



# 25A VARIABLE BURST FIRED AC REGULATOR

**BFM-240-25**  
X10640

**INTRODUCTION**

The BFM-240-25 is a mains supply, 25A ac energy regulator for proportional linear manual control of resistive loads using variable on/off bursts of complete main cycles energy, coincident with mains zero crossover. The unit uses a high current power device (triac) mounted on an integrated heatsink to ensure reliability. Simple supply and load connection is achieved by a 5-way power terminal block. Control is achieved manually by a 100kΩ potentiometer (not supplied) connected to the 3-way signal terminal block.

**APPLICATIONS**

Virtually all resistance heaters including ovens, electric furnaces, moulders, dryers, smelters, heating tapes, stress relieving, space heating and heating mantles. Unsuitable for use on inductive loads.

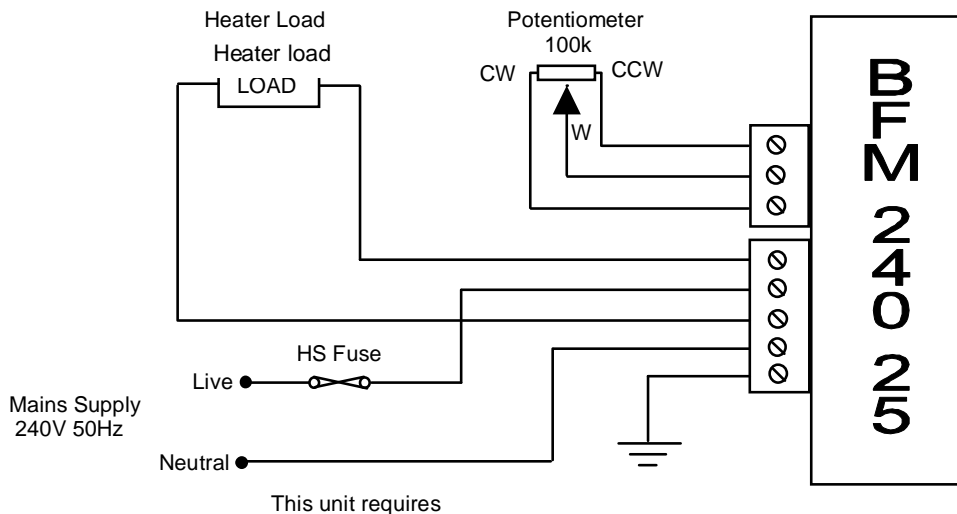
**FEATURES**

- Built in heatsink - 25A capability
- Burst fire control - RFI free
- Manual Control - 100kΩ potentiometer (not supplied)
- DIN-rail mounting
- 230V ac supply



**INSTALLATION**

**Installation & Connections**



**WARNING**

1. This unit must be earthed.
2. This unit requires SCR fusing.
3. HAZARDOUS LIVE SUPPLY terminals - isolate supply before commencing any installation work.
4. HAZARDOUS LIVE SIGNAL terminals –insulate any exposed wires.

## SPECIFICATIONS

<b>Mains voltage</b>	230V ac $\pm$ 10% @ 50-60 Hz	<b>Min. load</b>	100W
<b>Max. rms load current</b>	25A	<b>Isolation voltage</b>	2.5kV rms
<b>Integrated triac</b>	41A (600V)	<b>I<sup>2</sup>t for SCR fusing</b>	250A <sup>2</sup>
<b>Main control signal</b>	Remote 100k $\Omega$ potentiometer	<b>Replacement fuse</b>	30A 660V SCR type
<b>Peak cycle surge</b>	250A	<b>Offstate dv/dt</b>	500V/ $\mu$ s
<b>Heatsink</b>	1.3°C/W	<b>Max operating temp.</b>	0-65°C
<b>Isolation classification</b>	Class II	<b>Storage temp.</b>	0-85°C
<b>Max. cable entry</b>	2.5mm <sup>2</sup>		
<b>Fixing / mounting</b>	DIN-rail / (TS35 & TS32 compatible)		
<b>Dimensions</b>	150mm (H) x 130mm (W) x 35mm (W)		

## FUSING:

A suitable (typically 25A) semiconductor (SCR fast-acting) type fuse is recommended for unit and device protection (see SPECIFICATIONS I<sup>2</sup>t-rating for device 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 is not 'CE' marked.  
For information see recommendation section and contact our sales desk.

## RECOMMENDATION

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

<b>CODE</b>	<b>IDENTITY</b>	<b>DESCRIPTION</b>
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.

## ORDERING

State product description	<b>BFM-240-25</b>
Optional extra (not supplied)	100k $\Omega$ potentiometer

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