Specifications

Power Requirements

PS-12-115	115vac, 50/60hz @ .2A (full load)
PS-24-115	115vac, 50/60hz @ .1A (full load)
PS-12-230	230vac, 50/60hz @ .1A (full load)
PS-24-230	230vac, 50/60hz @ .05A (full load)

Tolerance $\pm$ 10% of nominal AC supply voltage

Isolation 1000v magnetic isolation

Physical

Size	2.9" (75mm) x 2.2" (55mm) x 4.3" (110 mm)
Mounting	DIN rail or panel (with two #6 screws)
Weight	16 oz. (454 grams)
Temp	20 - 140° F, 90% r. humidity (non cond.)

Origin Designed and assembled in the USA.

Performance

Output Power	12 watts @ 80°F ambient
Regulation	5% of nominal DC rating
Ripple	less than 1% @ half load, 15% @ full load
Protection	Electronic thermal overload
Rise Time	500ms, no overshoot
Drop Time	3 seconds w/ no load

Power Supply Section
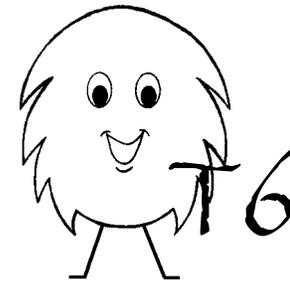
Installation guide for part numbers:

PS-12-115
**PS-24-115**
PS-12-230
PS-24-230

Application:

The power supply section can be used to power DC load devices or DC sensors. It provides a stable, well regulated DC output that is ideal for nearly any type of sensor. It is of the "linear" classification with thermal overload protection for reliable operation with very little EMI/RFI noise emission. Additional supplies can be connected in parallel If more output current is required. The output voltage will begin to drop below the nominal rating as a result of excessive current draw or high ambient temperature. The voltage will return to the nominal value after the adverse condition is corrected.

Mounting:

Power Supply sections can be either DIN rail mounted or panel mounted using two #6 screws. Maximum cooling is obtained by mounting the power supply so that air will enter the bottom slotted surface and exit though the top slotted surface. However, the unit can be mounted in any position so long as it is not placed near other devices that will generate a substantial amount of heat.

Wiring the supply:

Connect the terminals marked 115vac (or 230vac for -230 units) to the supply power. The DC output of the supply consists of one negative terminal and four positive terminals. In most applications, the negative of the supply is connected to the common terminal of the T6 controller's input or output. The positive terminals are then connected to each of the individual sensors or loads. If the output of the sensor is of a sinking configuration (npn) it can be connected directly to the input. Otherwise, an converter block may be required.

115vac
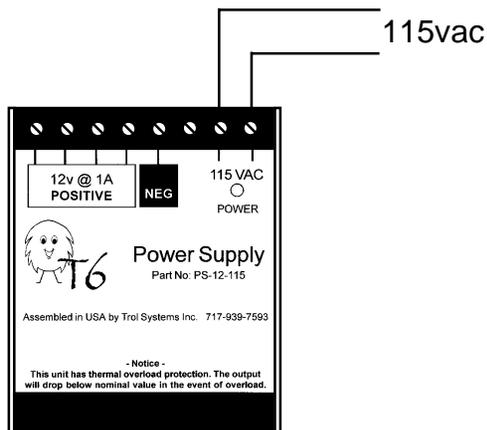
Interface to an input device:

The Power Supply section can be used to power electronic sensors of the three wire type (some have four wires, but the (-)supply and the (-)output can be connected together). These sensors will usually require between 10-30 volts to operate. Typically, one power supply is enough power to operate 6 sensors.

Electronic devices such as magnetic hall effect transistors, photo-transistors, and DC proximity sensors must meet the following criteria:

It must be rated to operate with a supply voltage equal or greater than the output voltage of the power supply section.

It must be of an open collector NPN (like symbol in illustration). This is often referred to as being in a sinking configuration.

It must <u>NOT</u> be of a PNP or sourcing configuration.

It cannot have an off current (leakage) greater than .5ma.

Wiring:

The negative of the supply is connected to the negative of the sensor and to the "COM" terminal of the inputs.
The positive of the supply is connected to the positive of the sensor. The output of the sensor (must be of sinking type) is connected to the numbered terminal of the input.
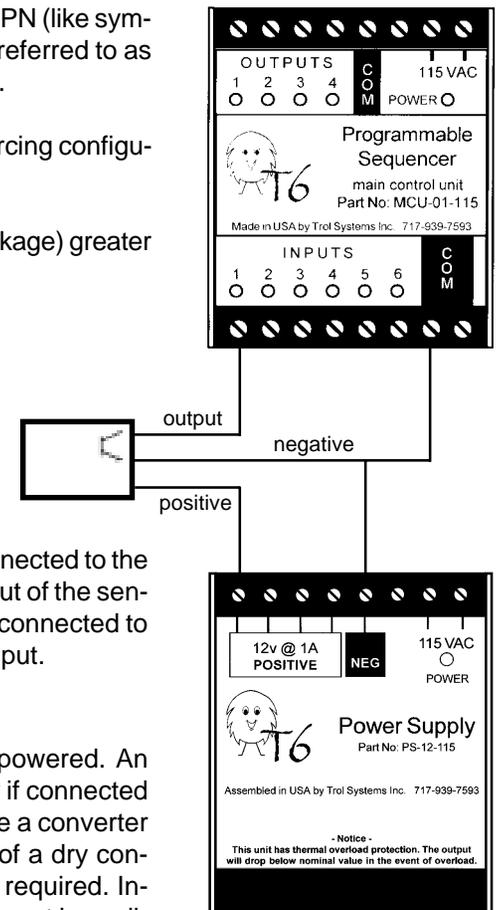
Warning! The inputs are self-powered. An input can be damaged instantly if connected to an outside power source! Use a converter block if the input device is not of a dry contact or sinking configuration as required. Information on T6 optional equipment is available on-line at www.trolsystems.com. In the literature index choose to download the T6 Optional Equipment booklet.