

## optris CT for applications in hazardous areas



### Features:

- Two-piece measuring system with active electronic for evaluation and passive IR receiver (sensing head)
- CTex sensing head can be installed as passive element in hazardous areas
- Energy limitation with appropriate zener barriers (STAHL) with approval for zone 1 (PTB 01 ATEX 2053/ E II (1/2) GD [EEx ia/ib] IIC/IIB)

### Technical data (zener barriers)<sup>1)</sup>

|                                        |                                                                                                                                                                                                                 |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Approvals:<br>Type 9002/22-032-300-111 | Europe (CENELEC):<br>for zone 1: PTB 01 ATEX 2053X<br>for zone 2: PTB 01 ATEX 2054X<br>IECEX PTB 08.0057X                                                                                                       |
|                                        | USA:<br>UL E81680V1S3                                                                                                                                                                                           |
|                                        | Canada:<br>CSA 1284580 (LR 43394)                                                                                                                                                                               |
| Classes, Divisions and Groups          | Europe (CENELEC):<br>for zone 1: E II (1/2) GD [EEx ia/ib] IIC/IIB<br>for zone 2: E II 3 GD EEx nA II T4                                                                                                        |
|                                        | USA:<br>I.S. circuits for: class I, II, III,<br>division 1, groups A, B, C, D, E, F, G<br>I.S. circuits for: class I, zone 0, group IIC<br>class I, division 2, groups A, B, C, D<br>class I, zone 2, group IIC |
|                                        | Canada:<br>I.S. circuits for: class I, groups A, B, C, D;<br>class II, groups E, F, G<br>class III<br>class I, division 2, groups A, B, C, D<br>class I, zone 2, groups IIC                                     |
| Installation                           | In zone 2, division 2 and in safe area                                                                                                                                                                          |
| Environmental rating                   | IP 67                                                                                                                                                                                                           |
| Ambient temperature                    | -20 °C ... 60 °C (-4 °F ... 140 °F)                                                                                                                                                                             |

### Concept/Scope of delivery

|                   |                                                                                                                                          |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Concept           | Classification of the optris CT sensing heads according to EN 60079-0/ EN 60079-11 (category of simple electrical devices) <sup>2)</sup> |
|                   | Intrinsically safe by limitation of the energy with two double zener barriers, type 9002/22-032-300-111 (R. STAHL AG)                    |
| Scope of delivery | CTLT – Sensor (optics 2:1, 15:1, 22:1) with cable length 3 m, 8 m or 15 m (3.3 ft, 16.4 ft, 49.2 ft) (selectable)                        |
|                   | Aluminum housing with mounting appliance for two zener barriers and CT electronics                                                       |
|                   | 2 zener barriers, type 9002/22-032-300-111 (R. STAHL AG) <sup>3)</sup>                                                                   |

<sup>1)</sup> Declaration of company R. Stahl AG

<sup>2)</sup> Verification by the operator

<sup>3)</sup> NOTE: The functionality and correct reading of the CT sensor can only be guaranteed if the recommended barriers are used.

