



## EK1100-0008 | EtherCAT Coupler with M8 connection

The EK1100-0008 coupler connects EtherCAT with the EtherCAT Terminals (ELxxxx). One station consists of an EK1100-0008 coupler, any number of EtherCAT Terminals and a bus end cap. The coupler converts the passing telegrams from Ethernet 100BASE-TX to E-bus signal representation. Compared with the EK1100, the EK1100-0008 has two M8 sockets, which are compatible with the EtherCAT Box modules.

The coupler is connected to the network via the upper Ethernet interface. The lower M8 socket may be used to connect further EtherCAT devices in the same strand. In the EtherCAT network, the EK1100-0008 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. If Ethernet cables with adequate performance are used, e.g. ZK1090-3131-1xxx, line lengths of 100 m are possible via M8.

Technical data	EK1100-0008
Task within EtherCAT system	coupling of EtherCAT Terminals (ELxxxx) to 100BASE-TX EtherCAT networks
Data transfer medium	Ethernet/EtherCAT cable (min. Cat. 5), shielded
Distance between stations	max. 100 m (100BASE-TX)
Number of EtherCAT Terminals	up to 65,534
Protocol	EtherCAT
Delay	approx. 1 $\mu$ s
Data transfer rates	100 Mbaud
Configuration	not required
Bus interface	2 x M8, shielded, screw type
Power supply	24 V DC (-15 %/+20 %)
Current consumption from $U_s$	70 mA + ( $\Sigma$ E-bus current/4)
Current consumption from $U_p$	load
Current supply E-bus	2000 mA
Power contacts	max. 24 V DC/max. 10 A
Electrical isolation	500 V (power contact/supply voltage/Ethernet)
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, IECEx

Accessories	
Cordsets	cordsets and connectors
System	
EtherCAT	For further EtherCAT products please see the <a href="#">system overview</a>