

# Intrinsic safety converter BXNT

- Approval [EEx ia] IIC ATEX II (1) G/D
- Main power 230 V AC
- Input and output: 4-20 mA
- DIN rail mounting



CE 0081  II (1) G/D

## FUNCTION

This converter (input s.i., output non s.i.) with galvanic insulation allows powering of measuring loop or conversion of analogue signal from a transmitter (passive or active) installed in an hazardous area.

## TECHNICAL FEATURES

|                                                             |                                                                                                     |
|-------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| Measuring loop                                              | 1                                                                                                   |
| Main power                                                  | 230 V AC $\pm 10\%$ / 48 ... 62 Hz<br>(indicator of powered unit)<br>by a green LED on front board) |
| Consumption                                                 | $\leq 2.7$ W                                                                                        |
| Mounting                                                    | In safe area<br>Input: s.i. - Output not s.i.                                                       |
| Loop powered<br>For transmitter, 2 wires, active or passive | $\geq 15$ V DC with current of 21 mA                                                                |
| Input signal<br>from hazardous area                         | 0/4-20 mA                                                                                           |
| Output signal<br>In and to safe area                        | 0/4-20 mA                                                                                           |
| Input impedance                                             |                                                                                                     |
| Current                                                     | $50 \Omega \pm 2\%$                                                                                 |
| Voltage                                                     | $> 2$ M $\Omega$                                                                                    |
| Load resistance                                             |                                                                                                     |
| Current                                                     | $\leq 800$ W                                                                                        |
| Voltage                                                     | $\geq 10$ kW                                                                                        |
| Accuracy                                                    | $\leq 0.2\%$ of F. S.                                                                               |
| Linearity                                                   | $\leq \pm 0.1\%$                                                                                    |
| Drifts                                                      |                                                                                                     |
| Voltage powering                                            | $\leq \pm 0.01\%$ / % Ualim                                                                         |
| Output resistance                                           | $\leq \pm 0.01\%$ / 100 $\Omega$                                                                    |
| Temperature influence                                       | $\leq 150$ ppm / $^{\circ}\text{C}$                                                                 |
| Response time                                               | $\leq 350$ ms                                                                                       |
| Galvanic insulation between<br>Input / Output / Supply      | 2500 V AC / 50 Hz                                                                                   |
| Installation                                                | In safe area                                                                                        |
| Case                                                        | In ABS                                                                                              |
| Mass                                                        | 200 g                                                                                               |
| Storage temperature                                         | $-25 \dots +70$ $^{\circ}\text{C}$                                                                  |
| Operating temperature                                       | $-20 \dots +60$ $^{\circ}\text{C}$                                                                  |
| % R. H.                                                     | 5 ... 95 % (without condensing)                                                                     |
| Connectors                                                  | Plug-in, clamp terminals                                                                            |
| Fitting                                                     | Rail acc. EN 50022                                                                                  |



Pression - Température

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Intrinsic safety converter  
BXNT

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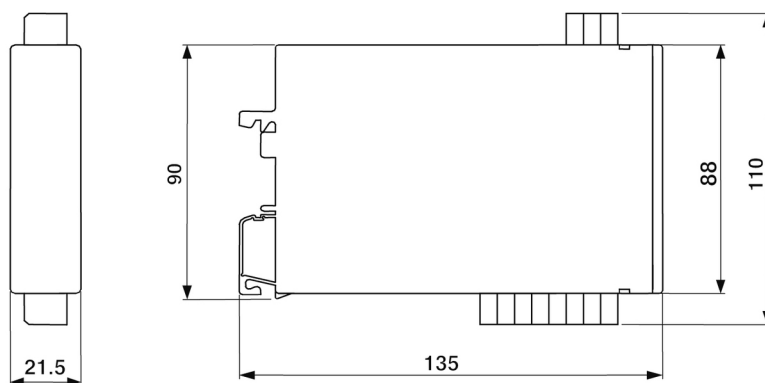
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**CERTIFICATES:**

|                   |                                                                                                                           |
|-------------------|---------------------------------------------------------------------------------------------------------------------------|
| CEM               | EN/CEI 61326 & CEI 61000-6-2                                                                                              |
| DBT               | EN/CEI 61010-1                                                                                                            |
| Intrinsic safety  | EN/CEI 60079-11 ; EN/CEI 60079-0<br>[Ex ia] I or [Ex ia] IIC or [Ex ia] IIB<br>[Ex iaD] I or [Ex iaD] IIC or [Ex iaD] IIB |
| ATEX certificate  | LCIE 02 ATEX 6104X                                                                                                        |
| IECEX Certificate | IECEX LCI 09.0013X                                                                                                        |

**DIMENSIONS****CODE NUMBER AND REFERENCE**

| Code    | Reference                    | Description                                                                    |
|---------|------------------------------|--------------------------------------------------------------------------------|
| 235 100 | BXNT / 230 V AC (48...62 Hz) | Converter Input s.i. / Output non s.i. – Approval [EEx ia] IIC ATEX II (1) G/D |