



## EL1809, EL1819 | HD EtherCAT Terminals, 16-channel digital input 24 V DC

The EL1809 and EL1819 digital input terminals acquire the binary control signals from the process level and transmit them, in an electrically isolated form, to the higher-level automation device. The EtherCAT Terminals each contain 16 channels, whose signal states are displayed by LEDs. The terminals are 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 and EL1819 EtherCAT Terminals, the reference ground for all inputs is the 0 V power contact. The versions have input filters with different speeds. 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	EL1819
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	15...30 V (EN 61131-2, type 3)	
Input current	typ. 3 mA (EN 61131-2, type 3)	
Input filter	typ. 3.0 ms	typ. 10 µs
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 <sup>2</sup> ; stranded wire: 0.25...1.5 mm <sup>2</sup> ; ferrule: 0.14...0.75 mm <sup>2</sup>	
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	