

## Zener Barrier ZbC2+

code: ZbC2+



**The Zener barrier ZbC2+ is a certified intrinsically safe interface .** It is used to connect a certified intrinsically safe device located in a potentially explosive atmosphere (Hazardous area) to a non-certified device that is in a safe area.

The Zener barrier prevents the transfer of unacceptably high energy from the safe area into the hazardous area. **The ZbC2+ Zener barrier contains two identical diode return barriers in a common housing** and it is designed for DIN rail mounting in a safe area.

### Technical data

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|--|---|
| <b>BARRIER TYPE AND DESIGN</b>                                 |   |
| Two identical Zener barriers ZB1 and ZB2 in the common housing |   |
| Positive polarity with return diode                            |   |
| <b>ELECTRICAL SPECIFICATION</b>                                |   |
| Nominal resistance $R_o$                                       | 310 $\Omega$  |
| Fuse rating  | 40 mA   |
| Series resistance  | $R_{s1} = 355 \Omega$ (terminals 1-5, terminals 3-7) <br> $R_{s2} = 42 \Omega$ (terminals 2-6, terminals 4-8) |
| Voltage drop across return diode                               | 0.8 V   |
| Working voltage (SAFE terminals)                               | max. 26 V at current of less than 10 $\mu$ A  |
| <b>GENERAL TECHNICAL DATA</b>                                  |   |
| Operating temperature range                                    | -20 to +60 $^{\circ}$ C   |
| Dimensions   | 22,5 x 114 x 100 mm   |
| Weight   | 125 g   |
| Warranty   | 3 years   |
| <b>DATA FOR APPLICATION IN CONNECTION WITH HAZARDOUS AREAS</b> |   |
| Directive conformity   | 2014/34/EU  |
| Compliance with standards                                      | EN IEC 60079-0:2018, EN 60079-11:2012   |
| Certificate  | FTZU 22 ATEX 0018X  |
| Identification marking   | EX II (3)G [Ex ic Gc] IIC   |
| Voltage $U_o$  | 29,4 V  |
| Current $I_o$  | 96 mA   |
| Resistance $R_o$   | min. 306 $\Omega$   |
| Capacitance $C_o$ + Induktance $L_o$                           | 120 nF + 2 mH or 60 nF + 4 mH   |
| Maximum safe voltage   | 250 V   |