



# 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.

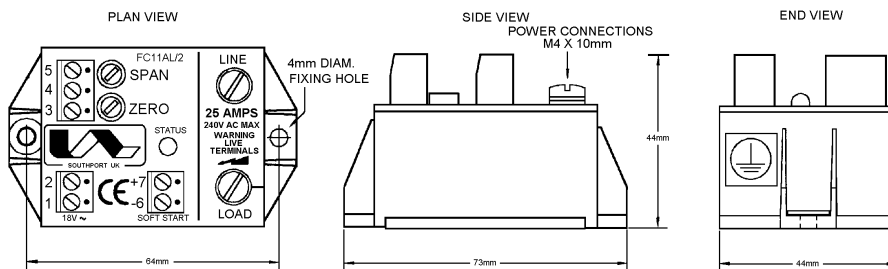
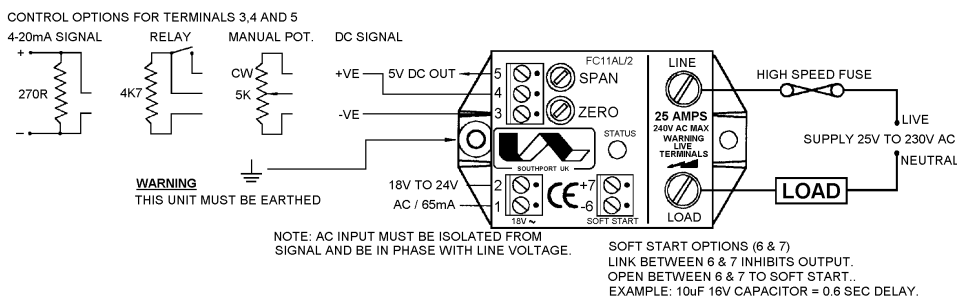
### FEATURES

- Integral 26A triac.
- Wide range of control signal inputs (voltage or current).
- Selectable soft-start signal delay function, (Terminals 6 & 7)
- Status LED giving output level indication.
- Consumes under 2 Watts.



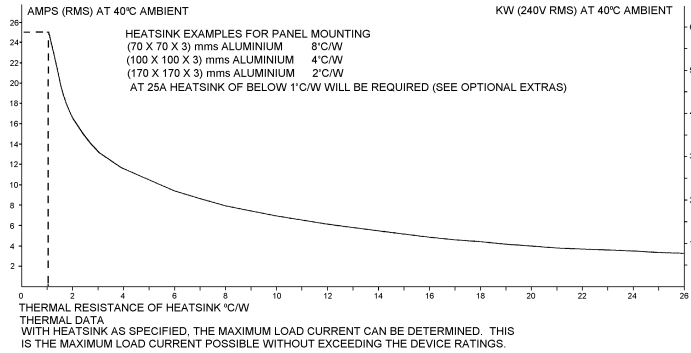
### INSTALLATION

### DIMENSIONS AND CONNECTIONS



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	0-2v dc	AC input power (1 & 2)	18 to 24V ac @ 65mA
Signal span maximum	0-25V dc	Auxiliary output (5)	5Vdc @ 5mA protected
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 <sup>2</sup> t for fusing (10m sec)	250 A <sup>2</sup> s	Power consumption	1.7W
Soft start time constant	0.06 sec/microfarad	Max. Peak voltage	600V
Isolation voltage	2500 Vrms	Current rating	25A
Max. Working temperature	65°C operational	Storage temperature	-20°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 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 IEC 950).

## ORDER CODE

State part number: FC11AL/2 + Signal option.

Optional extras include: Potentiometer, Soft start capacitor, 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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