CTi LTex Addendum

Infrared sensor for application in hazardous areas



Operator's Manual - Addendum

Manufacturer's Declaration for the CTi LTex Measurement System

The CTi LTex sensing head can be used as a passive element in hazardous areas. The operator is responsible for verifying the classification of the Optris CTi sensing heads, according to EN 60079-0:2018+AC:2020/ EN 60079-11:2012, and EN 60079-15:2010 (category of simple electrical devices) on his own.
To verify that the CTi sensing head is a simple electrical device according to EN 60079-11 section 5.7, we hereby confirm the following technical data:

- **Inductance (available for the sensor cable only):**

  Inductance of the loops min. 0.55 mH/ km; max 0.56 mH/ km
  For a cable length of 15 m:
  Inductance of the loops min. 0.825 $*10^{-3}$ mH; max 0.84 $*10^{-3}$ mH

- **Capacitance:**

  Capacitance of the sensor cable:
  Capacitance lead/ lead min. 16.5 nF/ km; max. 17.9 nF/ km
  Capacitance lead/ rest min. 101.0 nF/ km; max. 103.4 nF/ km
  For a cable length of 15 m:
  Capacitance lead/ lead min. 0.2475 nF; max. 0.2685 nF
  Capacitance lead/ rest min. 1.515 nF; max. 1.551 nF
  Capacitance in the sensing head:
  C1 = Ceramic SMD Capacitor 6.8 nF +/- 20 %
  C2 = Ceramic SMD Capacitor 6.8 nF +/- 20 %

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Technical Data

Connection Diagram

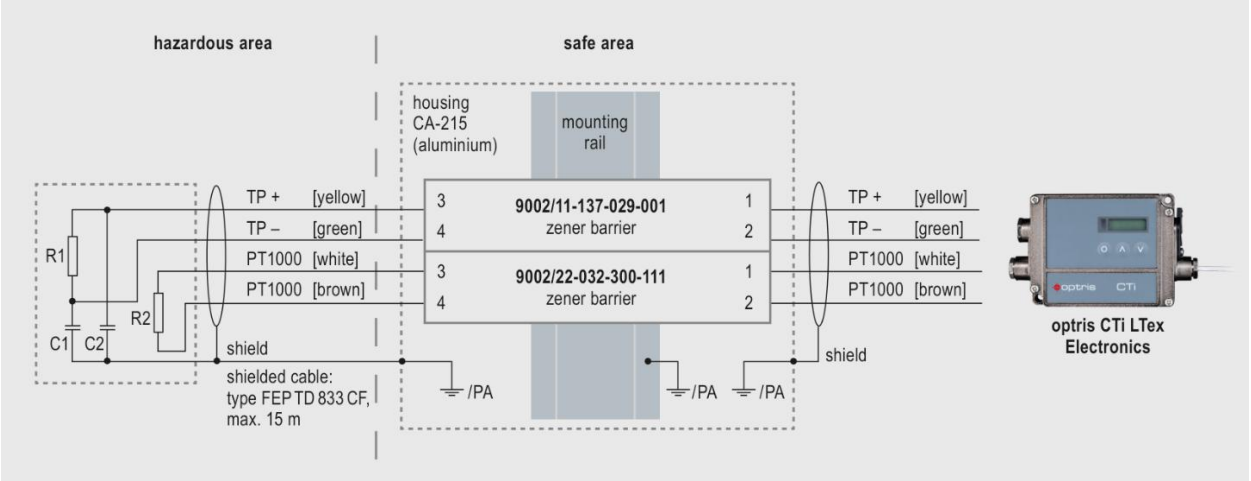


Figure 1: Connection diagram

For further information on the CTi LTex sensing head in relation to the appropriate components, contact our service department.

The CTi Ex system, including all associated barriers, is fully adjusted and calibrated at the factory. No additional calibration or adjustment is required prior to commissioning.

In case of a sensing head replacement, please order the corresponding part numbers from the spare parts list that were calibrated together with the Zener barrier. Please use the part numbers below and add the optics and cable specifications to your order.

LT / LThot (+ optics)	Cable Options
ACCTESHLT02 **(SF)**	CB3H - 3 m head cable
ACCTESHLT15 **(CF/SF)**	CB8H - 8 m head cable
ACCTESHLT22 **(CF/SF)**	CB15H - 15 m head cable
ACCTESHLT02H **(SF)**	
ACCTESHLT10H **(CF1/SF)**	

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