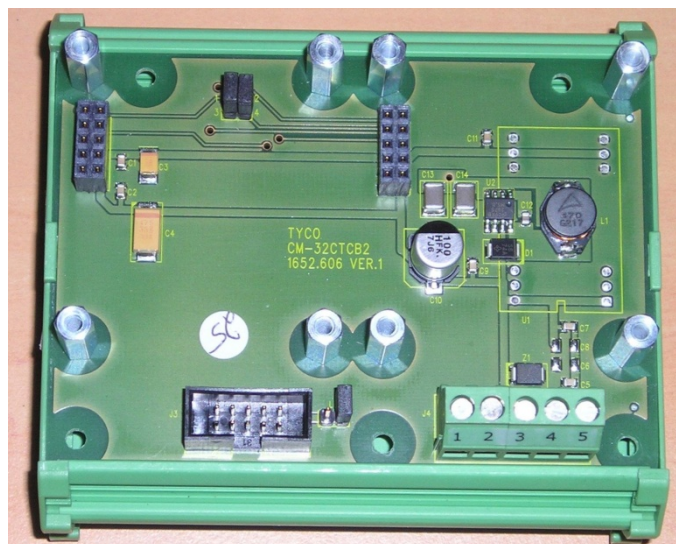


CM-32CTCB2, Communication Termination Board

Description:

The CM-32CTCB2 is the communication base card for the FAST2000[®] Compact/2 and the 19"-rack version of the FAST2000[®]. The card provides two communication channels which can be independently equipped with any of four interface modules RS422/RS485, RS232, Fibre optic or 30mA. These modules plug into the female 10 pin connectors J1 and J2.



Installation in the panel:

The CM-32CTCB2 is fitted in a Phoenix rail mount enclosure and installed on a DIN rail of the panel. It is connected to the serial communication channels of the CM-32 module by a 10-way ribbon cable. The ribbon cable connects to the 10 pin header J3 on the CM-32CTCB2 and to the CM-32 10 pin header either on the back plane of the 19"-rack of the FAST2000[®] or on the FAST2000[®] Compact/2 motherboard. The CM-32CTCB2 can be fitted with up to two communication driver modules. The modules plug into the female 10 pin connectors J1 and J2. J1 is used for serial channel A, J2 for serial channel B.

10-way ribbon cable connector J3

Pin#	Brief description
1	RTS Serial channel A
2	RTS Serial channel B
3	TX Serial channel A
4	TX Serial channel B
5	RX Serial channel A
6	RX Serial channel B
7	CTS Serial channel B
8	CTS Serial channel A
9	GND
10	GND


Driver module connectors J1 and J2


Pin#	J1	J2
1	TX A	TX B
2	RX A / RX B	RX B / RX A
3	RTS A	RTS B
4	CTS A	CTS B
5	+5V	+5V
6	+5V	+5V
7	GND	GND
8	GND	GND
9	+24V	+24V
10	+24V	+24V

To be able to mix segments of RS422 and Fibre optic in the same Token Ring it is possible to move Rx A to driver module B and Rx B to driver module A by using the jumpers on LK1. This is the recommended configuration when CM-32CTCB2 is set up in TokenRing mode. The reason is that wires / optic fibres from the nodes on each side then are connected to separate driver modules, and because of this the nodes are galvanically isolated from each other. When using channels A and B in other applications like for example printer outputs, Rx A should be on same driver module as Tx A and Rx B on same driver module as Tx B.

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Setting of Jumper LK1:

Jumpers on LK1 set as shown will connect RX A to RX on driver module B and RX B to RX on driver module A. This is the normal configuration in TokenRing mode.  1 2

Jumpers on LK1 set as shown will connect RX A to RX on driver module A and RX B to RX on driver module B. This is the normal configuration when connecting to other equipment like printers, Modbus, etc.  1 2

Power Termination:

To supply the communication termination board with power, 24V must be fed into the CM-32CTCB2's power terminal block J4.

Terminal#	Brief description
1	+24V DC In / Out
2	+24V DC In / Out
3	0V In / Out
4	0V In / Out
5	Earth

The earth connection is capacitive connected to 0V and +24V to reduce interference. It should be connected to chassis ground.

Technical data:

Input supply voltage:	min. 19 V	typ. 27.2 V	max. 30 V
Normal current consumption:	typ. 4.2 mA	max. 5.3 mA	
Add for each RS422/RS485 module	typ. 21 mA	max. 26.3 mA	
Add for each RS232 module	typ. 15 mA	max. 18.8 mA	
Add for each 30mA module	typ. 17.5 mA	max. 21.9 mA	
Add for each enabled 30mA driver	typ. 20.5 mA	max. 25.6 mA	
Add for each Fibre optic module	typ. 9 mA	max. 11.3 mA	
PCB dimensions:	typ. 72x100 mm		
Module dimensions:	typ. 90x103 mm		

Part-Nos.

Communication Termination Board	CM-32CTCB2	K09900220
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Options

Network Termination board 30mA	CM-32 CTCM1	K09900113
Network Termination board RS232	CM-32 CTCM232	K09900114
Network Termination board RS422/485	CM-32 CTCM422	K09900115
Network Termination board Fibre Optic	CM-32 CTCMOPT1	K09900117
10-way Ribbon cable connector		K09900508
10-way Ribbon cable		K09900504