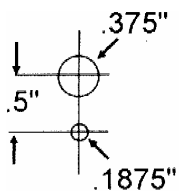


Unit Ordered	Model No	R <sub>L</sub> (Ohms) Minimum Load Resistance
	18TBP-1-5	24
	18TBP-1-10	12
	18TBP-1-15	8
	18TBP-2-5	48
	18TBP-2-10	24
	18TBP-2-15	16

For resistive loads such as strip or coil type industrial heaters a minimum load resistance R<sub>L</sub>, is always implied by the voltage and the current rating of your power control. Dividing the maximum output voltage (i.e. the input voltage) by the current rating will give you this value. Ohm's Law, E=I \*R

### MOUNTING INSTRUCTIONS



Drill mounting holes based on the dimensions shown. Remove the control knob, nut and dial plate. Mount the 18TBP to the back of a clean metal panel using the control pot shaft bushing nut. **THIS CONTACT SURFACE WILL ASSIST IN KEEPING THE UNIT COOL.** Insert the 18TBP from the rear of the panel and reinstall the dial plate, tighten the nut and replace the knob. When replacing the control knob insure the shaft is turned full counterclockwise and align the pointer on the knob with "0" on the dial plate.

### CONNECTING THE LOAD

Run the black (hot) lead from your source to either terminal on the back of the 18TBP. Connect the other terminal to your load. Run the white (neutral) lead from your source to your load. The power circuit of the 18TBP is connected in series with your load. See connection diagram on back of this instruction sheet.

### FUSING



To provide for many years of reliable operation these units are fused at their maximum rating. "These "2 millisecond" fuses provide short circuit protection as well as long term overload protection.

**IMPORTANT! USE ONLY PAYNE ENGINEERING RECOMMENDED FUSES**

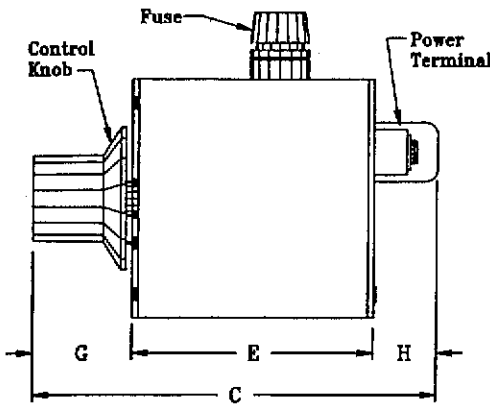
### TESTING



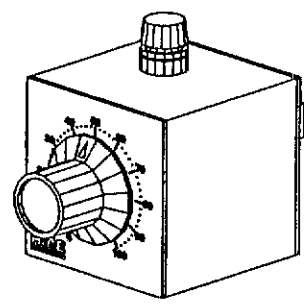
Thyristors require a small amount of current flowing through them in order to remain in the ON condition when applying power to the load. Therefore, with no load connected to the output terminals you cannot reliably check the operation of the unit. A 0.5 amp load connected to the unit is generally sufficient to check the power control prior to placing it in service.

**WARNING! HIGH VOLTAGE ALWAYS PRESENT ON POWER TERMINALS**

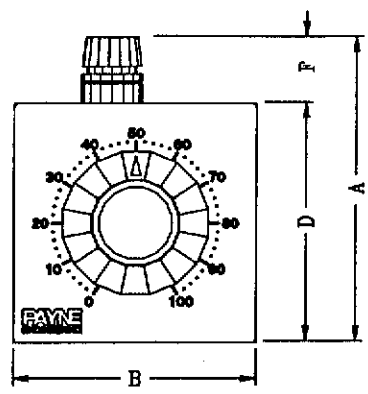




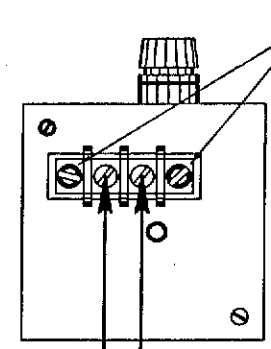
**SIDE VIEW**



**ISOMETRIC VIEW**



**FRONT VIEW**

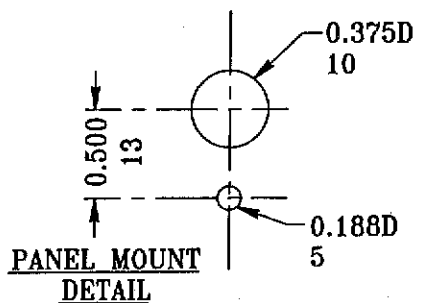


**REAR VIEW**



MODEL NO.	A	B	C	D	E	F	G	H
18TBP-1-5	3.188	2.500	3.750	2.500	2.000	0.688	1.063	0.688
-2-5	81	64	95	64	51	17	27	17
18TBP-1-10	3.188	2.500	3.750	2.500	2.000	0.688	1.063	0.688
-2-10	81	64	95	64	51	17	27	17
18TBP-1-15	3.188	2.500	4.250	2.500	2.500	0.688	1.063	0.688
-2-15	81	64	108	64	64	17	27	17

IN.  
MM



**-NOTE-**  
 All semi-conductor heat loss (1/5 watts/amp) must be transferred via the panel mount joint. PLEASE ENSURE A SMOOTH - PAINT FREE JOINT TO METAL PANEL.

Dwg. No.	18T/6.003C		
Model 18TBP Enclosed, Single Hole Panel Mount Power Control installation diagram			
<b>PAYNE</b> ENGINEERING	Drn By:	YLN	2/70
	App By:	RLW	1/5/93
Box 70, Scott Depot, W.Va. 25560 PH 304/757-7353 CABLE-PAYNEGRG TELEX 88-5452 FAX 304/757-7305			

Rev. C COMBINE 18TBP-5,10 & 15 ON ONE SHEET *WAF* 12/98