



# CSR-A & B SERIES

POWER REGULATOR CHIP

CSR-A/B

X10203

## INTRODUCTION

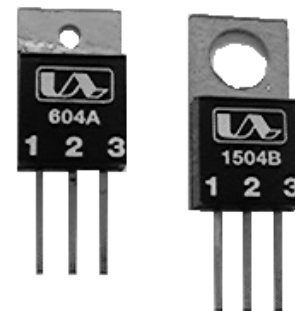
The CSR power regulator chip is a compact and robust unit, which is capable of controlling single-phase mains driven loads of up to 15A. Used in conjunction with variable resistance (potentiometer), the chip gives a fully adjustable output from zero to maximum voltage.

## 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

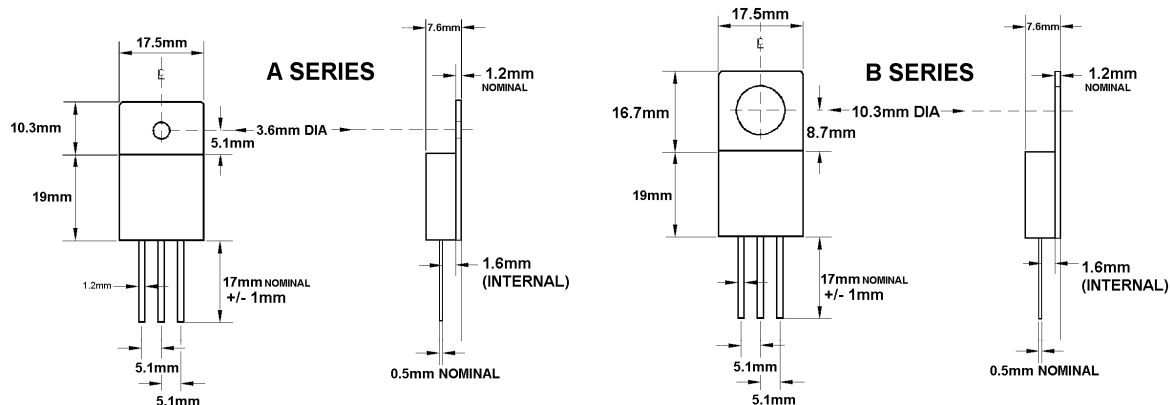
- Available in 6, 10, and 15A ratings.
- Flexibility of mounting.
- Easy installation (three pin connections).
- Isolated tab.
- Low cost.



RoHS Compliant

## INSTALLATION

### DIMENSIONS



### INSTALLATION

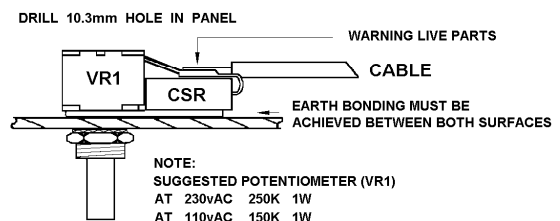
#### MOUNTING INSTRUCTIONS

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

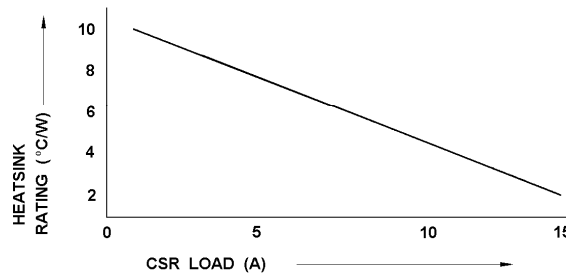
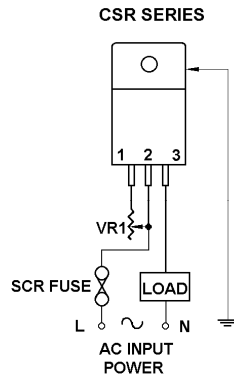
"B" VERSION : ATTACH DIRECTLY TO THE POTENTIOMETER TO THE PANEL (AS EXAMPLE - SIDE ELEVATION).

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



## SPECIFICATIONS

1504B

rms max. on state current  
Peak one cycle surge current  
Maximum off leakage current

Minimum holding load current

rms input voltage +/- 10% @ 50/60 Hz

Repetitive peak voltage

Total conduction phase angle (typical)

Controlled phase angle (typical)

| UNIT    | CSR   | CSR 604A | CSR 604B   | CSR 1004A | CSR 1004B | CSR 1504A |
|---------|-------|----------|------------|-----------|-----------|-----------|
| A       | 6     | 6        | 10         | 10        | 15        | 15        |
| A       | 100   | 100      | 120        | 120       | 150       | 150       |
| MA      | ----- | -----    | 2          | -----     | -----     | -----     |
| MA      | ----- | -----    | 30         | -----     | -----     | -----     |
| V       | ----- | -----    | 110/230    | -----     | -----     | -----     |
| V       | ----- | -----    | 400        | -----     | -----     | -----     |
| Degrees | ----- | -----    | 0 to 160°  | -----     | -----     | -----     |
| Degrees | ----- | -----    | 30 to 160° | -----     | -----     | -----     |

## 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.                                                                                                                                             |

**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. (formerly 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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