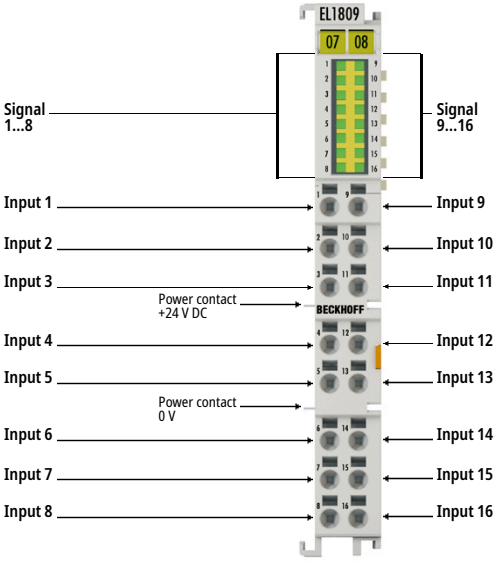
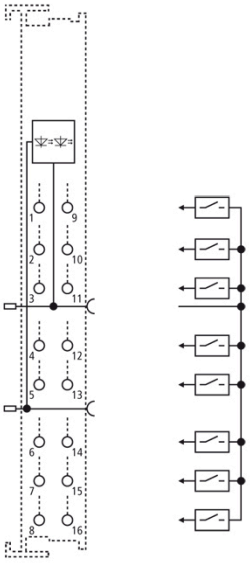
EL1809 | EtherCAT Terminal, 16-channel digital input, 24 V DC, 3 ms

Image similar, may contain optional accessories





EL1809 | EtherCAT Terminal, 16-channel digital input, 24 V DC, 3 ms

Product status: regular delivery

The EL1809 digital input terminal acquires the binary 24 V control signals from the process level and transmits them, in an electrically isolated form, to the higher-level automation unit. The EtherCAT Terminal has 16 channels, whose signal states are indicated by LEDs. The power contacts are connected through. With the EL1809, the reference ground for all inputs is the 0 V power contact.

Special features:

- input specification type 1/3
- no bouncing due to mechanical switches thanks to 3 ms input filter
- tool-free connection by direct plug-in technology for solid wire conductors
- space-saving use in the control cabinet
- direct connection of multi-channel sensors in 1-wire connection technology in the smallest space
- increased packing density with 16 connection points in the housing of a 12 mm terminal block

Product information

Technical data

Technical data	EL1809
Connection technology	1-wire

Technical data	EL1809
Specification	EN 61131-2, type 1/3
Number of inputs	16
Nominal voltage	24 V DC (-15%/+20%)
Signal voltage “0”	-3...+5 V (EN 61131-2, type 1/3)
Signal voltage “1”	11...30 V (EN 61131-2, type 3)
Input current	typ. 3 mA (EN 61131-2, type 3)
Input filter	typ. 3 ms
Distributed clocks	–
Current consumption power contacts	typ. 4 mA + load
Current consumption E-bus	typ. 100 mA
Electrical isolation	500 V (E-bus/field potential)
Configuration	no address or configuration setting
Special features	standard terminal with high number of channels for slow 24 V DC edges, direct plug-in technology
Weight	approx. 65 g
Operating temperature	-25...+60°C
Storage temperature	-40...+85°C
Relative humidity	95%, no condensation
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
Protect. rating/installation pos.	IP20/variable (see documentation)
Approvals/markings	CE, CCC, UL, ATEX, IECEx, cFMus
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-12-16pin
Design form	HD (High Density) 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 conductors (s): direct plug-in technology; fine-stranded conductors (st) and ferrule (f): spring actuation by screwdriver

Housing data	EL-12-16pin
Connection cross-section	s*: 0.08...1.5 mm², st*: 0.25...1.5 mm², f*: 0.14...0.75 mm²
Connection cross-section AWG	s*: AWG28...16, st*: AWG22...16, f*: AWG26...19
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	EL1809
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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