mvTBI-EBC   EtherCAT Bus Coupler

Features

• Bypass function in case of Power Supply fault
• Bus Connection: RJ45
• No configuration required
• Max number of EtherCAT Bus Terminals: 65535
• Max number peripheral signals: unlimited
• Fully compatible with EtherCAT protocol

Applications

• Process control
• Machine control
• Distributed systems
• Strip chart recorders
• Proportional valves

Overview

The **mvTBI-EBC** module is an EtherCAT Bus Coupler with bypass function in case of Power Supply fault, in order to maintain EtherCAT communication to the other slaves in case of power supply fault.
It interfaces your EtherCAT Master with the other modules of the mvTBI System.
mvTBI-EBC is full compatible with EtherCAT protocol and works with both Twincat System Manager and *Ma.Vi.* EtherCAT Master system, as well as any other EtherCAT Master.
The special hardware design of **mvTBI-EBC** module permits to switch off the power to a part of the mvTBI System while maintaining the communication with other slaves.

Hardware Specifications

Maximum number of EtherCAT Terminals: 65535

Link type

Data transfer medium	Ethernet CAT 5 cable
Protocol	EtherCAT
Baud rate	100 Mbaud
Bus connection	RJ45
Max length	
between 2 mvTBI-EBC	100 m

Power Requirements

Voltage	24 V ± 5%,
Current	70 mA typ.

Power Supplied

E-Bus	5 V, 3 A max.
Field	24 V ± 5%, 10 A max.

Dimensions

Height	99 mm
Width	22,5 mm
Depth	114,5 mm

Mounting
On 35mm mounting rail conform to EN 50022

Environmental Specifications

Temperature

Operating	0° to 65° C (32° to 149° F)
Non operating	-40° to 85° C (-40° to 185° F)

Humidity   20 to 95% RH, non-condensing

Altitude

Operating	Sea level to 10,000 ft. (3048m)
Non operating	Sea level to 40,000 ft. (12192m)

Vibration

Operating	5 to 2,000 Hz
	.015" (.38 mm) peak-to-peak displacement
	2.5g (maximum) acceleration,
Nonoperating	5 to 2,000 Hz
	.030" (.76 mm) peak-to-peak displacement
	5.0 g (maximum) acceleration,

Shock

Operating	30 g peak acceleration
	11 msec duration
Nonoperating	50 g peak acceleration
	11 msec duration

EtherCAT Compliance

- IEC 61158-2-12
- IEC 61158-3-12
- IEC 61158-4-12
- IEC 61158-5-12
- IEC 61158-6-12
- EtherCAT Slave Device Description Documentation

Warranty

The **mvTBI-EBC** carries a one-year warranty.

Ordering Information

mvTBI-EBC   : EtherCAT Bus Coupler