

X10542

Temperature Controllers

ZVT-25-IF

25A, 110V / 230V, Temperature range 0-40°C or 0-150°C
Burst Fired Flicker Inhibited



CONTACT US:

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KEY FEATURES:

- ✓ **Microprocessor-Based Control:** Delivers precise, linear temperature regulation with high accuracy.
- ✓ **Flicker Inhibited:** Burst fire switching minimises mains interference and power flicker.
- ✓ **High Current Capability:** Handles up to 25A for demanding heating systems.
- ✓ **Integrated High-Speed Fuse:** Provides built-in protection against overload and short circuit.
- ✓ **Integral Heatsink.**
- ✓ **Dual Voltage & Temperature Ranges.**
- ✓ **Compact OEM Design:** Ideal for control panels and equipment integration.
- ✓ **Single Entry Cable Gland.**
- ✓ **RoHS Compliant.**
- ✓ **Supplied with Control Knob & Dial.**

APPLICATIONS:

The **ZVT-25-IF** is ideal for high-power, single-phase temperature control applications, including:

- Ovens and dryers
- Hot plates and flexible heater mats
- Industrial resistive heaters
- Process heating systems
- OEM closed-loop thermal management

The **ZVT-25-IF** is a high-performance **burst-fired, flicker-inhibited temperature controller**, designed for precision and reliability in **OEM and industrial heating applications**. With a **25A current handling capacity**, this linear controller provides smooth and accurate closed-loop temperature regulation for single-phase resistive heating systems.

By switching complete mains cycles at zero voltage, the ZVT-25-IF minimises **RFI and electrical flicker**, ensuring stable operation even in sensitive environments. Housed within a durable enclosure with an integral **heatsink**, this controller guarantees long-term performance under high ambient temperatures. It is supplied with a **control knob and ZVT dial (0-40°C or 0-150°C)** for intuitive adjustment.

⚠ **Note:** The temperature sensor (NTC type) is ordered separately and must be properly earthed for safe operation.

TECHNICAL SPECIFICATIONS

Thyristor 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 to +40°C or 0 to +150°C
Calibration accuracy of full scale	3%
Isolation voltage (typical)	2500V rms
Proportional band (internal screw adjust 'typical')	5-15%
Front panel Dial - Scale (54 x 46 mm linear & adhesive backed)	0 to +40°C or 0 to +150°C
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 length	14.0mm

YOU MUST READ THIS BEFORE INSTALLATION

 ELECTRICAL SAFETY	 INSTALLATION REQUIREMENTS	 USER RESTRICTIONS	 USAGE ENVIRONMENT	 HOT SURFACE WARNING
WARNING: RISK OF ELECTRIC SHOCK Always consult the Installation & Maintenance Instructions before connecting this product to the power supply. WARNING: Disconnect Power Before Servicing Ensure the electrical supply is safely disconnected before connecting to any supply, load, or control terminals.	WARNING: Installation by Qualified Personnel Only This product must only be installed or fitted by a competent, qualified installer familiar with the relevant electrical standards and installation practices.	WARNING: Not for Use by Vulnerable Individuals This product is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they are supervised or instructed by a person responsible for their safety.	WARNING: Industrial Use Only This is an industrial-grade product and is not intended for household use.	WARNING: Hot Surfaces On certain models, surfaces marked with this symbol become hot during use. Avoid direct contact and follow all thermal safety precautions.

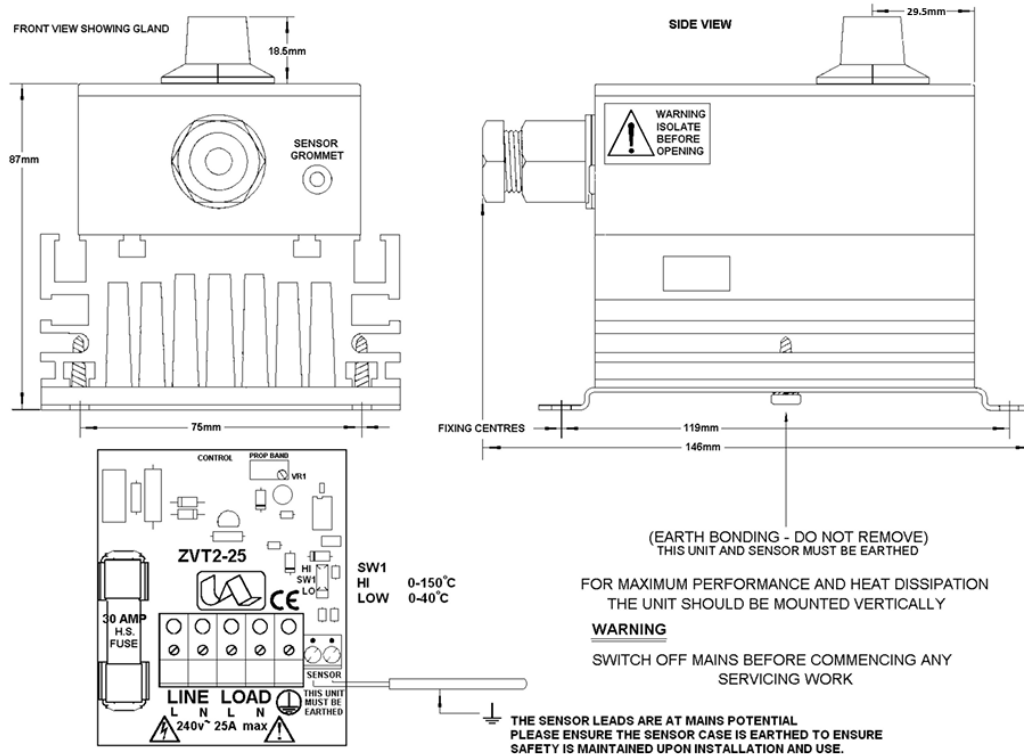
ZVT-25-IF

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INSTALLATION INSTRUCTIONS

Fixing/Mounting/Dimensions



RECOMMENDATIONS

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.

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
X10612	ZVT-E-IF-10K3A1	ZVT enclosed flicker inhibited NTC sensor installation sheet
P01.1	COS	UAL Conditions of Sale

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
A26036	ZVT-E-IF-10K3A1 Enclosed, inhibited flicker sensor

PRODUCT CODE AND RELATED PRODUCT CODE

Product Code	Product Description
A26254	ZVT2-25-IF, 0-40°C, 25A, 230V Burst Fired Flicker Inhibited
A26223	ZVT2-25-IF, 0-150°C, 25A, 230V Burst Fired Flicker Inhibited
A26118	ZVT1-25-IF, 0-40°C, 25A, 110V Burst Fired Flicker Inhibited
A26117	ZVT1-25-IF, 0-150°C, 25A, 110V Burst Fired Flicker Inhibited



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