TH Series - Linear Heat Detection

STANDARD FEATURES

- UL listed & FM approved
- Available in three temperature models
- Available in 328, 656, 1,640 & 3,280ft reels
- Available in 164ft reel for TH68 model only
- Low cost & fast response
- Compatible with HCA Series FACP & CZM Module
- UL Listed for up to 35ft (10.6m) spacing
- 92.1 ohms/conductor/km maximum resistance
- Localized overheat detection
- Not affected by RFI or EMC
- ATEX certified - zener barrier in hazardous areas
- Ambient temperatures range:
  TH68: -40F (-40C) ~ 139F (59C)
  TH88: -40F (-40C) ~ 171F (77C)
  TH105: -40F (-40C) ~ 198F (92C)
- Alarm temperatures:
  TH68: 155F (68C)
  TH88: 190F (88C)
  TH105: 221F (105C)
- Section replacement of sensor cable after alarm
- Continuously monitors 100% of sensor length

APPLICATIONS

- Underfloor (server rooms)
- Mechanical / Electrical control rooms
- Hazardous areas
- Warehouse
- Parking structures
- Cable trays
- Tunnel protection

DESCRIPTION

The TH series digital linear temperature sensing cable is manufactured as 2 twisted and tensioned tin plated copper coated steel conductors. Each conductor is then extruded with a temperature sensitive polymer before the application of an outer sheath of flame retardant high temperature material.

OPERATION

At a pre-determined temperature, inner insulation softens allowing the two conductors to come into contact with each other to produce the required alarm signal. Any break in conductors at temperatures below the alarm threshold generates an open circuit trouble signal. No minimum length exposure is required for the alarm rating.

PRODUCT LISTINGS

- UL & ULC Listed
- FM Approved
- CSFM Listed

SPECIFICATION

<table>
<thead>
<tr>
<th>Feature</th>
<th>TH68</th>
<th>TH88</th>
<th>TH105</th>
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</thead>
<tbody>
<tr>
<td>External Diameter</td>
<td>0.138 inch (3.5 mm)</td>
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<tr>
<td>Dielectric Withstand</td>
<td>500VDC</td>
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<tr>
<td>Conductors</td>
<td>Tin plated copper coated steel</td>
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<tr>
<td>Electrical Rating</td>
<td>30VAC (42.4VDC) 10 A</td>
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<tr>
<td>Conductor Resistance</td>
<td>Min: 88.1 ohms per 1000m</td>
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<td>Max: 92.1 ohms max per 1000m</td>
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<tr>
<td>Conductor Extrusion</td>
<td>Temperature Sensitive Polymer</td>
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<tr>
<td>External Sheath</td>
<td>Color coded polymer Lead &amp; Cadmium free / UV resistant</td>
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<tr>
<td>Tensile Strength</td>
<td>1,700 min (N/mm2)</td>
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<tr>
<td>Capacitance</td>
<td>TH68: 150pF/m</td>
<td>TH88: 97pF/m</td>
<td>TH105:88pF/m</td>
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<tr>
<td>Inductance</td>
<td>TH68: 960nH/m</td>
<td>TH88: 570nH/m</td>
<td>TH105:1060nH/m</td>
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<tr>
<td>Impedance</td>
<td>TH68: 80 ohms</td>
<td>TH88: 75 ohms</td>
<td>TH105: 110 ohms</td>
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<tr>
<td>Min. Bend Radius</td>
<td>4.0 inch (100 mm)</td>
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