TECK 90 (MINUS 40°C) 600 TO 1000 VOLT, XLP INSULATION, ARMORED POWER CABLE, SINGLE AND MULTI-CONDUCTOR

SCOPE:
This specification covers Aetna Insulated Wire's standard construction for single and multi-conductor Teck 90 (-40°C) HL 600-1000 V armored power cables insulated with cross-linked polyethylene (XLP), the insulated conductors cabled with a ground wire and the assembly covered with an inner polyvinyl chloride (PVC) jacket, encased in interlocked armor and with a final protective polyvinyl chloride (PVC) jacket overall.

PRODUCT SPECIFICATIONS AND RATINGS:
a) Canadian Electrical Code (CEC), Part 1
b) CSA C22.2 No. 131 Type Teck 90 Cable
c) ICEA S-95-658/NEMA WC70 Nonshielded 0-2 kV Cables
d) CSA C22.2 No. 38 Thermoset-Insulated Wires and Cables
e) For ratings see the individual product specification sheets.

APPLICATION:
All cables covered under this specification are suitable for 600V or 1000V operation at a maximum continuous conductor temperature of 90°C, an emergency overload temperature of 130°C and a short circuit condition of 250°C.
Type Teck 90 cables are recognized by the CEC, Part 1, meet all the requirements therein and are certified to the relevant CSA standards. In addition the cables comply in all respects with the referenced ICEA standards. The cables are intended for use in industrial applications for power and, lighting and control circuits, in pulp and paper mills, mines and industrial plants. Teck cables are recommended for severe operating conditions, in wet and dry locations, installed in corrosive environments and are resistant to mechanical abuse and ozone attack. They may be installed in racks, trays, ladders and cable troughs. The cables have an FT-4 flame rating and are also rated for Hazardous Locations (HL).

CONSTRUCTION DATA AND SPECIFICATIONS:
Conductors - The conductors consist of uncoated soft, copper strands meeting the requirements of ASTM B3. Unless otherwise specified the conductor shall be supplied as Class B compressed per ASTM B8.

Insulation - The insulation is cross-linked polyethylene (XLP) extruded concentrically over the conductor to the wall thickness, as specified.

Conductor Coding - Phase identification, where applicable, is provided by a number code on each insulated conductor.

Grounding Conductor - In a single conductor cable the ground conductor is a serving of concentric uncoated bare copper wires applied helically over the insulated conductor. In mutli-conductor assemblies, one stranded uncoated bare copper ground wire will be located in one of the outer interstices.

Assembly - The assembly of multi-conductor cables is done by cabling together the required number of conductors and the ground wire with a left hand lay and a suitable number of fillers to give the core a round cross section. A binder tape is applied.

Inner Jacket - Over the cable core an inner polyvinyl chloride (PVC) jacket is extruded.

Armor - Over jacketed core an interlocking armor of either aluminum or galvanized steel is applied per the governing specification.

Overall Jacket - A protective sunlight and ozone resistant jacket of polyvinyl chloride (PVC), suitable for installation in temperatures down to -40°C, is extruded for a tight fit over the interlocked armor.

AVAILABLE OPTIONS:
a) Custom ground configurations
b) UL compliant for Dual Rating
c) Aetna 3742 non-halogen, flame resistant, low smoke, low corrosion, non toxic jacket.

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