

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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| BARRIER TYPE AND DESIGN | |
| Two identical Zener barriers ZB1 and ZB2 in the common housing | |
| Positive polarity with return diode | |
| ELECTRICAL SPECIFICATION | |
| Nominal resistance R_o | 310 Ω |
| Fuse rating | 40 mA |
| Series resistance | $R_{s1} = 355 \Omega$ (terminals 1-5, terminals 3-7) $R_{s2} = 42 \Omega$ (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 μ A |
| GENERAL TECHNICAL DATA | |
| Operating temperature range | -20 to +60 $^{\circ}$ C |
| Dimensions | 22,5 x 114 x 100 mm |
| Weight | 125 g |
| Warranty | 3 years |
| DATA FOR APPLICATION IN CONNECTION WITH HAZARDOUS AREAS | |
| 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 Ω |
| Capacitance C_o + Induktance L_o | 120 nF + 2 mH or 60 nF + 4 mH |
| Maximum safe voltage | 250 V |