



EK9000 | Ethernet Bus Coupler

Ethernet The EK9000 Bus Coupler connects Ethernet networks to the EtherCAT Terminals (ELxxxx) as well as the EtherCAT Box modules (EPxxxx) and converts the telegrams from Ethernet to the E-bus signal representation. One station consists of an EK9000 and any number of EtherCAT Terminals. The coupler is connected to Ethernet via RJ45. In EtherCAT, the Ethernet coupler has at its disposal a lower-level, powerful and ultra-fast I/O system with a large selection of terminals. The coupler supports the Modbus TCP protocol and fits seamlessly into Ethernet networks.

| Technical data | EK9000 |
|-----------------------------------|--|
| Task within EtherCAT system | coupling of standard digital and analog EtherCAT Terminals and EtherCAT Box modules to Ethernet networks |
| Number of EtherCAT Terminals | depending on the process data size |
| Type/number of peripheral signals | depending on the process data size |
| Protocol | Modbus TCP, Modbus UDP |
| Data transfer rates | 100 Mbaud |
| Configuration | not required |
| Bus interface | 2 x RJ45 (switched) |
| Power supply | 24 V DC (-15 %/+20 %) |
| Input current | typ. 120 mA + (total E-bus current)/4 |
| Current consumption E-bus | up to 2 A |
| Power contacts | 24 V DC max./10 A max. |
| Electrical isolation | 500 V (power contact/supply voltage/Ethernet) |
| Dimensions (W x H x D) | 64 mm x 100 mm x 73 mm |
| 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 |
| Approvals | CE, UL, Ex |

| Accessories | |
|-----------------------------|-----------------------------|
| Cordsets | cordsets and connectors |
| FC9001-0010 FC9011 | Ethernet PCI fieldbus cards |

| System | |
|------------------------|---|
| Ethernet TCP/IP | For further Ethernet TCP/IP products please see the system overview |