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Safety Instructions
Commubox FXA195

II (1) G [Ex ia Ga] IIC
II (1) D [Ex ia Da] IIIC

Endress+Hauser
People for Process Automation

Commubox FXA195

Table of contents

Associated documentation

This document is an integral part of the following Operating Instructions:

TI00404F/00

Supplementary documentation

Explosion-protection brochure: CP00021Z/11

The Explosion-protection brochure is available:
- In the download area of the Endress+Hauser website: www.endress.com -> Downloads -> Brochures and Catalogs -> Text Search: CP00021Z
- On the CD for devices with CD-based documentation

Manufacturer's certificates

UK Declaration of Conformity

Declaration Number:
UK_00248

The UK Declaration of Conformity is available:
In the download area of the Endress+Hauser website:
www.endress.com -> Downloads -> Declaration -> Type: UKCA Declaration -> Product Code: ...

UKCA type-examination certificate

Certificate number:
CML 21UKEX2443X

List of applied standards: See UK Declaration of Conformity.

Manufacturer address

Endress+Hauser SE+Co. KG
Hauptstraße 1
79689 Maulburg, Germany

Address of the manufacturing plant: See nameplate.

Other standards

Among other things, the following standards shall be observed in their current version for proper installation:
- IEC/EN 60079-14: "Explosive atmospheres - Part 14: Electrical installations design, selection and erection"
- EN 1127-1: "Explosive atmospheres - Explosion prevention and protection - Part 1: Basic concepts and methodology"

Extended order code

The extended order code is indicated on the nameplate, which is affixed to the device in such a way that it is clearly visible. Additional information about the nameplate is provided in the associated Operating Instructions.

Structure of the extended order code

FXA195	–	**********	+	A*B*C*D*E*F*G*..
(Device type)		*(Basic specifications)*		*(Optional specifications)*

* = Placeholder
At this position, an option (number or letter) selected from the specification is displayed instead of the placeholders.

Basic specifications

The features that are absolutely essential for the device (mandatory features) are specified in the basic specifications. The number of positions depends on the number of features available.
The selected option of a feature can consist of several positions.

Optional specifications

The optional specifications describe additional features for the device (optional features). The number of positions depends on the number of features available. The features have a 2-digit structure to aid identification (e.g. JA). The first digit (ID) stands for the feature group and consists of a number or a letter (e.g. J = Test, Certificate). The second digit constitutes the value that stands for the feature within the group (e.g. A = 3.1 material (wetted parts), inspection certificate).

More detailed information about the device is provided in the following tables. These tables describe the individual positions and IDs in the extended order code which are relevant to hazardous locations.

Extended order code: Commubox

The following specifications reproduce an extract from the product structure and are used to assign:
- This documentation to the device (using the extended order code on the nameplate).
- The device options cited in the document.

Device type

FXA195

Basic specifications

Position 1 (Approval)		
Selected option		Description
FXA195	G	ATEX+EAC+UK II (1) G [Ex ia Ga] IIC ATEX+EAC+UK II (1) D [Ex ia Da] IIIC

Optional specifications

No options specific to hazardous locations are available.

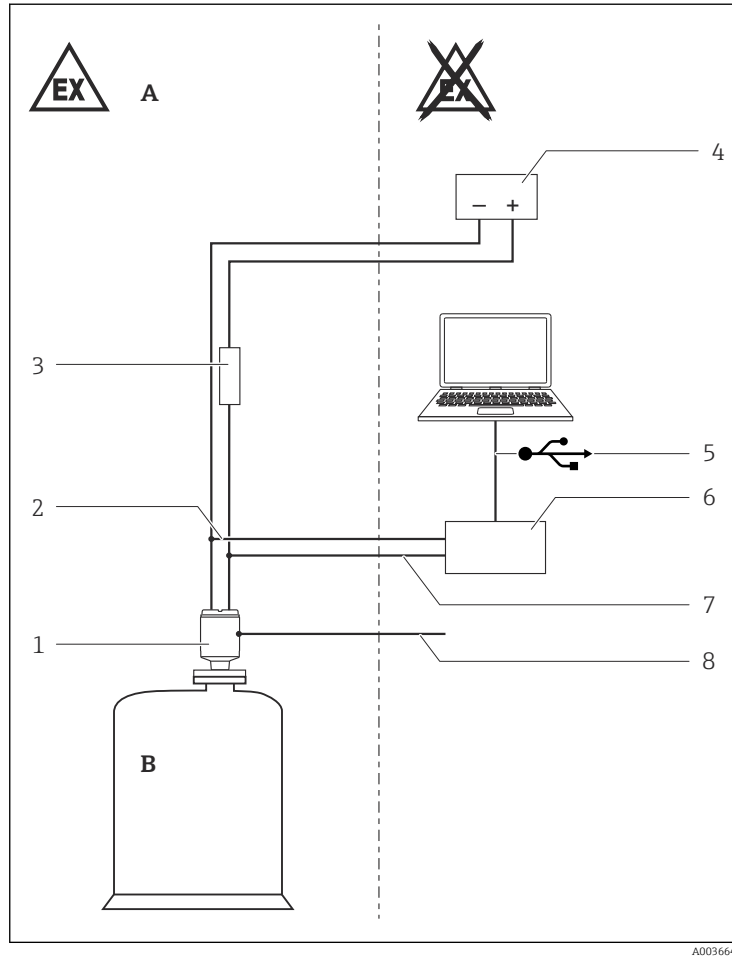
Safety instructions: General

- The device is intended to be used in explosive atmospheres as defined in the scope of EN IEC 60079-0 or equivalent national standards. If no potentially explosive atmospheres are present or if additional protective measures have been taken: The device may be operated according to the manufacturer's specifications.
- Staff must meet the following conditions for mounting, electrical installation, commissioning and maintenance of the device:
  - Be suitably qualified for their role and the tasks they perform
  - Be trained in explosion protection
  - Be familiar with national regulations
- Install the device according to the manufacturer's instructions and national regulations.

Safety instructions: Special conditions

The device may only be connected to SELV/PELV circuits (USB interface). Observe the relevant standards.

Safety instructions: Installation



1

A Zone 1, Zone 21
B Zone 0, Zone 20
1 Sensor
2 4 to 20 mA
3 Communication resistor 270 Ω
4 For passive device: auxiliary energy / PLC
5 USB
6 Commubox
7 [Ex ia Ga] IIC; [Ex ia Da] IIIC
8 [Ex ia Ga] IIC; [Ex ia Da] IIIC; for active device: separate power supply

- The device is an associated apparatus: Only use the device outside explosion hazardous areas.
- The intrinsically safe connections of the device may be routed to Zone 0 and Zone 20.
- There must be a distance of at least 50 mm between terminals of external intrinsically safe circuits and terminals or bare components of non-intrinsically safe circuits.
- Keep a minimum distance (air gap):
  - 3 mm between the bare components of the intrinsically safe circuit and metal enclosure components
  - 6 mm between bare components of intrinsically safe and non-intrinsically safe circuit
- The intrinsically-safe circuit is galvanically isolated from other circuits up to a peak value of the nominal voltage of 375 V.
- If an intrinsically safe circuit is connected to the device passes through dust explosion-hazardous areas of Zones 20 or Zone 21, make sure that the devices connected to this circuit meet the requirements of categories 1 D or 2 D and are certified accordingly.

Temperature tables

Permitted ambient temperature range:
$-20\,°C \leq T_a \leq +50\,°C$

Connection data

Power supply circuit	Communication circuit	
USB interface	Max. voltage:	$U_i \leq 30$ V
	HART resistor:	230 to 1 100 Ω

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