Safety Instructions
RIA15

JPN: Ex ib IIC T6

Document: XA01833K
Safety instructions for electrical apparatus for explosion-hazardous areas → 3

Endress+Hauser
People for Process Automation
RIA15

Table of contents

Associated documentation ........................................ 4
Supplementary Documentation ................................. 4
Manufacturer’s certificates ...................................... 4
Safety instructions ................................................ 5
Temperature tables ................................................ 6
Electrical connection data ....................................... 6
Associated documentation

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

**RIA15:**
Operating Instructions:
- BA01073K/09 or
- BA01170K/09 (HART option)

The Operating Instructions pertaining to the device apply.

Supplementary Documentation

The Explosion-protection brochure is available:
In the download area of the Endress+Hauser website:
[www.endress.com](http://www.endress.com) -> Downloads -> "Brochures and catalogs" ->
Text Search: CP00021Z

Manufacturer’s certificates

JPN certificate of conformity
Certificate number: CSAUK 19JPN001X

Affixing the certificate number certifies conformity with the following standards (depending on the device version):
JNIOSH-TR46-1:2015
JNIOSH-TR46-6:2015
Safety instructions

Explosion hazardous area zone 0, 1, 2
EPL Ga, Gb, Gc

Explosion hazardous area zone 1, 2
EPL Gb, Gc

Non-hazardous area

Associated intrinsically safe apparatus with max. electrical connection values (see tables)

Local potential equalization

Associated intrinsically safe apparatus with max. electrical connection values (see tables)

Connection without background illumination

Connection with background illumination

1 Loop power supply

2 Current supply 4...20 mA
Safety instructions: Installation

- Comply with the installation and safety instructions in the Operating Instructions.
- Install the device according to the manufacturer's instructions and any other valid standards and regulations.
- The indicator housing must be connected to the potential matching line.

Safety instructions: Special conditions

- Supply of indicators should be carried out through the intrinsically safe barriers with a certificate of conformity.
- The indicator must be installed so, that even in the event of rare incidents, an ignition source due to impact or friction between the enclosure and iron/steel is excluded.
- The type of protection for the process transmitter changes as follows when the devices are connected to certified intrinsically safe circuits of Category Ex ib: Ex ib IIC. When connecting an intrinsically safe Ex ib circuit, do not operate the process transmitter at Zone 0 / EPL Ga.
- The permitted category of the intrinsically safe circuit for the process transmitter depends on the type of protection of the respective associated apparatus used.

<table>
<thead>
<tr>
<th>Type</th>
<th>Temperature class</th>
<th>Ambient temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>RIA15</td>
<td>T6</td>
<td>−40 °C ≤ Ta ≤ +60 °C (-40 °F ≤ Ta ≤ +140 °F)</td>
</tr>
</tbody>
</table>

Temperature tables

Electrical connection data

<table>
<thead>
<tr>
<th>RIA15</th>
<th>Electrical connection data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply</td>
<td></td>
</tr>
<tr>
<td>(terminals + and - or + and LED or + and auxiliary terminal [□])</td>
<td>U_i ≤ 30 V DC</td>
</tr>
<tr>
<td></td>
<td>I_i ≤ 200 mA</td>
</tr>
<tr>
<td></td>
<td>P_i ≤ 900 mW</td>
</tr>
<tr>
<td></td>
<td>C_i = negligible</td>
</tr>
<tr>
<td></td>
<td>L_i = 35.1 µH</td>
</tr>
</tbody>
</table>

Type of protection

<table>
<thead>
<tr>
<th>Type of protection</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ex ib IIC T6 Gb</td>
<td>RIA15</td>
</tr>
</tbody>
</table>