

# LOOP PARTITOR

## self-powered

# ELITs 1 - ELITs 2

IP20

CE

CONVERTER

### Type

- ▶ The ELITs solves common point problems that may occur on measure loops, and also helps to prevent rejections of inducted disturbances on the cables.
- ▶ The ELITs insulates sensors or transmitters from process receivers (PLCs, data takers, etc.)

SP<sub>US</sub> Listed

Installation in ATEX / IECEx area 2  
Installation in division 2 cFMus



### Functions

- ▶ 1 or 2 insulated meas. channels
- ▶ Insulation input / output
- ▶ Transfer ratio 1 / 1
- ▶ High transmission accuracy
- ▶ High load impedance
- ▶ Self supplied by the input signal
- ▶ Reduced dimensions

### Marking:

CE

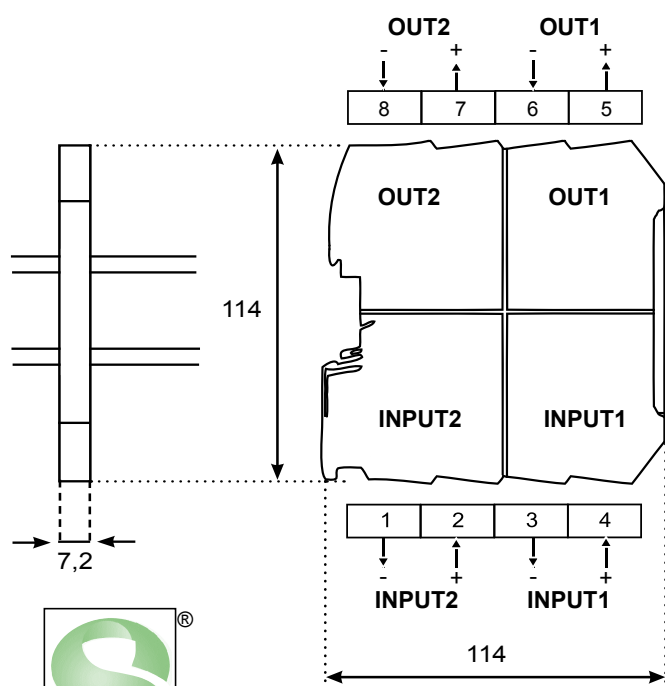
SP<sub>US</sub>

Ex

II 3 G Ex nA IIC T4 Gc  
Class I, Div.2, Groups A, B, C, D T4

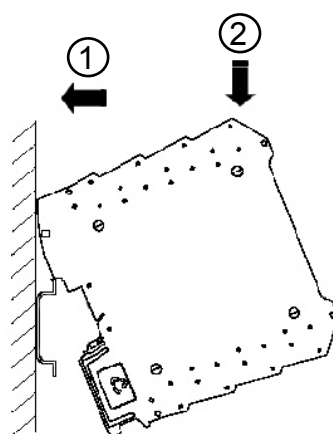
## DIMENSIONS, WIRING

**ELITs: dimensions:** 7.2 x 114 x 114 mm

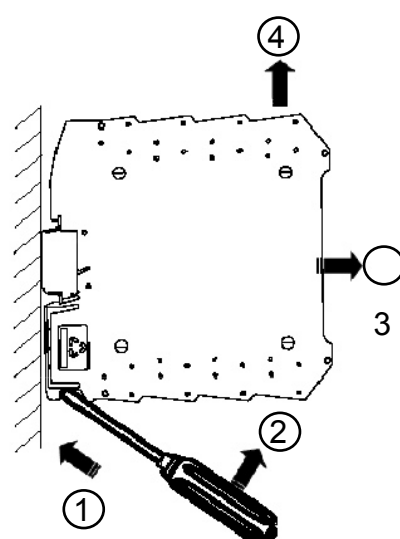


The friendly interface

### Mounting



### Unmounting



CA  
C0/138

# TECHNICAL FEATURES AT 23°C

|                   |                                                               | <b>ELITs 1</b>                                                                                      | <b>ELITs 2</b>                                                                                      |
|-------------------|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| <b>INPUT</b>      | Number of channels                                            | <b>1 channel</b>                                                                                    | <b>2 channels</b>                                                                                   |
|                   | Current                                                       | 0..4..20..50 mA                                                                                     | 0..4..20..50 mA                                                                                     |
|                   | Internal voltage drop at 20mA                                 | $\leq 1.5 \text{ V}$                                                                                | $\leq 1.5 \text{ V}$                                                                                |
|                   | Load loss                                                     | $I \times L_r + 1.5 \text{ V}$                                                                      | $I \times L_r + 1.5 \text{ V}$                                                                      |
|                   | Max. voltage drop (output loop open)                          | $U_e = 18.5 \text{ VDC}$                                                                            | $U_e = 18.5 \text{ VDC}$                                                                            |
| <b>OUTPUT</b>     | Impedance in $\Omega$ at 20 mA                                | $L_r + 75 \Omega$                                                                                   | $L_r + 75 \Omega$                                                                                   |
|                   | Number of channels                                            | <b>1 channel</b>                                                                                    | <b>2 channels</b>                                                                                   |
|                   | Current                                                       | 0..4..20..50 mA                                                                                     | 0..4..20..50 mA                                                                                     |
|                   | Max load ( $L_r$ in $\Omega$ ) admissible at 20 mA            | 700 $\Omega$                                                                                        | 700 $\Omega$                                                                                        |
|                   | Power supply                                                  | Self-powered by the input loop                                                                      | Self-powered by the input loop                                                                      |
| <b>GENERALS</b>   | Nominal response time (0 to 90%)                              | < 1 ms                                                                                              | < 1 ms                                                                                              |
|                   | Accuracy at nominal conditions at 20mA                        |                                                                                                     |                                                                                                     |
|                   | Grade                                                         | 0.1 % at $L_r = 0 \Omega$                                                                           | 0.1 % at $L_r = 0 \Omega$                                                                           |
|                   | Temperature influence                                         | $\pm 0.01 \text{ \% / } ^\circ\text{C}$ for $L_r \leq 700 \Omega$                                   | $\pm 0.01 \text{ \% / } ^\circ\text{C}$ for $L_r \leq 700 \Omega$                                   |
|                   | $L_r$ : load resistance influence                             | $\pm 0.05 \text{ \% / } 100 \Omega$ for $L_r \leq 700 \Omega$                                       | $\pm 0.05 \text{ \% / } 100 \Omega$ for $L_r \leq 700 \Omega$                                       |
|                   | Temperatures                                                  |                                                                                                     |                                                                                                     |
|                   | Operating temperature                                         | -25 to +70°C                                                                                        | -25 to +70°C                                                                                        |
|                   | Storage temperature                                           | -40 to +85 °C                                                                                       | -40 to +85 °C                                                                                       |
|                   | Others                                                        |                                                                                                     |                                                                                                     |
|                   | Conversion ratio                                              | 1 / 1                                                                                               | 1 / 1                                                                                               |
| <b>MECHANICAL</b> | Insulation Input/output and bet. channels                     | 2.5 Kv 50Hz 1mn                                                                                     | 2.5 Kv 50Hz 1mn                                                                                     |
|                   | Condense free dampness                                        | 85 %                                                                                                | 85 %                                                                                                |
|                   | Compliance with standards                                     | EMC 2014/30/UE<br>IEC 61000-6-4 rejection<br>IEC 61000-6-2 immunity<br>( < 2% of the measure range) | EMC 2014/30/UE<br>IEC 61000-6-4 rejection<br>IEC 61000-6-2 immunity<br>( < 2% of the measure range) |
|                   | Electrical safety                                             | EN 61010-1<br>CSA C22.2 14-13<br>UL 508 17th ed.                                                    | EN 61010-1<br>CSA C22.2 14-13<br>UL 508 17th ed.                                                    |
|                   | ATEX 2014/34/UE area 2<br>IECEX area 2<br>Hazardous locations | EN 60079-0, EN 60079-15<br>IEC 60079-0, IEC 60079-15<br>CSA C22.2 213<br>ANSI/ISA 12.12.01          | EN 60079-0, EN 60079-15<br>IEC 60079-0, IEC 60079-15<br>CSA C22.2 213<br>ANSI/ISA 12.12.01          |
|                   | Dimensions H x L x D                                          | 114 x 7.2 x 114 mm                                                                                  | 114 x 7.2 x 114 mm                                                                                  |
|                   | Tightening                                                    | Symmetrical DIN rail                                                                                | Symmetrical DIN rail                                                                                |
|                   | Housing                                                       | self-extinguishing case of PBT                                                                      | self-extinguishing case of PBT                                                                      |
|                   | Tightness                                                     | Housing / terminals IP 20                                                                           | Housing / terminals IP 20                                                                           |
|                   | Terminals                                                     | Screwed connections for flexible or rigid 2.5 mm <sup>2</sup> wires                                 | Screwed connections for flexible or rigid 2.5 mm <sup>2</sup> wires                                 |
|                   | Weight                                                        | 63 g                                                                                                | 78 g                                                                                                |

*This instrument is dedicated to industrial applications. It has to be mounted in an electrical switchbox, or equivalent.*

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