

# EL3068 | EtherCAT Terminal, 8-channel analog input, voltage, 0...10 V, 12 bit, single-ended

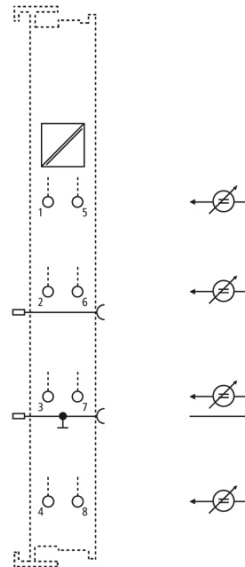
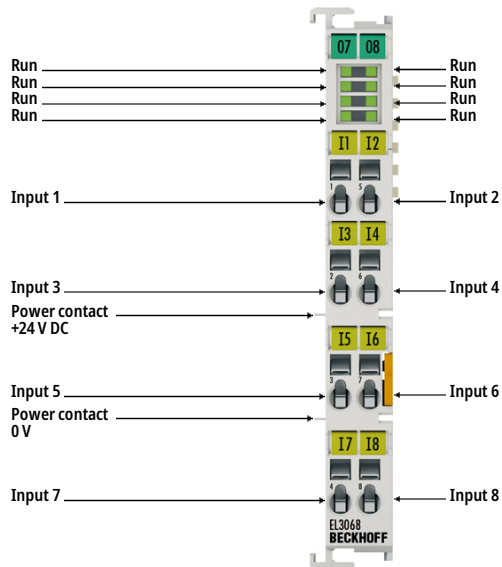
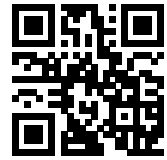


Image similar, may contain optional accessories

**i** **Product status:** regular delivery

The EL3068 analog input terminal processes signals in the range between 0 and 10 V. The voltage is digitized with a resolution of 12 bits and is transmitted (electrically isolated) to the higher-level automation device. The EL3068 EtherCAT Terminal combines eight channels in one housing. The power contacts are connected through. The 0 V power contact is used as reference ground connection for the inputs. The signal state of the EtherCAT Terminal is indicated by light emitting diodes.

## Product information

### Technical data

| Technical data               | EL3068           |
|------------------------------|------------------|
| Number of inputs             | 8 (single-ended) |
| Power supply                 | via the E-bus    |
| Signal voltage               | 0...10 V         |
| Distributed clocks           | –                |
| Internal resistance          | > 130 kΩ         |
| Input filter limit frequency | 1 kHz            |
| Dielectric strength          | max. 30 V        |

|                                    |                                                              |
|------------------------------------|--------------------------------------------------------------|
| Conversion time                    | 1.25 ms default setting, configurable, multiplex             |
| Resolution                         | 12 bit (16 bit presentation incl. sign)                      |
| Measurement error/uncertainty      | < ±0.3% (relative to full scale value)                       |
| Electrical isolation               | 500 V (E-bus/signal voltage)                                 |
| Current consumption E-bus          | typ. 130 mA                                                  |
| Current consumption power contacts | –                                                            |
| Bit width in the process image     | inputs: 32 byte                                              |
| Special features                   | activatable FIR/IIR filters, limit value monitoring          |
| Weight                             | approx. 60 g                                                 |
| Operating temperature              | -25...+60°C                                                  |
| Storage temperature                | -40...+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                        |
| Plug-in wiring level               | for all ESxxx terminals                                      |
| Protect. rating/installation pos.  | IP20/variable                                                |
| Approvals/markings                 | CE, CCC, UL, ATEX, IECEx                                     |
| Ex marking                         | ATEX:<br>II 3 G Ex ec IIC T4 Gc<br>IECEx:<br>Ex ec IIC T4 Gc |

| Housing data                      | EL-12-8pin                                                                                              | ES-12-8pin                                                                                              |
|-----------------------------------|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Design form                       | compact terminal housing with signal LEDs                                                               | terminal housing with pluggable wiring level                                                            |
| Material                          | polycarbonate                                                                                           |                                                                                                         |
| 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 (s), flexible conductor (st) and ferrule (f): spring actuation by screwdriver           |                                                                                                         |
| Connection cross-section          | s*: 0.08...2.5 mm <sup>2</sup> ,<br>st*: 0.08...2.5 mm <sup>2</sup> ,<br>f*: 0.14...1.5 mm <sup>2</sup> | s*: 0.08...1.5 mm <sup>2</sup> ,<br>st*: 0.08...1.5 mm <sup>2</sup> ,<br>f*: 0.14...1.5 mm <sup>2</sup> |
| Connection cross-section AWG      | s*: AWG28...14,<br>st*: AWG28...14,<br>f*: AWG26...16                                                   | s*: AWG28...16,<br>st*: AWG28...16,<br>f*: AWG26...16                                                   |
| Stripping length                  | 8...9 mm                                                                                                | 9...10 mm                                                                                               |

|                             |                         |
|-----------------------------|-------------------------|
| Current load power contacts | I <sub>max</sub> : 10 A |
| Dimensions (W x H x D)      | 12 mm x 100 mm x 68 mm  |

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

## Ordering information

| Ordering information |                                                                                                            |
|----------------------|------------------------------------------------------------------------------------------------------------|
| EL3068               | EtherCAT Terminal, 8-channel analog input, voltage, 0...10 V, 12 bit, single-ended                         |
| ES3068               | EtherCAT Terminal, 8-channel analog input, voltage, 0...10 V, 12 bit, single-ended, pluggable wiring level |