SAFETY PRECAUTIONS

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH
Only qualified persons should install this equipment. Such work should be performed only after reading this entire set of instructions.

- Never work alone.
- Before performing visual inspections, tests, or maintenance on the equipment, disconnect all sources of electric power. Always that all circuits are live until they have been completely de-energized, labeled, and tagged. Pay particular attention to the design of the power system. Consider all sources of power, including the possibility of backfeeding.
- Keep the working area clean. Do not work near other equipment or equipment that may generate an electrostatic discharge.
- Always use the proper rated voltage setting device to confirm that it is set correctly.
- Beware of potential hazards, wear personal protective equipment, and carefully inspect the work area for tools and objects that may have left the equipment.
- The successful operation of the equipment depends upon proper handling, installation, and operation. Regulatory harmonic mitigation equipment may affect personal property as well as damage to electrical equipment or other property.

Failure to follow these instructions will result in death or serious injury.

Quick Start Checklist

- Mount the unit.
- Determine the control power method and connect the power.
- Configure the Ethernet communications settings with a web browser (using an Ethernet crossover cable) or with HyperTerminal (using a null modem cable, which is included in the TCSBA0100 configuration kit). (sold separately).
- Configure the serial ports.
- Connect the data link.
- Wire the serial ports.

DESCRIPTION

1. 24-bit color control panel
2. 10/100BaseTx (IEEE 802.3af) connection
3. LEDs:
   - TX: Transmitting data
   - RX: Receiving data
   - Power/Status
4. Power Supply
5. DIN rail release
6. Slide release
7. RS232 connection

Ethernet Configuration

Before configuring the EGX, obtain a unique static IP address, subnet mask, and default gateway address from your network administrator. Use a Web browser or HyperTerminal to configure the EGX with the information obtained from your network administrator.

Ethernet Setup Using a Web Browser

1. Disconnect your computer from your network.
2. Connect an Ethernet crossover cable from the EGX to the computer.
3. Start Internet Explorer (version 6.0 or higher).
4. In the Address text box, type 169.254.0.10, then press Enter.
5. Select the language for the current HyperTerminal session.
6. In the Power Supply menu on the left side of the page, select Ethernet.
7. Click Setup.
8. In the Ethernet TCP/IP page that opens, click Ethernet TCP/IP in the menu on the left side of the page.
9. Select the frame format and media type (see Table 1 for a description of each option), then click Apply.
10. Reconnect your computer to your network if you assigned a static IP address to your computer in step (7). You must restore your computer's original settings before reconnecting to your network.

Ethernet Setup Using HyperTerminal

1. Attach a null modem cable to the computer.

Table 1: EGX Ethernet and TCP/IP Settings

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frame Format</td>
<td>Used to select the format for data sent over an Ethernet connection.</td>
<td>Ethernet II, 802.3 SNAP</td>
</tr>
<tr>
<td>Media Type</td>
<td>Used to define the physical Ethernet connection.</td>
<td>10-100BaseTX, 1000BaseT</td>
</tr>
<tr>
<td>IP Address</td>
<td>Used to enter the static IP address of the EGX.</td>
<td>169.254.0.10</td>
</tr>
<tr>
<td>Subnet Mask</td>
<td>Used to enter the Ethernet subnet mask address of your network.</td>
<td>255.255.0.0</td>
</tr>
<tr>
<td>Default Gateway</td>
<td>Used to enter the gateway (router) IP address used for wide area network (WAN) communications.</td>
<td>169.254.0.10</td>
</tr>
</tbody>
</table>

NOTE: The B0W6 or GBR adapter, and the Ethernet crossover cable are included in the TCSBA0100 configuration kit (sold separately).

Installation Guide

Only qualified workers should install this equipment. Such work should be performed only after reading this entire set of instructions.

- Apply appropriate personal protective equipment (PPE) and follow safe electrical practices. For sources of electric power. Assume that all circuits are live until they have been completely de-energized, labeled, and tagged. Pay particular attention to the design of the power system. Consider all sources of power, including the possibility of backfeeding.

- Beware of potential hazards, wear personal protective equipment, and carefully inspect the work area for tools and objects that may have left the equipment.

- The successful operation of the equipment depends upon proper handling, installation, and operation. Regulatory harmonic mitigation equipment may affect personal property as well as damage to electrical equipment or other property.

Additional Resources

Documentation: Go to www.powerlogic.com, and then click the firmware file you want to download. For more information, see the user's guide 63230-319-204.

Firmware: Go to www.powerlogic.com, and then click the firmware file you want to download. For more information, see the user's guide 63230-319-204.

Powering the EGX

Power-over-Ethernet (PoE [IEEE 802.3af])
The EGX supports PoE (IEEE 802.3af), allowing the EGX to be powered over an Ethernet connection. Use any PoE adapter from Schneider Electric, such as the TCSEAV0100 from Schneider Electric.

Ethernet Switch

Before configuring the EGX, obtain a unique static IP address, subnet mask, and default gateway address from your network administrator. Use a Web browser or HyperTerminal to configure the EGX with the information obtained from your network administrator.

Table 2: EGX Setup Utility Options

<table>
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NOTE: The B0W6 or GBR adapter, and the Ethernet crossover cable are included in the TCSBA0100 configuration kit (sold separately).

Installation Guide

Dimensions

DIN Rail Mounting and Removal

1. Slide release
2. Remove 4-20 mm screws ( Phillips, Pan Head )
3. Slide release

Serial Configuration
1. Click Serial Port.
2. Select the mode, physical interface, transmission mode, baud rate, and parity for the serial COM port.
NOTE: The serial port must match the same baud rate, parity, and mode settings. If you are using RS485, set the mode according to whether your daisy chain is 2-wire or 4-wire.

Serial Port
1. Click Serial Port.

RS485 Wiring
NOTE: For surge protection, we recommend connecting the shield wire directly to an external earth ground at a single point.

4-wire Devices

Daisy Chain Maximum Distances

<table>
<thead>
<tr>
<th>Speed</th>
<th>Min. Distance for 1-16 devices</th>
<th>Max. Distance for 17-32 devices</th>
</tr>
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<tbody>
<tr>
<td>2400</td>
<td>10,000 ft (3,048 m)</td>
<td>5,000 ft (1,524 m)</td>
</tr>
<tr>
<td>4800</td>
<td>5,000 ft (1,524 m)</td>
<td></td>
</tr>
<tr>
<td>9600</td>
<td>10,000 ft (3,048 m)</td>
<td>4,000 ft (1,219 m)</td>
</tr>
<tr>
<td>19200</td>
<td>5,000 ft (1,524 m)</td>
<td>2,500 ft (762 m)</td>
</tr>
</tbody>
</table>


Troubleshooting

DANGER
HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

This equipment must be installed and serviced only by qualified personnel.

1. Verify all electrical conductors are appropriately connected to the EGX. The wiring must comply with NFPA 70E.
2. Verify all network connections are correct.

Failure to follow these instructions can result in death or serious injury.

MAINTENANCE AND TROUBLESHOOTING

Maintenance
The EGX does not require maintenance, nor does it contain any user-serviceable parts. If the EGX fails to operate properly, please refer to the technical support contact provided in the shipping carton for a list of support phone numbers by country. Do not open the EGX enclosure; all service should be performed by qualified personnel.

Diagnostics
The Diagnostics page serves by the EGX displays diagnostic data that may be helpful in troubleshooting network problems. This page also contains information about your specific EGX, including the serial number, manufacturing date, and media access control (MAC) address. Clicking the Reset button on this page clears all counter values.

NOTE: This page may show accumulated readings since the EGX was last activated. If power to the EGX is lost, all values revert to zero.

Troubleshooting

Problem | Possible Cause | Solution
---|---|---
Power Status LED is not lit | Power source is not applied or is not stable. | Apply power or check power source.
Daisy Chain Maximum Distances

<table>
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NOTE: This table is only to be used as a guide.

RS232 Port
The RS232 port is used to configure the EGX network parameters, and also can be used for serial communication using Modbus. The EGX RS232 port is wired as a standard terminal equipment (T-9) device and uses a standard RS232 connector.

NOTE: An RS232 to RS485 adapter is included in the TCE3400/600 kit (sold separately) for use with an Ethernet crossover cable.

Table 2: RS232 Pin Assignments (EIA/TIA-561 for RJ45)

<table>
<thead>
<tr>
<th>Pin No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Power Supply</td>
</tr>
<tr>
<td>2</td>
<td>Data Set Ready</td>
</tr>
<tr>
<td>3</td>
<td>DSR Out (D2)</td>
</tr>
<tr>
<td>4</td>
<td>Line Noise</td>
</tr>
<tr>
<td>5</td>
<td>RTS In (D3)</td>
</tr>
<tr>
<td>6</td>
<td>Request To Send</td>
</tr>
<tr>
<td>7</td>
<td>Data Terminal Ready</td>
</tr>
<tr>
<td>8</td>
<td>DSR In (D1)</td>
</tr>
</tbody>
</table>

NOTE: This equipment must be installed and serviced only by qualified personnel.

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