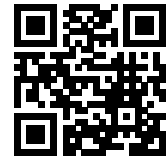


EL2912 | EtherCAT Terminal, 2-channel digital output, 24 V DC, 2 A, TwinSAFE, TwinSAFE Logic



Top view

i Product status: Regular delivery

The EL2912 TwinSAFE component is a digital output terminal. It has two fail-safe outputs with up to 2 A. The outputs are controlled by a TwinSAFE Logic-capable component via FSoE.

The EL2912 has safety parameters to specifically adapt the functionality to the respective safety requirements. Thus, for example, a test of the outputs can be configured with fine granularity in order to be able to detect cross-circuits among other things and to react appropriately.

In addition, standard outputs can be activated for the EL2912. As a result, corresponding standard outputs are available in parallel and internally ANDed with the safe outputs of the EL2912. The safe output signals, which are controlled by a TwinSAFE Logic, thus issue the safe release for the standard signals, which can then be triggered by the non-safety oriented control system independently of the cycle of the safety controller and FSoE. This allows faster switching times of the outputs, provided that the safety controller issues the necessary release for the output.

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 in this case 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 EL2912 is the integration of the functionality of the EL6910 TwinSAFE Logic. The EL2912 can thus also be used as a safety controller at any time. Thus, for example, the output signals can be prepared directly on the EL2912 before they are actually output. The range of functions corresponds to that of the EL6910. The only difference at this point 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:

- 2 safe outputs with 2 A

- integrated TwinSAFE Logic (functionality similar to the EL6910)
- up to 128 safe connections
- fine granular configuration of the test pulses of the individual output channels
- standard outputs can be activated with automatic ANDing with a safe output signal

Product information

Technical data

Technical data	EL2912
Connection technology	1-/2-wire
Number of outputs	2
Max. output current	2 A
Protocol	TwinSAFE/Safety over EtherCAT
Fault response time	≤ watchdog time (parameterizable)
Current consumption power contacts	load-dependent
Current consumption E-bus	typ. 200 mA
Installation position	horizontal
Safety standard	EN ISO 13849-1:2015 (Cat. 4, PL e) and EN 61508:2010 (SIL 3)
Weight	approx. 55 g
IP protection rating	IP20

Housing data	EL-12-8pin
Design form	compact terminal 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 conductor (e), flexible conductor (f) and ferrule (a): spring actuation by screwdriver
Connection cross-section	s*: 0.08...2.5 mm ² , st*: 0.08...2.5 mm ² , f*: 0.14...1.5 mm ²
Connection cross-section AWG	s*: AWG 28...14, st*: AWG 28...14, f*: AWG 26...16
Stripping length	8...9 mm
Current load power contacts	I _{max} : 10 A

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