

### **DESCRIPTION**

The Neta Twin Series of duct mounted in-line centrifugal fans is complete with a standby fan and motor for applications requiring 100% stand-by capacity.

## **Typical Applications**

Commercial and industrial supply or exhaust air applications such as shopping centres, office buildings, exhibition centres, hotels, health centres, schools and universities.

#### **Features**

- Robust, yet lightweight galvanised steel construction.
- Easy to fit 35mm TDF profile flange connections.
- Large choice of speeds available.
- Most 3-phase external rotor motors fitted are 2-speed star/ delta design.
- To improve energy efficiency, motors can be speed-controlled.
- A range of matched ancillaries is also available.

#### Construction

Galvanised sheet steel housing with modern flange connections. Backward-curved centrifugal impellers.

### **Motors**

Type - external rotor, squirrel cage induction motor.

Electricity supply -220-240V, single or 415V, three-phase, 50Hz. Bearings - sealed-for-life, ball.

Speed-controllable using electronic or auto-transformer controllers.

See pages N-2/3 for details on these motors.

### **Internal Thermal Protection**

Manual-reset type fitted as standard on all models with standard motors.

### **Testing**

Air flow test to BS848, Part 1, 1980. Noise test to BS848, Part 2, 1985.

# **Special Features**

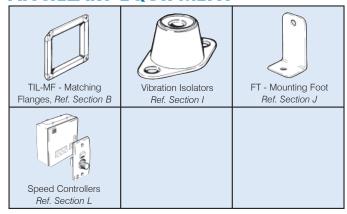
Easy access to the fan and motor is an integral part of the design.

Most three-phase motors are 2-speed star/delta design. Dual fan, dual-motor arrangements give 100% stand-by facility. Low-loss non-return damper to prevent short cycling.

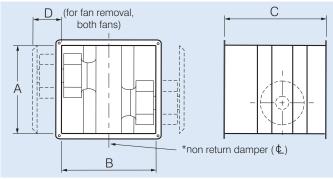
### Wiring Diagram

See page M-8, diagram ER 1, 2, 4, 5.

# **ANCILLARY EQUIPMENT**



### **DIMENSIONS**



Model TILD	Dime	Dimensions, mm					
TILE	Α	В	С	D	kg		
31.	425	540	780	230	45		
35.	500	655	900	280	52		
40.	550	745	1015	310	65		
45.	625	830	1130	345	88		
50.	700	925	1250	390	105		
56.	775	1055	1385	405	150		

<sup>\*</sup> Fan must be installed horizontally as shown with non-return damper axis vertical or installed vertically with air flow upwards.

### SUGGESTED SPECIFICATION

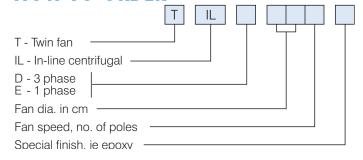
Neta Series Twin In-line centrifugal fans shall be as designed and manufactured by Fantech Pty. Ltd.

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

The galvanised steel housing shall be designed to optimise the fan performance by having carefully designed intake conditions. The casing and end flanges shall be of a modern formed design.

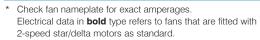
All models shall be fully tested to BS848, Part 1, 1980 for air flow and Part 2, 1985 for noise, in a fully certified laboratory.

#### **HOW TO ORDER**



# **TECHNICAL DATA**

Model	Nom.	Avg. dB(A) @ 3m						
TILD	Speed	Low A	ir High Air	TILE	. 1 ph.	TILD 3 ph.		
TILE	r/s	Flow	Flow	kW	Amps*	kW	Amps*	
314	23	47	48	0.15	0.66	0.18	0.37	
316	15	40	42	0.07	0.54	0.09	0.15	
354	23	52	51	0.28	1.25	0.19	0.51	
356	15	43	43	0.07	0.32	0.13	0.22	
404	23	56	54	0.49	2.20	0.45	1.40	
406	15	44	44	0.17	0.80	0.23	0.73	
408	11	39	40	-	-	0.16	0.30	
454	23	59	57	0.76	3.50	0.77	1.47	
456	15	47	46	0.43	2.00	0.44	0.90	
458	11	41	43	-	-	0.15	0.35	
504	23	62	61	1.30	5.70	1.39	2.70	
506	15	50	50	0.53	2.50	0.65	1.20	
508	11	43	45	0.23	1.15	0.30	0.50	
564	23	65	65	-	-	2.16	4.10	
566	15	54	54	0.84	4.10	0.69	1.45	
568	11	44	47	0.32	1.50	0.39	0.79	



Note:- The kW and amp figures apply to each motor.

## **NOISE DATA**

Model									
TILD	In-Duct Spectrum Corrections, dB <sup>#</sup>								
TILE		63	125	250	500	1k	2k	4k	8k
314	Inlet	33	29	21	18	10	10	8	2
316	Inlet	34	26	22	18	12	12	6	0
354	Inlet	28	26	22	19	10	12	11	1
356	Inlet	33	25	22	19	14	8	3	0
404	Inlet	28	26	21	18	11	12	12	5
406	Inlet	33	28	22	19	14	10	7	3
408	Inlet	33	26	19	16	14	14	12	3
454	Inlet	27	25	20	17	11	12	12	8
456	Inlet	31	30	21	18	13	11	9	5
458	Inlet	33	26	19	16	14	14	12	3
504	Inlet	26	26	21	15	12	12	12	9
506	Inlet	30	29	22	16	12	10	8	6
508	Inlet	32	26	20	16	14	13	12	4
564	Inlet	26	27	23	14	13	12	12	10
566	Inlet	29	29	23	15	12	10	8	7
568	Inlet	31	27	22	15	15	11	11	6

Add the In-Duct Spectrum Corrections to the appropriate dB(A) level to obtain the In-Duct Sound Power Level on the Inlet Side of the Unit.

For noise levels at the Outlet Side of the Unit, please refer to our sales department.

## **MATCHING FLANGES**

Model TILD	Matching Flanges			
TILE	Part No.			
31.	TIL31MF			
35.	TIL35MF			
40.	TIL40MF			
45.	TIL45MF			
50.	TIL50MF			
56.	TIL56MF			







