



SINGLE-PHASE FAN CONTROLLERS 15A Maximum

**VAC2-15E
&
VAC1-15E**
X10689

DESCRIPTION

These variable phase-angle regulators are robust, compact and enclosed units for 230V or 110V up to 15A single phase mains driven inductive loads, such as induction motors, fans and pumps. They give fully adjustable voltage outputs from zero to maximum.

The controller has an integrated RC snubber network for control of inductive loads and a minimum set speed adjuster (at the rear) to allow the designer/installer to fix a minimum output voltage level to prevent a motor being driven too slowly.

The large triac enables the unit to handle high inrush currents with ample safety margin on industrial installations. An adhesive backed silver label and hairline knob, are included for front panel mounting (or fitted to front of unit).

APPLICATION

Suitable for most simple mains driven motors and fans.

RoHS Compliant

FEATURES

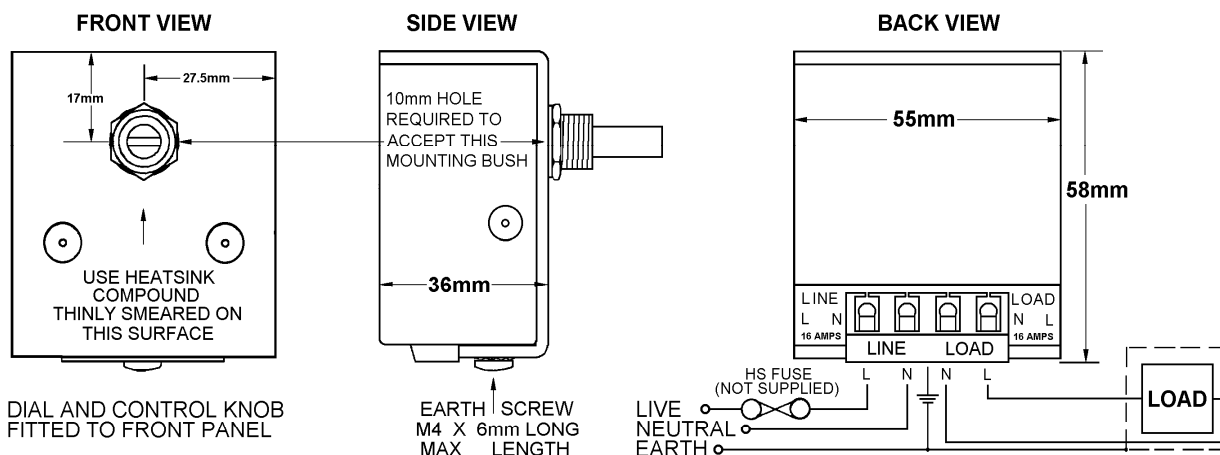
- Variable 0-98% output.
- Minimum set speed adjuster.
- Single-hole fixing.
- Rugged and compact.
- Large triac for inrush protection.
- Integral R-C snubber.



Both models are externally similar.
Model shown with fitted knob and dial.

INSTALLATION

CONNECTIONS & DIMENSIONS



DIAL AND CONTROL KNOB FITTED TO FRONT PANEL

WARNING LIVE TERMINALS
(SWITCH OFF MAINS BEFORE COMMENCING ANY SERVICING WORK)

NOTE 1:

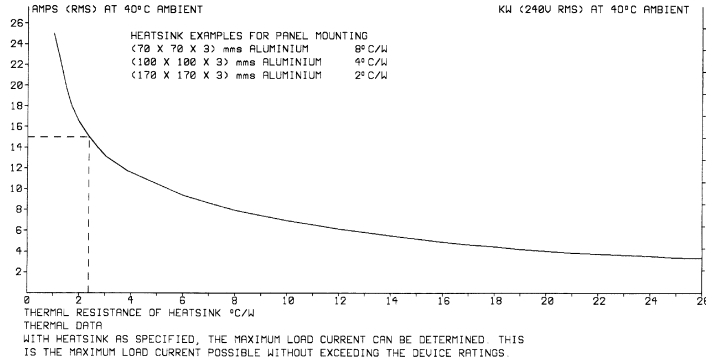
The unit must be fastened to a heatsink (suitable panel) rated at 2°C/W or better for a 15A operation.
Heatsink paste is essential for use between surfaces (of unit and heatsink) for good thermal bonding.
See INSTALLATION – cooling requirements.

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 .

INSTALLATION

COOLING REQUIREMENTS



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 ² t for fusing	112 A ² 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

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 the SRA datasheet for further information.

CE MARKING

This product family carries a "CE marking". These phase angle type controllers require a suitable remote filter. For information see recommendation section and contact our sales desk. (See the Declaration of Conformity).

RECOMMENDATIONS

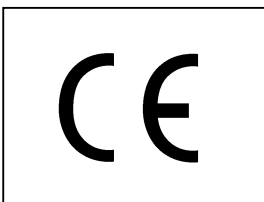
Other documents available on request, which may be appropriate for your application:-

CODE	IDENTITY	DESCRIPTION
X10229	RFI	Single Phase Filtering recommendations - addressing EMC Directive
X10213	ITA	Interaction, uses for phase angle and for burst fire control.
X10255	SRA (LVD)	Safety requirements - addressing the Low Voltage Directive including :- Thermal data/cooling ; "Live" parts warning & Earth requirements; Fusing recommendations.
P01.1	COS	UAL Conditions of sale.

NOTE: It is recommended that installation and maintenance of this equipment should be done with reference to the current edition of the I.E.T. (formally I.E.E.) regulations (BS7671) by suitably qualified/trained personnel. The regulations contain important requirements regarding installation and safety of electrical equipment. Specific installers should refer to local and national regulations.

ORDER CODE State part number:

A72225	VAC2-15E (4kW @ 230V ac) Fan Controller (includes knob and dial).
A72150	VAC1-15E (1.6kW @ 110V ac) Fan Controller (includes knob and dial).
Optional extras include:	F-series filter (current at which unit is to be used will be required), Heatsink compound.



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