



BK1150 | EtherCAT "Compact" Bus Coupler



The BK1150 Bus Coupler connects the EtherCAT real-time Ethernet system to the modular extendable KL/KS electronic terminal blocks at fieldbus level. A unit consists of a Bus Coupler, any number of terminals from 1 to 64 (with K-bus extension: 255) and a KL9010 bus end terminal.

The Bus Coupler recognises the connected Bus Terminals and automatically allocates them into the EtherCAT process image. It is connected to the EtherCAT network via the upper interface. The lower RJ45 socket may be used to connect further EtherCAT devices in the same strand.

The BK1150 "Compact" Bus Coupler works in an identical way to the BK1120 and supplements this series with an inexpensive DIN rail mounting coupler. The IP 20 housing of the BK1150 is around 5 mm narrower than that of the BK1120.

The Bus Terminals on the BK1150 can be parameterised via ADS by the KS2000 software; the KS2000 plug is omitted. Alternatively, the controller (PLC, IPC) can configure the Bus Terminals via PLC function blocks.

System data	EtherCAT BK1150
Number of I/O stations	65,535
Number of I/O points	depending on controller
Data transfer medium	Industrial Ethernet cable, screened, min. Cat.5
Max. cable length	100 m (100BASE-TX)
Data transfer rates	100 Mbaud
Data transfer time	typ. 0.01 ms in the case of 10 modules for 32 bit inputs and outputs each (without K-bus run-time)

Technical data	BK1150
Number of Bus Terminals	64 (255 with K-bus extension)
Max. number of bytes fieldbus	1024 byte input and 1024 byte output
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	2000 mA
Power contacts	24 V DC max./10 A max.
Electrical isolation	500 V (power contact/supply voltage/Ethernet)
Distance between stations	100 m (100BASE-TX)
Dimensions (W x H x D)	44 mm x 100 mm x 68 mm
Weight	approx. 110 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	
KS2000	configuration software for extended parameterisation
Cordsets	cordsets and connectors
FC9001-0010 FC9011	Ethernet PCI fieldbus cards

Related products	
BK1120	EtherCAT "Economy plus" Bus Coupler for up to 64 Bus Terminals (255 with K-bus extension)
BK1250	EtherCAT "Compact" Coupler between EtherCAT Terminals (E-bus) and Bus Terminals (K-bus), adapter terminal
CX8010	EtherCAT Embedded PC

System	
EtherCAT	For further EtherCAT products please see the system overview