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**Engineering Specifications**  
**Automatic Power Factor Correction System**  
**AVC - Accu Var Plus Series**

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**Applicable Standards:**

NEMA, IEEE/ANSI, NEC

**Regulatory Approvals:**

UL 508, C-UL, C22.2 No. 14-M91, file E125703

CSA C22.2 No 190 File LR 58450-20

**Ratings:**

240 V; up to 300 KVAR

480 V and 600 V; up to 600 KVAR

**Cabinet:**

NEMA 12 or 4, dust tight electrical compartment with vented capacitor chamber, 12 ga cold rolled steel welded cabinet, 14 ga door panels, 3 point latch, stainless steel hinges, ANSI #70 (light gray) finish, key lock handle (NEMA 12), NEMA 4 cabinets furnished with Stainless steel padlockable drop handle, sun & rain shield, and lockable controller window. Cabinet size: 48"W x 24"D x 90"H.

**Capacitors:** Assembled using Industrial Rated Capacitor Cells

- 240 V ( 5 to 25 KVAR), 480 V ( 5 to 50 KVAR), 600V (10 to 50 KVAR)

**General Construction:**

- Stage fuses:
  - UL recognized, designed specifically for capacitor applications.
  - Rated 600 VAC, 200KAIC.
  - Fast acting and current limiting; allows clearing action of capacitors while protecting from catastrophic failures.
  - Bolts directly to fuse buss channel for easy replacement.
  - Three phase fusing standard.
- Stage contactor:
  - Three phase double break, block type rated for capacitor switching.
  - Meets or exceeds NEMA, UL, CSA, and VDE standards.
- G.F.C.I.
  - UL recognized GFCI to guard controller circuits against electric shock.
- Control Wiring.
  - UL style 1015, 600V -40°C to +105°C. CSA type TEW. 18 AWG min.
- Inrush Coils:
  - Designed to minimize inrush currents during capacitor switching and reduce switching transients on the system.
- Input Power Bus:
  - Standard bracing for 75 KAIC, (100 KAIC optional.)
  - Material: 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 interrupt ratings:  
400 - 600 A 35kaic, 800 - 1200 A 50kaic, (consult factory for optional ratings.)
- 100 KAIC bus bracing.
- Copper bussing.
- Loss of KVAR and lights.  
Illuminates both for blown fuse and at capacitor end of life.
- Hand-Off-Auto stage switching.
- UL Listed Service Entry Equipment.
- Current Transformers: Split core.
- Metering.
- Custom system design