UNITED AUTOMATION

15A to 30A 3 Phase AC POWER REGULATORS

S/LAC SERIES

X10819

INTRODUCTION

The S/LAC range of Thyristor stacks is available for three phase 415V applications but other voltage supplies are available. They can control loads of up to 30A, with a number of signal control options. These stacks are assembled to suit the final load with options of phase angle, burst firing control or a combination of both. All S/LAC thyristor stacks come complete with appropriately rated High Speed semiconductor fuses and an integral heatsink.

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.

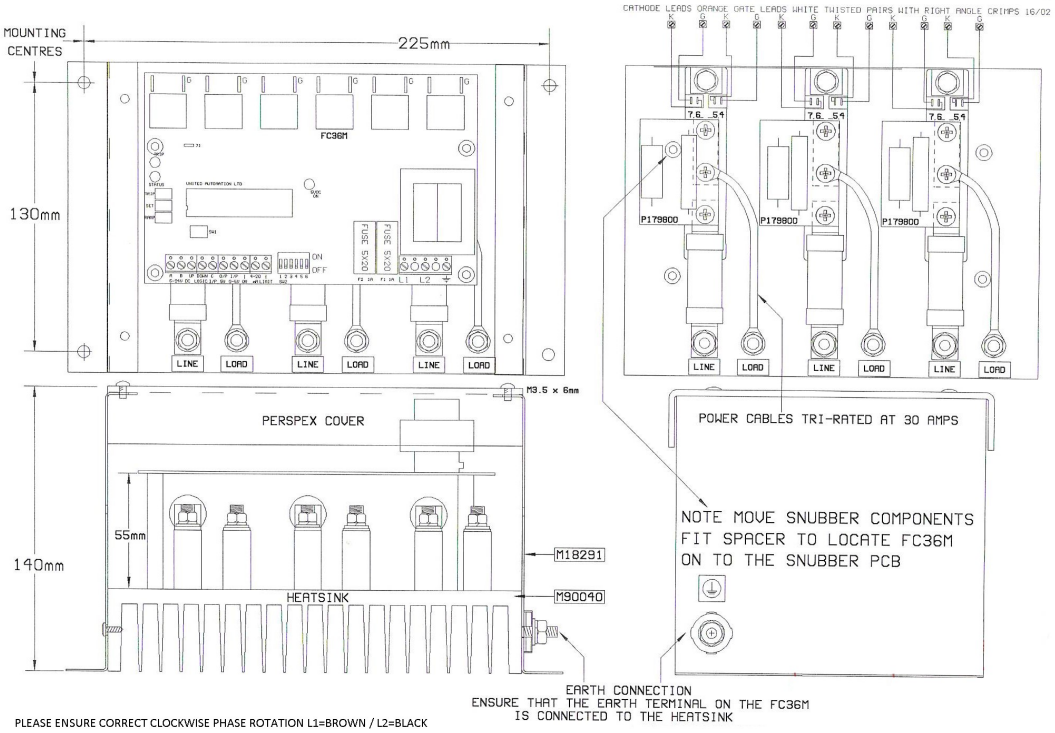
FEATURES

- 15 to 30A, 3 phase.
- Massive 0.4°C/Watt earthed heatsink.
- Phase angle, Burst firing or Logic control.
- Semiconductor fuses fitted.
- Simple installation.
- Perspex cover

RoHS Compliant Directive 2002/95/EC

INSTALLATION

CONNECTIONS AND DIMENSIONS



PLEASE ENSURE CORRECT CLOCKWISE PHASE ROTATION L1=BROWN / L2=BLACK

RECOMMENDATIONS
MOUNT FINS UPRIGHT TO MAXIMISE AIRFLOW
IF UNIT FITTED IN ENCLOSURE, IT IS RECOMMENDED TO USE A FAN AND OR LOUVRES
IF USED IN PHASE ANGLE A FILTER WILL BE REQUIRED

WARNING
LIVE TERMINALS
ISOLATE SUPPLY BEFORE COMMENCING ANY SERVICING WORK.

INSTALLATION

COOLING REQUIREMENTS

Heatsink temperature rating for standard stack assembly is calculated when naturally cooled. If mounted in enclosure or cabinet, adequate ventilation and/or forced air-cooling should be fitted. The heatsink should be mounted with the fins vertical to ensure optimum air flow.

LOAD CONSIDERATIONS

It is always advisable to indicate the type of load when ordering. For industrial reliability, based on long experience, the SAC range has considerable current overload capacity on the power devices used. The rated currents are maximum continuous RMS values for use within the temperature guidelines as shown in the table below.

Unusual heating loads such as Molybdenum, Platinum or Tungsten have a typical 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.

TERMINAL CONNECTIONS

LINE/LOAD:EARTH: M6 size terminals – (Torque settings: 4.5 – 5.5 Nm)

FUSING

It is recommended that semiconductor, fast acting type fuses or circuit breakers (Semiconductor-MCB) be used for 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 family carries a “CE” marking. For more information see recommendations section and contact our sales desk.

RECOMMENDATIONS

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

CODE	IDENTITY	DESCRIPTION
X10327	3-RFI	3 Phase Filter recommendations: 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, Earth requirements and Fuse recommendations.
X10322	ASC	AC Stack Specification and Application Datasheet
X10378	ILR	Inductive loads remedy sheet for use with Phase angle controllers
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.

To order see Stack Specification and Application circuit X10322 Datasheet

CE

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