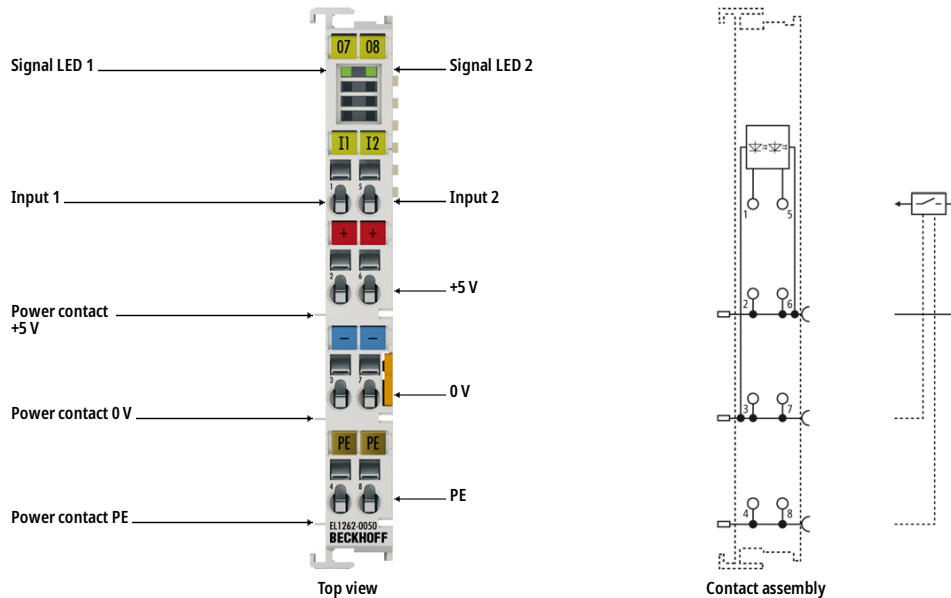




# EL1262-0050 | EtherCAT Terminal, 2-channel digital input, 5 V DC, 1 $\mu$ s, oversampling



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

The EL1262-0050 digital input terminal acquires the fast binary 5 V control signals from the process level and transmits them, in an electrically isolated form, to the controller. The EtherCAT Terminal has two channels that indicate their signal state via light emitting diodes. The signals are sampled with a configurable, integer multiple (oversampling factor:  $n$ ) of the bus cycle frequency ( $n$  microcycles per bus cycle). For each bus cycle, the EtherCAT Terminal generates a process data block that is transferred collectively during the next bus cycle. The timebase of the terminal can be synchronized precisely with other EtherCAT devices via distributed clocks. This XFC procedure enables the temporal resolution of the digital input signals to be increased to  $n$  times the bus cycle time. The switching thresholds of the input circuit are based on the CMOS level: Signal voltage "0"  $< 0.8$  V, signal voltage "1"  $> 2.4$  V. The 5 V supply voltage can be generated by the EL9505 power supply terminal and fed into the power contacts.

Special features:

- 5 V inputs
- suitable for particularly fast signals due to very low input delay
- synchronized operation through distributed clocks XFC technology possible
- multiple sampling of a process data through oversampling

## Product information

### Technical Data

Technical data	EL1262-0050
Connection technology	4-wire
Number of inputs	2

Sampling rate	max. 1 Msample/s
Nominal voltage	5 V DC
"0" signal voltage	< 0.8 V
"1" signal voltage	> 2.4 V
Input current	typ. 50 µA
Input filter	typ. < 1 µs
Oversampling factor	n = integer multiple of the cycle time, 1...1000, see documentation
Oversampling/multi-timestamping factor	n = integer multiple of the cycle time, 1...1000, see documentation
Precision of timestamp in the terminal	10 ns (+ input delay)
Distributed clock precision	<< 1 µs
Distributed clocks	yes
Time resolution signal	-
Current consumption power contacts	typ. 6 mA + load
Current consumption E-bus	typ. 70 mA
Electrical isolation	500 V (E-bus/field potential)
Bit width in the process image	n x 2 inputs + 64 bit CycleCounter/latch
Special features	oversampling, 5 V inputs
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, UL, ATEX
Ex marking	II 3 G Ex nA IIC T4 Gc Ex nA IIC T4 Gc Ex tc IIIC T135 °C Dc

<b>Housing data</b>	<b>EL-12-8pin</b>
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 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

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