

CTH3-A ATEX



ROOF FAN, AL COWL ATEX

MANUFACTURING FEATURES

- Roof cowl made of aluminium
- Structure, roof base support and bird protection guard made of galvanised steel.
- 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: 230V 50Hz in single phase motors, 230/400V 50Hz in three phase motors

APPLICATIONS

Specially designed for roof installation, they are suitable for:

- Smoke extraction.
- Smoke emergency exhaust with motor outside the hazardous area.
- Air renewal in buildings and industries.
- Industrial and professional kitchen hoods.
- Maximum continuous operation temperature: 110°C (fluide).
- Maximum ambient temperature: 50°C

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

- ATEX II2G Ex_d
- ATEX II2G Ex_e
- ATEX II3GD Ex_na

UNDER REQUEST

- 60Hz and special voltages.

Accessories



BTI

Technical data

Single-phase motor / 4 poles

Code	Model	R.P.M.	Rated I. (A) 230V	Rated power kW	Max. Airflow m3/h	Sound db (A)**	Weight	Connect. diagram
279220103AXD	CTH3-A 225 M4 0,12kW ATEX	1400	-	0,12	730	36	9	1
279250103AXD	CTH3-A 250 M4 0,12kW ATEX	1400	-	0,12	870	39	10	1
279280103AXD	CTH3-A 280 M4 0,12kW ATEX	1400	-	0,12	1.510	44	11	1
279310103AXD	CTH3-A 315 M4 0,25KW ATEX	1400	-	0,25	2.180	48	15	1

Single-phase motor / 6 poles

Code	Model	R.P.M.	Rated I. (A) 230V	Rated power kW	Max. Airflow m3/h	Sound db (A)**	Weight	Connect. diagram
279410103AXD	CTH3-A 400 M6 0,37KW ATEX	900	-	0,37	3.420	47	21	1

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
279220106AX_	CTH3-A 225 T4 0,12kW ATEX	1400	0,71	0,12	730	36	9	2
279250106AX_	CTH3-A 250 T4 0,12kW ATEX	1400	0,71	0,12	870	39	10	2
279280106AX_	CTH3-A 280 T4 0,12kW ATEX	1400	0,71	0,12	1.510	44	11	2
279310106AX_	CTH3-A 315 T4 0,25KW ATEX	1400	0,84	0,25	2.180	48	15	2
279350106AX_	CTH3-A 355 T4 0,55KW ATEX	1400	1,75	0,55	3.590	52	19	2
279400106AX_	CTH3-A 400 T4 0,75KW ATEX	1390	2,1	0,75	5.310	56	21	2
279450106AX_	CTH3-A 450 T4 1,1KW ATEX	1400	3,3	1,10	7.530	60	38	2
279500106AX_	CTH3-A 500 T4 1,5KW ATEX	1400	3,8	1,50	10.000	63	50	2
279560106AX_	CTH3-A 560 T4 3KW ATEX	1430	6,8	3	12.950	65	55	2

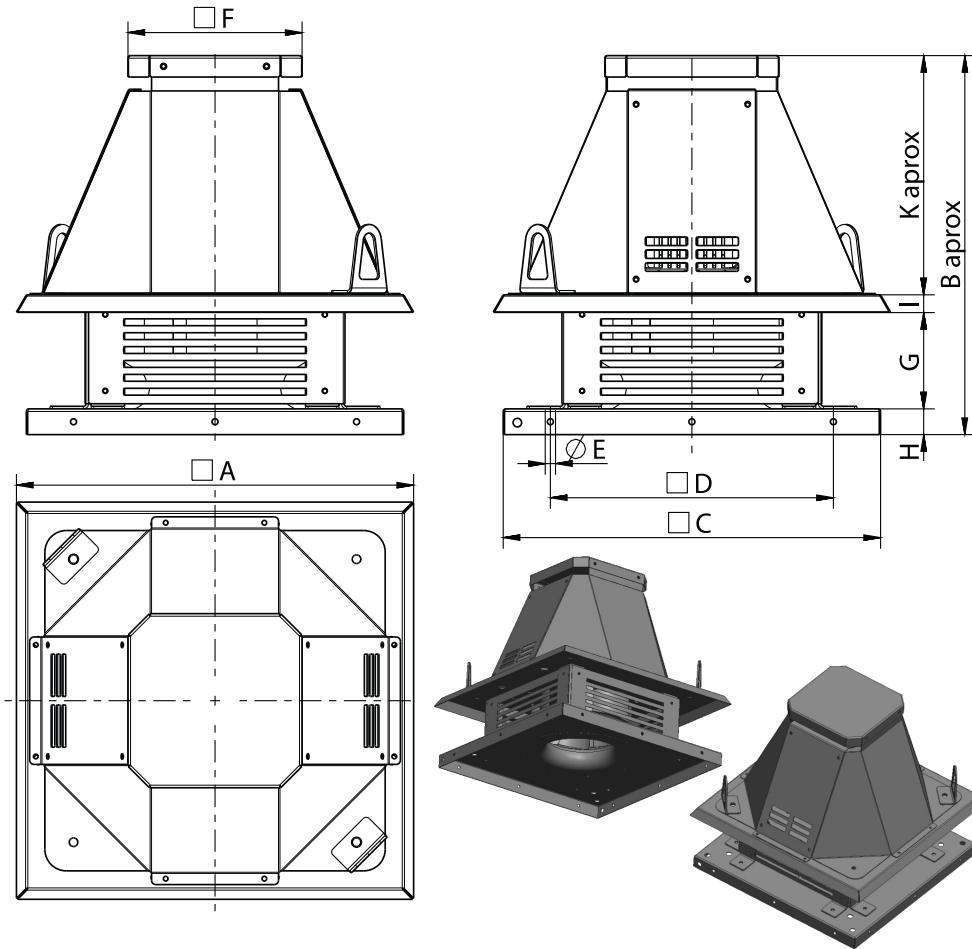
Three-phase motor / 6 poles

Code	Model	R.P.M.	Rated I. (A) 400V	Rated power kW	Max. Airflow m3/h	Sound db (A)**	Weight	Connect. diagram
279410106AX_	CTH3-A 400 T6 0,37KW ATEX	900	1,4	0,37	3.420	47	21	2
279460106AX_	CTH3-A 450 T6 0,37KW ATEX	910	1,4	0,37	4.890	51	38	2
279510106AX_	CTH3-A 500 T6 0,75KW ATEX	910	2,2	0,75	6.490	53	50	2
279570106AX_	CTH3-A 560 T6 0,75KW ATEX	910	2,2	0,75	8.430	56	55	2
279630106AX_	CTH3-A 630 T6 1,5KW ATEX	940	4	1,50	12.170	60	70	2

Code	Model	R.P.M.	Rated I. (A) 400V	Rated power kW	Max. Airflow m3/h	Sound db (A)**	Weight	Connect. diagram
279710106AX_	CTH3-A 710 T6 2,2KW ATEX	940	5,2	2,20	18.980	64	170	2
279800106AX_	CTH3-A 800 T6 4KW ATEX	960	9,46	4	24.950	67	205	2

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	E	F	G	H	I
CTH3-A 225 M4 0,12kW ATEX	463	441,9	440	330	12	203	112,25	30	20,75
CTH3-A 225 T4 0,12kW ATEX	463	441,9	440	330	12	203	112,25	30	20,75
CTH3-A 250 M4 0,12kW ATEX	463	441,9	440	330	12	203	112,25	30	20,75
CTH3-A 250 T4 0,12kW ATEX	463	441,9	440	330	12	203	112,25	30	20,75
CTH3-A 280 M4 0,12kW ATEX	583	500	560	450	12	203	140,75	40	20,75
CTH3-A 280 T4 0,12kW ATEX	583	500	560	450	12	203	140,75	40	20,75
CTH3-A 315 M4 0,25KW ATEX	583	544,6	560	450	12	203	185,25	40	20,75
CTH3-A 315 T4 0,25KW ATEX	583	544,6	560	450	12	203	185,25	40	20,75
CTH3-A 355 T4 0,55KW ATEX	664,6	644,6	630	535	12	253	210,8	40	30,75
CTH3-A 400 M6 0,37KW ATEX	664,4	702,75	630	535	12	253	268,75	40	30,75
CTH3-A 400 T4 0,75KW ATEX	664,4	702,75	630	535	12	253	268,75	40	30,75
CTH3-A 400 T6 0,37KW ATEX	664,4	702,75	630	535	12	253	268,75	40	30,75
CTH3-A 450 T4 1,1KW ATEX	774,6	758,15	710	590	14	253	304,25	40	30,75
CTH3-A 450 T6 0,37KW ATEX	774,6	758,15	710	590	14	253	304,25	40	30,75

Model	A	B	C	D	E	F	G	H	I
CTH3-A 500 T4 1,5KW ATEX	939,6	863,65	905	750	14	353	319,5	50	31
CTH3-A 500 T6 0,75KW ATEX	939,6	863,65	905	750	14	353	319,5	50	31
CTH3-A 560 T4 3KW ATEX	939,6	880,65	905	750	14	353	336,5	50	31
CTH3-A 560 T6 0,75KW ATEX	939,6	880,65	905	750	14	353	336,5	50	31
CTH3-A 630 T6 1,5KW ATEX	939,6	922,65	905	750	14	353	378,5	50	31
CTH3-A 710 T6 2,2KW ATEX	1134,6	1116,22	1100	940	14	453	441,5	50	31
CTH3-A 800 T6 4KW ATEX	1134,6	1142,72	1100	940	14	453	468	50	31

Model	K
CTH3-A 225 M4 0,12kW ATEX	278,9
CTH3-A 225 T4 0,12kW ATEX	278,9
CTH3-A 250 M4 0,12kW ATEX	278,9
CTH3-A 250 T4 0,12kW ATEX	278,9
CTH3-A 280 M4 0,12kW ATEX	298,5
CTH3-A 280 T4 0,12kW ATEX	298,5
CTH3-A 315 M4 0,25KW ATEX	298,5
CTH3-A 315 T4 0,25KW ATEX	298,5
CTH3-A 355 T4 0,55KW ATEX	363,25
CTH3-A 400 M6 0,37KW ATEX	363,25
CTH3-A 400 T4 0,75KW ATEX	363,25
CTH3-A 400 T6 0,37KW ATEX	363,25
CTH3-A 450 T4 1,1KW ATEX	383,15
CTH3-A 450 T6 0,37KW ATEX	383,15
CTH3-A 500 T4 1,5KW ATEX	463,15
CTH3-A 500 T6 0,75KW ATEX	463,15
CTH3-A 560 T4 3KW ATEX	463,15
CTH3-A 560 T6 0,75KW ATEX	463,15
CTH3-A 630 T6 1,5KW ATEX	463,15
CTH3-A 710 T6 2,2KW ATEX	593,72
CTH3-A 800 T6 4KW ATEX	593,72

Wiring diagram

DIAGRAM N° 1

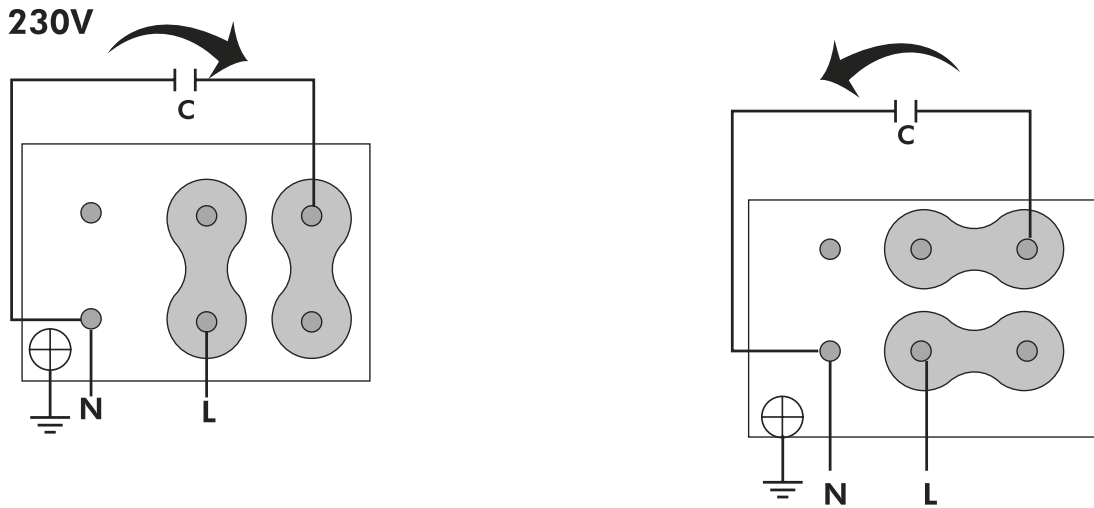
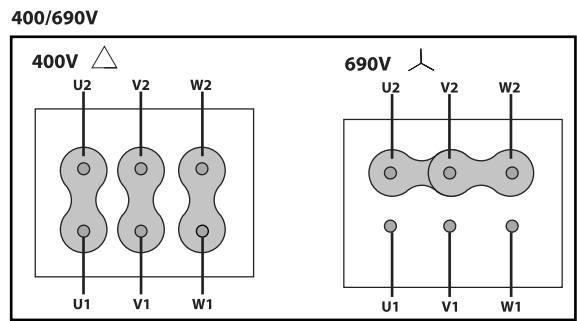
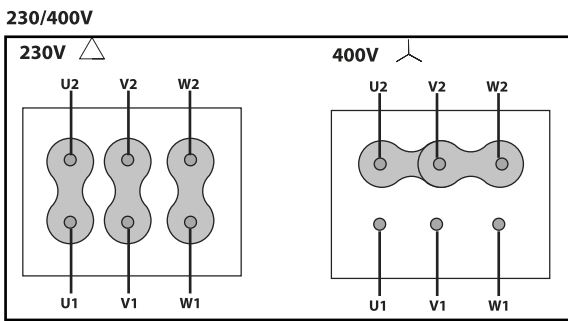


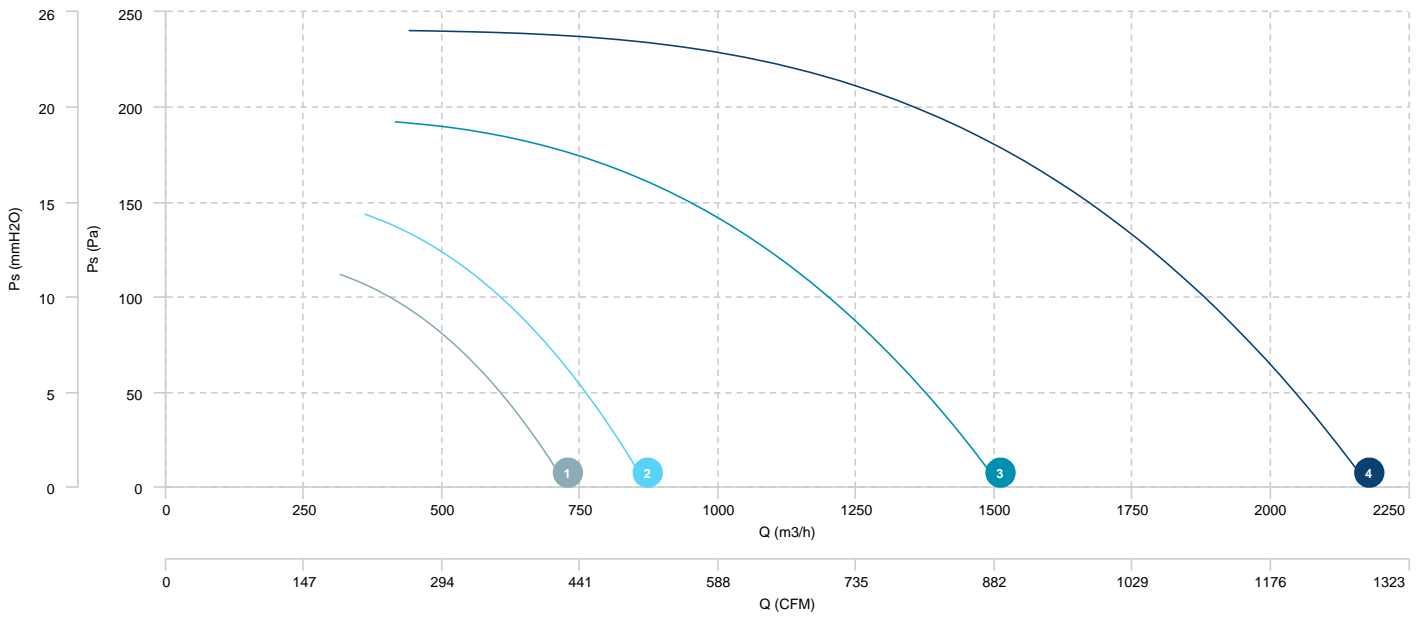
DIAGRAM N° 2



CHARACTERISTIC CURVE

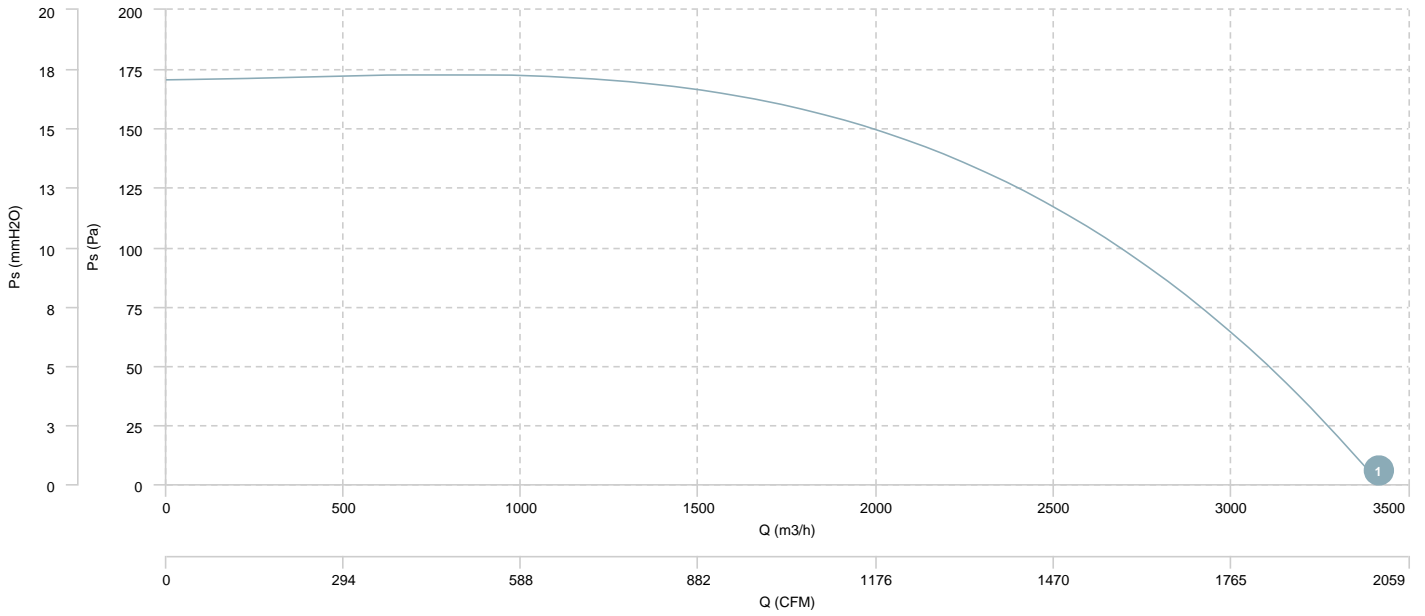
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|----------|------------------------------|----------|------------------------------|----------|------------------------------|----------|------------------------------|
| 1 | CTH3-A 225 M4 0,12kW
ATEX | 2 | CTH3-A 250 M4 0,12kW
ATEX | 3 | CTH3-A 280 M4 0,12kW
ATEX | 4 | CTH3-A 315 M4 0,25KW
ATEX |
|----------|------------------------------|----------|------------------------------|----------|------------------------------|----------|------------------------------|

AIR FLOW - PRESSURE



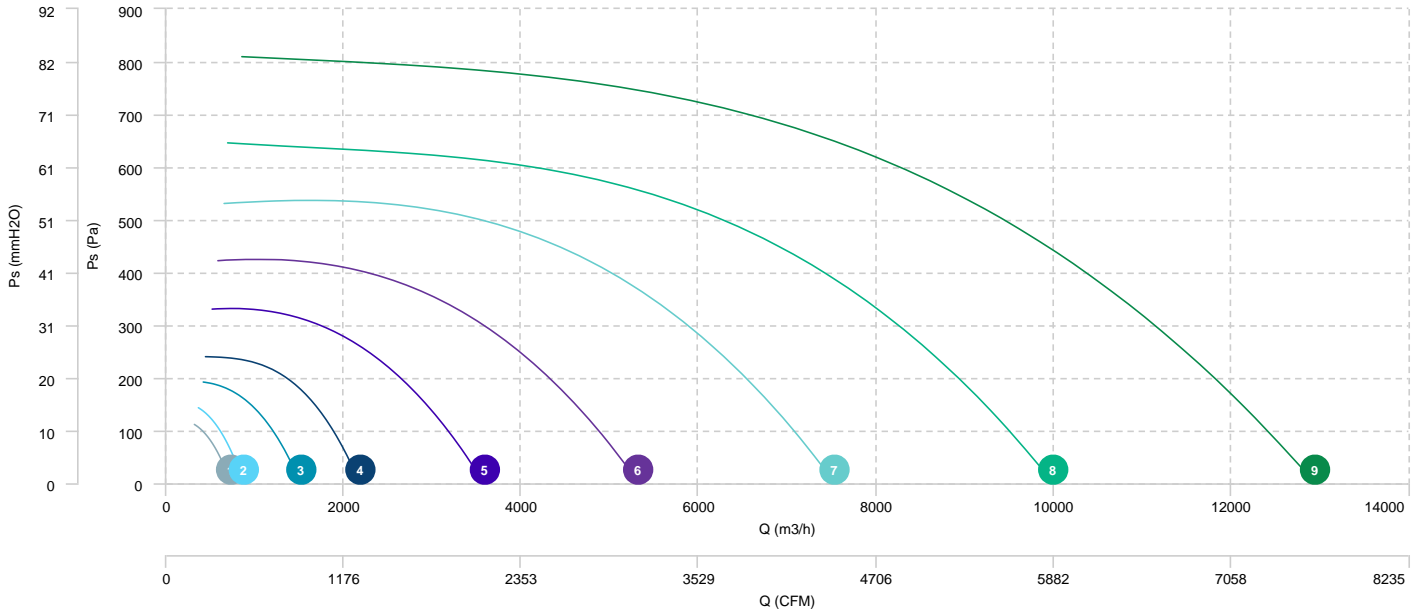
1 CTH3-A 400 M6 0,37KW
ATEX

AIR FLOW - PRESSURE



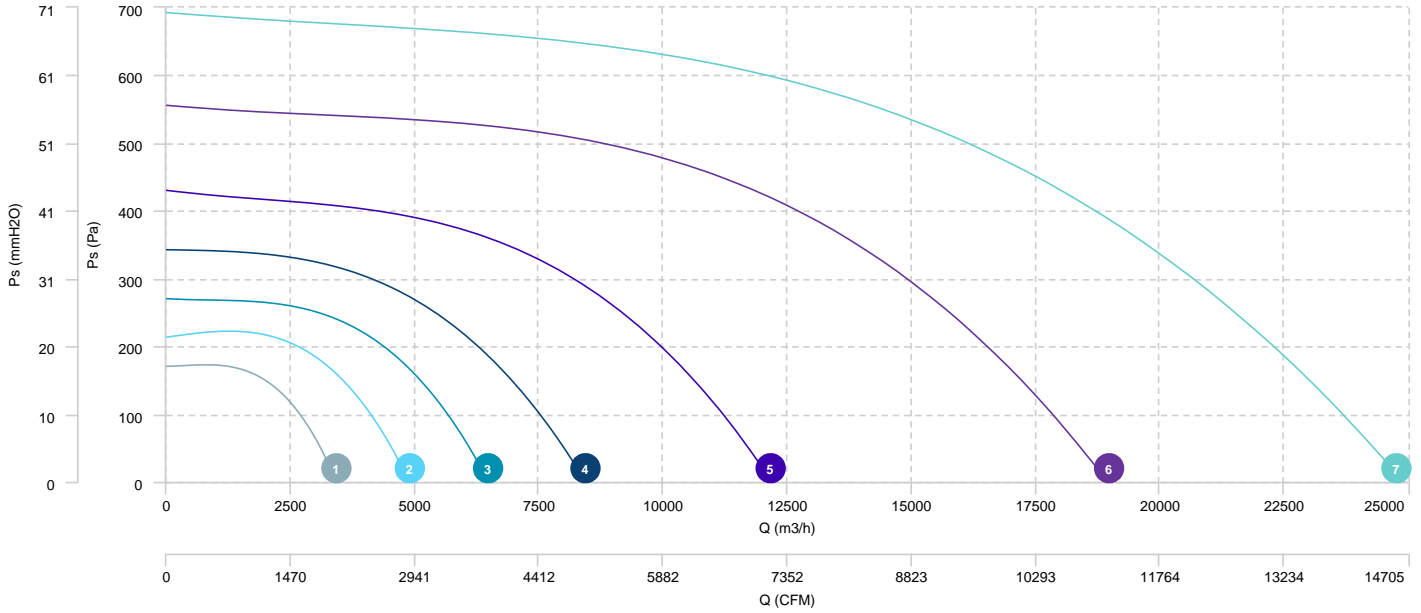
1	CTH3-A 225 T4 0,12kW ATEX	2	CTH3-A 250 T4 0,12kW ATEX	3	CTH3-A 280 T4 0,12kW ATEX	4	CTH3-A 315 T4 0,25KW ATEX
5	CTH3-A 355 T4 0,55KW ATEX	6	CTH3-A 400 T4 0,75KW ATEX	7	CTH3-A 450 T4 1,1KW ATEX	8	CTH3-A 500 T4 1,5KW ATEX
9	CTH3-A 560 T4 3KW ATEX						

AIR FLOW - PRESSURE



1	CTH3-A 400 T6 0,37KW ATEX	2	CTH3-A 450 T6 0,37KW ATEX	3	CTH3-A 500 T6 0,75KW ATEX	4	CTH3-A 560 T6 0,75KW ATEX
5	CTH3-A 630 T6 1,5KW ATEX	6	CTH3-A 710 T6 2,2KW ATEX	7	CTH3-A 800 T6 4KW ATEX		

AIR FLOW - PRESSURE



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
CTH3-A 225 M4 0,12kW ATEX	Inlet	40	48	53	56	57	55	52	47	62
CTH3-A 225 T4 0,12kW ATEX	Inlet	40	48	53	56	57	55	52	47	62
CTH3-A 250 M4 0,12kW ATEX	Inlet	43	51	55	59	60	58	55	50	65
CTH3-A 250 T4 0,12kW ATEX	Inlet	43	51	55	59	60	58	55	50	65
CTH3-A 280 M4 0,12kW ATEX	Inlet	48	56	60	63	65	63	60	55	70
CTH3-A 280 T4 0,12kW ATEX	Inlet	48	56	60	63	65	63	60	55	70
CTH3-A 315 M4 0,25KW ATEX	Inlet	52	60	64	68	69	67	64	59	74
CTH3-A 315 T4 0,25KW ATEX	Inlet	52	60	64	68	69	67	64	59	74
CTH3-A 355 T4 0,55KW ATEX (1410 RPM)	Inlet	56	64	68	72	73	71	68	63	78
CTH3-A 400 T4 0,75KW ATEX (1430 RPM)	Inlet	60	68	72	76	77	75	72	67	82
CTH3-A 450 T4 1,1KW ATEX	Inlet	64	72	76	79	81	79	76	71	86
CTH3-A 500 T4 1,5KW ATEX	Inlet	66	74	79	82	83	82	78	73	89
CTH3-A 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
CTH3-A 400 M6 0,37KW ATEX	Inlet	51	59	63	67	68	66	63	58	73
CTH3-A 400 T6 0,37KW ATEX	Inlet	51	59	63	67	68	66	63	58	73
CTH3-A 450 T6 0,37KW ATEX	Inlet	54	62	67	70	71	70	66	61	77
CTH3-A 500 T6 0,75KW ATEX	Inlet	57	65	70	73	74	72	69	64	79
CTH3-A 560 T6 0,75KW ATEX	Inlet	60	68	72	76	77	75	72	67	82
CTH3-A 630 T6 1,5KW ATEX	Inlet	63	71	76	79	80	79	75	70	86
CTH3-A 710 T6 2,2KW ATEX	Inlet	68	76	80	84	85	83	80	75	90
CTH3-A 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:

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