

X10250

Commercial Catering Equipment | Catering Heater Controller



# QVR-QVR/S-QLC

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



## 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

## 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          |
|---|--------------------------------------|--------------|
| Maximum RMS* on-state current   | 15A                                  | 17A          |
| Minimum Operating Current   | 200mA                                |              |
| Triac Limiting RMS on state Current                                     | 26A                                  |              |
| Peak one cycle surge @ 20mS   | 250A                                 |              |
| I <sup>2</sup> t for fusing   | 112A <sup>2</sup> s                  |              |
| Isolation voltage   | 2500V rms                            |              |
| Maximum recommended unit temperature                                    | 65°                                  |              |
| 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 +65°                           | -20° 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

**La Grand E.V.O**

Sydneystraat 90  
3047BP Rotterdam  
+31(0)102449966  
info@lagrand-evo.nl  
[www.lagrand-evo.nl](http://www.lagrand-evo.nl)



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**TB RFI Regulator**

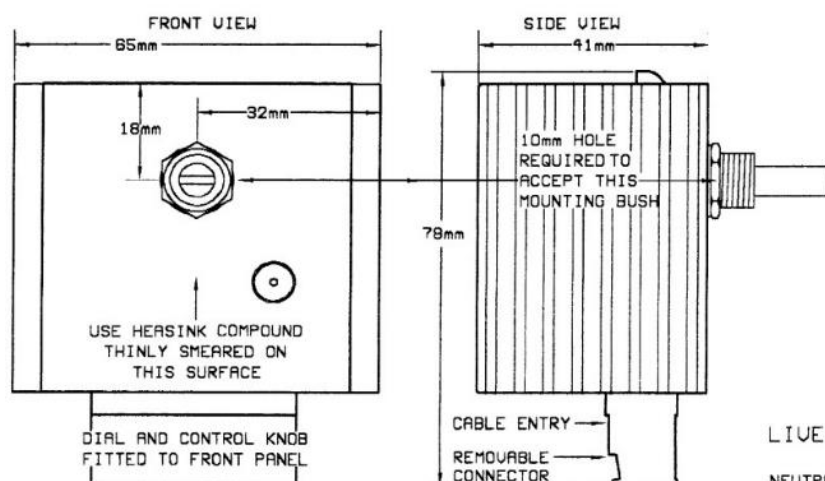


**RFI Regulator**

## INSTALLATION

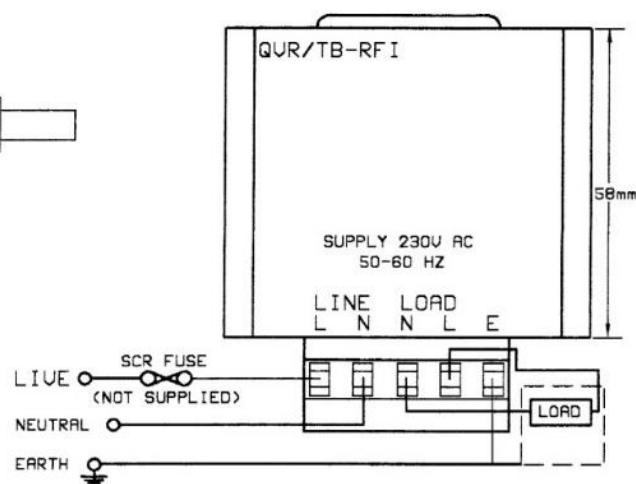
### DIMENSIONS & CONNECTIONS FOR TB RFI

#### DIMENSIONS



#### 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.

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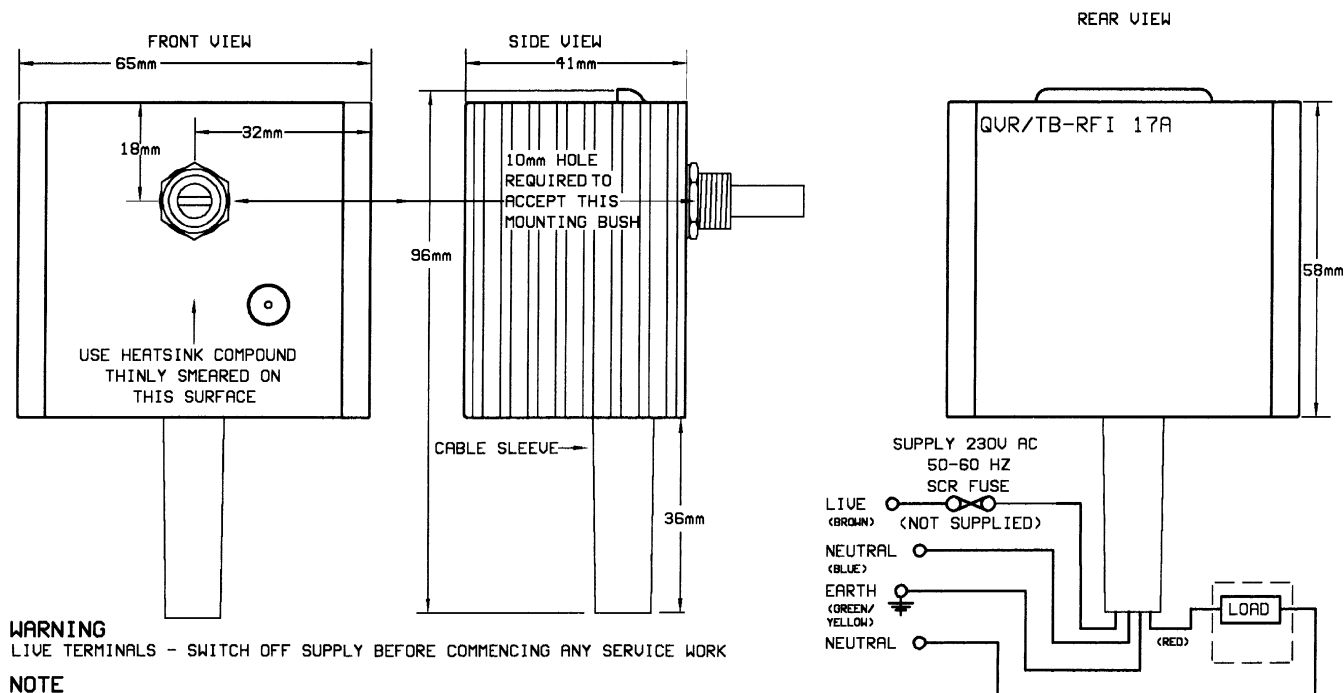


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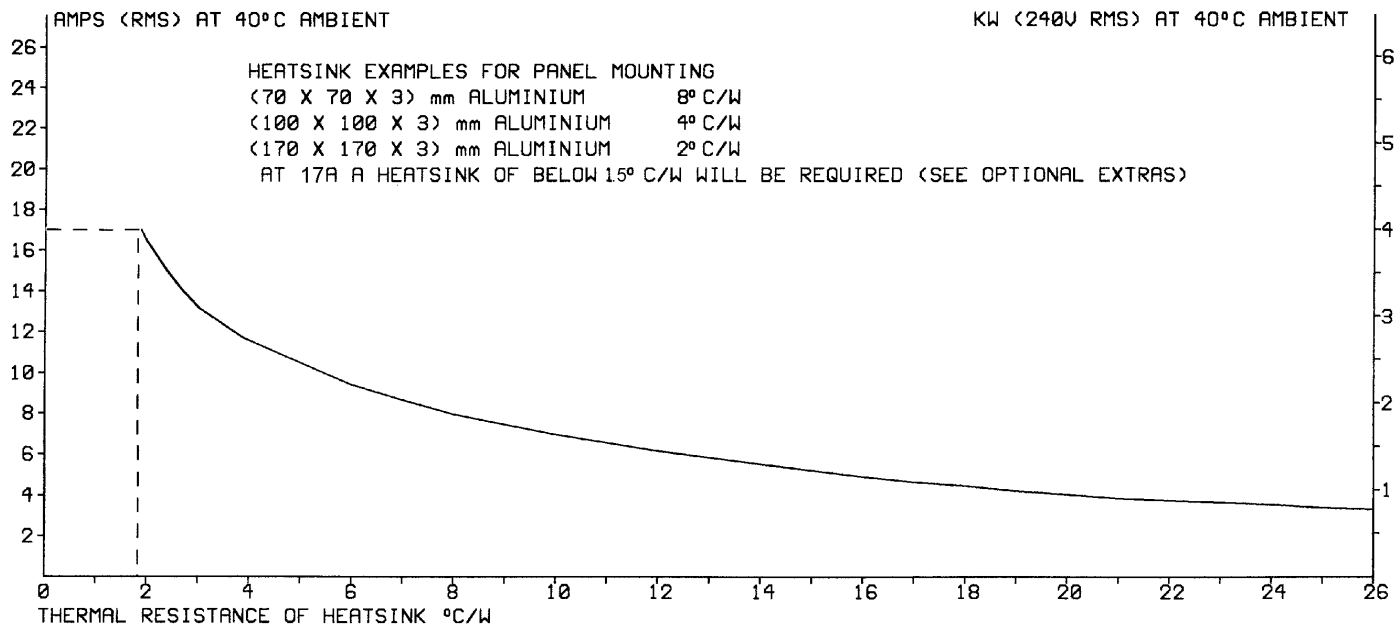
## DIMENSIONS & CONNECTIONS FOR RFI

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**NOTE**

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

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

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

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## 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.

## 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) |

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## 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] |
| A13218E      | Quartz Lamp Phase Angle 17A 230v Switched Regulator [QVR/S RFI]    |

### QLC

| Product Code | Product Description   |
|--------------|---|
| A11101E      | Quartz Lamp Phase Angle 15A 110v AC3 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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