

# Emergency Power Ready Solutions

Advanced Power Technologies

## What Will Happen When:

- Bad Weather interrupts your power?
- Utility power is unavailable?
- Your Standby Generator Set won't operate?
- Experienced personnel aren't available to connect the Rental generator set?



## APT Can:

- Assist in evaluation of your facility power requirements.
- Provide one of our many standard solutions quickly and affordably.
- Recommend a custom solution, designed to increase the reliability of the power supply of you facility.




## Generator Quick Connection Available Series

### Tap Box (WM Series)

 Rating: 120-480V, 400 - 2400A +

### Switchboard (FS Series)

 Rating: 480V, 800 – 4000A +

## Generator Quick Connection Tap Box (WM Series)

- Designed to allow facility to be emergency power ready
- Provides a quick, safe connection of a mobile generator set
- Minimize unplanned power outages
- Eliminate chaos & hazards of connecting temporary generator



## WM Series Enclosure Features

- Wall-mountable
- UL® 50 Listed
- Carbon steel NEMA Type 3R enclosure for outdoor installation.
- Powder coated ANSI 61 gray.
- Corrosion resistant hardware.
- Black quarter turn latch with padlocking provisions.
- Integral lower flip door allowing access to connect the mobile generator cables.
- Bottom door mechanically interlocked with front door to prevent unauthorized access to receptacles when not in use.



## WM Series Standard Product Features

- Silver plated copper bus with a 1000A/sq. in. current density
  - Connects the permanent facility load feeders to Cam-Lok® E1016 compatible receptacles
- Color coded, male Cam-Lok® E1016 compatible single pole receptacles with attached covers connect customer supplied female Cam-Lok® E1016 cables from the tapbox to mobile generator.
  - A phase – Brown
  - B phase – Orange
  - C phase – Yellow
  - Neutral – White
  - Ground – Green



## WM Series Optional & Custom Features

- Larger than 2400A load support
- Mechanical lugs for permanent facility side connection
- Circuit breakers
- Kirk Key for interlocking with facility circuit breakers
- Phase rotation monitoring



## Generator Quick Connection Switchboard (FS Series)

### ■ Primary components

- CAM technology receptacles
- Square D Masterpact® NW circuit breaker
- Kirk Key for site interlocking

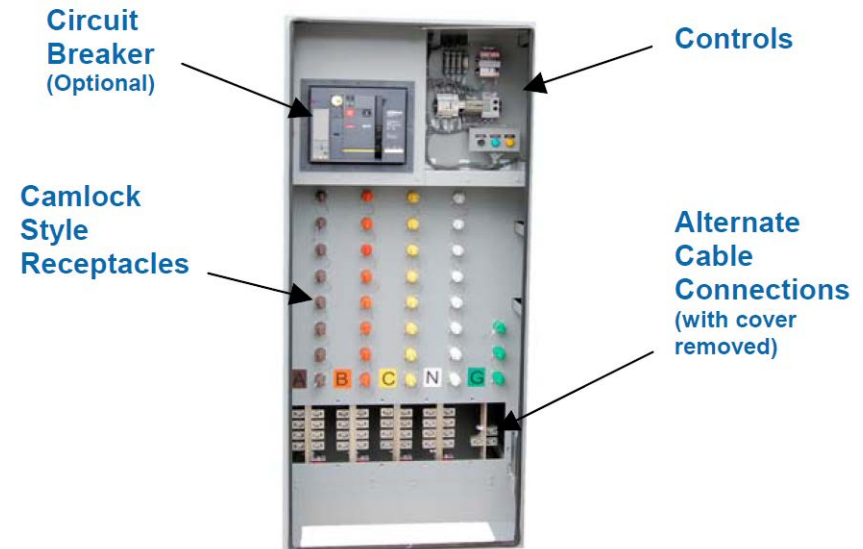


## FS Series Enclosure Features

- Type 3R enclosure for outdoor installation.
- Three types of enclosures are available:
  - Carbon steel with galvanized base.
  - Type 304 stainless steel.
  - Type 5052 aluminum.
- All types are powder coated ANSI 61 gray.
- All hardware will be stainless steel.
- Door handles will be padlockable.
- Door will include an integral lower flip door (allows the main door to be closed with the mobile generator cables connected).
- Anti-condensation heaters with thermostat/humidistat.
  - Requires 120V site power.

## FS Series Standard Product Features

- Pad-mountable
- Rating: 480V, 800 – 4000A+, 65kAIC
- Color coded, male Cam-Lok® E1016 compatible single pole receptacles with cover.
  - A phase – Brown
  - B phase – Orange
  - C phase – Yellow
  - Neutral – White
  - Ground – Green
- Busbar connections with NEMA standard hole pattern and mechanical lugs are available in the event a mobile genset is used that does not have cables with Cam-Lok® E1016 compatible plugs.
- Silver plated copper bus



## FS Series Circuit Breaker

- Square D Masterpact NW fixed mounted low voltage insulated case circuit breakers, UL 489 listed
- Circuit Breaker Sizes
  - 500kW – 800 Amp
  - 1000kW – 1600 Amp
  - 2000kW – 3000 Amp
  - Larger breakers available
- Circuit Breaker Features
  - Micrologic® 5.0 trip unit with long time, short time and instantaneous settings.
  - Integral Kirk Key mechanism for interlocking with normal source.
  - 120VAC shunt trip for tripping circuit breaker
    - if phase rotation is incorrect
    - if ground fault logic is configured for tripping on ground fault.



## FS Series Monitoring

- Ground Fault monitoring
  - Can be easily set to trip the circuit breaker on ground fault or provide alarm indication only.
  - Configured at the factory per your order.
    - Can easily be changed in the field.
- Phase rotation monitoring
  - Insures mobile generator set phase rotation matches that of facility.
  - Provides visual assurance of correct phasing.
  - Prevents circuit breaker from being closed if phase rotation is incorrect.
  - Instructions to easily fix incorrect phase rotation are on a label inside each panel.

