

100 AMP A.C. POWER DISTRO

MODEL ACD-100



FEATURES

- 100 amp total load
- Five 20 amp, 120 volt circuits, each with a status indicator
- Oversized buss bars
- 4 buss design accommodates 120V or 240V single phase, or 208V three phase power
- High-inrush magnetic circuit breakers
- Varistor spike and surge protection
- Compact two rack space package
- Most economical product of its type

DESCRIPTION

The **ACD-100 AC Power Distro** is an extremely compact, low cost rackmount power distribution system that is ideal for touring PA systems, touring musical and theatrical acts, mobile recording facilities, on-location film and video shoots, etc.—any situation where AC power must be distributed to multiple circuits and a hard-wired, built-in system is missing, inadequate, or impractical. Use of a Power Distro is cost-effective, both in terms of the convenience it offers and the elimination of bulky and expensive parallel feeds and related connectors.

The ACD-100 can handle up to 100 amps of incoming power, distributing it to five 20 amp, 120V circuits. Each circuit has a neon status indicator that lights up when its breaker is turned on, and a 20 amp duplex outlet on the rear panel.

The circuit breakers used in the ACD-100 are high-inrush magnetic types designed specifically for critical data processing and broadcast applications where nuisance tripping cannot be

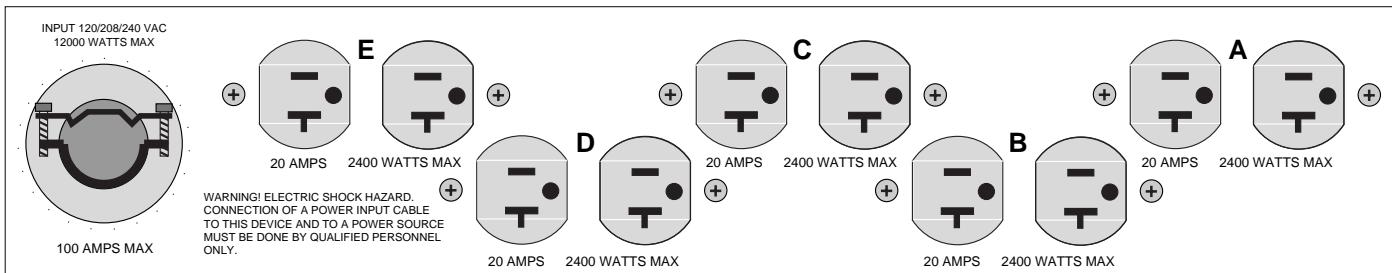
allowed. They have a pulse tolerance* of 10 times the rated current, or 200 amperes. This makes them particularly suited for use with power amps and other devices with high-reactance loads, since the high pulse tolerance will keep them from tripping falsely at the instant power is applied or on musical peaks. If a breaker should trip, it can be reset as soon as the overload is corrected—there is no cool-down delay time required. Temperature compensations which affect fuses and inexpensive thermal breakers are not a concern. The breakers are of the highest industrial grade, UL/CSA listed, precise in operation and rugged in construction. They may be used as on-off switches for the five circuits.

The ACD-100's design incorporates four oversized busses, allowing wiring for 120V or 240V single phase, or 208V three phase power. A strain relief clamp is provided that can accommodate a cable or wire bundle up to 1.5 inches in diameter. Cable termination is a simple process of breaking out and stripping the individual conductors and connecting them with set screws, and then tightening the strain relief clamp. Complete instructions accompanying the unit guide the user through the process of selecting and terminating the supply cable.

The ACD-100 provides basic spike and surge suppression, with metal oxide varistors (MOV's) connected between the line and neutral conductors of each circuit. The MOV's respond to line-derived spikes in less than a nanosecond, clamping transient voltages to safe levels of 200V peak or less.

* Pulse tolerance is defined as the maximum peak current amplitude of a single half sine wave pulse of 8 ms. duration that will not trip the circuit breaker.

ACD-100 Rear View



Architects and Engineers Specifications

The Power Distro shall mount in a standard 19" rack, and shall occupy two units ($3\frac{1}{2}$ ") of rack space.

It shall employ a four-buss structure (plus chassis ground) which can be reconfigured as needed using an ordinary screwdriver. Buss input connections shall accommodate wires as large as 2 AWG or as small as 8 AWG. Buss output connections shall be via repositionable Fast-On connectors. Buss construction shall be of solid copper capable of handling at least 125 amps. A secure cable clamp shall be provided which can accommodate an input cable up to 1.5 inches in diameter.

There shall be five output circuits on the rear panel, with a 20 amp duplex outlet for each. Circuit breakers rated at 20 amps shall be provided for each circuit using high inrush magnetic types, capable of operation as circuit on/off switches. Breakers shall be able to withstand an 8 millisecond pulse of 10 times the rated current without tripping, but must trip within 12 seconds at 1.25 times the rated current. Each circuit shall have an indicator light clearly readable at a 20 foot distance showing whether the circuit is on.

Each circuit shall be fitted with a protective device capable of clamping line to neutral spikes to no more than 200 V peak.

Response time shall not exceed 1 nanosecond. The devices shall absorb a surge current of up to 6500 amperes for 10 microseconds without damage.

The unit shall be the Furman ACD-100 Power Distro.

Three Year Limited Warranty

The Furman ACD-100 is protected by a limited three-year warranty covering defects in materials and workmanship.

AVAILABLE FROM:

ACD-100 SPECIFICATIONS

VOLTAGE AND CURRENT	Input Current:	100 amps
	Input Voltage:	Either: 120V single phase, 240V single phase, or 208V 3-phase
	Output:	Five identical 20 amp, 120V circuits
CIRCUIT BREAKERS	Pulse Tolerance:	200 amps (maximum peak current amplitude of a single half sine wave pulse of 8 ms. duration that will not trip the breaker)
	Overload vs. Trip Time:	100% overload: No trip. 125% overload: 0.7 -12 sec. 200% overload: 0.1-3 sec.
SPIKE/SURGE PROTECTION	Spike Protection Mode:	Line to neutral on each circuit
	Spike Clamping Voltage:	TVSS rating 400V peak, L-N, N-G, L-G (tested to UL 1449)
	Response time:	1 nanosecond
	Maximum surge current:	6,500 amps
	Maximum spike energy:	80 joules per circuit
OTHER	Mechanical:	Dimensions: 3.5" H x 19" W x 8" D, rack mount. Weight: 12 lbs (5.5 kg). Construction: Steel chassis, zinc chromate plating; .125" brushed and black anodized aluminum front panel.
	Power Consumption:	None
	Safety Information:	All current-carrying components are UL/CSA listed.