



EK1101 | EtherCAT Coupler with ID switch

The EK1101 coupler connects EtherCAT with the EtherCAT Terminals (ELxxxx). A station consists of an EK1101 coupler, any number of EtherCAT Terminals, an EL9011 bus end cap or an EK1110 EtherCAT extension. The coupler converts the passing telegrams from Ethernet 100BASE-TX to E-bus signal representation.

The EK1101 has three hexadecimal ID switches for assigning an ID to a group of EtherCAT components. This group can then be located at any position within the EtherCAT network. Variable topologies are therefore easily implementable.

Technical data	EK1101
Task within EtherCAT system	coupling of EtherCAT Terminals (ELxxxx) to 100BASE-TX EtherCAT networks, with identity verification
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
Type/number of peripheral signals	max. 4.2 GB addressable I/O points
Number of configurable IDs	4096
Protocol	EtherCAT
Delay	approx. 1 μ s
Data transfer rates	100 Mbit/s
Configuration	not required
Bus interface	2 x RJ45
Power supply	24 V DC (-15 %/+20 %)
Current consumption from Us	70 mA + (Σ E-bus current/4)
Current consumption from Up	load
Current supply E-bus	2000 mA
Current consumption E-bus	-
Power contacts	max. 24 V DC/max. 10 A
Electrical isolation	500 V (power contact/supply voltage/Ethernet)
Weight	approx. 105 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, IECEx
Ex-Marking	II 3 G Ex nA IIC T4 Gc Ex nA IIC T4 Gc Ex tc IIIC T135 °C Dc

Accessories	
Cordsets	cordsets and connectors

