

X10801 – EVR 3KW

1-Phase Enclosed Phase Angle Controller c/w Class B Filter

Issue 2



1 Introduction

This 3KW 'Mini Stack' is available for single phase, 230V applications. The unit can control loads of up to 13A, with a number of signal control options. The controllers are assembled to suit the final load, operating in phase angle mode. The controller comes complete with a BS1362 fuse and an integral heatsink.

2 Applications

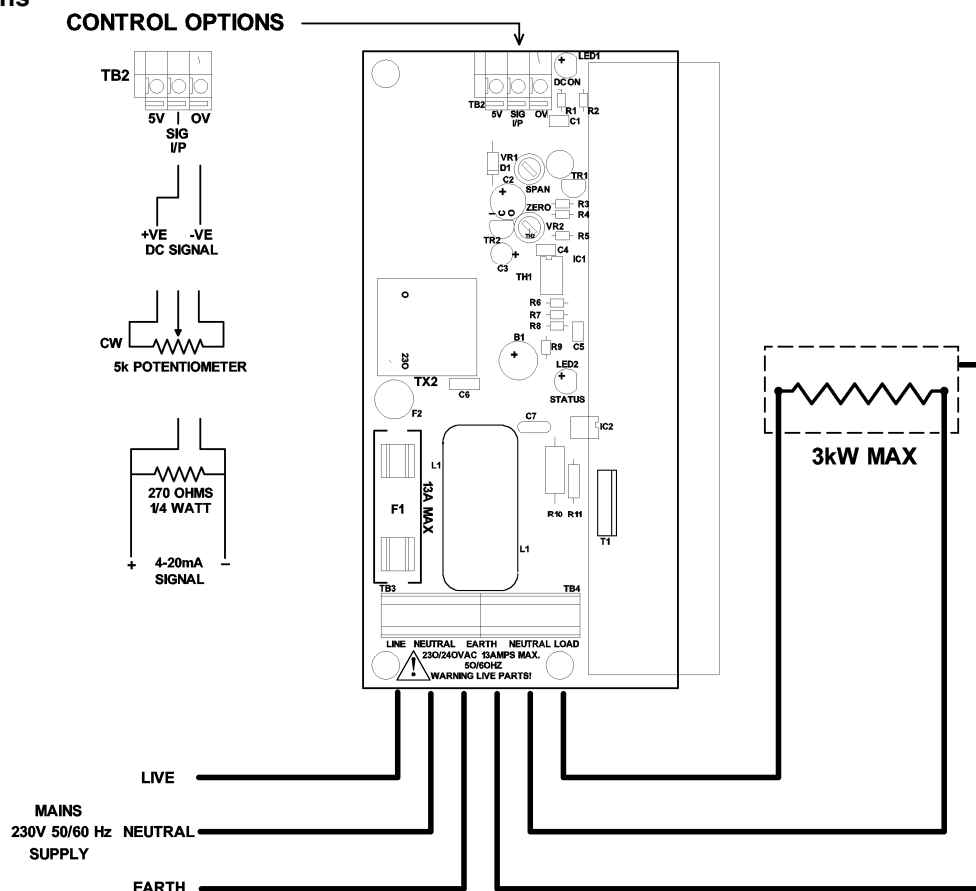
Suitable for heaters, ovens, dryers, air curtains, hot plates, heating and ventilation. SCR solid state phase angle power handing gives smooth proportional control of all types of industrial processes, e.g. furnaces, electroplating, controlled rectifiers, transformers etc.

3 Features

- Wide range of Control Signal Options.
- Enclosed with Status Indication
- Built in Class B Filter
- Phase angle mode of operation with Soft-Start.
- Mains Protection fuse fitted.
- Simple installation.



4 Connections



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5 Installation

5.1 Cooling Requirements

Heatsink rating for standard stack assembly is calculated when naturally cooled. If mounted in an enclosure or Cabinet, adequate ventilation and/or forced cooling should be fitted. When thermal trips are fitted we recommend that they are wired in line with the signal, so as to switch off the thyristors in an over temperature situation.

Unusual heating loads such as Molybdenum, Platinum or Tungsten, typically have a 10 to 1 hot to cold resistance ratio and therefore when cold, draw larger currents than normal. Transformers and other inductive loads have surge starting currents and require the correct type of phase angle firing circuit. These and similar types of surge loads, should be indicated, so that appropriate slow start or larger rated units can be correctly supplied for the specific needs.

Note: The unit is factory set for manual control or 0-5Vdc. For 4-20mA, a 270R resistor will be required to be fitted across the '+ve' & '0v' terminals and the zero & span adjusters will need recalibrating

6 Technical Specifications

Mains voltage	230V ac +10% -6%	Auxiliary Output	5Vdc
Signal Span Minimum	0-5Vdc	Triac Limiting RMS Current	26A
Signal Span Maximum	0-25Vdc	Peak Single Cycle Surge Current	250A
Signal Zero Offset	0-30% of Span	Max. Peak Voltage	600V
Signal Input	0-5VDC/factory default	Current Rating	13A
Manual Potentiometer	5K	Max. Working Temperature	65°C operational
Soft Start Time Constant	1 second fixed	Replacement Fuse	BS1362
Isolation Voltage	2500 Vrms	Storage Temperature	-20°C to +85°C
Dimensions			
Enclosure	W175 x H195 x D65mm	Height With Glands	225mm

7 Fusing

The unit comes with an integral 13A Mains Protection fuse (BS1362). On initial 'switch' on, 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.

8 CE Marking

This product family carries a "CE marking". The 3KW phase angle controller requires a suitable remote filter. For information see recommendation section and contact our sales desk. (See Declaration of Conformity).

9 Recommendations & Safety Requirements

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

Code	Identity	Description
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, Earthing Requirements and 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.

10 Order Code

State Part Number	A407802-3KW 1.Ph Phase Angle Controller
Optional Extras	Glands, 270R 1/4 W Resistor, 5k Potentiometer





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