

## 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 120 (or 220) VAC 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.

### 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

### 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 Standard PDU.

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 and connected equipment. Each phase and neutral is filtered, plus the ground wire. Following the filter, the PDU loads are further protected with an MOV which shunt 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

- Filtering: Each phase, neutral, and Ground
- MOV protection:
  - Phase-to-neutral
  - 70 Joule

- Operating Frequency: 50-400Hz
- Leakage Current: 1.5 mA @ 250VRMS
- Filter Discharge Voltage: 30 V max after 1 sec

# AC General, Inc.

## Circuit Protection

- 2 Pole Main circuit breaker (UL1077)
  - rated for 100% load over temperature
  - “medium” trip delay (general purpose applications, Test Equipment, transformer protection)
- Push-to-reset supplementary breakers (30A PDU only)

## Power Entry Connector

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

## Output Connectors

- Four (4) duplex NEMA 5-20R
- One (1) Utility duplex, NEMA 5-20R activated by main circuit breaker
- 220 VAC Model: four (4) duplex NEMA 6-20R

## Mechanical:

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

## Options:

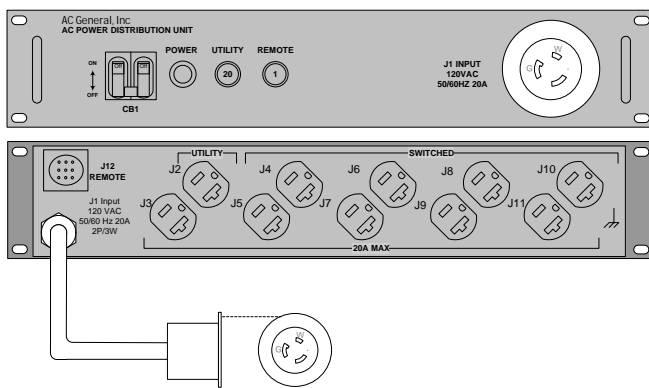
### Basic Remote ON/OFF (Options R/R1)

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

### AC Power Monitor (Option P)

- Available in 60Hz and 400Hz PDU only
  - Requires Remote Option
- AC Under-Voltage protection.
  - Under voltage set point: -15%, 102VAC
  - Fault Reaction Time: < 50 mSec
- All output power removed except Utility outlet

## 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