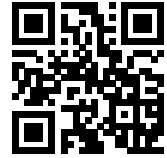


EL1918 | EtherCAT Terminal, 8-channel digital input, 24 V DC, TwinSAFE, TwinSAFE Logic



Top view

i Product status: Regular delivery

The EL1918 TwinSAFE component is a digital input terminal for sensors with potential-free contacts for 24 V DC. The EtherCAT terminal has eight fail-safe inputs, which are transmitted via FSoE to a TwinSAFE Logic-capable component.

The EL1918 has safety parameters to specifically adapt the functionality to the respective safety requirements. Thus, for example, test pulses can be configured with fine granularity for all eight channels in order to be able to connect as many types of sensors as possible.

The safety parameters are not stored directly on the component, but are transmitted to the input terminal via a TwinSAFE Logic-capable component when the safety application is started. This simplifies service procedures, because the component can simply be replaced. The safety-relevant parameters are transferred to the new component when the safety application is restarted.

A further highlight of the EL1918 is the integration of the functionality of the EL6910 TwinSAFE Logic. The EL1918 can also be used as a safety controller at any time. In the default case, the EL1918 is a simple input terminal, whose input signals are transmitted via FSoE to a TwinSAFE Logic-capable component. It can be used directly as a safety controller in order to process input signals directly in the terminal so as to forward only accumulated information to a TwinSAFE Logic, or a complete safety application can be implemented on the EL1918. The range of functions corresponds to that of the EL6910. The only difference is the limitation of the number of possible safe connections to 128. Apart from that, all the advantages of the new generation of safety controllers can be used (see EL6910 customizing, incremental download, analog value processing, etc.).

Special features:

- 8 safe inputs
- integrated TwinSAFE Logic (functionality similar to the EL6910)
- up to 128 safe connections
- fine granular configuration of the test pulses of the individual channels

Product information

Technical Data

| Technical data | EL1918 |
|------------------------------------|--|
| Connection technology | 1-/2-wire |
| Specification | link unit between safe input and output signals |
| Number of inputs | 8 |
| Protocol | TwinSAFE/Safety over EtherCAT |
| Fault response time | ≤ watchdog time (parameterizable) |
| Current consumption power contacts | see documentation |
| Current consumption E-bus | typ. 165 mA |
| Installation position | horizontal |
| Safety standard | EN ISO 13849-1:2015 (Cat. 4, PL e) and EN 61508:2010 (SIL 3) |
| Weight | approx. 50 g |
| IP protection rating | IP20 |

| Housing data | EL-12-16pin |
|-----------------------------------|---|
| Design form | HD (High Density) housing with signal LEDs |
| Material | polycarbonate |
| Dimensions (W x H x D) | 12 mm x 100 mm x 68 mm |
| Installation | on 35 mm DIN rail, conforming to EN 60715 with lock |
| Side by side mounting by means of | double slot and key connection |
| Marking | labeling of the BZxxx series |
| Wiring | solid conductors (e): direct plug-in technique; fine-stranded conductors (f) and ferrule (a): spring actuation by screwdriver |
| Connection cross-section | s*: 0.08...1.5 mm ² , st*: 0.25...1.5 mm ² , f*: 0.14...0.75 mm ² |
| Connection cross-section AWG | s*: AWG 28...16, st*: AWG 22...16, f*: AWG 26...19 |
| Stripping length | 8...9 mm |
| Current load power contacts | I _{max} : 10 A |

*s: solid wire; st: stranded wire; f: with ferrule