



PHASE CONTROL REGULATORS

PCR-240-1

X10643

INTRODUCTION

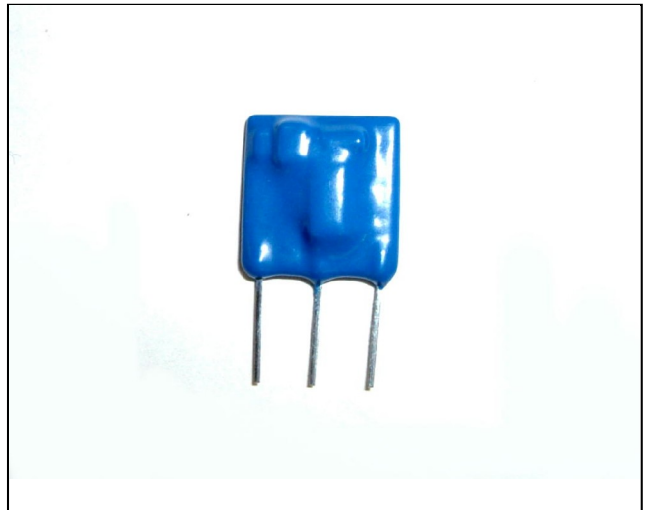
The PCR-240-1 is a thick-film, hybrid, phase angle power controller circuit, with 250W power capability. Its simple 3-pin connections make it versatile and useful as a low cost power controller to suit small load applications, with the addition of a potentiometer and suitable filter.

APPLICATIONS

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

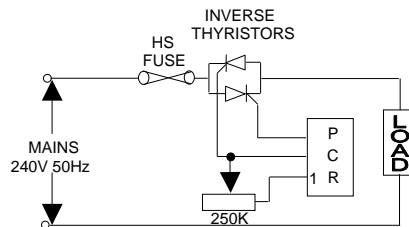
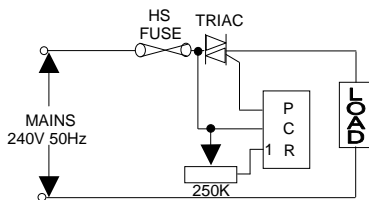
FEATURES

- Compact thick film technology
- Low cost 250W power controller
- Electrically isolated (1.5KV)
- Simple 3-pin connections



INSTALLATION

Connections

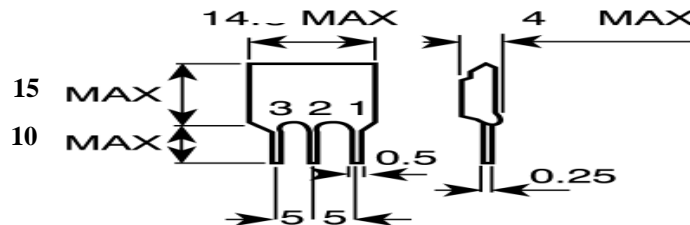


Dimensions

All dimensions in mm.

Lead connections shown as front view.

Back has flat face and silk screen print.



WARNING

1. This unit requires fusing.
2. All HAZARDOUS LIVE terminals - isolate supply before commencing any installation work.

SPECIFICATIONS

RMS On state current (Max.)	1.1A	Dimensions	
Peak one cycle surge current	120A	Overall (max.)	23 (H) x 14 (W) x 4mm (D)
Off state leakage current	1.5mA		
Minimum holding load current	25mA	Lead diameters	0.5mm
RMS input voltage	230V +/-10%@ 50Hz	Lead pitch	5mm
Repetitive peak voltage	600V	Lead length	10mm
Forward volts drop @ max. current	1.5V	Body length	15mm
Potentiometer (not supplied)	250K, 1W	Body thickness	4mm
Hysteresis (typical)	0.5%		
Total conduction phase angle (typical)	0 to 160°		
Controlled conduction phase angle (typical)	30 to 160°		
Power transfer @ max. current (efficiency)	98%		
Insulation withstand capability	2000V		

FUSING:

A semiconductor, fast acting type fuse, should be used as a remote failsafe device 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". These phase angle controllers need a suitable remote filter. For information see recommendation section and contact our sales desk.

RECOMMENDATION

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

CODE	IDENTITY	DESCRIPTION
X10229	RFI	Filtering recommendation - addressing EMC Directive
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.
AP02/4	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.E. wiring regulations (BS7671) by suitably qualified / trained personnel. The regulations contain important requirements regarding safety of electrical equipment. For International standards refer to I.E.C. directive IEC950.

ORDER CODE:

State part number: PCR-240-1
Optional extras: 250K, 1W potentiometer
RFI filter

Contact our technical sales desk for more information.



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