

# TEMPERATURE CONTROLLER

## Instrument Specification

# A131

**A precision, high current mercury switch,  
Oil or Winding temperature controller for Alarm, Trip  
and Cooler 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
- Fully compensated for ambient temperature
- High current switching (15 Amps)
- Maximum number of control switches '4'
- Extra long capillary length 60 metres
- Weatherproof case to IP55\* (Higher specification versions available \*\*)
- Maximum Pointer
- Optional selectable analogue output
- Optional Switch Test Knob
- Choice of scale options
- Full Installation and Maintenance Instructions supplied

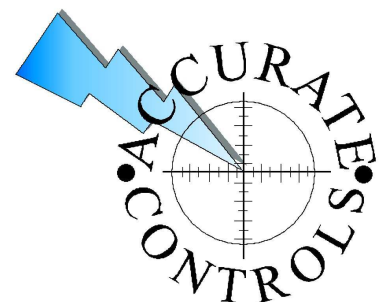
ISO 9001

BUREAU VERITAS  
Certification



### Accurate Controls Ltd.

25 Cowley Road, Nuffield Industrial Estate,  
Poole, Dorset, BH17 0UJ, United Kingdom.  
Tel: +44 (0)1202 678108  
Fax: +44 (0)1202 670161  
e-mail: [info@accurate-controls.ltd.uk](mailto:info@accurate-controls.ltd.uk)  
web: [www.accurate-controls.ltd.uk](http://www.accurate-controls.ltd.uk)



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### Indicating Scale:

Length: 115mm (4.5")  
Range: 0-120°C, 0-150°C, 0-160°C, 0-180°C, 30-150° C  
Accuracy: 0.5°C

### Accuracy of Indication:

To Class 1: EN13190:2001

### Electrical Connections:

Full circuit diagram supplied .  
All circuits insulation tested with 2000 Vac.  
Terminal block conductor size: 0.5 – 4.5mm<sup>2</sup>

### Switch Configurations:

Maximum 4 Normally Open or Normally Closed  
Switch Type: 8A @ 250V ac/DC (B115)  
Switch Type: 15A @ 250V ac/DC (B916)

Changeover Switches selectable by user for operation as normally open or normally closed.:

3 Wire Common Supply Connection.  
Switch Type: 5A @ 250V ac/DC (B1886)

4 Wire Independent Supply connection.  
Switch Type: 5A @ 250V ac/DC (B1895)

Switch Combinations:  
Maximum '4' in any configuration.

### Winding Temperature simulation (where fitted)

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

### Analogue Output (where fitted) :

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

Includes external DIN rail mounted power pack with universal input voltage:

85-265Vac 47-63Hz or 48-360 Vdc

### Standard Case:

Aluminium.  
Blue powder coat paint.  
Electrical entry point: rear & bottom  
Surface or flush mount  
\*Weatherproof to IP55—bottom entry capillary only

### Capillary System:

Material: Capillary protected by stainless steel sheathing. Optional P.V.C. outer cover.

Length: 1.5 to 60 metres.

Case entry point: Top, rear or bottom

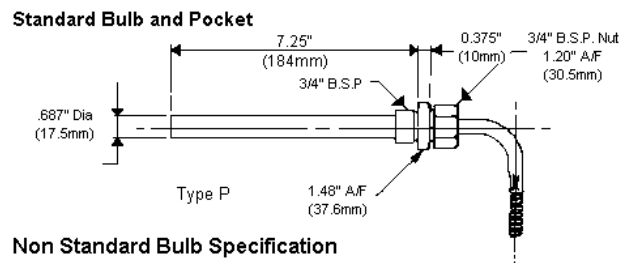
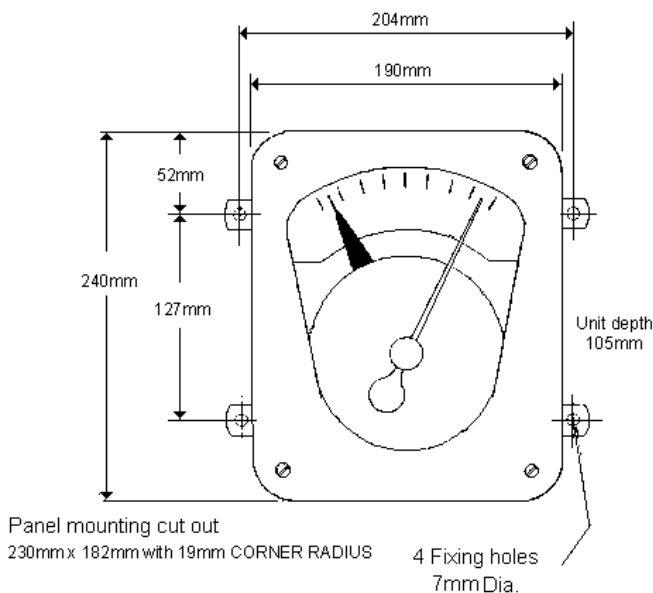
Ambient compensation as standard  
Bulb and pocket to suit customer requirements.

### Options:

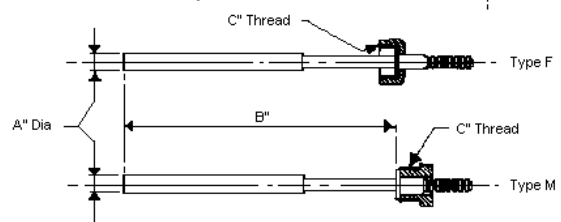
Switch test knob with or without wire locking facility.  
Anti-condensation heater.  
Anti-vibration mountings.

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

Full on site installation, calibration and maintenance service available.  
Please contact Accurate Controls for technical assistance.



### Non Standard Bulb Specification



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