



PHASE ANGLE POWER 25A ac CONTROL MODULE

PSR-25

X10205

INTRODUCTION

The PSR-25 Power Control module is a high power, full wave AC phase angle controller in a compact package. It is capable of regulating up to 6KW (25A) 230V ac. The PSR-25 regulator governs the amount of power supplied to the load, by controlling the phase angle of the AC supply. The low thermal impedance and high electrical isolation provides the equipment designer with a greater flexibility in a wide variety of applications.

APPLICATIONS

Suitable for quartz lamps, conventional resistive heating elements, including ovens, moulders and dryers and some inductive loads (e.g. transformers and motors).

FEATURES

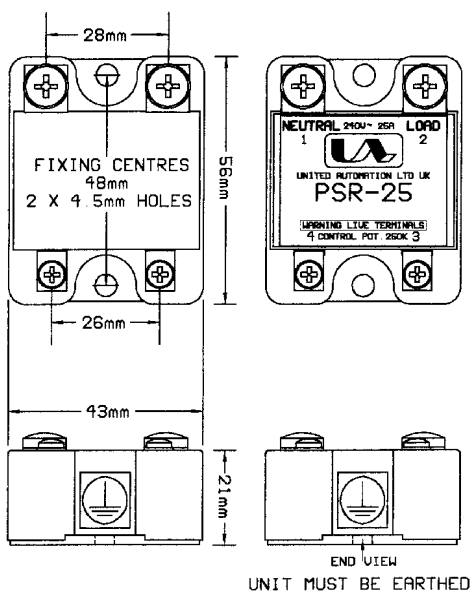
- Solid state reliability.
- Epoxy encapsulated.
- Simple wiring.
- Rugged and compact
- High current capability.
- Internal snubber.



RoHS Compliant
Directive
2002/95/EC

INSTALLATION

DIMENSIONS

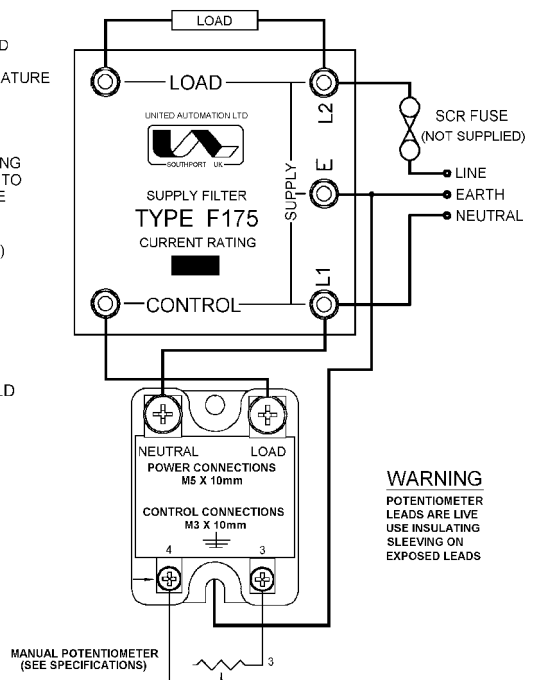


FIXING REQUIREMENTS

FOR 25A OPERATION THE UNIT SHOULD BE FASTENED TO A HEATSINK RATED AT 1.3°C PER WATT @ AMBIENT TEMPERATURE OF 35°C. A TYPICAL EXAMPLE IS A REDPOINT TYPE KA100-1 EARTH HEATSINK USING A 4mm SCREW OR BOLT TOGETHER WITH A STAR WASHER, ENSURING THAT THERE IS A GOOD METAL TO METAL CONTACT BETWEEN THE BASE AND THE HEATSINK HEATSINK PASTE IS ESSENTIAL (SEE COOLING REQUIREMENTS)

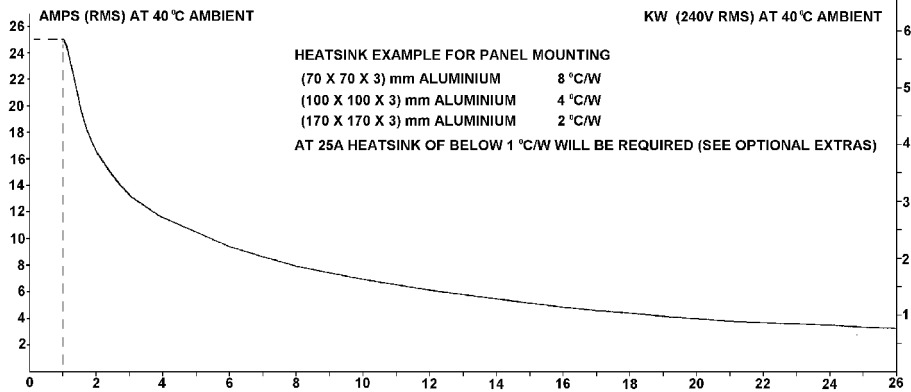
A SUITABLE FILTER WILL BE REQUIRED FOR THIS UNIT
NOTE:
MAX. LOAD CURRENT SHOULD MATCH NEAREST SUITABLE FILTER e.g 25A FILTER SHOWN FOR 25A MAX LOAD

CONNECTIONS



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

INSTALLATION



THERMAL RESISTANCE OF HEATSINK °C/W

THERMAL DATA

WITH HEATSINK AS SPECIFIED, THE MAXIMUM LOAD CURRENT CAN BE DETERMINED.
THIS IS THE MAXIMUM LOAD CURRENT POSSIBLE WITHOUT EXCEEDING THE DEVICE RATING.

SPECIFICATIONS

AC line voltage	110/230V +/- 10% @ 50/60 Hz	Unit limiting RMS current	25A
Peak one cycle surge (10ms)	250A	Max peak voltage	600Vac
I ² t for fusing	250 A ² s	Minimum operating current	200mA
Isolation voltage	5000Vrms	Leakage current	5mA
Max. operating temperature	65°C	Manual potentiometer (nominal)	250K 1W @ 230Vac
Storage temperature	-20°C to +85°C	Manual potentiometer (nominal)	100K 1W @ 110Vac

FUSING

It is recommended that semiconductor, fast acting type fuses or circuit breakers (Semiconductor - MCB) be used for unit protection. On initial operation some loads may need an increased factor of safety (F of S) for unit and/or device protection. See SRA Data sheet for further information.

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. See Declaration of Conformity.

RECOMMENDATIONS

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

CODE	IDENTITY	DESCRIPTION
X10229	RFI	Filter recommendations: Addressing the EMC Directive
X10213	ITA	Interaction: Uses for phase angle and for burst fire control.
X10255	SRA	Safety requirements: Addressing the Low Voltage Directive (LVD) including, Thermal data/cooling, Live parts warning, Earth requirements and fusing recommendations
AP02/4	COS	UAL Conditions of sale.

NOTE: It is recommended that installation and maintenance of this equipment should be carried out by suitably qualified/trained personnel with reference to the current edition of the I.E.E. wiring regulations (BS7671). The regulations contain important requirements regarding the safety of electrical equipment. For International Standards refer to I.E.C. Directive IEC 950.

ORDER CODE

State part number: **PSR 25**

Optional extras include: Potentiometer, Filter, Heatsink paste, Heatsink assembly

Note: When ordering a filter, the current the PSR is to be used at will be required.



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