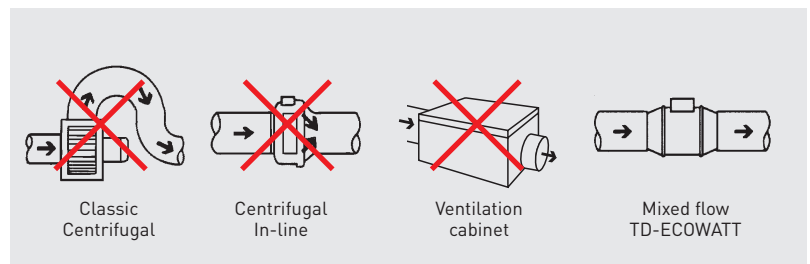




Range of low profile mixed flow fans with ball bearings and brushless DC motors, of high efficiency and low consumption. Manufactured in plastic (models 160 to 800) or in steel (models 1300 and 2000), removable fan body, and rated as standard 90/260V- 50/60Hz for models 160 to 800 and 230V/50-60Hz for models 1300 and 2000. Fan speed 100% adjustable with the potentiometer placed in the connection box (excepted TD-160/100 ECOWATT) or with an external control type REB-ECOWATT. Analogue input with terminals in the terminal box to control the fan with 0-10V input signal. Suitable for any kind of ventilation application where the noise level of the ventilation system is of particular importance and, due to continuous operation, a significant energy saving is desirable. It is also suitable for applications that require a Demand Controlled Ventilation System involving the use of other sensors or controls.



LOW PROFILE



The low profile of the TD-ECOWATT fans makes them the most effective solution for installations where space is very limited, especially in ceiling voids.

EASY TO MOUNT



Fix the support bracket.



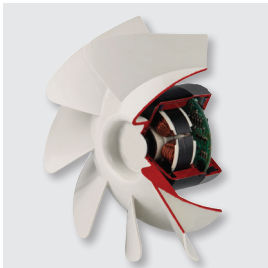
Place the impeller and motor.



Carry out the wiring connections.



Connect the ducts.

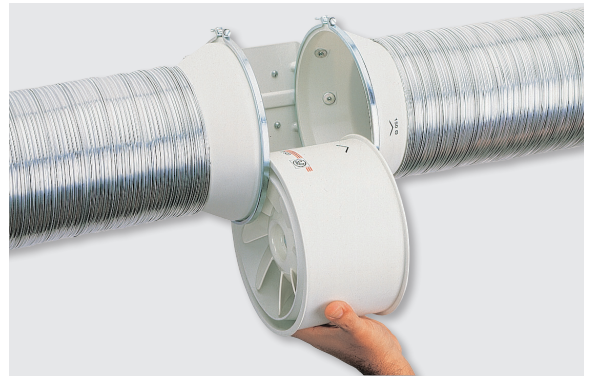


Continuous current brushless motor, high performance and low consumption, adjustable in lineal form.



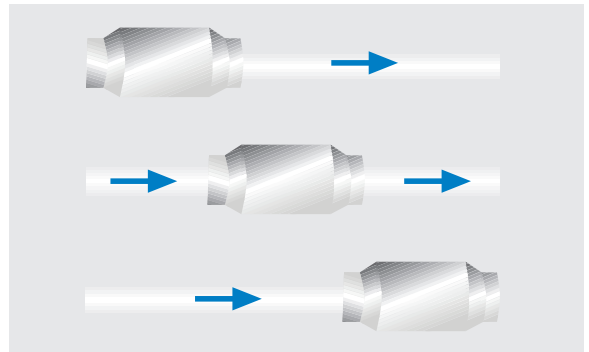
Electronics totally integrated in the product.

EASY MAINTENANCE



The unique design of the support bracket allows the motor and impeller assembly to be fitted or removed without dismantling the adjacent ducting.

FLEXIBLE MOUNTING POSITION



Can be mounted at any place of the air duct.

DESIGN CHARACTERISTICS

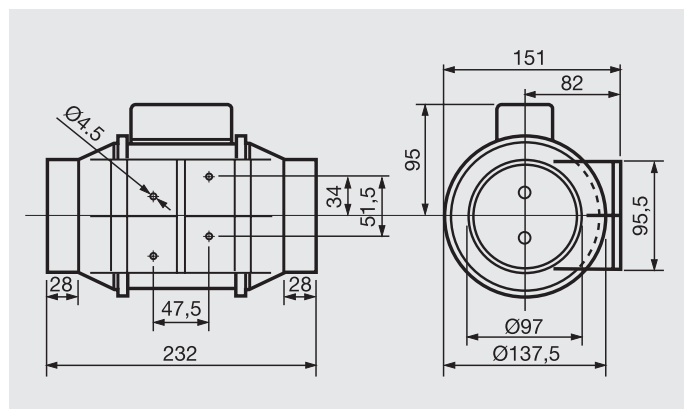
	160	250	350	500	800	1300	2000
PLASTIC HOUSING	●	●	●	●	●		
STEEL CASING						●	●
PLASTIC IMPELLER	●	●	●	●	●		
ALUMINIUM IMPELLER						●	●
INSULATION CLASS	II	II	II	II	II	I	I
NON SELF RESETABLE THERMAL PROTECTION	●	●	●	●	●		
BALL BEARINGS	●	●	●	●	●	●	●

TECHNICAL CHARACTERISTICS

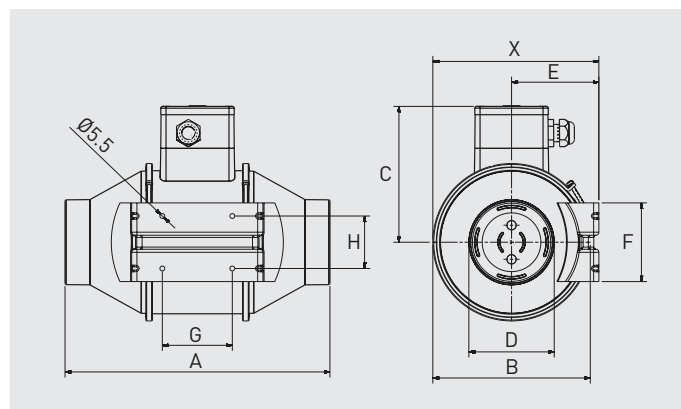
TD-ECOWATT	Input tension regul. (V)	Speed (rpm)	Maximum absorbed power (W)	Maximum absorbed current (A)	Maximum airflow (m³/h)	Sound pressure level* LpA @ 3m (dB(A))			Weight (kg)	Wiring diagram** (n°)
						Inlet	Radiated	Outlet		
TD-160/100 ECOWATT	10	2550	9	0,08	180	43	31	38	1,4	41
	8	2240	7	0,06	160	36	28	34		
	6	1720	4	0,04	120	32	21	28		
	4	1170	2	0,02	80	24	16	18		
TD-250/100 ECOWATT	10	2480	19	0,14	280	38	37	37	2,0	42
	8	2090	13	0,10	230	34	32	33		
	6	1530	7	0,06	180	27	19	25		
	4	1040	4	0,03	110	22	18	15		
TD-350/125 ECOWATT	10	2510	20	0,16	380	37	26	38	2,0	42
	8	2150	14	0,11	320	34	23	35		
	6	1580	8	0,06	230	28	20	28		
	4	1050	4	0,03	160	21	11	18		
TD-500/150 ECOWATT	10	2670	50	0,36	570	47	31	48	2,7	43
	8	2260	33	0,25	470	42	28	43		
	6	1670	16	0,13	340	34	21	36		
	4	1140	8	0,07	230	26	15	27		
TD-500/160 ECOWATT	10	2650	49	0,36	580	46	33	48	2,7	43
	8	2250	32	0,25	480	44	31	43		
	6	1660	16	0,13	350	37	24	38		
	4	1150	8	0,07	240	29	18	30		
TD-800/200 ECOWATT	10	2450	101	0,36	960	49	37	51	4,9	43
	8	2150	70	0,25	830	46	33	47		
	6	1830	46	0,13	710	43	31	44		
	4	1500	28	0,07	580	37	25	38		
TD-1300/250 ECOWATT	10	2590	157	0,70	1250	59	47	65	9,5	44
	8	2110	93	0,40	990	54	42	60		
	6	1680	54	0,30	800	48	37	52		
	4	1210	29	0,20	580	40	33	44		
TD-2000/315 ECOWATT	10	2580	262	1,10	1740	60	50	64	14,0	44
	8	2130	154	0,70	1410	56	46	50		
	6	1690	85	0,40	1110	50	40	54		
	4	1230	41	0,20	810	45	35	48		

* Sound pressure level measured in free field condition at 3m, at the medium working point on the performance curve, shown 2, 5, 8 and 11.
 ** See section of Wiring Diagrams.

DIMENSIONS (mm)

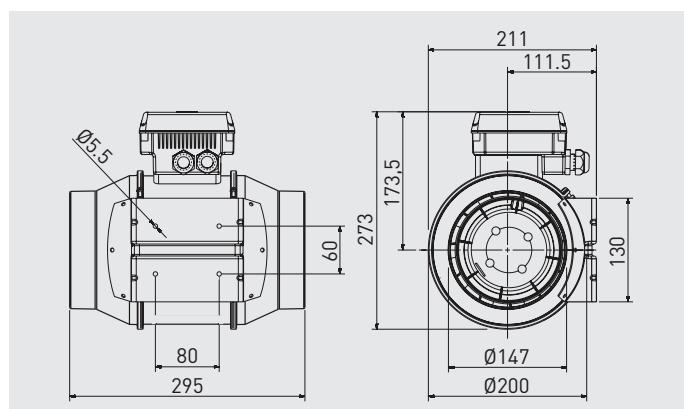


TD-160/100 ECOWATT

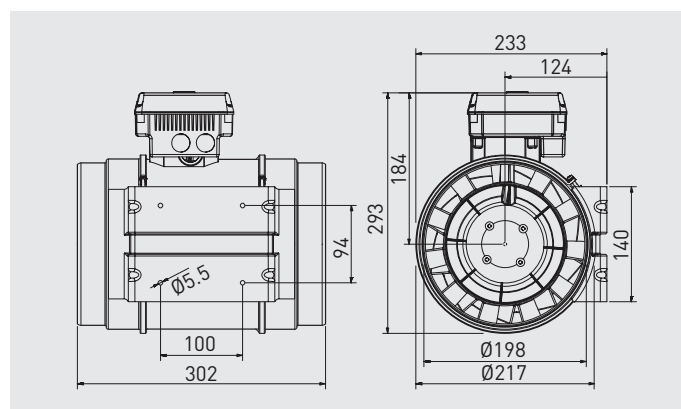


TD-250/100 and TD-350/125 ECOWATT

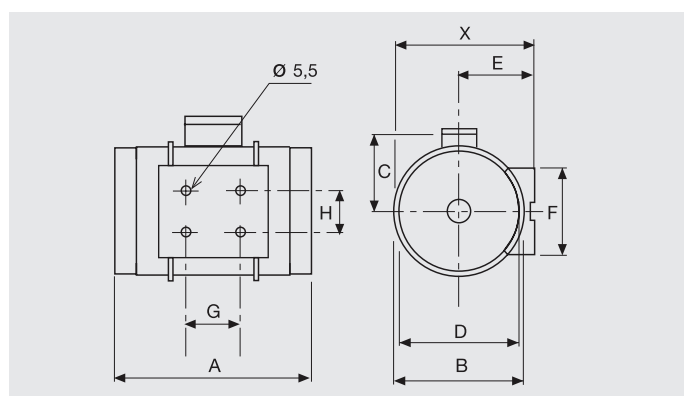
Model	X	A	ØB	C	ØD	E	F	G	H
TD-250/100 ECOWATT	188	303	176	156	97	100	90	80	60
TD-350/125 ECOWATT	188	258	176	156	123	100	90	80	60



TD-500/150 ECOWATT



TD-800/200 ECOWATT



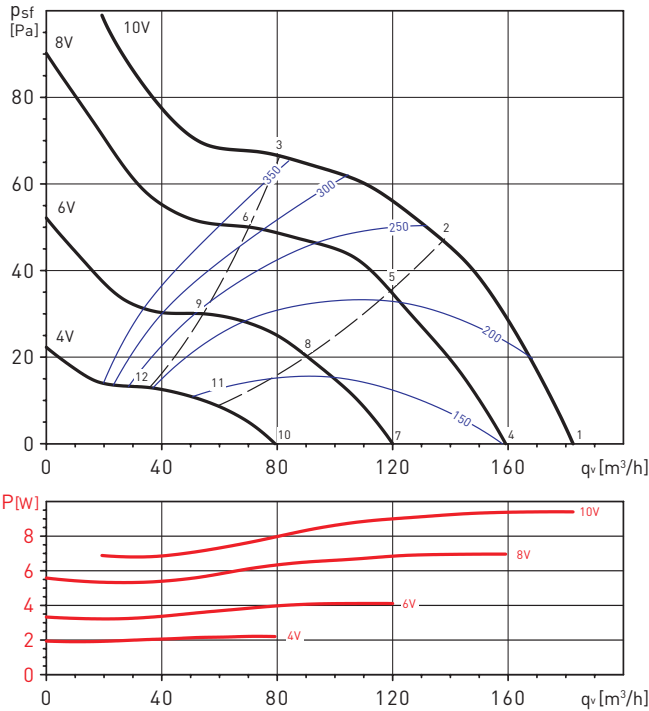
TD-1300/250 and TD-2000/315 ECOWATT

Model	X	A	ØB	C	ØD	E	F	G	H
TD-1300/250 ECOWATT	291	386	272	192	248	155	168	145	140
TD-2000/315 ECOWATT	356	450	336	224	312	188	210	182	178

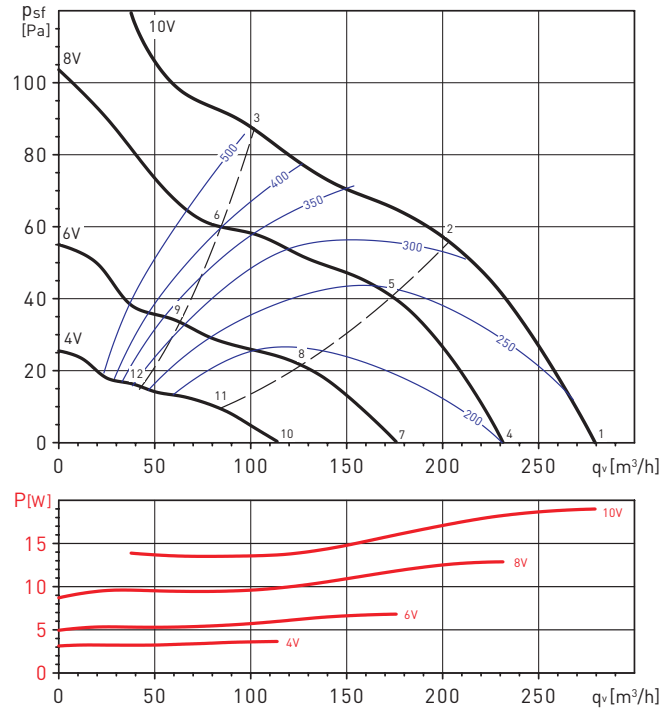
PERFORMANCE CURVES

- q_v : Airflow in m^3/h .
- p_{st} : Static pressure in Pa.
- P: Input power in W.
- SFP: Specific fan power in $W/m^3/s$ (blue curves).
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards.
- Sound power in dB(A).

TD-160/100 N ECOWATT



TD-250/100 ECOWATT



Working point		63	125	250	500	1000	2000	4000	8000	LwA
1	Inlet	25	27	42	50	63	54	42	33	63
	Outlet	25	27	40	52	55	53	44	34	59
	Break-Out	24	25	42	43	46	45	34	22	50
2	Inlet	25	30	44	51	62	53	41	31	63
	Outlet	25	29	40	52	55	53	42	32	58
	Break-Out	25	28	44	45	46	44	32	21	51
3	Inlet	28	35	46	52	62	55	40	31	63
	Outlet	31	34	37	51	53	50	41	31	57
	Break-Out	28	33	46	46	45	45	31	20	52
4	Inlet	23	25	38	47	55	49	38	29	56
	Outlet	21	25	37	49	51	48	40	29	55
	Break-Out	21	14	41	38	43	41	31	22	47
5	Inlet	26	28	41	47	54	48	36	27	56
	Outlet	23	28	37	49	50	47	38	27	54
	Break-Out	24	18	44	38	42	40	29	20	48
6	Inlet	28	32	43	48	53	47	36	27	55
	Outlet	25	31	35	48	48	45	37	27	52
	Break-Out	26	22	46	39	41	39	28	20	48
7	Inlet	18	22	33	41	52	42	30	24	53
	Outlet	19	23	30	43	46	41	31	23	49
	Break-Out	10	14	32	33	38	34	26	23	41
8	Inlet	20	26	34	41	51	41	28	23	52
	Outlet	21	26	31	42	45	40	30	23	48
	Break-Out	13	17	32	33	37	33	24	22	41
9	Inlet	22	27	35	41	51	40	28	23	51
	Outlet	21	25	28	40	43	37	29	23	46
	Break-Out	15	18	33	33	37	32	24	22	40
10	Inlet	17	20	27	31	43	34	23	23	44
	Outlet	18	21	22	33	37	31	24	23	39
	Break-Out	17	18	30	27	31	29	23	23	36
11	Inlet	20	21	27	31	43	33	23	23	44
	Outlet	18	21	22	32	36	30	24	23	39
	Break-Out	19	18	30	26	31	28	23	23	36
12	Inlet	18	20	27	30	43	31	23	22	43
	Outlet	19	19	22	29	33	28	23	22	36
	Break-Out	18	17	30	25	31	26	23	23	35

Working point		63	125	250	500	1000	2000	4000	8000	LwA
1	Inlet	26	31	47	57	55	52	44	36	60
	Outlet	28	32	48	56	54	53	44	35	60
	Break-Out	21	29	55	45	42	44	34	24	56
2	Inlet	26	32	48	54	54	50	42	33	58
	Outlet	27	31	50	53	49	50	41	31	57
	Break-Out	21	30	57	42	40	42	32	22	57
3	Inlet	27	34	43	52	53	48	40	32	56
	Outlet	30	32	45	52	49	49	40	32	55
	Break-Out	22	31	51	40	39	40	30	20	52
4	Inlet	21	28	48	52	51	47	39	30	56
	Outlet	24	28	46	52	49	48	39	29	55
	Break-Out	23	34	54	39	37	39	30	23	54
5	Inlet	22	32	45	50	49	45	37	28	54
	Outlet	22	30	48	48	44	44	36	27	53
	Break-Out	24	38	51	37	35	36	27	20	52
6	Inlet	23	31	42	48	49	43	35	28	52
	Outlet	23	30	44	47	44	43	35	27	51
	Break-Out	25	37	48	35	34	34	26	20	49
7	Inlet	18	35	41	45	43	38	32	25	49
	Outlet	21	27	42	44	41	39	32	24	48
	Break-Out	17	34	37	31	29	29	26	23	41
8	Inlet	18	36	38	42	42	36	31	24	47
	Outlet	19	28	37	40	41	35	30	24	45
	Break-Out	17	34	34	29	28	28	25	22	39
9	Inlet	17	33	36	40	41	33	30	24	45
	Outlet	19	26	36	38	43	33	29	24	45
	Break-Out	16	32	33	26	27	25	24	22	37
10	Inlet	17	26	34	39	37	30	27	23	42
	Outlet	17	22	31	33	29	26	26	22	37
	Break-Out	15	33	33	31	29	30	25	23	39
11	Inlet	18	27	34	38	37	30	28	23	42
	Outlet	17	21	28	30	28	24	26	22	35
	Break-Out	13	33	31	28	29	30	25	24	38
12	Inlet	18	26	32	37	37	29	27	23	41
	Outlet	18	19	27	29	27	23	26	22	34
	Break-Out	14	34	31	27	28	28	25	22	38

IN LINE MIXED FLOW DUCT FANS WITH BRUSHLESS DC MOTORS

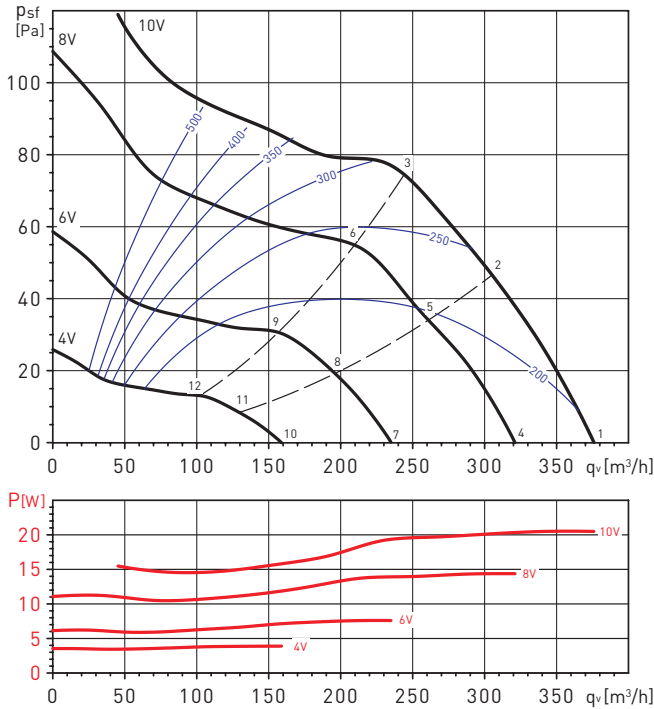
TD-ECOWATT Series



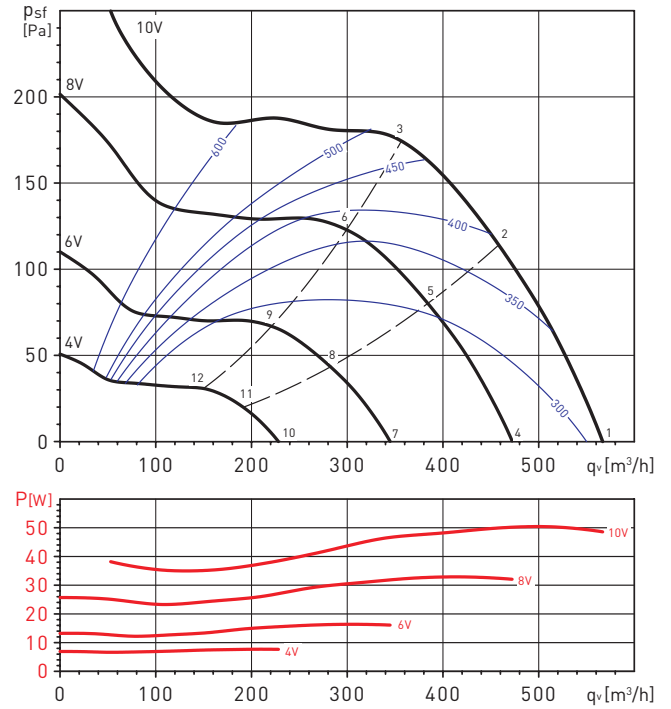
PERFORMANCE CURVES

- q_v : Airflow in m^3/h .
- p_{st} : Static pressure in Pa.
- P: Input power in W.
- SFP: Specific fan power in $W/m^3/s$ (blue curves).
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards.
- Sound power in dB(A).

TD-350/125 ECOWATT



TD-500/150 ECOWATT



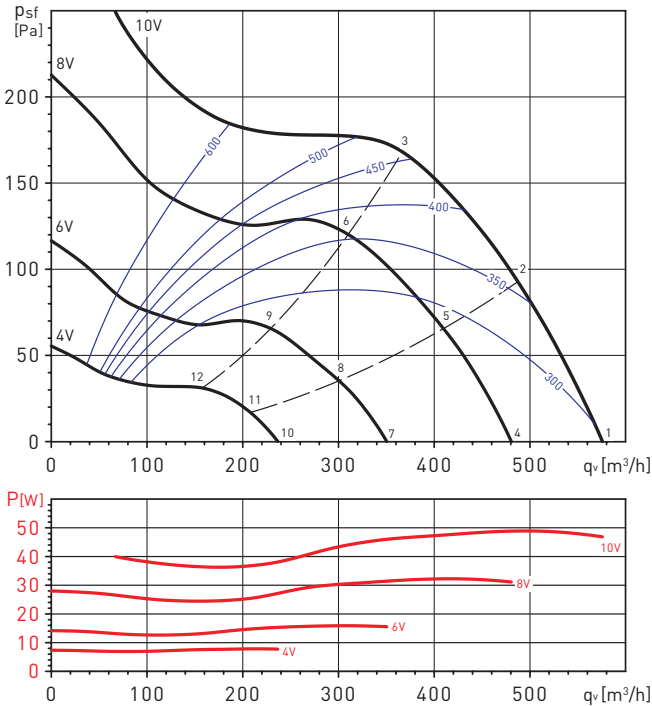
Working point		63	125	250	500	1000	2000	4000	8000	LwA
1	Inlet	30	31	46	52	56	54	45	35	59
	Outlet	30	32	48	57	57	53	43	34	61
	Break-Out	32	28	42	36	42	44	34	20	48
2	Inlet	31	31	46	50	53	51	44	34	57
	Outlet	25	30	47	53	54	50	43	34	58
	Break-Out	33	28	41	34	39	42	33	19	46
3	Inlet	32	33	51	55	55	53	46	36	60
	Outlet	27	34	56	56	54	51	44	34	61
	Break-Out	34	30	46	39	40	44	36	21	50
4	Inlet	21	31	50	50	53	48	40	30	57
	Outlet	25	31	55	51	53	46	38	29	58
	Break-Out	20	30	44	36	38	38	31	18	46
5	Inlet	26	32	45	47	51	46	39	29	54
	Outlet	25	30	49	49	50	45	39	28	55
	Break-Out	25	31	39	33	37	36	30	18	43
6	Inlet	26	35	51	51	53	49	42	31	58
	Outlet	24	33	53	51	49	46	40	28	57
	Break-Out	25	34	46	36	39	39	33	19	48
7	Inlet	34	36	44	42	45	38	35	24	49
	Outlet	20	24	42	44	43	36	33	23	48
	Break-Out	29	33	40	26	30	29	29	21	42
8	Inlet	34	36	42	41	43	37	35	23	48
	Outlet	20	24	39	42	42	36	33	23	46
	Break-Out	29	33	37	25	28	29	29	20	40
9	Inlet	37	36	43	43	46	40	35	24	50
	Outlet	26	31	41	45	41	37	33	23	48
	Break-Out	32	33	39	28	32	31	29	21	42
10	Inlet	18	26	40	33	32	25	29	23	42
	Outlet	18	23	35	33	30	24	28	22	39
	Break-Out	16	22	24	22	19	19	26	22	31
11	Inlet	18	25	40	32	31	24	29	23	41
	Outlet	19	22	34	33	30	24	28	22	38
	Break-Out	16	21	24	20	18	19	26	22	31
12	Inlet	18	24	38	33	36	26	29	23	41
	Outlet	17	23	33	33	30	25	28	22	38
	Break-Out	16	21	23	21	23	20	25	22	31

Working point		63	125	250	500	1000	2000	4000	8000	LwA
1	Inlet	32	36	53	62	63	65	59	50	69
	Outlet	38	38	56	62	65	64	58	50	69
	Break-Out	28	23	44	43	44	52	41	29	54
2	Inlet	32	33	49	61	62	62	55	48	67
	Outlet	29	33	56	64	64	60	55	49	68
	Break-Out	28	20	40	43	43	48	37	27	51
3	Inlet	35	42	62	62	63	63	58	51	69
	Outlet	29	34	57	67	65	61	57	51	70
	Break-Out	31	29	52	44	44	49	39	30	55
4	Inlet	25	34	58	55	58	62	53	45	65
	Outlet	31	34	55	57	59	59	52	45	64
	Break-Out	11	25	47	41	39	49	35	25	51
5	Inlet	23	31	54	53	56	58	51	42	62
	Outlet	26	33	57	57	57	55	51	44	63
	Break-Out	10	22	43	40	38	45	32	22	48
6	Inlet	30	40	62	56	58	58	53	45	65
	Outlet	27	38	59	62	60	56	53	46	66
	Break-Out	17	31	51	42	39	45	34	25	53
7	Inlet	20	33	47	49	51	53	43	34	57
	Outlet	22	33	51	52	52	50	43	35	58
	Break-Out	13	23	35	37	35	40	26	18	43
8	Inlet	19	33	46	49	49	48	42	33	54
	Outlet	20	32	51	51	50	46	41	34	56
	Break-Out	12	22	33	37	33	35	24	16	41
9	Inlet	28	35	51	50	49	49	44	37	56
	Outlet	19	34	53	54	51	47	42	34	58
	Break-Out	21	25	39	38	33	36	27	20	43
10	Inlet	18	26	40	42	42	38	31	28	47
	Outlet	17	23	41	45	46	37	31	26	50
	Break-Out	10	18	30	33	30	26	20	20	36
11	Inlet	18	25	40	42	38	36	30	27	46
	Outlet	19	24	41	44	41	35	31	26	47
	Break-Out	10	17	30	32	26	24	19	20	35
12	Inlet	20	34	41	42	39	38	32	28	47
	Outlet	20	28	42	45	42	37	33	27	48
	Break-Out	13	27	31	33	27	25	21	20	37

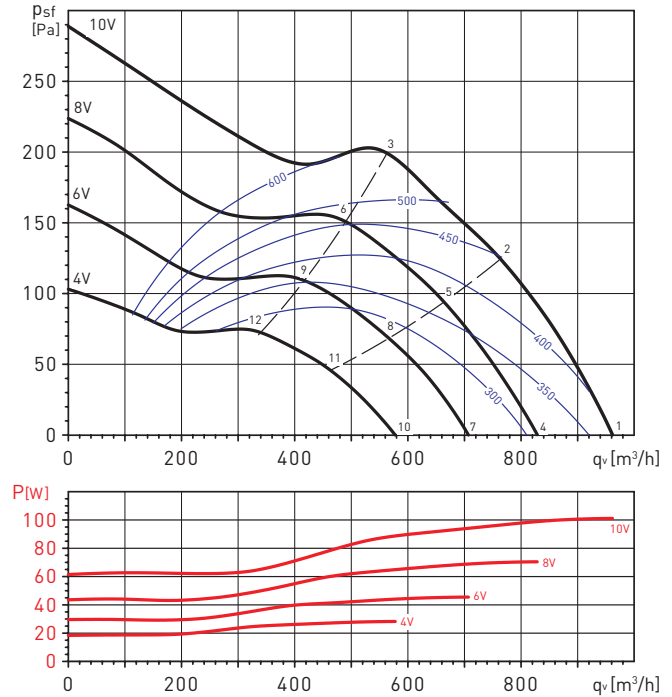
PERFORMANCE CURVES

- q_v : Airflow in m^3/h .
- p_{sf} : Static pressure in Pa.
- P: Input power in W.
- SFP: Specific fan power in $W/m^3/s$ (blue curves).
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards.
- Sound power in dB(A).

TD-500/160 ECOWATT



TD-800/200 ECOWATT



Working point	63	125	250	500	1000	2000	4000	8000	LwA	
1	Inlet	34	36	56	56	64	65	59	50	69
	Outlet	33	36	58	61	66	64	58	50	70
	Break-Out	40	28	45	41	50	53	41	30	55
2	Inlet	34	33	53	55	62	63	56	48	66
	Outlet	30	33	58	62	64	61	56	49	68
	Break-Out	39	25	42	40	47	50	38	28	53
3	Inlet	35	38	58	59	62	62	57	49	67
	Outlet	29	35	56	65	65	61	57	49	69
	Break-Out	40	30	47	44	47	50	39	29	54
4	Inlet	26	34	59	53	56	62	54	44	65
	Outlet	25	33	54	57	60	59	53	44	65
	Break-Out	26	27	45	37	41	50	36	25	52
5	Inlet	30	43	61	51	55	59	52	43	64
	Outlet	23	31	55	57	59	57	51	43	63
	Break-Out	31	36	47	36	40	47	34	23	51
6	Inlet	33	45	62	54	56	58	52	44	65
	Outlet	25	39	57	61	61	59	53	44	66
	Break-Out	33	38	48	38	41	46	35	24	51
7	Inlet	25	33	50	50	51	55	46	34	58
	Outlet	28	31	52	51	54	52	44	34	59
	Break-Out	21	23	38	36	35	43	30	19	45
8	Inlet	24	33	50	49	49	53	44	33	57
	Outlet	28	30	52	51	52	50	43	33	58
	Break-Out	20	23	37	35	33	40	28	18	44
9	Inlet	26	34	52	50	49	53	44	32	57
	Outlet	27	33	56	53	54	53	45	33	60
	Break-Out	21	23	39	36	33	40	28	17	44
10	Inlet	19	27	42	42	43	45	35	26	49
	Outlet	18	25	40	44	47	46	36	25	51
	Break-Out	15	21	30	32	30	33	24	20	38
11	Inlet	20	28	43	41	38	45	35	25	49
	Outlet	20	26	41	43	43	46	35	25	50
	Break-Out	16	22	32	31	25	33	24	20	38
12	Inlet	20	30	43	42	38	44	34	25	48
	Outlet	21	30	41	43	42	46	36	26	50
	Break-Out	15	24	31	32	25	32	23	20	37

Working point	63	125	250	500	1000	2000	4000	8000	LwA	
1	Inlet	25	36	52	58	66	66	62	52	70
	Outlet	49	48	51	62	67	68	64	51	72
	Break-Out	6	28	39	44	54	55	47	32	58
2	Inlet	26	36	52	60	65	64	59	50	69
	Outlet	38	38	51	62	67	66	61	50	71
	Break-Out	7	28	40	46	53	54	44	30	57
3	Inlet	29	42	61	68	67	66	59	51	72
	Outlet	33	41	61	70	69	67	61	51	74
	Break-Out	11	33	49	54	55	55	44	30	60
4	Inlet	22	34	51	55	63	63	58	48	67
	Outlet	46	44	53	58	64	65	59	47	69
	Break-Out	6	25	40	41	50	52	42	27	54
5	Inlet	24	33	55	56	62	61	55	46	66
	Outlet	36	35	52	58	63	63	56	45	67
	Break-Out	8	24	44	43	49	50	39	25	53
6	Inlet	27	49	57	64	63	61	55	46	68
	Outlet	30	40	60	66	66	63	56	46	71
	Break-Out	11	40	46	51	50	50	39	26	56
7	Inlet	22	32	49	54	60	59	53	43	64
	Outlet	41	40	52	55	61	61	54	42	65
	Break-Out	8	23	37	40	48	48	37	24	51
8	Inlet	22	30	56	53	59	57	50	41	63
	Outlet	31	31	52	55	60	59	51	40	64
	Break-Out	8	21	44	40	47	45	34	22	51
9	Inlet	23	41	57	57	60	57	50	41	64
	Outlet	26	40	63	62	61	59	51	40	67
	Break-Out	10	33	46	43	48	45	34	22	52
10	Inlet	19	30	47	49	54	54	45	37	58
	Outlet	34	32	44	51	56	56	47	35	60
	Break-Out	11	23	38	39	41	41	30	23	46
11	Inlet	21	29	50	49	52	50	43	35	57
	Outlet	26	26	46	51	54	52	43	32	58
	Break-Out	13	22	41	38	39	37	27	21	45
12	Inlet	21	41	55	53	53	50	42	35	59
	Outlet	25	36	54	55	55	52	43	33	60
	Break-Out	13	34	46	43	39	37	27	21	49

IN LINE MIXED FLOW DUCT FANS WITH BRUSHLESS DC MOTORS

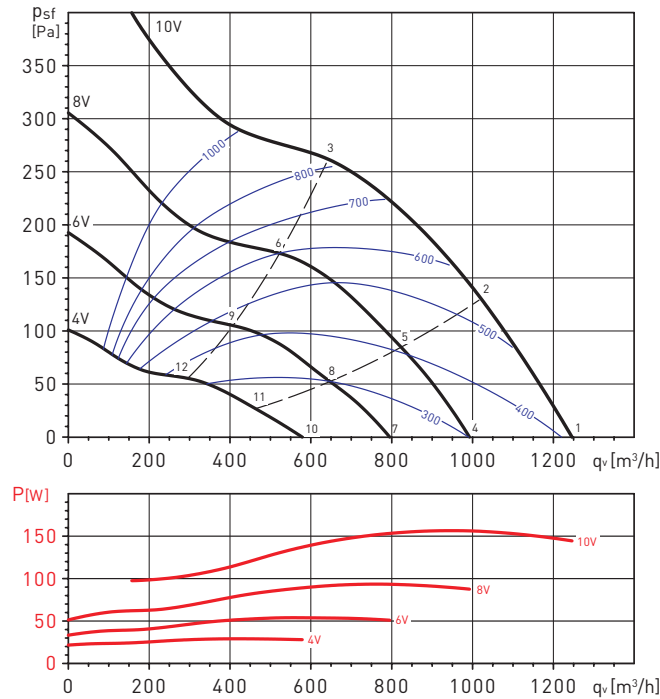
TD-ECOWATT Series



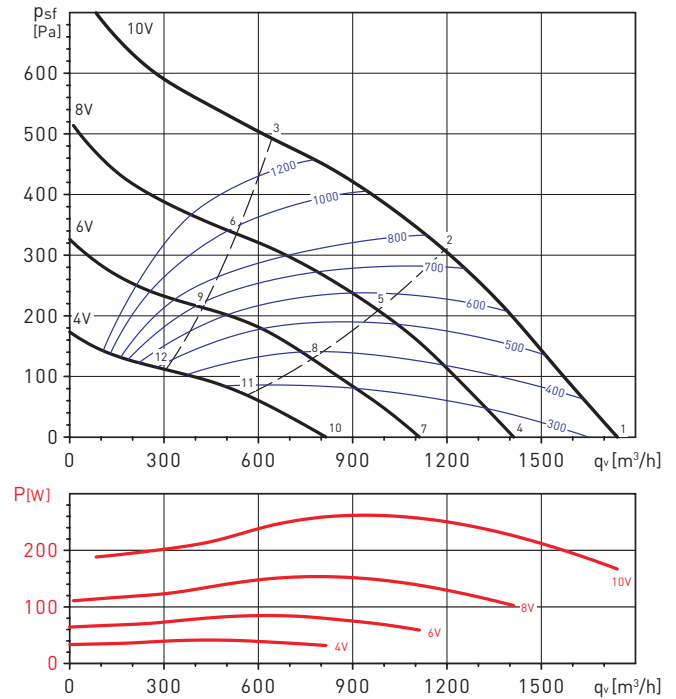
PERFORMANCE CURVES

- q_v : Airflow in m^3/h .
- p_{st} : Static pressure in Pa.
- P: Input power in W.
- SFP: Specific fan power in $W/m^3/s$ (blue curves).
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards.
- Sound power in dB(A).

TD-1300/250 ECOWATT



TD-2000/315 ECOWATT



Working point		63	125	250	500	1000	2000	4000	8000	LwA
1	Inlet	45	54	64	69	77	74	67	60	80
	Outlet	39	47	68	74	82	80	72	63	85
	Break-Out	44	44	49	52	65	64	53	47	68
2	Inlet	45	57	68	70	76	73	66	59	79
	Outlet	39	50	69	75	82	79	71	61	85
	Break-Out	44	47	53	53	64	63	51	46	67
3	Inlet	46	59	68	69	73	70	63	54	76
	Outlet	40	51	70	74	79	76	67	57	82
	Break-Out	45	49	54	52	61	59	48	41	64
4	Inlet	45	52	61	64	73	69	62	54	75
	Outlet	34	46	63	70	80	74	66	56	81
	Break-Out	44	46	43	48	61	58	48	42	63
5	Inlet	45	59	62	64	71	67	60	52	74
	Outlet	35	51	63	70	77	73	65	54	80
	Break-Out	45	53	44	48	59	57	47	40	62
6	Inlet	45	57	67	63	67	63	56	47	72
	Outlet	37	50	65	69	73	70	60	50	76
	Break-Out	45	51	49	47	55	53	42	35	59
7	Inlet	45	51	56	60	67	61	55	46	69
	Outlet	33	45	58	64	70	69	59	48	73
	Break-Out	45	45	41	50	55	53	41	36	58
8	Inlet	45	52	57	59	66	60	54	45	68
	Outlet	32	47	58	64	69	67	58	46	72
	Break-Out	45	47	42	49	53	52	40	35	57
9	Inlet	44	55	61	57	62	57	49	40	66
	Outlet	34	48	59	61	65	62	52	41	69
	Break-Out	44	49	46	47	49	48	35	30	55
10	Inlet	43	47	51	52	59	51	44	35	61
	Outlet	28	36	52	58	62	58	48	36	65
	Break-Out	43	46	42	49	47	43	37	32	54
11	Inlet	43	47	52	51	58	50	43	34	60
	Outlet	30	38	52	57	61	57	47	35	64
	Break-Out	43	46	43	48	46	42	35	31	53
12	Inlet	45	49	54	48	56	47	38	33	59
	Outlet	31	38	51	53	57	53	40	32	60
	Break-Out	44	47	45	46	43	38	31	30	52

Working point		63	125	250	500	1000	2000	4000	8000	LwA
1	Inlet	35	56	65	70	78	74	68	62	80
	Outlet	46	54	70	76	82	80	72	64	85
	Break-Out	22	40	55	61	68	65	59	54	71
2	Inlet	37	61	69	70	77	73	68	61	80
	Outlet	46	60	74	77	81	79	70	63	84
	Break-Out	24	45	59	62	67	64	58	53	70
3	Inlet	35	58	66	70	77	74	68	61	80
	Outlet	44	54	70	75	80	78	70	62	83
	Break-Out	22	41	56	61	67	64	58	53	70
4	Inlet	32	56	63	67	73	70	63	55	76
	Outlet	45	53	68	72	77	75	66	58	80
	Break-Out	20	38	53	56	63	60	54	47	66
5	Inlet	35	67	65	67	73	69	63	54	76
	Outlet	45	64	69	73	76	74	65	56	80
	Break-Out	23	49	55	56	63	59	54	46	66
6	Inlet	33	60	64	67	73	70	63	55	76
	Outlet	43	54	66	70	74	72	64	55	78
	Break-Out	20	41	53	56	62	59	53	46	65
7	Inlet	38	53	57	59	67	63	56	45	70
	Outlet	30	49	63	67	75	69	60	49	77
	Break-Out	36	42	48	50	57	54	47	38	60
8	Inlet	35	61	59	60	67	62	56	46	70
	Outlet	31	54	64	68	70	68	59	48	74
	Break-Out	33	50	50	50	57	53	47	38	60
9	Inlet	37	56	58	60	67	63	56	46	70
	Outlet	26	47	60	64	69	64	55	45	72
	Break-Out	35	45	49	50	57	53	47	38	60
10	Inlet	29	50	54	55	62	58	50	38	65
	Outlet	29	46	57	62	65	62	52	40	68
	Break-Out	24	41	41	46	52	47	41	31	55
11	Inlet	31	54	55	56	62	57	49	39	65
	Outlet	30	48	59	62	64	62	51	40	68
	Break-Out	26	45	42	46	52	47	40	32	55
12	Inlet	30	51	54	55	62	57	50	38	65
	Outlet	30	47	59	63	65	63	52	41	69
	Break-Out	25	43	42	47	53	48	41	32	55