

CENTRIFUGAL FANS CBTR Series



NEW



Description

Range of single inlet centrifugal fans with direct drive, equipped with two-pole three phase motors.

They are designed to move hot air up to a temperature of 80 °C.

They can be supplied in a high temperature version, with a cooling impeller between the motor and the fan impeller (Max.150 °C).

Explosion proof versions in accordance to ATEX Directive, for three phase models:

- Increased safety II2G EExII T3

- Flame proof II2G EExdIIBT5 or EExdIICT4

Applications

The CBTR range is perfectly adaptable to numerous industrial applications such as:

- Localised extraction
- Machine cooling
- Industrial processes
- Transport of materials

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- CENTRIFUGAL FANS WITH BACKWARD CURVED BLADES
- HIGH PRESSURE

Construction

The "CBTR" range is supplied as standard with a very rigid painted steel plate scroll. The scroll can be orientated and is supplied with an RD-270 orientation.

Centrifugal impellers with welded, backward curved blades. They are painted and designed to achieve maximum performance with a minimum sound level.

The motors are:

- Three-phase 230/400V 50Hz (up to 3kW) or 400V 50Hz
- IP 55, Class F
- Under request: 2/4 pole motors

Technical characteristics

Type	Speed (r.p.m.)	Power (motor) (kW)	Rated current (A)	Airflow maximum (m ³ /h)	Sound pressure levels* (dB(A))	Temperature driven air (maximum) (°C)	Weight (kg)
CBTR/2-355	2830	1,1	2,50	1720	72	80	38
CBTR/2-400	2850	2,2	4,40	2690	76	80	54
CBTR/2-450	2880	4	7,40	3730	80	80	81
CBTR/2-500	2850	5,5	10,90	4570	83	80	109
CBTR/2-560	2860	11	20	5660	87	80	144

*Average sound pressure levels, measured at 1,5 metres in dB(A) in open air, at the inlet side of the fans.

Acoustic characteristics

Sound power spectrum: The sound levels shown in these tables are sound power levels at the discharge and inlet, in dB(A) for frequency ranges at three points on the curve: A- free discharge, B- medium pressure, C- maximum pressure.

			63	125	250	500	1000	2000	4000	8000
CBTR/ 2-355	Inlet	A	75	71	77	82	86	83	78	77
		B	53	63	69	78	83	79	72	69
		C	55	58	64	72	79	74	68	62
	Discharge	A	65	70	75	83	89	86	79	73
		B	60	65	70	78	84	81	74	68
		C	56	61	66	74	80	77	70	64

			63	125	250	500	1000	2000	4000	8000
CBTR/ 2-500	Inlet	A	65	80	88	96	97	93	88	89
		B	61	76	84	92	93	89	84	85
		C	55	70	78	86	87	83	78	79
	Discharge	A	71	79	90	95	101	94	88	83
		B	67	75	86	91	97	90	84	79
		C	63	71	82	87	93	86	80	75

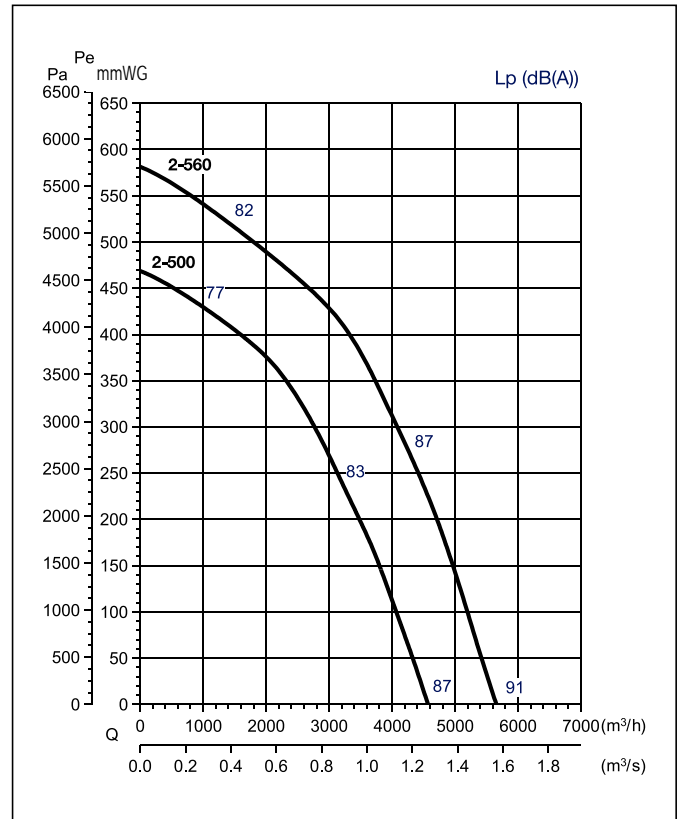
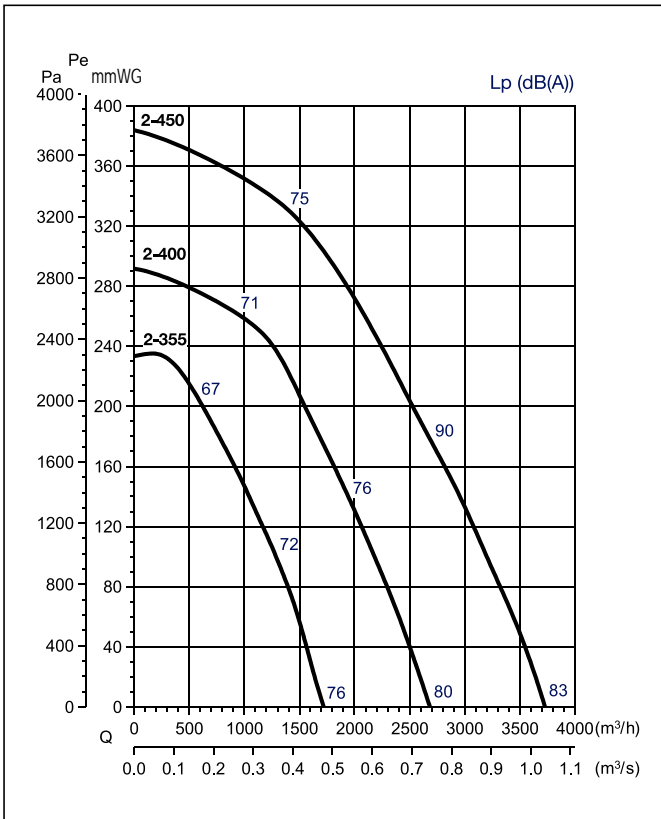
			63	125	250	500	1000	2000	4000	8000
CBTR/ 2-400	Inlet	A	78	77	81	88	89	86	82	82
		B	74	73	77	84	85	82	78	78
		C	69	68	72	79	80	77	73	73
	Discharge	A	75	75	83	88	93	89	82	77
		B	71	71	79	84	89	85	78	73
		C	66	66	74	79	84	80	73	68

			63	125	250	500	1000	2000	4000	8000
CBTR/ 2-560	Inlet	A	68	83	92	100	100	96	93	94
		B	64	79	88	96	96	92	89	90
		C	59	74	83	91	91	87	84	85
	Discharge	A	71	81	94	100	105	98	92	88
		B	67	77	90	96	101	94	88	84
		C	62	72	85	91	96	89	83	79

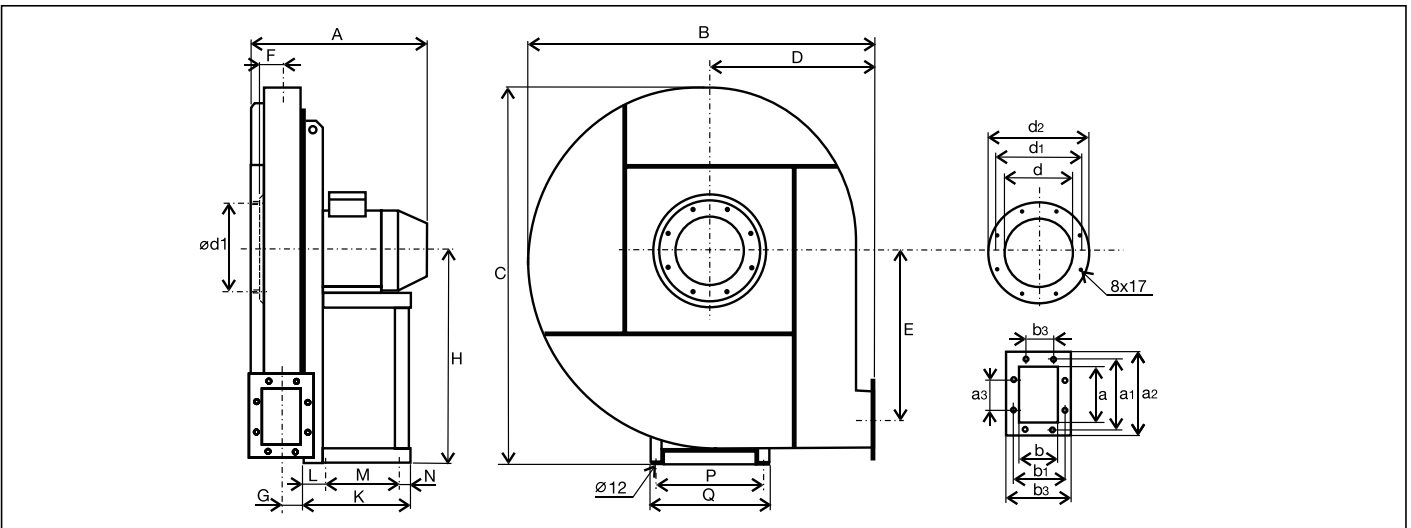
			63	125	250	500	1000	2000	4000	8000
CBTR/ 2-450	Inlet	A	62	77	84	92	93	89	84	84
		B	59	74	81	89	90	86	81	81
		C	54	69	76	84	85	81	76	76
	Discharge	A	71	79	87	92	98	92	85	80
		B	67	75	83	88	94	88	81	76
		C	62	70	78	83	89	83	76	71

Characteristic curves

- Q = Air volume in, m³/hr and m³/s
- Pe = Static pressure in mmWG and Pa.
- Dry air at 20 °C and 760 mmHg.
- Air flow data in accordance with the following standards: UNE 100-212-89, BS 848, Part 1, AMCA 210-85 and ASHRAE 51-1985.



Dimensions (mm)



Type	A*	B	C	D	E	F	G	H	K	L	M	N	P	Q	a	a1	a2	a3	b	b1	b2	b3	d	d1	d2
CBTR/2-355	400	535	615	250	220	61	56	355	198	45	139	14	203	225	146	182	216	112	105	139	175	-	184	219	254
CBTR/2-400	455	590	655	280	242	67	61	375	223	55	151	17	234	260	164	200	234	112	117	151	187	-	204	241	274
CBTR/2-450	555	645	715	300	269	76	70	400	280	30	227	23	289	324	183	219	253	112	131	165	201	-	228	265	298
CBTR/2-500	585	715	800	335	302	83	78	450	338	40	275	23	337	372	205	241	275	112	146	182	216	112	254	292	324
CBTR/2-560	750	805	890	375	343	92	87	500	467	50	389	28	395	440	229	265	299	112	164	200	234	112	285	332	365

* Orientative figure, depending on the brand of motor fitted.