



CSR-A & B SERIES

POWER REGULATOR CHIP

CSR-A/B

X10203

INTRODUCTION

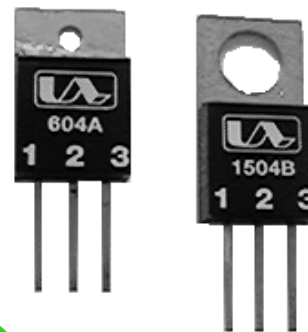
The CSR power regulator chip is a compact and robust unit, which is capable of controlling single-phase mains driven loads of up to 15A. Used in conjunction with variable resistance (potentiometer), the chip gives a fully adjustable output from zero to maximum voltage.

APPLICATIONS

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

FEATURES

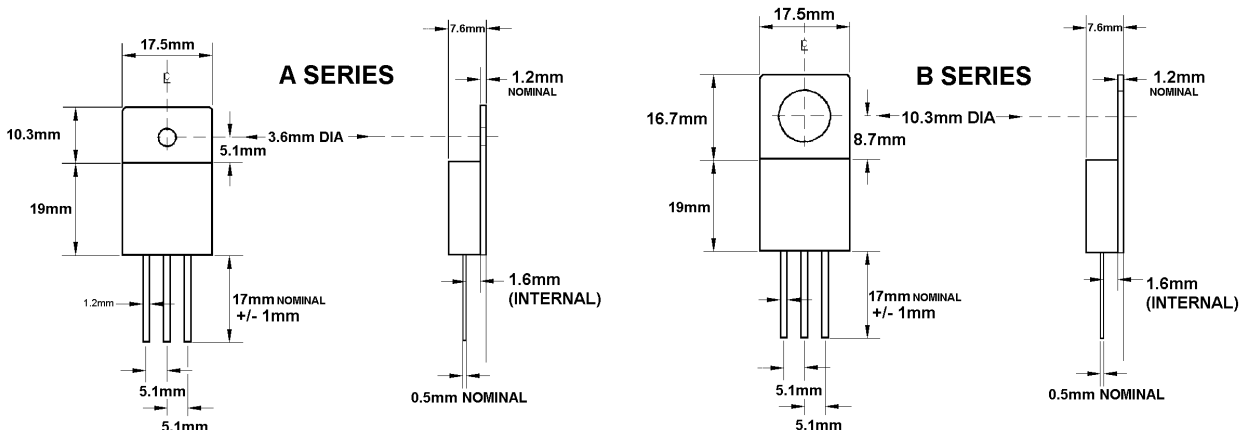
- Available in 6, 10, and 15A ratings.
- Flexibility of mounting.
- Easy installation (three pin connections).
- Isolated tab.
- Low cost.



RoHS Compliant

INSTALLATION

DIMENSIONS



INSTALLATION

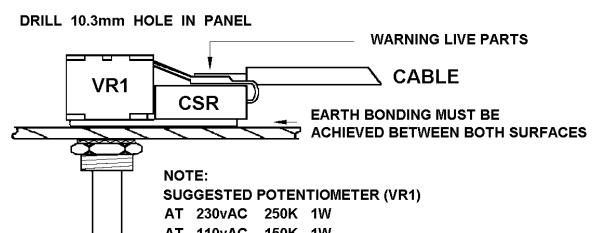
MOUNTING INSTRUCTIONS

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

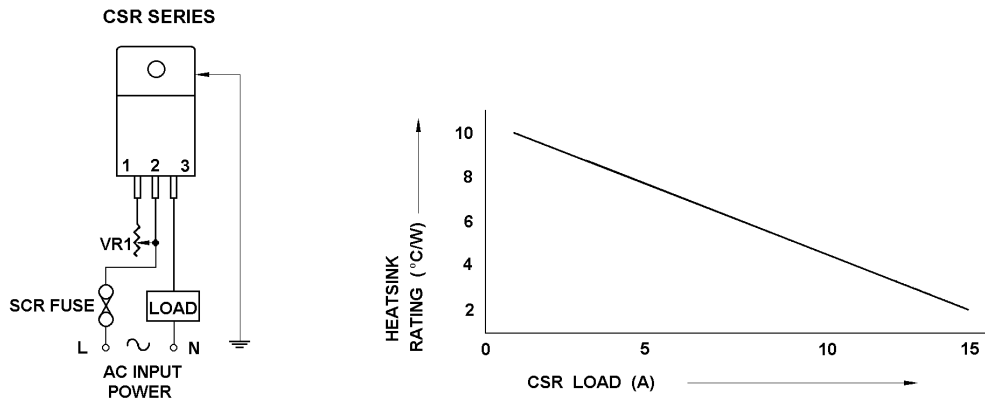
"B" VERSION : ATTACH DIRECTLY TO THE POTENTIOMETER TO THE PANEL (AS EXAMPLE - SIDE ELEVATION).

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

NOTE: HEATSINK MUST BE EARTHED



INSTALLATION Stainless steel typically 15 times less thermally conductive and mild steel which is typically 5 times less thermally conductive.



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. -----					
I ² t limiting values for fusing	A ² s	18	18	50	50	100	100

NOTE: For supply voltages above 120V or 240V AC, the controller may not turn off fully.

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 datasheet for further information.

CE MARKING

This family carries a "CE" marking. These phase angle controllers need a suitable remote filter. For more information see recommendations section and contact our sales desk. See Declaration of Conformity.

RECOMMENDATIONS

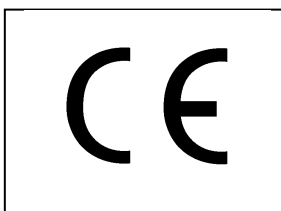
Other documents available on request, which may be appropriate for your application: -

CODE	IDENTITY	DESCRIPTION
X10229	RFI	Single 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 fusing recommendations.
P01.1	COS	UAL Conditions of sale.
X10378	ILR	Inductive loads remedy sheet for use with Phase angle controllers.

NOTE: It is recommended that installation and maintenance of this equipment should be done with reference to the current edition of the I.E.T. (formally I.E.E.) regulations (BS7671) by suitably qualified/trained personnel. The regulations contain important requirements regarding installation and safety of electrical equipment. Specific installers should refer to local and national regulations.

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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