

### **INTRODUCTION**

These variable phase angle powerful regulators are robust, compact and enclosed units for 230V or 110V up to 15A single phase mains driven loads. They give fully adjustable voltage outputs from zero to maximum,

The large triac enables the unit to handle high inrush currents with ample safety margin on industrial installations. An adhesive backed silver label and hairline knob are optional extras for front panel mounting.

#### **APPLICATIONS**

Suitable for quartz lamps, or conventional resistive heating elements in single, series or parallel configurations to the specified voltage, current and temperature limits. Applications include ovens, moulders, dryers and some inductive loads, for example transformers and motors

### **FEATURES**

- Variable 0-98% Output
- On/Off Switched version (QVR's)
- Single Hole Fixing
- Rugged and Compact
- Large Triac for Inrush Protection
- High Surge Option



### **INSTALLATION**



# **UNITED AUTOMATION LTD**

Southport Business Park Wight Moss Way Southport, PR8 4HQ ENGLAND Tel: 0044 (0) 1704 – 516500 Fax: 0044 (0) 1704 – 516501 enquiries@united-automation.com www.united- automation.com

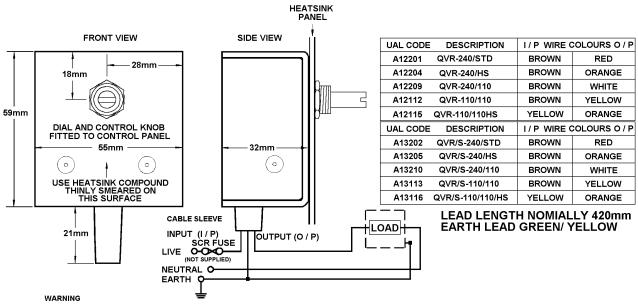






#### **DIMENSIONS AND CONNECTIONS**

### **MAIN OPTIONS**



LIVE TERMINALS - SWITCH OFF SUPPLY BEFORE COMMENCING ANY SERVICE WORK NOTE FOR HEATSINK PANEL MOUNTING:
A 10mm HOLE IS REQUIRED TO ACCEPT MOUNTING BUSH
USE HEATSINK COMPOUND FOR EFFECTIVE THERMAL COUPLING



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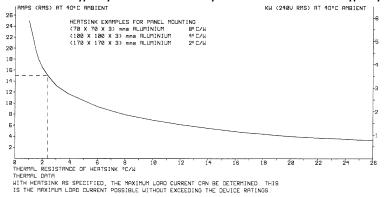


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INSTALLATION Cont. Stainless Steel typically 15 times less thermally conductive and mild Steel is typically 5 times less thermally conductive.



### **SPECIFICATIONS**

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Maximum rms on-state current	15A
Minimum Operating Current	200mA
Triac limiting rms on state current	25A
Peak one cycle surge @ 10mS	250A
Peak one cycle surge HS model @ 10mS	300A
I <sup>2</sup> t for fusing	112A <sup>2</sup> s
Isolation voltage	2500V rms
Maximum recommended unit temperature	70°C
Maximum cable temperature	105°C
Maximum recommended unit load at 20°C ambient, (without extra heatsink)	10A
Maximum recommended unit load at 40°C ambient, (without extra heatsink)	5A
Mains supply +/-10% @ 50/60Hz	110 or 230V ac

### **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.

## **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 the Declaration of Conformity).

### **RECOMMENDATIONS**

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

CODE	<u>IDENTITY</u>	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, Earth requirements and fusing recommendations
X10378	ILR	Inductive loads remedy sheet for use with Phase angle controllers
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. (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.



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**ORDER CODE** State part number: (See main option chart)

Non switched QVR 230V AC or 110V AC Switched QVR/S 230V AC or 110V AC

Optional extras include: high surge, various output, F-series filter (current at which unit is to be used will be required), standard knob, QVR dial, heatsink compound.



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