



EL2595 | 1-channel LED constant current terminal

The EL2595 EtherCAT Terminal contains a constant current source for LEDs and is designed for controlling one or several 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. To this end, the EL2595 features 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, so that the shortest light flashes are possible. The pulse duration can be set from 1 μ s to infinite, the flash timing itself can be specified via timestamps with distributed clocks as in the EL2252. An external trigger input is also available. Extensive real-time diagnostic functions for input current/voltage and output current/voltage enable detailed control 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).

Technical data	EL2595
Connection technology	2-wire
Number of outputs	1
Nominal voltage	2...48 V DC (controlled automatically)
Rated load voltage	2...48 V DC (controlled automatically)
Load type	ohmic
Distributed clocks	yes
Distributed clock precision	$\ll 1 \mu$ s
Max. output current	700 mA steady load (short-circuit proof)
Switching times	typ. T_{ON} : $< 1 \mu$ s, typ. T_{OFF} : $< 1 \mu$ s, pulses from 50 μ s
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, extensive real-time diagnostics, external trigger input
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. class/installation pos.	IP 20/variable
Approvals	CE