

BURST FIRED TEMPERATURE CONTROLLER 16A

ZVT-16

X10211

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 in complete mains cycle packets, at zero voltage, eliminating radio and mains borne interference. 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 control knob and ZVT scaled dial (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

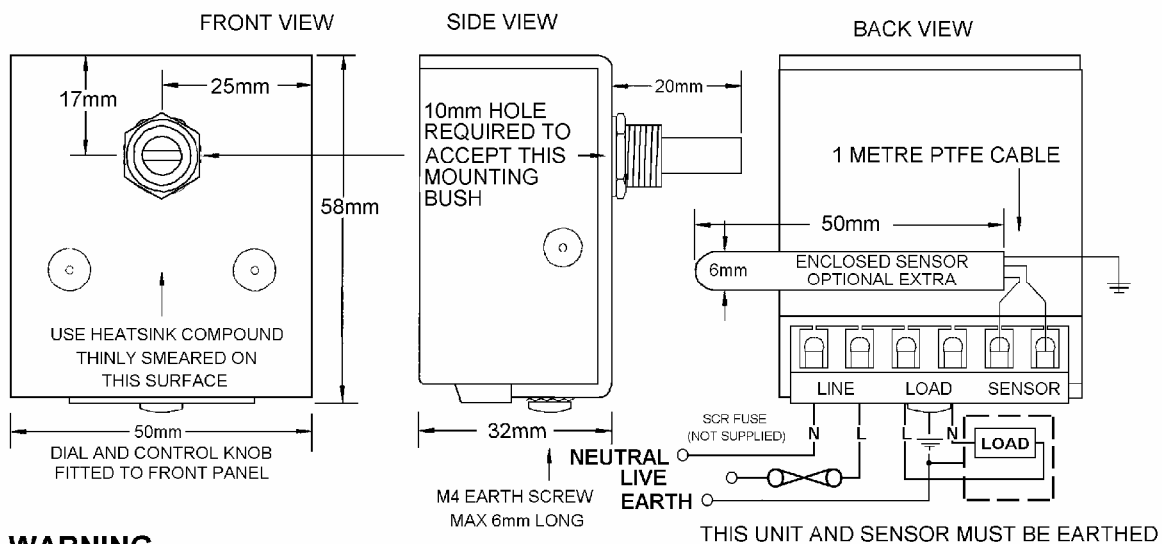
FEATURES

- Accurate proportional control.
- Compact and easy to use.
- Simple installation - with or without heatsink.
- Discrete components giving high reliability.
- Fail safe sensor input.



INSTALLATION

DIMENSIONS AND CONNECTIONS



WARNING

LIVE TERMINALS - SWITCH OFF SUPPLY BEFORE COMMENCING ANY SERVICE WORK.

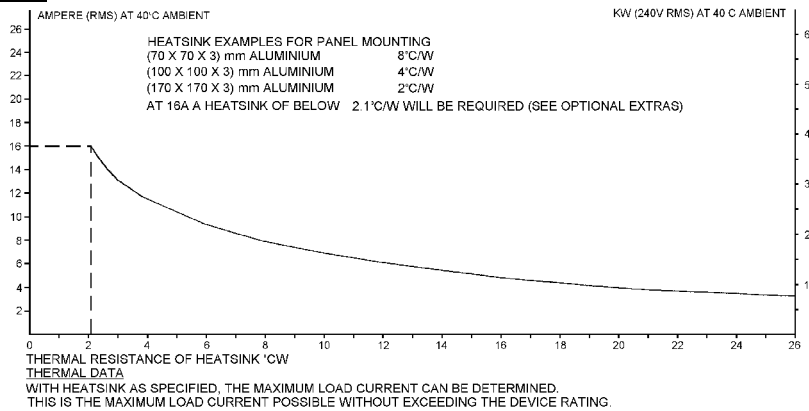
THE SENSOR IS NOT ISOLATED FROM THE MAINS SUPPLY. ADDITIONAL MEASURES SHOULD BE TAKEN TO ENSURE SAFETY IS MAINTAINED UPON INSTALLATION AND COMMISSIONING.

NOTE FOR HEATSINK MOUNTING.

A 10mm HOLE IS REQUIRED TO ACCEPT MOUNTING BUSH.

USE HEATSINK COMPOUND FOR EFFECTIVE THERMAL COUPLING.

COOLING REQUIREMENTS



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 ² t for fusing	128 A ² s	Control stability (typical)	1%
Maximum line voltage +/- 10% @ 50/60Hz (ZVT2/ZVT1)	230V/110V AC	Weight	125g
Maximum power consumption	6W	NTC type sensor	Must be earthed
Temperature control range	0-150°C		
Calibration accuracy (of full scale)	3%	further dimensions	
Isolation voltage (typical)	2500V rms	Shaft diameter (1/4 inch)	6.3 mm
Proportional band (rear screw adjust, "typical")	5-15%	Shaft projection from bush	13.0 mm
Scale (54 x 46mm, linear & adhesive backed)	0 to +150°C	Bush length	7.0 mm
Maximum c.s.a. cable entry	2.5mm ²	Fixing hole diameter	10.0 mm

FUSING

It is recommended that semiconductor, fast acting type fuses or circuit breakers (Semiconductor/ MCB), be 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, which may be appropriate for your applications, are available on request.

CODE	IDENTITY	DESCRIPTION
X10229	RFI	Filter 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 & Fusing recommendations.
X10234	ZVT-E-RGT10K	Sensor and ZVT installation data sheet
AP02/4	COS	UAL Conditions of sale.

NOTE. It is recommended that installation and maintenance of this equipment should be carried out by suitably qualified/trained personnel with reference to the current edition of the I.E.E. wiring regulations (BS7671). The regulations contain important requirements regarding the safety of electrical equipment. For International Standards refer to I.E.C. Directive IEC 950.

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



UNITED AUTOMATION LIMITED

1Southport Business Park
 Kew
 Southport, PR8 4HQ
 ENGLAND

Tel: 0044 (0) 1704 – 516500 Main
 Tel: 0044 (0) 1704 – 516516 Sales
 Fax: 0044 (0) 1704 – 516501
 Enquiry@united-automation.com
 www.united-automation.com

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