

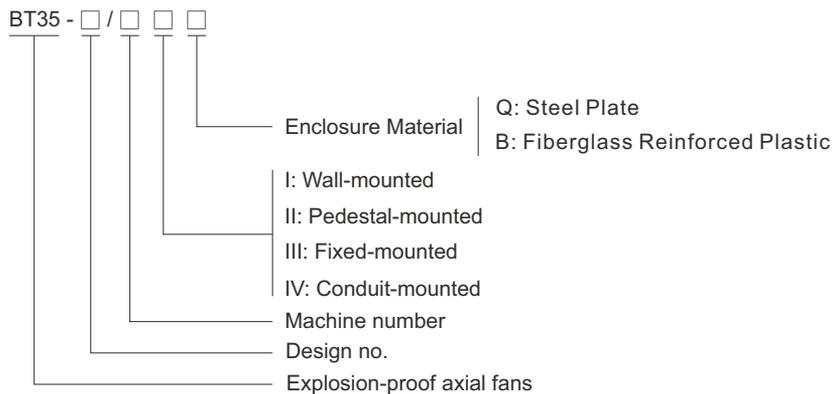
## Exhaust Fans

### BT35 Series Explosion-proof Axial Fans



- ◆ Explosion protection to
  - CENELEC
  - IEC
- ◆ Can be used in
  - Zone 1 and Zone 2
- ◆ The explosion-proof axial flow fan is composed of an explosion-proof motor, blades, and a wind duct among other components.
- ◆ The housing material can be either steel plate or fiberglass reinforced plastic.

#### Catalogue number logic



#### Technical data

##### Explosion-proof axial fans

BT35-□/□□□

##### Explosion protection

Global (IECEX)  
Gas  
Europe (ATEX)  
Gas

IECEX (applied for)  
Ex db IIC T4 Gb  
ATEX (applied for)  
⊕ II 2 G Ex db IIC T4 Gb

##### Certificates

IECEX; ATEX

##### Conformity to standards

EN 60079-0, EN 60079-1, IEC 60079-0, IEC 60079-1

##### Rated voltage

BT35-11-2.8~BT35-11-5: 220V/380V  
BT35-11-5.6~BT35-11-7.1: 380V

##### Spindle speed

1450r/min

##### Inlet thread

G3/4"

##### Cable outer diameter

10mm~ 14mm

# Zones 1&2

## Exhaust Fans

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**Selection table**

Machine number	Impeller diameter (mm)	Impeller circumference speed (m/s)	Impeller rotation speed (r/min)	Impeller angle (deg)	Air volume (m <sup>3</sup> /h)	Total pressure (mmH <sub>2</sub> O)	Efficiency	Motor power (kW)
2.8#	265	42.5	2900	15	1649	15.5	0.87	0.18
				20	2167	17.2	0.88	
				25	2685	17.7	0.89	
				30	2921	19	0.88	
				35	3202	23.7	0.86	
		21.3	1450	15	826	3.8	0.87	0.18
				20	1086	4.4	0.88	
				25	1346	4.5	0.89	
				30	1464	4.9	0.88	
				35	1605	6.1	0.86	
3.15#	295	47.5	2900	15	2339	19.6	0.87	0.18
				20	3074	21.8	0.88	0.25
				25	3810	22.4	0.89	0.37
				30	4414	24.2	0.88	0.55
				35	4545	30	0.86	
		23.9	1450	15	1169	4.9	0.87	0.18
				20	1537	5.4	0.88	
				25	1905	5.6	0.89	
				30	2072	6.0	0.88	
				35	2273	7.5	0.86	
3.55#	335	53.9	2900	15	3367	24.6	0.87	0.37
				20	4426	27.7	0.88	
				25	5484	28.4	0.89	0.55
				30	5965	30.6	0.88	
				35	6542	38.0	0.86	
		27.0	1450	15	1680	6.2	0.87	0.25
				20	2208	6.9	0.88	
				25	2737	7.1	0.89	
				30	3265	7.6	0.88	
				35	3977	9.5	0.86	
4#	390	60.7	2900	15	4806	31.6	0.87	0.55
				20	6316	35.2	0.88	
				25	7826	36.1	0.89	0.75
				30	8513	39.8	0.88	1.1
				35	9336	48.3	0.86	
		30.4	1450	15	2406	7.9	0.87	
				20	3163	8.8	0.88	
				25	3922	9.0	0.89	
				30	4263	9.7	0.88	
				35	4678	12.1	0.86	
4.5#	435	34.2	1450	15	3427	10.0	0.87	0.55
				20	4504	11.2	0.88	
				25	5881	11.5	0.89	
				30	6070	12.3	0.88	
				35	6658	15.3	0.86	



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Selection table

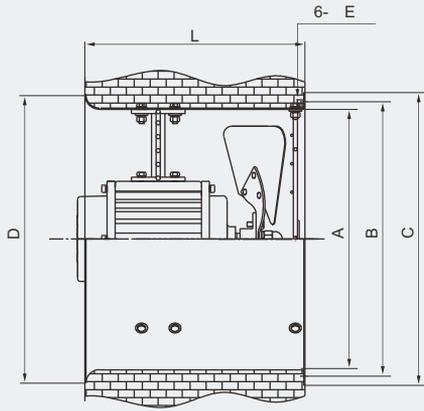
Machine number	Impeller diameter (mm)	Impeller circumference speed (m/s)	Impeller rotation speed (r/min)	Impeller angle (deg)	Air volume (m <sup>3</sup> /h)	Total pressure (mmH <sub>2</sub> O)	Efficiency	Motor power (kW)
5#	490	38.0	1450	15	4700	12.4	0.87	0.55
				20	6178	13.8	0.88	0.75
				25	7655	14.1	0.895	
				30	8832	15.2	0.88	
				35	9133	18.9	0.86	
		25.1	960	15	3314	5.4	0.87	0.37
				20	4129	6.0	0.88	
				25	5117	6.2	0.895	
				30	5566	6.6	0.88	
				35	6104	8.3	0.86	
5.6#	540	42.5	1450	15	6595	15.4	0.87	0.75
				20	8667	17.2	0.88	
				25	10739	17.7	0.895	
				30	11682	19.0	0.88	1.1
				35	12812	23.7	0.86	
		28.1	960	15	4362	6.8	0.87	0.37
				20	5730	7.5	0.88	
				25	7101	7.7	0.895	
				30	7724	8.3	0.88	
				35	8471	10.3	0.86	
6.3#	590	47.8	1450	15	9393	21.7	0.87	0.75
				20	12345	24.1	0.88	1.1
				25	15297	24.7	0.895	1.5
				30	16639	24.1	0.88	2.2
				35	18250	30.3	0.86	
		31.7	960	15	6219	8.6	0.87	0.75
				20	8173	9.6	0.88	
				25	10128	9.8	0.895	
				30	11016	10.6	0.88	
				35	12082	13.1	0.86	
7.1#	690	53.9	1450	15	13444	24.9	0.87	2.2
				20	17670	27.7	0.88	
				25	21895	28.8	0.895	
				30	23815	30.6	0.88	3
				35	26120	38.0	0.86	4
		36.7	960	15	8902	11.0	0.87	0.75
				20	11700	12.2	0.88	
				25	14498	12.5	0.895	
				30	15769	13.4	0.88	
				35	17296	16.7	0.86	



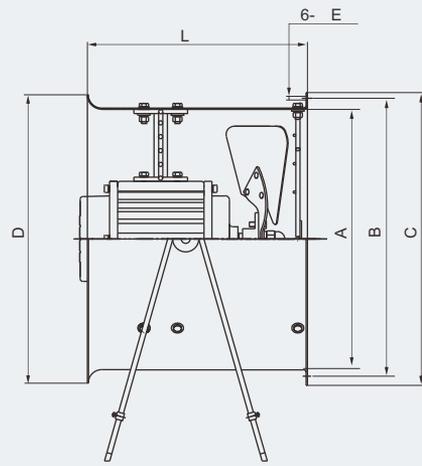
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Dimension drawings (all dimensions in mm) - subject to alteration

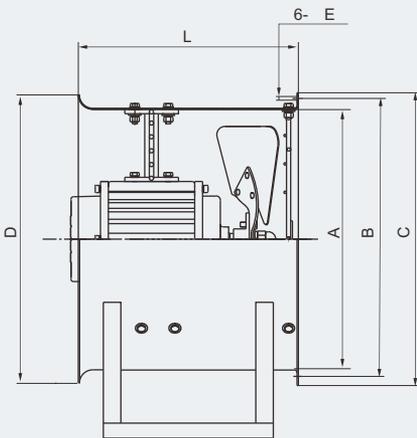


Wall-mounted (I)

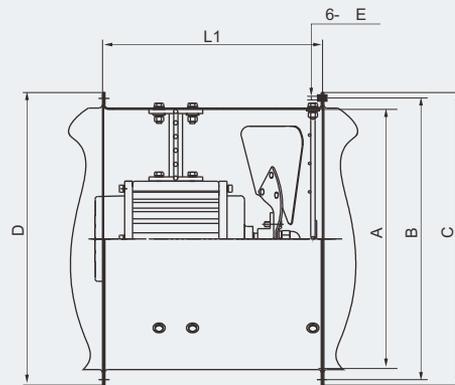


Pedestal-mounted (II)

Model	L	L1(Conduit-mounted)	ΦA	ΦB	ΦC	ΦD	ΦE
BT35-11-2.8	275(255)	300	283(285)	305	325(355)	320(355)	8.5
BT35-11-3.15	275(285)	275	315(320)	340	360(400)	355(405)	8.5
BT35-11-3.55	313(325)	300	355(363)	380	400(440)	395(450)	8.5
BT35-11-4.0	315(350)	330	418(408)	442	462(495)	455(500)	8.5
BT35-11-4.5	315(350)	330	454(458)	478	498(545)	494(560)	8.5



Fixed-mounted (III)



Conduit-mounted (IV)

Model	L	L1(Conduit-mounted)	ΦA	ΦB	ΦC	ΦD	ΦE
BT35-11-5.0	315(365)	330	520(508)	545	565(595)	555(615)	8.5
BT35-11-5.6	405(420)	390	563(575)	590	610(670)	600(695)	8.5
BT35-11-6.3	405(468)	390	610(640)	635	655(740)	650(760)	8.5
BT35-11-7.1	515(510)	500	710(710)	735	755(830)	750(865)	8.5

