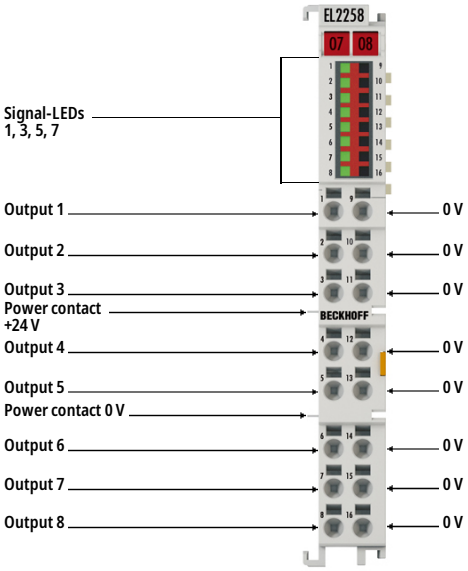
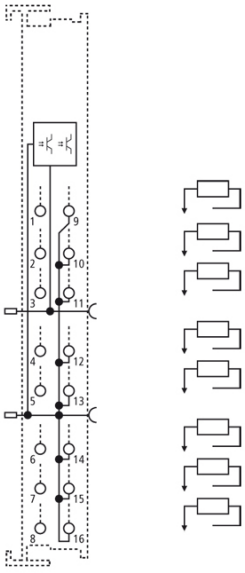
EL2258 | EtherCAT Terminal, 8-channel digital output, 24 V DC, 0.5 A, multi-timestamp



Top view



Contact assembly

Product status: Regular delivery

The 8-channel digital output terminal EL2258 connects the binary output signals of the controller at the process level with electrical isolation. As in the EL2252, the outputs of the EL2258 are switched with high precision relative to the transferred time stamp, although there are certain differences in the details: Eight instead of two channels, lower timestamp resolution and auto-activation, which enables consecutive switching tasks in each cycle. The multi-timestamping feature allows each EtherCAT cycle to capture or output as many events per channel as were preloaded in the internal buffer.

The distributed clocks are used as time reference. In conjunction with timestamp input terminals the EL2258 enables responses at equidistant time intervals that are largely independent of the bus cycle time.

Special features:

- Connection of different load types possible (ohmic, inductive, lamp load)
- Synchronized operation through distributed clocks XFC technology possible
- High performance thanks to XFC multi-timestamp function and auto-activation

Product information

Technical Data

Technical data	EL2258
Connection technology	2-wire
Number of outputs	8
Nominal voltage	24 V DC (-15 %/+20 %)

Load type	ohmic, inductive, lamp load
Oversampling/multi-timestamping factor	n = integer multiple of the cycle time, 1...10
Internal sampling/execution	< 10...40 µs, corresponds to 100...25 k detectable edges/s, dependent on configuration
Distributed clocks	yes
Distributed clock precision	<< 1 µs
Output delay through 24 V power section	typ. < 1 µs
Max. output current	0.5 A (short-circuit proof) per channel
Output stage	push
Short-circuit current	typ. < 1 A
Reverse voltage protection	yes
Breaking energy	< 150 mJ/channel
Switching times	typ. TON: < 1 µs, typ. TOFF: < 1 µs
Current consumption E-bus	typ. 130 mA
Electrical isolation	500 V (E-bus/field potential)
Current consumption power contacts	typ. 30 mA + load
Bit width in the process image	8 bit output (ch. 1 + ch. 2), 9 byte timestamp
Special features	multi-timestamping, auto activation
Weight	approx. 55 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
Approvals/markings	CE, UL

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 (e): direct plug-in technique; fine-stranded conductors (f) and ferrule (a): spring actuation by screwdriver
Connection cross-section	s*: 0.08...1.5 mm^2, st*: 0.25...1.5 mm^2, f*: 0.14...0.75 mm^2

Connection cross-section AWG	s*: AWG 28...16, st*: AWG 22...16, f*: AWG 26...19
Stripping length	8...9 mm
Current load power contacts	I_{max}: 10 A

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