage standardized asynchronous IEC motor with IP-55 protection and Class F electrical insulation. Standard voltages 230/400V 50 for three phase motors Up to 4kW and 400 / 690V 50Hz for higher powers.
- Motor with legs (B3) supported on a bench.
- Maximum continuous working temperature ambient (motor): 60°C.
- Suitable for transferring gases from -40°C to 350°C continuously due to cooling impeller

## Accessories



APPLICATIONS:

Plug-type installation made for the recirculation of gases in:

- Ovens
- Boilers
- Paint booths
- Drying of tobacco, barley, ceramic, glass and wood leaves
- Insulated thermal cameras subjected to temperature control
- Burners and incinerators
- Melting furnaces

ON DEMAND:

- Fans for special voltages
- Motor 2 Speed
- Manufacturing in special steels for work Up to 550°C in continuous
- Other Insulation thicknesses (200mm)
- Inox 304
- Inox 316
- Sparking proof construction
- Other sizes
- Other motors according to customer requirements

## Technical data

### Three-phase motor

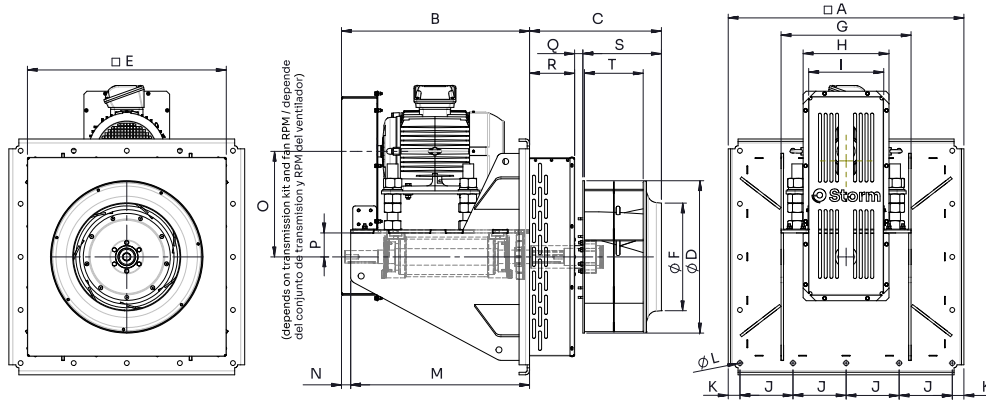
Code	Model	Angle	Min. Rated power kW	Max. Rated power kW	Max. Airflow m <sup>3</sup> /h	Sound db (A)**	Weight kg	Connect. diagram
	CLIBOS-TR 451 T4	1500 - 2700	2,20	5,50	12.810	-	216	1
	CLIBOS-TR 501 T4	1800 - 2400	3,00	7,50	15.650	-	220	1
	CLIBOS-TR 561 T4	1500 - 2200	3,00	9,20	20.100	-	260	1
	CLIBOS-TR 631 T4	1400 - 1900	4,00	11,00	25.180	-	270	1
	CLIBOS-TR 711 T4	1200 - 1700	5,50	15,00	32.230	-	398	1
	CLIBOS-TR 801 T4	1100 - 1600	7,50	22,00	43.370	-	416	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 (Mot T<160)	B (Mot T≥160)	C	D	E	F	G (Mot T<160)	G (Mot T≥160)
CLIBOS-TR 451 T4	786	627.25	-	373	458	663	321	433.4	-
CLIBOS-TR 501 T4	786	627.25	-	403.5	508	663	359	433.4	-
CLIBOS-TR 561 T4	846	627.25	797.75	429.76	568	723	399	433.4	528.4
CLIBOS-TR 631 T4	846	627.25	797.75	459.78	640	723	448	433.4	528.4
CLIBOS-TR 711 T4	1016	627.25	797.75	504.76	720	873	502	433.4	528.4
CLIBOS-TR 801 T4	1016	627.25	797.75	536.39	810	873	570.5	433.4	528.4

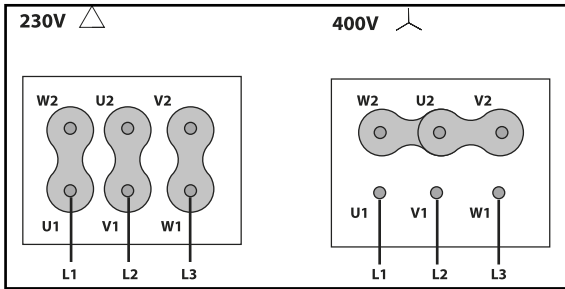
Model	H	I	J	K	L	M (Mot T<160)	M (Mot T≥160)	N	O (Mot. T100)
CLIBOS-TR 451 T4	286	250	177	39	16	596.5	-	30.75	320
CLIBOS-TR 501 T4	286	250	177	39	16	596.5	-	30.75	320
CLIBOS-TR 561 T4	286	250	192	39	16	596.5	767	30.75	320
CLIBOS-TR 631 T4	286	250	192	39	16	596.5	767	30.75	320
CLIBOS-TR 711 T4	286	250	233	42	18	596.5	767	30.75	-
CLIBOS-TR 801 T4	286	250	233	42	18	596.5	767	30.75	-

Model	O (Mot. T112)	O (Mot. T132)	O (Mot. T160)	O (Mot. T180)	P (Mot T<160)	P (Mot T≥160)	Q	R	S
CLIBOS-TR 451 T4	332	352	-	-	80	-	34	150	189
CLIBOS-TR 501 T4	332	352	-	-	80	-	45	150	208.5
CLIBOS-TR 561 T4	332	352	390	-	80	90	45.76	150	234
CLIBOS-TR 631 T4	332	352	390	-	80	90	45.78	150	264
CLIBOS-TR 711 T4	-	352	390	410	80	90	60.76	150	294
CLIBOS-TR 801 T4	-	352	390	410	80	90	57.39	150	329

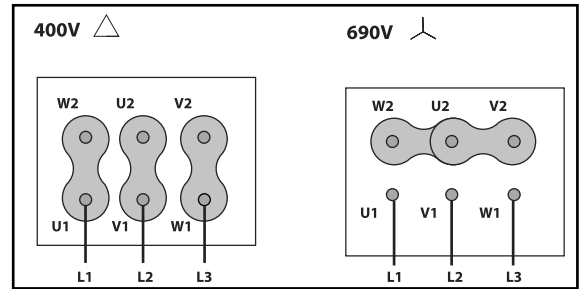
## Wiring diagram

### Wiring diagram N° 1

230/400V



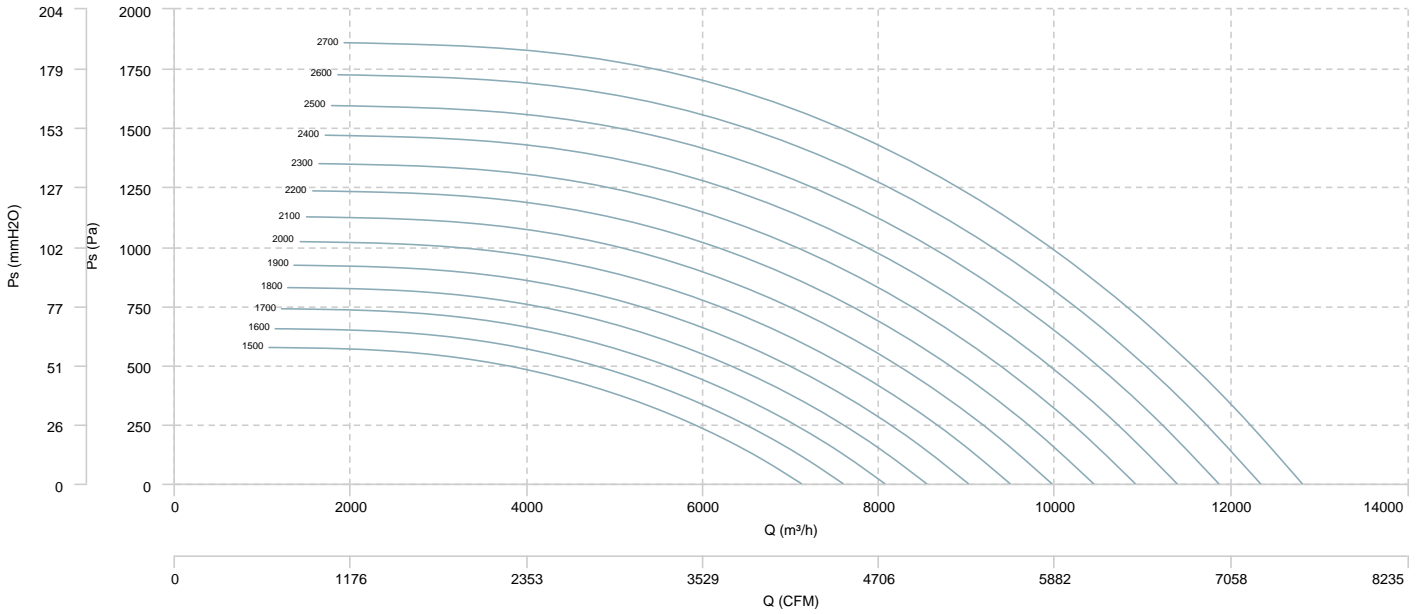
400/690V



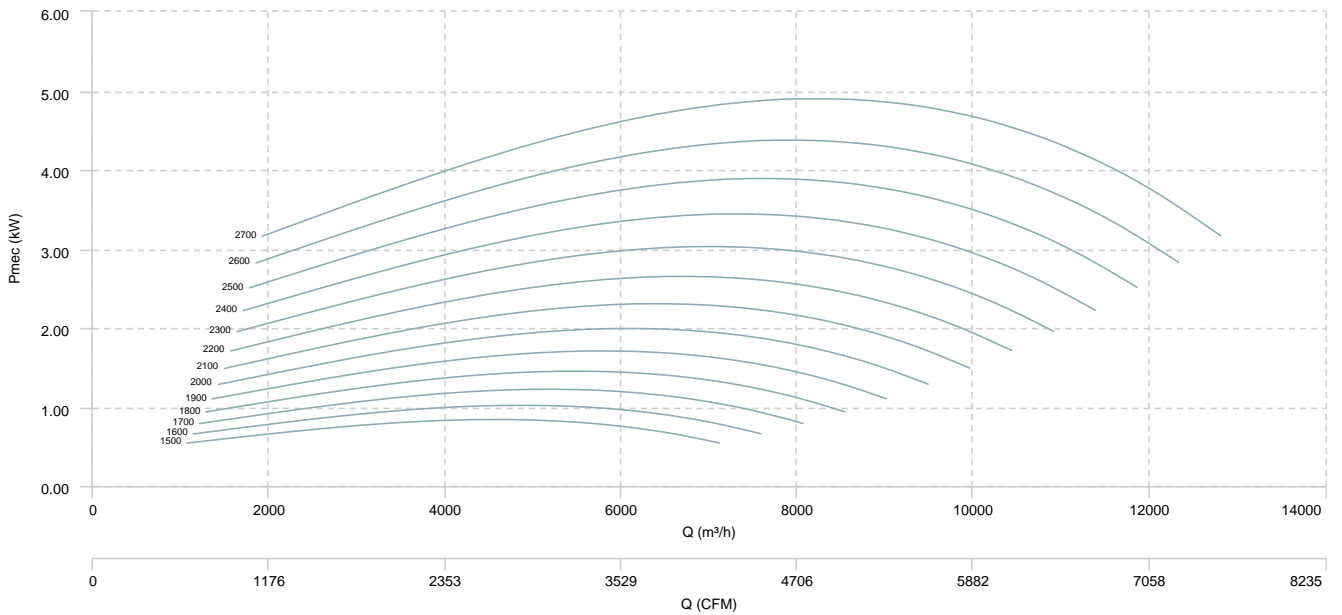
# CHARACTERISCTIC CURVE

CLIBOS-TR 451 T4

## AIR FLOW - PRESSURE

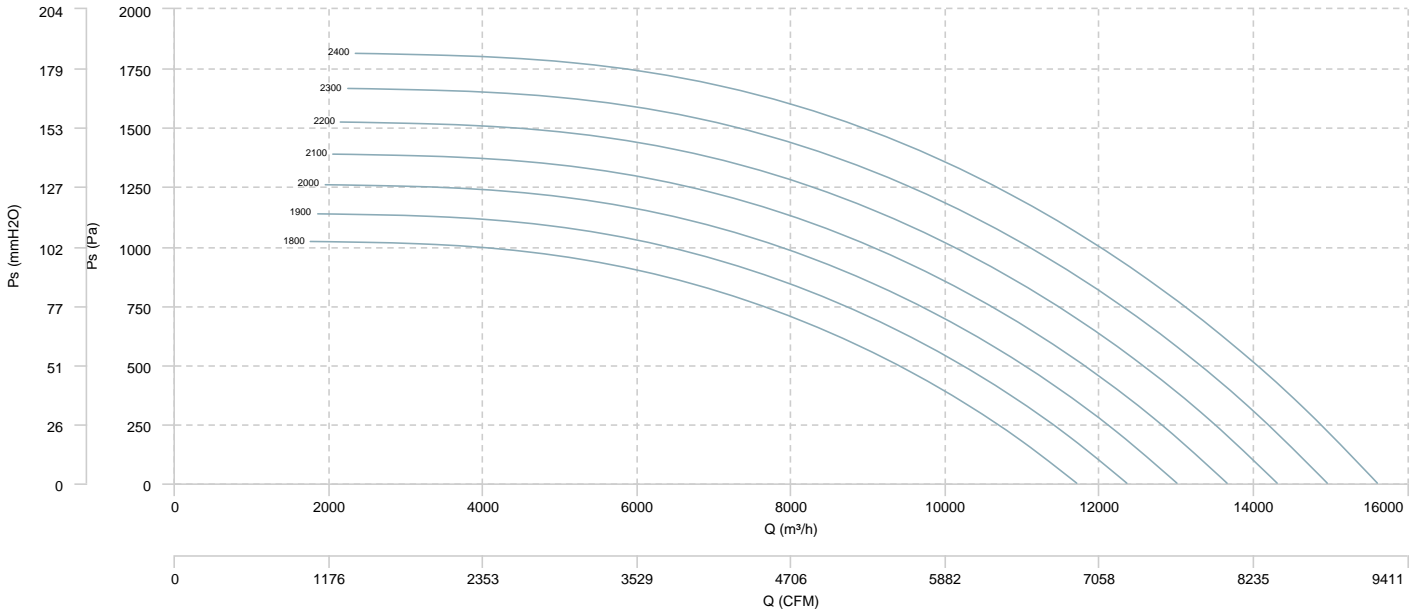


## AIR FLOW - MECHANICAL POWER

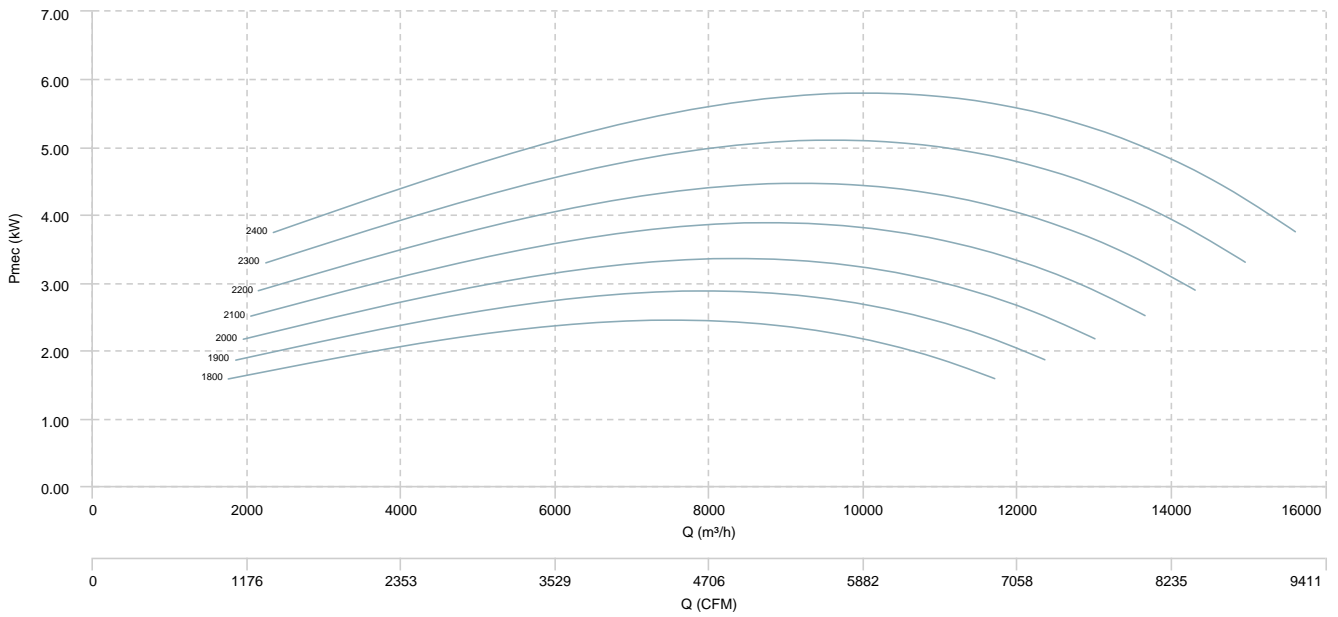


**CLIBOS-TR 501 T4**

**AIR FLOW - PRESSURE**

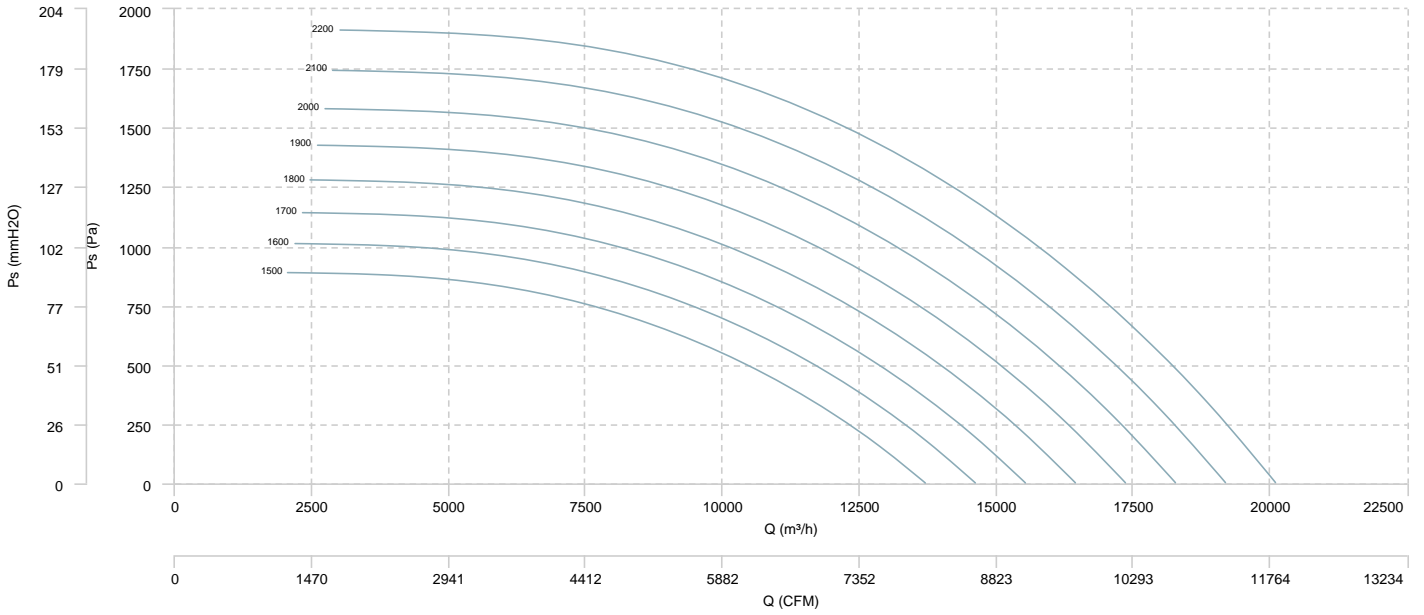


**AIR FLOW - MECHANICAL POWER**

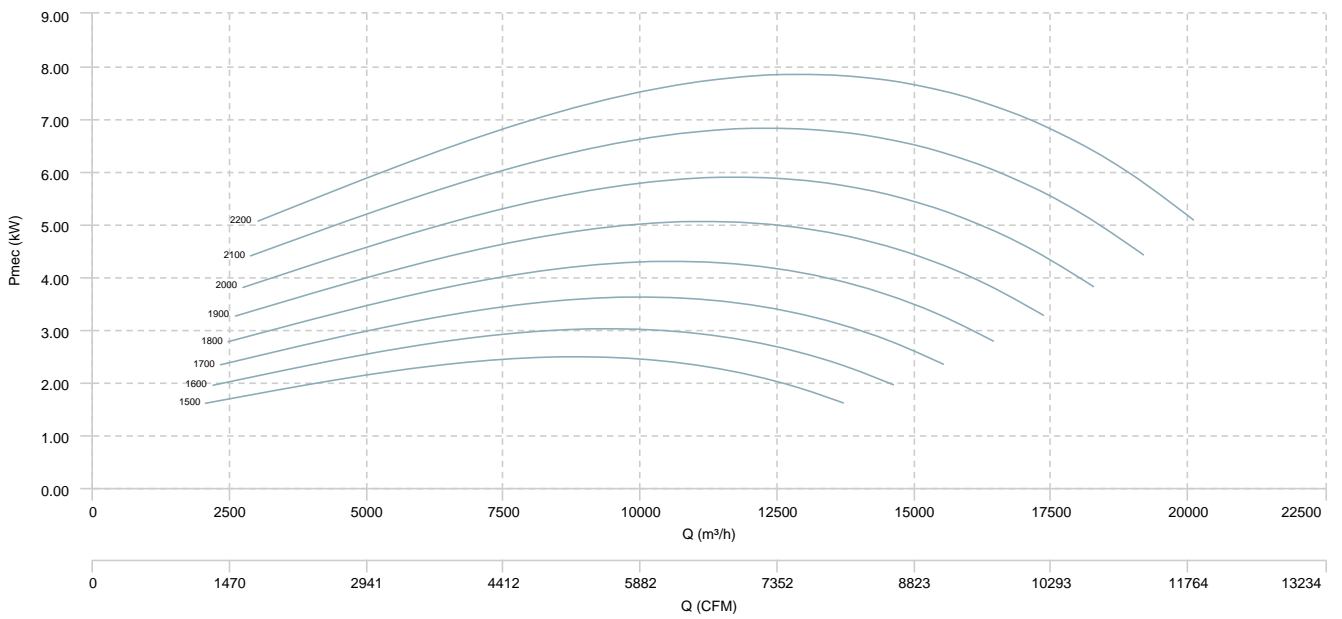


CLIBOS-TR 561 T4

**AIR FLOW - PRESSURE**

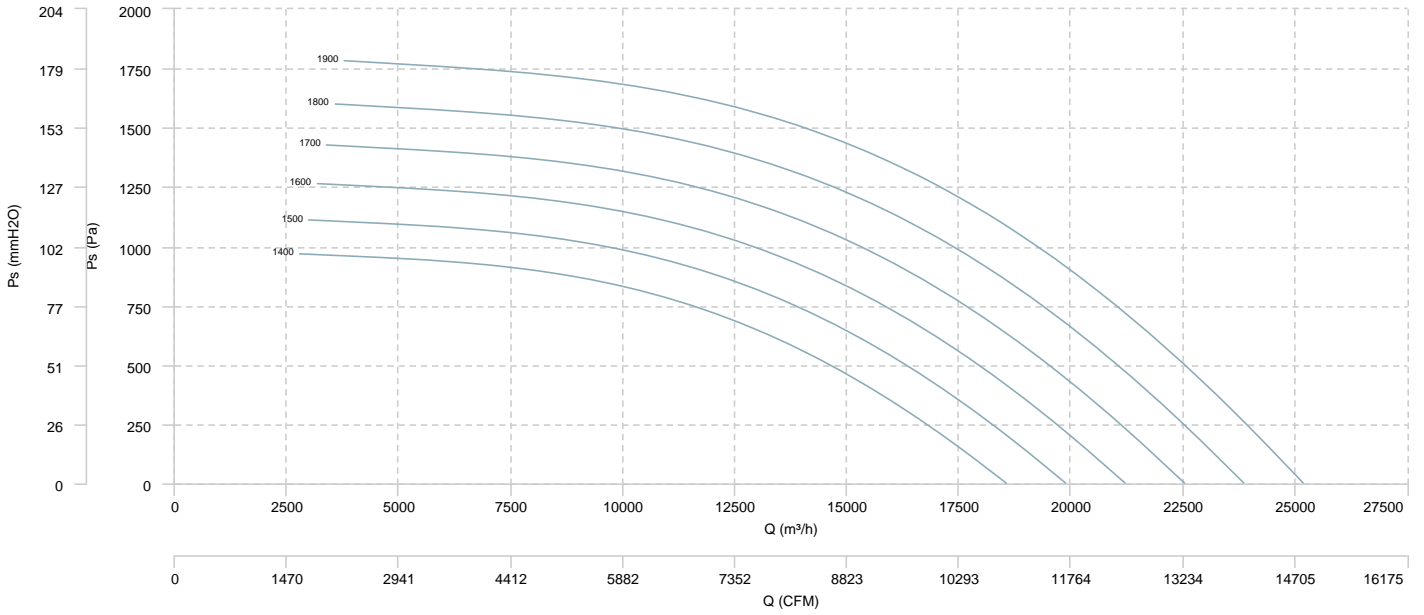


**AIR FLOW - MECHANICAL POWER**

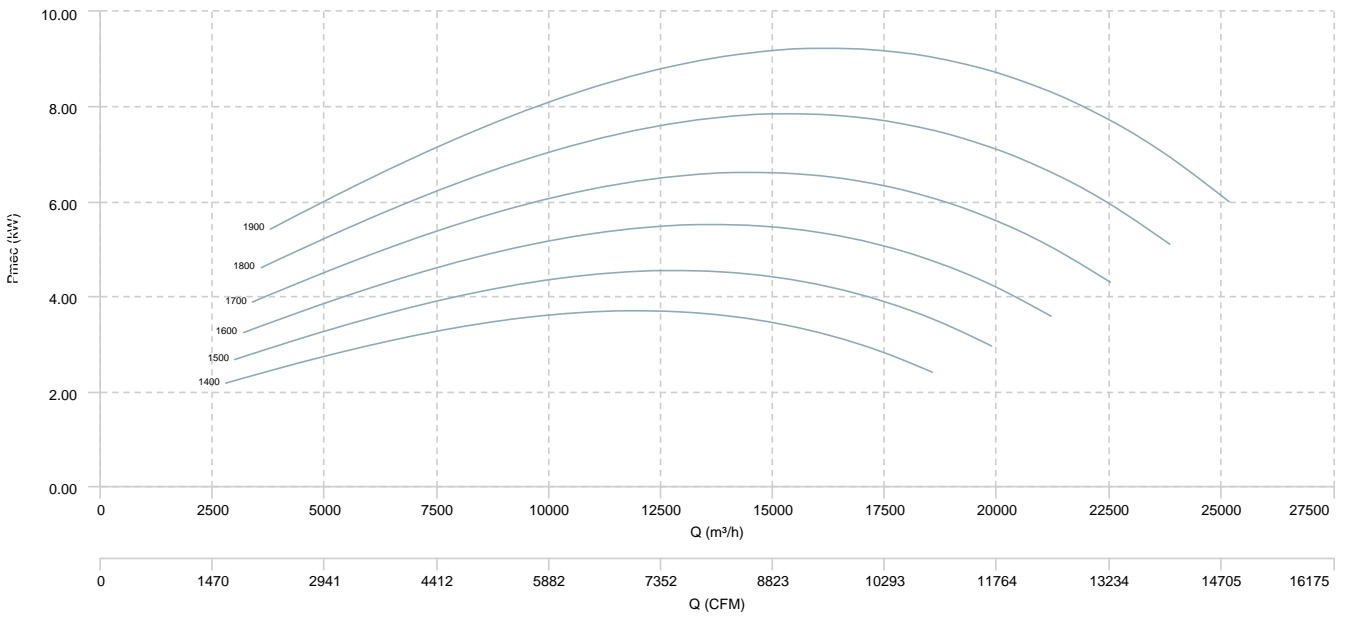


CLIBOS-TR 631 T4

**AIR FLOW - PRESSURE**



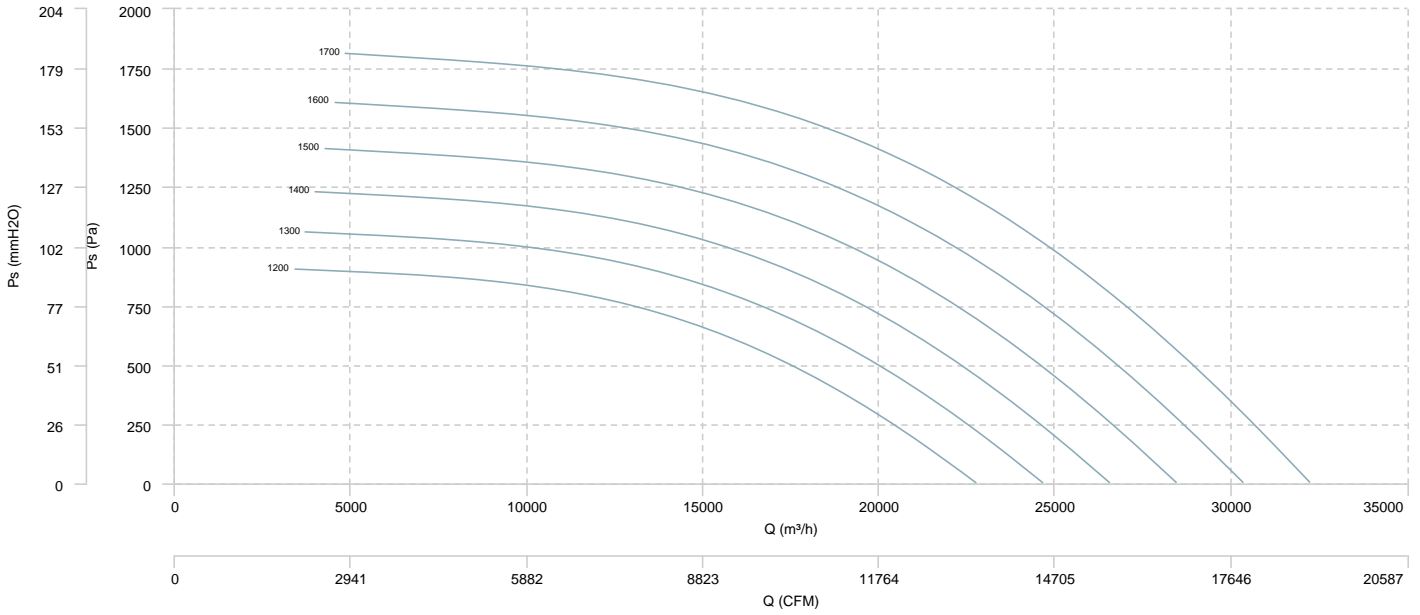
**AIR FLOW - MECHANICAL POWER**



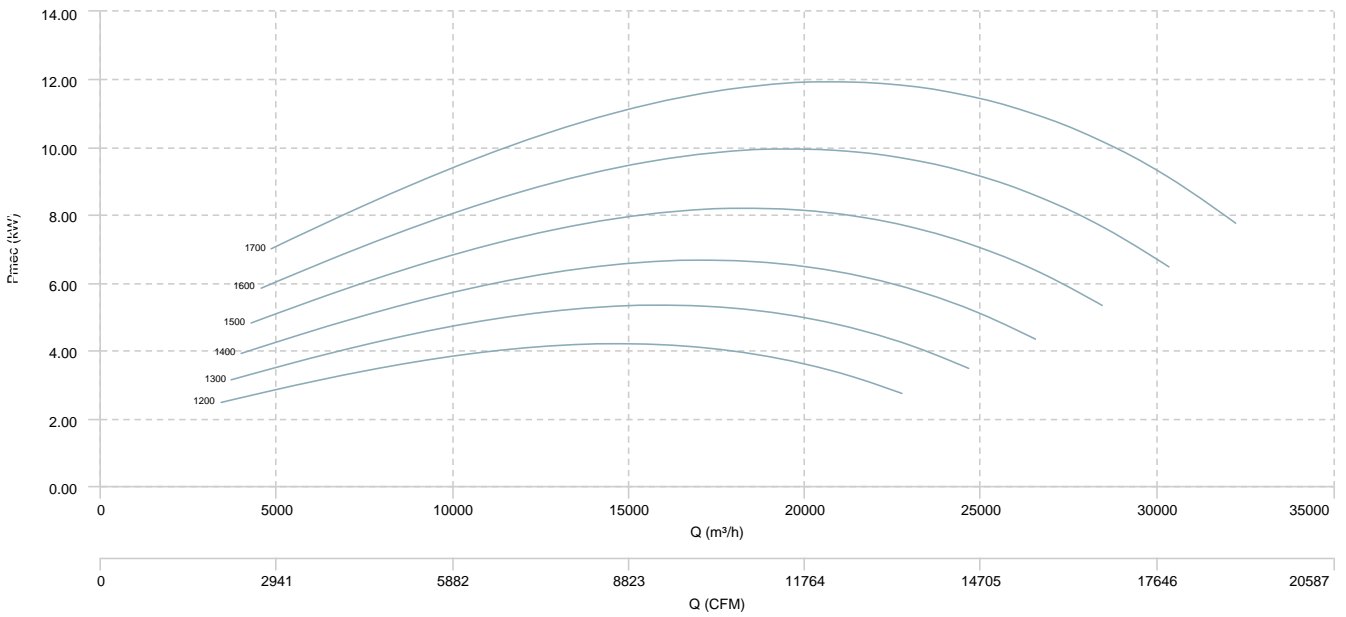


CLIBOS-TR 711 T4

**AIR FLOW - PRESSURE**

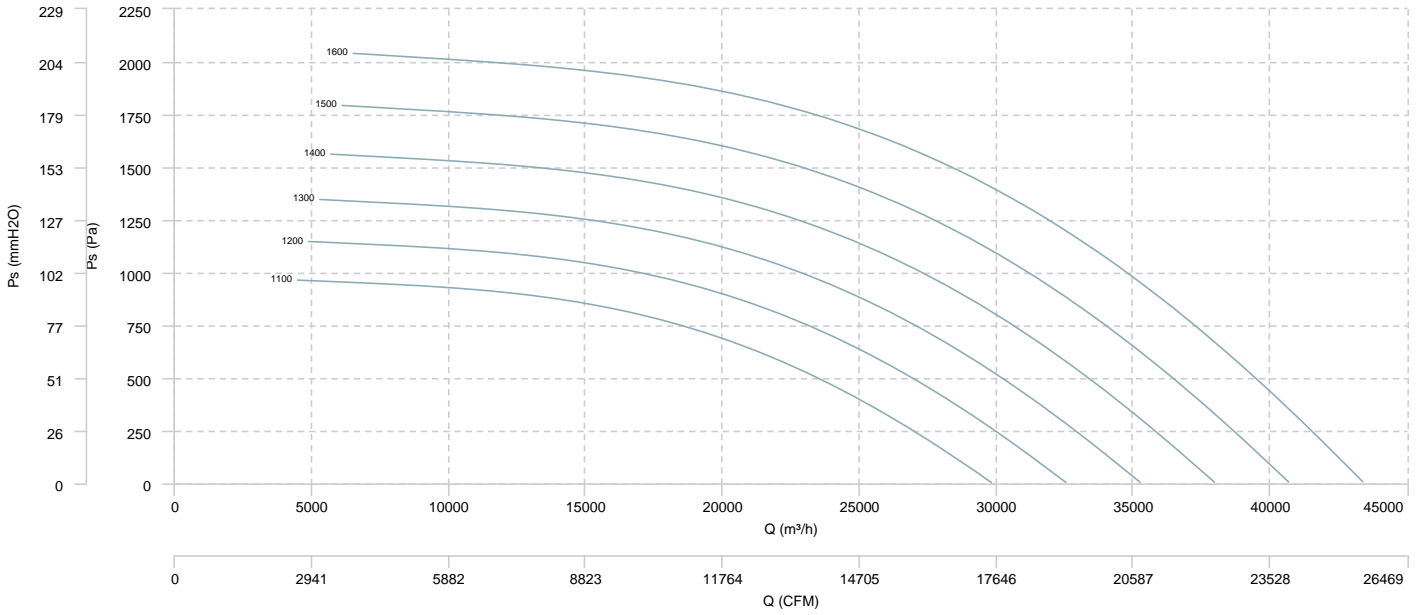


**AIR FLOW - MECHANICAL POWER**

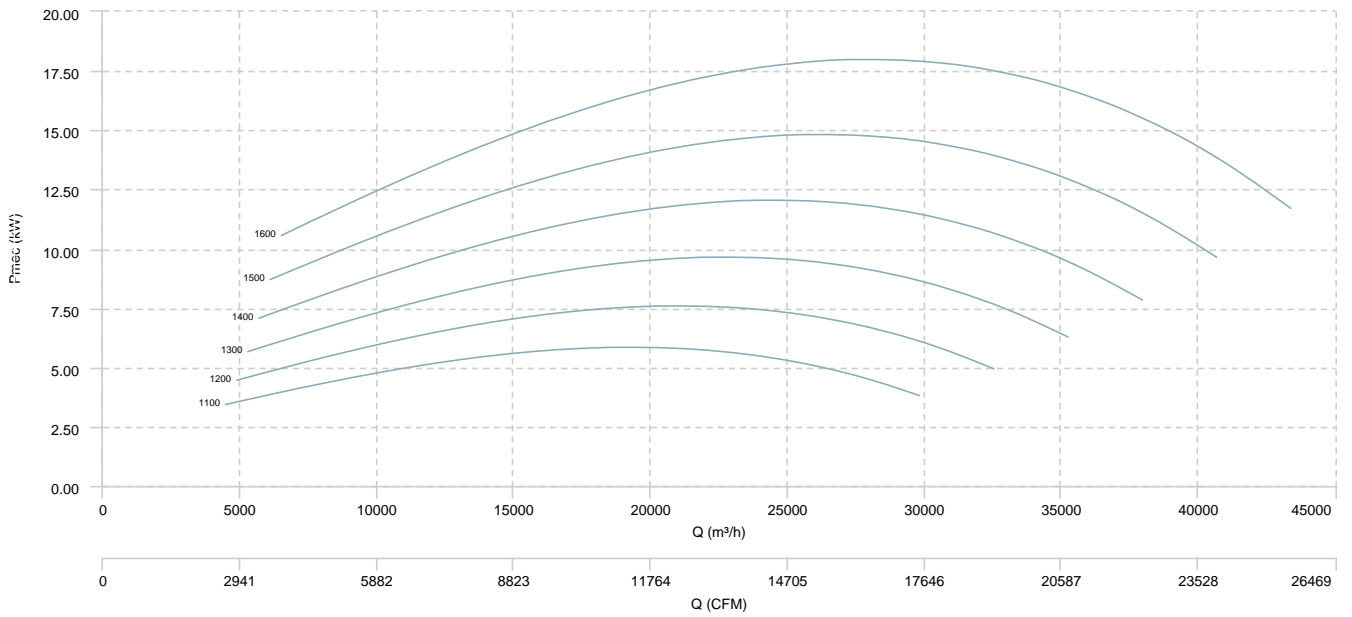


CLIBOS-TR 801 T4

**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
CLIBOS-TR 451 T4 (1500)	Radiated	38	56	63	69	71	78	65	56	80
CLIBOS-TR 501 T4 (1800)	Radiated	46	63	70	77	78	86	72	64	87
CLIBOS-TR 561 T4 (1500)	Radiated	62	66	74	78	81	78	66	62	85
CLIBOS-TR 631 T4 (1400)	Radiated	65	69	76	81	83	82	69	64	87
CLIBOS-TR 711 T4 (1200)	Radiated	65	69	76	81	84	81	69	65	87
CLIBOS-TR 801 T4 (1100)	Radiated	67	71	78	82	85	83	70	66	89

### Notes:

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

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