

# TCR



## 400°C/2h and 300°C/2h centrifugal fans with backward-curved impeller.

Robust centrifugal medium-pressure single-inlet fans to work inside fire danger zones at 400°C/2h, fitted with impellers backward-curved blades.

- Fan:
- Steel sheet casing
  - Impeller with backward-curved blades made from robust sheet steel and heat-resistant paint
  - Approval according to Standard EN 12101-3:2002/AC:2006, with certification No: 0370-CPR-0384

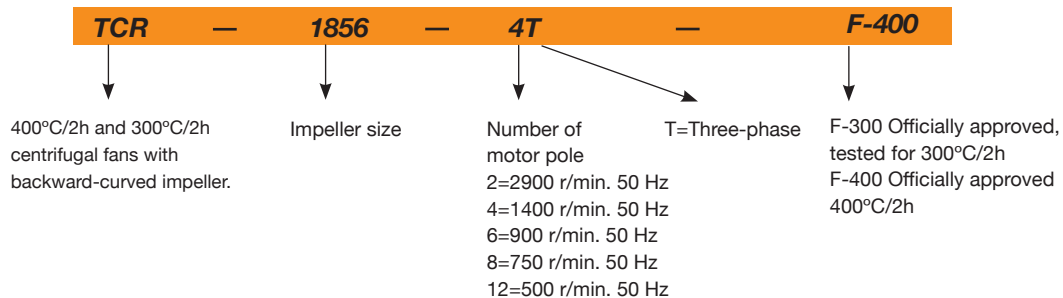
- Motor:
- Class H motors, ongoing use S1 and emergency use S2, with ball bearings and IP55 protection
  - Three-phase 230/400V.-50Hz. (up to 4HP) and 400/690V.-50Hz. (power over 4HP)
  - Max. air temperature to transport: S1 Service -20°C+ 120°C for ongoing use, S2 Service 300°C/2h, 400°C/2h

- Finish:
- Anti-corrosive finish in polyester resin, polymerised at 190°C after phosphate free pre-treatment



High-performance and robust backward-curved impeller.

### Order code



### Positions

LG 270 standard supply



### Technical characteristics

Model	Speed (r/min)	Maximum admissible current (A)			Power installed (kW)	Airflow maximum (m³/h)	Sound pressure level dB(A)	Approx. weight (Kg)
		230V	400V	690V				
TCR-1240-4T	1430	3.80	2.20		0.75	5800	71	76
TCR-1445-4T	1420	4.70	2.70		1.10	8030	72	98
TCR-1650-4T	1425	6.60	3.80		1.50	10500	74	118
TCR-1650-6T	940	4.40	2.60		0.75	7410	64	118
TCR-1856-4T	1430	11.40	6.60		3.00	15150	79	158
TCR-1856-6T	945	6.40	3.70		1.10	10050	70	150
TCR-2063-4T	1430		11.50	6.64	5.50	24450	80	257
TCR-2063-6T	945	7.40	4.30		1.50	16100	71	212
TCR-2271-4T	1455		23.00	13.28	11.00	34610	85	380
TCR-2271-6T	945	15.00	8.70		3.00	22750	76	313



**Erp. BEP (best efficiency point) characteristics**

<b>&lt;(°)</b>	Angle of inclination of the blades, in degrees	<b>SR</b>	Specific ratio
<b>PN</b>	Motor's nominal power in kW	<b>ηe[%]</b>	Efficiency
<b>MC</b>	Measurement category	<b>N</b>	Efficiency grade
<b>EC</b>	Efficiency category	<b>[kW]</b>	Input power
<b>S</b>	Static	<b>[m³/h]</b>	Airflow
<b>T</b>	Total	<b>[mmH²O]</b>	Static or total pressure (According to EC)
<b>VSD</b>	Variable-speed drive	<b>[RPM]</b>	Speed

Modelo	MC	EC	VSD	SR	ηe[%]	N	(kW)	(m³/h)	(mmH₂O)	(RPM)
TCR-1240-4T	A	S	NO	1.00	45.7%	58.5	0.608	2924	34.89	1461
TCR-1445-4T	A	S	NO	1.01	50.2%	60.4	1.065	3883	50.49	1442
TCR-1650-4T	A	S	NO	1.01	50.7%	58.7	1.759	5378	60.90	1437
TCR-1650-6T	A	S	NO	1.00	45.5%	58.3	0.592	4109	24.02	969
TCR-1856-4T	A	S	NO	1.01	54.3%	59.4	3.277	8342	78.29	1440
TCR-1856-6T	A	S	NO	1.00	48.4%	58.7	1.054	5632	33.24	963
TCR-2063-4T	B	T	NO	1.01	70.5%	72.4	6.537	13932	121.38	1432
TCR-2063-6T	A	S	NO	1.00	56.7%	64.2	1.930	9620	41.77	948
TCR-2271-4T	B	T	NO	1.01	69.9%	69.6	13.078	22380	149.81	1455
TCR-2271-6T	B	T	NO	1.01	57.4%	61.5	4.069	15016	57.11	945

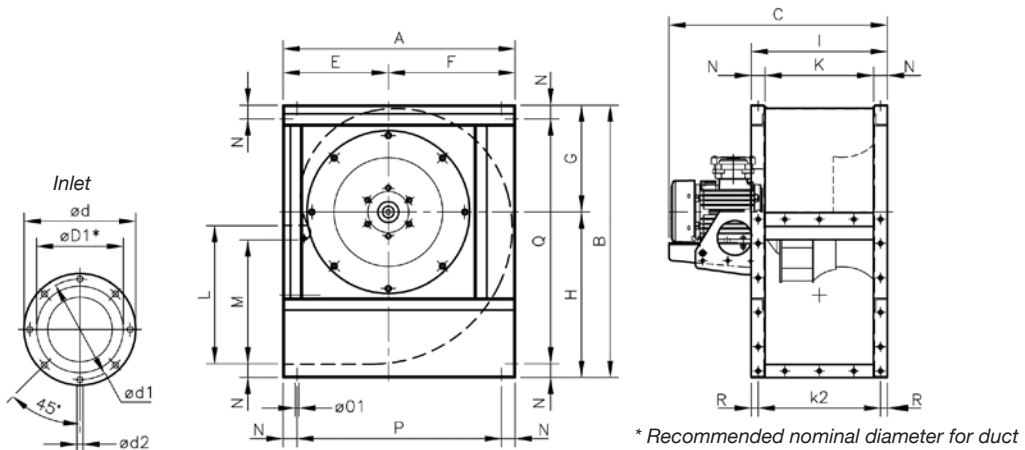
**Acoustic features**

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.

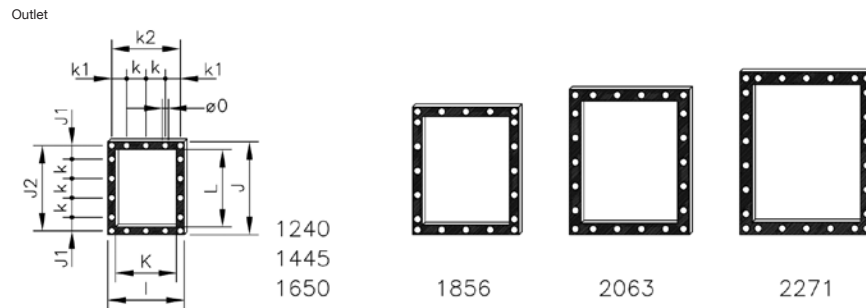
Model	63	125	250	500	1000	2000	4000	8000	Model	63	125	250	500	1000	2000	4000	8000
1240	56	70	76	79	79	80	70	59	1856-6	61	69	81	83	80	81	71	60
1445	59	72	78	83	80	83	78	64	2063-4	80	85	91	93	91	88	81	73
1650-4	64	74	82	84	83	85	76	66	2063-6	69	70	82	82	81	83	73	63
1650-6	53	65	72	77	73	69	62	54	2271-4	83	84	93	96	98	99	95	82
1856-4	69	78	91	87	90	91	85	71	2271-6	73	73	87	86	90	90	79	68

**Dimensions in mm**



Model	A	B	C	ØD1*	Ød	Ød1	Ød2	E	F	G	H	M	N	Ø01	P	Q	R
1240-4T	673	790	634	400	472	444	M.8	305	368	310	480	358.5	40	11	593	710	20
1445-4T	765	880	727	450	522	494	M.8	350	415	339	541	407	45	11	675	790	20
1650-4T	832	970	770.5	500	582	555	M.10	375	457	378	592	445	45	13	742	880	20
1650-6T	832	970	770.5	500	582	555	M.10	375	457	378	592	445	45	13	742	880	20
1856-4T	925	1084	857.5	560	645	615	M.10	415	510	424	660	493	50	13	825	984	25
1856-6T	925	1084	828	560	645	615	M.10	415	510	424	660	493	50	13	825	984	25
2063-4T	1037	1218	955	630	720	688	M.10	465	572	477	741	530	60	13	917	1098	30
2063-6T	1037	1218	932	630	720	688	M.10	465	572	477	741	530	60	13	917	1098	30
2271-4T	1173	1375	1149	710	800	768	M.12	525	648	538	837	603.5	65	13	1043	1245	32.5
2271-6T	1173	1375	1112	710	800	768	M.12	525	648	538	837	603.5	65	13	1043	1245	32.5

**Dimensions in mm**

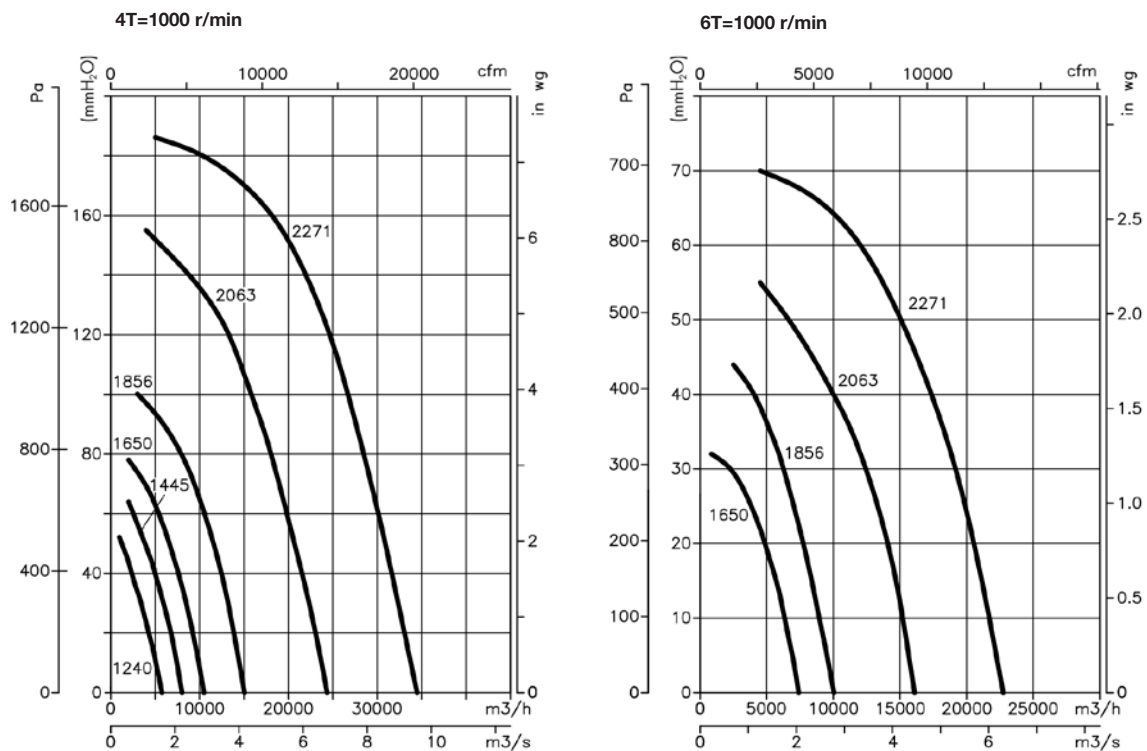


Model	I	J	J1	J2	K	k	k1	k2	L	Ø0
1240	395	480	70	440	315	100	77.5	355	400	11
1445	445	540	99	498	355	100	102.5	405	450	11
1650	490	590	87.5	550	400	125	100	450	500	13
1856	550	660	55	610	450	125	125	500	560	13
2063	620	750	95	690	500	125	92.5	560	630	13
2271	690	840	75	775	560	125	62.5	625	710	13

**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.



**Accessories**

See accessories section

