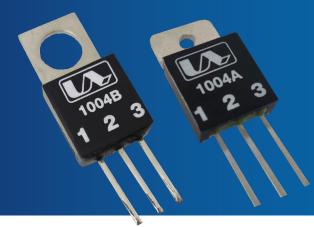
Variable AC Voltage Regulators

CSR CHIP

604 / 1004 / 1504 Compact Power Regulator Chip

CONTACT US:

- © 0044 (0) 1704-516 501
- □ enquiries@united-automation.com
- www.united-automation.com



KEY FEATURES:

- **Multiple Ampere Ratings:** Available in 6, 10, and 15 ampere ratings to suit different load requirements.
- Flexible Mounting: Offers versatility in installation, accommodating various mounting configurations.
- Easy Installation: Simple 3-pin connection setup for quick and hassle-free installation.
- Low Hysteresis Level: Ensures stable and accurate voltage regulation with minimal fluctuations.
- Cost-Effective: Provides high performance at an affordable price point, delivering value for money.

APPLICATIONS:

Ideal for a diverse range of applications, including:

- Ovens
- Fish & Chips Fryers
- Restaurants
- Hospitality Equipment
- Quartz Lamps / Heat Lamps
- **Moulding Machines**
- **Dryers**
- Inductive Loads such as Transformers and Motors

Introducing the CSR Power Regulator Chip, a versatile solution for precise control of single-phase mains-driven loads of up to 15 amps. This compact and robust unit, when paired with a variable resistance (potentiometer), offers a fully adjustable output from zero to maximum voltage, providing flexibility and reliability across various applications.

Ideal for a wide range of industries, including ovens, fish and chip fryers, restaurants, hospitality establishments, quartz lamps, moulding machines, dryers, and inductive loads such as transformers and motors, the CSR Power Regulator Chip ensures efficient power management and consistent performance.

Upgrade your equipment with the CSR Power Regulator Chip and experience reliable and efficient control over your single-phase mains-driven loads. Whether you're in the food service industry, hospitality sector, or manufacturing, this versatile chip is the perfect solution for your power management needs.

TECHNICAL SPECIFICATIONS

Specifications	Unit	CSR 604A	CSR 604B	CSR 1004A	CSR 1004B	CSR 1504A	CSR 1504B
RMS max. On state current	Α	6	6	10	10	15	15
Peak one cycle surge current	Α	100	100	120	120	150	150
Maximum off leakage current	mA				2		
Maximum 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 T	O 160°		
Controlled phase angle (typical)	Degrees			30 T	O 160°		
Power transfer at max. Current (efficiency)	%	99					
Tab surface operating range	°C	0 to +70					
Storage temperature	°C			0 t	o +75		
Insulation withstand capability	V			1500 1	or 1 min.		

YOU MUST READ THIS BEFORE INSTALLATION



ELECTRICAL SAFETY

WARNING: RISK OF ELECTRIC SHOCK Always consult the Installation & Maintenance Instructions before connecting this product to the power supply. **WARNING: Disconnect Power Before Servicing** Ensure the electrical supply is safely disconnected before connecting to any supply, load, or control terminals



INSTALLATION REQUIREMENTS

INSTALLATION REQUIRE
WARNING: Installation by Qualified Personnel Only

This product must only be installed or fitted by a competent, qualified installer familiar with the relevant electrical standards and installation practices.



USER RESTRICTIONS

WARNING: Not for Use by Vulnerable Individuals This product is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and by a person responsible for their safety.



USAGE ENVIRONMENT

WARNING: Industrial Use Only This is an industrial-grade product and is not intended for household



WARNING: Hot Surfaces On certain models, surfaces marked with this symbol become hot during use. Avoid direct contact and follow all



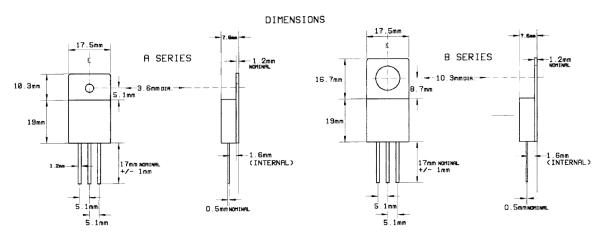
CSR CHIP

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INSTALLATION

DIMENSIONS & CONNECTIONS

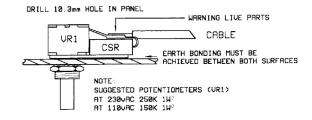


INSTALLATION

MOUNTING INSTRUCTIONS
"A" UERSION: FASTEN DIRECTLY TO HEATSINK FOR GOOD
EARTH BONDING

"B" UERSION: ATTACH DIRECTLY BY THE POTENTIOMETER TO THE PANEL (AS EXAMPLE ~ SIDE ELEUATION)

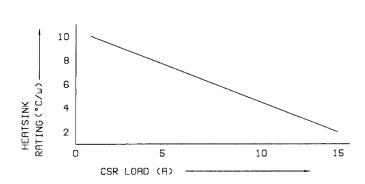
GENERAL NOTE: WHEN FIXING CSR TO ADDITIONAL HEATSINK, A SMEAR OF HEATSINK COMPOUND SHOULD BE USED BETWEEN THE BONDED SURFACES TO AID THERMAL DISSIPATION NOTE: HEATSINK MUST BE EARTHED



CONNECTIONS

CSR SERIES 0 2 SCR FUSE LOAD L AC INPUT POWER

COOLING REQUIREMENTS



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CSR CHIP

604/1004/1504

Compact Power Regulator Chip

RECOMMENDATIONS

FUSING

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

DOCUMENTS

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

Code	Identity	Description
X10229	RFI	Filter 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 and Fusing Recommendations

It is recommended that installation and maintenance of this equipment should be done with reference to the current edition of the I.E.T. regulations (BS7671) by suitably qualified/trained personnel. The regulations contain important requirements regarding the safety of electrical equipment. For International standards refer STANDARDS on D of C.

OPTIONAL EXTRAS

Product Code	Product Description	
N30001	Control Knob RN-113B	
L60018	PR DIAL (1 -10) TYPE	
A403001	5K Potentiometer	
Z01062	Heatsink Compound Syringe (Must be applied while fitting)	
A-EN2010-6-F*	6A 10 series EMI Single phase Chassis Mount filter	
A-EN2010-10-F*	10A 10 series EMI Single phase Chassis Mount filter	
A-EN2010-16-F*	16A 10 series EMI Single phase Chassis Mount filter	
*Note: When ordering a filter, the current at which the CSR is to be used at will be required.		

PRODUCT CODE AND RELATED PRODUCT CODE

CHIP - A		
Product Code	Product Description	
A01106	6A 230V Compact Power Regulator Chip - A	
A01110	10A 230V Compact Power Regulator Chip - A	
A01115	15A 230V Compact Power Regulator Chip - A	

CHIP -B		
Product Code	Product Description	
A01206	6A 230V Compact Power Regulator Chip - B	
A01210	10A 230V Compact Power Regulator Chip - B	
A01215	15A 230V Compact Power Regulator Chip - B	



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