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10.0 Product Specifications

Electrical Specifications

Parameter	Value	
Nominal Operating Voltage	220 - 240V a.c.	
Nominal Operating Frequency	50 Hz	
Maximum Load	500W	Derate for multi-gang applications (2A)
Minimum Load	40W	(0.16A)
Dimming Technique	Leading-Edge Phase Control	
Compatible Loads		Exhaust fans (shaded pole induction motors) Ceiling fans (split-phase induction motors)
Incompatible Loads		Incandescent lighting Halogen 240V lamps
		Fluorescent Lighting
		Low voltage lighting with iron-core transformers
		Low voltage lighting with electronic transformers
Operating Temperature Range	0 to 40°C	
Operating Humidity Range	10 to 90% R.H.	
Mounting Centres	84mm	Australian Pattern Plate
Shipping Weight	25g	Fan Control Mechanism Only
EMC Emission Compliance	AS/NZS CISPR 15:2002	
Specifications Typical @ 25°C ± 5°C		
No User Serviceable Parts Inside		

4.0 Load Compatibility

The Clipsal 32E500F Series Fan Controller a part of the C-Thru Range. Each mechanism is colour coded to indicate load compatibility.

LOAD SYMBOL	COMPATIBLE LOADS	C-THRU COLOUR		
		32E450L	32E450T	32E500F
		BLUE	GREEN	AMBER
		LEADING EDGE DIMMER	TRAILING EDGE DIMMER	FAN SPEED CONTROLLER
		450W	450W	500W
	Incandescent Lighting Halogen 240V Lamps	✓	✓	✗
	Low voltage lighting with iron-core transformers	✓	✗	✗
	Low voltage lighting with electronic transformers	✗	✓	✗
	Exhaust fans (shaded pole induction motors) Ceiling fans (split-phase induction motors)	✗	✗	✓

IMPORTANT NOTES:

- All 32E500F Series Fan Speed Controllers are compatible with all Airflow Ceiling Fans, including:
 - ACES36AL 900mm (36") Reversible Ceiling Sweep Fan – Hang Sure
 - ACES48AL 1200mm (48") Reversible Ceiling Sweep Fan – Hang Sure
 - ACES56AL 1400mm (56") Reversible Ceiling Sweep Fan – Hang Sure
 - ACES36JAL 900mm (36") Reversible Ceiling Sweep Fan – J Hook
 - ACES48JAL 1200mm (48") Reversible Ceiling Sweep Fan – J Hook
 - ACES56JAL 1400mm (56") Reversible Ceiling Sweep Fan – J Hook
 - AFLR48 1200mm (48") Reversible Ceiling Sweep Fan – Rattan Blades – Hang Sure
- Typical fan motors used on ceiling sweep fans may vary in nominal VA rating from 60VA to 120VA. Take care when controlling multiple fans from a single Fan Speed Controller not to exceed the maximum ratings and overload the unit.
- Fan motors used for exhaust and other fan types may stall (stop operating) at very low speed settings. Simply increase the speed setting to resume operation. This is normal operation, and is not a cause for concern.

5.0 Incompatible Loads

Under NO CIRCUMSTANCES should the 32E500F be used for incompatible load types such as lighting loads, or motors with capacitor start circuits. Failure to comply with this instruction will void any warranty associated with the product.

6.0 Important Warning

It is illegal for persons other than an appropriately licensed electrical contractor or other persons authorised by legislation to work on the fixed wiring of any electrical installation. Penalties for conviction are severe!

7.0 Installation Instructions

7.1 Wiring Details

1. Disconnect power at the main switchboard
2. Remove existing switch from wall
3. Connect the 32E500F in accordance with the wiring diagrams opposite
4. Reconnect power
5. Refit switch plate to wall
6. Turn fan switch on and check fan speed controller operation by turning control knob through full range

7.2 Minimum Fan Speed Settings

The minimum fan speed setting has been factory preset to suit typical ceiling sweep and exhaust fan applications.

7.3 Multi-Gang Derating

For applications, where 32E500F Series Fan Speed Controllers are multi-ganged, derate the maximum load rating of the unit according to the derating table shown below.

Number of Fan Speed Controllers	Maximum Load per Controller
1	500W
2	375W
3	280W

32E500F Multigang Fan Speed Controller Derating Table

The 32E500F Series Fan Speed Controllers incorporate thermal overload compensation, which automatically reduces the fan speed should the unit be inadvertently overloaded. Any significant overload should be avoided.

8.0 Unit Operation

The Fan Speed Controller is switched on or off using the 30 Series switch mechanism provided.* Turning the load on or off using the switch does not alter the fan speed setting.

Fan speed is adjusted by rotating the control knob:

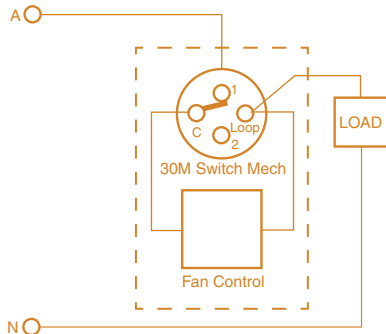
- Clockwise increases speed
- Anti-clockwise decreases speed

The 32E500F Series Fan Speed Controllers incorporate a kick start feature providing a short burst of power at start up to overcome the inertia of the fan. This feature allows the fan to rapidly increase speed to the set level, and thus provides better feedback to the user as to the suitability of the fan speed that they have set.

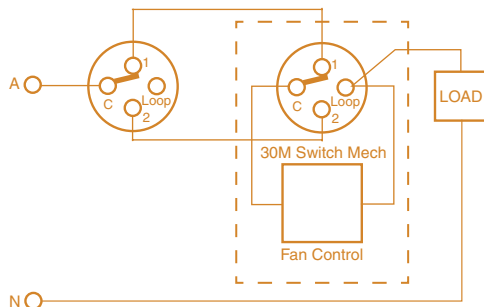
* 30 Series switch mechanism not included with 32E500FM and P2032E500FM modules.

9.0 Wiring Diagrams

9.1 One-Way Operation



9.2 Two-Way Operation



NOTE:

- If the unit is wired for 2-way operation it can be switched ON or OFF from either location, but the fan speed can only be adjusted from one location.
- Two or more fan controllers cannot be connected in parallel or series to control the same load from two different locations.
- Fan control wiring is polarity insensitive.

1.0 Product Range

0/ B2 - - Cj	Fan Speed Controller, 220-240Vac, 50Hz, 500W (30 Series Mechanism)
0/ B2 - - C	Fan Speed Controller, 220-240Vac, 50Hz, 500W (Standard Range)
/ - 0/ B2 - - C	Fan Speed Controller, 220-240Vac, 50Hz, 500W (2000 Series)
@ - 0/ B2 - - C	Fan Speed Controller, 220-240Vac, 50Hz, 500W (Classic Series)
P@ - 0/ B2 - - C	Fan Speed Controller, 220-240Vac, 50Hz, 500W (Slimline Series)
P1 / - 0/ B2 - - C	Fan Speed Controller, 220-240Vac, 50Hz, 500W (Eclipse Series)

M - 0/ B2 - - Cj	Fan Speed Controller, 220-240Vac, 50Hz, 500W (Prestige Mechanism)
M - 0/ B2 - - C	Fan Speed Controller, 220-240Vac, 50Hz, 500W (Prestige Series)

. 6/ - B2 - - C	Fan Speed Controller, 220-240Vac, 50Hz, 500W (Heritage Series)
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* Please note that these products are also available in other configurations and in a wide range of colours. For further information, please contact your nearest Clipsal Sales Representative.

2.0 Description

The Clipsal 32E500F Series Fan Speed Controller is a separately switched, compact, modular Fan Control mechanism rated at 500W (2A). The unit utilises state-of-the-art technology to provide continuous variable speed control of motor loads such as ceiling sweep fans and exhaust fans.

The 32E500F Series Fan Speed Controller is suitable for use in any new installation, but is also retro-fittable, and may be used to replace a standard switch in any existing installation.

3.0 Features

- Separately switched compact modular fan speed control mechanism
- 500W Rating
- Wall or architrave mounting options
- Wide range of plate styles and colour variants available
- Suitable for 1-way or 2-way operation
- Suitable for use with ceiling sweep fans (split phase induction motors)
- Suitable for use with exhaust fans (shaded pole induction motors)
- Kick start operation
- Preset minimum fan speed
- Over temperature compensation
- Immune to high frequency (ripple) signal injection on mains supply
- Fitted with suppressors to minimise radio frequency interference
- Complies with Australian and International EMC Standards