Single Phase Power Distribution Unit (PDU) Specifications

Overview

These specifications apply to AC General Standard Single Phase PDUs (Model series 100-xx-xx and 010-xx-xx). The PDUs are designed for equipment racks powered from a 20A or 30A 120VAC power drop, operating at 50, 60, or 400Hz.

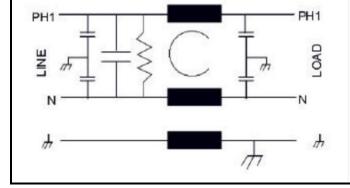
All Standard PDUs contain a UL1077 compliant main circuit breaker. AC General recommends that the power drop that supplies the PDU be rated at a minimum of 20A and possess a UL489 rated Branch Circuit Breaker.

AC Line Filter

Power quality is an important aspect of any equipment protection program. AC General incorporates a high quality robust AC Line Filter in each PDU to suppress conducted interference present on any power line and suppresses downstream EMI generated by equipment powered by the PDU from leaving the system.

The filter is placed at power input of the PDU to prevent incoming noise and transients on the AC line from propagating into the PDU. Your equipment is further protected with a MOV device which shunts any remaining transients to ground.

Insertion Loss [dB into 50 ohms]								
Frequency	100KHz	150	250	500	1.0 MHz	5.0	10.0	30.0
Line-to-Line	18	23	35	40	48	65	80	65
Line-to-Ground	15	19	23	29	36	50	50	50



- Operating Frequency: 50-400Hz
- Leakage Current: 1.5 mA @ 250VRMS
- Filter Discharge Voltage: 30 V max after 1 sec
- Filtering: Phase, Neutral, and Ground
- MOV protection
- Phase-to-neutral
- 70 Joule

Features

Circuit Protection

- ➤ 2-Pole Main circuit breaker
 - o Rated for 100% load over temperature
 - o UL1077 Recognized
 - o Trip Delay: "medium"
 - suitable for general purpose test equipment, power supplies, transformer protection
- One (1) UL Listed RK5 internal series fuse, coordinated with main breaker, provides 5000A Interrupt Rating for PDU
- Push-to-reset supplemental breakers for each duplex (30A PDUs only)

Environmental Specifications

- ➤ Operating Temperature: 0°C to +50°C
- ➤ Non-operating Temperature: -40°C to +71°C
- Relative Humidity (non-condensing): 5 to 95% +/- 5%
- > Operating & Non-operating Altitude: 15,000 Ft
- Operating Vibration: 5 to 55 Hz, 0.33 mm peak-to-peak displacement
- Functional Shock 15g, half-sine shock pulse, 11 mSec, 3 axes

Power Entry Connector

- ➤ 2 Pole/3 Wire nylon "locking" Flanged Inlet
 - Connector information provided on Model Data Sheet
- > Two ways to connect power drop
 - o Front Panel Bulkhead (PN 010-xxx-xx)
 - o Rear Panel Line Cord (PN 100-xxx-xx)
 - See diagrams below

Output Connectors

- Five (5) duplex receptacles NEMA 5-20R
 - o (10) outlets total

Mechanical

- > Dimensions:
 - o 3.5" [H] x 19.0" [W] x 7.1" [D]
- Weight: 9 lbs.
- Chassis Construction: aluminum 5052, chromate finish
- > Fasteners: stainless steel
- ➤ Front Panel Color: Gray FS 595 #26496
- Mounting: Hole spacing per EIA 310D

Options

Basic Remote ON/OFF (Options -R/-R1)

- ➤ Allows remote control of the PDU from 150 ft. away
- Low voltage control circuit:
 - o 60Hz Models: 24 VAC
 - o 400 Hz Models: 24 VDC
- Remote cable provided, standard length: 8ft
- > Two types of Remote Control are available:
 - o Option "-R"
 - System power controlled via (1) lighted toggle switch
 - o Option "-R1"
 - System power controlled via (2) lighted momentary pushbutton switches

AC Power Monitor (Option -P)

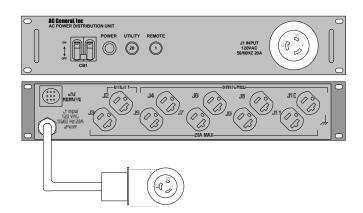
- Protects your system from Under-voltage, improper phase rotation, and phase loss
- Available in 60Hz and 400Hz PDU only
 - o Requires Remote Option
- ➤ AC Under-Voltage protection.
 - O Under voltage set point: -15%, 102VAC
 - o Fault Reaction Time: < 50 mSec
- Upon detecting a fault, all output power removed except Utility/Convenience outlet

Standards

All electrical components and wiring within the PDU are UL Recognized or Listed items

AC General, Inc.

Two Power Input Configurations Available



Front Panel Bulkhead
Applies to all Models with P/N 010-xxx-xx

Rear Panel Line Cord (6 Ft)
Applies to all Models with P/N 100-xxx-xx