

X10250

Commercial Catering Equipment | Catering Heater Controller

# QVR-QVR/S-QLC

RFI Suppression with 15A, 17A, 110V & 230V  
Variable AC Regulator

## CONTACT US:

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## KEY FEATURES:

- ✓ Adjustable output from 0 to 98% for precise voltage control
- ✓ Available in non-switched (QVR), switched (QVR/S), and 4-position switch (QLC) potentiometer options.
- ✓ Single hole fixing for easy installation.
- ✓ Robust and compact design ensures durability.
- ✓ Equipped with a large triac for inrush protection.
- ✓ Suitable for both 230V and 110V single-phase mains-driven loads
- ✓ **High Surge Capability** (A14232E/HS) – Handles high inrush currents for reliable operation.

## APPLICATIONS:

- Ovens
- Fish & Chips
- Restaurants
- Hospitality
- Quartz Lamps / Heat Lamps
- Moulders
- Dryers and
- Some inductive loads,
- for example, transformers and motors

## VARIANTS:

- **QVR** – Non-Switched Potentiometer
- **QVR/S** – Switched Potentiometer
- **QLC** – 4-Positioned Switch Potentiometer

Ensure stable power for your electrical systems with our Variable Phase Angle Regulators. Designed to regulate voltages and control power flow, these compact units are perfect for a variety of applications, including ovens, restaurants, and quartz lamps. With adjustable outputs and robust construction, they provide precise voltage control and can handle high inrush currents with ease. Optional features like on/off switches and adhesive labels make installation a breeze.

Enhance the performance and reliability of your electrical systems with our Variable Phase Angle Regulators. Whether you need precise voltage control for commercial kitchens or industrial equipment, our regulators deliver exceptional performance and durability.

## TECHNICAL SPECIFICATIONS

Specifications	TB RFI**	RFI	TB RFI** (HIGH SURGE)
Maximum RMS* on-state current	15A	17A	15A
Minimum Operating Current	200mA		
Triac Limiting RMS on state Current	26A		41A
Peak one cycle surge @ 20mS	250A		400A
I²t for fusing	112A²s		
Isolation voltage	2500V rms		
Maximum recommended unit temperature	65°C		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%	110V or 230VAC		
Mains Frequency	50/60Hz		
Unit storage temperature range	0° to +85°		
Further Dimensions			
Shaft diameter	6.3mm		
Bush length	7mm (QVR, QVR/S) & 5mm (QLC)		
Shaft projection from bush	12mm (QVR), 8mm (QVR/S) & 30mm (QLC)		
Fixing hole diameter	10mm		

\*RMS = Root Mean Square

\*\*TB RFI= Terminal Block Radio Frequency Interference

## YOU MUST READ THIS BEFORE INSTALLATION

 ELECTRICAL SAFETY	 INSTALLATION REQUIREMENTS	 USER RESTRICTIONS	 USAGE ENVIRONMENT	 HOT SURFACE WARNING
<b>WARNING: RISK OF ELECTRIC SHOCK</b> Always consult the Installation & Maintenance Instructions before connecting this product to the power supply. <b>WARNING: Disconnect Power Before Servicing</b> Ensure the electrical supply is safely disconnected before connecting to any supply, load, or control terminals.	<b>WARNING: Installation by Qualified Personnel Only</b> This product must only be installed or fitted by a competent, qualified installer familiar with the relevant electrical standards and installation practices.	<b>WARNING: Not for Use by Vulnerable Individuals</b> This product is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they are supervised or instructed by a person responsible for their safety.	<b>WARNING: Industrial Use Only</b> This is an industrial-grade product and is not intended for household use.	<b>WARNING: Hot Surfaces</b> On certain models, surfaces marked with this symbol become hot during use. Avoid direct contact and follow all thermal safety precautions.

# QVR – QVR/S – QLC

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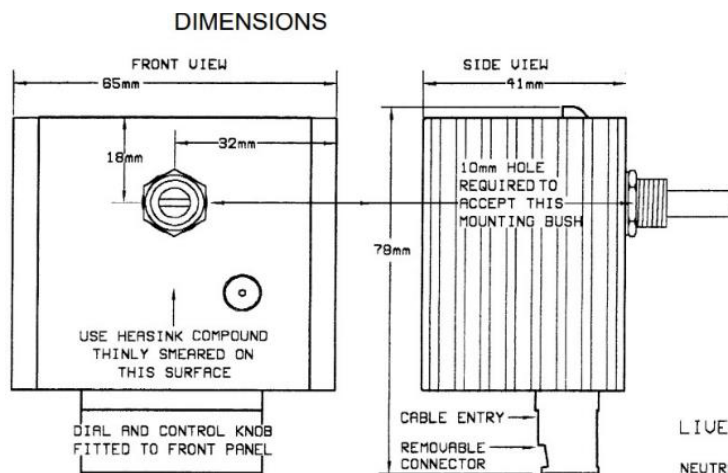
**TB RFI Regulator**



**RFI Regulator**

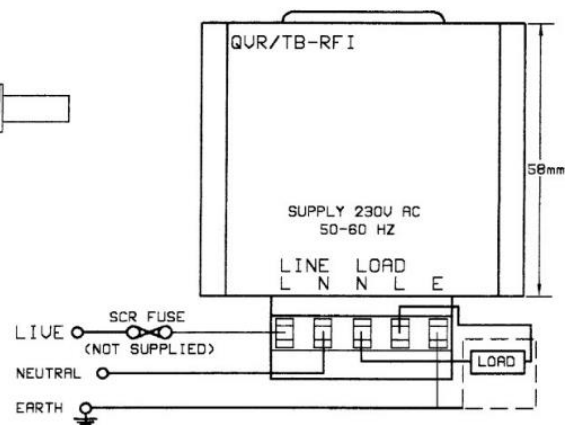
## **INSTALLATION**

### **DIMENSIONS & CONNECTIONS FOR TB RFI**



### **CONNECTIONS**

REAR VIEW



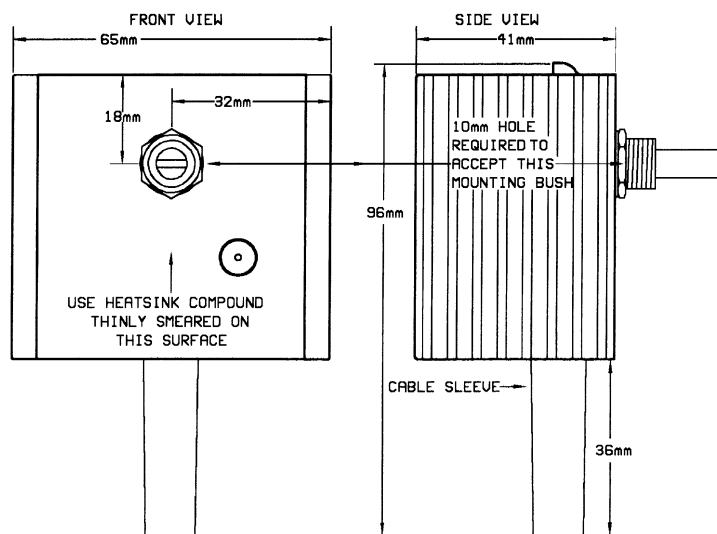
#### **WARNING**

LIVE TERMINALS - SWITCH OFF SUPPLY BEFORE COMMENCING ANY SERVICE WORK

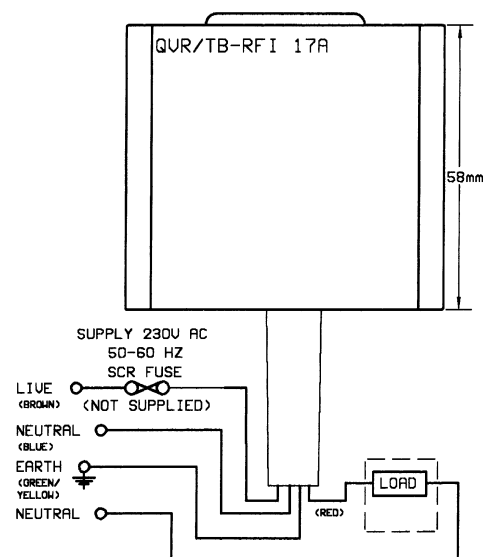
#### **NOTE**

FOR HEATSINK PANEL MOUNTING A 10MM HOLE IS REQUIRED TO ACCEPT MOUNTING BUSH.  
HEATSINK COMPOUND MUST BE USED FOR EFFECTIVE THERMAL COUPLING.

### **DIMENSIONS & CONNECTIONS FOR RFI**



REAR VIEW



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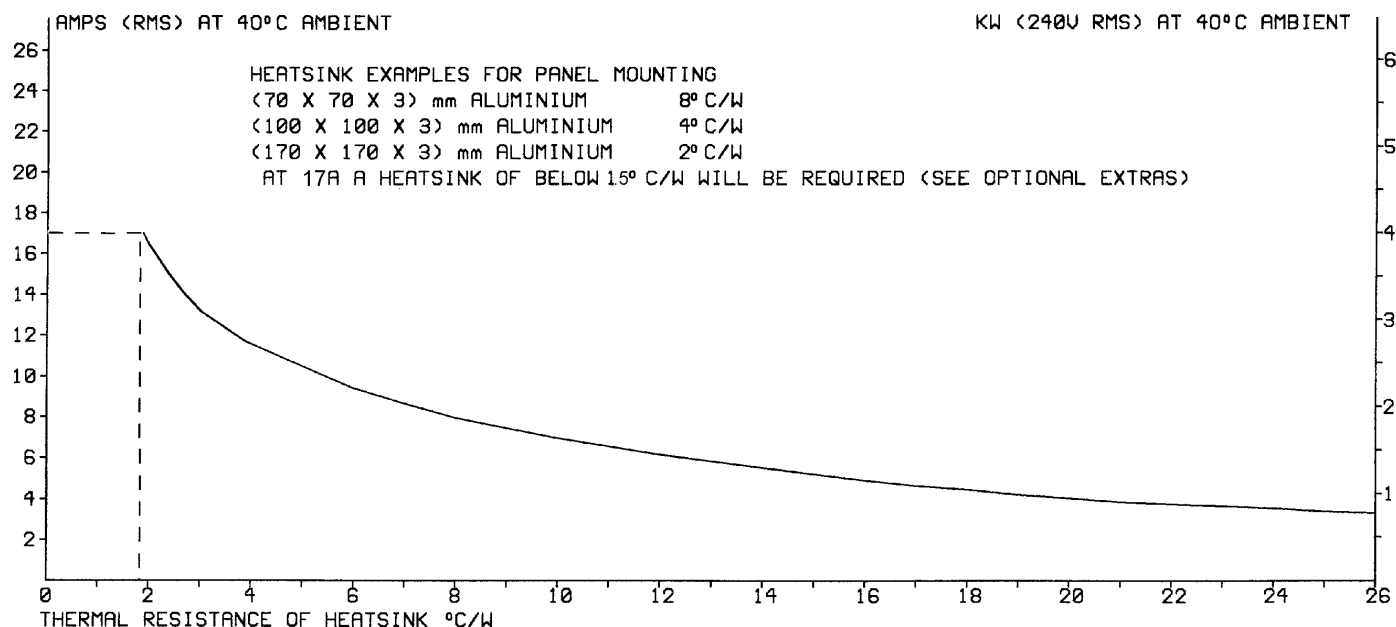


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**INSTALLATION Cont.** Stainless Steel typically 15 times less thermally conductive and mild Steel is typically 5 times less thermally conductive.



## THERMAL DATA

WITH HEATSINK AS SPECIFIED, THE MAXIMUM LOAD CURRENT CAN BE DETERMINED. THIS IS THE MAXIMUM LOAD CURRENT POSSIBLE WITHOUT EXCEEDING THE DEVICE RATINGS.

## SWITCHED CONFIGURATION (ONLY FOR QLC)

For 110 VAC	
POSITION	AC O/P LOADED VOLTS (RMS typical)
0	ZERO
1	80
2	90
3	SUPPLY

For 230 VAC	
POSITION	AC O/P LOADED VOLTS (RMS typical)
0	ZERO
1	173
2	193
3	SUPPLY

## 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.



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## OPTIONAL EXTRAS

Product Code	Product Description
N30001	Control Knob RN-113B SCI
L60011	DIAL QVR TYPE
L60012	DIAL QLC TYPE
Z01062	Heatsink Compound Syringe (Must be applied while fitting)

## PRODUCT CODE AND RELATED PRODUCT CODE

### QVR

Product Code	Product Description
A14118E	Quartz Lamp Phase Angle 15A 110V Regulator [QVR TB RFI]
A14231E	Quartz Lamp Phase Angle 15A 230V Regulator [QVR TB RFI]
A12217E	Quartz Lamp Phase Angle 17A 230V Regulator [QVR RFI]

### QVR/S

Product Code	Product Description
A14117E	Quartz Lamp Phase Angle 15A 110V Switched Regulator [QVR/S TB RFI]
A14232E	Quartz Lamp Phase Angle 15A 230V Switched Regulator [QVR/S TB RFI]
A14232E/HS	Quartz Lamp Phase Angle 15A 230V Switched Regulator – High Surge [QVR/S TB RFI]
A13218E	Quartz Lamp Phase Angle 17A 230V Switched Regulator [QVR/S RFI]

### QLC

Product Code	Product Description
A11101E	Quartz Lamp Phase Angle 15A 110V 3 Position Switched Regulator [QLC TB RFI]
A11200E	Quartz Lamp Phase Angle 15A 230V 3 Position Switched Regulator [QLC TB RFI]
A11215E	Quartz Lamp Phase Angle 17A 230V 3 Position Regulator [QLC RFI]

## PRODUCT CODE AND RELATED PRODUCT CODE (UL CERTIFIED MARK) – E319489

### QVR

Product Code	Product Description
A14133	Quartz Lamp Phase Angle 15A 120V Regulator [QVR-RFI-TB-(UL)]
A14233	Quartz Lamp Phase Angle 15A 230V Regulator [QVR-RFI-TB-(UL)]



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1 July 2025 | Issue: 12

Page 4 of 4