

Top view, contact assembly, connection

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## EL3161, EL3162 | 1-, 2-channel analog input terminals 0...10 V, single-ended, 16 bits

The EL3161 and EL3162 analog input terminals process signals in the range between 0 and 10 V. The voltage is digitised to a resolution of 16 bits, and is transmitted, electrically isolated, to the higher-level automation device. The input channels of an EtherCAT Terminal have the reference ground as common ground potential. The EL3161 is the single-channel version. The EL3162 combines two channels in one housing. The signal state of the EtherCAT Terminals is indicated by light emitting diodes.

| Technical data                   | EL3161   ES3161                             | <b>EL3162</b>   ES3162             |
|----------------------------------|---|------------------------------------|
| Number of inputs                 | 1 (single-ended)                            | 2 (single-ended)                   |
| Power supply                     | via the E-bus                               |                                    |
| Signal voltage                   | 010 V                                       |                                    |
| Distributed clocks               | yes   |                                    |
| Internal resistance              | > 130 kΩ                                    | > 200 kΩ                           |
| Input filter limit frequency     | 10 kHz                                      |                                    |
| Conversion time                  | ~ 35 µs                                     | ~ 50 µs                            |
| Resolution                       | 16 bits (incl. sign)                        |                                    |
| Measuring error                  | $<\pm0.3$ % (relative to full scale value)  |                                    |
| Electrical isolation             | 500 V <sub>rms</sub> (E-bus/signal voltage) |                                    |
| Current consumption E-bus        | 130 mA typ.                                 | 170 mA typ.                        |
| Bit width in the process image   | 1 x 16 bit input, 1 x 8 bit status          | 2 x 16 bit input, 2 x 8 bit status |
| Weight                           | approx. 60 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 60068-2-27/29   |                                    |
| 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                    |                                    |
| Further information              | www.beckhoff.com/EL3161                     |                                    |

For availability status see Beckhoff website at: www.beckhoff.com/EL3161