



CSR/604/1004/1504

POWER REGULATOR CHIP

CSR
X10203

INTRODUCTION

The CSR Power Regulator chip is a compact and robust unit which is capable of controlling single-phase mains driven loads of up to 15 amps. Used in conjunction with variable resistance (potentiometer), the chip gives a fully adjustable output from zero to maximum voltage.

APPLICATIONS

Suitable for conventional resistive heating elements such as ovens, quartz lamps, moulders and dryers. Also suitable for many inductive loads such as transformers, fans and motors.

FEATURES

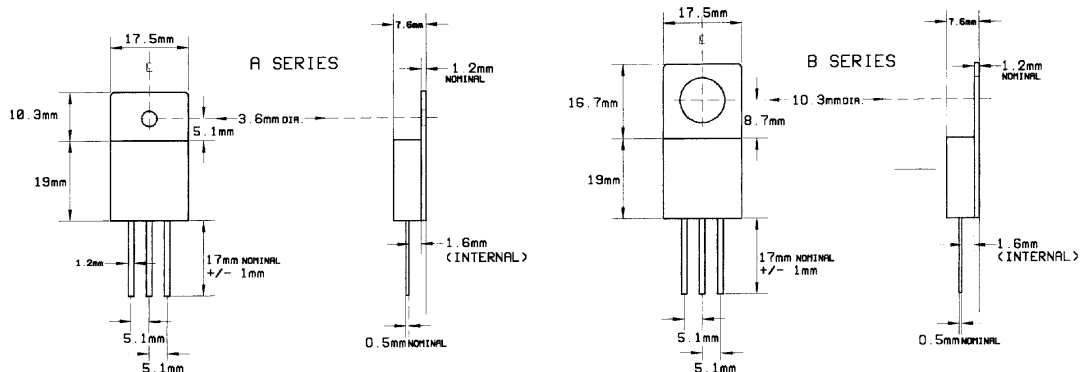
- Available in 6, 10, and 15 ampere rating.
- Flexibility of mounting.
- Easy installation (3 pin connections).
- Low hysteresis level.
- Low cost.

EXAMPLES



INSTALLATION

DIMENSIONS



INSTALLATION

MOUNTING INSTRUCTIONS

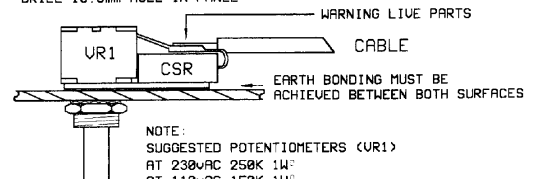
"A" VERSION: FASTEN DIRECTLY TO HEATSINK FOR GOOD EARTH BONDING

"B" VERSION: ATTACH DIRECTLY BY THE POTENTIOMETER TO THE PANEL (AS EXAMPLE - SIDE ELEVATION).

GENERAL NOTE: WHEN FIXING CSR TO ADDITIONAL HEATSINK, A SHEAR OF HEATSINK COMPOUND SHOULD BE USED BETWEEN THE BONDED SURFACES TO AID THERMAL DISSIPATION

NOTE: HEATSINK MUST BE EARTHED

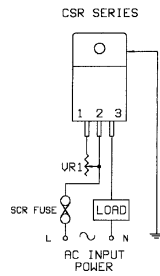
DRILL 10.3mm HOLE IN PANEL



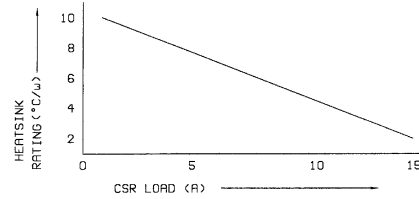
NOTE:
SUGGESTED POTENTIOMETERS (UR1)
AT 230VAC 250K 1W²
AT 110VAC 150K 1W²

INSTALLATION

CONNECTIONS



COOLING REQUIREMENTS



SPECIFICATIONS

	UNIT	CSR 604A	CSR 604B	CSR 1004A	CSR 1004B	CSR 1504A	CSR 1504B
RMS max. On state current	A	6	6	10	10	15	15
Peak one cycle surge current	A	100	100	120	120	150	150
Maximum off leakage current	mA	-----	-----	-----	2	-----	-----
Minimum holding load current	mA	-----	-----	-----	30	-----	-----
RMS input voltage +/- 10% @ 50/60 Hz	V	-----	-----	-----	110/230	-----	-----
Repetitive peak voltage	V	-----	-----	-----	400	-----	-----
Total conduction phase angle (typical)	degrees	-----	-----	-----	0 to 160°	-----	-----
Controlled phase angle (typical)	degrees	-----	-----	-----	30 to 160°	-----	-----
Power transfer at max. Current (efficiency)	%	-----	-----	-----	99	-----	-----
Tab surface operating range	°C	-----	-----	-----	0 to + 70	-----	-----
Storage temperature	°C	-----	-----	-----	0 to + 75	-----	-----
Insulation withstand capability	V	-----	-----	-----	1500 for 1 min.	-----	-----

FUSING:

It is recommended to use semiconductor (fast acting) type fuses or circuit breakers (Semiconductor - MCB) for unit protection. (See SRA Datasheet for further information).

CE MARKING

This product family carries a "CE marking". These phase angle type controllers require 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 recommendations - addressing the 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: CSR 'A' OR 'B' + (Load rating) and (Supply voltage)
Optional extras include: Knob, Dial, Heatsink compound.



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