



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

The EL1809 digital input terminal acquires the binary control signals from the process level and transmits them, in an electrically isolated form, to the higher-level automation device. The EtherCAT Terminal contains 16 channels, whose signal states are displayed by LEDs. The terminal is particularly suitable for space-saving use in control cabinets. By using the single-conductor connection technique, a multi-channel sensor can be connected in the smallest space with a minimum amount of wiring. The power contacts are looped through.

For the EL1809, the reference ground for all inputs is the 0 V power contact. The conductors can be connected without tools in the case of solid wires using a direct plug-in technique.

The HD EtherCAT Terminals (High Density) with increased packing density feature 16 connection points in the housing of a 12 mm terminal block.

Technical data	EL1809
Connection technology	1-wire
Specification	EN 61131-2, type 1/3
Number of inputs	16
Nominal voltage	24 V DC (-15 %/+20 %)
"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)
Bit width in the process image	16 inputs
Configuration	no address or configuration setting
Conductor types	solid wire, stranded wire and ferrule
Conductor connection	solid wire conductors: direct plug-in technique; stranded wire conductors and ferrules: spring actuation by screwdriver
Rated cross-section	solid wire: 0.08...1.5 mm ² ; stranded wire: 0.25...1.5 mm ² ; ferrule: 0.14...0.75 mm ²
Special features	standard input terminal with high number of channels for slow or fast 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. class/installation pos.	IP 20/variable (see documentation)
Approvals	CE, UL, Ex