Ex-Certificate for LB 480

Requests for this Ex-approval have come from North America, Asia and Middle East. Especially in Canada new plants are being erected according to these standards.

This approval was issued by the CSA-Groupe in Canada.

The SENSseries LB 480 can be delivered with this approval as of now. In Camos simply select the standard ATEX-detector.

Important:

The production will be reorganized to the new rating plate in July 2016. Until then it is mandatory that you explicitly demand the CSA-approval in the order. Therewith it is assured that the LB 480 rating plate contains the CSA-marking as well.

Ex-Standards in North America

Two different official Ex-standards exists in parallel in North America.

1) NEC 500-503 / CEC 18
   (Class/Division/Group)
   - based on Standards from 1897
   - still used in most cases
   - most of it is pressure proofed enclosures
   - cable bushings via Conduits

2) NEC 505 / CEC 18
   (Class/Zone/AEx)
   - based on IECEx
   - introduced in 1996
   - still a low portion
   - but with a rising trend especially in Canada
   - enables a terminal room in Ex-e
   - cable bushings with cable glands

1 NEC 505 = National Electrical Code, substitutional also for NEC 506
2 CEC 18 = Canadian Electrical Code
3 Conduits = Pipework system which carries the connection leads to the field devices
4 Ex-e = increased safety, in most cases used for the terminal room, hence no pressure proofed cable glands are necessary
Overview of the Ex-Markings

Examples:

1) Class I, Zone 1, AEx de IIC T4
2) Class I, Division 1, Group B, T5
3) II 2 G Ex de IIB T4 Zone 1

It is often not obvious from the customer specifications which standard we have to comply with. Here is a little help that illustrates which Ex-standard is required.

1) NEC 505, CEC 18 (based on IECEx)
   Criterion 1: combined marking of „Class + Zone“
   Criterion 2: marking „AEx“
   used in: Canada, USA, Asia, Middle East
2) NEC 500-503 + CEC 18
   Criterion 1: combined marking of „Class/Division“
   Criterion 2: marking „Group“
   used in: Canada, USA, Asia, Middle East
3) ATEX 94/9/EG or IECEx IEC 60079
   Criterion 1: „II 2 G“ or „II 2 D“

Which Approvals are available?

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Best regards

BERTHOLD TECHNOLOGIES GmbH & Co. KG
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Process Control