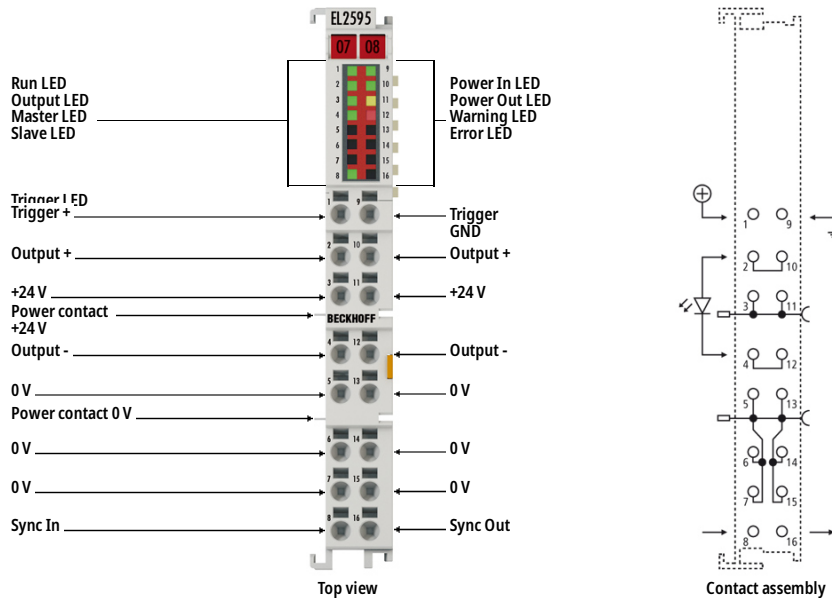
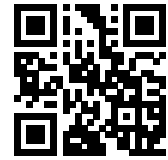


EL2595 | EtherCAT Terminal, 1-channel LED output, 48 V DC, 0.7 A



i Product status: Regular delivery

The EL2595 EtherCAT Terminal contains a constant current source for LEDs and is designed to control one or more LEDs connected in series. The user specifies the required set current, the integrated power supply unit then provides the required forward voltage, depending on the connected LEDs. For this purpose, the EL2595 has a step-up/step-down power supply unit, which generates the output voltage from the 24 V DC input voltage. The output voltage is also adjusted during operation in order to maintain the set current. The current can be switched quickly for short-term lighting, hence even extremely short flashes of light are possible. The pulse duration is adjustable from 1 μ s to infinity, the flash time itself can be set through a timestamp via distributed clocks; an external trigger input is also available. Extensive real-time diagnostics, e.g. for input current/voltage and output current/voltage allow detailed monitoring of the LED light intensity. If a specifiable load corridor is exited, e.g., due to load errors, the EL2595 switches off to protect the load (resettable).

Special features:

- Suitable for simple lighting tasks and continuous LED operation
- Max. output current 300...700 mA
- Optional automatic operation in case of communication interruption
- Support of XFC technology timestamp
- Synchronized operation through distributed clocks XFC technology possible

Application recommendations:

- The EL2595 LED terminal of the 1st generation is often sufficient for simple lighting tasks.
- The EL2596 and EL2596-0010 are the significantly more powerful successors and are thus suitable for applications requiring high-precision control.
- The EL2564 is the right choice for simple continuous lighting applications with RGBW LEDs in voltage mode.

Product information

Technical Data

Technical data	EL2595
Recommended use	constant lighting > 300 mA and simple illumination tasks
Connection technology	2-wire
Number of outputs	1
Input voltage	24 V DC (-15 %/+20 %)
Load type	LED (ohmic)
Distributed clocks	yes
Distributed clock precision	<< 1 μ s
Output voltage	2...48 V DC (Up/down control from input voltage, observe dead band in control mode)
Max. output current	300...700 mA (depending on output voltage and Duty Cycle)
Switching times	typ. TON: < 1 μ s, typ. TOFF: < 1 μ s, pulses from 200 μ s
Trigger output (to camera)	-
Trigger input (from camera)	1 (electrically isolated, typ. 8 mA, 5...24 V DC)
Current consumption E-bus	typ. 130 mA
Electrical isolation	500 V (E-bus/field potential)
Current consumption power contacts	typ. 20 mA + load
Special features	optional automatic operation in case of communication interruption, continuous LED operation possible
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

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