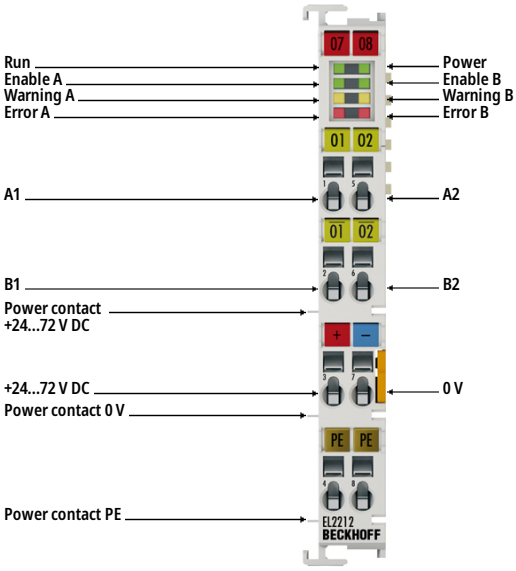
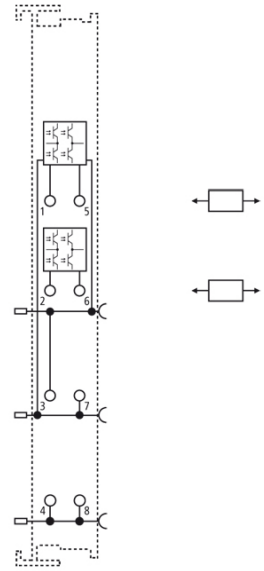
EL2212 | EtherCAT Terminal, 2-channel digital output, 24…72 V DC, 10 A, overexcitation, multi-timestamp



Top view



Contact assembly

Product status: Regular delivery

The EL2212 digital output terminal connects the binary control signals from the automation device on to the actuators at the process level with electrical isolation. The multi-timestamp features allow each EtherCAT cycle to capture as many events per channel as were preloaded in the internal buffer.

The EL2212 supports the particularly fast switching of inductive loads, such as valves or relays. 24 to 72 V DC supplies are connected to the power contacts and passed through to the load when switched on. After an adjustable waiting period the terminal begins to control channel-wise the current in order to protect the load. The switching process can be positioned exactly using the timestamp. The switch-off process is also accelerated considerably by the pole reversal of the voltage. The two channels are independently controllable.

Special features:

- push-pull output with tristate
- suitable for particularly fast switching of inductive loads e.g., valves or relays
- current-controlled outputs with high-impedance switching option
- synchronized operation through distributed clocks XFC technology possible
- high performance thanks to XFC multi-timestamp feature

Product information

Technical Data

Technical data	EL2212, ES2212

Connection technology	4-wire
Number of outputs	2
Nominal voltage	24...72 V DC (-15 %/+0 %)
Load type	inductive > 1 mH
Precision of timestamp in the terminal	10 ns
Resolution timestamp	1 ns
Distributed clocks	yes
Distributed clock precision	<< 1 µs
Max. output current	peak current: max. 10 A per channel, holding current: 0.2...2.5 A per channel
Output stage	full bridge (push-pull)
Short-circuit current	typ. 12 A
Reverse voltage protection	–
Switching times	without distributed clocks: typ. TON/TOFF 20 µs, with distributed clocks: typ. TON/TOFF < 1 µs via internal compensation
Current consumption E-bus	typ. 120 mA
Electrical isolation	500 V (E-bus/field potential)
Current consumption power contacts	load-dependent
Configuration	via TwinCAT System Manager
Special features	Multi-timestamping, current-controlled outputs can be connected in high-resistance mode.
Weight	approx. 50 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
Protect. rating/installation pos.	IP20/variable
Pluggable wiring	for all ESxxxx terminals
Approvals/markings	CE

Housing data	**EL-12-8pin**	**ES-12-8pin**
Design form	compact terminal housing with signal LEDs	terminal housing with pluggable wiring level
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 conductor (e), flexible conductor (f) and ferrule (a): spring actuation by screwdriver	
Connection cross-section	s*: 0.08...2.5 mm², st*: 0.08...2.5 mm², f*: 0.14...1.5 mm²	s*: 0.08...1.5 mm², st*: 0.08...1.5 mm², f*: 0.14...1.5 mm²
Connection cross-section AWG	s*: AWG 28...14, st*: AWG 28...14, f*: AWG 26...16	s*: AWG 28...16, st*: AWG 28...16, f*: AWG 26...16
Stripping length	8...9 mm	9...10 mm
Current load power contacts	I_{max}: 10 A	

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

Ordering Information

Ordering information	
EL2212	EtherCAT Terminal, 2-channel digital output, 24...72 V DC, 10 A, overexcitation, multi-timestamp
ES2212	EtherCAT Terminal, 2-channel digital output, 24...72 V DC, 10 A, overexcitation, multi-timestamp, pluggable wiring