



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.

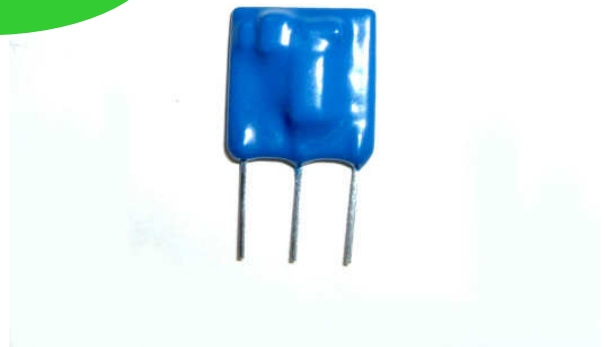
APPLICATIONS

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

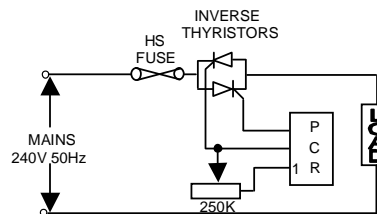
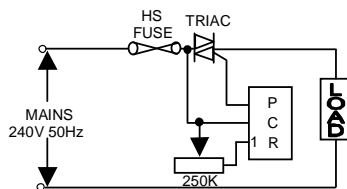


- Compact thick film technology.
- Low cost 250W power controller.
- Electrically isolated (1.5kV).
- Simple 3-pin connections.



INSTALLATION

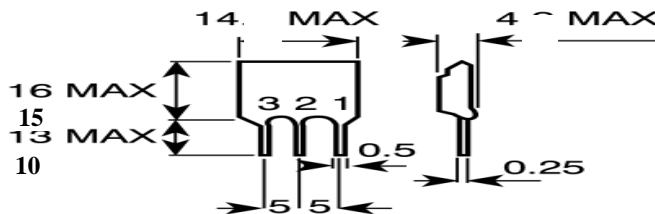
Connections



NOTE

Lead connections shown as front view - this has flat face and silk screen print.

Pin-1 is identified with a 'dot'.



DIMENSIONS

All dimensions in mm.

WARNINGS

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

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)	250kΩ	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	2kV		

FUSING:

A semiconductor, fast acting type fuse (e.g. 1¼" x ¼" Ultra-rapid, ceramic FF-type), 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 are available on request, which may be appropriate for your applications.

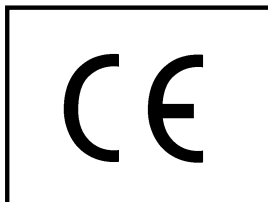
CODE	IDENTITY	DESCRIPTION
X10229	RFI	Filtering recommendation - addressing EMC Directive
X10213	ITA	Interaction, uses for phase angle and for burst fire control.
X10255	SRA	Safety requirements - addressing the Low Voltage Directive including :- Thermal data/cooling; "Live" parts warning & Earth requirements; Fusing recommendations.
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: PCR-240-1
Optional extras: 250kΩ potentiometer; HS fuse; RFI filter

Contact our technical sales desk for more information.



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	31/07/12

