



EL3054 | 4-channel analog input terminal 4...20 mA, single-ended, 12 bit

The EL3054 analog input terminal processes signals in the range between 4 and 20 mA. The current is digitised to a resolution of 12 bits and is transmitted (electrically isolated) to the higher-level automation device. The input electronics are independent of the supply voltage of the power contacts. In the EL3054 with four inputs, the 24 V power contact is connected to the terminal in order to enable connection of 2-wire sensors without external supply. The power contacts are connected through. The signal state of the EtherCAT Terminal is indicated by light emitting diodes. The error LEDs indicate an overload condition and a broken wire.

| Technical data | EL3054 ES3054 |
|------------------------------------|---|
| Number of inputs | 4 (single-ended) |
| Technology | single-ended |
| Signal current | 4...20 mA |
| Distributed clocks | – |
| Internal resistance | 85 Ω typ. + diode voltage |
| Input filter limit frequency | 1 kHz |
| Dielectric strength | max. 30 V |
| Conversion time | 0.625 ms default setting, configurable |
| Resolution | 12 bit (16 bit presentation, incl. sign) |
| Measuring error | < ± 0.3 % (relative to full scale value) |
| Electrical isolation | 500 V (E-bus/signal voltage) |
| Current consumption power contacts | – |
| Current consumption E-bus | typ. 130 mA |
| Bit width in the process image | inputs: 16 byte |
| Configuration | no address or configuration setting required |
| Special features | standard and compact process image, activatable FIR/IIR filters, limit value monitoring |
| Weight | approx. 60 g |
| 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 |
| EMC immunity/emission | conforms to EN 61000-6-2/EN 61000-6-4 |
| Protect. class/installation pos. | IP 20/variable |
| Pluggable wiring | for all ESxxxx terminals |
| Approvals | CE, UL, Ex |