

1 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.

2 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

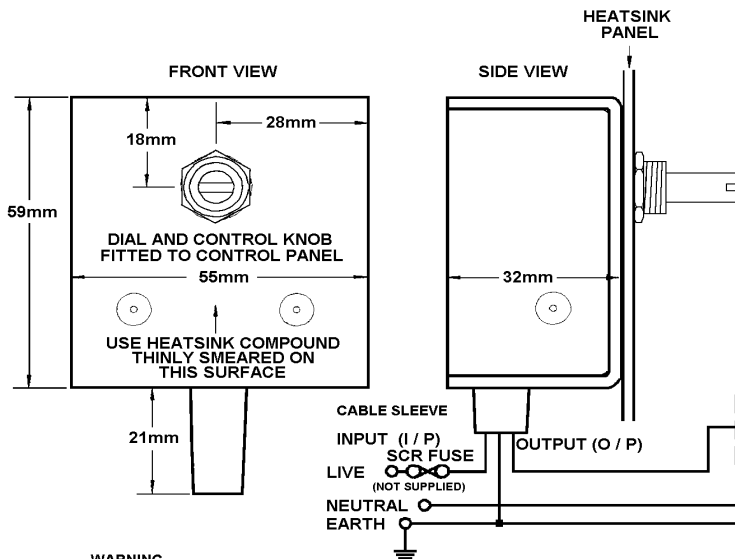
3 Features

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



4 Installation

DIMENSIONS AND CONNECTIONS



MAIN OPTIONS

UAL CODE	DESCRIPTION	I / P WIRE COLOURS	O / P
A12201	QVR-240/STD	BROWN	RED
A12204	QVR-240/HS	BROWN	ORANGE
A12209	QVR-240/110	BROWN	WHITE
A12112	QVR-110/110	BROWN	YELLOW
A12115	QVR-110/110HS	YELLOW	ORANGE

UAL CODE	DESCRIPTION	I / P WIRE COLOURS	O / P
A13202	QVR/S-240/STD	BROWN	RED
A13205	QVR/S-240/HS	BROWN	ORANGE
A13210	QVR/S-240/110	BROWN	WHITE
A13113	QVR/S-110/110	BROWN	YELLOW
A13116	QVR/S-110/110/HS	YELLOW	ORANGE

LEAD LENGTH NOMIALLY 420mm
EARTH LEAD GREEN/ YELLOW

WARNING

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

UNITED AUTOMATION LTD

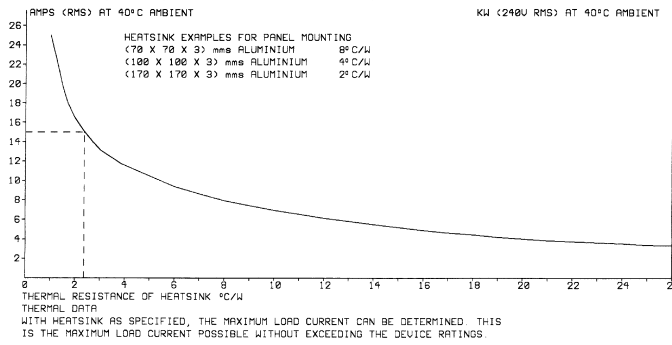
Southport Business Park
Wight Moss Way
Southport, PR8 4HQ
ENGLAND

Tel: 0044 (0) 1704 – 516500
enquiries@united-automation.com
www.united-automation.com

unitedautomationltd UA_Limited



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



5 Specifications

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 ² t for fusing	112A ² 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

6 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.

7 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).

8 Recommendations

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
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.

9 Order Code

State part number: (See main option chart)

Part Number	Non Switched QVR 230v AC or 110v AC, Switched QVR/S 230v AC or 110v AC
Optional Extras	High surge, various output, F-series filter (current at which unit is to be used will be required), standard knob, QVR dial, heatsink compound.

UNITED AUTOMATION LTD



Southport Business Park
Wight Moss Way
Southport, PR8 4HQ
ENGLAND

Tel: 0044 (0) 1704 – 516500

enquiries@united-automation.com

www.united-automation.com

unitedautomationltd UA_Limited

