

## CTH4 ATEX



### ROOF FAN, VERTICAL DISCHARGE ATEX

#### 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.

#### Available in the following versions (to be indicated in case of order):

- ATEX II2G Ex\_d
- ATEX II2G Ex\_e
- ATEX II3GD Ex\_na

#### APPLICATIONS

Specially designed for roof installation, with vertical discharge without any additional kit, they are suitable for:

- Air renewal in buildings and industries.
- Industrial and professional kitchen hoods.
- Maximum continuous operation temperature: 110°C (fluide).
- Maximum ambient temperature: 50°C

#### 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
278310106X_	CTH4 315 T4 0,25kW ATEX	1400	0,84	0,25	2.180	48	16	1
278350106X_	CTH4 355 T4 0,55kW ATEX	1400	1,75	0,55	3.590	52	20	1
278400106X_	CTH4 400 T4 0,75kW ATEX	1390	2,1	0,75	5.310	56	22	1
278450106X_	CTH4 450 T4 1,1kW ATEX	1400	3,3	1,10	7.530	60	40	1
278500106X_	CTH4 500 T4 1,5kW ATEX	1400	3,8	1,50	10.000	63	53	1
278560106X_	CTH4 560 T4 3kW ATEX	1430	6,8	3	12.950	65	58	1

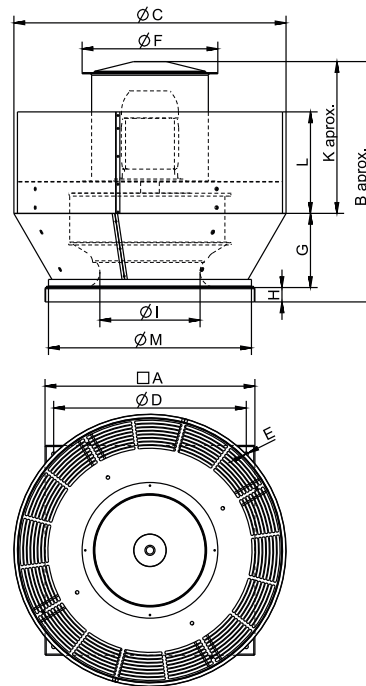
### Three-phase motor / 6 poles

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



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

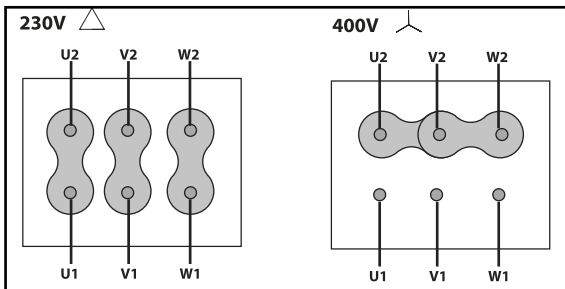
Model	ØF	ØI	ØM
CTH4 315 T4 0,25kW ATEX	374	210	428
CTH4 355 T4 0,55kW ATEX	374	236	478
CTH4 400 T4 0,75kW ATEX	374	266	528
CTH4 400 T6 0,37kW ATEX	374	266	528

Model	ØF	ØI	ØM
CTH4 450 T4 1,1kW ATEX	434	300	578
CTH4 450 T6 0,37kW ATEX	374	300	578
CTH4 500 T4 1,5kW ATEX	434	335	628
CTH4 500 T6 0,75kW ATEX	434	335	628
CTH4 560 T4 3kW ATEX	472	374	706
CTH4 560 T6 0,75kW ATEX	472	374	706
CTH4 630 T6 1,5kW ATEX	472	422	802
CTH4 710 T6 2,2kW ATEX	472	472	892
CTH4 800 T6 4kW ATEX	600	532	992

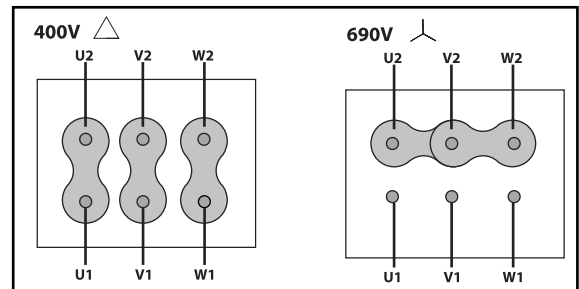
# Wiring diagram

DIAGRAM N° 1

230/400V



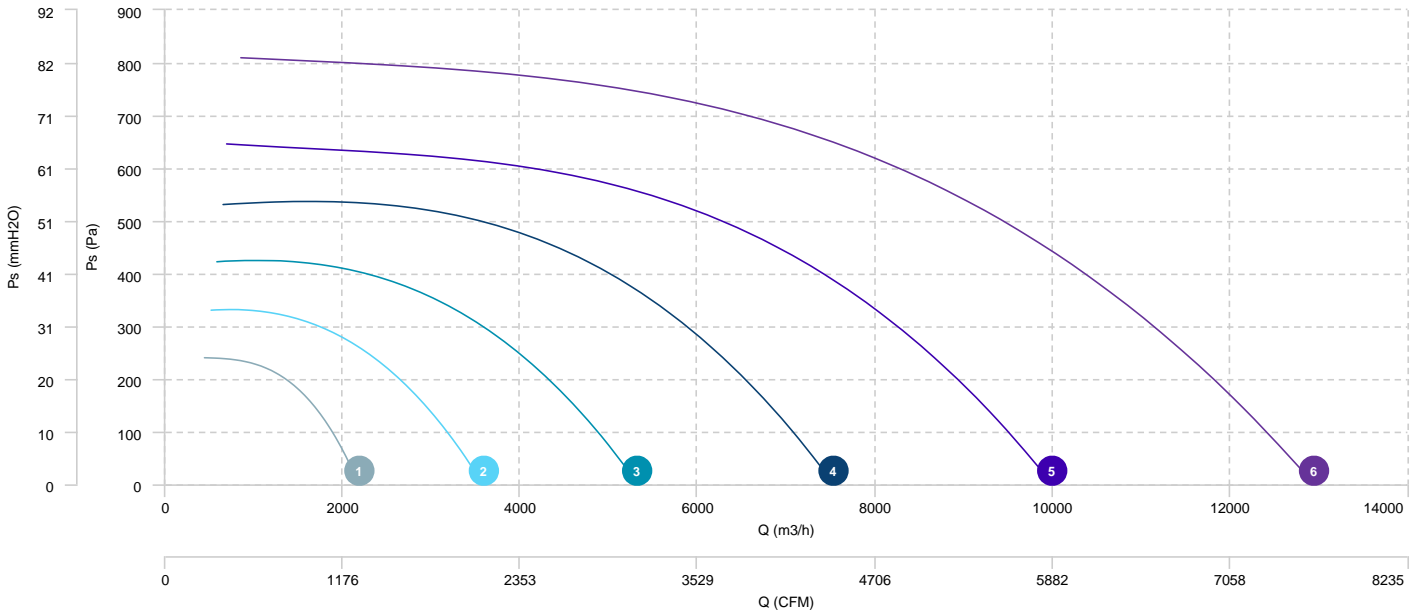
400/690V



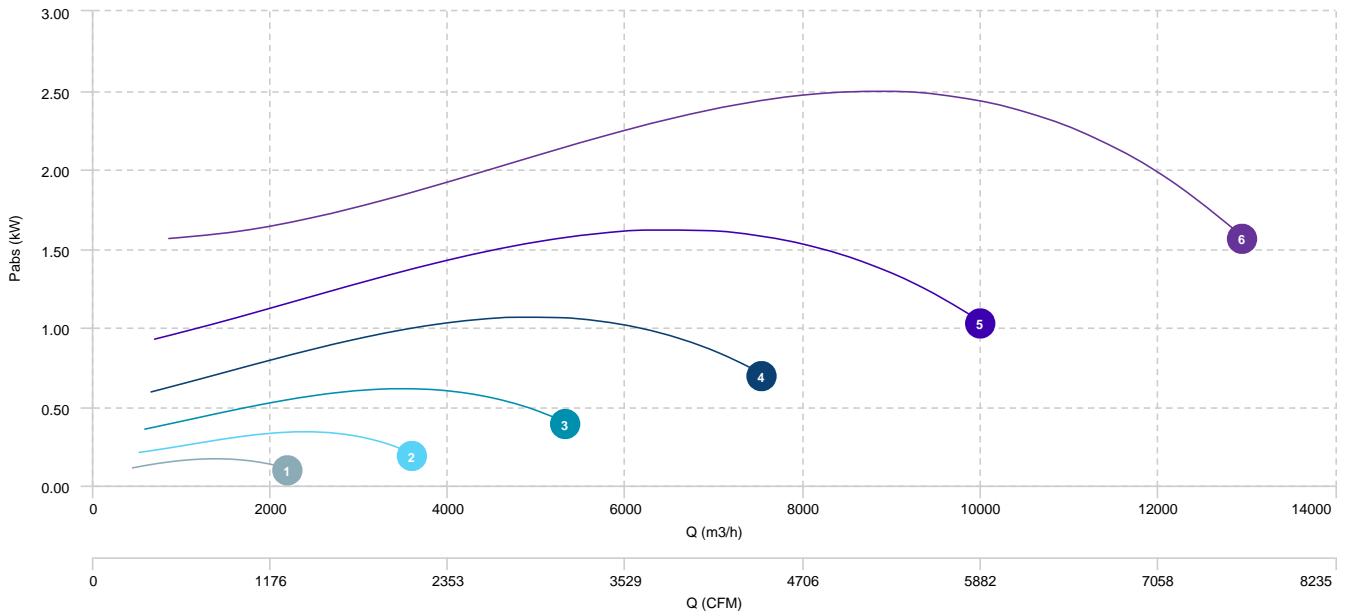
## CHARACTERISTIC CURVE

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

### AIR FLOW - PRESSURE

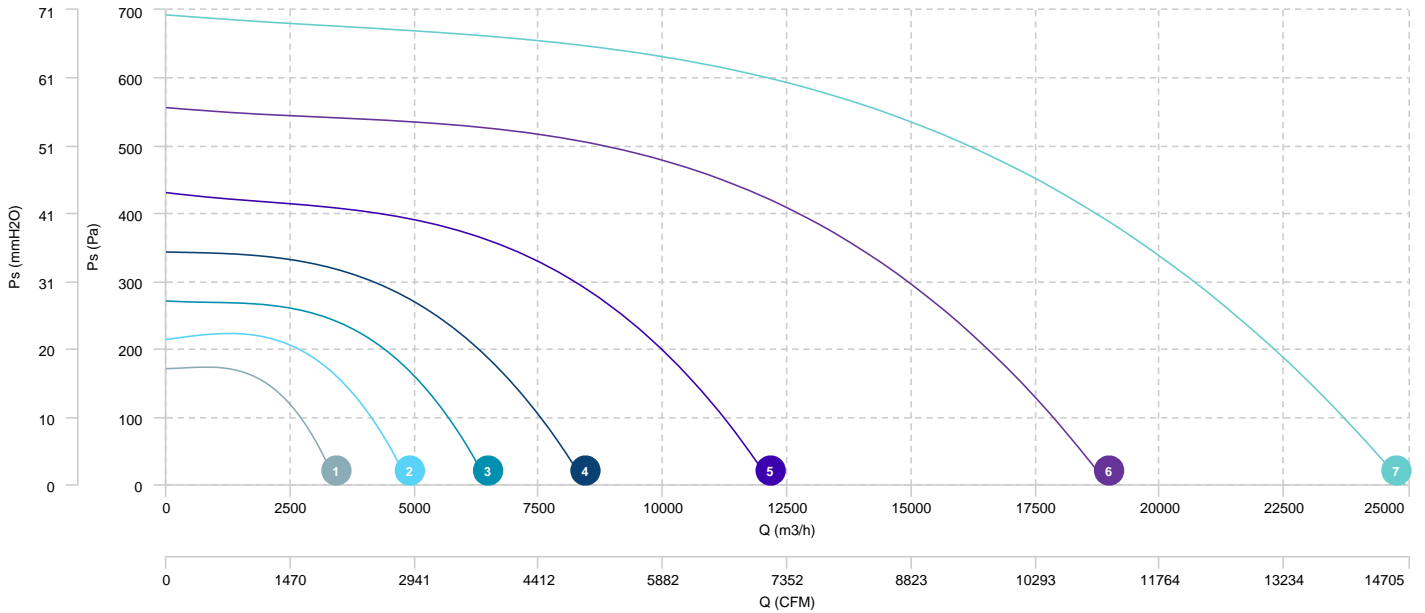


### AIR FLOW - ABSORBED POWER

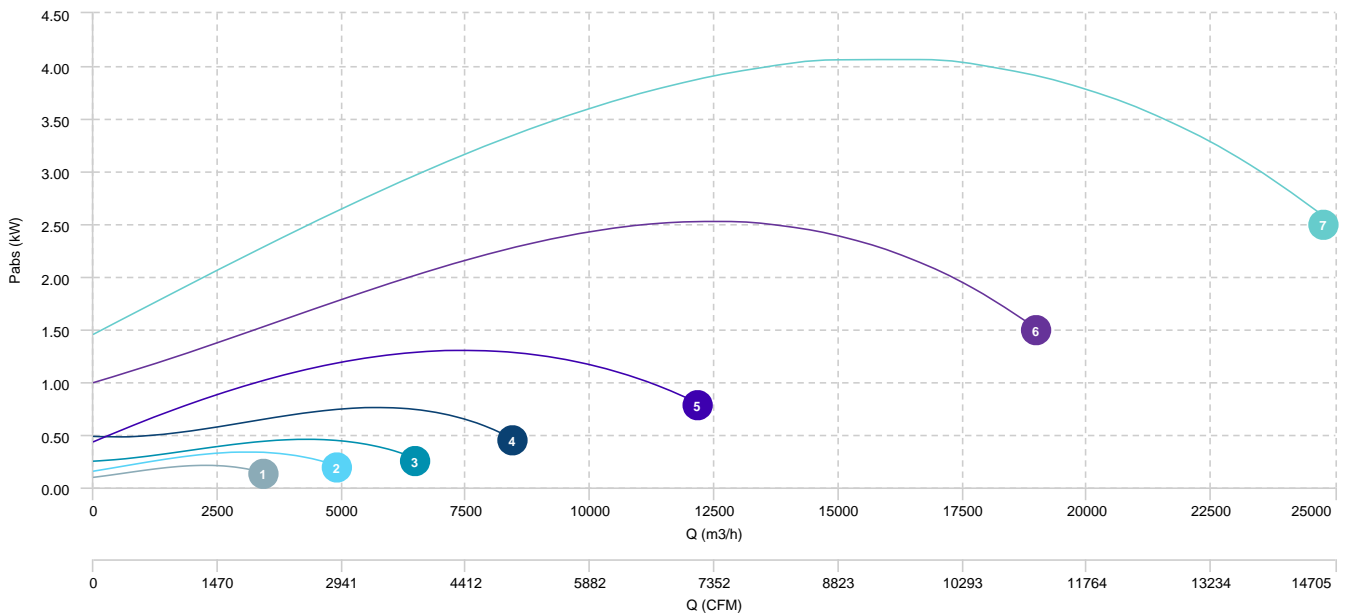


1	CTH4 400 T6 0,37kW ATEX	2	CTH4 450 T6 0,37kW ATEX	3	CTH4 500 T6 0,75kW ATEX	4	CTH4 560 T6 0,75kW ATEX
5	CTH4 630 T6 1,5kW ATEX	6	CTH4 710 T6 2,2kW ATEX	7	CTH4 800 T6 4kW ATEX		

## 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 ATEX	Inlet	52	60	64	68	69	67	64	59	74
CTH4 355 T4 0,55kW ATEX (1410 RPM)	Inlet	56	64	68	72	73	71	68	63	78
CTH4 400 T4 0,75kW ATEX (1430 RPM)	Inlet	60	68	72	76	77	75	72	67	82
CTH4 450 T4 1,1kW ATEX	Inlet	64	72	76	79	81	79	76	71	86
CTH4 500 T4 1,5kW ATEX	Inlet	66	74	79	82	83	82	78	73	89
CTH4 560 T4 3kW ATEX	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 ATEX	Inlet	51	59	63	67	68	66	63	58	73
CTH4 450 T6 0,37kW ATEX	Inlet	54	62	67	70	71	70	66	61	77
CTH4 500 T6 0,75kW ATEX	Inlet	57	65	70	73	74	72	69	64	79
CTH4 560 T6 0,75kW ATEX	Inlet	60	68	72	76	77	75	72	67	82
CTH4 630 T6 1,5kW ATEX	Inlet	63	71	76	79	80	79	75	70	86
CTH4 710 T6 2,2kW ATEX	Inlet	68	76	80	84	85	83	80	75	90
CTH4 800 T6 4kW ATEX	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:

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