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

BARRIER TYPE AND DESIGN	
Two identical Zener barriers ZB1 and ZB2 in the common housing	
Positive polarity with return diode	
ELECTRICAL SPECIFICATION	
Nominal resistance Ro	310 Ω
Fuse rating	40 mA
Series resistance	Rs1 = 355 Ω (terminals 1-5, terminals 3-7) Rs2 = 42 Ω (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 uA
GENERAL TECHNICAL DATA	
Operating temperature range	-20 to +60 °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 Uo	29,4 V
Current Io	96 mA
Resistance Ro	min. 306 Ω
Capacitance Co + Induktance Lo	120 nF + 2 mH or 60 nF + 4 mH
Maximum safe voltage	250 V