# **TWIN GAMMA ULTRA SERIES**



### **DESCRIPTION**

The Twin Gamma Ultra Series of Mixed-Flow roof fans have been designed for use in commercial ducted exhaust applications. Incorporating twin vertical discharge fans, the unit provides 100% stand-by capacity.

These compact and low profile units are fitted with bird-mesh to prevent the entry of birds and vermin into the ducting or building.

They are available in 5 sizes, extending from 315 to 500mm diameter.

### **Typical Applications**

Exhaust air from a wide range of commercial applications such as factories, warehouses and workshops, change rooms, bulk goods retail outlets and assembly halls.

#### Features

- Robust, lightweight construction.
- Choice of speeds available.
- · Compact, low profile design.
- Designed for vertical exhaust applications.
- Backdraft-shutters are an optional extra (See special note).
- Can be mounted at angle up to 30°.
- Most 3-phase motors are 2-speed star/delta design.

Note: Pressure loss across the shutter is now included in the performance curves.

### Construction

Cowls are UV-stabilised plastic. Impellers are Mixed-Flow design and made from high performance injection moulded composite material. Steel components have a corrosion resistant finish. Bird-mesh guards are fitted as standard.

### **Internal Thermal Protection**

Thermal protection is supplied as standard on all motors

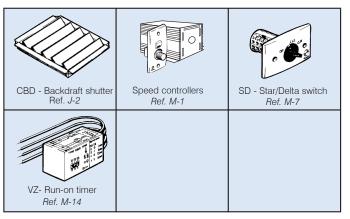
### Testing

Air flow tests based on ISO5801 Noise tests based on ISO13347-3

### **Special Note**

Backdraft shutters are offered as an optional extra, but are essential to prevent short circuiting and ensuring proper performance of the product. Due to this, the backdraft shutter effect on the products performance is included in the performance curves. This is to ensure accurate selections to allow reliable and predictable on-site performance. There is no longer a need to add losses due to the backdraft shutter as is required with single Gamma models.

## **ANCILLARY EQUIPMENT**



#### **Motors**

Type - external rotor, squirrel cage induction motor

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

Bearings - sealed-for-life, ball

Speed-controllable using electronic or auto-transformer controllers

All three-phase units are fitted with 2-speed star/delta design motors

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

### SUGGESTED SPECIFICATION

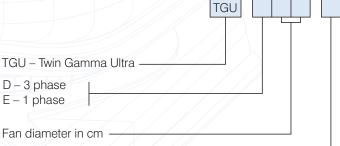
The roof ventilators shall be of the Twin Gamma Ultra Series vertical exhaust type as designed and manufactured by Fantech Pty. Ltd. They shall provide dual fan vertical discharge to provide a 100% stand-by capacity and be of the model numbers shown on the schedule/drawing.

Impellers shall be made from high performance injection moulded composite material. They shall be Mixed-Flow design and driven by speed-controllable external rotor motors with integral thermal overload protection.

The windband shall be of the vertical exhaust design and formed from plastic. Steel components shall be corrosion protected.

All performance data shall be for a complete assembled unit based on ISO5801 for air flow and ISO13347-3 for noise.

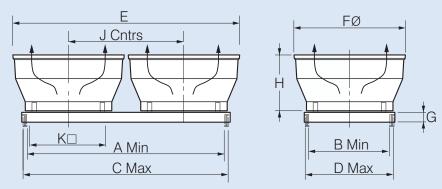
## **HOW TO ORDER**



Fan speed, no. of poles

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### DIMENSIONS



Model TGUD	Dimensions, mm													
TGUE	Α	В	С	D	E	FØ	G	н	J	K□	kg.			
31	1080	380	1180	480	1363	667	75	353	696	372	32			
35	1080	380	1180	480	1363	667	75	353	696	372	33			
40	1580	600	1680	700	1894	928	75	459	966	592	66			
45	1580	600	1680	700	1894	928	75	459	966	592	78			
50	1580	600	1680	700	1894	928	75	459	966	592	87			

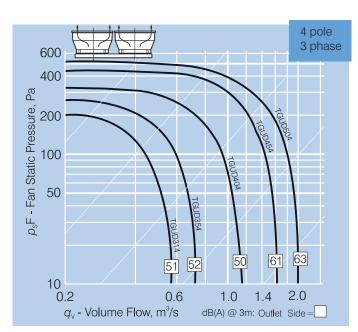
### **TECHNICAL DATA**

Model TGUD TGUE	Nom. Speed r/s	Max Operating Temp. °C		TGUD AVG. dB(A) @ 3M	TGUE kW	1ph Amps*	TGUE kW	) 3ph Amps*	ln-d 63	uct so 125	ound p 250	oower 500	levels 1k	, dB 2k	4k	8k
314	00	60	Inlet	46	0.22	1.10	0.21	0.50	68	66	66	63	61	58	54	47
	23		Outlet	51	0.22				69	70	69	69	66	64	58	51
<b>316</b> 15	15	60	Inlet	40	0.09	0.48	0.09	0.26	66	62	59	56	57	51	43	33
	15		Outlet	44	0.09		0.05		66	64	61	62	60	57	47	37
<b>318</b> 13	13	60	Inlet	37	_	_	0.05	0.11	63	59	56	53	54	48	40	30
	10		Outlet	41		_			63	61	58	59	57	54	44	34
<b>354</b> 23	23	60	Inlet	47	0.37	1.85	0.33	0.68	69	69	68	64	62	60	55	47
	20		Outlet	52	0.07				71	73	72	70	67	64	58	50
<b>356</b> 16	16	60	Inlet	41	0.12	0.56	0.13	0.36	66	64	65	56	55	53	45	32
	10		Outlet	44	0.12				67	66	66	62	60	56	47	35
<b>358</b> 13	13	60	Inlet	37	-	-	0.07	0.14	62	60	61	52	51	49	41	28
			Outlet	40					62	62	62	58	56	52	43	31
<b>404</b> 22	22	60	Inlet	51	0.58	2.60	0.54	1.20	70	72	73	68	66	63	58	53
			Outlet	56					66	76	79	72	72	67	61	54
<b>406</b> 15	15	60	Inlet	45	0.28	1.35	0.22	0.56	66	67	69	62	60	58	51	42
			Outlet	50					61	69	73	66	67	61	52	42
<b>408</b> 11	11	60	Inlet	38	-	-	0.13	0.28	59	60	62	55	53	51	44	35
			Outlet	43					54	62	66	59	60	54	45	35
454	23	60	Inlet	56	1.10	10 5.20	1.00	1.95	76	77	80	72	70	69	65	59
			Outlet	61					79	83	86	77	76	72	68	60
<b>456</b> 1	15	60	Inlet	46	0.37	1.75	0.32	0.70	68	69	68	62	61	59	51	41
			Outlet	51					61	71	74	67	67	62	53	42
458	9	60	Inlet	33	-	-	0.19	0.39	55	56	55	49	48	46	38	28
			Outlet	38					48	58	61	54	54	49	40	29
504	21	60	Inlet	58	1.65	7.40	1.45	2.80	81	82	78	74	72	72	68	63
			Outlet	63					85	88	85	80	79	74	71	63
506	14	60	Inlet	50	0.54	2.50	0.48	0.88	71	76	69	64	65	66	58	51
			Outlet	54					76	78	75	69	71	66	60	48
508	11	60	Inlet	43			0.31	0.50	64	69	62	57	58	59	51	44
			Outlet	47	-	-			69	71	68	62	64	59	53	41

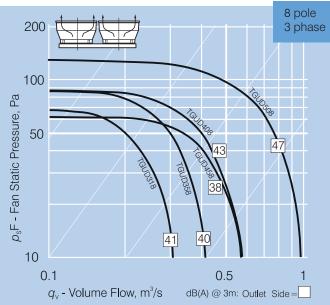
Electrical data in **bold** type refers to fans fitted with 2-speed star/delta motors as standard

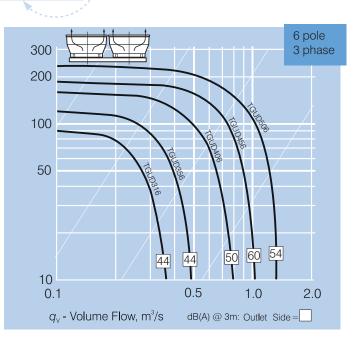
\* Amperages shown are a guide only, refer to our Sales Department for accurate figures at time of order.

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D





10 0.1 0.5 1 *q*<sub>v</sub> - Volume Flow, m<sup>3</sup>/s dB(A) @ 3m: Outlet Side =

D-37C ROOF MOUNTED FANS

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