CLIPSAL

by Schneider Electric

c-thru
The Clear Choice

Fan Speed Controller

32E500F
Series

500W

Installation Instructions

REGISTERED DESIGN • REGISTERED PATENT

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1.0 Product Range

32E500FM	Fan Speed Controller, 220-240V~, 50Hz, 500W (30 Series Mechanism)
32E500F	Fan Speed Controller, 220-240V~, 50Hz, 500W (Standard Range)
2032E500F	Fan Speed Controller, 220-240V~, 50Hz, 500W (2000 Series)
C2032E500F	Fan Speed Controller, 220-240V~, 50Hz, 500W (Classic™ Series)
SC2032E500F	Fan Speed Controller, 220-240V~, 50Hz, 500W (Slimline® Series)
SL2032E500F	Fan Speed Controller, 220-240V~, 50Hz, 500W (Eclipse® Series)
P2032E500FM	Fan Speed Controller, 220-240V~, 50Hz, 500W (Prestige™ Mechanism)
P2032E500F	Fan Speed Controller, 220-240V~, 50Hz, 500W (Prestige™ Series)
1920E500F	Fan Speed Controller, 220-240V~, 50Hz, 500W (Heritage™ Series)

* 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 retrofittable, 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.

4.0 Load Compatibility

The Clipsal 32E500F Series Fan Controller is 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	32E450UD
		BLUE	GREEN	AMBER	TRANSPARENT
		LEADING EDGE DIMMER	TRAILING EDGE DIMMER	**FAN SPEED CONTROLLER**	UNIVERSAL DIMMER
		450W	450W	500W	450W
	Incandescent Lighting Halogen/Dichroic 240V Lamps	✓	✓	✗	✓
	Low Voltage Halogen/Dichroic Lighting with Iron-Core Transformers	✓	✗	✗	✓
	Low Voltage Halogen/Dichroic Lighting with Electronic Transformers	✗	✓	✗	✓
	Small Motor Loads Exhaust Fans Ceiling Fans	✗	✗	✓	✓

IMPORTANT NOTES:

All 32E500F Series Fan Speed Controllers are compatible with all Airflow Ceiling Fans, including:

- ACES36 Series 900mm (36") Reversible Ceiling Sweep Fan
- ACES48 Series 1200mm (48") Reversible Ceiling Sweep Fan
- ACES56 Series 1400mm (56") Reversible Ceiling Sweep Fan
- AFLR48 Series 1200mm (48") Reversible Ceiling Sweep Fan – Rattan Blades

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 on page 6.
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 Kick Start Feature

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.

7.3 Minimum Fan Speed Settings

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

7.4 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 Controllers	Maximum Load per Controller
1	500W
2	375W
3	280W

7.5 Thermal Overload Compensation

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

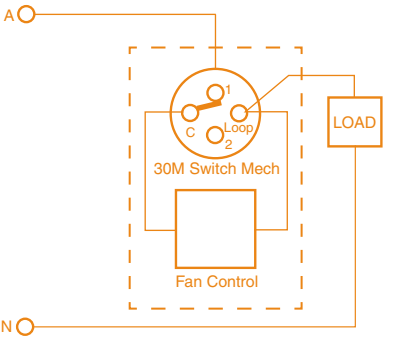
The fan speed controller is switched on or off using the 30 Series switch mechanism provided.* Turning the load on or off using the switch does not alter the fan speed setting.

Fan speed is adjusted by rotating the control knob:
- Clockwise increases speed
- Anti-clockwise decreases speed.

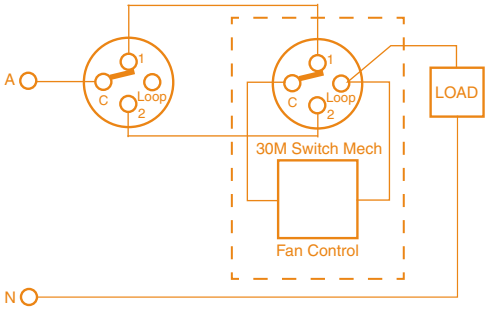
** 30 series switch mechanism not included with 32E500FM and P2032E500FM modules.*

9.0 Wiring Diagrams

9.1 One-Way Operation



9.2 Two-Way Operation



NOTE:

- If the unit is wired for two-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 NOT polarity sensitive.

10.0 Electrical Specifications

Parameter	**Value**	
Nominal Operating Voltage	220 - 240V~	
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
Safety Compliance	AS/NZS3100, IEC60669-2-1	
EMC Emission Compliance	AS/NZS CISPR 15:2002	
Specifications Typical @ 240V~, 25°C		
No User Serviceable Parts Inside		

WARNING:

Operation at temperatures or voltages outside of specification (240V~ 25°C) may cause the thermal protection circuitry to operate. Decrease the size of the connected load to prevent re-occurrence.

11.0 Warranty Statement

1. The benefits conferred herein are in addition to, and in no way shall be deemed to derogate; either expressly or by implication, any or all other rights and remedies in respect to the Clipsal Product, which the consumer has under the Commonwealth Trade Practices Act or any other similar State or Territory Laws.
2. The warrantor is Clipsal Australia Pty Ltd. With registered offices in all Australian States.
3. This Clipsal Product is guaranteed against faulty workmanship and materials for a period of two (2) years from the date of installation.
4. Clipsal Australia Pty Ltd reserves the right, at its discretion, to either repair free of parts and labour charges, replace or offer refund in respect to any article found to be faulty due to materials, parts or workmanship.
5. This warranty is expressly subject to the Clipsal Product being installed, wired, tested, operated and used in accordance with the manufacturer's instructions.
6. All costs of a claim shall be met by Clipsal Australia Pty Ltd, however should the product that is the subject of the claim be found to be in good working order all such costs shall be met by the claimant.
7. When making a claim the consumer shall forward the Clipsal Product to the nearest office of Clipsal Australia Pty Ltd with adequate particulars of the defect within 28 days of the fault occurring. The product should be returned securely packed, complete with details of the date and place of purchase, description of load, and circumstances of malfunction.

Clipsal Australia Pty Ltd

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