IN LINE CENTRIFUGAL DUCT FANS

VENT Series

The new VENT Series of in-line duct fans. High airflow performance against high system resistances encountered in ducted systems. Low noise levels. Compact space saving size. 100% speed controllable external rotor motors. Factory matched non stalling backward curved impellers. Pre-wired electrical wiring terminal box. "Secure fix" long duct spigot connectors. Extensive range of accessories. Suitable for residential, commercial & industrial ventilation applications.

VENT-100 to VENT-315

VENT-355 and VENT-400

Applications

The new VENT Series of in-line duct fans are suitable for many residential, commercial and industrial environments ventilation applications including:

- Residential – bathrooms, toilets, utility rooms.
- Commercial – Cafes, bars, restaurants and offices.
- Industrial – Equipment cooling, workshops, spot ventilation.

Description

The VENT series of in-line duct fans comprises of 18 model variations covered by 9 nominal model sizes. The VENT series have been designed to be connected in-line with standard nominal diameter ducting sizes of 100, 125, 150, 160, 200, 250, 315, 355 and 400mm respectively. Model sizes 100 to 315mm are available in two versions; standard type B and a high performance type L all with single phase motors. Model sizes 355 and 400mm are available with high performance constructions and fitted with either single phase (B) or three phase motors (T). All models are suitable for voltage regulated speed control.

Airflow performances of the VENT series range from 200 up to 3,380 m^3/hr and pressures up to 820Pa.

To compliment the VENT series in-line duct fans an extensive range of accessories are available to complete any given ventilation system installation.

Accessories such as filters, electrical heater batteries, grilles, speed controllers and connectors are available from S&P.

Construction

All VENT series in-line duct fan casings are manufactured from corrosion resistant galvanised pressed steel. A robust fixing bracket, supplied as standard or duct flexible connectors (supplied separately) enable the fast and easy mounting of the fans.

All models include non-stalling backward curved impellers which are designed to deliver maximum airflow performance against high static pressures typically encountered in ducted systems along with the minimum of noise levels.

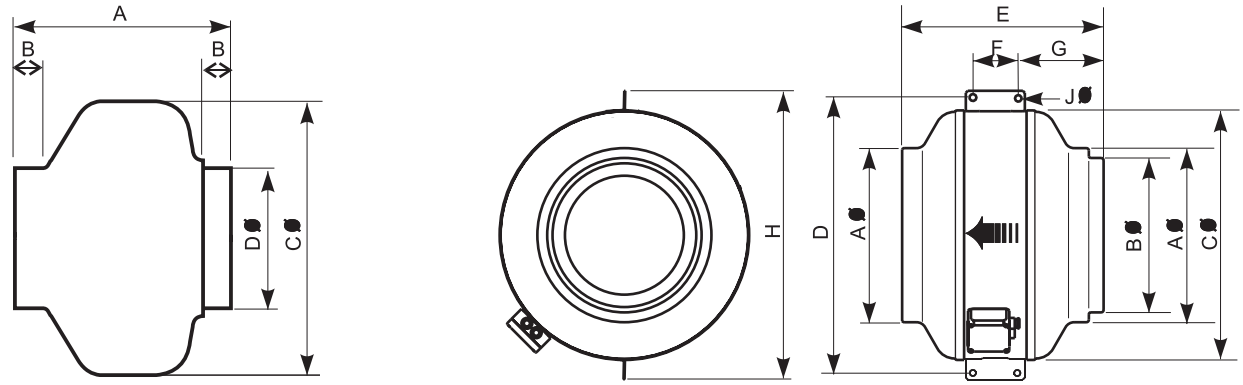
All models include a robust and reliable S&P external rotor motor:

- Single phase 230V 50/60Hz.
- Three phase 230/400V 50Hz for models 355 and 400mm.
- IP44 protection, Class B insulation.
- Sealed for life ball bearing assemblies.
- All motors include Safety Thermal Overload Protection as standard.
- All nodels are suitable for operation at 60Hz.

Technical characteristics

Type	Voltage V/Hz	Speed (rpm)	Maximum absorbed power (W)	Maximum absorbed current (A)	Maximum airflow (m^3/h)	Sound pressure level (dB(A))	Maximum ambient temperature (ºC)	Weight (kg)
VENT-100B	230 - 50	2550	85	0,60	235	38	40	3
VENT-100L	230 - 50	2500	78	0,33	290	47	60	3
VENT-125B	230 - 50	2500	87	0,60	280	39	40	3
VENT-125L	230 - 50	2450	80	0,35	410	47	60	3
VENT-150B	230 - 50	2100	70	0,30	560	46	60	5
VENT-150L	230 - 50	2700	120	0,53	700	50	60	5
VENT-160B	230 - 50	2200	70	0,30	600	45	60	5
VENT-160L	230 - 50	2750	130	0,55	760	51	60	5
VENT-200B	230 - 50	2250	125	0,50	830	47	60	5
VENT-200L	230 - 50	2600	170	0,72	1000	52	60	5
VENT-250B	230 - 50	2300	130	0,55	935	49	60	6
VENT-250L	230 - 50	2750	180	0,80	1100	54	60	6
VENT-315B	230 - 50	2300	235	1,00	1440	52	50	8
VENT-315L	230 - 50	2700	350	1,45	1890	55	50	8
VENT-355L	230 - 50	1350	280	1,20	2650	60	40	17
VENT-400L	230 - 50	1250	400	1,60	3380	61	40	22
VENT-355L-T	230/400 - 50	1375	290	1,4/0,8	2650	60	40	17
VENT-400L-T	230/400 - 50	1360	450	1,9/1,1	3380	61	40	22

Dimensions (mm)



Type	A	B	C	D	E	F	G	H	J
VENT-100	194	23	243	98					
VENT-125	195	27	243	123					
VENT-150	214	24	333	147					
VENT-160	222	28	333	157					
VENT-200	223	25	333	198					
VENT-250	206	27	333	248					
VENT-315	230	25	401	312					
VENT-355	354	314	508	583	410	100	170	587	10,5
VENT-400	399	354	568	623	441	100	185	647	10,5

Acoustic characteristics

Sound power level spectrums (LwA) at the maximum airflow (0Pa).

Type	LwA	63	125	250	500	1000	2000	4000	8000	TOT
100L	Inlet	44	53	63	60	67	61	52	41	70
	Disch.	42	48	67	61	63	61	55	44	70
	Rad.	42	44	53	51	46	45	40	33	56
100B	Inlet	37	43	54	49	59	54	48	39	61
	Disch.	38	42	56	48	53	53	49	38	60
	Rad.	36	33	32	36	40	38	34	26	45
125L	Inlet	38	47	59	67	65	62	56	44	70
	Disch.	38	45	61	64	63	63	56	46	69
	Rad.	37	43	45	51	47	45	42	33	54
125B	Inlet	33	43	55	57	57	55	51	41	62
	Disch.	34	41	57	53	55	56	52	41	62
	Rad.	34	36	35	38	41	39	37	28	46
150L	Inlet	40	45	63	73	69	64	61	46	75
	Disch.	40	45	63	66	67	64	61	47	72
	Rad.	40	37	46	59	51	50	43	30	60
150B	Inlet	36	44	58	70	64	60	56	40	71
	Disch.	36	43	55	62	62	59	56	40	67
	Rad.	36	38	40	53	46	45	41	29	55
160L	Inlet	39	45	63	74	70	67	63	48	77
	Disch.	43	45	61	67	68	65	62	49	72
	Rad.	43	36	44	60	52	51	45	32	61
160B	Inlet	35	41	56	69	63	60	56	42	71
	Disch.	35	42	54	63	61	59	57	42	67
	Rad.	35	37	37	52	45	45	42	29	54

Type	LwA	63	125	250	500	1000	2000	4000	8000	TOT
200L	Inlet	42	52	63	70	69	68	66	60	75
	Disch.	43	51	63	70	69	69	68	59	75
	Rad.	43	48	40	51	53	52	49	39	58
200B	Inlet	41	53	60	67	66	64	63	52	72
	Disch.	42	51	61	65	66	66	65	53	72
	Rad.	42	42	34	46	48	53	46	37	56
250L	Inlet	43	57	67	71	72	70	70	60	78
	Disch.	42	53	67	73	75	75	72	62	80
	Rad.	36	52	37	53	53	51	50	38	59
250B	Inlet	42	53	62	68	69	66	66	57	74
	Disch.	39	48	62	70	70	69	67	59	76
	Rad.	38	43	36	52	48	50	48	42	56
315L	Inlet	45	58	70	74	75	76	71	66	81
	Disch.	57	58	72	76	77	77	72	68	83
	Rad.	51	54	49	56	61	59	56	48	65
315B	Inlet	44	59	68	70	71	70	67	60	77
	Disch.	44	51	71	72	75	74	69	64	80
	Rad.	43	43	47	50	52	55	53	43	59
355B	Inlet	40	57	68	71	71	67	59	48	76
	Disch.	42	59	62	69	70	68	60	50	74
	Rad.	41	55	43	50	55	51	42	29	59
400B	Inlet	42	61	69	72	67	66	63	50	76
	Disch.	47	63	66	70	69	68	64	51	75
	Rad.	45	58	45	52	52	50	46	30	61

Airflow Performance Characteristics

- Airflow in m³/hr & m³/s, static pressure in mmWG & Pa
- Dry air at 20ºC and 760 mmHg.
- According to UNE 100-212-89, BS 848 Part 1, AMCA 210-85 & ASHRAE 51-1985.