ABB ABB Series Service Manual

AI931S

1. Description

AI931S ABB 3KDE175511L9310,Analog Input Module

3. Product Information

AI931S ABB 3KDE175511L9310,Analog Input Module

The remote S900 I/O system can be installed in non-hazardous areas or directly in Zone 1 or Zone 2 hazardous area depending on the selected system variant. S900 I/O communicates with the control system level using the PROFIBUS DP standard. The I/O system can be installed directly in the field, therefore the costs for marshalling and wiring are reduced.

The system is sturdy, error-tolerant and easy to service. Integrated disconnection mechanisms allow replacement during operation, meaning that there is no need to interrupt the primary voltage in order to exchange the power supply units.

S900 I/O type S. For installation in hazardous area Zone 1. For connecting intrinsically safe field devices installed in Zone 2, Zone 1 or Zone 0.

AI931S Analog Input (AI4H-Ex), passive inputs for 0/4...20 mA.

Features and benefits

- ATEX Certification for installation in Zone 1
- Redundancy (Power and Communication)
- Hot Configuration in Run
- Hot Swap functionallity
- Extended Diagnostic
- Excellent configuration and diagnostics via FDT/DTM
- G3 – coating for all components
- Simplified maintenance with auto-diagnostics
- Passive inputs for 0/4...20 mA
- Short and break detection
- Electrical isolation between input / bus and input / power
- Common return for all inputs
- 4 channels
- Transmission of HART frames via the fieldbus
- Cyclic HART variables

General info

Article number 3KDE175511L9310

Type Analog Input

Number of channels 4

Signal type 4...20 mA

HART Yes

SOE N/A

Redundancy No

Intrinsic safety Yes

Mechanics S900

Environment and certification

CE mark Yes

Hazardous Location ATEX Zone 1

Corrosive atmosphere ISA-S71.04 G3

Climatic operating conditions Relative humidity max. 93 % +/- 3 % at 40°C

Max ambient temperature -20 °C...60 °C

RoHS compliance DIRECTIVE/2011/65/EU (EN 50581:2012)

WEEE compliance DIRECTIVE/2012/19/EU

WEEE category Small Equipment (No External Dimension More Than 50 cm)

Dimensions

Width 20 mm (0.79 in.)

Depth 104 mm (4.09 in.)

Height 104 mm (4.09 in.)

Weight 0.13 kg (0.28 lbs.)