

GL GAMMA SERIES - BUSHFIRE CODE COMPLIANT



DESCRIPTION

The GL Gamma Series, with bushfire code compliance, has been developed for bushfire prone regions. They feature a high performance backward-curved centrifugal fan and a robust galvanised steel construction.

There are 8 sizes in the range extending from 315 to 710mm diameter.

Typical Applications

Suitable for applications requiring the combination of speed-controllable motors with an all metal construction. Designed for use in commercial kitchen exhaust systems in bushfire prone areas, see *Special Notes*.

Features

- Quick release toggle clamps provide easy access for cleaning and maintenance.
- Designed for vertical discharge applications.
- High quality bronze mesh provides ember protection.
- Speed-controllable with electronic or auto-transformer controllers (not on CE316VGL-BFC).
- Compact, low profile design.
- Choice of speeds available.
- High performance backward-curved centrifugal fan.
- Many 3-phase motors are 2-speed star/delta design.
- Can be mounted at angles up to 30°.
- Backdraft dampers are an optional extra, refer to page J-2 for details.
- Compliant to AS3959:2009 up to and including BAL-40.

Construction

Cowls are of galvanised steel

Ember protection - bronze mesh with maximum of 2mm aperture

Backward-curved centrifugal impellers

Powder-coating is an optional extra

Motors

Type - external rotor, squirrel cage induction motors

Electricity supply - 230V, single or 415V three-phase, 50Hz

Bearings - sealed-for-life, ball

Speed-controllable using electronic or auto-transformer speed controllers (not CE316VGL-BFC)

Many 3-phase motors are 2-speed star/delta design.

See pages O-2/3 for details on these motors

Internal Thermal Protection

All motors are fitted with Internal Thermal Contacts as standard.

Testing

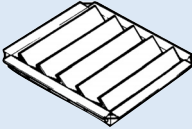
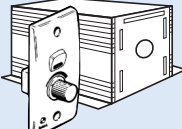

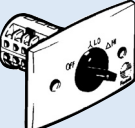
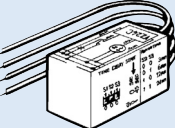
Air flow to ISO5801:1997

Noise tests to BS848:Part 2, 1985

Wiring Diagram

See page N-8, diagrams ER 1, 2, 4, 5.

ANCILLARY EQUIPMENT

 CBD - Backdraft shutter Ref. J-2	 Speed controllers Ref. M-7	 VA - Speed controller Ref. M-5
 SD - Star/Delta switch Ref. M-7	 VZ - Run-on timer Ref. M-14	

Special Notes

Construction of buildings in bushfire prone areas

AS3959:2009, clause 6.6.5(b) "Roof penetrations" states: Openings in vented roof lights, roof ventilators or vent pipes shall be fitted with ember guards made from a mesh or perforated sheet with a maximum aperture of 2mm, made of corrosion-resistant steel, bronze or aluminium.

Backdraft dampers

Backdraft shutters are an optional extra, refer to *page J-2* for details. The pressure loss across the shutter has to be added to the system pressure before making fan selections.

Kitchen Hood Exhaust Systems

AS/NZS1668.1:1998, Clause 11.2.5 states that, for commercial installations:- "kitchen exhaust fan casings and cowls shall be manufactured from non-combustible materials that have a fusing temperature above 1000°C".

SUGGESTED SPECIFICATION

The roof ventilators shall be of the GL Gamma Series with bushfire code compliance as designed and manufactured by Fantech Pty Ltd.

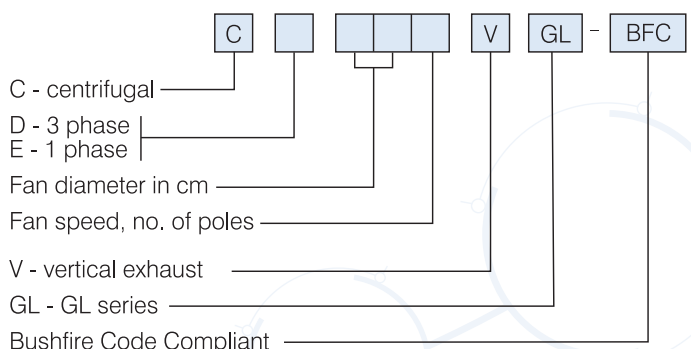
Impellers shall be of backward-curved centrifugal design and driven by speed-controllable external rotor motors with integral thermal protection.

They shall be constructed from galvanised steel and be of vertical exhaust design.

Ember protection mesh shall be bronze or steel with openings a maximum of 2mm. The windband shall incorporate quick-release toggle clamps to provide easy access for cleaning and maintenance

All data shall be based on tests on a complete assembled unit to ISO5801:1997 for air flow and BS848:Part 2, 1985 for noise.

HOW TO ORDER



TECHNICAL DATA & NOISE LEVELS

Model CD...VGL-BFC CE...VGL-BFC	Nom. Speed		Avg dB(A) @ 3m		CE.. 1 ph.		CD.. 3 ph.		In-duct Spectrum Corrections, dB**							
	r/s	Inlet	Low Air Flow	High Air Flow	kW	Amps*	kW	Amps*	63	125	250	500	1k	2k	4k	8k
314.	23	Inlet	47	48	0.15	0.66	0.18	0.37	35	29	21	18	10	10	8	2
316.†	15	Inlet	40	42	0.07	0.54	0.09	0.15	34	26	22	18	12	12	6	0
354.	23	Inlet	52	51	0.28	1.25	0.19	0.51	28	26	22	19	10	12	11	1
356.	15	Inlet	43	43	0.07	0.32	0.13	0.22	33	25	22	19	14	8	3	0
404.	23	Inlet	56	54	0.49	2.20	0.45	1.40	28	26	21	18	11	12	12	5
406.	15	Inlet	44	44	0.17	0.80	0.23	0.73	33	28	22	19	14	10	7	3
408.	11	Inlet	39	40	-	-	0.16	0.30	33	26	19	16	14	14	12	3
454.	23	Inlet	59	57	0.76	3.50	0.77	1.47	27	25	20	17	11	12	12	8
456.	15	Inlet	47	46	0.43	2.00	0.44	0.90	31	30	21	18	13	11	9	5
458.	11	Inlet	41	43	-	-	0.15	0.35	33	26	19	16	14	14	12	3
504.	23	Inlet	62	61	1.30	5.70	1.39	2.70	26	26	21	15	12	12	12	9
506.	15	Inlet	50	50	0.53	2.50	0.65	1.20	30	29	22	16	12	10	8	6
508.	11	Inlet	43	45	0.23	1.15	0.30	0.50	32	26	20	16	14	13	12	4
564.	23	Inlet	65	65	-	-	2.16	4.10	26	27	23	14	13	12	12	10
566.	15	Inlet	54	54	0.84	4.10	0.69	1.45	29	29	23	15	12	10	8	7
568.	11	Inlet	44	47	0.32	1.50	0.39	0.79	30	27	22	15	15	11	11	6
634.	23	Inlet	69	70	-	-	4.30	7.35	24	28	24	12	13	11	12	10
636.	15	Inlet	60	58	-	-	1.10	2.20	28	29	24	14	12	10	8	8
638.	11	Inlet	46	50	-	-	0.68	1.20	28	27	23	14	14	9	10	6
716.	15	Inlet	63	61	-	-	2.20	4.30	28	29	24	14	12	10	8	8
718.	11	Inlet	48	53	-	-	0.66	2.00	28	27	23	14	14	9	10	6
711.	9	Inlet	41	46	-	-	0.28	1.20	28	27	23	14	14	9	10	6

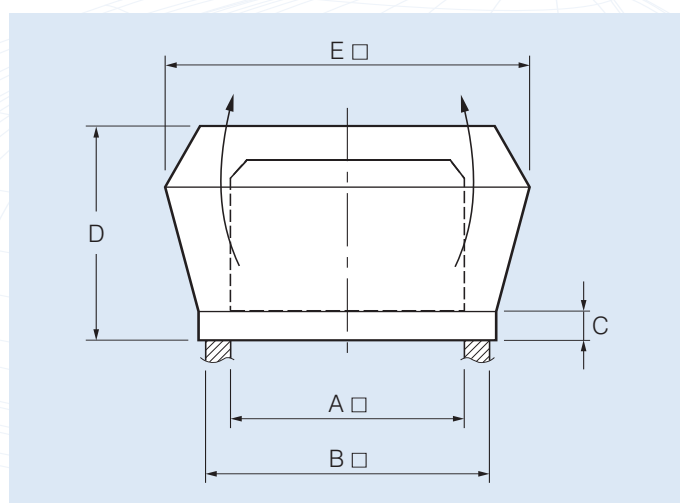
Electrical data in **bold** type refers to fans fitted with 2-speed star/delta motors as standard.

* Amperages shown are a guide only, refer to our Sales Department for accurate figures at time of order.

** Add the In-Duct Spectrum Corrections to the closest dB(A) level shown on the fan curve to obtain the In-Duct Sound Power Levels on the Inlet Side of the unit.

† The CE316VGL is not speed controllable.

DIMENSIONS



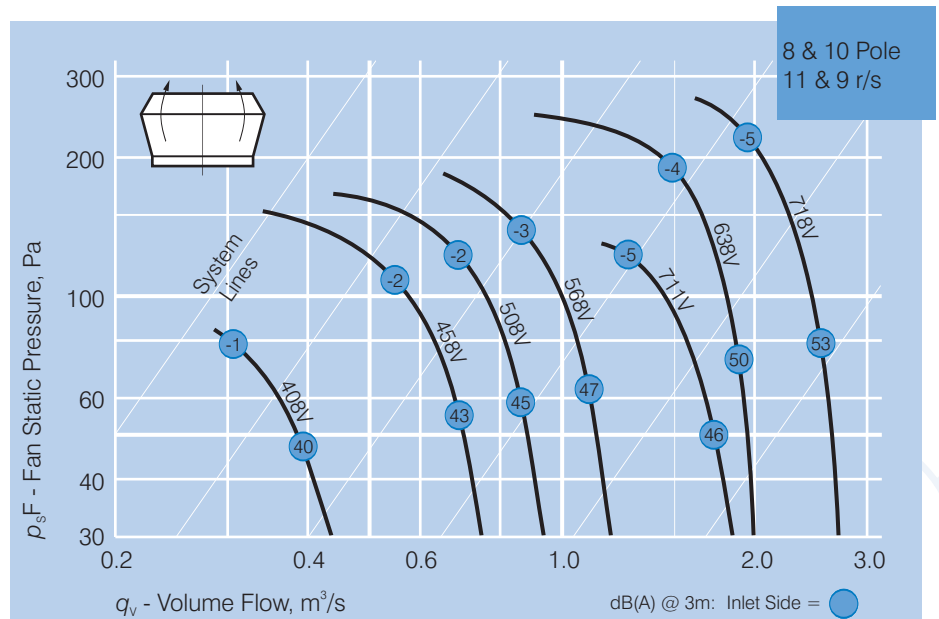
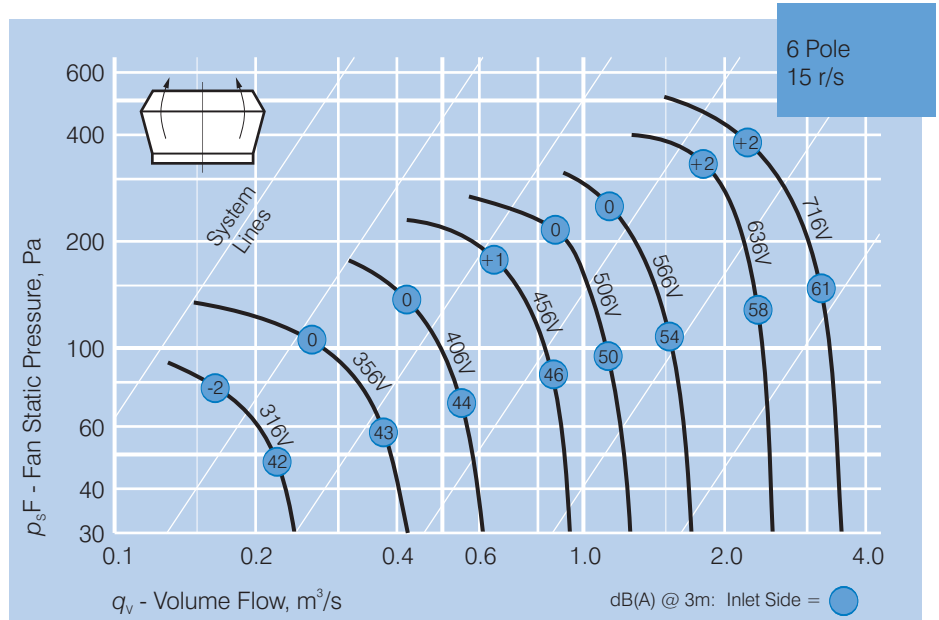
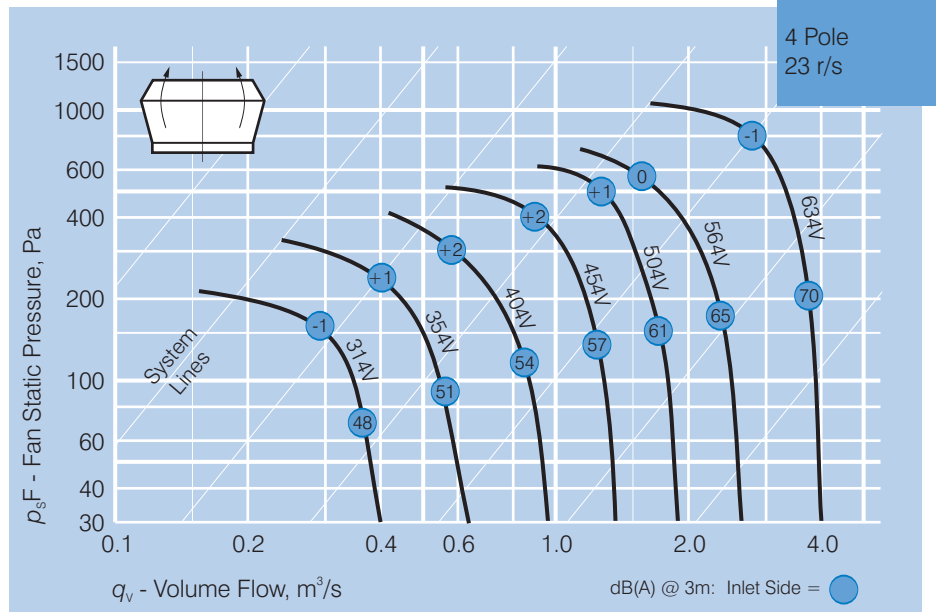
Model CD...VGL-BFC CE...VGL-BFC	Dimensions, mm					Approx. weight	Approx. volume
	A	B	C	D	E	kg.	m ³
314	310	410	50	310	520	16	0.10
316							
354	400	500	50	420	670	26	0.22
356							
404							
406	400	500	50	420	670	26	0.22
408							
454							
456	620	720	60	525	900	49	0.50
458							
504						57	
506	620	720	60	525	900	51	0.50
508							
564						65	
566	620	720	60	525	900	56	0.50
568							
634						97	
636	710	810	60	665	1160	78	1.03
638							
716						95	
718	710	810	60	665	1160	83	1.03
711							

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Note

Performance curves shown are based on nominal speeds.

As motor speeds may vary from one manufacturer to another, and from one motor type to another, variations in performance can result.



Scan the QR Code to view wiring diagrams or more information online.

