



BK1250 | “Compact” coupler between E-bus and K-bus Terminals



The BK1250 is a “Bus Coupler in terminal housing” for mixed application of EtherCAT Terminals (ELxxxx) and standard Bus Terminals (KLxxxx) in a bus station. It enables implementation of compact and cost-effective control solutions. The wide range of Bus Terminals can thus be optimally combined with the communication speed and large bandwidth of EtherCAT Terminals. Up to 64 Bus Terminals (with K-bus extension up to 255) can be connected to a BK1250. The Bus Coupler recognizes the connected Bus Terminals and automatically allocates them into the EtherCAT process image.

| Technical data | BK1250 |
|----------------------------------|---|
| Number of Bus Terminals | 64 (255 with K-bus extension) |
| Max. number of bytes fieldbus | 1024 byte input and 1024 byte output |
| Digital peripheral signals | 8,192 inputs/outputs |
| Analog peripheral signals | 256 inputs/outputs |
| Protocol | EtherCAT |
| Configuration possibility | via KS2000 or EtherCAT (ADS) |
| Data transfer rates | 100 Mbit/s |
| Bus interface | via E-bus contacts |
| Power supply | 24 V DC (-15 %/+20 %) |
| Input current | 70 mA + (total K-bus current)/4, 200 mA max. |
| Starting current | approx. 2.5 x continuous current |
| Recommended fuse | ≤ 10 A |
| Current supply K-bus | 500 mA |
| Power contacts | max. 24 V DC/max. 10 A |
| Electrical isolation | 500 V (power contact/supply voltage/Ethernet) |
| Weight | approx. 55 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 |
| Approvals/markings | CE, UL, ATEX |
| Ex marking | II 3 G Ex nA IIC T4 Gc |

| Accessories/related products | |
|------------------------------|---|
| KS2000 | configuration software for extended parameterisation |
| Cordsets | cordsets and connectors |
| FC9001-0010 FC9011 | Ethernet PCI fieldbus cards |
| BK1120 | EtherCAT “Economy plus” Bus Coupler for up to 64 Bus Terminals (255 with K-bus extension) |
| BK1150 | EtherCAT “Compact” Bus Coupler for up to 64 Bus Terminals (255 with K-bus extension) |

