



EL1804 | HD EtherCAT Terminal, 4-channel digital input 24 V DC, 3-wire connection

The EL1804 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 four channels, consisting of a signal input, 24 V DC and 0 V. The signal states are displayed by LEDs. The power contacts are looped through.

For the EL1804, the reference ground for all inputs is the 0 V power contact. The wires 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	EL1804
Connection technology	3-wire
Specification	EN 61131-2, type 1/3
Number of inputs	4
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. 2 mA + load
Current consumption E-bus	typ. 90 mA
Electrical isolation	500 V (E-bus/field potential)
Bit width in the process image	4 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
Weight	approx. 60 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