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Data Sheet: T1H-EBC100-DS

Terminator I/O

T1H-EBC100 Ethernet Base Controller

Also refer to:
Ethernet Base Controller User Manual T1H-EBC-M
Terminator I/O Installation & I/O Manual T1K-INST-M

Install Controller on DIN Rail

Slide Unit into Position

Base Controller Specifications

Dimensions

Port Pin-outs

WARNING: To minimize the risk of potential safety problems, you should follow all applicable local and national codes that regulate the installation and operation of your equipment. These codes vary from area to area and it is your responsibility to determine which codes should be followed, and to verify that the equipment, installation, and operation are in compliance with the latest revision of these codes.

Equipment damage or serious injury to personnel can result from the failure to follow all applicable codes and standards. We do not guarantee the products described in this publication are suitable for your particular application, nor do we assume any responsibility for your product design, installation, or operation.

If you have any questions concerning the installation or operation of this equipment, or if you need additional information, please call us at 770-844-4200.

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Important Note: Upon a power cycle or “init base def” command, the EBC controller will reassign I/O addresses to modules actually present. If any module(s) have been removed or inserted, this can cause the I/O slot addresses to change from their previous assignments. Please take note of this when altering the installed modules.

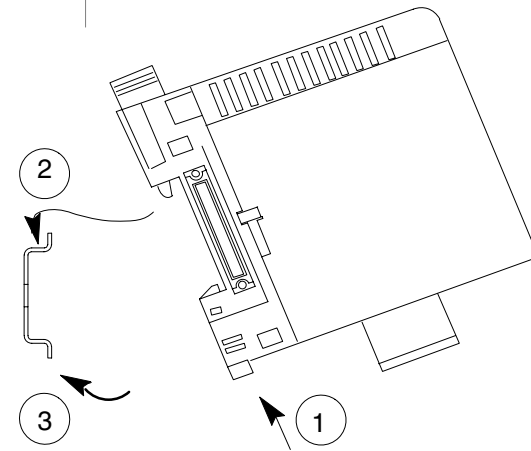


Note: NetEdit3 comes packaged with the T1H-EBC-M User Manual on the AutomationDirect Software Product Showcase CD, or you can download it from **www.hosteng.com**.

NetEdit3 software utility can be used to:

- configure the module
- assure the 10/100Base-T link is working
- set the Module ID over a 10/100Base-T network
- diagnose certain types of network problems
- update the EBC's booter and/or firmware if necessary

The T1H-EBC100 also supports HTML configuration. Refer to the T1H-EBC-M for more information.

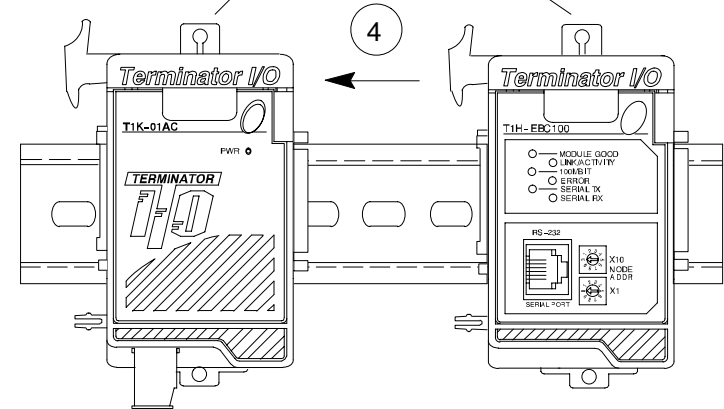


Mount Unit on DIN Rail (see note)

1. Make sure the locking tab is in the latched position
2. Hook upper tab over upper flange of DIN rail.
3. Tilt unit toward DIN rail until it snaps securely to DIN rail.

NOTE: Do not force the base controller on the DIN rail. Due to slight size variations in different manufacturers' DIN rail, it may be necessary to first unlatch the locking tab, rotate the module into place, then latch the locking tab.

Surface Mounting Tabs Provided (4-5mm (0.16-0.2") oval hole)



Slide Unit into Position on DIN Rail

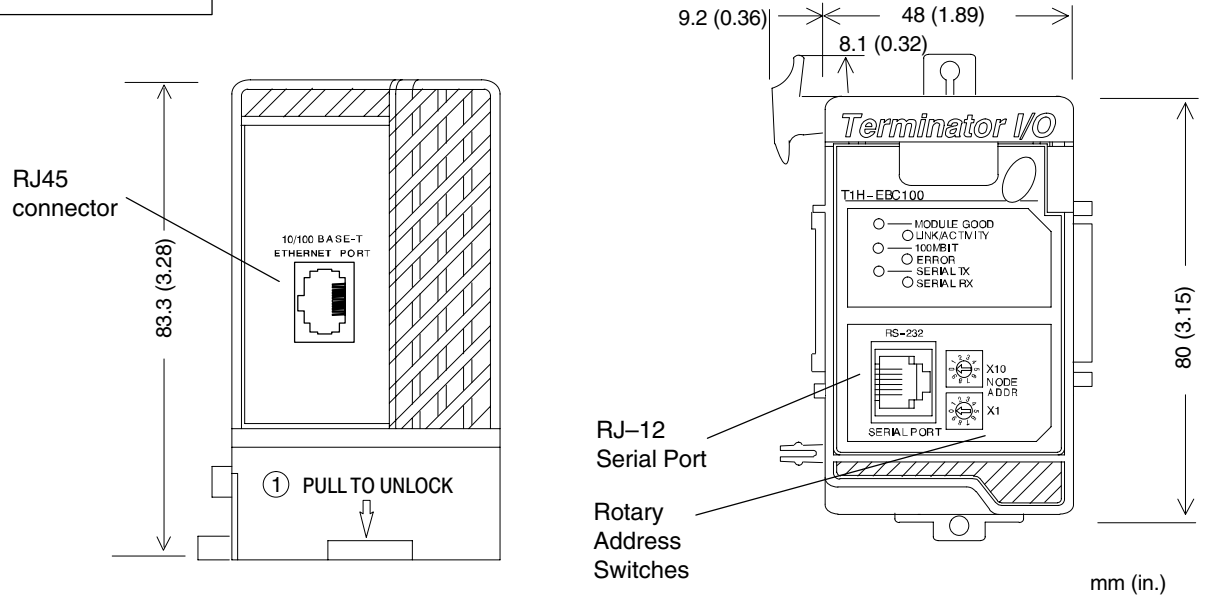
4. Slide the unit on the DIN rail until the clip arm attaches securely to the power supply.

Specifications

T1H-EBC100 Ethernet Base Controller

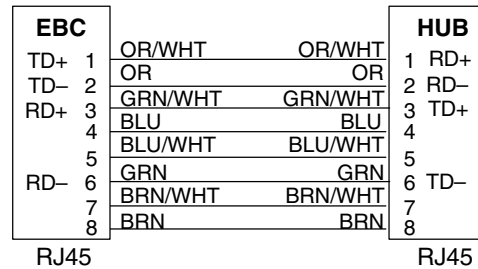
Module Type	Ethernet slave
Communications	10/100Base-T
Auto-configuring	I/O type/position automatically identified during power-up
IP Configuration	-Obtain an IP address from a DHCP Server automatically at power-up (Default); -Dedicated IP address using NetEdit3 or HTML configuration
Ethernet Protocols	TCP/IP, UDP/IP, IPX, MODBUS TCP
Ethernet Port	RJ45
Node Address	1 to 99 (decimal) set by rotary switches or software; 0 (default, used for setting address via software only)
Link Distance	100 meters (328 feet)
Data Transfer Rate	100Mbps or 10Mbps (auto-detect)
LED Indicators	<p>MODULE GOOD (green): On = module passed diagnostic check during last power-up Fast blink = configured I/O module no longer reporting (see auto-configuring, above) Slow blink = unconfigured I/O module added to system (see auto-configuring, above)</p> <p>LINK/ACTIVITY (green): On= Ethernet network activity detected 100MBIT (green): On= Ethernet activity is auto-detected at 100Mbps Off = (with LINK/ACTIVITY On) Ethernet activity is auto-detected at 10Mbps</p> <p>ERROR (red): On = watchdog timer timeout represents hardware, communications, or network fault; power-on reset or reset within master device software</p> <p>SERIAL TX (green): On= EBC RJ12 serial port is transmitting</p> <p>SERIAL RX (green): On= EBC RJ12 serial port is receiving</p>
Serial Communications Port	RJ12, RS232C K-Sequence protocol, ASCII, MODBUS RTU (not functional when used with HX-ERM)
Base Power Requirement	350mA@5VDC (EBC100); Serial port supports up to 500mA@5VDC (add for power budget consumption).

Dimensions

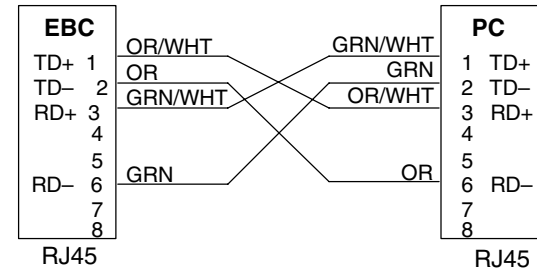


T1H-EBC100 Ethernet Port Pin-out

Patch (Straight-through) Cable



Crossover Cable

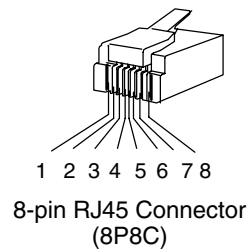


This diagram illustrates the standard wire positions in the RJ45 connector. We strongly recommend that you use **Category 5** or better, UTP cable.

General Specifications

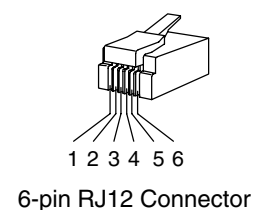
Installation Requirements	mounts to right of first power supply
Operating Temperature	32° F to 131° F (0° C to 55° C)
Storage Temperature	-4° F to 158° F (-20° C to 70° C)
Relative Humidity	5 to 95% (non-condensing)
Environmental Air	No corrosive gases, pollution level = 2 / (UL 840)
Vibration	MIL STD 810C 514.2
Shock	MIL STD 810C 516.2
Noise Immunity	NEMA ICS3-304 Impulse noise 1us, 1000V FCC class A RFI (144MHz, 430MHz, 10W, 10cm)

10/100Base-T



T1H-EBC100 Serial Port Pin-out

RJ12



Serial Port Pin Descriptions

1	0V	Power (-) connection (GND)
2	5V	Power (+) connection
3	RXD	Receive Data (RS232C)
4	TXD	Transmit Data (RS232C)
5	RTS	Request to Send
6	CTS	Clear to Send