

**A Minimum Footprint,  
High Capacity Power  
Distribution Unit (PDU)  
with Monitoring Up to  
Six 42-Pole  
Panelboards...**

- **15 to 300 kVA**
- **UL Listed**
- **Easy to Install**
- **High Isolation**
- **High Efficiency (>96%)**
- **Overload Protection**
- **Designed for Harmonic Loads**
- **Tiered Output Conduit Landing**
- **System Monitoring Panel**
- **2 Year Warranty**

### **Modular Construction**

The Power Distributor is modular in construction, which permits it to be easily expanded and field upgraded. As many as 2 side car distribution centers can be added. Thus the number of output circuit breakers can be tripled from 84 to 252 in the smallest footprint available in today's marketplace.

The distribution centers, offered by Crucial Power can be configured with most panelboards currently being manufactured. This makes it possible to match the panelboards which you may already have installed, thus reducing the number of different breakers your facilities engineer or electrician has to keep on site. Saving you time and money, these products can also be configured with main output breakers to directly feed individual devices.

***A Full Line Power  
Protection Company.***

 **CRUCIAL POWER PRODUCTS**

# **Power Distributor I**

## **High Capacity Power Distribution**



### **A Big Problem**

Does it seem sometimes like downtime is occurring all the time? Its no wonder! Today's sophisticated circuits cannot digest a diet of the same raw utility power that fed yesterday's equipment.

### **Natural Selection**

In the utility jungle of sags, surges, cable-induced noise, RF interference, and voltage spikes, one need not be a victim. Today's rough and wild electrical environment has given rise to the natural selection of Crucial Power's isolating and power distribution unit. Raw and dirty power can now be cleaned, tamed, and efficiently distributed.

### **Perfect Solution**

Crucial Power products stand out from the herd of "me-too" units because they are delivered sooner, last longer, and cost less. Our no-nonsense design philosophy is backed up by an experienced, fully qualified field service team.

### **Design Details**

Attention to detail is evidenced by the gold anodized plating applied to exposed internal surfaces, offering increased corrosion resistance and longer life. Every unit is stringently calibrated at the factory and must pass exhaustive quality control tests before it can be shipped.

The heart of any Power Distribution Unit is its transformer. Besides pumping out at least 96% of the energy it receives, Crucial Power's transformers are built to maintain their high efficiency rating for at least 20 years of continuous operation. Its fail-safe convection-cooled design is augmented by temperature sensors.

A two-stage alarm (audible and shunt trip) warns operators of, and protects the transformer from, harmful operating temperatures.

Total physical separation between primary and secondary circuits is designed into the unit. From the shielded transformer to the conduit, all input and output power is isolated. This design principle, along with primary and secondary filters and spike suppression systems, aids in common and normal mode noise immunity.

# Power Distributor Specifications

<b>Sizes</b> .....	15, 30, 50, 75, 100, 125, 150, 200, 225, 250 and 300 kVA
<b>Input Voltage*</b> .....	208 or 480 VAC
<b>Output Voltage*</b> .....	208Y/120 VAC
<b>Frequency*</b> .....	60 Hz
<b>Harmonic Distortion</b> .....	1% max. added
<b>Audible Noise</b> .....	<35 dB measured on Response Curve "A"

## Typical Noise Reduction

Common-Mode.....	-120 dB
Normal-Mode.....	-20 dB/decade
<b>Overload (Inrush)</b> .....	200% of full load for 10 seconds 1000% of full load for 1 cycle
<b>Efficiency</b> .....	>96%
<b>Load Power Factor</b> .....	0.3 leading or lagging to unity
<b>Transformer Type</b> .....	3 phase computer grade, dual shielded, isolation transformer

## Transformer Source

<b>Impedance</b> .....	2.5 to 5% std.
<b>Cooling</b> .....	Convection

## Environmental

Operating Temperature.....	32°F (0°C) to 104°F (40°C)
Operating Humidity.....	10 to 90% non-condensing

## Dimensions

Main Unit .....	69" H 34" W 34" D
Side Car .....	69" H 34" W 11" D

UNIT SIZE (kVA)	INPUT VOLTAGE (VAC)	OUTPUT VOLTAGE (VAC)	MODEL NUMBER	WEIGHTS (LBS)	A/C LOAD (TONS)	BTUs/HR																																																																								
15	208 480	208Y/120	NP015B0518K3	500	0.13	1,535																																																																								
			NP015H0518K3				30	208 480	NP030B0518K3	650	0.26	3,071	NP030H0518K3	50	208 480	NP050B0518K3	910	0.43	5,120	NP050H0518K3	75	208 480	NP075B0518K3	1,030	0.64	7,679	NP075H0518K3	100	208 480	NP100B0518K3	1,350	0.85	10,239	NP100H0518K3	1,150	125	208 480	NP125B0518K3	1,600	1.07	12,799	NP125H0518K3	1,245	150	208 480	NP150 B0518K3	2,075	1.28	15,359	NP150H0518K3	1,675	200	208 480	NP200B0518K3	2,300	1.70	20,478	NP200H0518K3	1,820	225	208 480	NP225B0518K3	2,600	1.92	23,038	NP225H0518K3	2,180	250	208 480	NP250B0518K3	2,900	2.13	25,598	NP250H0518K3	2,400	300	208 480	NP300B0518K3
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\* 100 kVA only available in 480 volts input

\*\* Other voltages and Frequencies available - contact factory.

Specifications are subject to change without prior notification.

## Standard Features

- **Caster Based, Small Footprint Cabinet**
- **Tiered Output Conduit Landing Bracket**
- **42 Pole Panelboard**
- **Transformer Thermal Shut-down**
- **Main Input Circuit Breaker with Shunt Trip**
- **Emergency Power Off Switch (EPO)**
- **Output System Status Panel**  
*Monitoring; RMS Metering, Output Voltage (Phase to Phase, Phase to Neutral), Output Current, Output Neutral Current, KVA, Percent Load per Phase*
- **Alarms;**  
*Under Voltage, Over Voltage, Phase Rotation, Phase Loss, First Stage Temperature Shut-Off, Second Stage Temperature Shut-Off, Ground Amps, EPO Tripped, and 8 Optional External Ports for Form C Contact Closures.*

## Options

- K-Factor Ratings up to K-50
- Remote Emergency Power Off Station with 50 ft Cable
- Transient Suppression Plate
- Input Three Phase Power Connector
- Secondary Surge Suppression
- Manual Restart
- Secondary Output Main Circuit Breaker
- A/C Shut-Down Relay (Momentary or Latching)
- Ground Integrity Monitor
- Input/Output Filter (-60 dB/decade)
- Field Wired Junction Box
- Non-standard Panelboards
- Special Paint
- Seismic Brackets
- Side Car for Panelboard Expansion
- 10 ft. Input Cable



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