

UNIVERSAL PHASE ANGLE CONTROLLER C/W INTEGRAL POWER DEVICE

FC11AL/2

X10260

INTRODUCTION

This single phase firing module with integral 26A triac, uses variable phase angle control with adjustable signal matching and selectable soft-start. The power supply transformer is remote for increased reliability and wide operational voltage capabilities. The FC11AL/2 controller governs the amount of power supplied to the load, by controlling the AC supply. A ramp and pedestal input circuit, allowing variation of firing phase angle by DC signal, enables more power through to the load with increasing angle.

APPLICATIONS

Suitable for most AC resistive loads with current ratings up to 25A when fitted onto a suitable heatsink (see cooling requirements). Also some inductive loads such as transformers and full wave vibrators.

FEATURES:

- Integral 26A triac.
- Wide range of control signal inputs (voltage or current).
- Adjustable soft-start function.
- Status LED giving output level indication.
- Consumes under 2 Watts.

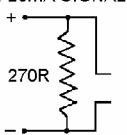


INSTALLATION

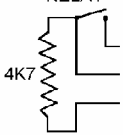
DIMENSIONS AND CONNECTIONS

CONTROL OPTIONS FOR TERMINALS 3,4 AND 5

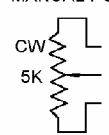
4-20mA SIGNAL



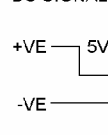
RELAY



MANUAL POT.

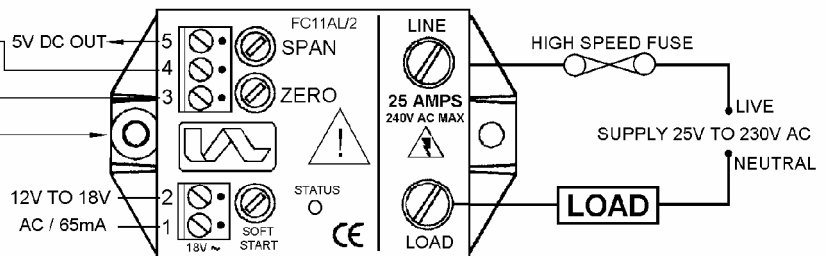


DC SIGNAL



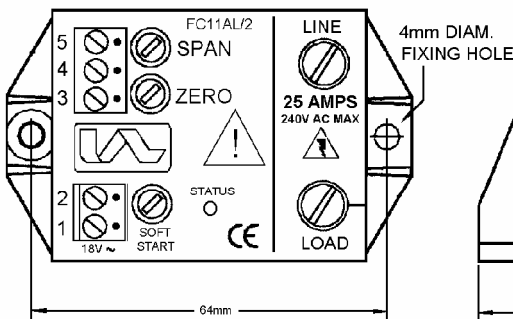
WARNING
THIS UNIT MUST BE EARTHED

NOTE: AC INPUT MUST BE ISOLATED FROM SIGNAL AND BE IN PHASE WITH LINE VOLTAGE.

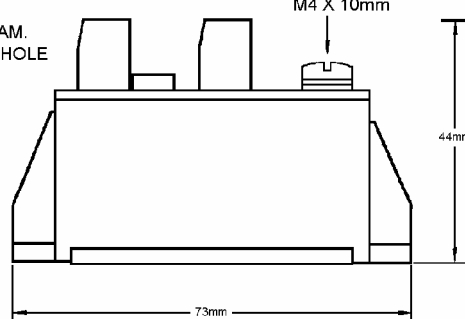


ADJUSTABLE
SOFT START

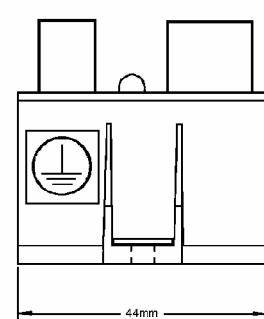
PLAN VIEW



SIDE VIEW
POWER CONNECTIONS
M4 X 10mm



END VIEW



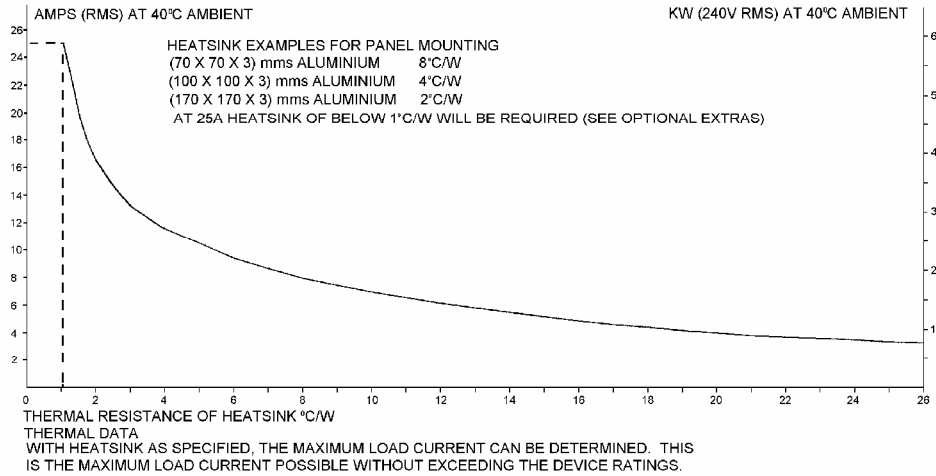
USE HEATSINK COMPOUND FOR EFFECTIVE THERMAL COUPLING

WARNING LIVE TERMINALS

SWITCH OFF MAINS SUPPLY BEFORE COMMENCING ANY SERVICE WORK

INSTALLATION

COOLING REQUIREMENTS



SPECIFICATIONS

Signal Span minimum	1.5 to 5V dc	AC input power (1 & 2)	12 to 18V ac @ 65mA
Signal span maximum	5 to 25V dc	Auxiliary output (5)	5Vdc
Signal zero offset	0-30% of span	Triac limiting RMS current	26A
Signal input resistance	5000 ohms \pm 20%	AC line voltage +/- 10% @ 50/60 Hz	25v to 230V
Manual potentiometer	2K, 5K or 10K	Peak single cycle surge current	250A
I ² t for fusing (10m sec)	250 A ² s	Power consumption	1.7W
Soft start time constant	0-20 seconds	Max. Peak voltage	600V
Isolation voltage	2500 Vrms	Current rating	25A
Max. Working temperature	65°C operational	Storage temperature	0°C to +85°C

FUSING:

It is recommended to use semiconductor (fast acting) type fuses or circuit breakers (Semiconductor - MCB) for unit protection and an appropriate fuse for unit supply (F1A). On initial 'switch on' some loads may need an increased Factor of Safety (F of S) for unit and/or device protection. (See SRA Datasheet 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)

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 (LVD) including :- Thermal data/cooling ; "Live" parts warning & Earthing 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. 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 I.E.C. 950).

ORDER CODE:

State part number: FC11AL/2 + Signal option.
 Optional extras include: Potentiometer, Supply transformer, Heatsink assembly, Heatsink compound, Heatsink, Filter.
 Note: When ordering the filter, the current the FC11AL/2 is to be used at will be required.



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