

# Cross Flow Fans

## TF/FF Series

Cross flow fans are particularly indicated for big air volume in limited space, with low noise and at the same time regular flow.

FF-FFD series also offer a fixing system with 4+4 extensions put on the side.

## Cross Flow Fans TF/FF Series

### Technical Specifications

- single phase, 2 shaded poles, impedance protected motor, built complying "CE" standards, with self-lubricating and self-aligning sleeve bearings, with big oil reservoir;
- motor with "F" insulation class ( 155°C);
- suitable for continuous duty with room temperature between -10°C and + 60°C;
- electric supply by 6,3x0,8mm male faston-type connectors, directly fixed on coil;
- ø 60mm fan blade with curved forward pales, made with strengthening intermediate discs, with constant thickness;
- housing made of zinc coated metal plate.

### On Request



- motor with "H" insulation class ( 180°C);
- operating voltages between 12V and 400V 50/60Hz;
- version with double voltage and/or double rotation speed;
- electric supply with flying cables of various lengths;
- protection against dust and/or humidity;
- coil bobbin with "IP56" protection class;
- thermal protector and/or thermal cut off protection;
- housing made with superficial cataphoresis treatment;
- "HT" version for functioning between -30°C and + 100°C;
- built complying UL-CSA standards;
- "BB version" with two 626ZZ ball bearings type on the motor;
- "BBBLV" version with two 626ZZ ball bearings type on the motor and 624ZZ ball bearings type on the fan wheel side;
- AISI steel driving shaft 420 with milled plane.



### ID code

TFR18035T1R|FNHT|BBBLV|VR230|50|

1 2 3 4 5 6 7 8 9 10 11 12 13

- |  |  |
|--|--|
| 1) series<br>TF: "standard" housing<br>FF: housing with extra fixing points  | 7) electric supply<br>R: radial faston type connectors<br>A: axial faston type connectors<br>C: flying cable   |
| 2) motor position<br>R: motor on the right side, respect to air outlet<br>L: motor on the left side, respect to air outlet   | 8) motor position<br>fn - dc - sc - ic - fc - sn - dn - in   |
|  TFR/FFR<br> TFL/FFL | 9) on request (*)<br>HT: High temperature<br>IV/IM-PRN: Low temperature with high humidity rate 92%<br>INC: Low temperature with high humidity rate IP56 |
| 3) fan blade nominal length<br>90 - 120 - 180 - 240 - 270 - 300 - 360 mm   | 10) on request<br>BB = ball bearings on the motor<br>BBBLV = ball bearings on the motor and on the fan wheel side  |
| 4) motor stack height<br>10-15-20-30-35-40mm   | 11) on request<br>cooling wheel on the motor side  |
| 5) thermal protection<br>T: thermal protector<br>F: thermal cute off<br>blank: impedance protected   | 12) operating voltage  |
| 6) coil bobbin code  | 13) rated frequency  |

(\*) impregnated versions:

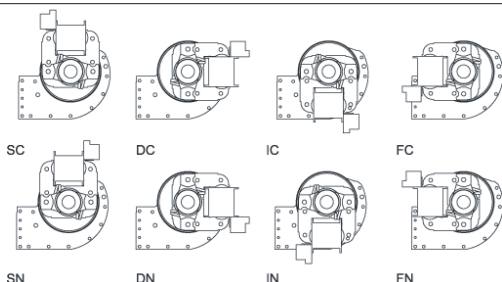
**IV Version:** impregnated coil bobbin through immersion in epoxydic varnish (classic impregnation of stators);

**PRN Version:** coil bobbin spread with black epoxydic resin, the bobbin is protected by a visible layer of resin;

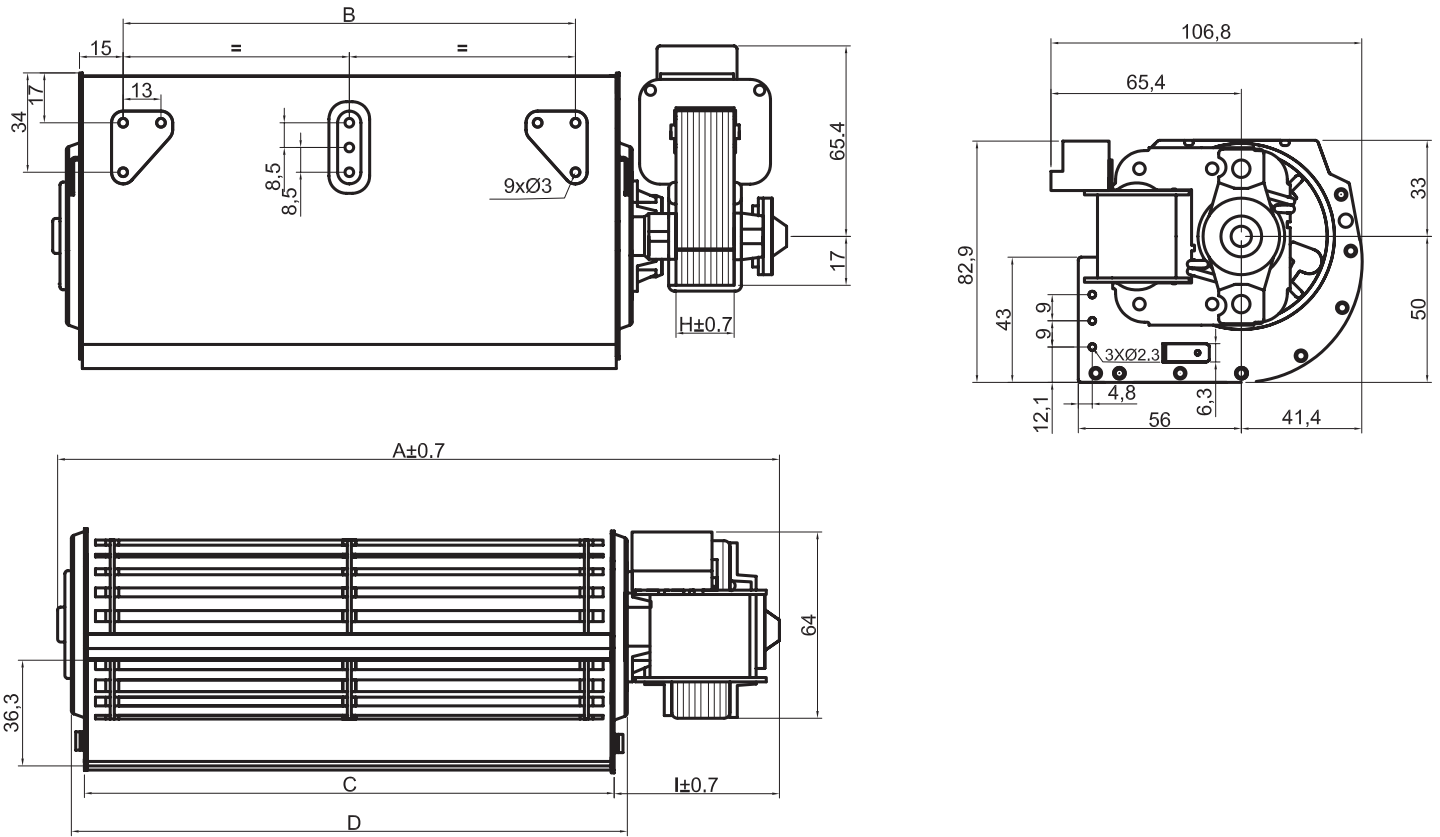
**IM Version:** the coil bobbin is impregnated through immersion in epoxydic varnish with silicon put in the contacts zone at the end of the winding and 3 cores cable, the bobbin is covered by a nylon cap. The coil bobbin is not submerged in the resin, but well visible, it should be necessary to pay attention and to place the motor in a way that the open part of the cap will be directed downward in order to prevent that it could fill up of humidity;

**INC Version:** coil bobbin in "IP56", the bobbin is completely submerged in the epoxydic resin.

### Motor position



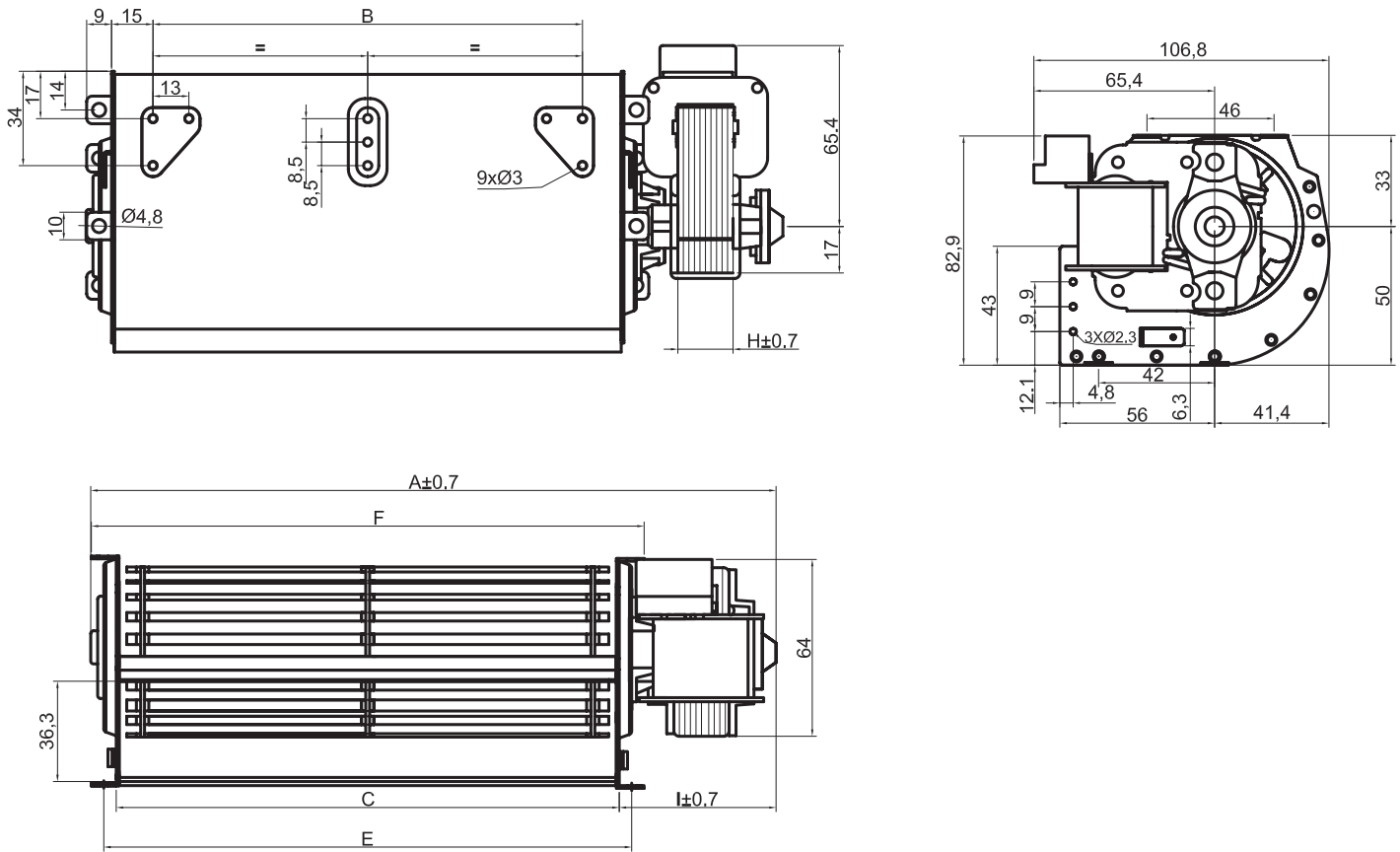
## TF Dimensions



## TF Versions

Series	Motor	Dimensions						Input power W	Input current A	Free air RPM	Free air flow rate	Static pressure PA
		A	B	C	D	H	I					
TF90/15	15-1	156	64	94	104	15	53.5	18	0,140	1900	60	60
TF90/20	20-1	162	64	94	104	20	58.5	23	0,150	2400	80	62
TF120/15	15-1	186	94	124	134	15	53.5	19	0,160	1600	85	58
TF120/20	20-1	191	94	124	134	20	58.5	24	0,170	2150	110	62
TF180/15	15-1	246	154	184	194	15	53.5	19	0,150	1300	100	55
TF180/20	20-1	251	154	184	194	20	58.5	25	0,180	1600	125	60
TF180/30	30-1	261	154	184	194	30	68.5	37	0,280	2400	180	63
TF180/35	35-1	266	154	184	194	35	73.5	42	0,320	2550	200	65
TF240/20	20-1	311	214	244	254	20	58.5	25	0,190	1250	125	55
TF240/35	35-1	326	214	244	254	35	73.5	46	0,340	2500	240	64
TF270/20	20-1	341	244	274	284	20	58.5	26	0,200	1100	130	53
TF270/35	35-1	356	244	274	284	35	73.5	49	0,350	2250	260	63
TF300/20	20-1	371	274	304	314	20	58.5	25	0,195	1200	171	51
TF300/30	30-1	381	274	304	314	30	68.5	43	0,320	1900	270	61
TF300/40	40-1	391	274	304	314	40	78.5	53	0,400	2300	330	64
TF360/20	20-1	431	334	364	374	20	58.5	26	0,195	1050	180	48
TF360/30	30-1	441	334	364	374	30	68.5	45	0,325	1700	285	60
TF360/40	40-1	451	334	364	374	40	78.5	55	0,450	2200	370	62

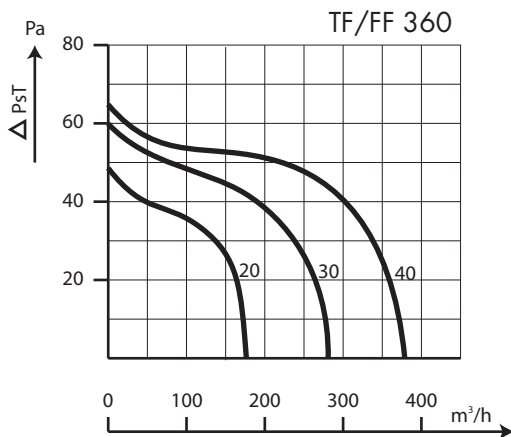
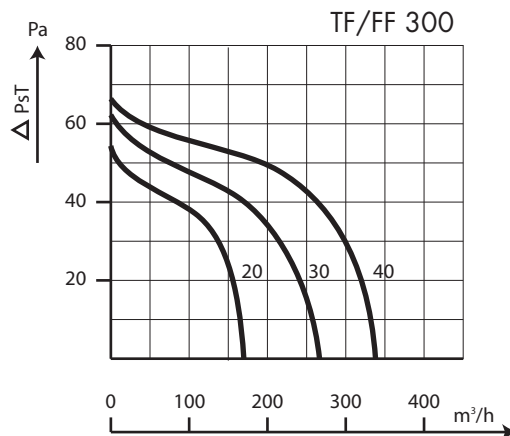
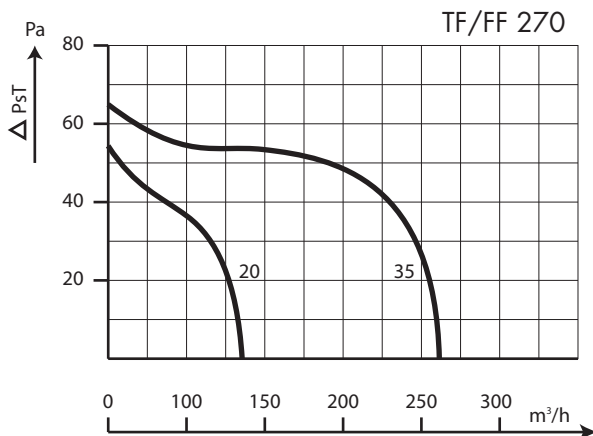
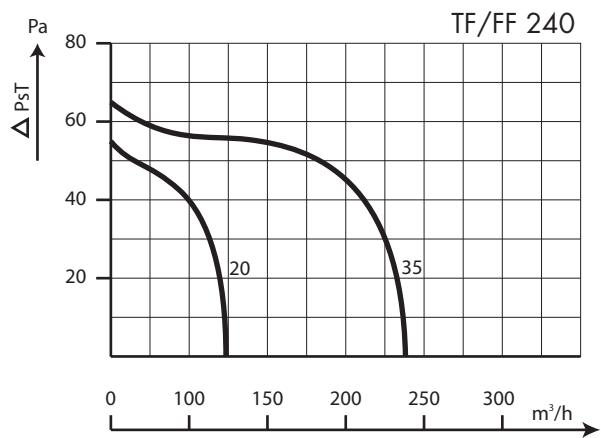
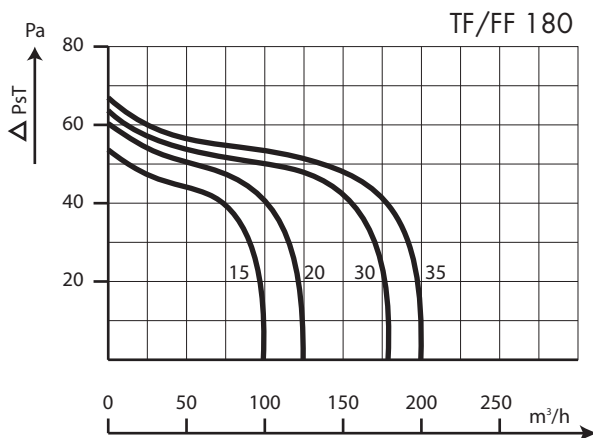
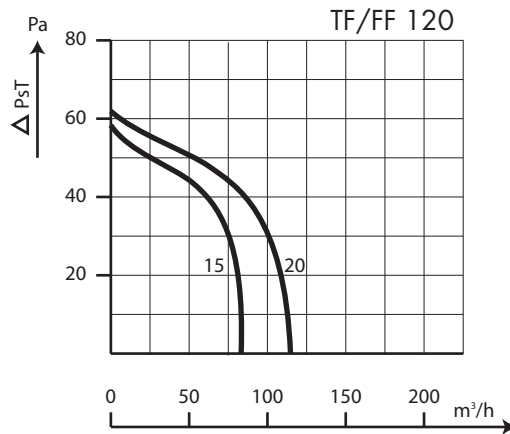
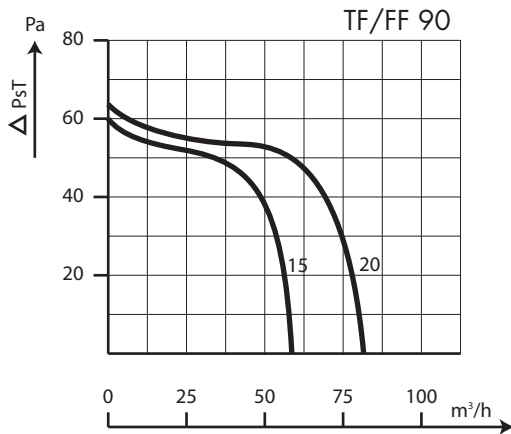
## FF Dimensions



## FF Versions

Series	Motor	Dimensions							Input power W	Input current A	Free air RPM	Free air flow rate	Static pressure PA
		A	B	C	E	F	H	I					
FF90/15	15-1	156	64	94	103	112	15	53.5	18	0,140	1900	60	60
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FF360/40	40-1	451	334	364	373	382	40	78.5	55	0,450	2200	370	62

## Static Pressure Curve



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All motors, fans and blowers are manufactured in our factory in Pieve Emanuele (Milano – Italy).  
Dimensions and specifications can vary. We reserve ourselves the right to make changes anytime we consider it's the case.