

# 25A VARIABLE BURST FIRED AC REGULATOR

BVR -series

### **INTRODUCTION**

The BVR-25 series is a powerful OEM 25A ac energy regulator for proportional linear manual control of resistive loads using burst fire control – this is principally variable on/off bursts of complete main cycles of energy, coincident with mains zero crossover. A 50% on/off setting with a light bulb as a load would show even on/off flashes. The output is in block bursts, with a full 0 to 100% range. The output block lengths can be varied from a rapid burst fire mode to a variable duty cycle range of 1-30 seconds.

The unit comprises of a high current triac (power device) mounted on an integral heatsink controlled by a populated PCB with fuse and connection terminals, all enclosed, for simple connection, maintenance and installation.

### **APPLICATIONS**

Virtually all resistance heaters including ovens, electric furnaces, moulders, dryers, smelters, heating tapes, stress relieving, space heating and heating mantles. Not suitable for use on lighting and inductive loads.

**FEATURES** 

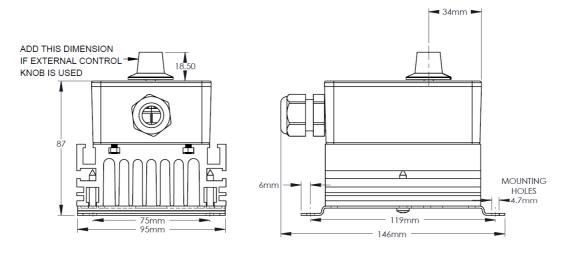
- Integrated high-speed fuse
- Built-in heatsink & mounting plate
- Radio Frequency Interference (RFI) free
- Single-entry cable gland
- Control knob and dial supplied
- 110V or 230V models available
- Variable Duty cycle range 1-30s (adjustable by duty cycle trimmer)
- Rapid burst fire mode (duty cycle trimmer fully anti-clockwise)

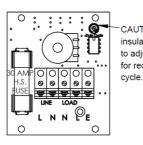
# free mmer

Photo shows complete unit with open lid

### **INSTALLATION**

# Fixing/Mounting/Dimensions





(EARTH BONDING - DO NOT REMOVE)
FOR OPTIMUM PERFORMANCE AND HEAT DISSIPATION
CAUTION: Use THE UNIT MUST BE MOUNTED VERTCALLY
insulated trimmer to adjust cermet SWITCH OFF MAINS BEFORE COMMENCING
for required duty ANY SERVICE WORK

SWITCH OFF MAINS BEFORE COMMENCING
ANY SERVICE WORK
THIS UNIT MUST BE EARTHED
USING MOUNTING BASE PLATE

### **SPECIFICATIONS**

Mains voltage 110 or 230V ac  $\pm$  10% Min. load current 200mA Frequency 50-60Hz Isolation voltage 2500V rms Max. rms load current 25A I2t for SCR fusing 250A2

Integral Triac 41A (600v) Replacement fuse 30A 660V SCR type

Main control signal 220k $\Omega$  potentiometer Offstate dv/dt 500V/μs Peak cycle surge 250A Max operating temp. 65°C

Heatsink 1.3°C/W Storage temp. 0°C to 65°C Isolation classification Class II Max. cable entry 2.5mm²

## **FUSING:**

A semiconductor (fast-acting) type fuse (stock code F11307) is supplied as standard 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. For spares or replacements contact our sales desk.

# **CE MARKING**

This product family carries a "CE marking" For information see recommendation section and contact our sales desk.

### **RECOMMENDATION**

Other documents are available on request, which may be appropriate for your applications.

CODE IDENTITY DESCRIPTION

X10213 ITA Interaction, uses for phase angle and for burst fire control.

X10255 SRA 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 ref.: for 110V ac supply - **BVR1-25A** - 110V, 25A

for 230V ac supply - BVR2-25A - 230V, 25A

Includes control knob, BVR dial & 65mm long potentiometer spindle (cut to suit)

Spares: F11307 – 30A, 660V HS (SCR type) ferrule fuse (10mm Ø x 38mm long)



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