1. Intended use
The bus node type CTEU-EP is intended exclusively for use as a participant in EtherNet/IP or Modbus TCP networks. The bus node may only be used in its original status without unauthorised modifications and only in perfect technical condition. The specified limit values must be observed here. The product is intended for use in industrial environments. Outside of industrial environments, e.g. in commercial and mixed-residential areas, actions to suppress interference may have to be taken.

2. Power supply connection
3. Status LEDs
4. Mounting, dismantling, installation
5. Data transmission errors
6. Unauthorised access to the product

3.1 Ports
Power supply connection

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 V</td>
<td>RX+</td>
<td>Operating voltage of the power supply</td>
</tr>
<tr>
<td>24 V</td>
<td>RX–</td>
<td>Operating voltage of the power supply</td>
</tr>
<tr>
<td>24 V</td>
<td>UL/SEN</td>
<td>Status of the internal communication between the bus node and the higher level product</td>
</tr>
<tr>
<td>24 V</td>
<td>UEL/OUT</td>
<td>Status of the internal communication between the bus node and the higher level product</td>
</tr>
<tr>
<td>24 V</td>
<td>NF</td>
<td>Function earth (earth potential)</td>
</tr>
<tr>
<td>24 V</td>
<td>NF</td>
<td>Function earth (earth potential)</td>
</tr>
</tbody>
</table>

3.2 Indicators

<table>
<thead>
<tr>
<th>Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS</td>
<td>Power supply connection</td>
</tr>
<tr>
<td>X1</td>
<td>Status of the operating voltage supply (Phase A)</td>
</tr>
<tr>
<td>X2</td>
<td>Status of the operating voltage supply (Phase B)</td>
</tr>
<tr>
<td>X3</td>
<td>Status of the operating voltage supply (Phase C)</td>
</tr>
<tr>
<td>X1</td>
<td>Status of the internal communication between the bus node and the higher level product</td>
</tr>
<tr>
<td>X2</td>
<td>Status of the internal communication between the bus node and the higher level product</td>
</tr>
<tr>
<td>TP1</td>
<td>Network status</td>
</tr>
<tr>
<td>TP2</td>
<td>Connection status (Team 1)</td>
</tr>
<tr>
<td>TP3</td>
<td>Connection status (Team 2)</td>
</tr>
</tbody>
</table>

4.1 Mounting the bus node
To mount the bus node on the decentralised electrical connection box:

1. Check seal and sealing surfaces of the bus node and the product with the I-Port interface. Replace damaged parts.
2. Push the bus node onto the product carefully and without force. Secure the bus node with the short conductor with the greatest possible cross section (≥ 4 mm² Cu).
3. Fixing the power supply

Electric voltage
Injury caused by electric shock, damage to machine and to system

- For the electrical power supply, only use PELV circuits in accordance with IEC 60204-1/EN 60204-1.
- Observe the handling specifications for electrostatically sensitive devices.
- Use covered caps to seal unused connections to achieve the required degree of protection.
- Always ensure that the connection technology being used has the required degree of protection.

I-Port interfaces
The I-Port interfaces (X1/X2) are located on the underside of the bus node.

5.1 Setting the IP address

5.3 Setting IP address

- Observe the basic addressing rules for the allocation of the IP addresses, e.g. with respect to the use of public or private address ranges.
- Check that the IP address can be used in the automation network.
- Ensure that there is no duplication of IP addresses in use.
- Use the switch [ON]/[OFF] for setting the addressing type or for setting the host ID of the bus node.

The change of IP addressing in the bus node requires a corresponding update in the higher-order control system.

Examples

- Host ID = 05
- Host ID = 38

Dynamic addressing

1. Make sure there is a DHCP server (e.g. BOOTP DHCP server from Rockwell Automation) in the network.
2. Set all switch elements for address setting DIL1 (1...6) and DIL2 (2...7) to “OFF”.
3. With Festo Field Device Tool (FFT) or EtherNet/IP Object, activate the “DHCP” option.
4. Switch bus node off and back on.

Saved addressing

1. Set all switch elements for address setting DIL1 (1...6) and DIL2 (2...7) to “OFF”.
2. Set the IP address with the Festo Field Device Tool (FFT) or EtherNet/IP Object, activate the “DHCP” option.
3. Switch bus node off and back on.

Static addressing

1. Set all switch elements for the octets of the IP address with the Festo Field Device Tool (FFT) or EtherNet/IP Object.
2. With all switch elements for address setting DIL1 (1...6) and DIL2 (2...7), set the switch elements of the IP address.
3. Switch bus node off and back on.
5.6 Changing start addresses of inputs/outputs

7. Diagnosis

8. Maintenance

9. Accessories

10. Glossary