## X10503 – QLC-RFI-TB-E

# Phase Angle Electronic Heat Switch with RFI Suppression Issue 3



### Introduction

These switched phase angle power regulators are robust and compact units ideal for controlling single phase mains driven loads. The standard QLC units are for 230V supply, with an integral three position and off control switch with wiring connections to the plug-in five way terminal. The large triac enables the unit to handle high inrush current with ample safety margins on industrial installations. These units incorporate their own RFI filter network to comply with EMC Regulations (Class A).

## **Applications**

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

#### 3 **Features**

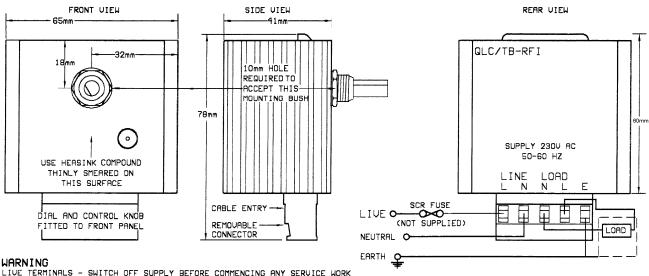
- Integral RFI (Filtering) network.
- Plug in power connector block.
- Single 10mm hole mounting bush fixing.
- Designed to maximise thermal dissipation.
- 15A(Max) rating with suitable panel mounting
- 'E'-model complete with Knob and Dial



## Installation

**DIMENSIONS, WIRING CONNECTIONS & OUTPUTS** 

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



LIVE TERMINALS - SWITCH OFF SUPPLY BEFORE COMMENCING ANY SERVICE WORK

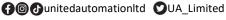
FOR HEATSINK PANEL MOUNTING A 10MM HOLE IS REQUIRED TO ACCEPT MOUNTING BUSH HEATSINK COMPOUND MUST BE USED FOR EFFECTIVE THERMAL COUPLING

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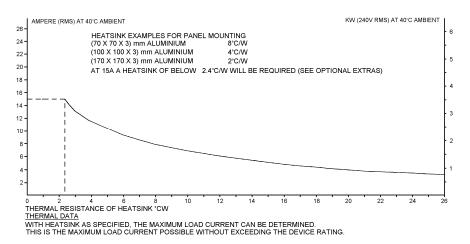


Page 1 of 2 Issue: 3 Date: 5, December 2022

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## Installation



#### **Technical Specifications** 5

TRIAC limiting RMS on-state current	25A	Isolation voltage	2500V RMS			
Unit limiting RMS on-state current	15A	I <sup>2</sup> t Limiting value for fusing	112A <sup>2</sup> s			
Peak One-cycle surge @ (10ms)	320A	Mains frequency	50/60Hz			
Max. forward voltage drop at 10A	1.5V	Max. recommended operational temperature	65°C			
Max. recommended storage temperature	65°C	Mains supply, tolerance, within 10%	230V ac			
Dimensions Approximate						
Shaft diameter	6.3mm (1/4")	Shaft projection from bush	30mm			
Bush length	5mm	Fixing hole diameter	10mm			

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

## CE Marking

This product family carries a "CE" marking and incorporates a filter. (Standard type to emission levels BS EN 55022 Class A - Industrial) to address the EMC directive. For more information see recommendations section and contact our sales desk. (See Declaration of Conformity)

## **Recommendations & Safety Requirements**

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

Code	Identity	Description
X10229	RFI	Filtering 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	
	SKA	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**

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State Part Number	QLC-RFI-TB-E-230V (other voltage inputs and outputs available)
Optional Extras	Knob, Dial, Heatsink Compound (conductive bonding paste)

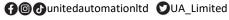
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Page 2 of 2 Issue: 3 Date: 5, December 2022