

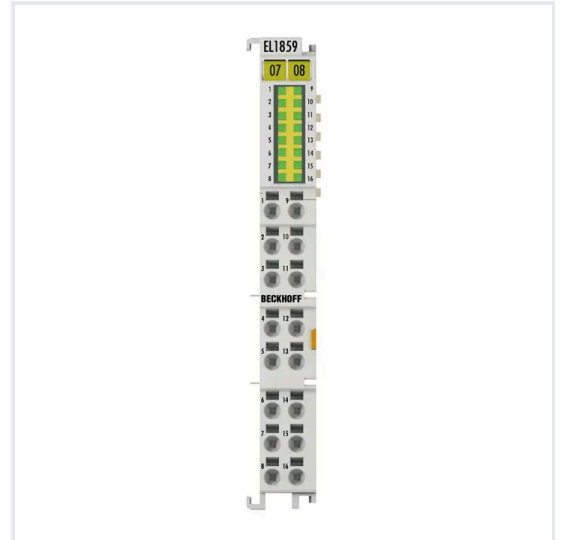
# EL1859 | EtherCAT Terminal, 8-channel digital input + 8-channel digital output, 24 V DC, 3 ms, 0.5 A

The digital EL1859 **EtherCAT** Terminal combines eight digital inputs and eight digital outputs on a single device. The signal state of the channels is indicated by LEDs. The reference ground for all inputs is the 0 V DC power contact; the outputs are fed via the 24 V power contact.

Special features:

- compact design through the combination of inputs and outputs in one terminal
- no bouncing due to mechanical switches thanks to 3 ms input filter
- short-circuit proof outputs protected against reverse polarity with output current up to 0.5 A
- tool-free connection by direct plug-in technique for solid wire conductors

**i** **Product status:** regular delivery



# Product information

Technical data	EL1859
Connection technology	1-wire
Specification	EN 61131-2, type 1/3
Number of channels	8 inputs + 8 outputs
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	–
Load type	ohmic, inductive, lamp load
Max. output current	0.5 A per channel
Reverse voltage protection	yes
Breaking energy	< 150 mJ/channel
Current consumption power contacts	typ. 15 mA + load
Switching times	typ. T <sub>ON</sub> : 60 µs, typ. T <sub>OFF</sub> : 300 µs
Current consumption E-bus	typ. 130 mA
Electrical isolation	500 V (E-bus/field potential)
Configuration	no address or configuration setting
Special features	combi EtherCAT Terminal, 8 x output 24 V DC, I <sub>max</sub> = 0.5 A, load type: ohmic, inductive, lamp load, reverse voltage protection
Weight	approx. 65 g
Operating/storage temperature	0...+55°C/-25...+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

Technical data	EL1859
Protect. rating/installation pos.	IP20/variable (see documentation)
Approvals/markings	CE, UL, ATEX, IECEx
Ex marking	ATEX: II 3 G Ex ec 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 (s): direct plug-in technique; fine-stranded conductors (st) and ferrule (f): spring actuation by screwdriver
Connection cross-section	s*: 0.08...1.5 mm <sup>2</sup> , st*: 0.25...1.5 mm <sup>2</sup> , f*: 0.14...0.75 mm <sup>2</sup>
Connection cross-section AWG	s*: AWG28...16, st*: AWG22...16, f*: AWG26...19
Stripping length	8...9 mm
Current load power contacts	I <sub>max</sub> : 10 A

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