Model 18 TP Series

Solid State Power Controls

INSTALLATION AND OPERATING NOTES

1. For resistive loads such as strip or coil type industrial heaters a minimum load resistance, R_L, is always implied by the voltage and 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.

2. To provide for many years of reliable operation these units are fused at their maximum rating. These fuses are quite fast to provide millisecond short circuit protection as well as long-time over-load protection. Under normal operation, they should never need to be replaced.

IMPORTANT: USE ONLY PAYNE ENGINEERING RECOMMENDED FUSES

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

WARNING! HIGH VOLTAGE ALWAYS PRESENT ON POWER TERMINALS

4. For maximum efficiency in dissipating the 1-1.5 watts per amp generated by the thyristors, tightly bolt the bare aluminum mounting flanges to a clean metal panel. The power control dissipates this heat via beryllium oxide metal-to-metal conduction, so that large convection cooling fins are not necessary.

5. The power control case temperature should not exceed 60-70°C for good long term reliability. If this temperature is exceeded, you may damage the device and you should check the mounting surfaces for a smooth metal-to-metal mating.

6. (Does not apply to 18TBP units) The control potentiometer supplied with each unit can be remotely mounted up to 50 ft. from the power control. Any 2 conductor cable No. 22 AWG or larger will suffice.

R_L MUST BE GREATER THAN _____ OHMS

PAYNE ENGINEERING

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18/4.7Rev.B
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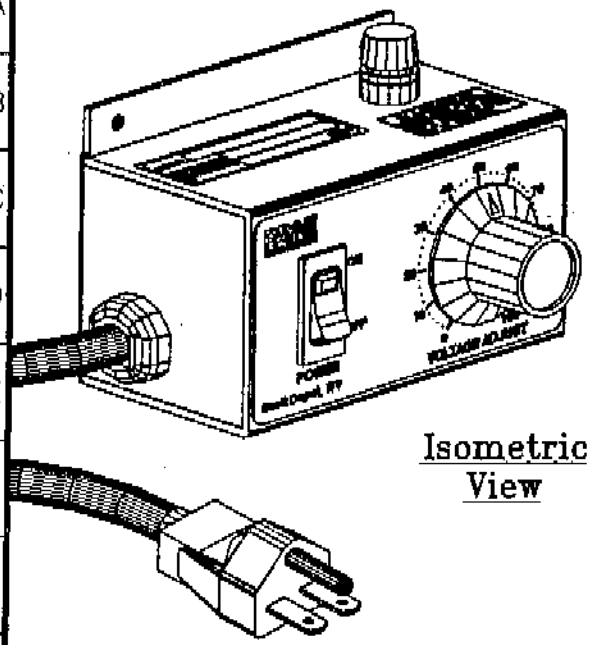
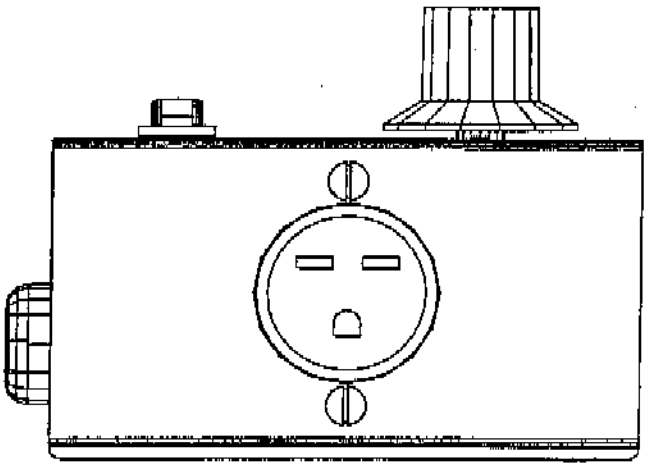
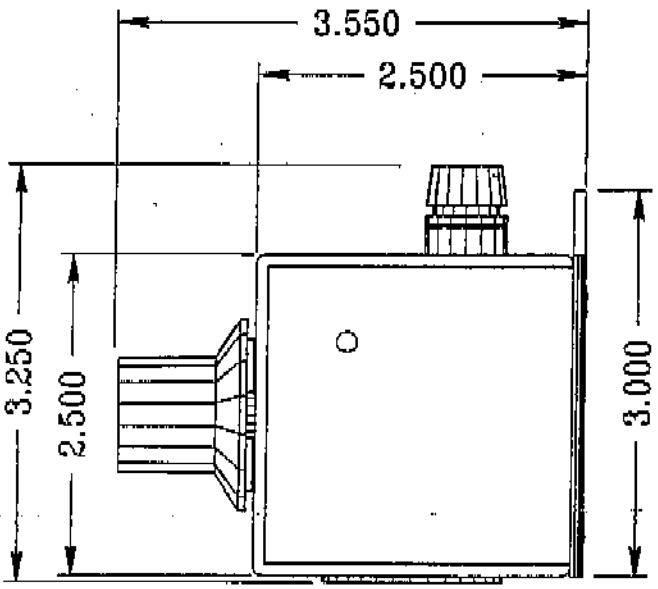


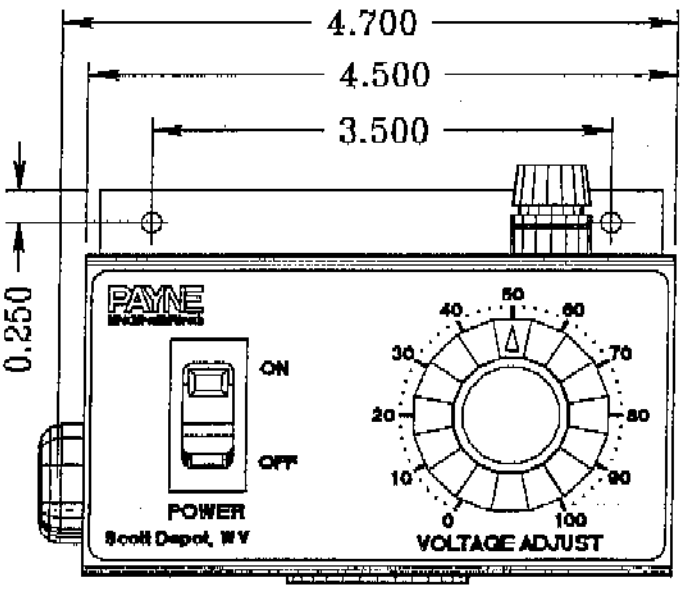
Isometric View



Bottom View



Right Side View



Front View

Dwg. No.	18T/12.007

MODEL 18TP-2-5/10
PORTABLE
SOLID STATE
POWER CONTROL
3D model

PAYNE ENGINEERING

Drn By:		02/03/95
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