



## KL3002 | 2-channel analog input terminal -10...+10 V

The KL3002 analog input terminal handles signals in the range from -10 to +10 V. The voltage is digitised to a resolution of 12 bits and is transmitted, electrically isolated, to the higher-level automation device. The input channels of the Bus Terminal have differential inputs and possess a common, internal ground potential. The light emitting diodes give an indication of the data exchange with the Bus Coupler.

| Technical data                     | KL3002   KS3002  |
|------------------------------------|--|
| Number of inputs                   | 2  |
| Power supply                       | via the K-bus  |
| Signal voltage                     | -10...+10 V  |
| Technology                         | differential input   |
| Internal resistance                | > 200 k $\Omega$   |
| Common-mode voltage $U_{cm}$       | 35 V max.  |
| Resolution                         | 12 bit (for 0...10 V range: resolution 11 bit)             |
| Conversion time                    | ~ 2 ms   |
| Measuring error                    | < $\pm 0.3$ % (relative to full scale value)               |
| Electrical isolation               | 500 V (K-bus/signal voltage)                               |
| Current consumption power contacts | – (no power contacts)                                      |
| Current consumption K-bus          | typ. 65 mA   |
| Bit width in the process image     | input: 2 x 16 bit data (2 x 8 bit control/status optional) |
| Configuration                      | no address or configuration setting                        |
| Weight                             | approx. 70 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 KSxxxx Bus Terminals                               |
| Approvals                          | CE, UL, Ex   |

| Special terminals |  |
|-------------------|--|
| KL3002-0010       | Siemens S5 format                      |
| KL3002-0011       | fast $\mu$ P, scan time approx. 0.5 ms |
| KL3002-0050       | Siemens S7 format                      |