

## **ETHYLENE-PROPYLENE RUBBER INSULATION (EPR) POWER CABLE, NON-SHIELDED, 2400V (5000V\*) TYPE MV-90, DRY, SINGLE CONDUCTOR**

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### **SCOPE:**

This specification covers Aetna Insulated Wire's standard construction for single conductor non-shielded power cables, Type MV-90, insulated with solid dielectric ethylene-propylene rubber to the 2400V level (EPR) to the 2400V level and with an optional jacket overall and a "dry" rating.

\*Note: NEC 2005 no longer recognizes non-shielded 5000V construction and only recognizes 2400V non-shielded with the specific constructions attributes included in this specification. These cables meet the current relevant ICEA and UL standards for 5000V non shielded cables.

### **PRODUCT SPECIFICATIONS AND RATINGS:**

- i) National Fire Protection Association (NFPA) 70: National Electric Code (NEC)
- ii) Underwriters Laboratories 1072 for Medium Voltage Power Cables
- iii) ICEA S-96-659/NEMA WC71 Nonshielded 2001V - 5KV Cables
- iv) See individual product sheets for specific listings and ratings.

### **APPLICATION:**

These cables comply with the exception notes of NEC Article 310.6 with respect to non-shielded cables above 2000V and NEC Table 310.63. Consequently where NEC requirements apply, this cable is suitable for use in dry locations at a continuous conductor operating temperature of 90°C, at an emergency overload conductor temperature of 130°C and at a short circuit conductor temperature of 250°C. Respecting the requirements for a "dry" location, these cables may be installed in duct or conduit or properly supported aerial installations.

### **CONSTRUCTION DATA:**

**Conductors** - The conductor consists of uncoated soft, copper strands meeting the requirements of ASTM B3. Unless otherwise specified the conductor will be supplied as Class B compact per ASTM B496.

**Conductor Shield** - The conductor shielding consists of an extruded semi-conducting layer meeting the requirements of the governing specifications above.

**Insulation** - The insulation is ethylene-propylene rubber (EPR) extruded concentrically and simultaneously over the conductor shield to the wall thickness as specified in the governing specifications listed and as shown on the individual product specification sheets.

**Jacket** - A sunlight and ozone resistant jacket of polyvinylchloride (PVC) or chlorinated polyethylene (CPE) is extruded over the insulation.

### **AVAILABLE OPTIONS:**

- a) Aetna 3742 non-halogen, flame resistant, low smoke, low corrosion, non toxic jacket.
- b) (-40°C) PVC jacket
- c) Linear Low Density jackets are available.