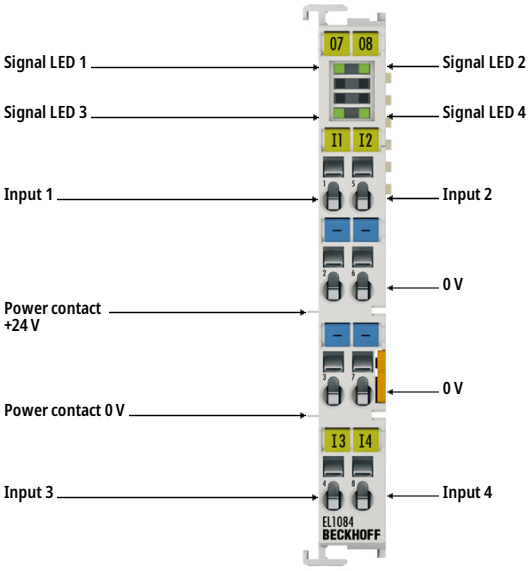
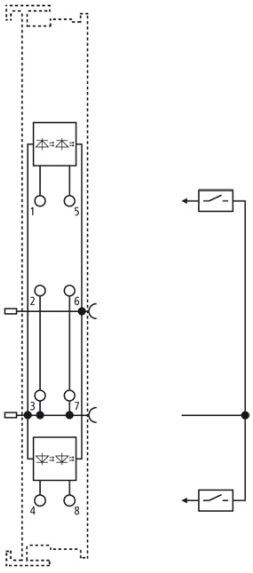
# EL1084 | EtherCAT Terminal, 4-channel digital input, 24 V DC, 3 ms, ground switching




Top view



Contact assembly

**Product status:** Regular delivery

The EL1084 digital input terminal acquires the binary control signals from the process level and transmits them, in an electrically isolated form, to the higher-level automation unit. The EtherCAT Terminal has four channels that indicate their signal state via light emitting diodes.

Special features:

- ground switching
- no bouncing due to mechanical switches thanks to 3 ms input filter
- direct connection of four 2-wire sensors via additional 0 V connection points

## Product information

### Technical Data

| Technical data | EL1084, ES1084 |
|---|---|
| Connection technology | 2-wire |
| Specification | ground switching “0”: 18...30 V DC, “1”: 0...7 V DC, typ. 3 mA input current |
| Number of inputs | 4 |
| Nominal voltage | 24 V DC (-15 %/+20 %) |
| “0” signal voltage | 18...30 V |
| “1” signal voltage | 0...7 V |

| | |
|---|---|
| **Input current** | typ. 3.0 mA |
| **Input filter** | typ. 3.0 ms |
| **Distributed clocks** | – |
| **Current consumption power contacts** | typ. 20 mA |
| **Current consumption E-bus** | typ. 90 mA |
| **Electrical isolation** | 500 V (E-bus/field potential) |
| **Configuration** | no address or configuration setting |
| **Special features** | 2-wire connection |
| **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 |
| **Pluggable wiring** | for all ESxxxx terminals |
| **Approvals/markings** | CE, UL, ATEX, DNV GL |
| **Ex marking** | II 3 G Ex nA 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 | |
| **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 | s*: 0.08...1.5 mm², st*: 0.08...1.5 mm², f*: 0.14...1.5 mm² |
| **Connection cross-section AWG** | s*: AWG 28...14, st*: AWG 28...14, f*: AWG 26...16 | s*: AWG 28...16, st*: AWG 28...16, f*: AWG 26...16 |
| **Stripping length** | 8...9 mm | 9...10 mm |
| **Current load power contacts** | $I_{max}$: 10 A | |

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

## Ordering Information

| Ordering information | |
|---|---|
| **EL1084** | EtherCAT Terminal, 4-channel digital input, 24 V DC, 3 ms, ground switching |
| **ES1084** | EtherCAT Terminal, 4-channel digital input, 24 V DC, 3 ms, ground switching, pluggable wiring |