CONSTRUCTION

**Conductor**
- Class B compressed stranded copper
  - in accordance with ASTM B3 and ASTM B8

**Options**
- Class B compact stranded -8000 Series Aluminum -ACM
- Class B compact stranded copper

**Conductor Shield**
- Extruded semi-conducting thermosetting polymeric layer

**Insulation**
- No-lead EPR (Ethylene Propylene Rubber)
  - Thickness: 0.22 inches (5.59mm) - nominal
  - Insulation level: 133%
  - 105°C rated

**Insulation Shield**
- Extruded Semi-conducting thermosetting polymeric layer
- CSA B8.10 - Shield Removal/termination requirements are printed on the surface
- Phase identification as per ICEA Method 3, using printed circuit numbers
- Meets requirement of ICEA but built to CSA standards

**Copper Tape Shield**
- Helically wrapped 5 mil copper tape with 25% overlap

**Bonding Conductor**
- Class B compressed stranded bare copper
  - in accordance with ASTM B3 and B8

**Fillers**
- Non-wicking, non-hygroscopic

**Overall Jacket**
- Red PVC (optional colours available)
  - Nominal Thickness: No.2 AWG to 250 kcmil = 0.11 inches (2.79mm)
    - 350 kcmil to 750 kcmil = 0.14 inches (3.56mm)

**Typical Print Legend**
- (CSA) SOUTHWIRE (NESC) #P# 3/C [AWG or #kcmil] CU 220 EPR 15KV 133% INS LEVEL 25% TS SUN RES TC-ER 105° FT4 (-40°C) LTGG RoHS YEAR [SEQUENTIAL METER MARKS]
## TABLE 2 - ENGINEERING SPECIFICATIONS

<table>
<thead>
<tr>
<th>HVTC Product Code</th>
<th>Maximum Pulling Tension</th>
<th>DC Resistance @ 25°C</th>
<th>AC Resistance @ 90°C-60 Hz (triplex formation)</th>
<th>Inductance L</th>
<th>Capacitance C</th>
<th>Inductive Reactance @ 60Hz (triplexed)</th>
<th>Capacitive Reactance @ 60Hz (triplexed)</th>
<th>Positive - Sequence Impedance*</th>
<th>Zero - Sequence Impedance*</th>
<th>Short Circuit Current (each phase conductor) @ 60Hz</th>
<th>Allowable Ampacities in Ventilated Cable Tray †</th>
<th>Allowable Ampacities on Directly Buried in Earth ‡</th>
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<tbody>
<tr>
<td>CU220F70-002</td>
<td>1583</td>
<td>7084</td>
<td>0.162</td>
<td>0.203</td>
<td>0.665</td>
<td>0.1172</td>
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<td>0.423</td>
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<td>0.1124</td>
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<td>14209</td>
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* Calculations are based on 5 mil 25% over lapping copper tape shield / Conductor temperature of 90°C / Shield temperature of 45°C / Earth resistivity of 100 ohms-meter
† Ampacities are based on Table D17N of the 2015 Canadian Electrical Code Part I (40°C Ambient Air Temperature, indoor installation)
‡ Ampacities are based on Table D17E of the 2015 Canadian Electrical Code Part I
*** For use in cable trays, exposed run and hazardous locations as per the limitations in the Canadian Electrical Code Part I, particularly Table 19.

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