



# BURST FIRED FLICKER INHIBITED 25A TEMPERATURE CONTROLLER

**ZVT-25-IF**  
X10542

## INTRODUCTION

The ZVT-25 is a linear precision temperature controller. This stand - alone OEM unit, with 25A current capability, is ideal for high power, closed loop temperature control applications. Using variable on/off bursts of complete mains cycle energy, coincident with mains zero cross-over to avoid RFI problems.

The high current triac, fuse, terminals and all main parts are enclosed and it is mounted on an integral heatsink to ensure long life with reliable high ambient temperature operation. The controller is supplied with a control knob and ZVT scaled dial (0 to 40°C or 0 to +150°C). The temperature sensor is ordered separately and is not included with the unit.

## APPLICATIONS

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

RoHS Compliant  
Directive  
2002/95/EC

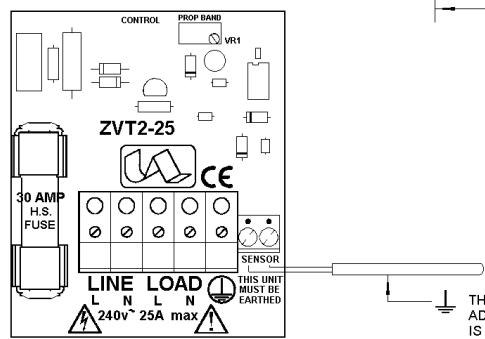
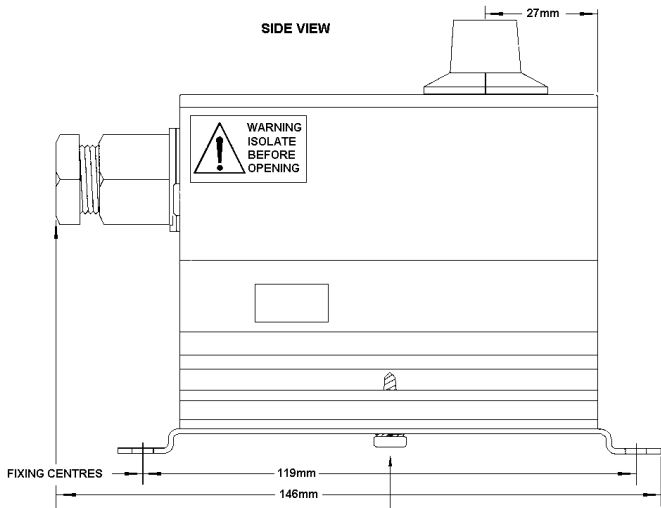
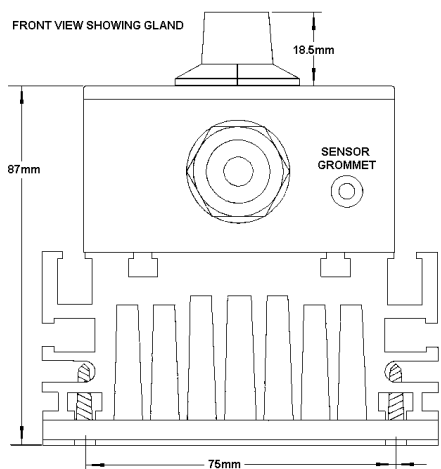
## FEATURES

- Microprocessor based
- Flicker inhibited
- Integral high speed fuse
- Complete 25A working unit
- Single entry cable gland
- Two voltage and temperature ranges
- Control knob and scaled dial supplied



## INSTALLATION

### Fixing/Mounting/Dimensions



(EARTH BONDING - DO NOT REMOVE)  
THIS UNIT AND SENSOR MUST BE EARTHED

FOR MAXIMUM PERFORMANCE AND HEAT DISSIPATION  
THE UNIT SHOULD BE MOUNTED VERTICALLY

### WARNING

SWITCH OFF MAINS BEFORE COMMENCING ANY  
SERVICING WORK

THE SENSOR IS NOT ISOLATED FROM THE MAINS SUPPLY.  
ADDITIONAL MEASURES SHOULD BE TAKEN TO ENSURE SAFETY  
IS MAINTAINED UPON INSTALLATION AND COMMISSIONING

## **SPECIFICATIONS**

Triac limiting RMS on-state current.	26A
Peak single cycle surge current.	200A
Integral high speed (semiconductor) 30A ferrule fuse.	10mm Ø x 38mm long
Supply voltage for ZVT2.	230Vac +/- 10% @ 50/60Hz
Supply voltage for ZVT1.	110Vac +/- 10% @ 50/60Hz
Temperature control range.	0-40°C / 0-150°C
Calibration accuracy of full scale.	3%
Isolation voltage (typical)	2500V rms
Proportional band (internal screw adjust 'typical').	5-15%
Scale (54 x 46 mm linear & adhesive backed).	0 to +150°C
Maximum c.s.a. cable entry.	2.5mm <sup>2</sup>
Operation temperature range.	0 to +65°C
Storage temperature range.	0 to 65°C
Control stability (typical).	1%
Weight.	125g
Overall dimensions.	(see <i>Installation section</i> )

### ***further dimensions***

Shaft diameter	6.3mm (1/4 inch)
Shaft projection from bush	13.0mm
Bush length	7.0mm
Fixing hole diameter	10.0mm

## **FUSING:**

A semiconductor, fast acting type fuse, is supplied as standard for unit protection. On initial operation, some loads may need an increased Factor of Safety (F of S) for unit and/or device protection. For spares or replacements contact our sales desk.

## **CE MARKING**

This product family carries a "CE" marking. For information see recommendation section and contact our sales desk.

## **RECOMMENDATION**

Other documents, which may be appropriate for your applications, are available on request.

<b>CODE</b>	<b>IDENTITY</b>	<b>DESCRIPTION</b>
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 standards refer to I.E.C. Directive IEC950.

## **ORDER CODE:**

ZVT (110V /230V)-25A-(Flicker Inhibited)- (Temperature range – 0-40°C / 0-150°C)

*State part number:* ZVT (1/2)-25-IF- (0-40°C/0-150°C) – *Please select required voltage and temperature range*

*Extras:* ZVT-E-10K3A1 Enclosed sensor



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