



C-L-X[®] Type MV-105 or MC-HL  

5/8kV Okoguard[®] Shielded Power Cable-Aluminum Sheath
 3 Okopact (Compact Stranded) Copper Conductors/105°C Rating
 5kV-133% or 8kV-100% Insulation Level
For Cable Tray Use-Sunlight Resistant-For Direct Burial



- A Uncoated (Compact Stranded) Copper Conductors
- B Extruded Semiconducting EPR Strand Screen
- C Okoguard Insulation (EPR)
- D Extruded Semiconducting EPR Insulation Screen
- E Phase Identification Tape
- F Three Copper Grounding Conductors
- G Uncoated Copper Shield
- H Fillers and Binder Tape
- J Impervious, continuous, Corrugated Aluminum C-L-X Sheath
- K Jacket-Yellow Okoseal

Insulation

Okoguard is Okonite's registered trade name for its exclusive ethylene-propylene rubber (EPR) base, thermosetting compound, whose optimum balance of electrical and physical properties is unequaled in other solid dielectrics. Okoguard insulation, with the distinctive red color and a totally integrated EPR system, provides the optimum balance of electrical and physical properties for long, problem free service.

Assembly

Type MV-105 conductors are assembled with fillers, three bare stranded grounding conductors and a binder tape into a round core. A continuously corrugated welded aluminum sheath (C-L-X) encases the cable core. The C-L-X sheath is protected with a low temperature yellow Okoseal[®] jacket. The impervious, continuous, corrugated aluminum C-L-X sheath provides complete protection against moisture, liquids and gases in addition to its excellent mechanical strength. In addition, the aluminum CLX sheath exceeds the equipment grounding requirements of NEC Section 250.118 and 250.122, and can be used as the equipment grounding conductor in non-HL areas. The Okoseal jacket allows the cable to be direct buried in the ground, embedded in concrete or areas subjected to corrosive atmospheres.

Applications

C-L-X power cables are recommended as an economical alternate to a wire in conduit system. They are designed specifically for use as feeders or branch circuits in industrial and utility power distribution systems. C-L-X power cables may be installed in both exposed and concealed work, wet and dry locations, directly buried in the earth, or embedded in concrete. They may be installed on metal racks, troughs, in cable trays or secured to supports not greater than 6 feet apart.

C-L-X Type MC-HL cables are also approved for Classes I, II, and III, Division 1 and 2 and Class I, Zones 1 and 2 hazardous locations - NEC Articles 501, 502, 503 and 505.

Specifications

Conductors: Uncoated copper compact stranded per ASTM B-496.

Strand Screen: Extruded semiconducting EPR strand screen meets or exceeds electrical and physical requirements of ICEA S-93-639/NEMA WC74 and UL 1072.

Insulation: Okoguard meets or exceeds the electrical and physical requirements of ICEA S-93-639/NEMA WC74 and UL 1072. The insu-

lated conductors are tested in accordance with AEIC CS8.

Insulation Screen: Extruded semiconducting EPR insulation screen per ICEA S-93-639/NEMA WC74, AEIC CS8 and UL 1072.

Shield: 5 mil uncoated copper tape helically applied with 12.5% nominal overlap.

Phase Identification: Color coded (black, red, blue) polyester ribbon laid longitudinally under the copper shield tape.

Grounding Conductors: Three uncoated copper in accordance with UL 1072.

Assembly: Cabled with fillers and ground wires in the interstices, binder tape overall.

Sheath: Close fitting, impervious, continuous, corrugated aluminum C-L-X per UL 1072; C-L-X is recognized as a grounding conductor by NEC.

Jacket: A low temperature, sunlight resistant, yellow PVC jacket in accordance with UL 1072. Other color jackets are available.

UL Listed as type MV-105 or MC-HL, sunlight resistant for use in cable tray, and for direct burial in accordance with UL 1072 & 2225. CSA Listed to C68.10.

Product Features

- Triple tandem extruded, all EPR system.
- Complete prepackaged, color coded, factory tested wiring system.
- Okoguard C-L-X cables meet or exceed all recognized industry standards (UL, AEIC, NEMA/ICEA, IEEE).
- Passes the vertical tray flame test requirements of IEEE 383 and 1202, UL 1072, ICEA T-29-520 (210,000 BTU/hr.).
- Complies with NEC Articles 300.50 and 310.10(F) for direct burial.
- Complies with NEC Articles 501, 502, 503 and 505 for hazardous locations.
- Continuous sheath provides grounding safety.
- Excellent corona resistance.
- Screens are clean stripping.
- Exceptional resistance to "treeing".
- Minimum installation temperature of -40°C.
- Improved Temperature Rating.
- Three symmetrical grounding conductors for PWM/VFD and other modern AC drive/motor applications.
- ABS listed as CWCMC Type MC-HL.
- CSA listed as FT4, SR, HL and LTGG (-40°C).

