



**PHASE ANGLE ELECTRONIC HEAT SWITCH  
WITH RFI SUPPRESSION (110v)**

**QLC/TB-RFI  
(110v)  
X10787**

**INTRODUCTION**

These switched phase-angle power regulators are robust and compact units are ideal for controlling single/phase mains driven loads. These QLC units are for 110VAC supply, with a 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 which will aid product compliance when correctly installed.

**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.

**FEATURES**

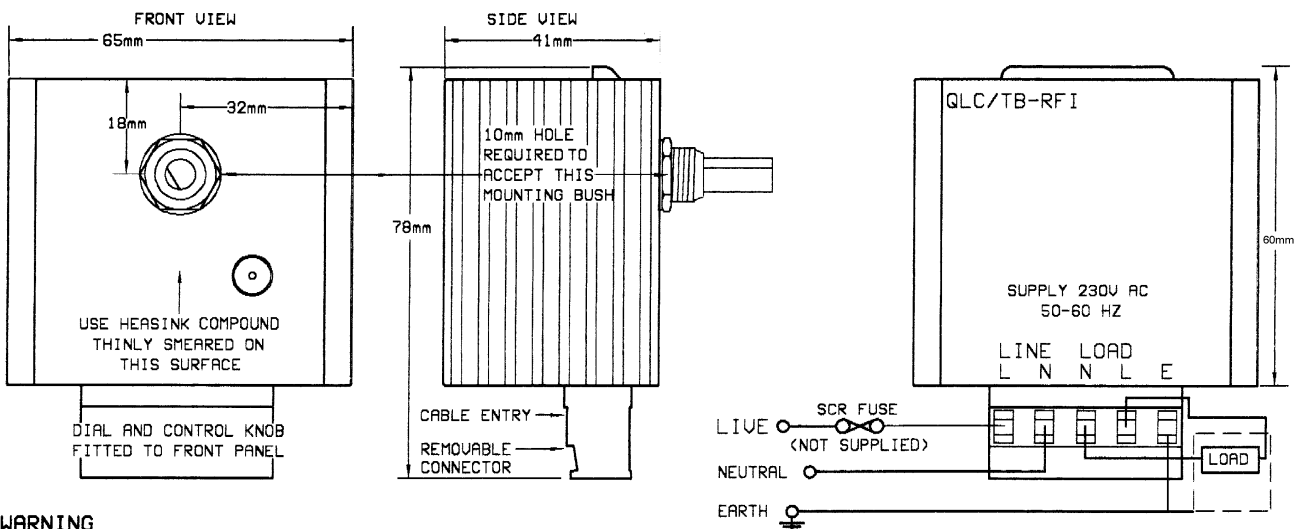
- Integrated RFI network.
- Plug in power connector block.
- Single-hole fixing.
- Rugged and compact.
- Designed to maximise thermal dissipation.



**INSTALLATION**

POSITION	ac O/P LOADED VOLTS (rms typical)
<b>0</b>	<b>ZERO</b>
<b>1</b>	<b>80</b>
<b>2</b>	<b>90</b>
<b>3</b>	<b>SUPPLY</b>

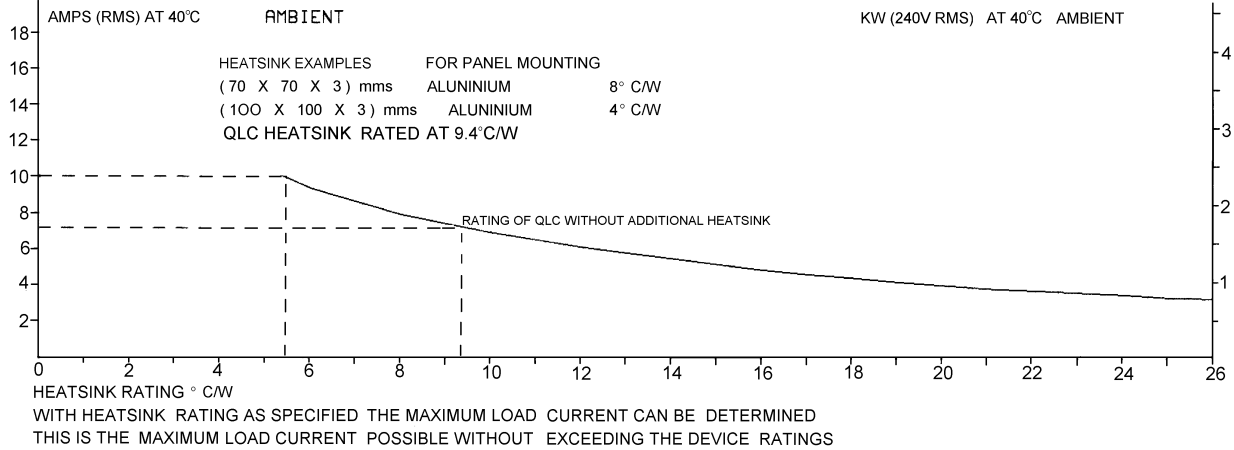
**DIMENSIONS, WIRING CONNECTIONS & OUTPUTS**



**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.

## INSTALLATION



## SPECIFICATIONS AND DIMENSIONS

Unit limiting rms on state current	15A	Maximum forward voltage drop at 15A	1.5V
Triac limiting rms on state current	25A	Peak one cycle surge @ (10ms)	320A
Mains supply, tolerance, within 10%	110V AC	I <sup>2</sup> t limiting value for fusing	112A <sup>2</sup> s
Isolation voltage	2.5kV rms	Mains frequency	50/60Hz
Max recommended operational temperature	65°C	Max. recommended storage temperature	65°C
<b>Dimensions approximate</b>			
Shaft diameter	6.3 mm (1/4")	Bush length	5 mm
Shaft projection from bush	30 mm	Fixing hole diameter	10mm

## FUSING

It is recommended to use semiconductor (fast-acting) type fuses or circuit breakers (semiconductor - MCB) for protection. On initial use some loads may need an increased factor of safety for unit and/or device protection (see SRA data sheet for further information).

## CE MARKING

This product family carries a CE mark and incorporates a built-in filter. For information see recommendation section and contact our sales desk (see Declaration of Conformity).

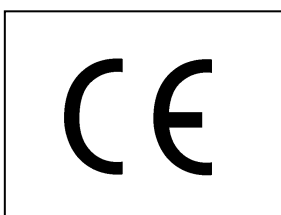
## RECOMMENDATIONS

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

CODE	IDENTITY	DESCRIPTION
X10229	RFI	Single Phase Filtering recommendations - addressing 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

**ORDER CODE:** State part number: QLC-RFI-TB (110v) (*Other voltage inputs and outputs available*)  
Optional extras include: knob, dial, heatsink compound.



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Page No. 2 of 2                      Issue 2                      Date 19/02/19

