

TEMPERATURE CONTROLLER

Instrument Specification

A200

A precision, micro switch, Oil or Winding temperature controller for Alarm, Trip, Pump & Fan control with optional analogue output.



- Configured as an Oil Temperature Indicator (OTI) or Winding Temperature Indicator (WTI) for simulation of transformer 'Hot Spot' temperature
- ONAN & OFAF dual gradient option
- Self contained system
- 2, 3 or 4 High current switches (5 Amp max)
- Up to 30 metre capillary length
- Stainless steel sheathed capillary
- Weatherproof case to IP55* (Higher specification versions available**)
- Maximum Pointer
- Optional selectable analogue output
- Optional laminated safety glass window with 99% UV blocking
- Fully compensated for ambient temperature change
- Full Installation and Maintenance instructions supplied
- Conforms to BS.EN 50216-11:2008
- 10 year warranty when supplied & **fitted** by Accurate Controls Ltd



Issued: Jan 2020

Accurate Controls Ltd.

25 Cowley Road, Nuffield Industrial Estate,
Poole, Dorset, BH17 0UJ, United Kingdom.

Tel: +44 (0)1202 678108

e-mail: info@accurate-controls.ltd.uk

web: www.accurate-controls.ltd.uk



© ACL 2020

Indicating Scale :

Length : 115mm (4.5")
Range : 0-120°C, 0-150°C, 0-180°C, 30-150°C
Accuracy : 1.5% FSD

Accuracy of indication :

To Class 1: EN13190:2001

Electrical Connections :

Circuit diagram supplied
Circuit insulation tested 2000 V AC for 1 min.
Terminal block conductor size: 0.22 – 2.5mm²

Switch Configurations :

Standard configuration (for alarm & trip only) :

2 off fixed differential changeover switches.
Differential 3-5°C

Optional switches (for pump & fan control) :

1 or 2 off adjustable differential switches.
Minimum differential of 25% of scale span.

Selectable normally open - normally closed switch configuration

Switch rating (all switches) :

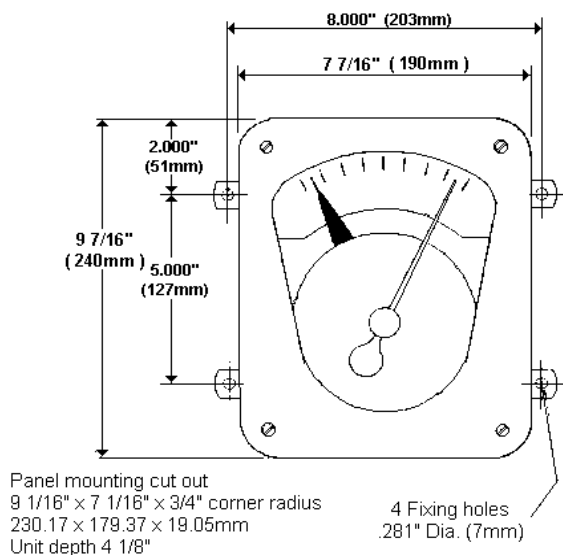
5A 240V AC
250mA 250V DC
5A 30V DC
All switches 3 wire configured SPDT

Winding Temperature simulation (where fitted) :

Gradients set to customer specification.
Dual ONAN and OFAF gradients.
Overload protection to 200% load.
Matching unit not required
Suitable for 10A CT currents

Full on site installation, calibration and maintenance service available.

Please contact Accurate Controls for technical assistance.



Analogue Output (where fitted) :

0-10, 0-20, 2-10 & 4-20mA analogue output for interfacing with industry standard SCADA, substation control systems. (digital or analogue meters are available upon request)

External DIN rail mounted power pack with universal input voltage: 85-265V AC 47-63Hz or 48-360 V DC

Standard Case :

Aluminium
Architectural polyester powder coat.
Electrical entry: bottom
Surface or panel mount
*Waterproof to IP55—bottom capillary entry only

Capillary System :

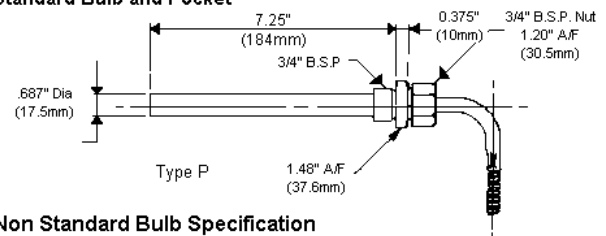
Capillary: Protected by stainless steel sheathing
Length: 2 to 30 metres
Case entry: Bottom or rear
Ambient compensation as standard
Bulb and pocket to suit customer requirements

Options :

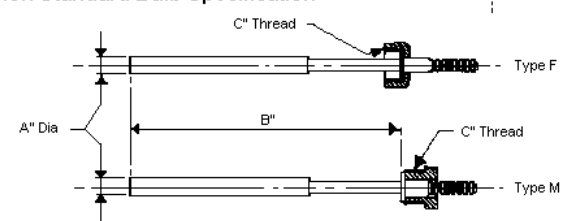
Anti-vibration mountings.
Anti-condensation heater.
Laminated safety glass window 99% UV blocking.
2, 3 or 4 High current rated, ATEX EEx d 11C approved switches. (5 Amp max)

**PVC coated capillary & stainless steel cases are available should the environment require it.
Contact factory for details.

Standard Bulb and Pocket



Non Standard Bulb Specification



Please state Type F or Type M and maximum dimensions for A", B", C": Thread Size

INSTRUMENT SPECIFICATION SHEET

Quotation Request

A200

For replacement of an existing instrument please advise serial number if known

Customer reference

Qty required Delivery required

Case Mounting Surface Flush / Panel inset
 Case Window Standard Acrylic Laminated Glass 99% UV blocking*
 Case Finish Standard Painted (Normal Environments) Customer specified (comments box)

Note: Stainless Steel cases are available see A200S data sheet*

Capillary Length (metres) Min 2 metre Max 30 metre

Capillary Type 304 Stainless Steel Sheathed
 304 Stainless Steel & PVC sheathed (*Harsh environments)

Capillary Entry Bottom Rear
 Electrical Cable Entry Bottom Rear

Bulb & Pocket Type Accurate Std Bulb A501 Matching Pocket A501P
 DIN 42554 Std Bulb
 Customer specified Bulb Diameter Thread Size
 Length Gender
 Customer specified matching Pocket Y/ N Mounting thread

Scale Range 0 -120°C 0 -160°C 30 -150°C
 0 -150°C 0 -180°C

Instrument Type OTI WTI (Single gradient) WTI (Dual Gradient)
 1st Gradient Natural (ONAN) cooling °C at Amps
 2nd Gradient Forced (OFAF) cooling °C at Amps

Note: Customer adjustable gradient instrument available see A200AG data sheet

Instrument Label

Switch Options – select for each switch from table					
Switch No	Part No.	Configuration	Switch No	Part No.	Configuration
1			3		
2			4		

Analog Output for Remote Indication Yes mA output options 0-10mA 0-20mA
 No 2-10mA 4-20mA

Anti Vibration Mounts Y / N Test Certificate Y / N

* Harsh or Hazardous Environment Contact Factory for further information

Comments

Switch Option Table

A200 Micro-switch Options		
Part No.	Description	Configuration
MZ5 13F	5 Amp AC Fixed Differential (3-5°C)	3 wire changeover
MZ6 90V (Max of 2)	5 Amp AC Adjustable Differential (Max 25% scale span)	

Warranty:
 12 months supply only.
 10 years for Accurate Controls installed instruments.
 Please contact factory for installation

Submitted by:

Name	Company & Address	Tel No.	E-mail

Accurate Controls Ltd.

25 Cowley Road, Nuffield Industrial Estate, Poole, Dorset, BH17 0UJ, United Kingdom.
 Tel: +44 (0)1202 678108,
 E-mail: info@accurate-controls.ltd.uk web: www.accurate-controls.ltd.uk

