

**EC Fan**

**Trickle Boost/Controller**

Installation and Wiring Instructions



Stock Ref. No. 475775

**Vent-Axia**<sup>®</sup>

PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION.  
THESE INSTRUCTIONS SHOULD BE LEFT WITH THE END USER

**CE**



## **IMPORTANT: READ THESE INSTRUCTIONS BEFORE COMMENCING THE INSTALLATION**

### **IMPORTANT SAFETY INFORMATION**

1. DO NOT install this product in areas where the following may be present or occur:
2. Excessive oil or a grease laden atmosphere.
3. Corrosive or flammable gases, liquids or vapours.
4. Subject to direct water spray from hoses.
5. Ambient temperatures higher than 40°C or less than -20°C.
6. Possible obstructions which would hinder the access or removal of the Controller.
7. All wiring must be in accordance with the current IEE wiring regulations BS7671, or appropriate standards of your country. Installation should be inspected and tested by a suitably qualified person after completion.
8. Ensure the mains supply (voltage, frequency and phase) complies with the rating label.
9. A means for electrical disconnection must be incorporated in the fixed wiring to the unit in accordance with the wiring rules having a contact separation in all poles of at least 3mm.
10. Precautions must be taken to avoid the back-flow of gases into the building from the open flue of gas or other fuel-burning appliances.
11. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
12. Young children should be supervised to ensure that they do not play with the appliance.

### **INSTALLATION GUIDANCE:**

1. The installer is responsible for the installation and electrical connection of the system on site. It is the responsibility of the installer to ensure that the equipment is safely and securely installed and left only when mechanically and electrically safe.
2. All regulations and requirements must be strictly followed to prevent hazards to life and property, both during and after installation, and during any subsequent servicing and maintenance.
3. When removing enclosure knock-outs take care not to damage the controller PCB.
4. All mains connections to the unit using flexible wiring or any additional controls wiring must use cable glands sufficient to retain the IP rating of the unit and provide cable retention to the requirements of EN60335-1 Clause 25.15.
5. EC fans use capacitors to store mains voltage, contact with the mains wiring must be avoided for 5 minutes following supply disconnection.

## INTRODUCTION

Commercial Single EC Fan Trickle/Boost Controller incorporating the following functionality:

- Controls trickle and boost speed for EC single fan.
- Trickle and boost speed set by on-board potentiometers.
- Live switch input for boost speed selection

## SPECIFICATION

<b>475775 EC Trickle/Boost Fan Controller</b>		
<b>Supply Voltage</b>	V AC	230 VAC
<b>AC line Frequency</b>	Hz	50 Hz
<b>Supply Power</b>	W	1W
<b>Operating Environment</b>		-20 to 40°C, IP22 Enclosure
<b>Dimensions</b>		Enclosure 94mm(L) x 94mm (W) x 57mm (H)
<b>Fixing Hole Centres</b>		79 x 79mm

## CONNECTION DETAILS

### Switched Live Mains Connector J1

<b>Pin</b>	<b>Function</b>
<b>LS</b>	Switched Live, boost speed select input
<b>N</b>	Neutral

### Fan Motor Controls Connector J2

<b>Pin</b>	<b>Function</b>
<b>10V</b>	10 Volts supply
<b>0V</b>	Ground
<b>1/10V</b>	0 to 10 Volts fan speed control output

## INSTALLATION

See “Safety” information at the beginning of this document.

### Wiring:

For connections; see connection details table above and wiring diagram below - Route control wiring separately from AC mains wiring.

Remove enclosure knock-outs as required to fit cable glands, taking care not to damage the PCB.

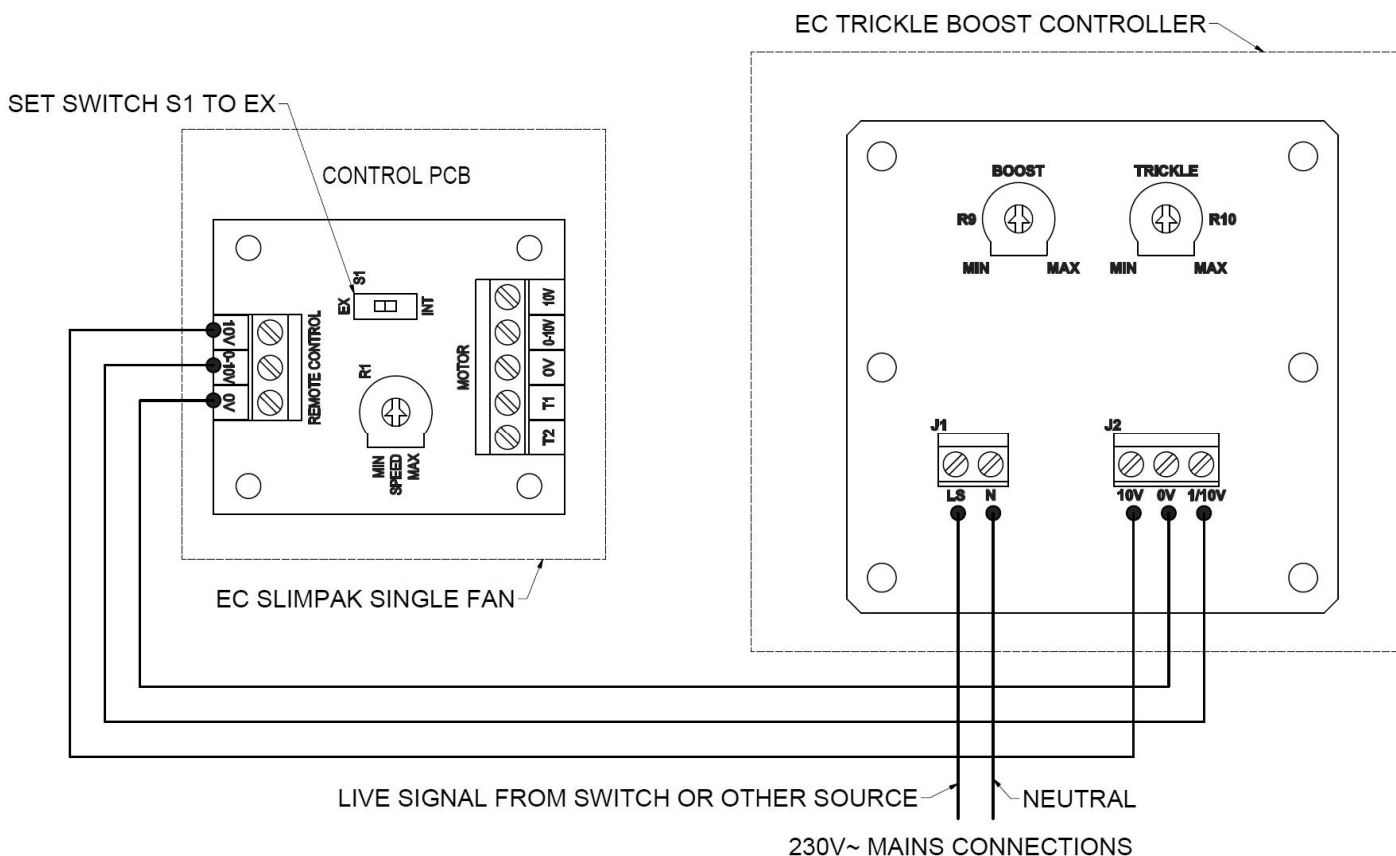
Ensure that the switch S1 on the control PCB of the EC Slimpak Single Fan unit is set to the EX position, see wiring diagram below.

## OPERATION

### Fan Speed Control:

- 1) **Trickle Speed:** the fan runs at trickle speed, which is set by the potentiometer R10 between 15% and 100% speed.
- 2) **Boost Speed:** boost speed is activated by the LS input on terminal J1, and is set by the potentiometer R9 between 15% and 100% speed.
- 3) **Note** it is not possible to set boost speed lower than trickle speed.

## MAINS & CONTROL WIRING CONNECTION



## MAINTENANCE AND SERVICING

The EC Trickle/Boost Controller has no replaceable parts, if a fault develops return to the manufacturer.

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For details of the warranty and returns procedure please refer to [www.vent-axia.com](http://www.vent-axia.com) or write to Vent-Axia Ltd, Fleming Way, Crawley, RH10 9YX