



# Cross-flow Fans

## TFD/FFD 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.

The FF-FFD series provides an additional fixing option through 4 +4 extensions placed directly on the side.

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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 60 mm aluminium impeller with forward curved blades fitted with intermediate reinforcement discs;
- housing made of pre-galvanized metal sheet, designed to ensure high aeraulic efficiency 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 black cataphoresis coating;
- several “HT” versions for operation from -30° C to 100° C;
- built in compliance with UL-CSA standards;
- version fitted with ball bearings;
- version built to customers design.

**Product Identification Code**

TFD	180	35	T	1	R	FN	HT	BBBLV	230	50
1	2	3	4	5	6	7	8	9	10	11

- 1) **TFD** series: “standard” housing  
**FFD** series: housing with “ears”  
see FFD series dimensions
- 2) fan blade nominal length  
90 - 120 - 180 - 240 - 270 - 300 - 360 mm
- 3) motor stack height  
15 - 20 - 30 - 35 - 40 mm
- 4) thermal protection  
**T**: thermal protector  
**F**: thermal fuse  
**blank**: impedance protected
- 5) coil winding code
- 6) electrical connection  
**R**: radial faston-type connectors  
**A**: axial faston-type connectors  
**C**: cables
- 7) motor position  
see table 1 and 2 below
- 8) on request (\*)  
**HT**: high-temperature version  
**IV-IM-PRN**: low temperature with high humidity up to 92%  
**INC**: coil insulation with IP55 protection
- 9) on request  
**BB**: ball bearings on motor  
**BBBLV**: ball bearings on motor and impeller
- 10) supply voltage
- 11) rated frequency

(\*) Impregnated versions:

**IV version**: impregnated coil through dip-coating using epoxy transparent paint. (standard stator coil dip-coating process).

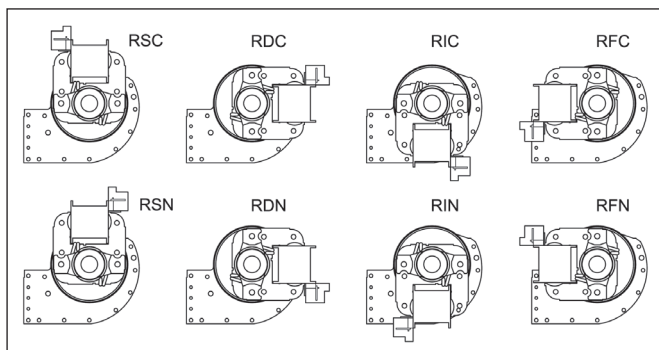
**PRN version**: coil coated with black epoxy resin, the coil is protected by a clearly visible layer of resin.

**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.

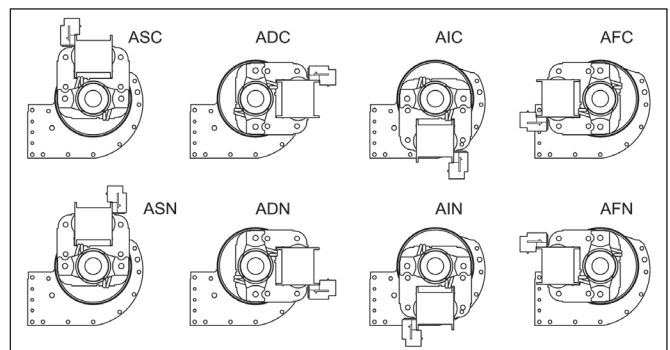
**INC version**: coil with IP55 protection, the coil is completely buried into the epoxy resin.

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YOUR APPLICATION NEEDS**

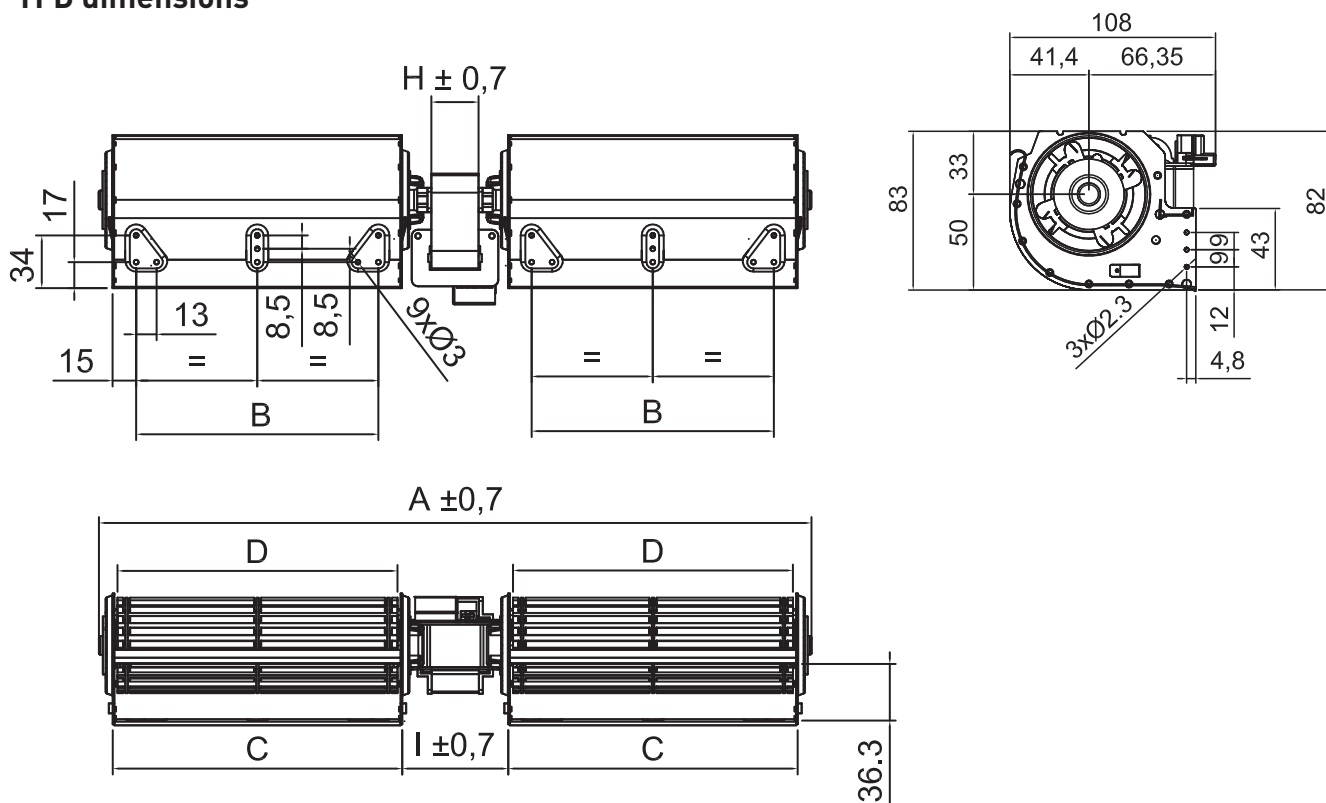
**Motor position -radial faston-type connectors** (table 1)



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



**TFD dimensions**

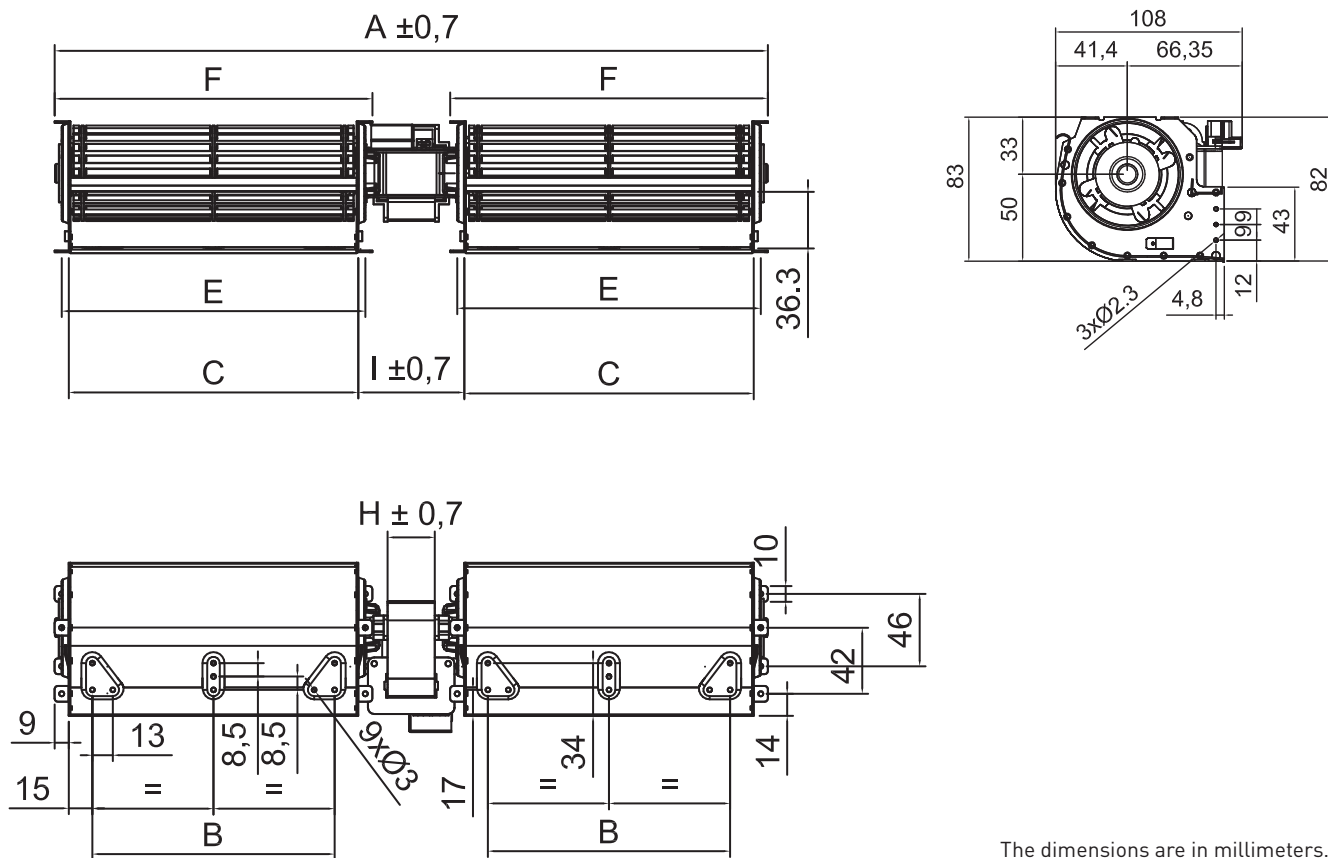


The dimensions are in millimeters.

**TFD versions**

Series	Motor	Dimensions						Input Power (W)	Input Current (A)	RPM	Flow rate (m <sup>3</sup> /h)	Static pressure (ΔPa)	Curve n°
		A	B	C	D	H	I						
TFD 180/20	20-1	445	154	184	194	20	61	23	0,18	990	168	38	1
TFD 180/30	30-1	455	154	184	194	30	71	38	0,29	1645	280	63	2
TFD 180/35	35-1	460	154	184	194	35	76	47	0,35	1880	331	69	3
TFD 240/30	30-1	565	214	244	254	30	71	38	0,29	1170	283	62	4
TFD 240/35	35-1	570	214	244	254	35	76	49	0,37	1320	320	65	5
TFD 240/40	40-1	575	214	244	254	40	81	55	0,43	1460	335	69	6
TFD 270/30	30-1	625	244	274	284	30	71	39	0,29	1090	307	58	7
TFD 270/40	40-1	365	244	274	284	40	81	52	0,42	1270	343	65	8
TFD 300/30	30-1	385	274	304	314	30	71	39	0,29	1060	333	51	9
TFD 300/40	40-1	695	274	304	314	40	81	52	0,41	1120	347	67	10
TFD 360/30	30-1	805	334	364	374	30	71	39	0,3	940	359	44	11
TFD 360/40	40-1	815	334	364	374	40	81	52	0,42	1020	382	65	12

**FFD dimensions**

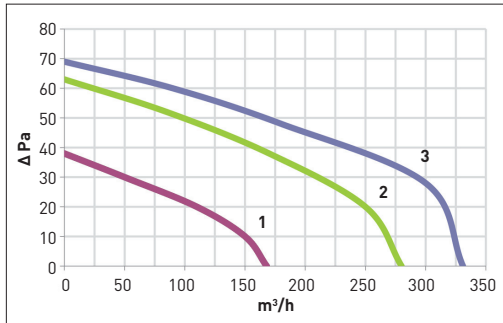


**FFD versions**

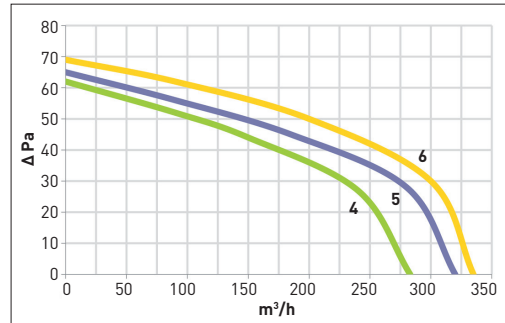
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		A	B	C	E	F	H	I						
FFD 180/20	20-1	445	154	184	193	202	20	61	23	0,18	990	168	38	1
FFD 180/30	30-1	455	154	184	193	202	30	71	38	0,29	1645	280	63	2
FFD 180/35	35-1	460	154	184	193	202	35	76	47	0,35	1880	331	69	3
FFD 240/30	30-1	565	214	244	253	262	30	71	38	0,29	1170	283	62	4
FFD 240/35	35-1	570	214	244	253	262	35	76	49	0,37	1320	320	65	5
FFD 240/40	40-1	575	214	244	253	262	40	81	55	0,43	1460	335	69	6
FFD 270/30	30-1	625	244	274	283	292	30	71	39	0,29	1090	307	58	7
FFD 270/40	40-1	365	244	274	283	292	40	81	52	0,42	1270	343	65	8
FFD 300/30	30-1	385	274	304	313	322	30	71	39	0,29	1060	333	51	9
FFD 300/40	40-1	695	274	304	314	322	40	81	52	0,41	1120	347	67	10
FFD 360/30	30-1	805	334	364	373	382	30	71	39	0,3	940	359	44	11
FFD 360/40	40-1	815	334	364	373	382	40	81	52	0,42	1020	382	65	12

Typical curves

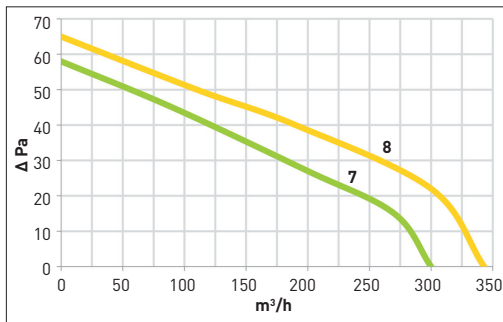
TFD/FFD 180



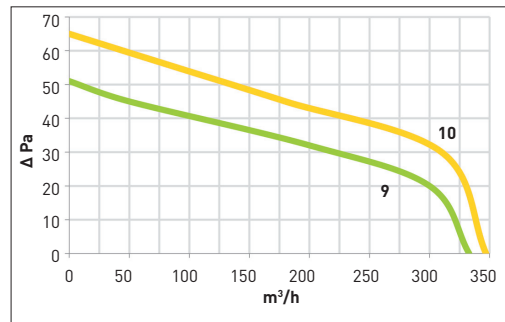
TFD/FFD 240



TFD/FFD 270



TFD/FFD 300



TFD/FFD 360

