

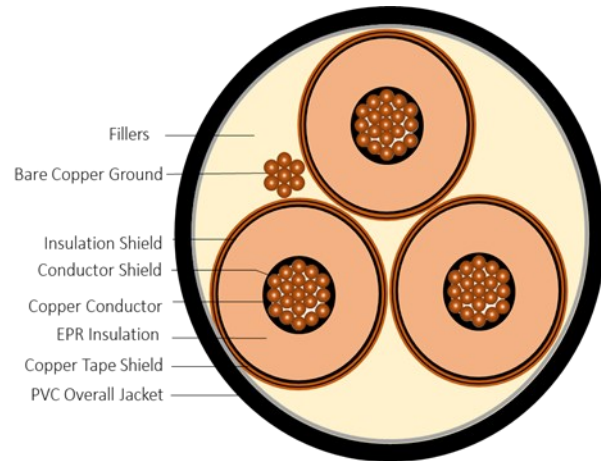
## EPR/CTS/PVC Power, Type MV-105, 35kV 100% 3 Conductor Un-Filled Copper - Silicone Free

### DESCRIPTION

The 3 Conductor MV-105 Power cables consist of a copper un-filled conductors, covered with ethylene propylene rubber (EPR), copper taped shield (CTS), and a polyvinyl chloride (PVC) jacket. These cables are used in industrial power circuits.

### APPLICATIONS

- In conduit, duct, free air, direct burial and raceways, primary installations include cable trays, and outdoor locations.
- Approved for Class I, Div. 2 industrial hazardous locations per NEC.
- Excellent sunlight resistance.
- For CT USE per UL 1072.
- Designed to operate continuously at a conductor temperature not exceeding
  - » 105°C for normal operations
  - » 140°C for emergency overload
  - » 250°C for short circuit



**SERIES G35AEP**

### CONSTRUCTION

|                                 |                                                                                                                                                                                                     |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>CONDUCTOR</b>                | Fully annealed bare copper (unfilled)<br>Class B compressed strand                                                                                                                                  |
| <b>STRAND SHIELD</b>            | Extruded thermoset semi-conducting<br>polymer over the conductor                                                                                                                                    |
| <b>INSULATION</b>               | Ethylene propylene rubber (EPR)                                                                                                                                                                     |
| <b>INSULATION<br/>SHIELD</b>    | Extruded thermoset semi-conducting<br>polymer over the insulation                                                                                                                                   |
| <b>PHASE<br/>IDENTIFICATION</b> | Color ribbons in each phase<br>(black-red-blue)                                                                                                                                                     |
| <b>SHIELD</b>                   | 5 mil annealed copper tape helically<br>applied with approximately 25%<br>overlap                                                                                                                   |
| <b>GROUND</b>                   | Uninsulated bare copper ground                                                                                                                                                                      |
| <b>FILLERS</b>                  | Non-hygroscopic fillers, as necessary<br>to obtain a circular cross-section                                                                                                                         |
| <b>JACKET</b>                   | Black Polyvinyl Chloride (PVC)                                                                                                                                                                      |
| <b>JACKET<br/>MARKING</b>       | 00000 FT LS CABLE XXXKCMIL (or<br>AWG) CU 3/C WITH GND 35KV 100%<br>INSUL LEVEL 345 MILS EPR/PVC JKT<br>MV-105 FOR CT USE (UL) SUN RES<br>DIR BUR MADE IN USA MM/DD/YYYY<br>(LIGHTNING BOLT SYMBOL) |
| <b>PACKING</b>                  | Non-returnable wood reels                                                                                                                                                                           |

### STANDARDS (Compliance)

|                    |                                                                                               |
|--------------------|-----------------------------------------------------------------------------------------------|
| <b>PERFORMANCE</b> | AEIC CS8<br>ASTM B3<br>ASTM B8<br>ICEA S-93-639/ NEMA WC74<br>ICEA S-97-682<br>UL 1072<br>NEC |
| <b>OTHER</b>       | EPA 40 CFR, Part 261<br>OSHA                                                                  |

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| SPECIFICATIONS        |                            |                         |                          |                   |                       |                  |                          |
|-----------------------|----------------------------|-------------------------|--------------------------|-------------------|-----------------------|------------------|--------------------------|
| Part Number           | Conductor Size (AWG/kcmil) | Conductor Diameter (in) | Insulation Diameter (in) | Ground Size (AWG) | Jacket Thickness (in) | Approx. O.D (in) | Approx. Weight (lbs/kft) |
| G35AEP-1ACB-3CG-T5Z-Z | 1/0                        | 0.362                   | 1.12                     | 4 AWG             | 0.105                 | 2.84             | 3,730                    |
| G35AEP-50CB-3CG-T5Z-Z | 500                        | 0.789                   | 1.56                     | 1 AWG             | 0.130                 | 3.85             | 9,075                    |

The dimensions and weights shown are approximate and subject to industry standards. Other designs available upon request.