



DESCRIPTION

The TD-EcoWatt range of mixed-flow fans incorporates the latest innovative EC motor technology.

Suitable for mounting in any position, the range is available to suit standard duct sizes from 100 to 315mm diameter.

Typical Applications

Ideal for the ventilation of toilets, laundries, ensuites and kitchens for homes, hotels and commercial premises.

Features

- An energy efficient solution with state of the art EC motor technology.
- Speed-controllable from 10% to 100% via a 0-10V analogue input signal.
- High performance mixed-flow impeller.
- Fans can be removed for maintenance or repair without disturbing the duct system via specially designed support brackets.
- All models are designed for direct connection to standard diameter circular ducting.
- Integral mounting foot makes installation more simple.
- Includes plug and lead for easy and quick installation.
- Suitable for both supply and exhaust air applications.

Construction

Models 250/100 to 800/200 - casings manufactured from reinforced, injection moulded, polypropylene plastic. Impellers are made of injection moulded plastic and are a mixed-flow design.

Models 1300/250 and 2000/315 - casings manufactured from epoxy coated steel. Impellers are made of aluminium and of mixed-flow design.

Motors

Type - high performance, energy efficient brushless DC motor.
Electricity supply - 90-260V, 50/60Hz for models 250/100 to 800/200.
- 230V, 50/60Hz for models 1300/250 and 2000/315.

Bearings - sealed for life, ball.

Motor protection IP44.

See pages O-7 for details of these motors.

Internal Thermal Protection

Manual-reset thermal overload protection device in accordance with mandatory requirements for in-line fans, AS/NZS60335-2-80:2004

Testing

Air flow to ISO5801:Part 1 1997 or AMCA 210-99

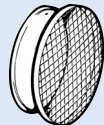


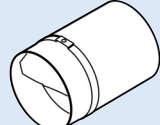
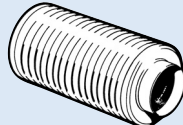

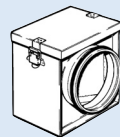
Noise to ISO 13347-3 2004

Special Note

Avoid the use of spring-loaded backdraft dampers, extensive lengths of duct and restrictive air valves with the 250/100ECO and 350/125ECO models.

EC motors should be directly connected to their appropriate AC supply. EC motors should not be regularly power cycled.

ANCILLARY EQUIPMENT

 MRJ - Inlet grille Ref. J-9	 RED - Reducer* Ref. B-17	 RSK - Backdraft Dampers Ref. J-3
 SJK - Backdraft Damper Ref. J-3	 CC - Attenuators Ref. H-16	 FC - Fast clamp Ref. J-5
 FGR - Filter Unit Ref. J-10		

* If it is necessary to connect the TD-2000/315ECO unit to 300mm diameter ducting, it is recommended 2-RED031-030 reducers be used. In this situation the performance will be reduced by approximately 7%.

Multi-stage Fans

In addition to being used as single-stage fans, the TD-EcoWatt can be arranged in parallel, in series or in both parallel and series.

Such flexibility enables higher air flow and pressure demands to be met. The principle of 2-stage parallel can be found on page B-16; refer to the Fans by Fantech Product Selection Program for details of other combinations.

SUGGESTED SPECIFICATION

The duct mounted fans shall be of the TD-EcoWatt Series as supplied by Fantech Pty Ltd and be of the model numbers shown on the schedule/drawings.

Impellers shall be of mixed-flow design and driven by a speed-controllable, brushless EC-DC motor with manual-reset thermal overload protection. Fans shall be capable of running 10 to 100% of capacity via a 0-10V analogue input signal.

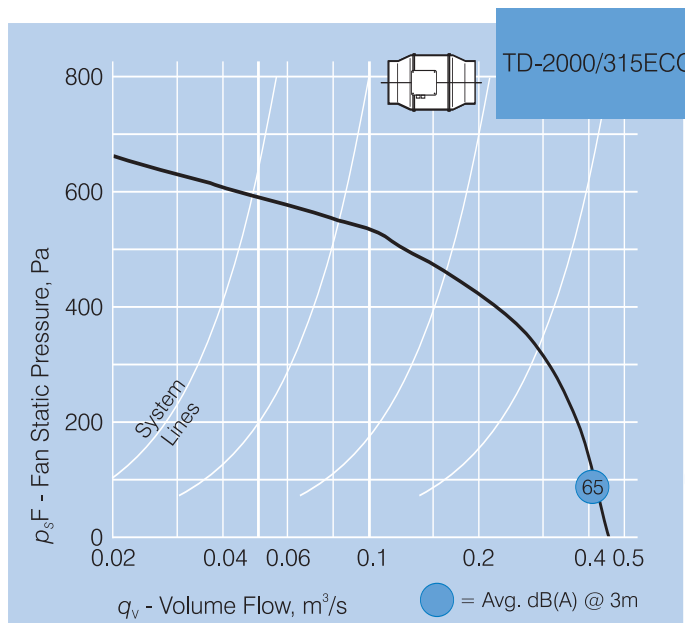
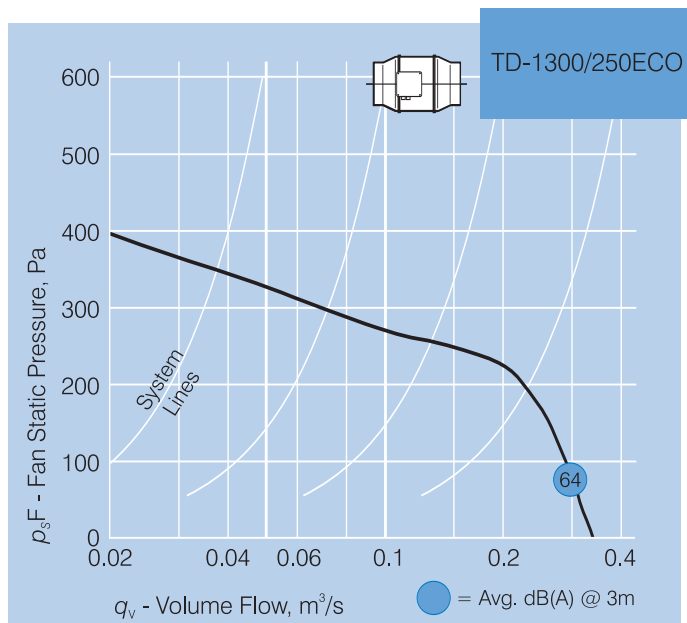
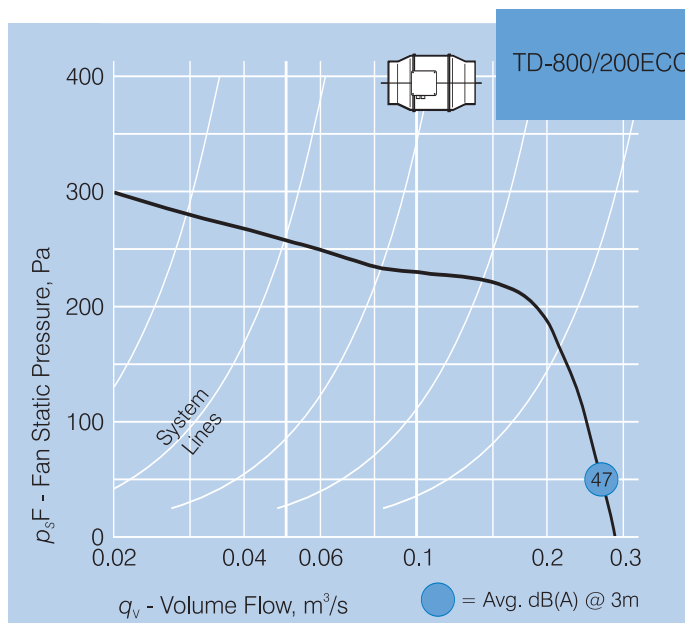
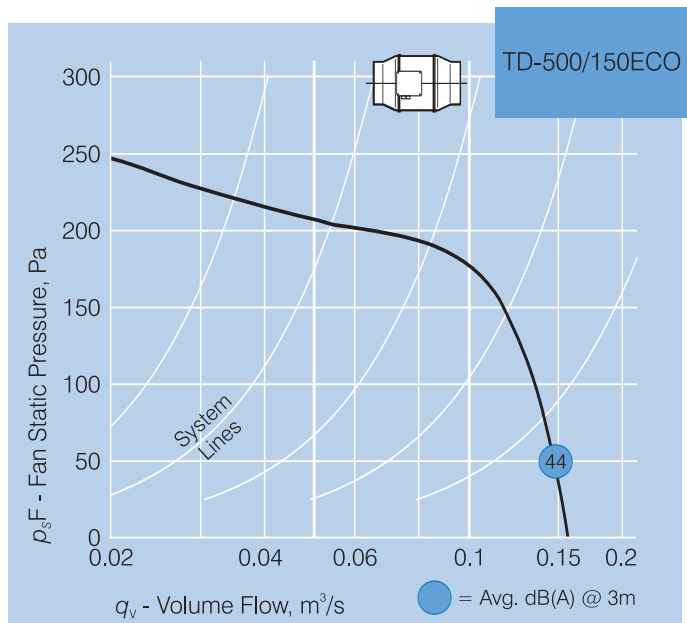
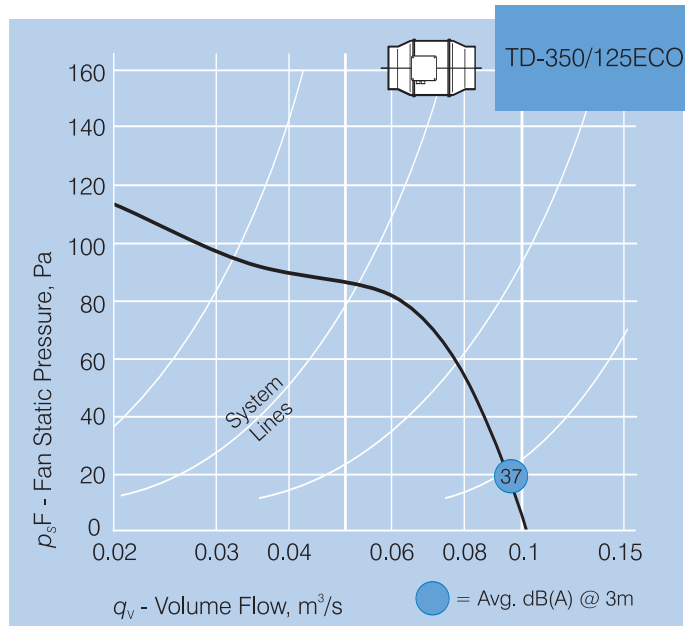
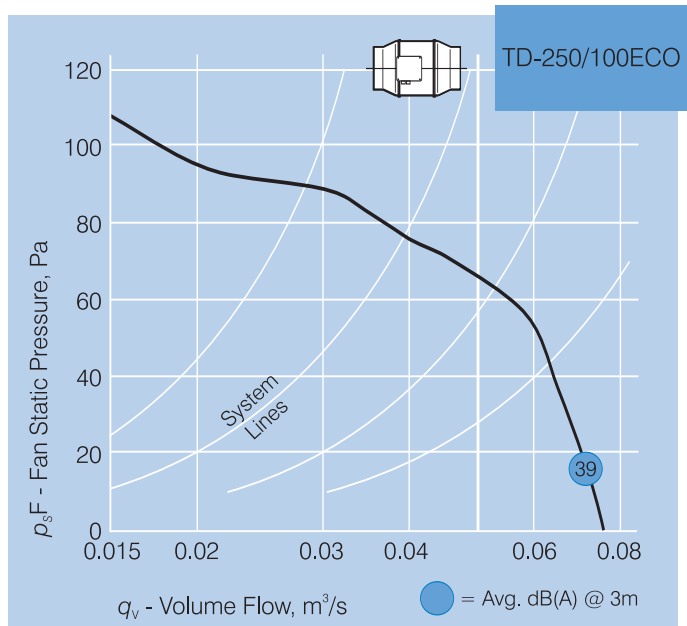
It shall include an integral mounting foot, plug and lead and specially designed support brackets to enable motor removal.

All fans shall be tested to ISO5801:Part1, 1997 and AMCA 210-99 for air flow and ISO 13347-3 2004 for noise.

TECHNICAL DATA

Model Number	Fan Speed rev/sec	Avg. dB(A) @ 3m	TD.. 1 ph. Watts	App. Amps	Max. amb °C	App. wt. kg
250/100ECO	40	39	20	0.17	60	2.0
350/125ECO	40	37	21	0.17	60	2.0
500/150ECO	43	44	50	0.35	60	2.7
800/200ECO	39	47	105	0.75	60	4.9
1300/250ECO	42	64	155	0.62	40	9.5
2000/315ECO	42	65	255	1.07	40	14.0

SINGLE-STAGE

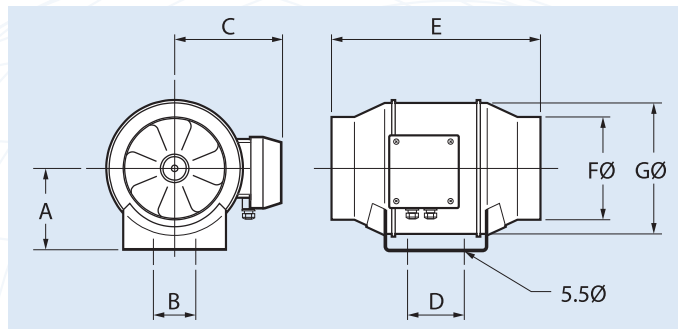


NOISE DATA

Model Number	Type	dB(A) @ 3m	In-duct Sound Power Levels L_w dB re 1pW							
			63	125	250	500	1k	2k	4k	8k
250/100ECO	Inlet	39	53	48	55	58	55	52	43	37
250/100ECO	Outlet	38	55	48	56	59	52	51	42	36
250/100ECO	Breakout	34	50	45	55	51	50	49	37	30
350/125ECO	Inlet	37	54	44	53	55	53	51	43	36
350/125ECO	Outlet	38	55	46	54	58	53	51	42	35
350/125ECO	Breakout	31	48	35	53	45	46	47	35	26
500/150ECO	Inlet	44	52	50	59	58	57	60	54	49
500/150ECO	Outlet	45	55	50	60	63	61	58	54	49
500/150ECO	Breakout	34	44	38	57	39	44	51	39	34
800/200ECO	Inlet	47	52	49	58	57	65	62	58	50
800/200ECO	Outlet	49	66	55	58	65	65	64	58	49
800/200ECO	Breakout	36	52	36	48	38	53	52	45	32
1300/250ECO	Inlet	64	65	63	77	77	82	79	71	64
1300/250ECO	Outlet	64	65	66	78	78	81	78	70	62
1300/250ECO	Breakout	62	66	67	79	77	79	75	66	57
2000/315ECO	Inlet	65	72	70	79	79	82	79	70	65
2000/315ECO	Outlet	66	72	71	81	80	83	80	71	65
2000/315ECO	Breakout	64	71	75	83	80	81	77	69	64

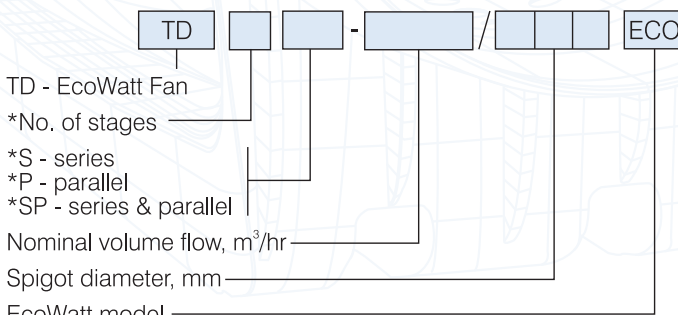
Sound Levels are taken at medium-level pressure.

DIMENSIONS



Model No.	Dimensions, mm						
	A	B	C	D	E	FØ	GØ
250/100ECO	100	60	156	80	303	97	176
350/125ECO	100	60	156	80	258	123	176
500/150ECO	111	60	173	80	295	147	200
800/200ECO	124	94	184	100	302	198	217
1300/250ECO	155	140	192	145	386	248	272
2000/315ECO	188	178	224	182	450	312	336

HOW TO ORDER



* Only required if other than standard single-stage unit.

FANS IN PARALLEL

The TD-EcoWatt Fans can be installed in parallel by using the same principle as the TD- Mixvent Fans. See page B-16.



Scan the QR Code to view more information online.

