EL2564 | EtherCAT Terminal, 4-channel LED output, 5...48 V DC, 4 A, RGBW, common anode

Run LED
Error LED
Output LED 1
Output LED 3

Power LED
Output LED 2
Output LED 4

Output 1-

Output 2-

Output 3-
Power contact +24 V

Output 4-

LED supply+
Power contact 0 V

LED supply+

LED supply-

LED supply-

Top view

Contact assembly
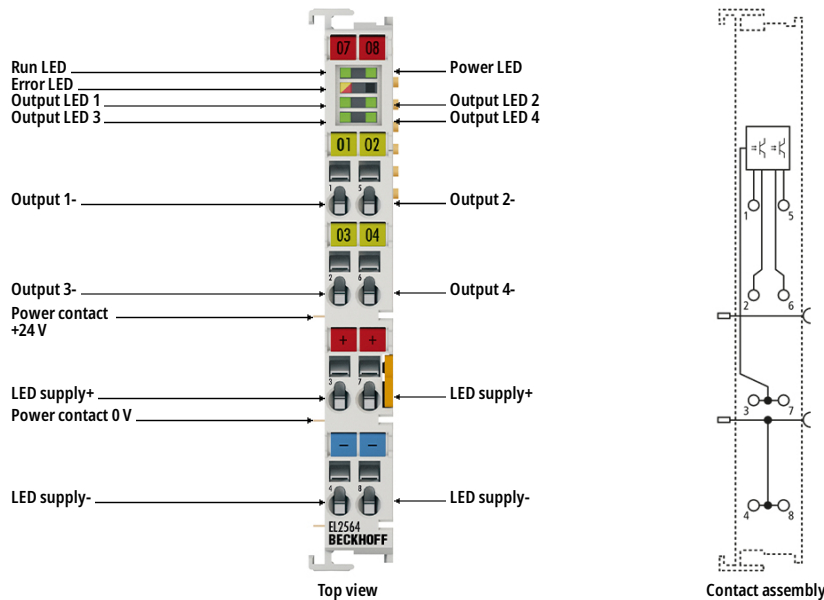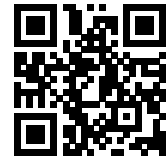
ℹ **Product status:** Regular delivery

The EL2564 digital output terminal controls LEDs with integrated series resistor via an adjustable (ground switching) PWM signal. Common anode RGBW LEDs can be controlled with the four channels. But also the operation with four LEDs of the same color is possible with the terminal. The terminal has a flexible input voltage of 5...48 V DC. The output voltage corresponds to the input voltage. For the operation of multicolor LEDs the color portion per channel is adjustable. Thus any color mix can be realized. In addition to the color mixing per channel, the adjustment of the total brightness over all channels is also possible. Another parameter that can be adjusted is the frequency. By setting the frequency in a range of 1...16,000 Hz, stroboscopic effects can be avoided. Furthermore, visible flashes can be realized by the low frequencies.

Special features:

- flexible input voltage 5...48 V DC
- adjustable color component per channel with multicolor LEDs (adjustment of the duty cycle)
- adjustable total brightness across all channels
- adjustable frequency 1...16.000 Hz, for the avoidance of stroboscopic effects and the realization of visible flashes at low frequencies

Recommended uses:

- the EL2564 is the right choice for simple continuous light applications with RGBW LEDs in voltage mode
- the 1st generation EL2595 LED terminal is often sufficient for simple lighting tasks
- the EL2596 and EL2596-0010 are its successors with a greatly increased performance and are thus suitable for applications where there is a demand for high-precision control

Product information

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Technical data

Technical data	EL2564
Recommended use	general lighting, LED control, multicolor common anode LEDs
Connection technology	2-wire
Number of outputs	4
Input voltage	5...48 V DC
Load type	LED (ohmic)
Output voltage	$\sim U_{IN}$
Max. output current	4 A per channel
PWM clock frequency	1 Hz...16 kHz, 5 kHz default
Duty factor	0...100 %
Resolution	15 bit (depending on PWM frequency)
Output current	4 A per channel
Current consumption E-bus	typ. 70 mA
Configuration	via TwinCAT System Manager
Special features	ground switching PWM for common anode LEDs, adjustable color share per channel (duty cycle), adjustable light intensity/brightness, adjustable frequency (anti-stroboscope)
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
Approvals/markings	CE

Housing data	EL-12-8pin
Design form	compact terminal 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 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

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Connection cross-section AWG	s*: AWG 28...14, st*: AWG 28...14, f*: AWG 26...16
Stripping length	8...9 mm
Current load power contacts	I_{max}: 10 A

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