



# Cross-Flow Fans

## TF 45 Series

Cross flow fans are particularly indicated for uses where, in limited space, high air volume is required with low noise and regular air-flow.

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**Technical specifications:**

- single phase, 2-shaded poles, impedance protected motor, built according to the “CE” mark requirements, in compliance with EN 60335-1 standard, with self-aligning and self lubricating sleeve bearings with big oil reservoir;
- motor with minimum 130 “B” insulation class;
- suitable for continuous operation in ambient temperature from -10°C to +50°C;
- electrical connection by 6,3x0,8 mm, radial or axial, male faston-type connectors, directly fixed on coil;
- constant thickness Ø 45 mm aluminium impeller with forward curved blades fitted with intermediate reinforcement discs;
- housing made of pre-galvanized metal sheet, thanks to the high aeraulic efficiency it guarantees an excellent yield in terms of air flow, static pressure and low noise level.

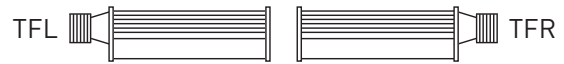
**On request:**

- version with IMQ - CSV approved motor;
- motor with different powers and insulation classes: 155 “F” - 180 “H”;
- supply voltage from 12V to 400V 50/60Hz;
- version with dual voltage and/or double rotation speed;
- electrical connection by means of different cable lengths;
- motor coil winding with IP55 protection;
- protection against dust and/or humidity;
- thermal protector and/or thermal fuse;
- housing with cataphoresis coating;
- “HT” version for operation from -30° C to 100° C;
- built in compliance with UL-CSA standards;
- “BB” version with 2 626 ZZ type ball bearings on the motor.

**Product Identification Code**

TF	R	45	240	20	T	1	A	SN	HT	BB	230	50
1	2	3	4	5	6	7	8	9	10	11	12	13

- 1) TF series: “standard” housing
- 2) motor position  
**R:** motor on the right of the air outlet  
**L:** motor on the left of the air outlet

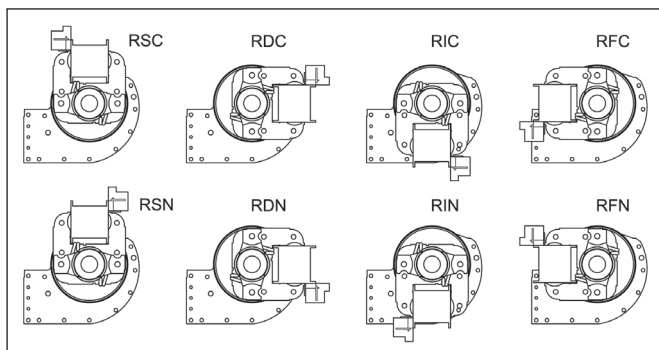


- 3) fan blade Dimension
- 4) fan blade nominal length  
120 - 180 - 240 - 300 - 360 mm
- 5) motor stack height  
10-15-20-30-35 mm
- 6) thermal protection  
**T:** thermal protector  
**F:** thermal fuse  
**blank:** impedance protected
- 7) coil winding code
- 8) electrical connection  
**R:** radial faston-type connectors  
**A:** axial faston-type connectors  
**C:** cables
- 9) motor position  
see table 1 and 2 below
- 10) on request (\*)  
**HT:** high-temperature version  
**IV-IM-PRN:** low temperature with high relative humidity up to 92%  
**INC:** coil insulation with IP55 protection
- 11) on request  
**BB:** ball bearings on motor
- 12) supply voltage
- 13) rated frequency

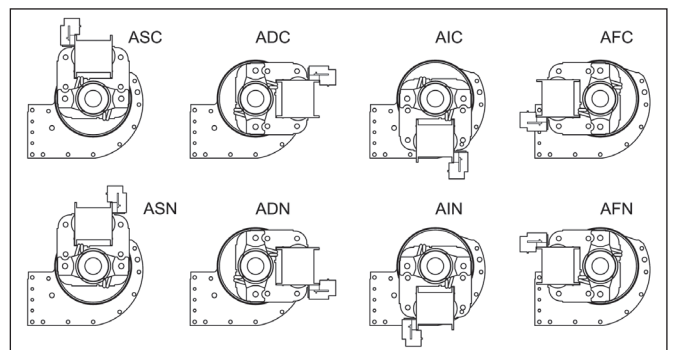
**OUR TECHNICAL AND COMMERCIAL OFFICE CAN ADVISE YOU ON THE VERSION THAT MOST SUITS YOUR APPLICATION NEEDS**

(\*) Impregnated versions:  
**IV version:** impregnated coil through dip-coating using epoxy transparent paint. (standard stator coil dip-coating process).  
**PRN version:** coil coated with black epoxy resin, the coil is protected by a clearly visible layer of resin.  
**IM version:** impregnated coil through dip-coating using transparent epoxy paint with silicone applied on contacts at the end of winding, three-pole wire and coil covered by a nylon cap. The coil is not buried in the resin but visible; caution should be paid when mounting the motor so that the cap open part faces downward to prevent its filling up with condensate.  
**INC version:** coil with IP55 protection, the coil is completely buried into the epoxy resin.

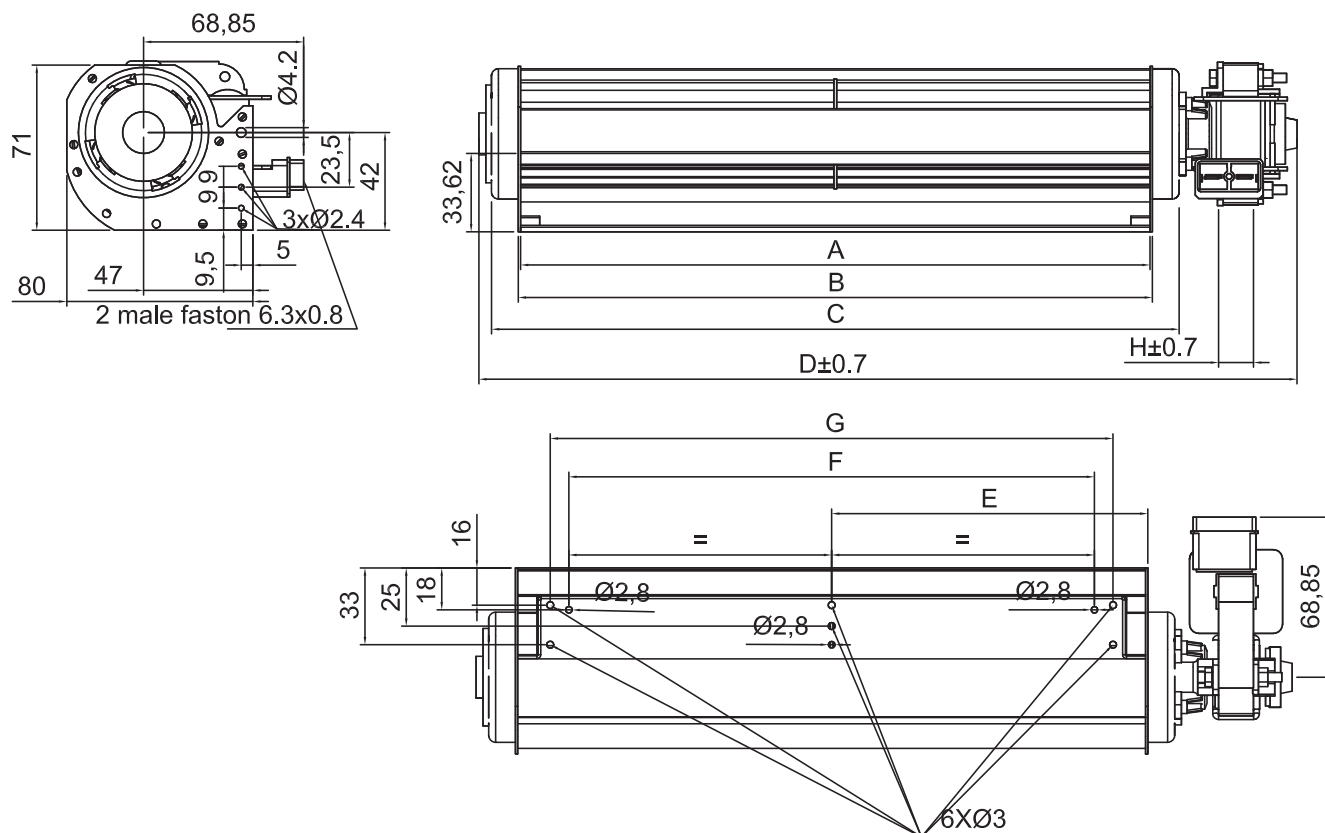
**Motor position -radial faston-type connectors (table 1)**



**Motor position -axial faston-type connectors (table 2)**



**TF 45 dimensions**



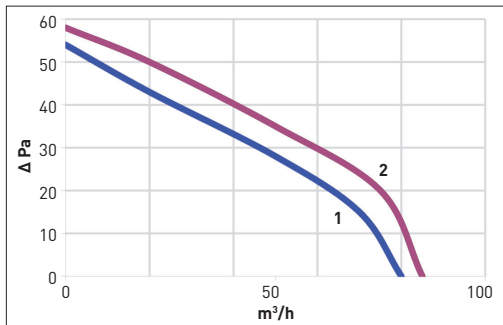
The dimensions are in millimeters.

**TF 45 versions**

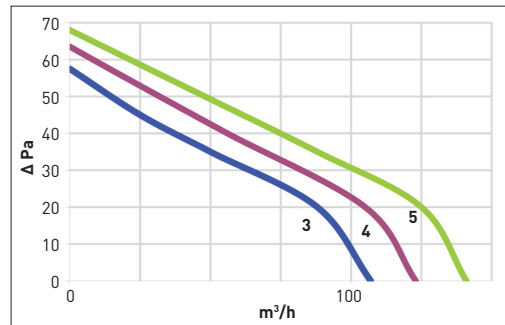
Series	Motor	Dimensions								Input Power (W)	Input Current (A)	RPM	Flow rate (m³/h)	Static pressure (ΔPa)	Curve n°
		A	B	C	D	E	F	G	H						
TF 45-120/15	15-10	120	122	145	201		78	94	15	21.5	0.150	2300	80	54	1
TF 45-120/20	20-1	120	122	145	206		78	94	20	22	0.163	2450	85	58	2
TF 45-180/15	15-3	180	182	205	261	91	138	154	15	24	0.174	1850	107	57.5	3
TF 45-180/20	20-1	180	182	205	266	91	138	154	20	24	0.175	2040	123	63.5	4
TF 45-180/30	30-3	180	182	205	276	91	138	154	30	29	0,203	2500	141	68	5
TF 45-240/15	15-10	240	242	265	321	121	196	212	15	23.62	0.155	1370	110	52	6
TF 45-240/20	20-1	240	242	265	326	121	196	212	20	25.73	0.187	1670	132	63	7
TF 45-240/30	30-1	240	242	265	336	121	196	212	30	36,80	0,273	2450	192	68	8
TF 45-300/15	15-3	300	302	325	381	151	256	272	15	25.4	0.183	1238	131	45	9
TF 45-300/20	20-1	300	302	325	386	151	256	272	20	26.3	0.192	1390	149	50	10
TF 45-300/30	30-1	300	302	325	396	151	256	272	30	40	0.285	2250	265	60	11
TF 45-360/15	15-1	360	362	385	441	181	316	332	15	18,3	0,144	1140	146	43	12
TF 45-360/20	20-1	360	362	385	446	181	316	332	20	23,55	0,177	1270	161	50	13
TF 45-360/30	30-1	360	362	385	456	181	316	332	30	40	0.292	1850	246	59	14
TF 45-360/35	35-2	360	362	385	461	181	316	332	35	48	0.350	2230	284	61	15

Typical curves

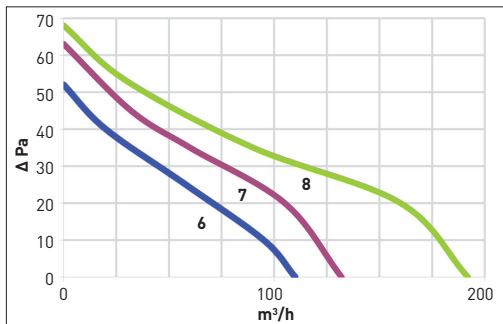
TF 45 120



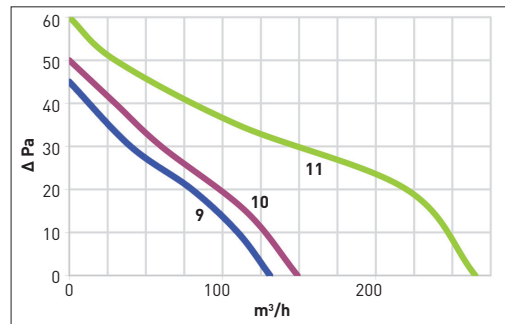
TF 45 180



TF 45 240



TF 45 300



TF 45 360

