600-175-1AA11



TB20 bus coupler

EtherNet / IP

- Modules can be replaced during operation (hot-swapping)
- 24 V DC power supply
- Integrated power supply unit for powering peripheral modules (2.5 A)
- Supplies the system’s I/O voltage (24 VDC)
- USB device port for online diagnostics, configuring parameters, setup, and firmware updates with "TB20 ToolBox"
- TB20 ToolBox simulation for commissioning the I/O system without a higher-level controller in order to test the functionality (I/O check)
- Concealed "factory reset" switch for restoring the module to its factory settings
- Supports unicast and multicast
- CIP connections
- 511 bytes of input assembly data, 511 bytes of output assembly data
- TB20 ToolBox can be used for easy access to assembly sizes and to the structure of the memory image within the assemblies
- Up to 64 peripheral modules
- Implicit messaging (transport class 1)
- Explicit messaging (transport class 3)
- TCP watchdog
- IP address can be set relative to a base IP address by using a DIP switch that can be covered

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 EtherNet/IP bus coupler makes it possible to access data from peripheral modules using the EtherNet/IP protocol. It can accommodate up to 64 modules of any kind connected in series with the bus coupler.The EtherNet/IP bus coupler features an integrated two-port switch that allows for star and line topology configurations.A large I/O image table size of one kbyte makes it possible to implement 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.A functioning TB20 configuration will always require a bus coupler and at least one peripheral module. The bus coupler supports hot-swapping for replacing modules during operation. Note: Individual modules cannot be combined with the IO systems of other manufacturers.

Technical data

General information	
Order number	600-175-1AA11
Article name	TB20-C, EtherNet/IP bus coupler
Scope of delivery	Bus coupler Ethernet/IP, 24 V power supply connector, bus cover element, base module
Dimensions (DxWxH)	73 x 35 x 110 mm
Weight	Approx. 115 g
Number of modules that can be connected in series	64
Voltage supply	24 VDC, 18–28 VDC
Power dissipation	Max. 8 W
Permissible cable cross-section	AWG 16 .. 22
Mounting position	Any
EtherNet/IP interface	
Number	2
Connection	RJ45
Protocol transmission model	Implicit messaging (transport class 1), explicit messaging (transport class 3)
Transmission rate	10/100 Mbps, automatic detection
Input/output assembly size	511/511 bytes
IP address	Can be set with software and/or DIP switch
DHCP	Yes, can be selected using DIP switch
USB interface	
Number	1
Protocol	Full-speed USB 1.1 device
Connection	Mini-USB
Isolation voltage	Yes
Electrical isolation	1.5 kV
Current draw	
Current draw without modules (internal)	75 mA
Power supply for modules	5 V DC, max 2.5 A
Ambient conditions	
Ambient temperature	0 °C ... +60 °C
Transport and storage temperature	-20 °C ... +80 °C
Relative air humidity	95 % r H without condensation
Protection rating	IP 20
Certifications	CE, UL
UL	
Surrounding Air Temperature	0 °C ... +50 °C
Pollution degree	2
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"