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
- Fully compensated for ambient temperature
- Max of 4 high current control switches (15 Amps)
- Self contained system
- Up to 60 metre capillary length
- Weatherproof case to IP55*
 (Higher specification versions available **)
- Maximum Pointer & choice of scale options
- Optional selectable analogue output
- Optional Switch Test Knob
- Optional laminated safety glass window with 99% UV blocking.
- Full Installation and Maintenance Instructions supplied
- 10 year warranty when supplied <u>& fitted</u> by Accurate Controls Ltd
- RoHS compliant by exemption



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Indicating Scale:

Length: 115mm (4.5")

Ranges: 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:

Full circuit diagram supplied. All circuits insulation tested with 2000 V AC. Terminal block conductor size: 0.5 – 4.5mm²

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

RoHS Compliant by Exemption:

The product qualifies for one of the specific exemptions as set out in the Annex to the RoHS Directive.

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 analogue meters are available upon request)

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

85-265V AC 47-63Hz or 70 - 360 V DC

Lower DC input voltage range available by special request

Standard Case:

Aluminium.

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: 2 to 60 metres.

Case entry point: Top, rear or bottom

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

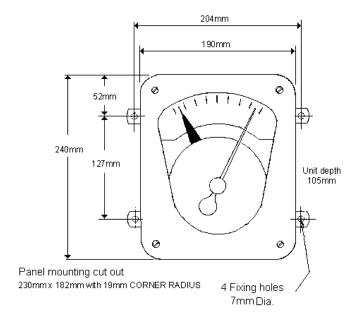
Options:

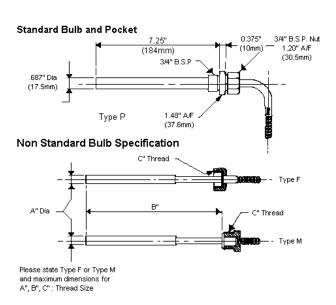
Switch test knob with or without wire locking facility. Anti-condensation heater. Anti-vibration mountings.

Laminated safety glass window with 99% UV Blocking

** 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.





INSTRUMENT SPECIFICATION SHEET

Quotation Request

A131

For replacement of a					Customer reference			
Qty required Delivery required								
Case Mounting	Surface		Flu	ısh / Panel inse	t			
Case Window	Standard Acrylic	Lam	inated Glass 99% UV blocking*					
Case Finish	Standard Painted (Normal Environments)	Cu	ıstomer specifie	ed (comments box	x)			
Note: Stainless Steel cases are available see A131S data sheet*							ents	
Capillary Length (metres) Min 2 metre Max 60 metre								
Capillary Type	Slary Type 304 Stainless Steel Sheathed 304 Stainless Steel & PVC sheathed (*Harsh environments)							
Capillary Entry Electrical Cable Entry	Bottom Top Rear Rear							
Bulb & Pocket Type Accurate Std Bulb A501 DIN 42554 Std Bulb Diameter Matching Pocket A501P Thread Size								
Customer spec	cified Bulb Length			nder				
Customer specified matching Pocket Y/ N Mounting thread								
Scale Range	0 -120°C 30 -150°C		150°C					
Instrument Type OTI WTI (Single gradient) WTI (Dual Gradient) If WTI, please fill in gradient details 1st Gradient Natural cooling °C at Amps								
Instrument Label	Forced cooling	°C (at		Amps	<u>s</u>	Switch Opti	on Table
						A131		
	ct for each switch from table	0 " 1 11	5			Mercury Switch Options Part No. Description Configurations		
Switch No Part No.	Configuration	Switch No	Part No.	Configurat	tion	B115	8 Amp	NO NC
2		4				B916	SPST 15 Amp	NO NC
						B1886	SPST 5 Amp SPDT	3 wire changeover
Switch Test Knob	Standard	+ stop at 1	115°C	+ wire lock pos	st	B1895	5 Amp DPDT	4 wire changeover
Analog output for Remote Indication	Yes mA outp	S 2-	10mA	0-20m. 4-20m.	Α		nths: supply	•
Anti Vibration Mounts Y / N Test Certificate Y/ N						10 yea		urate Controls nstruments.
* Harsh or Hazardous Environment Contact Factory for further information						PI	ease contact	factory for
Submitted by:								
Name Company & Address		Tel No.			E-mail			

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