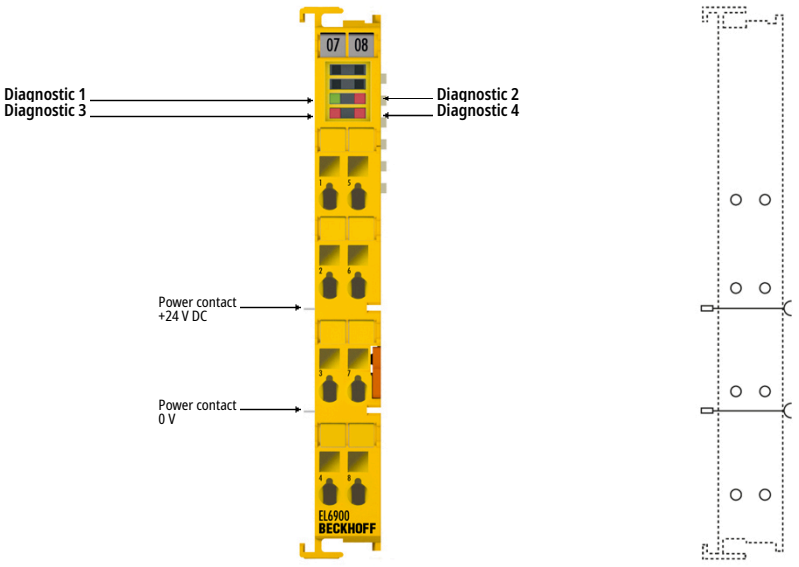
EL6900 | EtherCAT Terminal communication interface, TwinSAFE Logic

Image similar, may contain optional accessories



EL6900 | EtherCAT Terminal communication interface, TwinSAFE Logic

Product status: regular delivery

The EL6900 TwinSAFE component is a dedicated safety controller. It is used for the realization of safety-oriented applications on the basis of Boolean values. For this purpose, certified function blocks are available that enable the processing of safe input signals and the generation of safe output signals. The functionality of the function blocks ranges from simple Boolean functions such as AND and OR to complex function blocks for muting the safety function.

With the backup and restore function, the EL6900 additionally offers a simple way to exchange a safety controller in case of service.

The EL6900 can safely exchange data via FSoE with up to 128 safe communication devices.

The EL6900 is programmed with the TwinCAT 3 Safety Editor or with TwinCAT 2.

Special features:

- safety applications on the basis of Boolean values
- up to 128 safe connections
- up to 255 function blocks
- up to 32 TwinSAFE groups
- up to 8 users
- backup and restore support

Product information

Technical data

Technical data	EL6900
Specification	link unit between safe input and output signals
Protocol	TwinSAFE/Safety over EtherCAT
Cycle time	approx. 500 µs/according to project size
Fault response time	≤ watchdog time (parameterizable)
Current consumption power contacts	–
Current consumption E-bus	typ. 188 mA
Installation position	horizontal
Safety standard	DIN EN ISO 13849-1:2008 (Cat. 4, PL e) and EN 61508:2010 (SIL 3)
Weight	approx. 50 g
Protection rating	IP20
Ex marking	ATEX: II 3G Ex ec IIC T4 Gc IECEx: Ex ec IIC T4 Gc cFMus: Class I, Division 2, Groups A, B, C, D Class I, Zone 2, AEx ec IIC T4 Gc

Housing data	EL-12-8pin
Design form	compact terminal housing with signal LEDs
Material	polycarbonate
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 BZxxxx series
Wiring	solid conductor (s), flexible conductor (st) and ferrule (f): 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*: AWG28...14, st*: AWG28...14, f*: AWG26...16
Stripping length	8...9 mm
Current load power contacts	I_{max}: 10 A
Dimensions (W x H x D)	12 mm x 100 mm x 68 mm

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

Material Compliance

Material compliance	EL6900
REACH SVHC	no
POP	compliant
RoHS	compliant with exemption
RoHS exemption	7c-I: Lead-containing electrical and electronic components in glass and ceramic materials, excluding dielectric ceramics in capacitors
China-RoHS	www.beckhoff.com/china-rohs-io
CA Prop65	www.beckhoff.com/prop65
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