

## Data Sheet & Operating Instructions

 English (EN)

**Product:** Electroserv 481B-P-1000K Mini Analogue Controller

**Product Code:** GHT 3005

The Electroserv 481B-P-1000K Mini Analogue Controller is an indicating or blind electronic temperature controller designed as a simple to use and reliable instrument. The variety of ranges and outputs makes it suitable for most applications where on/off or time proportioning control is required.

### Technical Information:

**Model:** 481B-P-1000K-00  
**Input:** Type K  
**Output:** 3A 250VAC  
**Supply:** 115—230VAC  
**Size:** 123.5mm x 48mm x 96mm  
**Weight:** 0.5kg  
**Unit of Sale:** Each



### Operating Instructions:

#### *Installation*

The controller is for panel mounting in a DIN 92 x 45mm cut out retained by two mounting clips which can be fitted on each side OR top and bottom. Insert the unit through the cut out and slide the mounting clips into the moulded grooves ensuring they are firmly attached. Tighten screwed rod. Do not over tighten.

#### *Connections and Wiring*

Electrical connections are via a 12 way screwed terminal block. All connections are low current, a label on the case of the unit denotes input and power connections.

#### *Supply*

The supply is connected to terminals 10 & 12 or 10 & 11 as appropriate.

The earth connection is made to the screw terminal located adjacent to terminal 12.

#### *Inputs*

##### Thermocouple

Connections to 1 (positive) 2 (negative). Compensating cable of the correct type must be used between the thermocouple and the unit unless the thermocouple leads allow direct connection. Ensure both thermocouple and compensating cable are connected with correct polarity.

Note: label denotes type of thermocouple



Units 3—5 & 7 Venture Works  
Charleywood Road  
Knowsley Industrial Estate North  
Merseyside, L33 7SG  
Tel: +44 (0)151 548 5281  
enq@globeheat.com  
[www.globeheat.com](http://www.globeheat.com)

---

#### Resistance Thermometer (PT100)

Platinum resistance thermometer connections are made to terminals 1, 2 & 3 as shown for 3 wire probes. For 2 wire resistance thermometers connections are terminals 1 & 2 with a link fitted across the terminals 2 & 3. Use copper wire.

#### *Outputs*

##### On/off or time proportional relay (O,P)

Relay connections are made as shown. Below the setpoint of the controller contacts 8 & 9 are made (relay energised).

The output is normally used to energise the coil of an external relay, contactor or solenoid.  
Contacts 3 amp 250V AC resistive.

##### On/off or time proportional relay (OL,PL)

Logic output connections are made as shown. This output is 10MA at 10V DC minimum. The output is normally used to drive a solid state relay.

#### *Adjustments*

Proportional band: First isolate instrument. Unclip front bezel and remove earth screw at rear, adjacent terminal 12. Withdraw instrument from case. Adjust RV3 anticlockwise to max. of 3%. Clockwise to minimum of 0% (on/off). Factory set at 2%. Setting of prop band should be as low as possible consistent with stable control.