

Model 33020

POWER SUPPLY MODULE LifeSaver

- Battery Backup System for Uninterruptable Power Output
- Overload and Short-Circuit Protection
- All Outputs Constantly Monitored
- Overvoltage Transient Protection
- Externally Accessible Fuses
- Does Not Require Forced-Air Cooling
- Zinc Dichromate-Plated Chassis

DESCRIPTION

Power supply module supervised by the system's central processor, with full battery backup system consisting of two +12VDC/5A regulated outputs and two +24VDC/3A unregulated outputs. Battery backup shall maintain full load operation for minimum of 30 minutes.

ENVIRONMENTAL REQUIREMENTS

Temperature Range: 10°C to 49°C (50°F to 120°F) when mounted in Executone cabinet.

Storage Temperature: -40°C to 85°C (-40°F to 185°F).

BTU/hr: 1650/supply

POWER REQUIREMENTS

117 volts, 60 Hz AC, 20Amp computer-grade service line. Maximum power consumption: 480VA.

REGULATED +12V OUTPUTS

Voltage: factory adjusted for + 12.4 VDC to +12.5VDC. Current: 0 to 5 Amperes.

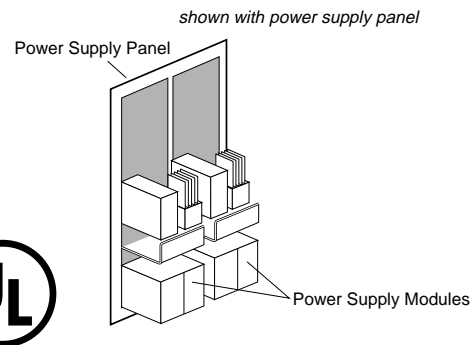
Ripple and Noise: Less than 100 mv peak-to-peak at 117VAC \pm 10% input.

Line Regulation: \pm 0.1% maximum for an AC input variation of \pm 10% from 117VAC.

Load Regulation: 1% maximum for a no load to full load to no load variation.

Voltage Overshoot: Less than 100 mv.

Voltage Drift vs. Temperature: \pm 2 mv/°C.



UNREGULATED +24V OUTPUTS

Voltage: factory adjusted for +24VDC nominal.

Current: 3 Amperes maximum.

Ripple: Less than 100 mv peak-to-peak at 117VAC \pm 10% input.

CIRCUIT PROTECTION

+12VDC: Current limiting and overvoltage crow-bar protection circuitry.

+24VDC: Current limiting.

AC Line: 5A slo-blo replaceable fuse.

Battery Backup: 20A replaceable fuse.

CONTROLS AND INDICATORS

One AC ON/OFF switch and one battery backup ON/OFF switch. One green LED indicator per +12VDC output, one green LED indicator per +24 VDC output, one "CHARGER ON" LED, one "ON BACKUP" LED, and one "LOW BATTERY" LED.

DESIGN

Open frame construction with heavy-duty, strain-relieved, six-foot line cord with molded three-prong plug. For connections, a terminal strip is provided.

FINISH AND DIMENSIONS

Zinc dichromate-plated (amber color) metal chassis.

The maximum dimensions are:

9-3/4" (24.77 cm) wide x

27-3/4" (70.49 cm) high x

5-1/4" (13.34 cm) deep.

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

POWER SUPPLY MODULE

The Model 33020 Power Supply Module with battery backup shall include two regulated +12VDC/5A outputs, and two +24VDC/3A unregulated outputs which shall be supervised by the system's central processor. Full load operation for a minimum of 30 minutes shall be possible in the event of a power failure via the battery backup system.

The ambient operating temperature shall be 10°C to 49°C (50°F to 120°F) when mounted in an Executone cabinet. The storage temperature range shall be -40°C to 85°C (-40°F to 185°F). BTU/hr equals 1650 per supply.

The input power requirements shall be 117VAC \pm 10%, 60 Hz \pm 5% computer-grade line. The maximum power consumption shall be 480VA. The power supply module shall be equipped with one AC ON/OFF switch. The AC line shall be protected by an 5A slo-blo replaceable type fuse.

The two +12 volt regulated outputs shall be identical. The +12VDC shall be factory adjusted for +12.4VDC to +12.5VDC. The current shall be 0 to 5A. The ripple and noise shall be less than 100 mv peak-to-peak at 117VAC \pm 10% input. Line regulation shall be \pm 0.1% maximum for an AC input variation of \pm 10% from 117VAC nominal. Load regulation shall be 1% maximum for a no load to full load or full load to no load variation. Voltage overshoot shall not be greater than 100 mv and voltage drift versus temperature shall be \pm 2 mv/°C.

Each regulated +12 volt output shall use current limiting to protect the power supply circuitry for any overload or short circuit condition. Each regulated +12 volt output shall also have overvoltage circuitry which protects the external load from an overvoltage transient or power supply failure. The trigger point for the overvoltage circuit shall be factory-set to between +13.5VDC to +13.75 VDC. Each +12VDC output shall be monitored by a green status indicator (LED).

The two +24 volt unregulated outputs shall be identical. The voltage shall be +24VDC. The current shall be 3A maximum. Ripple shall be less than 100 mv peak-to-peak at 117VAC \pm 10% input. The + 24VDC unregulated section shall use current limiting to protect the power supply circuitry for any overload or short circuit condition.

The battery backup operation shall be provided by two 12 VDC 8AHR batteries wired in series. These batteries shall be integral to the design of the power supply module with an ON/OFF switch for turning the battery backup system on or off. Battery backup output shall be protected by a 20A replaceable fuse.

To show the current operating status, the power supply module shall be equipped with the following indicators: one "CHARGER ON" LED, one "ON BACKUP" LED, and one "LOW BATTERY" LED.

The power supply module shall be connected to the input AC line by means of a heavy duty, strain relieved six-foot line cord and molded three-prong plug. For ease of installation and maintenance, power connections shall be made via a terminal strip with screw-type connections. The power supply module shall not require forced air cooling.

The power supply module shall utilize open-frame construction and shall be designed to mount onto a Model HPNPSP Power Supply Panel. The maximum dimensions of the power supply module shall be: 9-3/4" (24.77 cm) wide x 27-3/4" (70.49 cm) high x 5-1/4" (13.34 cm) deep.