

# TX400 HMI/PLC Product Series

## 5" Display — CODESYS V3 PLC with TARGET and WEB VISU

### High-Quality Plastic Housing and Front Film with Capacitive Touch

#### TX405-P3CV01

|                              |                                                                                                                      |
|------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Type                         | TX405-P3CV01                                                                                                         |
| ID                           | 100051167                                                                                                            |
| <b>Display/touch</b>         |                                                                                                                      |
| Display                      | TFT colour                                                                                                           |
| Touchscreen                  | Capacitive                                                                                                           |
| Active screen area           | 5"                                                                                                                   |
| Resolution (pixels)          | 800 × 480 pixels WVGA                                                                                                |
| Format                       | 16:9                                                                                                                 |
| Brightness                   | 400 cd/m² typ.                                                                                                       |
| dimmbable                    | Yes, To 0 %                                                                                                          |
| <b>Controller</b>            |                                                                                                                      |
| Processor                    | 64-bit RISC, Quad core 1.6 GHz                                                                                       |
| Memory                       | 4 GB Flash                                                                                                           |
| RAM memory                   | 2048 MB                                                                                                              |
| Add-on memory                | 1 x USB host port                                                                                                    |
| Real time clock              | Yes (battery-buffered)                                                                                               |
| <b>PLC data</b>              |                                                                                                                      |
| Programming                  | CODESYS V3                                                                                                           |
| Released for CODESYS version | V 3.5.19.20                                                                                                          |
| Programming languages        | IEC 61131-3 (IL, LD, FBD, SFC, ST)                                                                                   |
| Programming interface        | Ethernet                                                                                                             |
| Program memory               | 20000 kByte                                                                                                          |
| Non-volatile memory          | 63 kByte                                                                                                             |
| <b>Interfaces</b>            |                                                                                                                      |
| Onboard                      | 2 × RJ45 Ethernet, 1 × CAN, 1 × RS232/RS485/RS422, 1 × USB host, 1 × power supply                                    |
| Ethernet                     | ETH0 - 10/100 Mbit<br>ETH1 - 10/100 Mbit                                                                             |
| Protocols                    | PROFINET (Controller/Device)<br>EtherNet/IP (Scanner/Adapter)<br>Modbus TCP (Server/Client)<br>EtherCAT (MainDevice) |
| Fieldbus                     | Modbus RTU (Server/Client)<br>CANopen (Server)                                                                       |
| USB                          | 1 × host port                                                                                                        |
| Serial                       | 1x RS232 / RS485 / RS422, 1x CAN                                                                                     |
| <b>Power supply</b>          |                                                                                                                      |
| Rated value                  | 24 VDC, max. 0.9 A                                                                                                   |
| Admissible voltage range     | 10...32 VDC                                                                                                          |



- 2 separate RJ45 Ethernet ports
- 1 serial interface (RS232/RS422/RS485)
- 1 CAN interface
- 1 USB host port

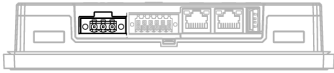
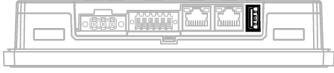
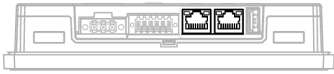
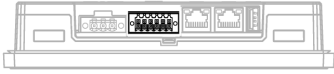
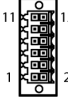
**General data**

|                              |                                                         |
|------------------------------|---------------------------------------------------------|
| Operating ambient conditions | -20...55 °C, 5...85 % relative humidity, non-condensing |
| Storage ambient conditions   | -30...70 °C, 5...85 % relative humidity, non-condensing |
| Approvals                    | CE<br>cULus                                             |
| Protection class             | IP66 front, IP20 rear<br>NEMA type: 12/4X               |

**Dimensions**

|                   |                   |
|-------------------|-------------------|
| Front (W x H x D) | 107 x 147 x 37 mm |
| Cut-out (W x H)   | 136 x 96 mm       |
| Mounting depth    | 29+8 mm           |
| Weight            | approx. 0.5 kg    |

Connection and pin assignment

|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                             |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | <p><b>Power Supply</b></p> <p>The power supply connector is supplied with each device. It can be reordered from Turck as an accessory.</p> <p>Type designation: TX-Mount-xx</p>                                                                                                                                                                                                                                                                                                                                     | <p>Pin assignment</p>  <p>1 = 24 VDC<br/>2 = 0 V<br/>3 = <math>\frac{1}{2}</math></p>                                                                                                                                                                    |
|    | <p><b>USB Interface</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <p>Pin assignment</p>  <p>1 = 5 VDC<br/>2 = D -<br/>3 = D +<br/>4 = GND</p>                                                                                                                                                                              |
|  | <p><b>Ethernet Ports</b></p> <p>The Ethernet ports are independent.</p> <p>Ethernet cables (examples):</p> <p><b>RJ45 male connector–RJ45 male connector:</b> RJ45S-RJ45S-4422-2M (ID: 6635218)</p> <p><b>RJ45 male connector–M12 male connector, 4-pin, D-coded:</b> RSSD-RJ45S-4422-2M (ID: 6635170)</p> <p><b>RJ45 male connector–M8 male connector, 4-pin:</b> PSGS4M-RJ45S-4422-2M (ID: 6635247)</p> <p><b>RJ45 male connector–M12 female receptacle, 4-pin, D-coded:</b> RJ45-FKSDD-4414-2M (ID: 6935282)</p> | <p>Pin assignment</p>  <p>1 = TX +<br/>2 = TX -<br/>3 = RX +<br/>4 = n.c.<br/>5 = n.c.<br/>6 = RX -<br/>7 = n.c.<br/>8 = n.c.</p>                                                                                                                      |
|  | <p><b>Serial Interfaces</b></p> <p>The serial interface can be operated either as RS232, RS485 or RS422.</p>                                                                                                                                                                                                                                                                                                                                                                                                        | <p>Pin assignment</p>  <p>1 = CAN - H<br/>2 = CAN 120 Ohm<br/>3 = CAN - CAN-L<br/>4 = CAN - CAN-H<br/>5 = CAN - GND<br/>6 = CAN - SHIELD<br/>7 = GND<br/>8 = SHIELD<br/>9 = RTS / CHA+<br/>10 = CTS / CHB+<br/>11 = TXD / CHA-<br/>12 = RXD / CHB-</p> |

**Accessories**

| Type code      | Ident no. |                                                             | Dimension drawing |
|----------------|-----------|-------------------------------------------------------------|-------------------|
| TX700-MOUNT-10 | 100003189 | TX700 mounting bracket and power connectors for 10" devices |                   |

**Function accessories**

| Type code | Ident no. |                                                | Dimension drawing |
|-----------|-----------|------------------------------------------------|-------------------|
| TX-PSC    | 100002938 | Power Supply Male Connector for TX HMI Devices |                   |