

CBPN/ATEX

Medium pressure single inlet centrifugal fans, equipped with backward curved impeller, designed for spray booths, with ATEX certification



Notified authority: LOM
Identification no.: LOM 03ATEX0147
Motor marking:
Ⓔ II 2G Ex db IIB T4 Gb
Ⓔ II 2G Ex eb IIB T3 Gb
Ⓔ II 2D Ex tb IIC T135 °C Db
Ⓔ II 3G Ex h IIB T3 Gc



Medium pressure single inlet centrifugal fans, equipped with backward curved impeller, designed for spray booths. ATEX 2G or 2D certification with flameproof Ex db, increased safety Ex eb or dust ignition proof Ex tb motor to work in explosive gas or dust atmospheres. They can also be supplied with a motor without ATEX category for ATEX category 3 fans only inside the fan.

Fan:

- Sheet steel casing.
- Backward curved impeller in extremely robust sheet steel, specially designed for clean or dusty air.
- Fitted with inspection hatch.
- Maximum temperature of air to be carried: -25 °C +120 °C.
- Standard marking Ex db version with flameproof motor (Ex db): II 2G Ex h IIB T4 Gb.
- Standard marking Ex eb version with increased safety motor (Ex eb): II 2G Ex h IIB T3 Gb.
- Standard marking for Ex n version with motor without ATEX category: II 3G Ex h IIB T3 Gc only inside the fan.

Motor:

- Class F motors with ball bearings and ATEX certification flameproof Ex db, increased safety Ex eb or dust ignition proof Ex tb. Also motor without ATEX classification.
- Three-phase 230/400 V 50 Hz (up to 4 kW) and 400/690 V 50 Hz (powers greater than 4 kW).
- Working temperature: -20 °C +40 °C.

Finish:

- Anti-corrosive with ATEX paint, free of iron components, in polyester resin polymerized at 190 °C, after degreasing with phosphate-free nanotechnological treatment.

On request:

- Motors with built-in PTC.
- Special windings for different voltages and frequencies.
- ATEX construction for flammable dust.
- ATEX fan with greater protection than the standard marking.

Order code

CBPN/ATEX	—	1856	—	4	—	T	—	4	—	2G Ex eb
↓		↓		↓		↓		↓		↓
CBPN/ATEX: Medium pressure single inlet centrifugal fans, equipped with backward curved impeller, designed for spray booths, with ATEX certification		Impeller size		Number of motor poles 4=1500 r/min 50 Hz		T = Three-phase		Motor power (HP)		2G Ex eb: for zones 1 and 2 2G Ex db: for zones 1 and 2 2D Ex tb: for zones 21 and 22 3G Ex n: for inside zone 2

Technical characteristics

Model	Speed (r/min)	Maximum admissible current (A)			Installed power (kW)	Maximum flow rate (m³/h)	Sound pressure level¹ dB (A) Irradiated	Approx. weight (Kg)	
		230V	400V	690V				Ex eb	Ex db
CBPN/ATEX-1445-4T	1435	4.54	2.61		1.10	8240	64	78	80
CBPN/ATEX-1650-4T-2	1400	6.93	4.00		1.50	11140	74	91	93
CBPN/ATEX-1650-4T-3	1440	8.3	4.77		2.20	12800	68	93	95
CBPN/ATEX-1856-4T-4	1445	11.27	6.48		3.00	14690	77	111	113
CBPN/ATEX-1856-4T-5.5	1460	15.29	8.79		4.00	17200	71	115	118
CBPN/ATEX-2063-4T	1455		18.50	10.64	5.50	24400	74	175	187

1. The noise level values are pressures in dB(A) measured at a distance of 3 metres in a free field.



Erp. (Energy Related Products)

Information on Directive 2009/125/EC can be downloaded from the SODECA website or the QuickFan selector programme.

Acoustic characteristics

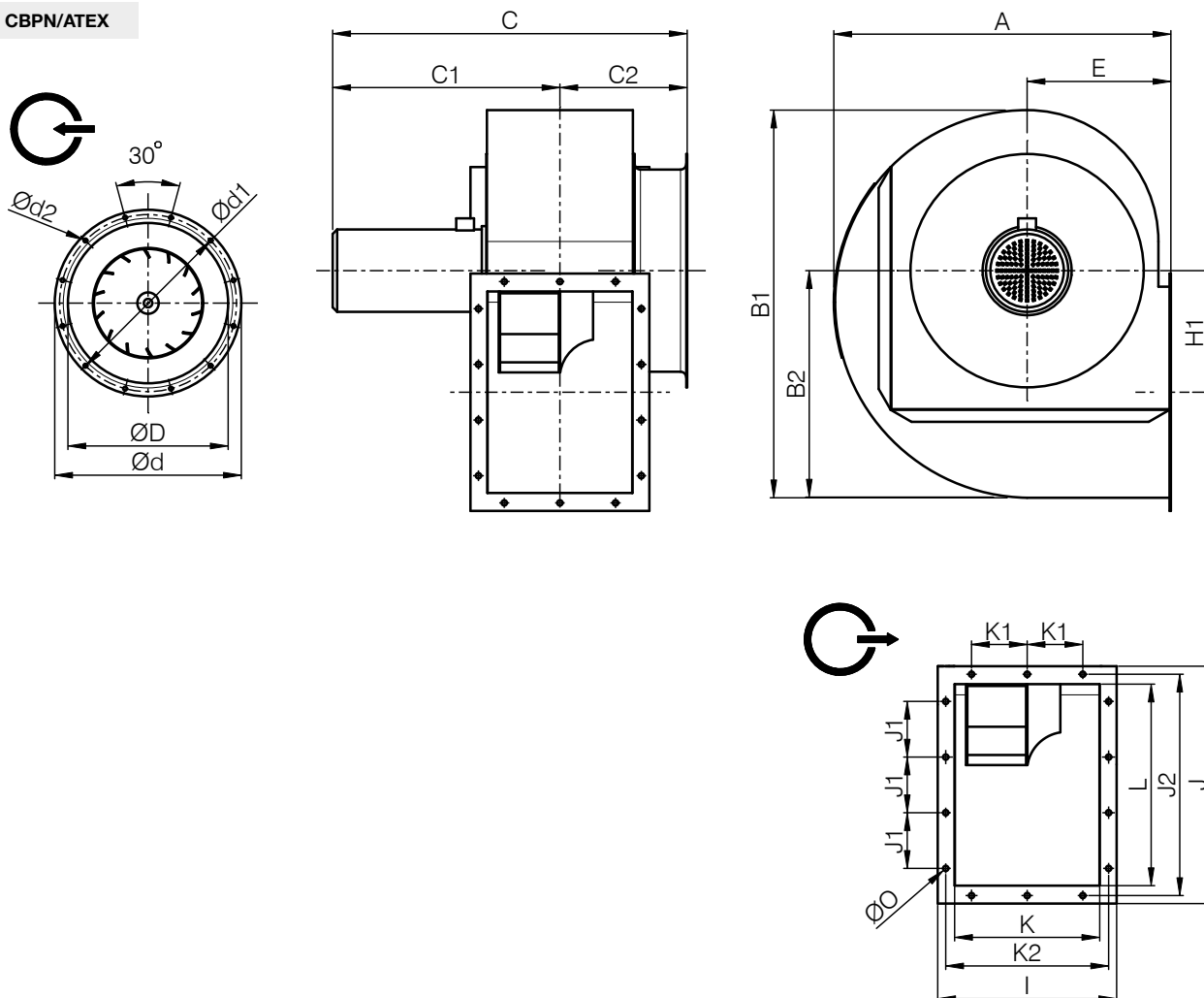
The values given are obtained under laboratory conditions according to ISO 3744.
Irradiated sound power spectrum $L_w(A)$ in dB(A) per Hz frequency band

	63	125	250	500	1000	2000	4000	8000
CBPN/ATEX-1445-4T	62	73	78	78	80	76	70	60
CBPN/ATEX-1650-4T-2	66	77	82	82	84	81	74	64
CBPN/ATEX-1650-4T-3	66	76	82	82	84	80	73	64

	63	125	250	500	1000	2000	4000	8000
CBPN/ATEX-1856-4T-4	69	80	85	86	87	84	77	67
CBPN/ATEX-1856-4T-5.5	69	80	85	86	87	84	77	67
CBPN/ATEX-2063-4T	72	83	88	89	90	87	80	70

Dimensions mm

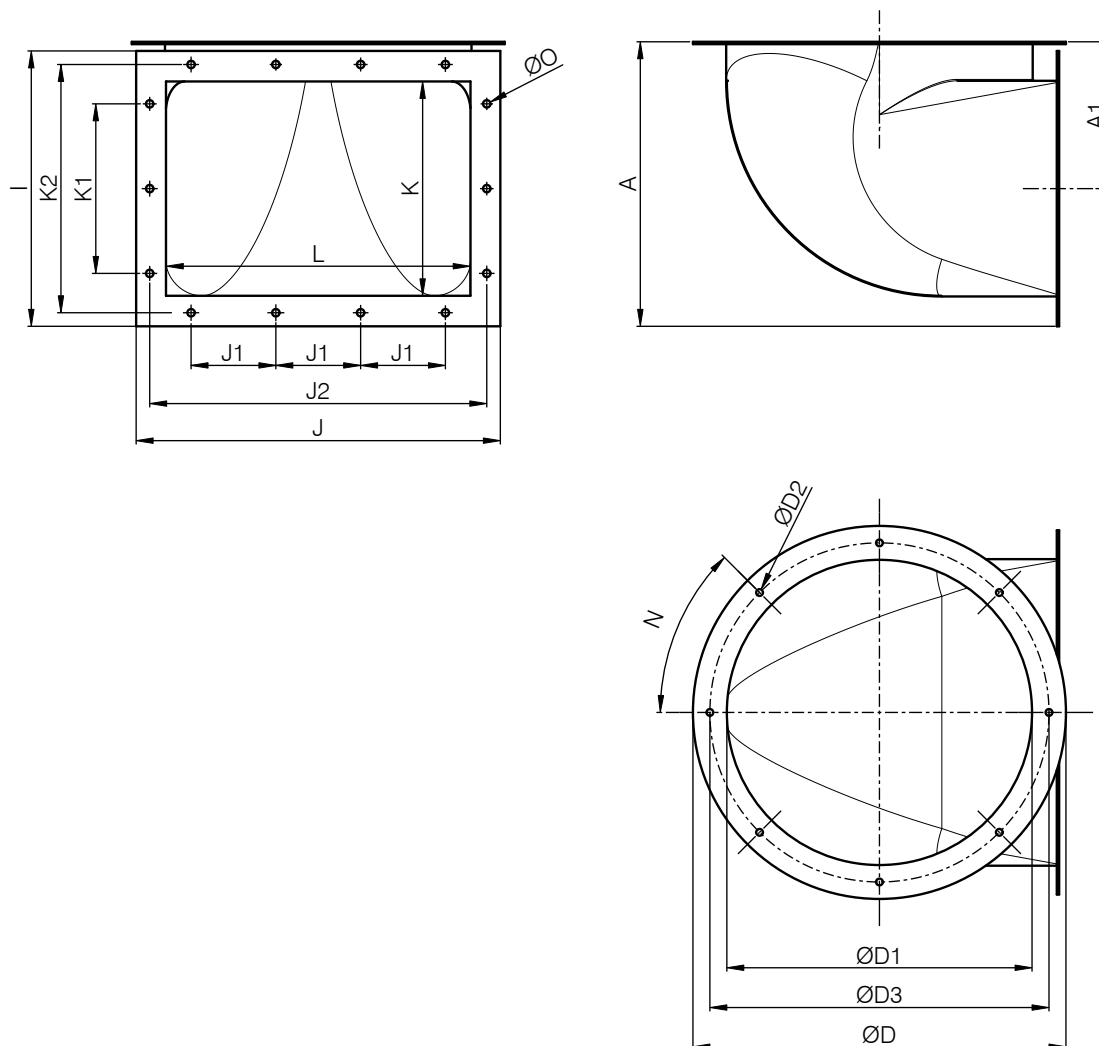
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	A	B1	B2	C	C1	C2	E	H1	I	J	J1	J2	K	K1	K2	L	$\varnothing d$	$\varnothing D$	$\varnothing d_1$	$\varnothing d_2$	$\varnothing O$
CBPN/ATEX-1445-4T	757	871	510	797	511	285	323	273	402	533	125	497	326	125	366	453	524	450	497	11	12
CBPN/ATEX-1650-4T-2	847	992	567	839	535	304	358	301	441	587	125	551	359	125	405	507	590	505	551	11	12
CBPN/ATEX-1650-4T-3	847	992	567	899	595	304	358	301	441	587	125	551	359	125	405	507	590	505	551	11	12
CBPN/ATEX-1856-4T-4	947	1094	626	939	615	324	402	331	504	670	160	630	403	160	464	570	668	560	629	11	12
CBPN/ATEX-1856-4T-5.5	947	1094	626	929	605	324	402	331	504	670	160	630	403	160	464	570	668	560	629	11	12
CBPN/ATEX-2063-4T	1057	1232	705	1066	715	351	450	375	553	738	160	698	458	160	513	645	720	635	698	11	14

Dimensions mm

BIC/90



	A	A1	I	J	J1	J2	K	K1	K2	L	N	ØD	ØD1	ØD2	ØD3	ØO
BIC/90-1445	419.5	216.5	406	537	125	497	316	250	366	449	8x45°	550	450	10	500	11
BIC/90-1650	456	233.5	445	591	125	551	356	250	405	501	12x30°	600	500	10	560	11
BIC/90-1856	535	278	514	670	160	630	415	320	464	570	16x22.5°	680	560	13	629	13
BIC/90-2063	594	307.5	573	748	160	698	454	320	513	648	12x30°	730	640	13	690	11

Accessories



INT/ATEX



RPA



B



BIC



BIC/90



ACE/ATEX

Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm

Pe= Static pressure in mm H₂O, Pa and inwg

