



KL6051 | Data exchange terminal with serial interface

The KL6051 serial interface terminal makes it possible to exchange data between different fieldbus systems. Full duplex data exchange is possible, independently of the higher-level fieldbus. Under the terminal's default setting, 32 inputs and 32 outputs are transferred between the fieldbus systems. The time to exchange the data is about 5 ms for 32 bits of I/O. The exchange of data with the Bus Coupler is indicated by the run LED. The TxD and RxD LEDs indicate the state of the signal transmission.

| Technical data | KL6051 KS6051 |
|------------------------------------|--|
| Technology | 2 x RS422 |
| Data transfer channels | TxD and RxD, full duplex |
| Data transfer rates | 62,500 baud, 32 bit bidirectional data exchange between two KL6051 |
| Bit transfer | via 2 pairs of twisted wires with differential signals |
| Line impedance | 120 Ω |
| Cable length | approx. 1,000 m twisted pair |
| Power supply | via the K-bus |
| Current consumpt. K-bus | typ. 65 mA |
| Current consumption power contacts | – (no power contacts) |
| Electrical isolation | 500 V (K-bus/signal voltage) |
| Data buffer | 32 bit bidirectional |
| Bit width in the process image | input/output: 4 x 8 bit user data, 1 x 8 bit control/status (up to 5 x 8 bit user data are possible) |
| Configuration | no address or configuration setting |
| Special features | automatic data exchange |
| 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 |
| 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 |