Measuring temperature exceeding 2000°F.

Cable setup prior to flame test.

Okotherm CIC 600 volt cables are defined as "fire resistant" by having passed the conditions stated in operating voltage. Electrically insulating ceramic-like ash that is capable of maintaining a 600 volt phase to phase including 2000°F for three hours. When exposed to a fire, the Okotherm CIC insulation becomes an electrically insulating ceramic-like ash that is capable of maintaining a 600 volt phase to phase operating voltage.

For specified area applications, Okotherm CIC cables are available with a low smoke, zero halogen jacket to ensure product safety.

**ENGINEERING NOTES**

Okotherm CIC 600 volt power, control, and instrumentation cables are used in systems where, in the event of a fire, circuit integrity is required for a period of time in order to maintain or safely shut down the process. Fire resistance is determined by compliance to the IEC 60331-21 circuit integrity fire test. Depending upon the cable design, Okotherm CIC cables are capable of maintaining circuit integrity based on qualification to the IEC standard, parts 11 and 21, for temperatures and times up to and including 2000°F for three hours. When exposed to a fire, the Okotherm CIC insulation becomes an electrically insulating ceramic-like ash that is capable of maintaining a 600 volt phase to phase operating voltage.

Okotherm CIC 600 volt cables are defined as "fire resistant" by having passed the conditions stated in IEC 60331-21 which include the following:

- Test voltage is maintained throughout the test
- No failure of any of the 2A fuse
- No evidence of dielectric breakdown
- No conductor rupture

For specified area applications, Okotherm CIC cables are available with a low smoke, zero halogen jacket to ensure product safety.

**MANUFACTURED OKOTHERM CABLES**

**POWER & CONTROL**

Okotherm CIC Fire Resistant Cable
- 600V Control Cable - Type MC C-L-X, Aluminum Sheath
  - Tin or Nickel Coated Copper Conductors
  - Alum C-L-X Sheath - Coded per ICEA
  - Conductor Rating: 90°C Wet or Dry Rating

Okotherm CIC Fire Resistant Cable
- 600V Power Cable - Type TC-ER, Aluminum Sheath
  - Tin or Nickel Coated Copper Conductors
  - 3 Tin or Nickel Coated Copper Conductors

Okotherm CIC Fire Resistant Cable
- 600V Control Cable - Type MC H-L C-L-X, Aluminum Sheath
  - Tin or Nickel Coated Copper Conductors
  - Alum C-L-X Sheath - Coded per ICEA
  - Conductor Rating: 90°C Wet or Dry Rating

**INSTRUMENTATION**

Okotherm CIC Fire Resistant Cable
- 600V Instrumentation Cable - Type MC H-L C-L-X, Aluminum Sheath
  - Tin or Nickel Coated Copper Conductors
  - Alum C-L-X Sheath - Coded per ICEA
  - Conductor Rating: 90°C Wet or Dry Rating

Okotherm CIC Fire Resistant Cable
- 600V Power & Control Tray Cable - Type TC-ER Cable
  - Tin or Nickel Coated Copper Conductors
  - Alum C-L-X Sheath - Coded per ICEA
  - Conductor Rating: 90°C Wet or Dry Rating