

## 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.
- ATEX standard asynchronous motor. ATEX certified according to the zone. IP55 protection and class F insulation. Manufactured with standard voltages: 230/400V 50Hz in three phase motors up to 4kW and 400/690V 50Hz for higher powers.

**APPLICATIONS**

Ventilation in indoor environments classified as ATEX. 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.
- Working temperature: ambient from -20°C to 40°C, transported air according to the ATEX classification.

**UNDER REQUEST**

- 60Hz and special voltages.

## Accessories



**BTI**



**INT**



**INT  
ATEX**



**KV  
CTH3**



**SFC**

## Technical data

### Single-phase motor / 4 poles

Code	Model	R.P.M.	Rated I. A 230V	Rated power kW	Max. Airflow m <sup>3</sup> /h	Sound db (A)**	Weight kg	Connect. diagram
279220103AXD	CTH3-A 225 M4 0,12kW ATEX	-	-	0,00	730	36	9	1
279250103AXD	CTH3-A 250 M4 0,12kW ATEX	-	-	0,00	880	39	10	1
279280103AXD	CTH3-A 280 M4 0,12kW ATEX	-	-	0,00	1.520	44	11	1
279310103AXD	CTH3-A 315 M4 0,25KW ATEX	-	-	0,00	2.190	43	15	1

### Single-phase motor / 6 poles

Code	Model	R.P.M.	Rated I. A 230V	Rated power kW	Max. Airflow m <sup>3</sup> /h	Sound db (A)**	Weight kg	Connect. diagram
279410103AXD	CTH3-A 400 M6 0,37KW ATEX	-	-	0,00	3.320	41	21	1

### Three-phase motor / 4 poles

Code	Model	R.P.M.	Rated I. A 400V	Rated power kW	Max. Airflow m <sup>3</sup> /h	Sound db (A)**	Weight kg	Connect. diagram
279220106AXN	CTH3-A 225 T4 0,12kW ATEX	1420	0,71	0,12	730	36	9	2
279250106AXN	CTH3-A 250 T4 0,12kW ATEX	1420	0,71	0,12	880	39	10	2
279280106AXN	CTH3-A 280 T4 0,12kW ATEX	1420	0,71	0,12	1.520	44	11	2
279310106AXN	CTH3-A 315 T4 0,25KW ATEX	1400	0,84	0,25	2.190	43	15	2
279350106AXN	CTH3-A 355 T4 0,55KW ATEX	1430	1,75	0,55	3.590	48	19	2
279400106AXN	CTH3-A 400 T4 0,75KW ATEX	1410	2,1	0,75	5.130	51	21	2
279450106AXN	CTH3-A 450 T4 1,1KW ATEX	1420	3,3	1,10	7.300	54	38	2
279500106AXN	CTH3-A 500 T4 1,5KW ATEX	1415	3,8	1,50	10.010	57	50	2
279560106AXN	CTH3-A 560 T4 3KW ATEX	1420	6,8	3,00	14.060	61	55	2

### Three-phase motor / 6 poles

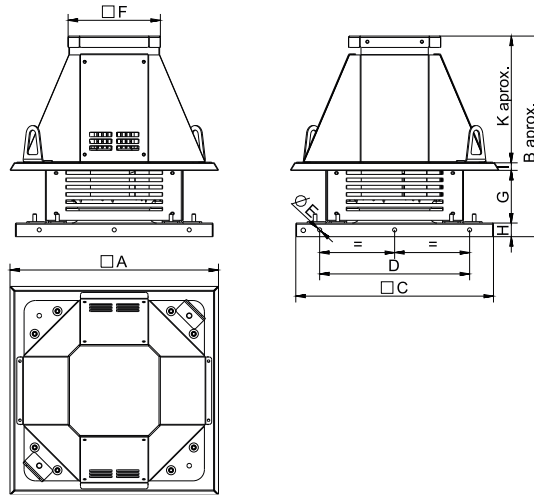
Code	Model	R.P.M.	Rated I. A 400V	Rated power kW	Max. Airflow m <sup>3</sup> /h	Sound db (A)**	Weight kg	Connect. diagram
279410106AXN	CTH3-A 400 T6 0,37KW ATEX	940	1,4	0,37	3.320	41	21	2
279460106AXN	CTH3-A 450 T6 0,37KW ATEX	940	1,4	0,37	4.730	45	38	2
279510106AXN	CTH3-A 500 T6 0,75KW ATEX	930	2,2	0,75	6.490	48	50	2
279570106AXN	CTH3-A 560 T6 0,75KW ATEX	930	2,2	0,75	9.110	51	55	2
279630106AXN	CTH3-A 630 T6 1,5KW ATEX	940	4,00	1,50	13.230	55	70	2

Code	Model	R.P.M.	Rated I. A 400V	Rated power kW	Max. Airflow m <sup>3</sup> /h	Sound db (A)**	Weight kg	Connect. diagram
279710106AXN	CTH3-A 710 T6 2,2KW ATEX	930	5,2	2,20	18.940	59	170	2
279800106AXN	CTH3-A 800 T6 4KW ATEX	960	9,46	4,00	27.090	62	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 aprox	C	D	E	F	G	H	I
CTH3-A 225 M4 0,12kW ATEX	463	441,9	435	330	9	203	112,25	30	20,75
CTH3-A 225 T4 0,12kW ATEX	463	441,9	435	330	9	203	112,25	30	20,75
CTH3-A 250 M4 0,12kW ATEX	463	441,9	435	330	9	203	112,25	30	20,75
CTH3-A 250 T4 0,12kW ATEX	463	441,9	435	330	9	203	112,25	30	20,75
CTH3-A 280 M4 0,12kW ATEX	583	500	595	450	9	203	140,75	40	20,75
CTH3-A 280 T4 0,12kW ATEX	583	500	595	450	9	203	140,75	40	20,75
CTH3-A 315 M4 0,25KW ATEX	583	544,6	595	450	9	203	185,25	40	20,75
CTH3-A 315 T4 0,25KW ATEX	583	544,6	595	450	9	203	185,25	40	20,75
CTH3-A 355 T4 0,55KW ATEX	664,6	644,6	665	520	9	253	210,8	40	30,75
CTH3-A 400 M6 0,37KW ATEX	664,4	702,75	665	520	9	253	268,75	40	30,75
CTH3-A 400 T4 0,75KW ATEX	664,4	702,75	665	520	9	253	268,75	40	30,75
CTH3-A 400 T6 0,37KW ATEX	664,4	702,75	665	520	9	253	268,75	40	30,75
CTH3-A 450 T4 1,1KW ATEX	774,6	758,15	665	520	9	253	304,25	40	30,75
CTH3-A 450 T6 0,37KW ATEX	774,6	758,15	665	520	9	253	304,25	40	30,75
CTH3-A 500 T4 1,5KW ATEX	939,6	863,65	939	710	9	353	319,5	50	31
CTH3-A 500 T6 0,75KW ATEX	939,6	863,65	939	710	9	353	319,5	50	31
CTH3-A 560 T4 3KW ATEX	939,6	880,65	939	710	9	353	336,5	50	31
CTH3-A 560 T6 0,75KW ATEX	939,6	880,65	939	710	9	353	336,5	50	31
CTH3-A 630 T6 1,5KW ATEX	939,6	922,65	939	710	9	353	378,5	50	31
CTH3-A 710 T6 2,2KW ATEX	1134,6	1116,22	1035	840	9	453	441,5	50	31
CTH3-A 800 T6 4KW ATEX	1134,6	1142,72	1035	840	9	453	468	50	31

Model	K aprox
CTH3-A 225 M4 0,12kW ATEX	278,9
CTH3-A 225 T4 0,12kW ATEX	278,9

Model	K aprox
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

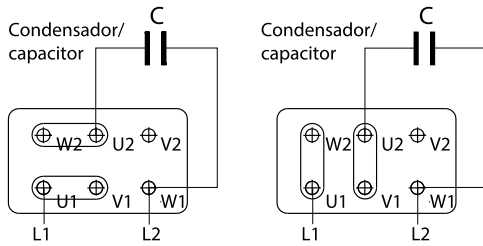
# Wiring diagram

## Wiring diagram Nº 1

Motores monofásicos con placa de borne/  
Single phase motors with terminal board

Rotación horaria /  
Clockwise rotation

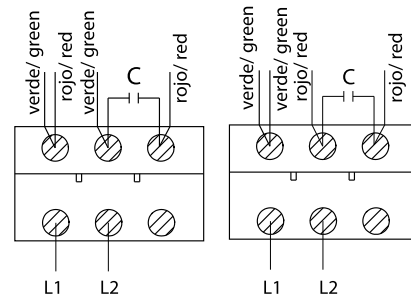
Rotación anti-horaria/  
Conuterclockwise rotation



Motores monofásicos con conector/  
Single phase motors with connector

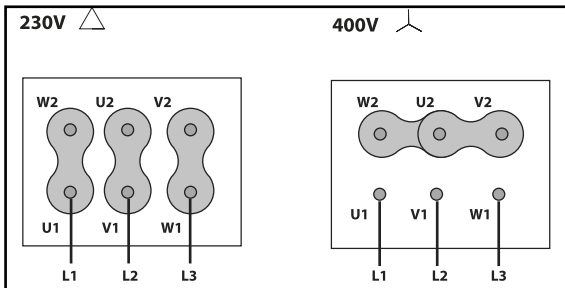
Rotación horaria /  
Clockwise rotation

Rotación anti-horaria/  
Conuterclockwise rotation

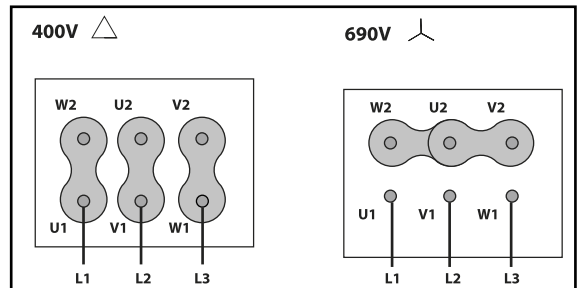


## Wiring diagram Nº 2

230/400V



400/690V



## CHARACTERISTIC CURVE

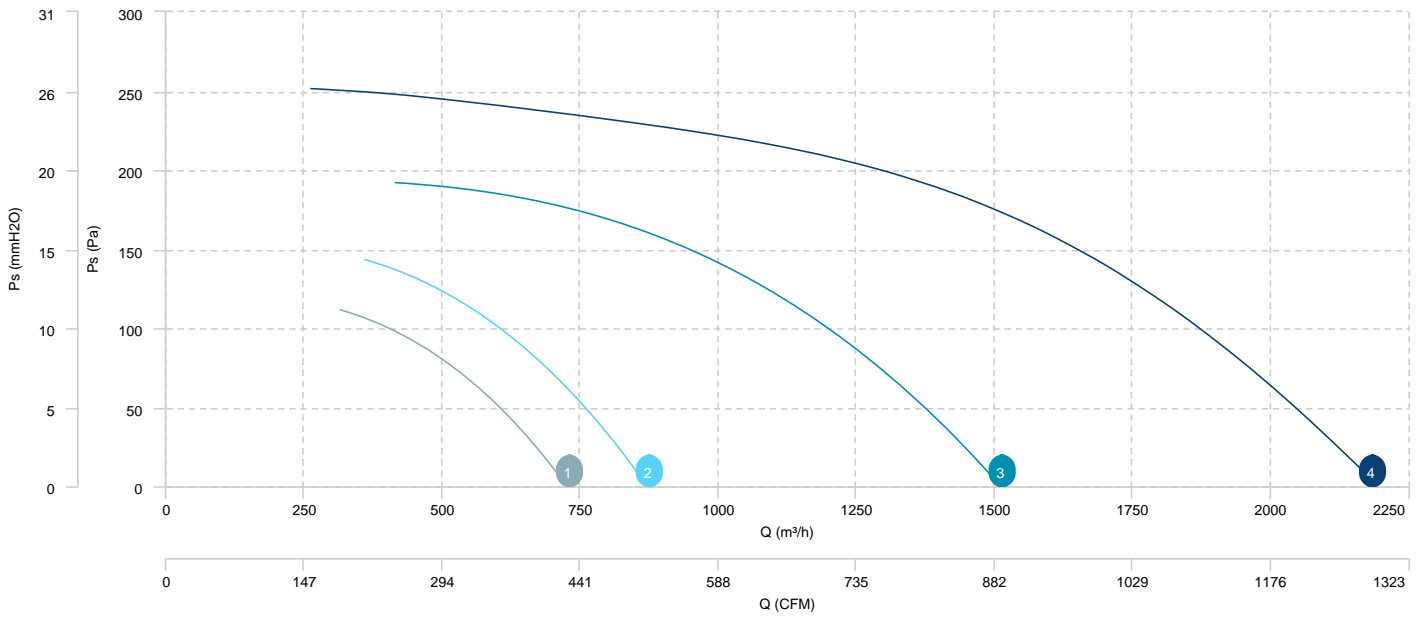
**1** CTH3-A 225 M4 0,12kW  
ATEX

**2** CTH3-A 250 M4 0,12kW  
ATEX

**3** CTH3-A 280 M4 0,12kW  
ATEX

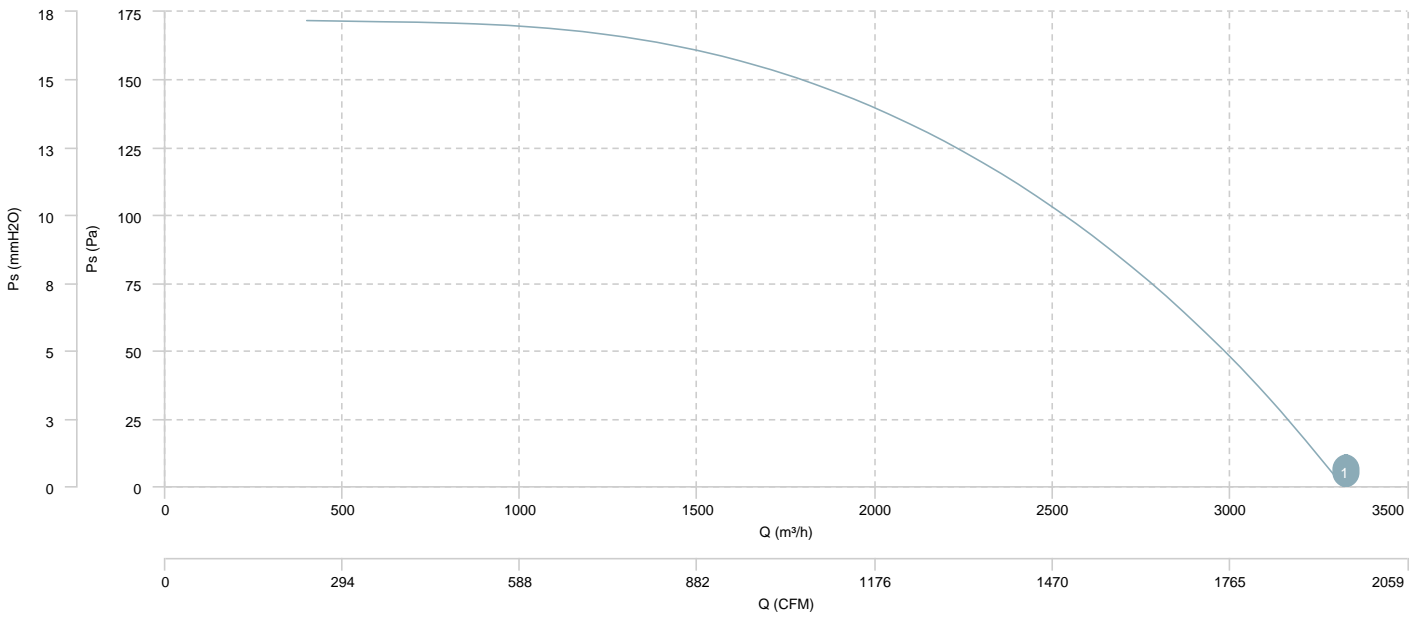
**4** CTH3-A 315 M4 0,25KW  
ATEX

### AIR FLOW - PRESSURE



1 CTH3-A 400 M6 0,37KW  
ATEX

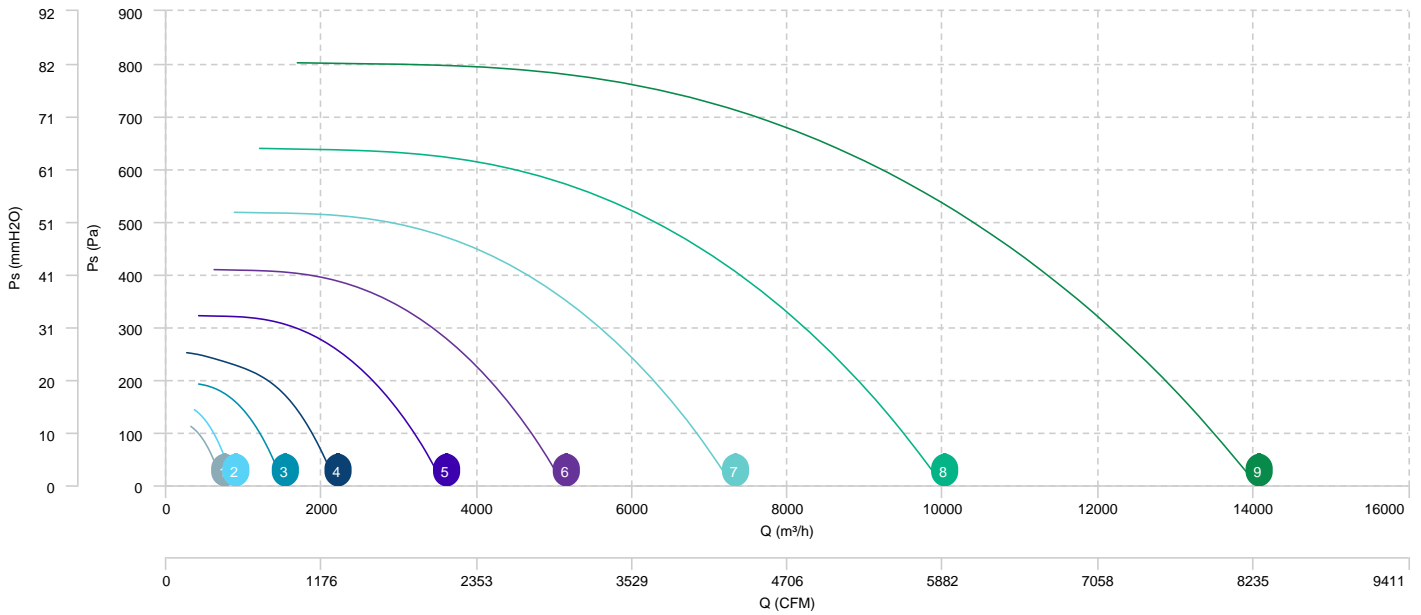
## AIR FLOW - PRESSURE





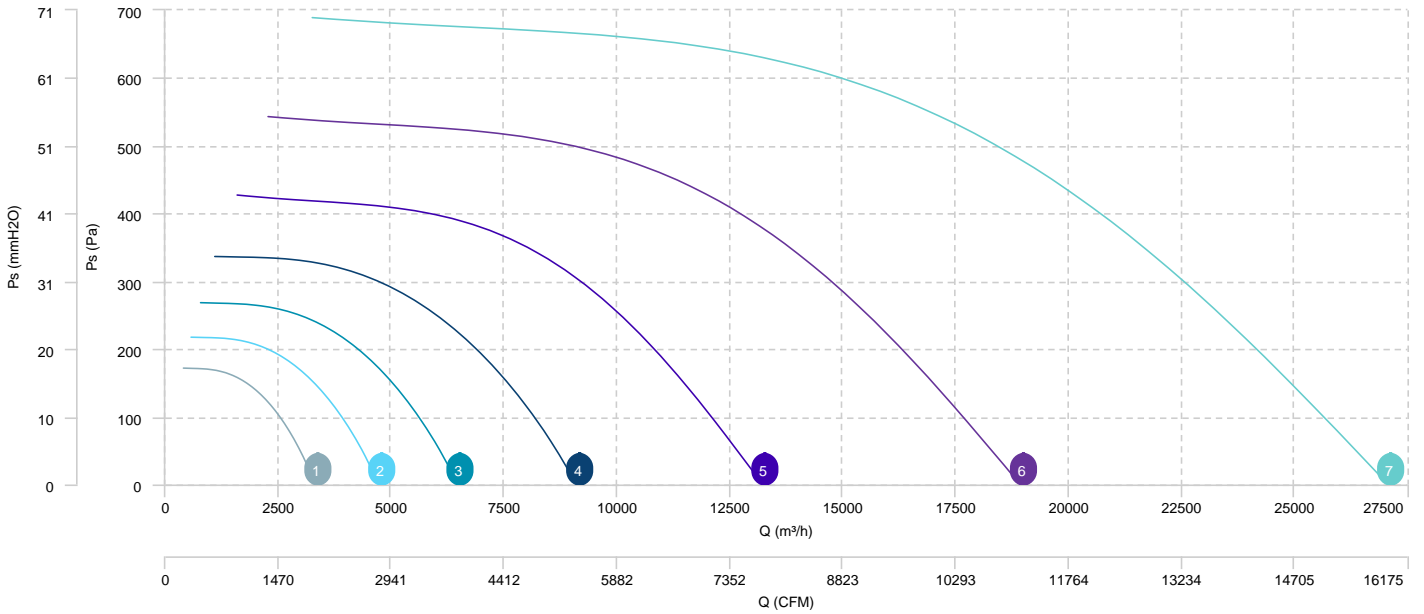
1	CTH3-A 225 T4 0,12kW ATEX	2	CTH3-A 250 T4 0,12kW ATEX	3	CTH3-A 280 T4 0,12kW ATEX	4	CTH3-A 315 T4 0,25KW ATEX
5	CTH3-A 355 T4 0,55KW ATEX	6	CTH3-A 400 T4 0,75KW ATEX	7	CTH3-A 450 T4 1,1KW ATEX	8	CTH3-A 500 T4 1,5KW ATEX
9	CTH3-A 560 T4 3KW ATEX						

## 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	46	54	59	62	63	62	58	55	69
CTH3-A 315 T4 0,25KW ATEX	Inlet	46	54	59	62	63	62	58	55	69
CTH3-A 355 T4 0,55KW ATEX	Inlet	51	59	64	67	68	66	63	60	74
CTH3-A 400 T4 0,75KW ATEX	Inlet	54	62	67	70	71	69	66	63	77
CTH3-A 450 T4 1,1KW ATEX	Inlet	58	66	70	74	75	73	70	67	80
CTH3-A 500 T4 1,5KW ATEX	Inlet	61	69	74	77	78	76	73	70	83
CTH3-A 560 T4 3KW ATEX	Inlet	64	72	77	80	81	80	76	74	87

### 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	45	53	57	61	62	60	57	54	67
CTH3-A 400 T6 0,37KW ATEX	Inlet	45	53	57	61	62	60	57	54	67
CTH3-A 450 T6 0,37KW ATEX	Inlet	48	56	61	64	65	64	60	57	71
CTH3-A 500 T6 0,75KW ATEX	Inlet	52	60	64	67	69	67	64	61	74
CTH3-A 560 T6 0,75KW ATEX	Inlet	55	63	68	71	72	70	67	64	77
CTH3-A 630 T6 1,5KW ATEX	Inlet	59	67	71	74	76	74	71	68	81
CTH3-A 710 T6 2,2KW ATEX	Inlet	62	70	75	78	79	77	74	71	85
CTH3-A 800 T6 4KW ATEX	Inlet	66	74	78	82	83	81	78	75	88