



Electrical Test Instruments, LLC  
Product Description and Specifications  
**10 kVA Autotransformer Model AT-10**

**Overview:**

This is a portable autotransformer intended to allow the **PI-800** and **PI-1600** test sets to be used at full capacity on 208 and 480 VAC lines. It provides 240 VAC at 10 kVA, and also an isolated 120 VAC 500 VA supply for lights, hand tools, and other small appliances. It is housed in a rugged ABS enclosure approximately 22" wide x 11" high x 22" deep, including 2" lids, and weighs less than 125 lb.

**Basic Description and Operation:**

This instrument is housed in a rugged waterproof case with removable front and rear covers. The input connection is by way of two 50 A male connectors and a ¼" ground lug. Female plugs are provided for the customer to make cables as required. The input is protected by high interrupting capacity 60 ampere fuses (and a 30-ampere fuse for 480 VAC). Input voltage of 208 VAC or 480 VAC is selected by means of a simple jumper which is accessed through a clear polycarbonate window on the rear. When input power is applied, a green POWER ON light is illuminated, and 240 VAC for the PI-800 is provided on two 50 A female connectors. 120 VAC is also applied to internal fans through a 2 amp fuse, and to the rear mounted GFCI outlet through a 4 A circuit breaker.

In the case of long-term overload and subsequent overheating of the autotransformer, thermal overload switches will open, and the red Thermal Overload lamp will light. It is the responsibility of the user to remove the load if this occurs. The unit should remain powered up so the fans may remove heat from the enclosure.

It is extremely important to check the position of the input voltage jumper before applying power. If 480 VAC is applied in the 208 VAC configuration, very high input currents (500 amperes or more) will flow, and cause a dangerous condition which may damage the unit or cause injury to the operator. It is good practice to connect the unit in the following sequence:

- (1) Inspect the input jumper to make sure it is tight and properly set.
- (2) Measure the input power source to verify it is within the limits of the **AT-10** as configured.
- (3) Connect the input ground terminal to a solid earth ground.
- (4) Connect the output ground terminal to the **PI-800**.
- (5) Connect the power leads from the **AT-10** output jacks to the **PI-800** input jacks.
- (6) Connect the input leads of the **AT-10** to a de-energized power source.
- (7) Energize the power source and verify that the Power On lamp lights and both fans run with good air flow.

Specifications:

Width: 22 inches (559 mm)  
Height: 11 inches (280 mm)  
Depth: 18 inches (457 mm)  
Depth (lids): 2.0 inches (51 mm)  
Weight: 87 pounds (38.5 kg.)

Input (480V): 420-520 VAC, 60 Hz, 10 kVA nominal (21 amperes)

Output (Main): 240 VAC at 40 A continuous (9.6 kVA)

Output (Auxiliary): 120 VAC at 4 A continuous (480 VA)

Regulation: 2% at rated load on main output

5% at rated load on auxiliary output

Overloads:	200%	30 seconds ON, 90 seconds OFF	(25% Duty Cycle)
	300%	10 seconds ON, 90 seconds OFF	(10% Duty Cycle)
	1000%	0.3 seconds ON, 30 seconds OFF	(1% Duty Cycle)

## WARRANTY

Electrical Test Instruments, LLC, will correct any defect in workmanship or material for two years after date of purchase of any Electrical Test Instruments product. Such corrective measures will be limited to repairing or replacing the unit, at Electrical Test Instruments' option. This limited warranty shall not apply to equipment which has been subjected to negligence, accident or damage by operation, maintenance or storage, or to non-normal use or service. This limited warranty does not cover reimbursements for transportation, removal, installation, repair or replacement, except as may otherwise be specifically agreed to in writing by Electrical Test Instruments. The foregoing is in lieu of all other warranties expressed or implied, and all other obligations or liabilities whether arising under contract, negligence or otherwise, on the part of Electrical Test Instruments. In no event shall Electrical Test Instruments be liable for consequential or special damages, including but not limited to loss of use, loss of income, loss of profit or cost of replacement.