

# Power Distribution Solutions



[www.unionconnector.com](http://www.unionconnector.com)

Bulletin: PDS-113  
copyright © 2013 Union Connector

# Custom power distribution equipment is our specialty

Union Connector has been manufacturing electrical equipment since 1929. In that time we have received a well deserved reputation for building safe, dependable products that satisfy our customer's needs.

We provide solutions for power distribution requirements in:

- *Theatres*
- *Convention Centers*
- *Casinos*
- *Hotels*
- *Stadiums*
- *Arenas*
- *Houses of Worship*
- *Schools*

These solutions are designed for special applications such as:

- *Theatrical Lighting Systems*
- *Architectural Lighting*
- *Portable Power Distribution*
- *Audio Power Distribution*
- *Generator Connection*
- *Outdoor Power Distribution*

Custom equipment can range from a simple 20A. portable box to an outdoor, 1600A. 3-phase power center with meters, multiple branch circuits with a combination of receptacle styles.

Contact our engineering department to discuss your project's needs and see how we can help provide you with a safe, reliable, UL Listed, power distribution solution.



# Available options:

## Enclosure variations:

- NEMA 1
- NEMA 3R
- NEMA 4X
- Powder Coated Steel
- Stainless Steel
- Custom colors
- Surface Mount
- Pad Mount
- Recessed Mount

## Ratings:

- Single phase 120V.
- Three Phase 120/208V.
- Multiple Vac ratings
- Single Phase 120/240V.
- Three Phase 277/480V.
- 20A. to 1600A.

## Overcurrent Protective Devices ( OCPD) / Switches:

- Molded case circuit breakers
- Branch Rated Fuses
- Fused Boltswitches
- Molded case switches
- Fused Heavy Duty Switches

## Receptacles / output connections:

- Cam (reverse G/N option)
- SafeCam®
- Posi-Lok™
- Pin & Sleeve
- Stage Pin
- Nema (Edison & Locking)
- 19-pin
- Direct bus connection

## Miscellaneous:

- Meters
- Contactors
- Isolated Ground
- Remote Control



## Power Distribution Solutions

### We have built for our customers

#### Arena Outdoor Power Center

**Enclosure:** NEMA 3R, 48" x 48" x 36", free-standing, double door, ASA 61 gray powder-coat finish.

A switch operated fluorescent light is mounted to the interior ceiling.

**Feed:** 1200A., 3-phase, 277/480V. Entry is through slab into the enclosure.

**Transformer:** Step down, dry type, 3-phase, 480V. primary to 120/208V. Y secondary.

**Circuit Breakers:** Molded-case, UL489, 10K AIC @ 240V.

(3) 60A., 3-pole  
(3) 50A., 2-pole  
(10) 20A. 1-pole

**Contactors:** (2) 60A., 3-pole, EOMH

**Outlets:** (1) 60A., 120/208V., Pin & Sleeve  
(3) 50A., 125/250V., non-NEMA Locking  
(9) 20A., 125V. GFCI duplex  
(1) 20A., 125V. duplex

**Listing:** UL Listed



#### Arena Outdoor Power Center

**Enclosure:** NEMA 3R, 72" x 72" x 36", free-standing, double door, ASA 61 gray powder-coat finish.

A switch operated fluorescent light is mounted to the interior ceiling

**Feed:** 1200A., 3-phase, 120/208V. Conduit entry is through slab into the bottom of enclosure.

**Fused Disconnects:** (4) 200A. 3-pole single throw heavy duty switches w/200A. fuses

**Circuit Breakers:** Molded-case, UL489, 10K AIC @ 240V.,

(2) 60A., 3-pole  
(6) 50A., 2-pole  
(10) 20A., 1-pole

**Outlets:** (4) sets of (5) 200A. Cams  
(2) 60A., 120/208V., Pin & Sleeve  
(6) 50A., 125/250V., non-NEMA Locking  
(9) 20A., 125V. GFCI duplex  
(1) 20A., 125V. duplex

**Listing:** UL Listed





## Stadium Broadcast Power Center

- Enclosure:** NEMA 1, 33" x 60" x 12", surface mount, gray powder-coat
- Feed:** 400A., 3-phase, 120/208V. Entry is through the top of enclosure.
- Circuit Breakers:** Molded-case, UL489, 10K AIC @ 240V  
 (1) 400A., 3-pole, Main ( 65K AIC )  
 (2) 200A., 3-pole  
 (2) 60A., 3-pole
- Contactors:** (2) 60A., 3-pole
- Outlets:** (2) sets of (5) 200A. Cams  
 (1) set of shunt-trip protected, copper bus w/solderless terminals  
 (2) 60A., 120/208V., Pin & Sleeve
- Metering:** Analog ammeter with phase selector switch
- Listing:** UL Listed



## Stadium Power Center

- Enclosure:** NEMA 1, 90" x 51" x 24", free standing, ASA 61 gray powder-coat
- Feed:** 1000A., 3-phase, 120/208V. Entry is through the bottom of the enclosure.
- Circuit Breakers:** Molded-case, UL 489, 10K AIC @ 240V.  
 (1) 1000A., 3-pole, Main ( 65k AIC )  
 (6) 200A., 3-pole  
 (5) 30A., 1-pole  
 (6) 20A., 1-pole
- Outlets:** (6) sets of (5) 200A. Cams  
 (5) 30A., 125V., L5-30  
 (6) 20A., 125V., GFCI duplex
- Listing:** UL Listed



## Stadium Show Power Center

- Enclosure:** NEMA 1, 10 ½ ft. x 6 ft. x 1 ft., freestanding, ASA 61 gray enamel. Multiple bus connection chamber doors are provided beneath Cam outlet circuits.
- Feed:** 1600A., 3-phase, 120/208V. Entry is through the side of the enclosure to terminals on the Main copper bus.
- Circuit Breakers:** Molded case, UL489, 65K AIC@240V.
- Breakers:**
- (1) 1600A., 3-pole Main
  - (1) 800A. 3-pole Branch
  - (1) 600A. 3-pole Branch
  - (1) 400A. 3-pole Branch
  - (1) 200A. 3-pole Branch
  - (2) 100A., 3-pole Branch
- Outlets:**
- |                                  |      |  |
|----------------------------------|------|--|
| (2) sets of (6) 400A. Cams       | plus | (1) set of bus lugs - (øA, øB, øC, N, G) ( 800A. circuit ) |
| (2) sets of (6) 400A. Cams       | plus | (1) set of bus lugs - (øA, øB, øC, N, G) ( 600A. circuit ) |
| (1) set of (6) 400A. Cams        | plus | (1) set of bus lugs - (øA, øB, øC, N, G) ( 400A. circuit ) |
| (1) set of (5) 200A. Cams        | plus | (1) set of bus lugs - (øA, øB, øC, N, G) ( 200A. circuit ) |
| (2) 100A. 120/208V. Pin & sleeve |      |  |
- Listing:** UL Listed







## Power Distribution Solutions

### We have built for our customers

#### Convention Center Ballroom Power Center

- Enclosure:** NEMA 1, 60" x 50" x 9", recess mount, blue enamel, voltage barrier
- Feed:** 800A., 3-phase, 120/208V.  
200A., 3-phase, 277/480V.  
Entry is through the sides of the enclosure.
- Fused Pull-out Switches:** Boltswitch type  
(1) 400A., 3-pole, w/(3) 400A., 300V. fuses  
(2) 200A., 3-pole, w/(3) 200A., 300V. fuses  
(1) 200A., 3-pole, w/(3) 200A., 600V. fuses
- Outlets:** (1) set of (5) 400A., 120/208V. Cams  
(2) sets of (5) 200A., 120/208V. Cams  
(1) set of (5) 200A., 277/480V. Cams
- Listing:** UL Listed



#### Convention Center Power Panel for Portable Equipment

- Enclosure:** NEMA 1, 60" x 50" x 9", surface mount, blue enamel
- Feed:** 1200A., 3-phase, 120/208V. Entry is through the bottom of the enclosure to copper busbars.
- Circuit Breakers:** Molded case, UL489, 65K AIC@240V.  
(2) 400A., 3-pole  
(1) 200A., 3-pole  
(1) 100A., 3-pole
- Outlets:** (2) sets of (5) 400A. Cams  
(1) set of (5) 200A. Cams  
(1) set of (5) 100A. Cams
- Listing:** UL Listed





## Power Distribution Solutions

We have built for our customers

### State Park Outdoor Power Center

The enclosure is a 60" x 6" x 16" NEMA 3R single door cabinet with an interior fluorescent worklight.

Feed to the enclosure is 400A. 3-phase, 120/208V. that enters the cabinet from the side.

Unit contains

- (1) 400A. Branch 3-pole breaker in a Company Switch
- (1) 60A. 3-pole Safety Switch
- (4) 20A. Branch 1-pole breakers

Output is:

- (1) set of 400A., 120/208V. Cams
- (4) 20A., 125V. duplex.



### University Arena Outdoor Power

The enclosure is a 45" x 39" x 25" NEMA 3R double door cabinet with rack rails for signal gear on the reverse side of the power section.

Feed to the enclosure is 400A. 3-phase, 120/208V. that enters the cabinet from below. A hinged access door is provided below the main door for portable cable entrance to the connection area.

Unit contains

- (2) 100A. Branch 3-pole breakers
- (2) 50A. Branch 2-pole breakers
- (2) 30A. Branch 2-pole breakers
- (2) 20A. Branch 1-pole breakers

Output is:

- (2) 100A., 120/208V. Pin & Sleeve
- (2) 50A., 250V. 6-50
- (2) 30A., 250V. L6-30
- (2) 20A., 125V. duplex.







## Power Distribution Solutions

### We have built for our customers

#### Convention Center Recessed Outdoor Company Switch

**Enclosure:** NEMA 4X, 30" x 18" x 6", recess mount, gray ASA 61 enamel.

Enclosure size was constrained by the physical location between two structural members of the building.

**Feed:** 400A., 3-phase, 120/208V. Entry is through the back of the enclosure to terminals on the breaker.

**Circuit Breaker:** Molded case, UL489, 65K AIC@240V.

**Breaker:** (1) 200A., 3-pole

**Outlets:** (1) set of (5) 200A. Cams

**Listing:** UL Listed



#### Hugh School Gym/Auditorium Recessed Company Switch

**Enclosure:** NEMA 1, 21" x 24" x 7", recess mount, blue enamel. Keyed locks for doors protecting outlet panel and breaker controls.

**Feed:** 200A., 3-phase, 120/208V. Entry is through the top of the enclosure to terminals on the breaker.

**Circuit Breaker:** Molded case, UL489, 65K AIC@240V.

**Breaker:** (1) 200A., 3-pole

**Outlets:** (1) set of (5) 200A. Cams w/covers on lanyards

**Listing:** UL Listed





## Power Distribution Solutions

### We have built for our customers

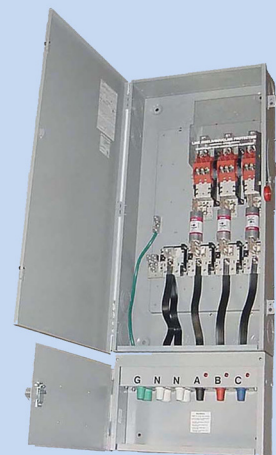
#### Community Theatre Fused Power Center

- Enclosure:** NEMA 1, 60" x 28" x 14", surface mount, blue enamel
- Feed:** 600A., 3-phase, 120/208V. Conduit entry is through the top of the enclosure to terminals on the switch.
- Fused Switch:** UL Listed double-break rotary blade type fused safety switch.  
The operating handle prevents inadvertent opening of the fuse access chamber door during operation.  
(1) 400A., 3-pole switch with (3) 400A., 300V. fuses
- Outlets:** (1) set of (5) 400A. Cams
- Listing:** UL Listed



#### Arena Fused Company

- Enclosure:** NEMA 1, 42" x 21" x 12", surface mount, gray ASA 61 enamel. Cam outlets are mounted inside the padlockable outlet chamber. A hinged trapdoor on the bottom of the chamber allows for cable entry.
- Feed:** 400A., 3-phase, 120/208V. Entry is through the top of the enclosure to terminals on the switch.
- Fused Switch:** UL Listed double-break rotary blade type fused safety switch.  
The operating handle prevents inadvertent opening of the fuse access chamber door during operation.  
(1) 400A., 3-pole switch with (3) 400A., 300V. fuses
- Outlets:** (1) set of (9) 400A. Cams - (3) Line (ø A, øB, øC )  
(4) Neutral ( 2 male/ 2 female )  
(2) Ground (1 male/1 female )
- Listing:** UL Listed







## Power Distribution Solutions

### We have built for our customers

#### Arena Generator Connection Panel

**Enclosure:** NEMA 3R, 24" x 48" x 18", surface mount, locking single door, gray ASA 61 enamel. A hinged trapdoor on the bottom of the enclosure allows for portable cable entry.

**Facility Connection:** Lugs on copper bus for facility wiring termination. Bus is rated to 1600A. Entry is through top of the enclosure into bus wiring chamber.

**Fused** UL Listed double-break rotary blade type fused safety

**Inlets:** (5) sets of (5) 400A. Cams  
Cams are color-coded for 277/480V.

**Listing:** UL Listed



#### University Theatre Outlet Panel

**Enclosure:** NEMA 1, 24" x 30U x 12", rack cabinet, black enamel,

**Feed:** (2) circuits - 100A., 3 $\phi$ , 120/208V.  
(3) circuits - 200A., 3 $\phi$ , 120/208V.  
(1) circuit - 400A., 3 $\phi$ , 120/208V.  
Entry is through the sides of the enclosure.

Unit provides direct connection of branch circuit wiring from a lighting panelboard to the outlet panels

**Outlets:** (2) 100A., 120/208V. Posi-Lok™ panels  
(3) 200A., 120/208V. Posi-Lok™ panels  
(1) 400A., 120/208V. Posi-Lok™ panel

**Listing:** UL Listed





[www.unionconnector.com](http://www.unionconnector.com)

Jacksonville, FL

Tel: 631-753-9550 Fax: 631-753-9560