

X10689

Fan Speed Controllers | Single Phase

# VAC1-15E & VAC2-15E

15A, 1.6kW 110V, 4kW 230V

Fan control enclosed

## CONTACT US:

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## KEY FEATURES:

- ✓ **Variable 0-98% Output:** Achieve precise voltage control for a wide range of applications.
- ✓ **Minimum Set Speed Adjuster:** Ensures motors do not run too slowly, protecting your equipment.
- ✓ **Rugged and Compact Design:** Durable construction suitable for industrial environments.
- ✓ **Large TRIAC for Inrush Protection:** Handles high inrush currents with ease.
- ✓ **Integral RC Snubber:** Enhances performance with inductive loads.
- ✓ **Single Hole Fixing:** Simplifies installation and setup.

## APPLICATIONS:

Perfect for controlling most simple mains-driven motors and fans, these controllers are versatile solutions for heating, ventilation, and air conditioning (HVAC) systems and industrial fan and pump applications.


The **VAC1-15E & VAC2-15E Single Phase Fan Controllers** are robust and compact variable phase-angle regulators, designed to deliver reliable performance for single-phase mains-driven inductive loads. These enclosed fan controllers are suitable for either 230V or 110V systems, supporting up to 15A. Ideal for controlling induction motors, fans, and pumps, they offer fully adjustable voltage outputs from zero to maximum, ensuring precise control over your equipment's performance.

The controllers feature an integrated RC snubber network, specifically designed for managing inductive loads, and a minimum set speed adjuster located at the rear. This adjuster allows you to set a minimum output voltage level, preventing motors from running too slowly, which can be critical in certain applications. Built with a large triac, the units can handle high inrush currents, providing a significant safety margin for industrial installations. For convenience, an adhesive-backed silver label and hairline knob are included for front panel mounting or for direct use on the unit.

## TECHNICAL SPECIFICATIONS

Maximum rms on-state current	15A
Minimum operating current	200mA
Triac limiting rms on state current	25A
Peak one cycle surge @ 10mS	250A
Peak one cycle surge HS model @ 10mS	300A
I <sup>2</sup> t for fusing	112 A <sup>2</sup> s
Isolation voltage	2500V rms
Maximum recommended unit temperature	70°C
Maximum cable temperature	105°C
Maximum recommended unit load at 20°C ambient, (without extra heatsink)	10A
Maximum recommended unit load at 40°C ambient, (without extra heatsink)	5A
Mains supply +/-10% @ 50/60Hz	110 or 230V ac

## YOU MUST READ THIS BEFORE INSTALLATION

 ELECTRICAL SAFETY	 INSTALLATION REQUIREMENTS	 USER RESTRICTIONS	 USAGE ENVIRONMENT	 HOT SURFACE WARNING
<b>WARNING: RISK OF ELECTRIC SHOCK</b> Always consult the Installation & Maintenance Instructions before connecting this product to the power supply. <b>WARNING: Disconnect Power Before Servicing</b> Ensure the electrical supply is safely disconnected before connecting to any supply, load, or control terminals.	<b>WARNING: Installation by Qualified Personnel Only</b> This product must only be installed or fitted by a competent, qualified installer familiar with the relevant electrical standards and installation practices.	<b>WARNING: Not for Use by Vulnerable Individuals</b> This product is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they are supervised or instructed by a person responsible for their safety.	<b>WARNING: Industrial Use Only</b> This is an industrial-grade product and is not intended for household use.	<b>WARNING: Hot Surfaces</b> On certain models, surfaces marked with this symbol become hot during use. Avoid direct contact and follow all thermal safety precautions.

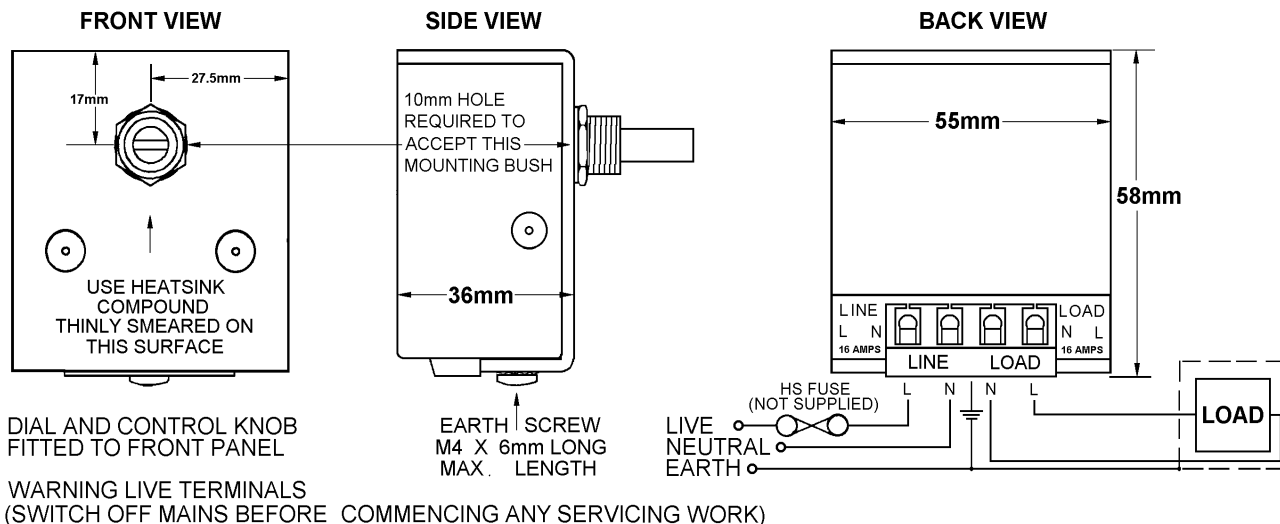
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## INSTALLATION

## DIMENSIONS & CONNECTIONS



### NOTE 1:

The unit must be fastened to a heatsink (suitable panel) rated at 2°C/W or better for a 15A operation. Heatsink paste is essential for use between surfaces (of unit and heatsink) for good thermal bonding.

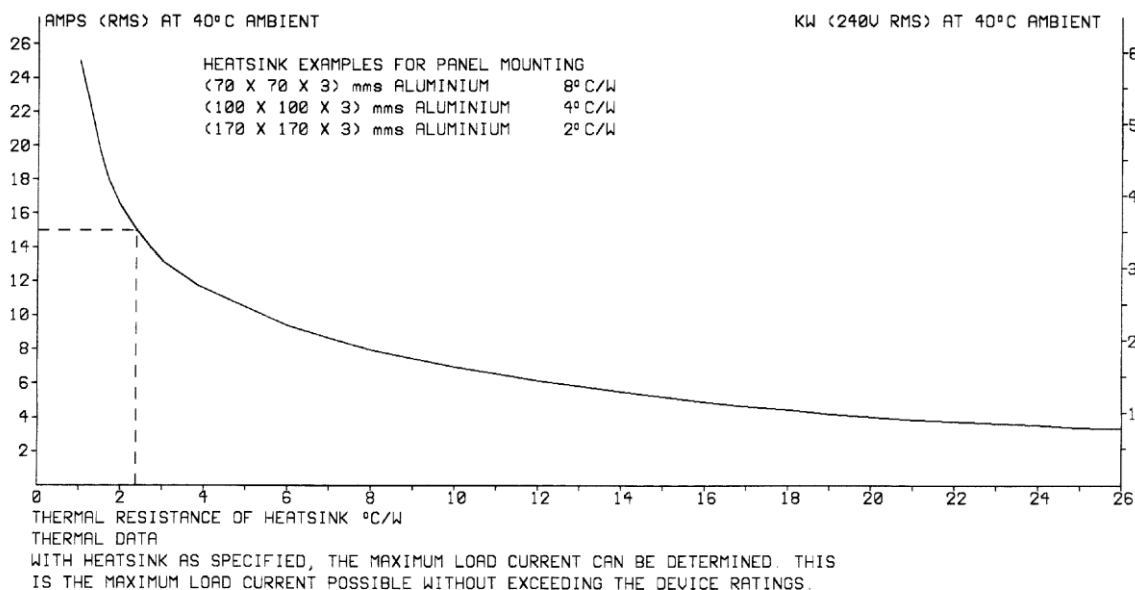
See INSTALLATION – cooling requirements.

### NOTE 2:

Minimum set speed adjustment is accessed via a rear cover hole (this is covered by an adhesive label).

Adjust the cermet screw using a small terminal screwdriver.

## COOLING REQUIREMENTS



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## RECOMMENDATIONS

### FUSING

It is recommended to use semiconductor (fast acting) type fuses or circuit breakers (Semiconductor - MCB) for unit protection. On initial switch on some loads may need an increased Factor of Safety (F of S) for unit and/or device protection. See SRA datasheet for information.

### DOCUMENTS

Other documents available on request, which may be appropriate for your application:

Code	Identity	Description
<b>X10229</b>	RFI	Filtering Recommendations: Addressing the EMC Directive
<b>X10213</b>	ITA	Interaction: Uses for phase angle and for burst fire control
<b>X10255</b>	SRA	Safety Requirements: Addressing the Low Voltage Directive (LVD) including Thermal Data/Cooling, Live Parts Warning, Earthing Requirements and Fusing Recommendations
<b>P01.1</b>	COS	UAL Conditions of Sale

It is recommended that installation and maintenance of this equipment should be done with reference to the current edition of the I.E.T. regulations (BS7671) by suitably qualified/trained personnel. The regulations contain important requirements regarding the safety of electrical equipment. For International standards refer STANDARDS on D of C.

### OPTIONAL EXTRAS

Product Code	Product Description
<b>N30001</b>	Control Knob RN-113B SCI
<b>Z01062</b>	Heatsink Compound Syringe (Must be applied while fitting)

## PRODUCT CODE AND RELATED PRODUCT CODE

Product Code	Product Description
<b>A72150</b>	VAC1-15E – 15A – 1.6kW 110V – Fan control enclosed
<b>A72225</b>	VAC2-15E – 15A – 4kW 230V – Fan control enclosed



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