



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.

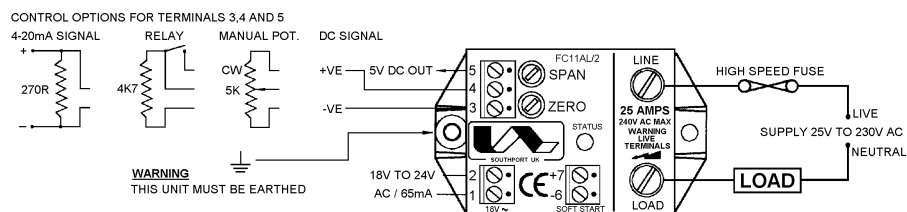
FEATURES

- 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.

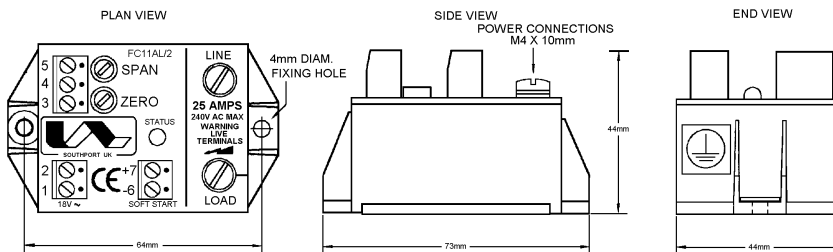


INSTALLATION

DIMENSIONS AND CONNECTIONS

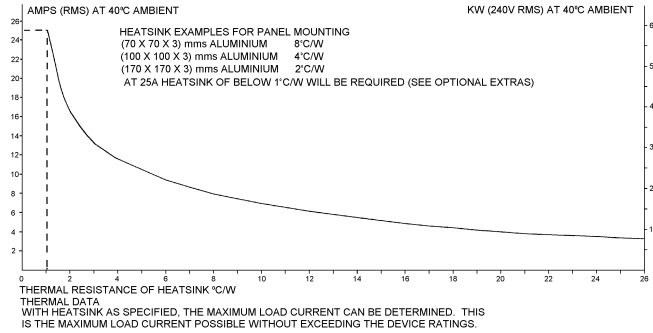


SOFT START OPTIONS (6 & 7)
LINK BETWEEN 6 & 7 INHIBITS OUTPUT.
OPEN BETWEEN 6 & 7 TO SOFT START.
EXAMPLE: 10uF 16V CAPACITOR = 0.6 SEC DELAY.



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 ± 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	0.06 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 trans former, 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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