600-185-1AA11



TB20 bus coupler
EtherCAT

- EtherCAT slave with Modular Device Profile (MDP) support
- Two EtherCAT ports (RJ45, 100BASE-TX)
- Up to 64 peripheral modules
- Modules can be replaced during operation (hot-swap)
- Automatic module I/O data mapping
- 1024 bytes of input data

Info

A functioning TB20 configuration will always require a bus coupler and at least one peripheral module.Note: Individual modules cannot be combined with the IO systems of other manufacturers. The EtherCAT bus coupler makes it possible to access data from peripheral modules using the EtherCAT protocol.It can accommodate up to 64 modules of any kind connected in series with the bus coupler.It detects peripheral modules that are plugged in and can assign the corresponding I/O data to an EtherCAT mapping automatically.The EtherCAT bus coupler supports the Modular Device Profile.A large I/O image table size of 1,024 bytes makes it possible toimplement comprehensive and complex systems.TB20 ToolBox can be used to easily configure the system and the various module parameters and transfer the corresponding settings to the coupler.Alternatively, the configuration can also be edited using the CoE object dictionary.Finally, running TB20 systems can be diagnosed in real-time and set up for testing purposes if an EtherCAT master is not yet connected (simulation / I/O check).A functioning TB20 configuration will always require a bus coupler and at least one peripheral module. Note: Individual modules cannot be combined with the IO systems of other manufacturers.

Technical data

General information	
Order number	600-185-1AA11
Article name	TB20-C, EtherCAT bus coupler
Scope of delivery	Bus coupler EtherCAT, 24 V power supply connector, bus cover element, base module
Dimensions (DxWxH)	73 x 35 x 110 mm
Weight	Approx. 130 g
Number of modules that can be connected in series	64
Voltage supply	24 V DC, 18...28 V DC
EtherCAT interface	
Number	2
Connection	RJ45
Transmission rate	100 Mbps, full duplex
Protocol	EtherCAT according to IEC standard 61158
I/O image size1024 bytes respectively	
Features	Automatic process data configuration,
Diagnostic functions	cycle-current module diagnosis on the basis of module and channel status, subsequent module diagnosis on the basis of the diagnosis status in the object directory
USB interface	
Number	1
Protocol	Full-speed USB 1.1 device
Connection	Mini-USB
Isolation voltage	1.5 kV
Electrical isolation	Yes
Ambient conditions	
Ambient temperature	0 °C ... +60 °C
Transport and storage temperature	-20 °C ... +80 °C
Relative air humidity	95 % r H without condensation
Pollution degree	2
Protection rating	IP 20
Certifications	CE, UL pending
CE	
Noise immunity	DIN EN 61000-6-2 "EMC Immunity"
Interference emission	DIN EN 61000-6-4 "EMC Emission"
Vibration and shock resistance	DIN EN 60068-2-6:2008 „Vibration", DIN EN 60068-2-27:2010 „Shock"