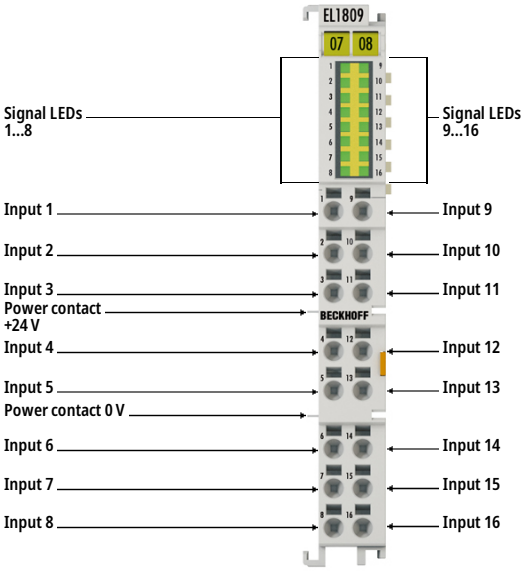
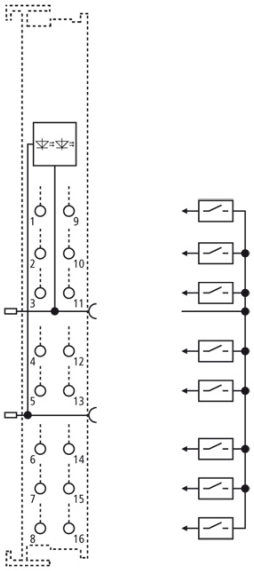
EL1809 | EtherCAT Terminal, 16-channel digital input, 24 V DC, 3 ms



Top view



Contact assembly

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 technique 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
Specification	EN 61131-2, type 1/3
Number of inputs	16

“0” signal voltage	-3…+5 V (EN 61131-2, type 1/3)
“1” signal voltage	11…30 V (EN 61131-2, type 3)
Input current	typ. 3 mA (EN 61131-2, type 3)
Input filter	typ. 3.0 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 technique
Weight	approx. 65 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
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Protect. rating/installation pos.	IP20/variable (see documentation)
Approvals/markings	CE, UL, ATEX, IECEx
Ex marking	ATEX: II 3 G Ex nA IIC T4 Gc IECEx: Ex ec IIC T4 Gc

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

Current load power contacts	I_{max}: 10 A

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