

BK1120 | EtherCAT Coupler for standard Bus Terminals

Ether CAT.

The BK1120 Bus Coupler connects EtherCAT with the K-bus components (KLxxxx) from the proven Beckhoff Bus Terminals range. One station consists of a BK1120 Bus Coupler, any number of terminals (up to 64; up to 255 with K-bus extension) and a bus end terminal. The Bus Coupler recognises the connected terminals and automatically allocates them into the EtherCAT process image. The Bus Coupler is connected to the network via the upper Ethernet interface. The lower RJ45 socket may be used to connect further EtherCAT devices in the same strand. In the EtherCAT network, the BK1120 Bus Coupler can be installed anywhere in the Ethernet signal transfer section (100BASE-TX) – except directly at the switch. The coupler BK9000 (for K-bus components) is suitable for installation at the switch.

Technical data	BK1120
Task within EtherCAT system	coupling of standard Bus Terminals (KLxxxx) to 100BASE-TX EtherCAT networks
Data transfer medium	Ethernet/EtherCAT CAT5 cable
Distance between stations	100 m (100BASE-TX)
Number of Bus Terminals	64 (255 with K-bus extension)
Max. number of bytes fieldbus	1,024 byte input and 1,024 byte output
Protocol	EtherCAT
Data transfer rates	100 Mbaud
Configuration possibility	via KS2000 or EtherCAT (ADS)
Bus interface	2 x RJ45
Power supply	24 V DC (-15 %/+20 %)
Input current	70 mA + (total K-bus current)/4, 500 mA max.
Starting current	approx. 2.5 x continuous current
Recommended fuse	≤ 10 A
Current supply K-bus	1,750 mA
Power contacts	24 V DC max./10 A max.
Electrical isolation	500 V (power contact/supply voltage/Ethernet)
Weight	approx. 150 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	CE, UL, Ex

Accessories	
Cordsets	cordsets and connectors