Description & Operation Guide

VARIAC®

STPPX-240-150A

AC Power Supply for Heat Rise Testing

Version 1.1 ● 21 October 2024

ISE Inc - 10100 Royalton Rd, Cleveland, OH 44133 USA – (440) 237-3200
https://ISEinc.com - https://VARIAC.com

ISE, Inc. 10100 Royalton Rd. - Cleveland, OH 44133 USA

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Trademarks

1 Introduction

1.1 General Description

The **STPPX-240-150A AC Power Supply Designed as an AC Current Source for Heat Rise Testing.** It can be used in other applications where 0-12VAC up to 150A is required. It provides an isolated manually adjustable output.

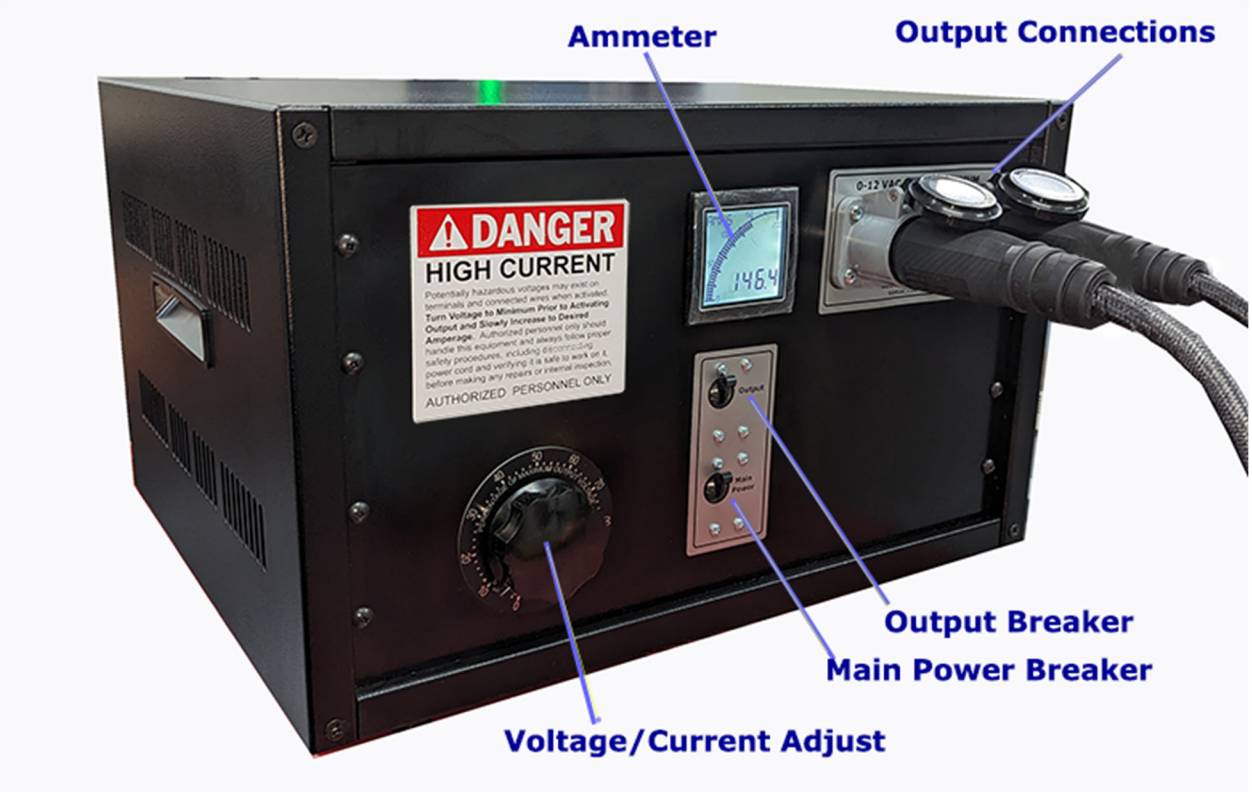
1.2 Safety Features

Input and intermediate circuit breakers are provided to protect the unit from over current conditions. Heavy duty 300A single pole locking receptacles are provided for connection to the load. Safety covers are also provided over the receptacles.

1.3 Specifications

Specification	Details
Input Power Source	**Source Power Supply Options:** (20A Power Source Circuit Recommended in All Cases.) 240VAC Single Phase Input / 0-12VAC Nominal output /150A Maximum 208VAC Single Phase Input / 0-10VAC Nominal Output/ 150A Maximum 120VAC Single Phase Input / 0-6VAC Nominal Output/ 150A Maximum Rated Source Frequency 50/60 Hz
Power Source Connection	6 Foot Power Cord is provided. Customer must install suitable plug for his intended use.
Input Power Source Protection	20A Front Panel Circuit Breaker Provided
Output Voltage Range	0-12VAC (Range varies based on power source. (See above)
Output Maximum Continuous Amperage & KVA Ratings	Conservatively rated for 150A continuous operation 1.8KVA Maximum

Output Load Protection	Front mounted breaker that is on the primary of the final isolation transformer
Amperage Indication	Digital Ammeter with bar graph (Usable range 3-150A +/-1% Accuracy typical.
Approx Weight & Dimensions	13” H x 21.0” W x 18.5” D 125 pounds
Operating Environment	Operating Temperature Range: 32-122F (0-50C) Designed for indoor use only and must be protected from water and excessive dust or contamination. Designed for placement on a benchtop or cart for mobility.



2 Getting Started

This chapter describes the unpacking and general startup up the system.

2.1 IMPORTANT UNPACKING INSTRUCTIONS

- First Inspect the shipment for obvious carrier damage. Report any damage to the Freight carrier and ISE.
- When ready to remove the cabinet from its skid, remove all strapping and packing.
- The enclosure is extremely heavy. Do not attempt to move it unassisted.

2.2 Install Appropriate Plug on the Input Power Cord

- Install plug (not supplied) on the end of the cord. White and Black wires connect to your single-phase power source. Green wire is the safety ground. See additional information in specification section regarding input voltage.
- Both front panel breakers should be set to off whenever the power plug to your source power.
- Never plug in the device with a load connected and the front panel breakers in the on condition.
- Always use the appropriate output plugs (2 are provided). Receptacle covers are lifted, and plugs are inserted the locked in place by turning the plugs clockwise.
- Install the proper size of wire leads into the plugs for connecting your load to the power supply output. The standard plugs as provided accommodate wire sizes from #6 to 2/0 AWG. Generally, we recommend 1AWG on this model. Follow the directions by the plug manufacturer on installing your wire. Improper connection of these wires can cause over heating and damage to the plugs and receptacles.

3 Front Panel Controls

Getting Acquainted with the controls and operation.

1) A **Large Voltage/Current Adjustment Knob** is provided. **Adjust fully counterclockwise to zero prior to tuning on the unit or its load to assure safe operation.**
2) Breaker Labeled as **Main Power** is used to connect power to your power source and Ammeter will Illuminate.
3) Breaker labeled **Output** applies voltage to the **Output Terminals**. **Check that the Voltage/Current Knob is at minimum** or known safe output prior to activating the output breaker.

3.1 Typical Operation When Using as a Heat Rise Current Source.

- Connect the output to the unit under test.
- Turn the Voltage/Current knob to Minimum (Full counterclockwise).
- Turn on main power breaker.
- Turn on output breaker.
- Carefully adjust the knob for the desired amperage.
- A stable power source is required. Variations with amperage output will be experienced with line voltage changes. Re-adjust amperage as required during test.

Hazardous currents and voltages can be present with this equipment. Only personnel with proper electrical safety training should utilize this equipment.