

SINGLE INLET CENTRIFUGAL FAN WITH BACKWARD CURVED IMPELLER - TAM/TAT



Description

- Series of single inlet direct-drive centrifugal fans.
- Impeller type TA with radial tip design of curved blades is used.
- The shape of the blades prevents from retaining contamination and makes them suitable for conveying polluted air containing dust and/or oil mist, but not exceeding 200 mg/m³.
- The fans are equipped with manufactured by "TANGRA-AV" Ltd impellers, which are statically and dynamically balanced.

Construction

- The fan casing and steps are produced from galvanized metal sheet with powder coating.

Accessories

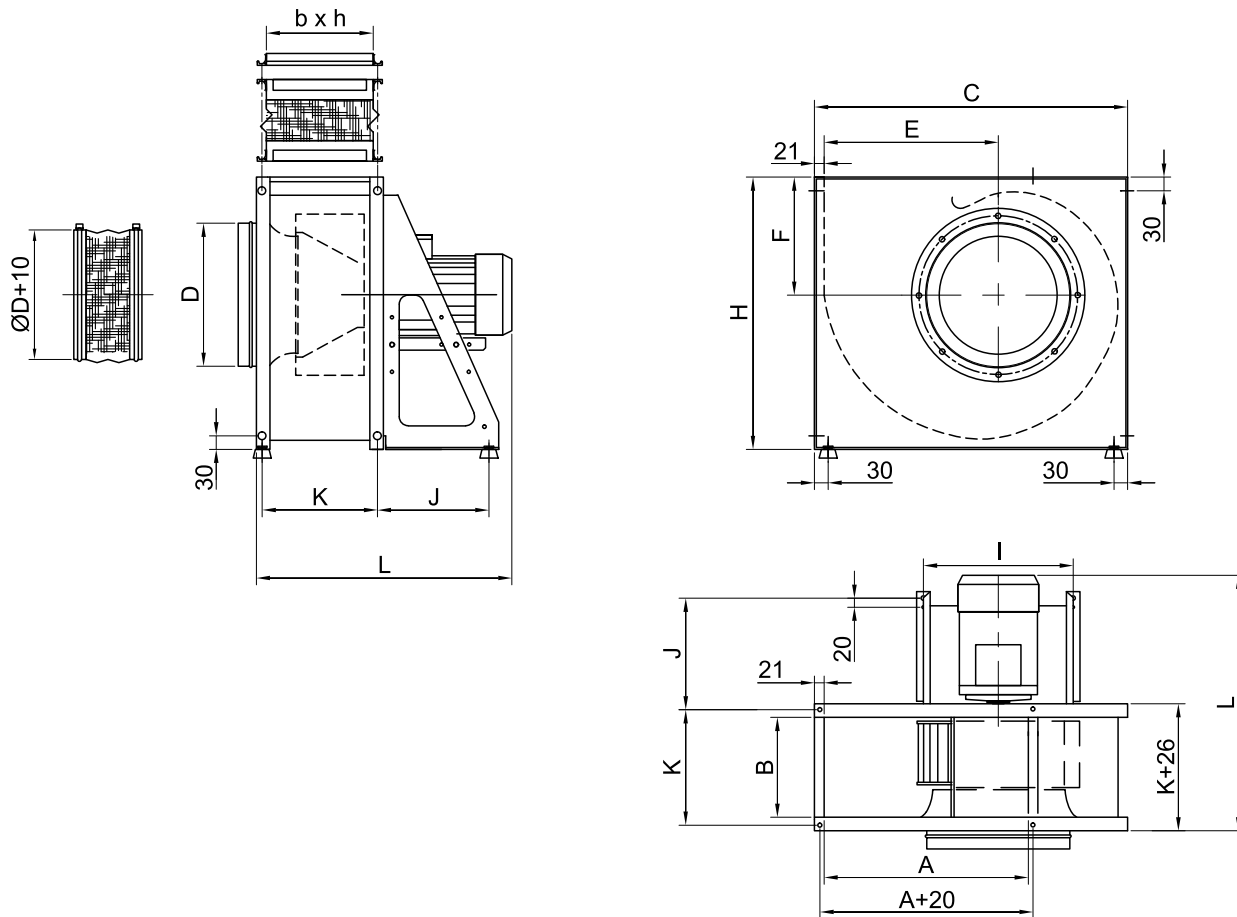
- There are two draining holes (at position 0° and 90°) with plastic stopper.
- Vibration absorbers and inlet adapter are standard.

Class and operating temperature:

- Protection class IP 54 Din 40050
- Class "F" insulation VDE 0530
- Ambient temperature: -30°C to +40°C
- Maximum Working temperature: + 60°C

Fans are not appropriate for transportation of explosion-risk substances and corrosive gas.

Overall and joined dimensions



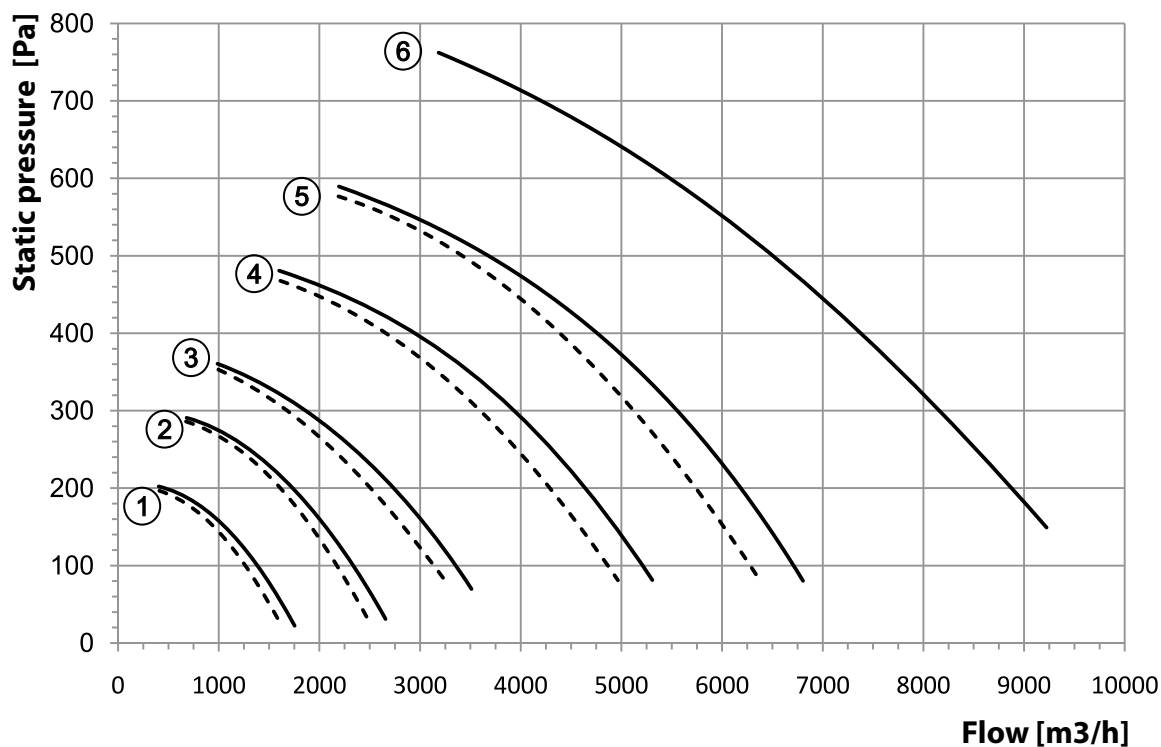
Model	A [mm]	B [mm]	C [mm]	H [mm]	E [mm]	F [mm]	I [mm]	J [mm]	K [mm]	L [mm]	Connection [mm]		
											ØD	b	h
TA* 250/4	300	165	495	435	270	195	260	171	191	410	225	300	170
TA* 280/4	350	185	550	480	303	210	282	196	211	430	250	350	190
TA* 315/4	350	205	610	530	341	235	308	215	239	500	280	400	220
TA* 355/4	450	220	690	600	384	260	336	245	254	530	315	450	235
TA* 400/4	500	250	760	650	433	285	308	155	284	560	355	500	265
TA* 450/4	570	280	850	730	487	320	344	155	314	620	400	570	295

* = M for single phase motor, * = T for three phase motor

Technical specification

Designation in figure	Type - size	Rotation frequency [min ⁻¹]	Nominal power [kW]	Nominal current [A]		Weight [kg]
				1/220V	Y/380V	
1	TAM 250/4	1400	0.37	2.9	-	16.5
	TAT 250/4	1400	0.37	-	1.1	17.5
2	TA* 280/4	1400	0.55	4.0	1.6	23.5
3	TA* 315/4	1400	0.75	5.7	2.1	26.5
4	TA* 355/4	1400	1.50	9.8	3.6	36.5
5	TA* 400/4	1400	1.50	10.0	3.6	43.5
6	TAT 450/4	1400	2.20	-	5.3	55.5

Static pressure [Pa]



Note: Dotted curves are for single phase fans.

Noise pressure level on frequency bands Lp [dB]

Fan	Channel	Frequency [Hz]							
		63	125	250	500	1000	2000	4000	8000
TA* 250/4	Lp1	39.9	46.0	49.1	40.5	41.3	32.2	22.6	12.9
	Lp2	74.8	73.1	76.2	62.1	57.2	55.0	50.0	43.9
	Lp3	67.4	67.4	79.9	65.2	58.4	54.1	50.5	44.1
TA* 280/4	Lp1	42.3	45.1	43.4	39.5	43.7	30.6	26.1	15.5
	Lp2	79.6	76.6	71.4	67.7	62.0	59.2	52.7	47.3
	Lp3	72.0	70.3	74.8	68.9	61.9	58.0	54.0	48.6
TA* 315/4	Lp1	43.7	47.1	46.3	41.5	45.7	33.8	28.7	19.2
	Lp2	82.7	79.4	74.8	70.9	66.2	62.0	54.7	48.2
	Lp3	75.6	73.2	76.1	70.2	63.9	59.3	55.4	49.2
TA* 355/4	Lp1	49.0	50.6	51.7	42.9	41.0	35.3	30.3	21.6
	Lp2	84.9	81.7	77.6	73.8	70.1	66.4	59.9	51.6
	Lp3	77.8	76.8	78.0	72.0	67.2	62.4	57.7	51.5
TA* 400/4	Lp1	58.4	55.5	53.0	45.8	41.8	36.0	30.7	23.0
	Lp2	86.0	83.6	79.3	75.3	71.8	68.4	62.9	54.8
	Lp3	82.0	82.7	79.2	73.7	70.1	66.1	59.2	52.0
TA* 450/4	Lp1	69.2	55.5	58.4	50.0	44.5	40.5	36.2	30.3
	Lp2	88.9	84.5	80.7	77.2	74.3	71.9	68.0	60.5
	Lp3	87.2	85.2	81.7	76.7	73.3	69.9	65.0	58.5

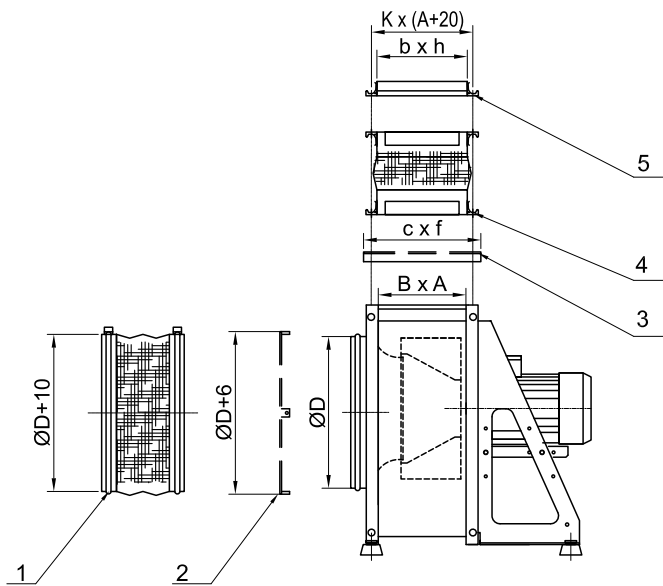
* = M for single phase motor, * = T for three phase motor

(Lp1) – measured at 1.5m, in free field condition

(Lp2) – inlet side

(Lp3) – outlet side

Options and accessories



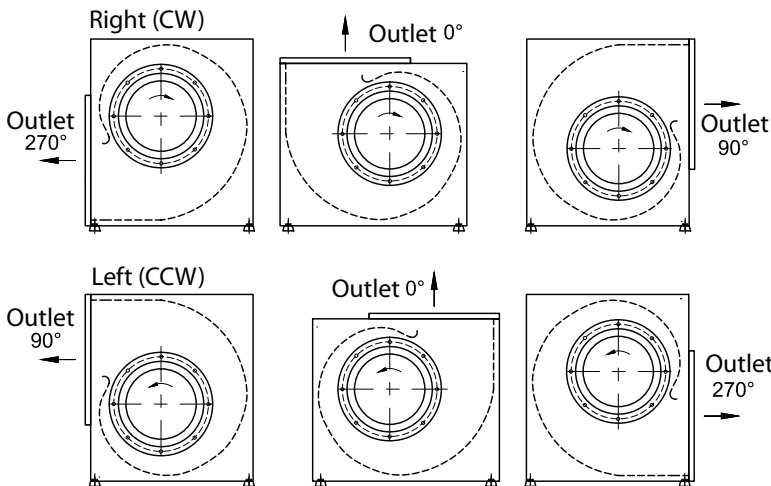
As accessories are available:

For inlet:

- 1. Flexible adapter or
- 2. Guard net

For outlet:

- 3. Guard net or
- 4. Flexible adapter
- 5. Flange



Fan's position is defined by observing from the inlet flange:

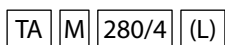
The fan is:

- Right (R) – Clock Wise (CW)
- Left (L) – Counter Clock Wise (CCW)

Note:

- Standard position is 0°.
- Positions 90° or 270° - on request.

Order designation



- (R) – right
- (L) – left
- Type-size: 250/4, 280/4, 315/4, 355/4, 400/4, 450/4
- M – single phase
- T – three phases
- Centrifugal Fan

AL FAN BOXES FOR DIRECT DRIVEN BACKWARD CURVED CENTRIFUGAL FANS TYPE TAM/TAT



Description

- Fan boxes are designed for transfer of air in non-aggressive and explosion-proof environment.

Construction

- Housing made of aluminium profiles fitted with PVC corners. The acoustic insulated panels mounted in the housing are made of galvanized sheet steel covered with powder coating and insulation of synthetic rubber
- Fan types APM/APT are assembled in the box through flexible connectors on anti – vibration mounts.

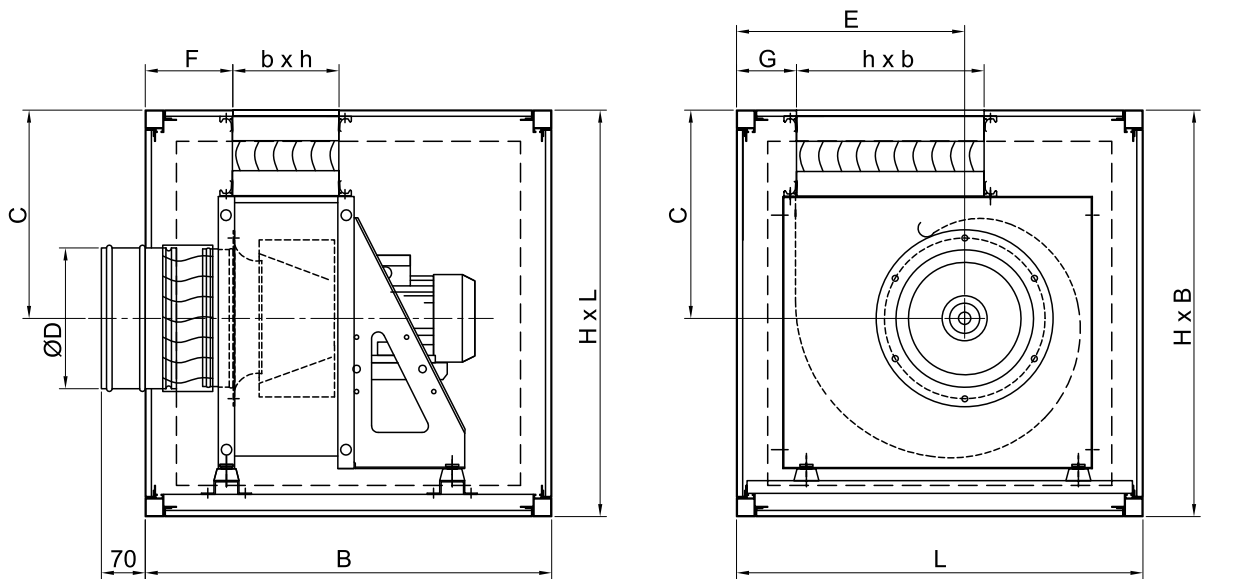
Installation

- Side placed air intake /entrance/, with flange and round flexible connector.
- Fan position 90°, 270° and 0°
- Standard position is 0°.

Options and accessories

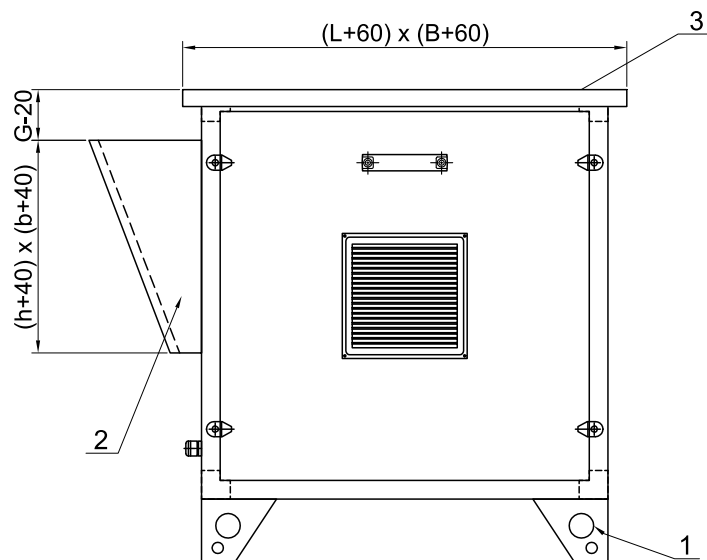
- On request the box could be produced with acoustic insulated panels type "sandwich".
- Position 90°, 270° - on request.
- Mounting feet with high 100mm or 150mm – 4pcs.
- Protection guard for direct discharge of air.
- Roof cover for outdoor installation.
- On request the "entrance" can be rectangular with dimension min DxD.

Overall and joined dimensions



Accessories for AL casing:

1. Mounting feet with height 100mm or 150mm – 4pcs.
2. Protection guard for direct discharge of air.
3. Roof cover for outdoor installation.
4. On request the “entrance” can be rectangular with dimension min DxD.



Model	B [mm]	H [mm]	L [mm]	ØD [mm]	C [mm]	E [mm]	F [mm]	G [mm]	b [mm]	h [mm]
TA* 250/4	650	650	650	225	333	368	140	96	170	300
TA* 280/4	700	700	700	250	355	400	160	96	190	350
TA* 315/4	760	760	760	280	390	437	160	96	220	400
TA* 355/4	880	880	880	315	445	500	160	116	235	450
TA* 400/4	800	930	930	355	445	540	200	106	265	500
TAT 450/4	900	1020	1020	400	480	593	200	106	295	570

* = M for single phase motors, * = T for three phase motors

Order designation

Box AL - TAT - 280/4 - 90°

Fan position: 0°, 90°, 270°

Size

Fan type: TAM or TAT

Construction type: AL