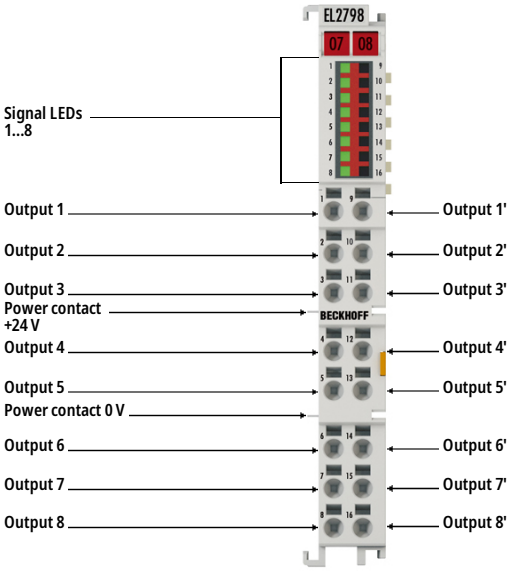
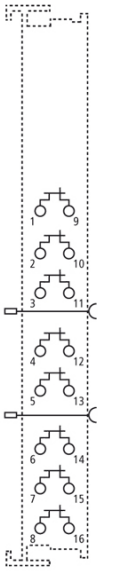
EL2798 | EtherCAT Terminal, 8-channel solid state relay output, 30 V AC, 48 V DC, 2 A, potential-free



Top view



Contact assembly

Product status: Regular delivery

The digital EL2798 EtherCAT Terminal provides eight switches that can be used like a relay contact for AC/DC voltages. The electronic switch is realized through high-performance MOSFET transistors with low on-resistance. The switch itself is not short-circuit-proof, but thanks to its high pulse current capability it can cope with current until an external fuse is triggered. The wear resistance increases the availability of the application. Ohmic and slightly inductive loads can be switched up to a rated voltage of 30 V AC/DC. Purely ohmic loads can be switched up to 48 V DC rated voltage. High peak voltages and electromagnetic interference pulses are prevented. The EL2798 features potential-free contacts; the power contacts are passed through.

Special features:

- 8 x make contacts as substitutes for relay contacts
- Switching of ohmic loads up to a rated voltage of 30 V AC/48 V DC
- Switching of slightly inductive loads up to a rated voltage of 30 V AC/DC
- Max. output current of 2 A per channel (∑ 10 A)
- potential-free

Product information

Technical Data

Technical data	EL2798
Connection technology	2-wire
Number of outputs	8 x make contacts

Nominal voltage	0...30 V AC/DC (ohmic load only: 0...48 V DC)
Distributed clocks	–
Max. output current	2 A per channel (∑ 10 A)
Short-circuit current	not short-circuit proof, see peak current
Reverse voltage protection	–
Switching times	TON: typ. 1.8 ms, TOFF: typ. 30 ms
Breakdown voltage	80 V
Peak current	5 A (100 ms), < 50 A (10 ms)
Isolation voltage (channel/channel)	< 200 V
Current consumption E-bus	typ. 140 mA
Electrical isolation	500 V (E-bus/field potential)
Switching on speed	typ. 1.8 ms, max. 5 ms
Switching off speed	typ. 30 ms, max. 50 ms
On-resistance	typ. 0.03 Ω
Special features	substitute for relay contacts, potential-free
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, DNV GL

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 mm², st*: 0.25...1.5 mm², f*: 0.14...0.75 mm²
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