



# BURST FIRED FLICKER INHIBITED 16A TEMPERATURE CONTROLLER

**ZVT-16-IF**  
X10511

## INTRODUCTION

This economical, energy saving, OEM temperature controller combines precision sensing to give powerful output in a compact, single hole fixing enclosure. It outperforms conventional thermostats by switching energy down to half mains cycle packets, at zero voltage, which minimises mains borne RFI interference and flicker. Proportional self-adjustment gives accurate temperature control of loads up to 16A, with appropriate installation and the use of an additional heatsink (see cooling requirements). The controller is supplied with a knob and ZVT scaled dial (0 to 40°C or 0 to 150°C). The NTC temperature sensor is ordered separately and is not included with the unit.

NOTE: It is important that the sensor is used with a bonded earth (see installation wiring).

## APPLICATIONS

Suitable for temperature control of single phase resistive heaters, ovens, dryers, hot plates and flexible heater mats.

**RoHS Compliant  
Directive  
2002/95/EC**

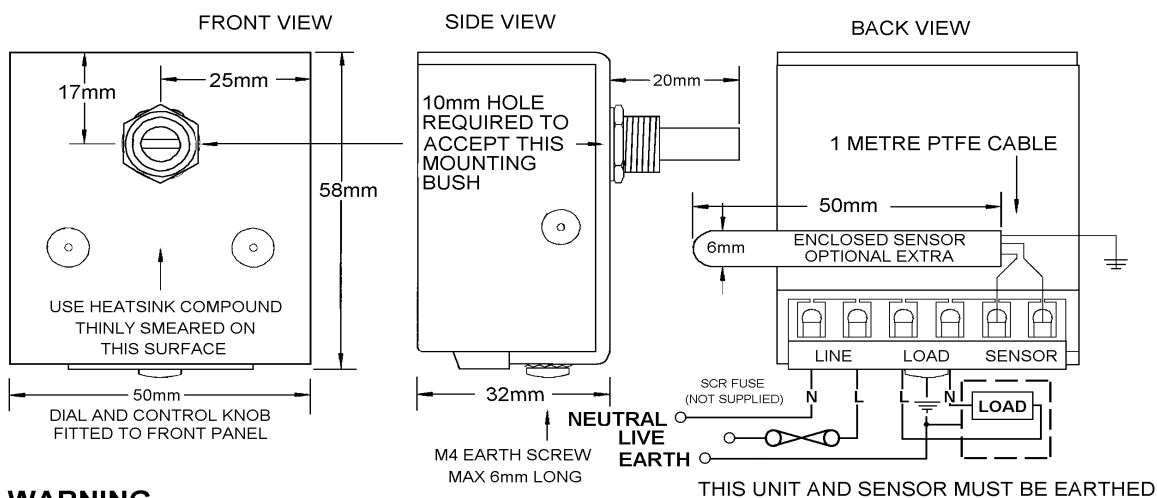
## FEATURES

- Microprocessor based control
- Flicker inhibited
- Simple installation - with or without heatsink
- Two voltage and temperature ranges
- Discrete component giving high reliability
- Control knob and scaled dial supplied



## INSTALLATION

## DIMENSIONS AND CONNECTION

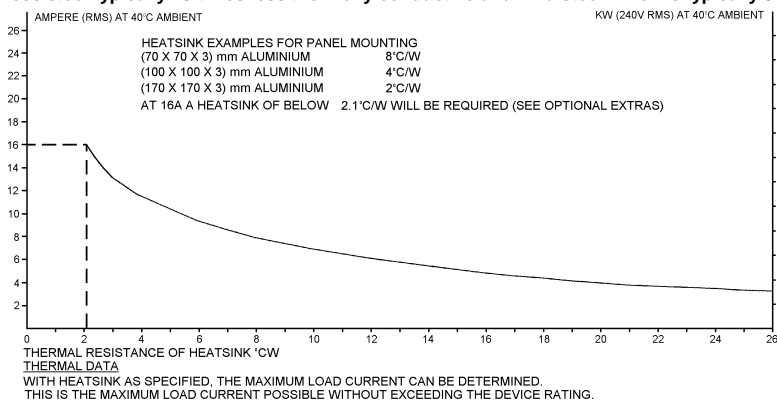


## WARNING

LIVE TERMINALS - SWITCH OFF SUPPLY BEFORE COMMENCING ANY SERVICE WORK.  
THE SENSOR IS NOT ISOLATED FROM THE MAINS SUPPLY. ADDITIONAL MEASURES SHOULD BE TAKEN TO ENSURE SAFETY IS MAINTAINED UPON INSTALLATION AND COMMISSIONING.  
NOTE FOR HEATSINK MOUNTING.

A 10mm HOLE IS REQUIRED TO ACCEPT MOUNTING BUSH.  
USE HEATSINK COMPOUND FOR EFFECTIVE THERMAL COUPLING.

**COOLING REQUIREMENTS** Stainless steel typically 15 times less thermally conductive and mild steel which is typically 5 times less thermally conductive



**SPECIFICATIONS**

Maximum RMS on-state current	16A	Operation temperature range	0 to 65°C
Peak single cycle surge current	200A	Storage temperature range	0 to 65°C
I <sup>2</sup> t for fusing	128 A <sup>2</sup> s	Control stability (typical)	1%
ZVT1 Maximum line voltage +/- 10% @ 50/60Hz	110V AC	Weight	125g
ZVT2 Maximum line voltage +/- 10% @ 50/60Hz	230V AC	NTC type sensor	Must be earthed
Maximum power consumption	6W	<b>further dimensions</b>	
Temperature control range	0-40°C/0-150°C	Shaft diameter (1/4 inch)	6.3 mm
Isolation voltage (typical)	2500V rms	Shaft projection from bush	13.0 mm
Proportional band (rear screw adjust, "typical")	1-15%	Bush length	7.0 mm
Scale (54 x 46mm, linear & adhesive backed)	0-40°C/0-150°C	Fixing hole diameter	10.0 mm
Maximum c.s.a. cable entry	2.5mm <sup>2</sup>		

**FUSING**

It is recommended that semiconductor, fast acting type fuses or circuit breakers (semiconductor- MCB) are used for unit protection. On initial operation 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" mark. For information, see recommendation section and contact our sales desk. See Declaration of Conformity.

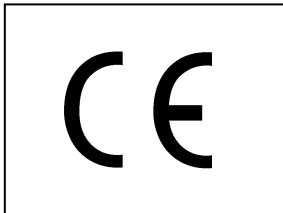
**RECOMMENDATION**

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

CODE	IDENTITY	DESCRIPTION
X10229	RFI	Filter recommendation - 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; Fusing recommendations.
X10612	ZVT E-10K3A1	ZVT enclosed flicker inhibited NTC sensor Installation sheet
AP02/4	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.E. wiring regulations (BS7671) by suitably qualified/trained personnel. The regulations contain important requirements regarding safety of electrical equipment. For International Standard refer to I.E.C. Directive IEC 950.

<b>ORDER CODE:</b>	ZVT (110V /230V)-16A-(Flicker Inhibited)- (temperature range – 0-40°C / 0-150°C)
<b>State part number:</b>	ZVT (1/2)-16-IF- (0-40°C/0-150°C) ) – Please select required voltage and temperature range
<b>Optional extras:</b>	ZVT-E-10K3A1 Enclosed Sensor, Heatsink compound.



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