

# CMR/ATEX *Robust centrifugal medium-pressure fans with backwards-curved impeller, with ATEX certification*



Robust centrifugal single-inlet, medium-pressure fans to work in explosive atmospheres.

**Fan:**

- Steel sheet casing
- Impeller with backward-curved blades made from robust sheet steel
- Spark-proof inlet ring in copper or aluminium

**Motor:**

- Class F insulation, IP55 with ATEX certification, Ex"e" explosion-proof or Ex"d" flame-resistant
- Three phase, 50Hz, 230/400V motors up to and including 4kW. 400/690V over 4kW
- Max. air temperature to transport: -20°C+ 80°C

Ex "e" marked:  $\text{CE} \text{Ex} \text{II} 2\text{G} \text{Ex} \text{e}$   
 Ex "d" marked:  $\text{CE} \text{Ex} \text{II} 2\text{G} \text{Ex} \text{d}$   
 Ex tc marked:  $\text{CE} \text{Ex} \text{II} 3\text{D} \text{Ex} \text{tc}$   
 Ex tb marked:  $\text{CE} \text{Ex} \text{II} 2\text{D} \text{Ex} \text{tb}$   
**Notified authority: L.O.M**  
**Identification No: LOM3ATEX147**

**Finish:**

- Rust retardant finish with ATEX paint, containing no ferrous components, in polyester resin polymerised at 190°C, after phosphate free pre-treatment

**On request:**

- Built-in motors with PTC
- Special windings for different electrical supplies and frequencies
- ATEX construction for different categories
- Made from stainless steel

**Order code**



Robust centrifugal medium-pressure fans fitted with multi-blade impeller with ATEX certification

**Marked:**  
 $\text{CE} \text{Ex} \text{II} 2\text{G} \text{c}$   
 $\text{CE} \text{Ex} \text{II} 2\text{D} \text{c}$   
 $\text{CE} \text{Ex} \text{II} 3\text{D} \text{c}$

Impeller size

Number of motor pole  
 2=2900 r/min. 50 Hz  
 4=1400 r/min. 50 Hz  
 6=900 r/min. 50 Hz

T=Three-phase  
 Motor power (HP)

Ex-e: marked:  $\text{CE} \text{Ex} \text{II} 2\text{G} \text{Ex} \text{e} \text{IIB} \text{T}3$   
 Ex "d" marked:  $\text{CE} \text{Ex} \text{II} 2\text{G} \text{Ex} \text{d} \text{IIB} \text{T}5$   
 Ex tc marked:  $\text{CE} \text{Ex} \text{II} 3\text{D} \text{Ex} \text{tc}$   
 Ex tb marked:  $\text{CE} \text{Ex} \text{II} 2\text{D} \text{Ex} \text{tb}$

**Technical characteristics**

Model	Speed (r/min)	Maximum current (A)			Installed power (kW)	Maximum airflow (m³/h)	Sound pressure level dB(A)	Approx. weight with motor (Kg)	
		230V	400V	690V				Ex-e	Ex-d
CMR-1240-4T/ATEX	1410	3.81	2.20		0.75	5800	71	70	84
CMR-1445-2T/ATEX	2880		15.70	9.06	7.50	16500	87	141	163
CMR-1445-4T/ATEX	1410	5.20	3.00		1.10	8030	72	93	112
CMR-1650-2T/ATEX	2930		22.00	12.70	11.00	18850	89	178	258
CMR-1650-4T/ATEX	1400	6.93	4.00		1.50	10500	74	114	134
CMR-1650-6T/ATEX	930	4.16	2.40		0.75	7410	64	111	130
CMR-1856-4T/ATEX	1440	12.30	7.10		3.00	15150	79	152	175
CMR-1856-6T/ATEX	910	5.89	3.40		1.10	10050	70	145	166
CMR-2063-4T/ATEX	1440		12.00	6.93	5.50	24450	80	225	264
CMR-2063-6T/ATEX	940	7.62	4.40		1.50	16100	71	209	233
CMR-2271-4T/ATEX	1460		23.80	13.74	11.00	34610	85	315	412
CMR-2271-6T/ATEX	945	14.72	8.50		3.00	22750	76	280	320
CMR-2380-4T/ATEX	1465		42.00	24.00	22.00	48000	83	416	495
CMR-2380-6T/ATEX	965		16.40	9.47	7.50	30000	75	363	441

**Acoustic features**

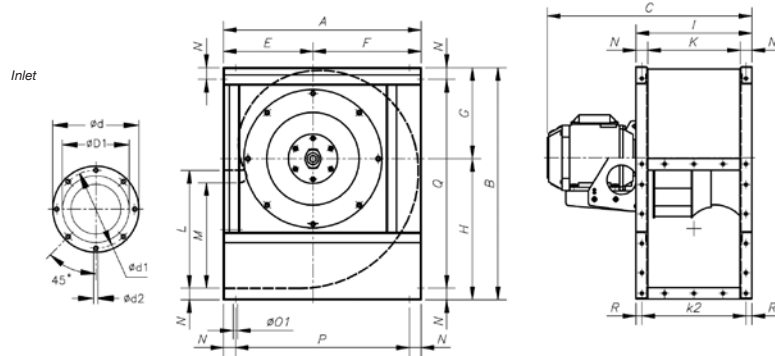
The specified values are determined according to free field measurements of pressure and sound levels in dB(A) at an equivalent distance of twice the fan's span plus the turbine's diameter, with a minimum of 1.5 m.

Sound power Lw(A) spectrum in dB(A) via frequency band in Hz.

Model	Lp dB (A)	63	125	250	500	1000	2000	4000	8000	Model	Lp dB (A)	63	125	250	500	1000	2000	4000	8000
CMR-1240-4T/ATEX	71	56	70	76	79	79	80	70	59	CMR-1856-6T/ATEX	70	61	69	81	83	80	81	71	60
CMR-1445-2T/ATEX	87	73	85	83	95	93	97	99	89	CMR-2063-4T/ATEX	80	80	85	91	93	91	88	81	73
CMR-1445-4T/ATEX	72	59	72	78	83	80	83	78	64	CMR-2063-6T/ATEX	71	69	70	82	82	81	83	73	63
CMR-1650-2T/ATEX	89	73	81	85	99	97	99	99	88	CMR-2271-4T/ATEX	85	83	84	93	96	98	99	95	82
CMR-1650-4T/ATEX	74	64	74	82	84	83	85	76	66	CMR-2271-6T/ATEX	76	73	73	87	86	90	90	79	68
CMR-1650-6T/ATEX	64	53	65	72	77	73	69	62	54	CMR-2380-4T/ATEX	83	76	78	94	91	96	97	93	82
CMR-1856-4T/ATEX	79	69	78	91	87	90	91	85	71	CMR-2380-6T/ATEX	75	68	70	86	83	88	89	85	74

**Dimensions in mm**

**CMR-1240...2271**

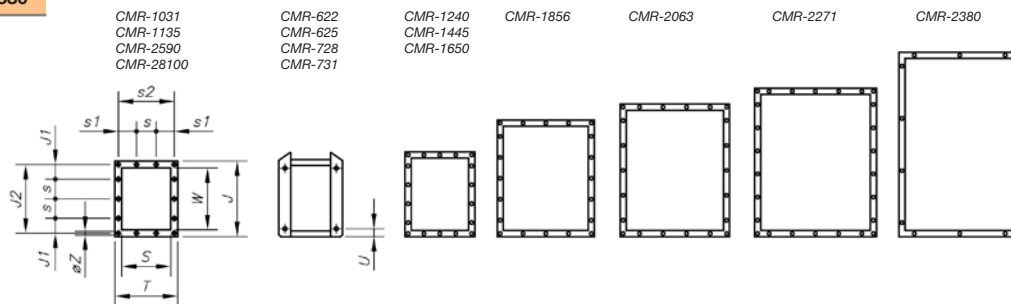


Ex-"e" Ex-"d"

Model	A	B	C	C	ØD1*	Ød	Ød1	Ød2	E	F	G	H	I	K	k2	L	M	N	Ø01	P	Q	R
CMR-1240-4T/ATEX	673	790	596	638	400	472	444	M.10	305	368	310	480	395	315	355	400	358	40	11	593	710	20
CMR-1445-2T/ATEX	765	880	774	857	450	522	494	M.10	350	415	339	541	445	355	403	450	404	45	11	675	790	21
CMR-1445-4T/ATEX	765	880	679	687	450	522	494	M.10	350	415	339	541	445	355	403	450	404	45	11	675	790	21
CMR-1650-2T/ATEX	832	970	945.5	1018	500	582	555	M.10	375	457	378	592	490	400	450	500	445	45	13	742	880	20
CMR-1650-4T/ATEX	832	970	724.5	724.5	500	582	555	M.10	375	457	378	592	490	400	450	500	445	45	13	742	880	20
CMR-1650-6T/ATEX	832	970	724.5	724.5	500	582	555	M.10	375	457	378	592	490	400	450	500	445	45	13	742	880	20
CMR-1856-4T/ATEX	925	1084	798	889	560	645	615	M.10	415	510	426	658	550	450	500	560	493	50	13	825	984	25
CMR-1856-6T/ATEX	925	1084	780.5	809	560	645	615	M.10	415	510	426	658	550	450	500	560	493	50	13	825	984	25
CMR-2063-4T/ATEX	1037	1218	937	1020	630	720	688	M.10	465	572	477	741	620	500	560	630	530	60	13	917	1098	30
CMR-2063-6T/ATEX	1037	1218	839	930	630	720	688	M.10	465	572	477	741	620	500	560	630	530	60	13	917	1098	30
CMR-2271-4T/ATEX	1173	1375	1129	1201	710	800	768	M.12	525	648	538	837	690	560	625	710	603	65	13	1043	1245	32.5
CMR-2271-6T/ATEX	1173	1375	973	1056	710	800	768	M.12	525	648	538	837	690	560	625	710	603	65	13	1043	1245	32.5

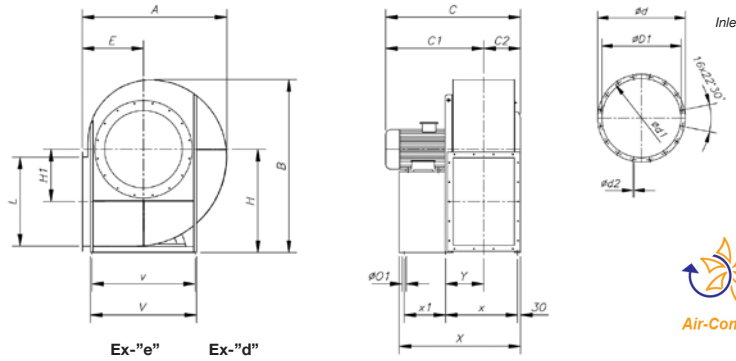
\* Recommended nominal diameter for duct.

**CMR-1240...2380**



Model	T	J	J1	J2	S	s	s1	s2	W	Øz	U
CMR-1240	395	480	70	440	315	100	77.5	355	400	11	-
CMR-1445	445	540	99	498	355	100	102.5	403	450	11	-
CMR-1650	490	590	88	550	400	125	100	450	500	11	-
CMR-1856	550	660	55	610	450	125	125	500	560	13	-
CMR-2063	620	750	95	690	500	125	92.5	560	630	13	-
CMR-2271	690	840	75	775	560	125	62.5	625	710	13	-
CMR-2380	680	920	160	871	560	200	140	639	800	14	-

CMR-2380



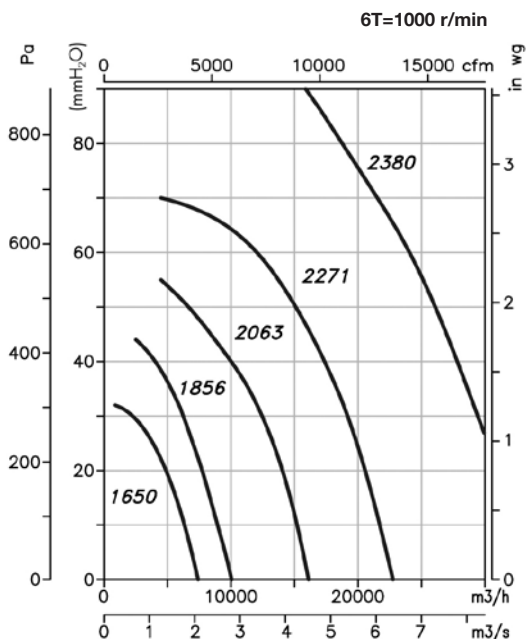
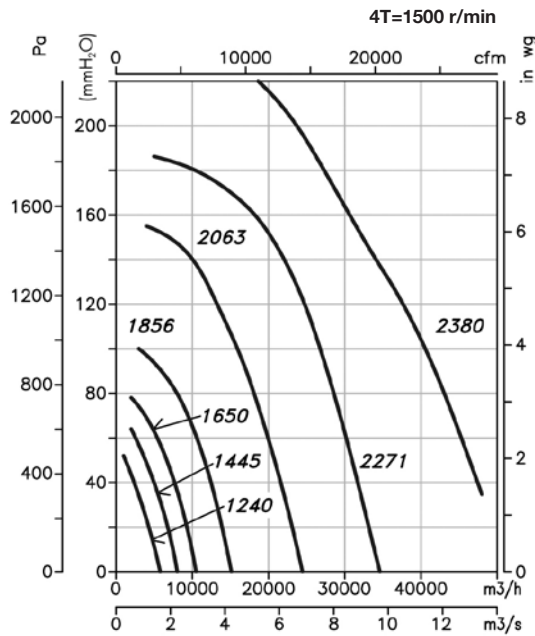
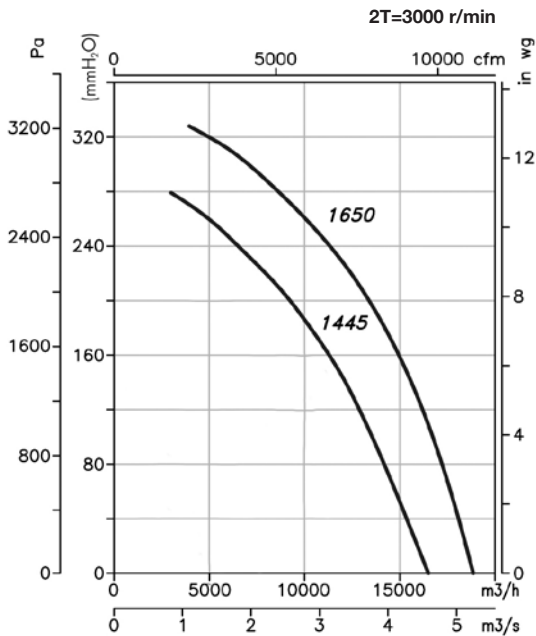
Model	A	B	C	C1	C	C1	C2	ØD1*	Ød	Ød1	Ød2	E	H	H1	L	Ø1	V	v	X	x	x1	Y
CMR-2380-4T/ATEX	1350	1660	1019	733	1063	777	286	808	906	861	11.5	560	1000	500	800	17	930	870	1102.5	667.5	370	352.5
CMR-2380-6T/ATEX	1350	1660	590	304	716	430	286	808	906	861	11.5	560	1000	500	800	17	930	870	1102.5	667.5	370	352.5

\* Recommended nominal diameter for duct.

Characteristic Curves

Q = Airflow in m<sup>3</sup>/h, m<sup>3</sup>/s and cfm.

Pe = Static pressure in mmH<sub>2</sub>O, Pa and inwg.



Positions

LG 270 standard supply



Accessories

See accessories section.

