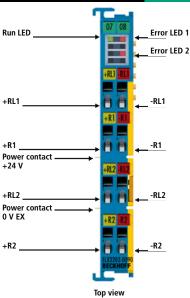
Analog input ELX3202-0090





ELX3202-0090 | 2-channel analog input terminal RTD for 2, 3 and 4-wire connection, 16 bit, Ex i, TwinSAFE SC



The ELX3202-0090 analog input terminal allows the direct connection of RTDs located in hazardous areas classified Zone 0/20 or 1/21. The circuitry of the ELX3202-0090 can operate sensors with 2, 3 and 4-wire technology. Linearisation is carried out over the entire freely selectable temperature range. By default the terminal is set to PT100 sensors with 3-wire technology. The ELX3202-0090 terminal indicates signal state and sensor malfunctions (e.g. wire breakage) by means of LEDs.

With the aid of the TwinSAFE SC technology (TwinSAFE Single Channel) it is possible to make use of standard signals for safety tasks in any network or fieldbus. To do this, EtherCAT I/Os from the areas of analog input, position measurement or communication (4...20 mA, incremental encoder, IO-Link, etc.) are extended by the TwinSAFE SC function. The properties typical for the signals and the standard functions of the I/O components are retained. TwinSAFE SC I/Os differ optically from standard I/Os by a yellow stripe on the front of the housing.

The TwinSAFE SC technology enables communication via a TwinSAFE protocol. These connections can be distinguished from the usual secure communication via Safety over EtherCAT.

The data from the TwinSAFE SC components is fed via a TwinSAFE protocol to the TwinSAFE Logic, where it can be used in the context of safety-relevant applications. Detailed examples confirmed/calculated by the TÜV SÜD for the correct application of the TwinSAFE SC components and the respective normative classifications can be found in the TwinSAFE application manual.

Technology temperature measurement Sensor types PT100, PT200, PT500, PT1000, Ni100, Ni120, Ni1000 resistance measurement (10 Ω4 kΩ), KT(Y) sensors Number of inputs 2 (differential) Connection method 2-, 3-, 4-wire (default: 2-wire) Temperature range -200+850 °C (PT sensors); -60+250 °C (Ni sensors), for further types and details see documentation Resolution 0.1 °C per digit Measuring current < 1 mA (depending on sensor and measuring range)		
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TwinSAFE SC Weight approx. 60 g Operating/storage temperature -25+60 °C/-40+85 °C Relative humidity 95 %, no condensation Vibration/shock resistance conforms to EN 60068-2-6/EN 60068-2-27	Current consumption E-bus	typ. 70 mA
Operating/storage temperature -25+60 °C/-40+85 °C Relative humidity 95 %, no condensation Vibration/shock resistance conforms to EN 60068-2-6/EN 60068-2-27	Special features	
95 %, no condensation Vibration/shock resistance conforms to EN 60068-2-6/EN 60068-2-27	Weight	approx. 60 g
Vibration/shock resistance conforms to EN 60068-2-6/EN 60068-2-27	Operating/storage temperature	-25+60 °C/-40+85 °C
	Relative humidity	95 %, no condensation
FNC: 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	Vibration/shock resistance	conforms to EN 60068-2-6/EN 60068-2-27
EMC immunity/emission conforms to EN 61000-6-2/EN 61000-6-4	EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Protect. class/installation pos. IP 20/see documentation	Protect. class/installation pos.	IP 20/see documentation
Approvals/Markings CE, ATEX, IECEx	Approvals/Markings	CE, ATEX, IECEx

Ex-Marking	II 3(1)G Ex ec [ia Ga] IIC T4 Gc II (1)D [Ex ia Da] IIIC I (M1) [Ex ia Ma] I Ex ec [ia Ga] IIC T4 Gc [Ex ia Da] IIIC [Ex ia Ma] I

further Ex components	
ELXxxxx	EtherCAT Terminals with intrinsic safe in- and output
ELXxxxx-0090	EtherCAT Terminals with intrinsic safe in- and output and TwinSAFE SC
СРХхххх	Multi-touch Panel PCs and multi-touch Control Panels for use in hazardous areas, Zone 2/22