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**Engineering Specifications**  
**Automatic Power Factor Correction System**  
**IDLP - Demand Line *Plus* Series**

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**Applicable Standards:**

UL listed, NEMA, IEEE/ANSI, NEC

**Ratings:**

480 V and 600 V; up to 4,800 KVAR

**Cabinet:**

NEMA 1 or 3R, Match and line up switch gear style, 12 ga Steel frames, 14 ga panels, stainless steel hinges, ANSI #70 (light gray) finish, pad lockable handle (NEMA 1), NEMA 3R cabinets furnished with Stainless steel 1/4 turn fasteners, and lockable controller window. Standard cabinet is 36" deep, 90" high, and each modular section is 24" wide. Modules are added as required to suit application.

**Capacitor Cells:**

- Assembled using Industrial Rated Capacitor Cells
- 480 V (5 to 100 KVAR); and 600 V (10 to 100 KVAR)

**General Construction:**

- Stage fuses:
  - UL recognized, designed specifically for capacitor applications.
  - Rated 600 VAC, 200KAIC.
  - Fast acting and current limiting; allows normal clearing action of capacitors while protecting from catastrophic failures.
  - Front mounted for easy replacement.
  - Three phase fusing standard.
- Stage contactor:
  - Sized for KVAR stage requirements.
  - Three phase double break, block type rated for capacitor switching.
  - Meets or exceeds NEMA, IEC, UL, CSA, and VDE standards.
- Control Wiring.
  - UL Listed, 600V. 18 AWG min.
- Inrush Coils:
  - Designed to minimize inrush currents during capacitor switching and reduce switching transients on the system.
- Copper Busing:
  - Standard Bracing 75Kaic, (optional 100Kaic)
  - Material: Tin Plated Copper.
- Electrical Door Interlock:
  - Safety feature prevents door from opening while main power is on.
- Control Transformer:
  - Meets or exceeds NEMA, ANSI, UL, and CSA standards.
  - Power rating 1 KVA.
- Automatic Power Factor Controller:
  - See separate specification page.

**Optional Equipment:**

- Blown fuse indicating lights:  
Illuminate after fuse operation.
- Molded Case circuit breaker:  
Thermal magnetic trip, sized for 1.55 times (min) nominal current to reduce nuisance tripping due to temporary overvoltages, tolerances, harmonic currents, etc.  
Standard interrupting ratings:  
400 - 600 A 35kaic; 800 - 1200 A 50kaic; 1600 - 2400 A 85kaic (consult factory for optional ratings.)
- Encased System Breaker:  
Thermal magnetic trip, sized for 1.55 times (min) nominal current to reduce nuisance tripping due to temporary overvoltages, tolerances, harmonic currents, etc.  
Standard interrupting ratings:  
400 - 800 A 65kaic; 1200 - 2000 A 65kaic; 2500 - 4000 A 100kaic (consult factory for optional ratings.)
- 100 KAIC bus bracing.
- Hand-Off-Auto stage switching.
- Current Transformers: Split core.
- Harmonic Filtering and Suppression. (See separate specification page)
- Metering.
- Custom System Design.