

Linear Heat Detector Cables HDC68 and HDC105

Instruction Sheet
R10169GB2



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Document number: R10169GB2
Published: 20.10.2020

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1 Linear Heat Detector Cable HDC68

HDC Linear Heat Detector Cable HDC68 and HDC105 are used to monitor abnormal heat increase to prevent full fire event. Sensors located along the cable continuously detect heat changes unlike standard point detector. Alarm signal is generated when thermosensitive polymer insulation melts around the cable. The Alarm levels are **68 °C (HDC68) and 105 °C (HDC105)**. The cable is covered in two copper steel wires, which are individually insulated with polymer.

Cable Lengths:

Linear Heat Detection Cable HDC68 100M (FFS06435138)

Linear Heat Detection Cable HDC68 200M (FFS06435133)

Linear Heat Detection Cable HDC105 100M (FFS06435139)

Linear Heat Detection Cable HDC105 200M (FFS06435135)

1.1 Applications

- Pipelines
- Storage Tanks
- Cable Trays
- Aircraft Hangars
- Control Rooms
- Warehouses
- Bridges and Tunnels
- Mines
- Cooling Towers
- Escalators
- Power distribution apparatus: Transformers, Switch Gears

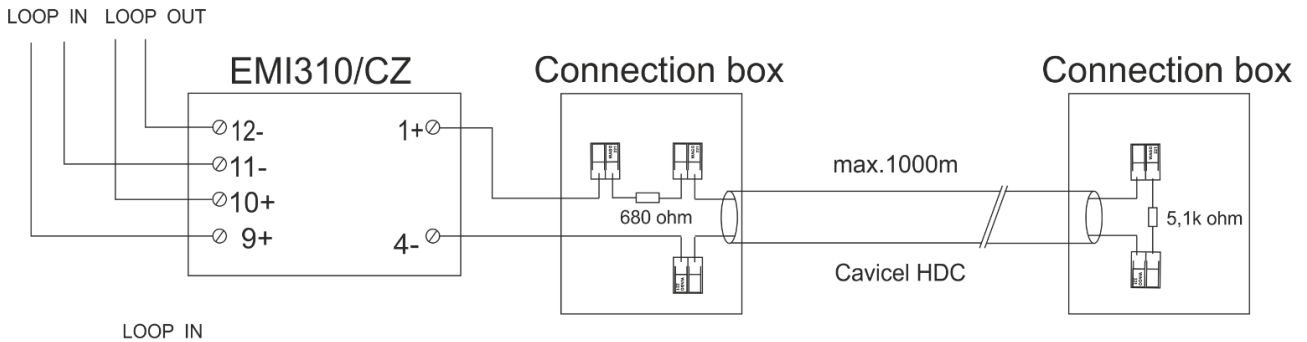
1.2 Features and Benefits

- Ease of installation and maintenance
- Fast substitution of the shorted circuit cable sector
- Suitable to any dangerous or difficult access areas
- Short response times
- Minimum false alarms
- Simple integration with fire extinguishing systems

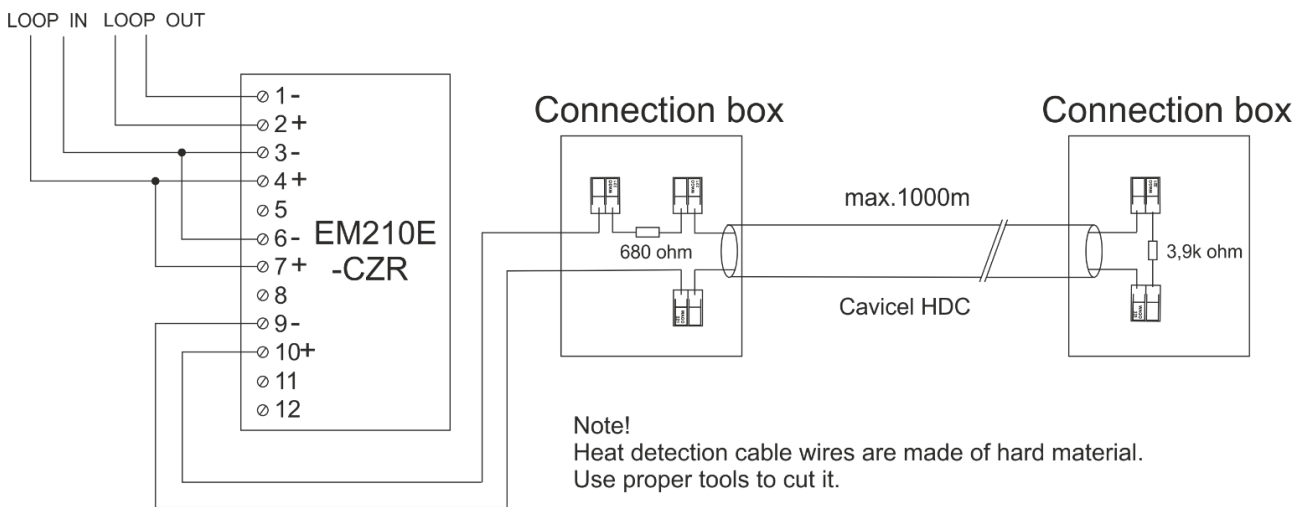
2 Cable Connection

Linear heat detection cable connection principles

ALC- loop

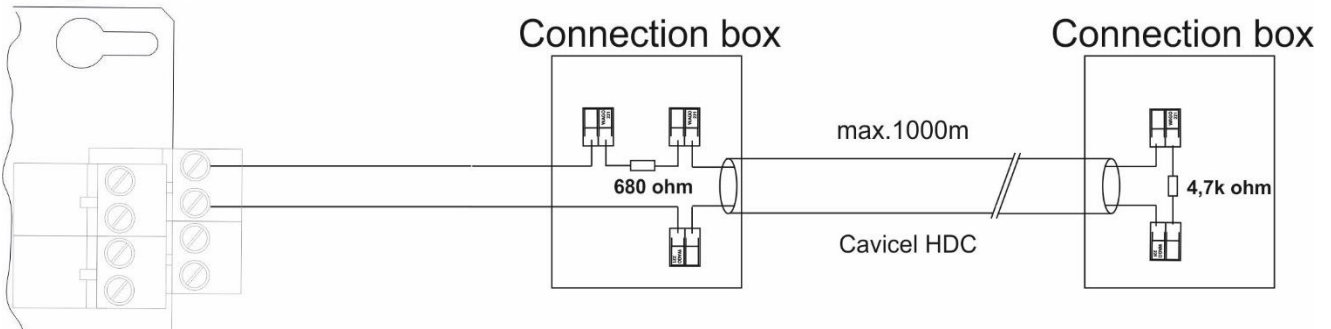


SLC- loop



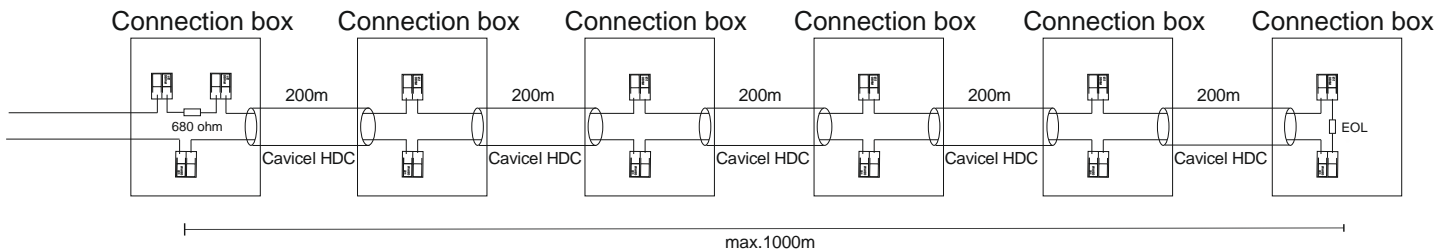
CLC

Configured as detection line



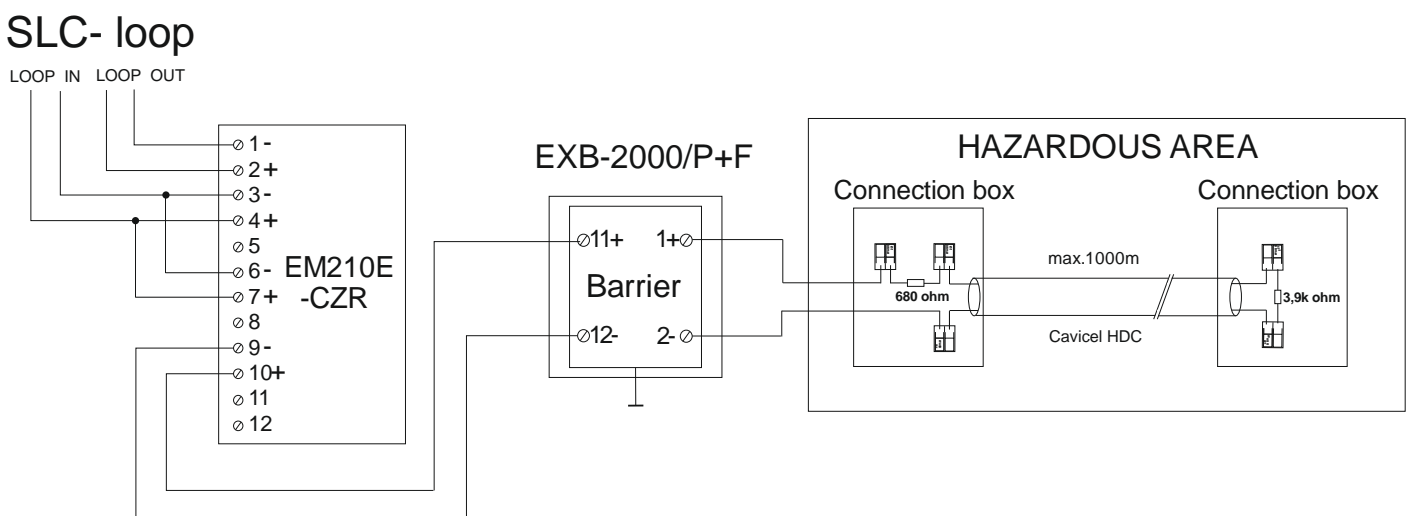
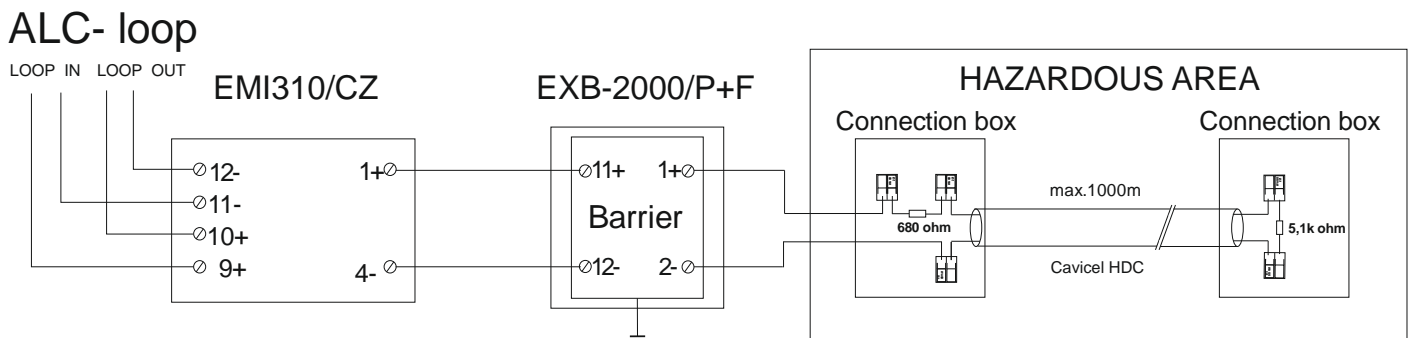
Cavicel HDC is delivered in max. 200m reels.

In case longer cable is needed the connections must be done on a connection box



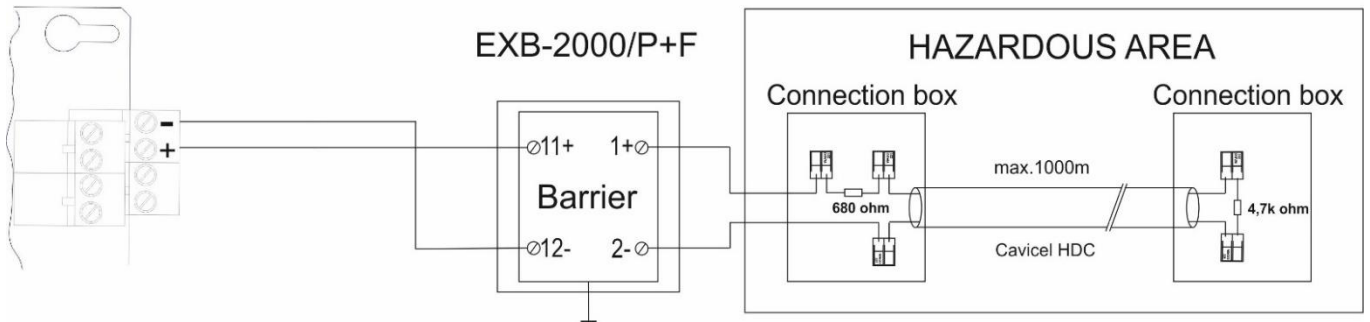
2.1 Hazardous Area Cable Connection

Linear heat detection cable IS-area connection principles



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Configured as Exi area detection line



3 Additional components



| | |
|---|-------------|
| Linear Heat Detection Junction box | |
| Product number | FFS00703903 |



| | |
|--|-------------|
| Linear Heat Detection Cable T-clips | |
| Product number | FFS06435137 |

4 HDC Cable installation

Linear Heat Detector Cables HDC68 and HDC105 are sensitive to heat and mechanical stress, which makes it important to pay attention to transportation, working environment temperature and maximum storage.

Working environment temperature shall not exceed **40°C (HDC68) or 50°C (HDC105)**.

It must be avoided to be close to heat sources; such as electric lamps, steam pipes, heaters or any heat producing. Crushing or pinching will injure cable.

4.1 Installation warnings

Linear Heat Detector cables HDC68 and HDC105 are individually tested prior to shipment to our factory.

Opening the coil pay attention to the spring effect caused by steel conductors.

- Do not bend the cable at 90-degree, minimum bending radius is 65 mm
- Do not use pliers or other hard tools to bend the cable
- Do not use nail type clips and do not give to the cable any mechanical impact
- Do not overtighten the fastener, it must allow the wire to expand at the temperature
- Do not paint the cable
- Do not directly connect the cable to main electrical supplies

The light sun ray's exposure can cause an increase of temperature of cable surface over the maximum working rating temperature admitted: for this reason, take a right protection in order to keep the cable within the maximum working temperature. If necessary to join HDC cables to achieve longer runs shall be joined by right crimping tools.