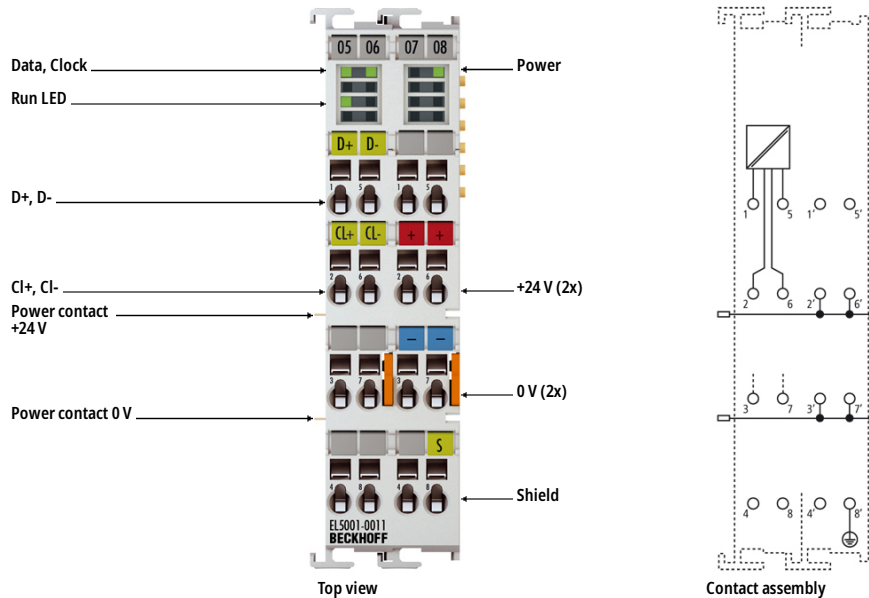


# EL5001-0011 | EtherCAT Terminal, 1-channel encoder interface, SSI, monitor



**i** **Product status:** Regular delivery

The EL5001-0011 SSI monitor EtherCAT Terminal is used for monitoring the data exchange between SSI master and SSI encoder (slave). The encoder is powered via the existing SSI interface. The interface circuit makes the incoming data stream available to the controller as a data word in the process image. Various operating modes can be permanently set via the control register.

The EL5001-0011 EtherCAT Terminal can be interconnected in an SSI master/slave communication. It is used for passive reading of the data exchange between SSI master and SSI slave (encoder). This enables the current position value to be made available to other control modules. The EL5001-0011 offers an optional 24 V encoder operating voltage.

Extensive parameterizations allow optimum adaptation to different encoder types.

## Special features:

- automatic baud rate detection up to max. 1 MHz
- coding: gray and binary
- data length up to 32 bit, flexibly adjustable.
- separate evaluation of a status error bit (power fail bit) in the process data

Via the distributed clocks function, the time of data acquisition from the encoder can be output via timestamp. The encoder profile allows the process data to be linked quickly and easily to the motion control application.

## Product information

### Technical data

Technical data	EL5001-0011
Technology	SSI monitor interface
Number of channels	1
Encoder connection	D+, D-, CI+, CI-
Encoder operating voltage	24 V DC (generated from the power contacts)
Signal output (pulse)	difference signal (RS422)
Signal input (data)	difference signal (RS422)
Power supply	24 V DC via power contacts
Data transfer rates	variable up to 1 MHz, 250 kHz default
Serial input	variable up to 32 bit, 24 bit default
Data direction	read
Current consumption power contacts	typ. 20 mA + load
Current consumption E-bus	typ. 130 mA
Distributed clocks	yes
Special features	no clock output (simply listening), adjustable baud rate, coding and data length, power fail bit activatable
Weight	approx. 100 g
Electrical isolation	500 V (E-bus/field potential)
Operating/storage temperature	-25...+60 °C/-40...+85 °C
Relative humidity	95 %, no condensation
Vibration/shock resistance	conforms to EN 60068-2-6/EN 60068-2-27
Protect. rating/installation pos.	IP20/variable
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Approvals/markings	CE, UL, ATEX
Ex marking	II 3 G Ex nA IIC T4 Gc

Housing data	EL-24-2x8pin
Design form	compact terminal housing with signal LEDs
Material	polycarbonate
Dimensions (W x H x D)	24 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 mm <sup>2</sup> , st*: 0.08...2.5 mm <sup>2</sup> , f*: 0.14...1.5 mm <sup>2</sup>

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 <sub>max</sub> : 10 A

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