CTH4

ROOF FAN, VERTICAL DISCHARGE

MANUFACTURING FEATURES
• Fan made of steel with polyester powder finishing coat.
• High efficiency backward impeller with self-cleaning system of steel.
• Standard asynchronous motor with IP-55 protection and Class F insulation.
Manufactured with standard voltages: 230/400V 50Hz three phase motors and 400V 50Hz in 2 speed motors.

APPLICATIONS
Specially designed for roof installation, with vertical discharge without any addicional kit, they are suitable for:
• Air renewal in buildings and industries.
• Industrial and professional kitchen hoods.
• Maximum continuous operation temperature: 110ºC (fluide).
• Maximum ambient temperature: 50ºC

UNDER REQUEST
• 60Hz and special voltages.

Technical data

Three-phase motor / 4 poles

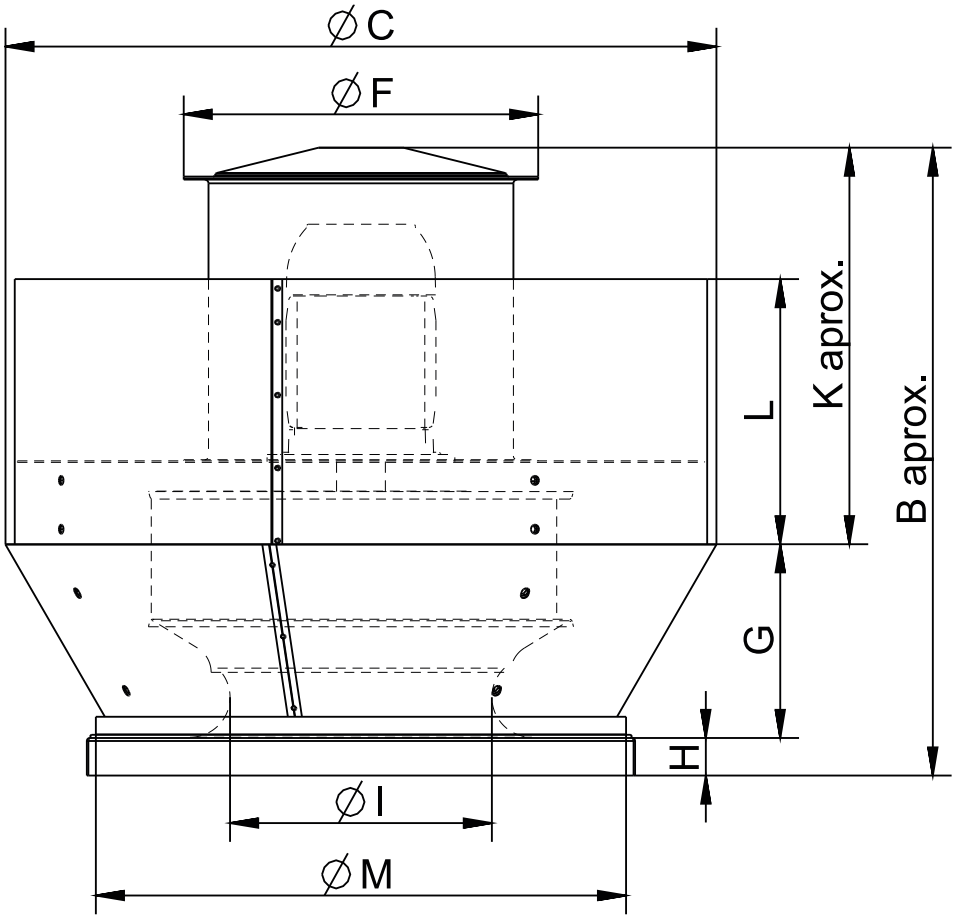
Code	Model	R.P.M.	Rated I. (A) 400V	Rated power kW	Max. Airflow m3/h	Sound db (A)**	Weight	Connect. diagram
278310106	CTH4 315 T4 0,25kW	1400	0,79	0,25	2.180	48	16	1
278350106	CTH4 355 T4 0,55kW	1400	1,49	0,55	3.590	52	20	1
278400106	CTH4 400 T4 0,75kW	1390	1,63	0,75	5.310	56	22	1
278450106	CTH4 450 T4 1,1kW	1400	2,49	1,10	7.530	60	40	1
278500106	CTH4 500 T4 1,5kW	1400	3,26	1,50	10.000	63	53	1
278560106	CTH4 560 T4 3kW	1430	6,17	3	12.950	65	58	1

Three-phase motor / 6 poles

Code	Model	R.P.M.	Rated I. (A) 400V	Rated power kW	Max. Airflow m3/h	Sound db (A)**	Weight	Connect. diagram
278410106	CTH4 400 T6 0,37kW	900	1,27	0,37	3.420	47	22	1
278460106	CTH4 450 T6 0,37kW	910	1,27	0,37	4.890	51	40	1
278510106	CTH4 500 T6 0,75kW	910	1,95	0,75	6.490	53	53	1
278570106	CTH4 560 T6 0,75kW	910	1,95	0,75	8.430	56	58	1
278630106	CTH4 630 T6 1,5kW	940	3,71	1,50	12.170	60	74	1
278710106	CTH4 710 T6 2,2kW	940	5,94	2,20	18.980	64	106	1
278800106	CTH4 800 T6 4kW	960	9,46	4	24.950	67	113	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


∅C
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L
K aprox.
B aprox.
G
H
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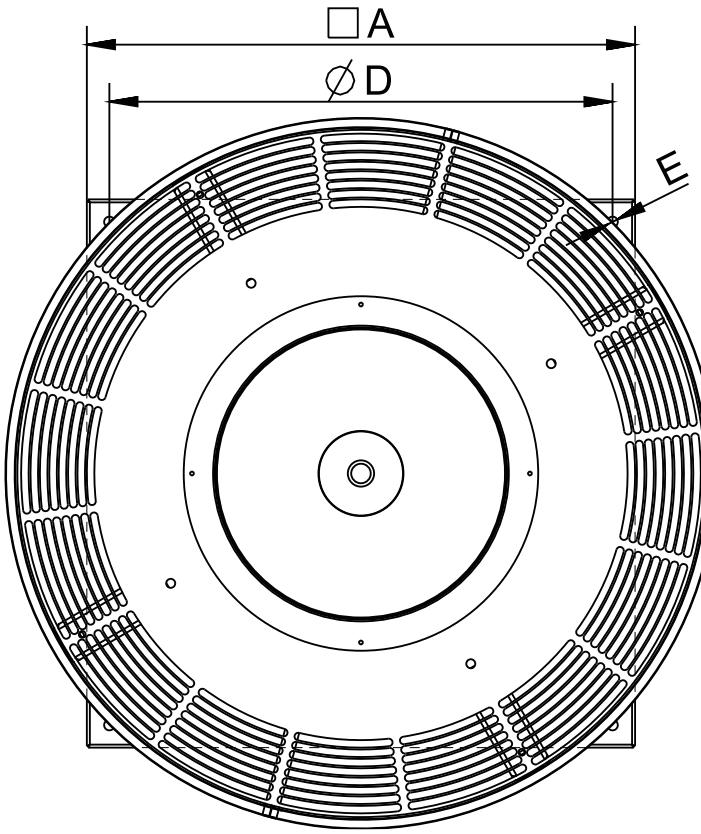
∅M


□A
∅D
E

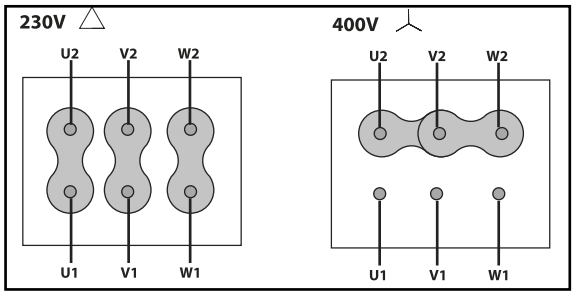
Model	A	B	D	G	H	K	L	ØC	ØE
CTH4 315 T4 0,25kW	450	547.5	390	153	40	715	215	554.5	12
CTH4 355 T4 0,55kW	500	582.5	440	168	40	374.5	237	622.7	12
CTH4 400 T4 0,75kW	550	637.5	490	193	40	404.5	267	701.6	12
CTH4 400 T6 0,37kW	550	637.5	490	193	40	404.5	267	701.6	12
CTH4 450 T4 1,1kW	600	754	540	218	40	496	298	780	12
CTH4 450 T6 0,37kW	600	669	540	218	40	411	298	780	12
CTH4 500 T4 1,5kW	650	771.5	590	237	40	494.5	307	852	12
CTH4 500 T6 0,75kW	650	771.5	590	237	40	494.5	307	852	12
CTH4 560 T4 3kW	730	836	670	258	50	528	353	946.6	14
CTH4 560 T6 0,75kW	730	836	670	258	50	528	353	946.6	14
CTH4 630 T6 1,5kW	830	877	770	290	50	537	380	1083.6	14
CTH4 710 T6 2,2kW	920	940	860	323	50	567	442.5	1200.7	14
CTH4 800 T6 4kW	1020	1096.5	960	358	50	688.5	442	1340	14

Model	ØF	ØI	ØM
CTH4 315 T4 0,25kW	374	210	428
CTH4 355 T4 0,55kW	374	236	478
CTH4 400 T4 0,75kW	374	266	528
CTH4 400 T6 0,37kW	374	266	528
CTH4 450 T4 1,1kW	434	300	578
CTH4 450 T6 0,37kW	374	300	578
CTH4 500 T4 1,5kW	434	335	628
CTH4 500 T6 0,75kW	434	335	628
CTH4 560 T4 3kW	472	374	706
CTH4 560 T6 0,75kW	472	374	706
CTH4 630 T6 1,5kW	472	422	802
CTH4 710 T6 2,2kW	472	472	892
CTH4 800 T6 4kW	600	532	992

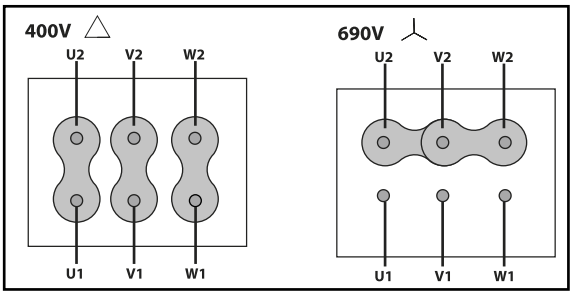
Wiring diagram

DIAGRAM Nº 1

230/400V



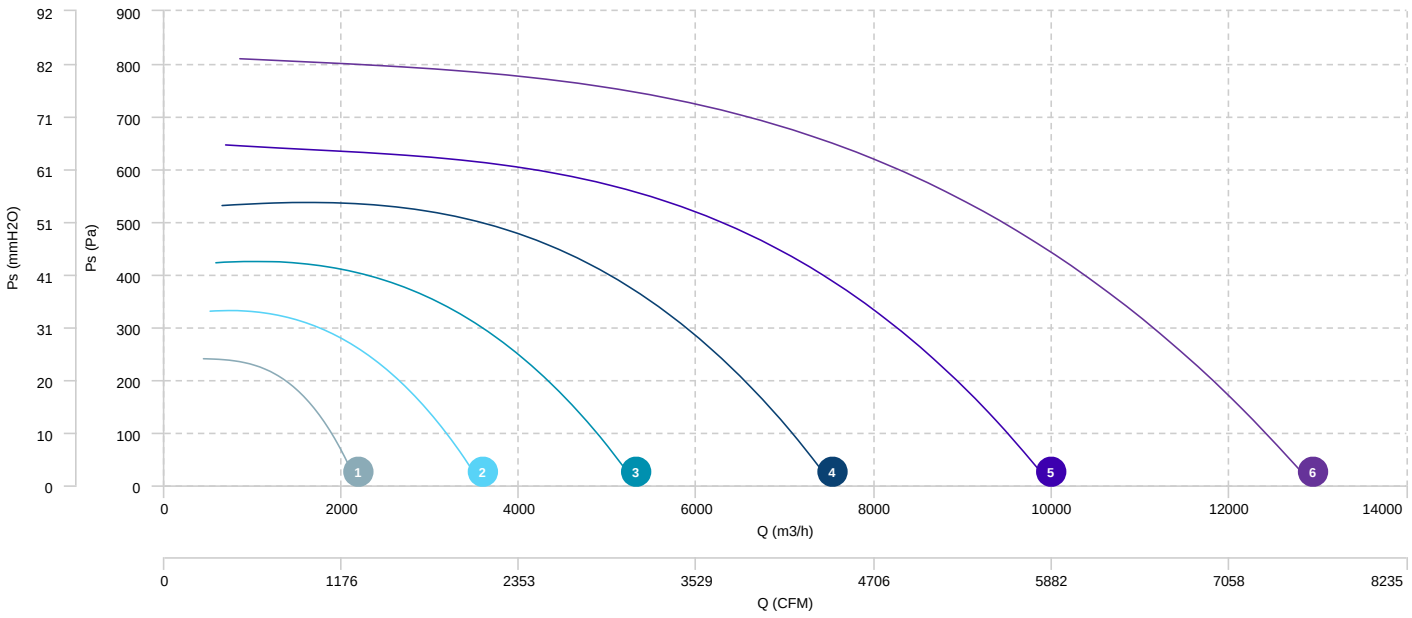
400/690V



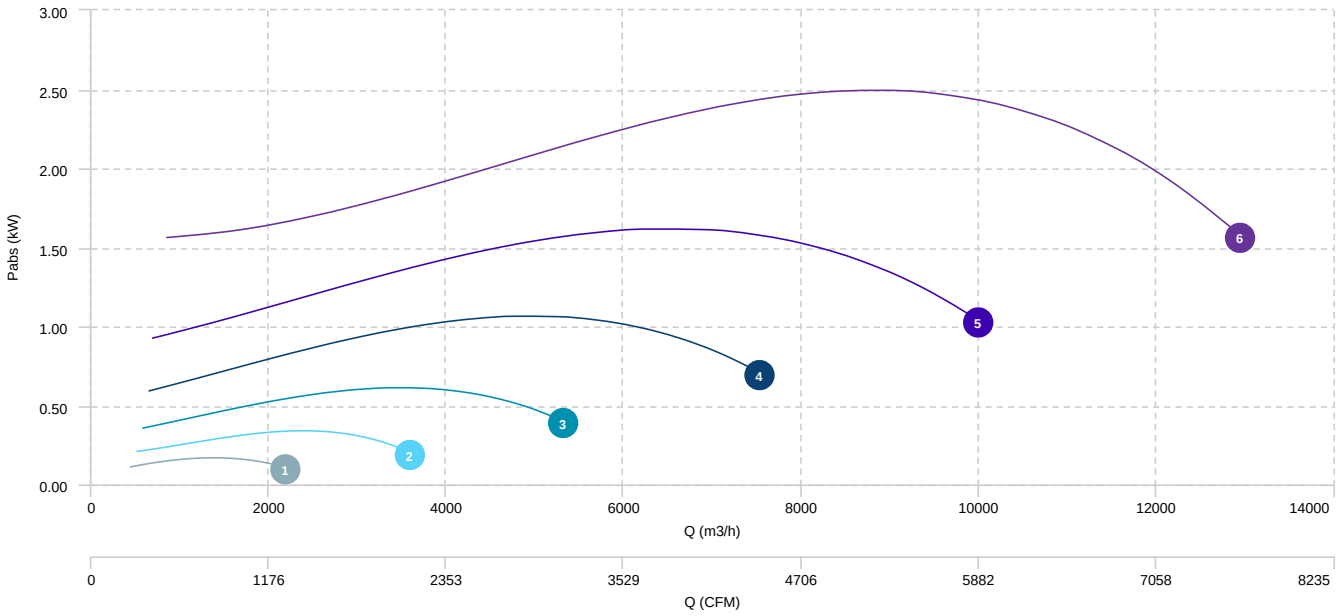
CHARACTERISCTIC CURVE

1	CTH4 315 T4 0,25kW	2	CTH4 355 T4 0,55kW	3	CTH4 400 T4 0,75kW	4	CTH4 450 T4 1,1kW
5	CTH4 500 T4 1,5kW	6	CTH4 560 T4 3kW				

AIR FLOW - PRESSURE

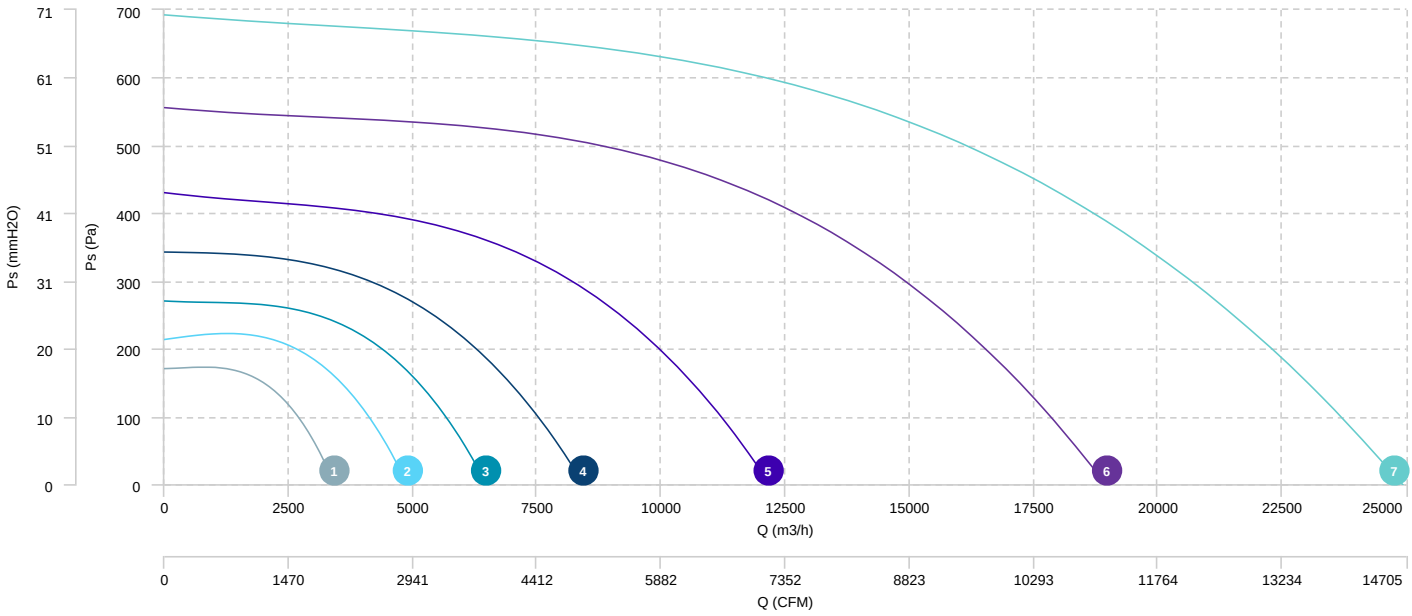


AIR FLOW - ABSORBED POWER

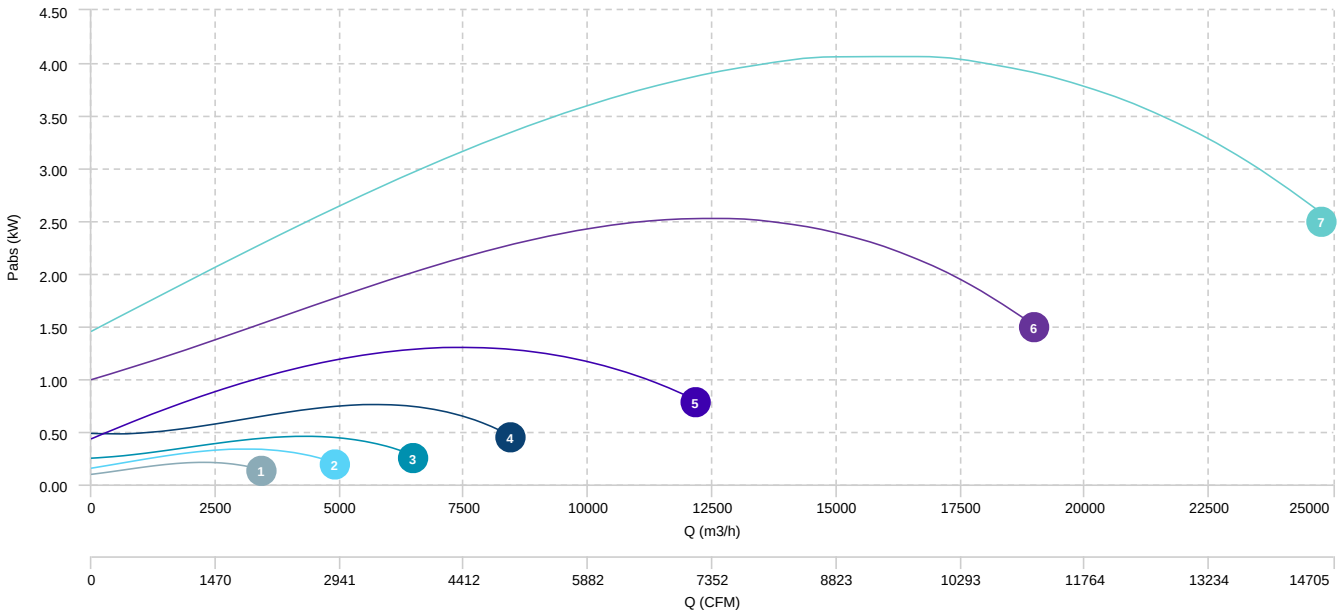


1	CTH4 400 T6 0,37kW	2	CTH4 450 T6 0,37kW	3	CTH4 500 T6 0,75kW	4	CTH4 560 T6 0,75kW
5	CTH4 630 T6 1,5kW	6	CTH4 710 T6 2,2kW	7	CTH4 800 T6 4kW		

AIR FLOW - PRESSURE



AIR FLOW - ABSORBED POWER



Sound data

Sound / 4 poles

Sound power Lw dB (A)										
Model		**63 Hz**	**125 Hz**	**250 Hz**	**500 Hz**	**1000 Hz**	**2000 Hz**	**4000 Hz**	**8000 Hz**	**Total**
CTH4 315 T4 0,25kW	Inlet	52	60	64	68	69	67	64	59	74
CTH4 355 T4 0,55kW (1410 RPM)	Inlet	56	64	68	72	73	71	68	63	78
CTH4 400 T4 0,75kW (1430 RPM)	Inlet	60	68	72	76	77	75	72	67	82
CTH4 450 T4 1,1kW	Inlet	64	72	76	79	81	79	76	71	86
CTH4 500 T4 1,5kW	Inlet	66	74	79	82	83	82	78	73	89
CTH4 560 T4 3kW	Inlet	69	77	82	85	86	84	81	76	91

Sound / 6 poles

Sound power Lw dB (A)										
Model		**63 Hz**	**125 Hz**	**250 Hz**	**500 Hz**	**1000 Hz**	**2000 Hz**	**4000 Hz**	**8000 Hz**	**Total**
CTH4 400 T6 0,37kW	Inlet	51	59	63	67	68	66	63	58	73
CTH4 450 T6 0,37kW	Inlet	54	62	67	70	71	70	66	61	77
CTH4 500 T6 0,75kW	Inlet	57	65	70	73	74	72	69	64	79
CTH4 560 T6 0,75kW	Inlet	60	68	72	76	77	75	72	67	82
CTH4 630 T6 1,5kW	Inlet	63	71	76	79	80	79	75	70	86
CTH4 710 T6 2,2kW	Inlet	68	76	80	84	85	83	80	75	90
CTH4 800 T6 4kW	Inlet	71	79	83	86	88	86	83	77	93

Notes:

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

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