



48 x 96 mm

Features :

- Compact PLC with Built - in HMI
- Configurable LED Display
- Windows Based User Friendly Software for Ladder Programming & HMI Configuration
- RS485 Based Communication with MODBUS RTU Protocol

Display Specification

| | |
|-------------|------------------------------|
| Display | 7 Segment LED |
| Digits | (4 + 4) RED + 6 GREEN Digits |
| LED Bank | 4 RED LED's, 4 GREEN LED's |
| No. of Keys | 5 Keys (4 User Configurable) |

Input Specifications

| | |
|----------------------------|--|
| Digital Input | |
| No. of Digital Inputs | 6 |
| Input Type | PNP |
| Input Voltage Range | 5 - 30V DC |
| Response Time | Typical 2 mSec (Based on Ladder Scan Time) & 100 µSec for fast Input |
| Debounce Time | 0 to 255 mSec (Default 10 mSec) |
| Fast Counter Input | |
| Input Type | PNP |
| No. of Fast Input Channels | 1 |
| Max Speed | 5 kHz |
| Analog Input | |
| No. of Channels | 1 |
| Sensor Type | TC / RTD |
| Sensor | J, K, T, R, S, C, E, B, N, L, U, W, PLTNL, mV (-5 to 65mV), PT100 |
| Accuracy | 0.25% ±1°C (TC), 0.1% ±1°C (RTD) at 25°C |
| Conversion time | 50 msec |
| Resolution | 14 Bits |

Output Specifications

| | |
|-------------------------------|---|
| Digital Output - Relay | |
| No. of Outputs | 4 |
| Type | Relay |
| Relay Type | SPST |
| Contact Rating | 5A@230V AC (Resistive) 5A@28V DC (Resistive) |
| Response Time | 10 mSec |
| Mechanical Life | 2000000 Cycles |
| Isolation | No |

Communication

| | |
|------------------------|---------------------------------------|
| Communication port | RS485 [Slave] |
| Communication protocol | MODBUS RTU |
| Connector | RJ25 (6 Pin Jack) |
| Transmission mode | Half Duplex |
| Transmissions speed | 9600, 19200, 38400, 57600, 115200 bps |
| Data bits | 7 or 8 |
| Parity | None, Odd, Even, Space, Mark |
| Stop bits | 1 or 2 |

Functional Specifications

| | |
|---------------------|---|
| Programming method | Windows based Software for Ladder Programming and HMI Configuration |
| Memory | Data Memory : 16 kB Code Memory : 112 kB EEPROM Memory : 1 kB |
| Max. no. of objects | 2000 (As per memory) |
| Minimum scan time | 200 µSec |
| Typical scan time | 2 mSec (Based on ladder scan time) |

Environmental Specifications

| | |
|-----------------------------|---------------|
| Operating temperature | 0 to 55°C |
| Storage temperature | -20 to 70°C |
| Humidity (non - condensing) | 10% to 95% RH |

Mechanical Specifications

| | |
|----------|----------------|
| Mounting | Panel |
| Weight | 240 gms approx |

Functional Features

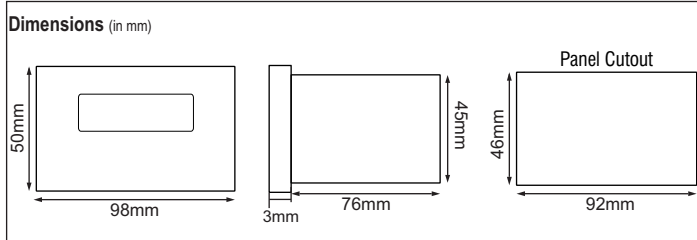
| | |
|-------------------------|--|
| Timer operational modes | On delay, Off delay, Pulse, Special [Up / Down] Timer, 1ms Timer |
| Timer resolution | 1 mSec (Accurate only for 1 mSec Timer block) |
| Counter | Up counter, Down counter, Up / Down counter, Special [Up / Down] counter |
| Other blocks | Analog Input, FTC, PIDT, Ramptoak |
| Memory retention | 10 years (2KB memory) |
| RTC | No |

*Usage Limited to 4 nos

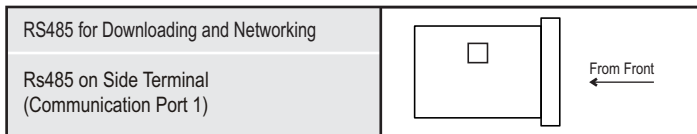
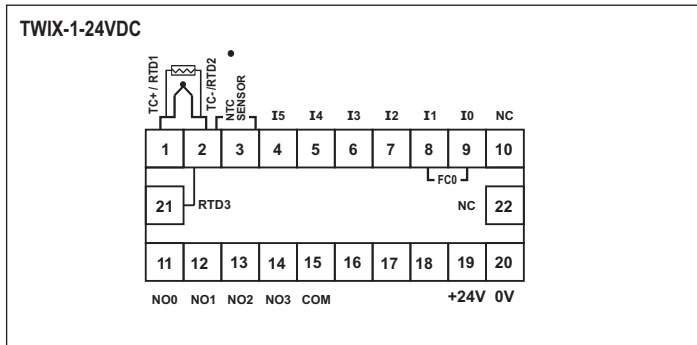
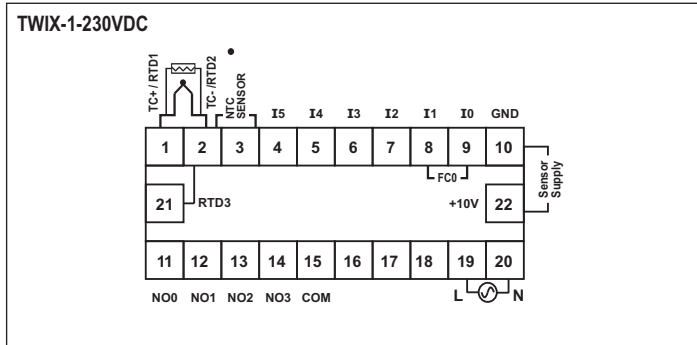
Supply Specification

| | |
|--------------------|---|
| Supply Voltage | 90 to 270V AC 50 / 60 Hz, 18-28 VDC |
| Power Consumption | 6W Max |
| Source Supply (SS) | 10V, 50mA (Applicable only for 230V AC model) |

VAR IN_OUT & VAR OUTPUT types Variables Maximum Retention 25 variables only each of 32 bit @110V, @24VDC



Terminal Connections



Port Description

| Port 1 (6 pin jack) | |
|---------------------|-----------------|
| PIN | Description |
| 1 | RS485 Slave +ve |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | - |
| 6 | RS485 Slave -ve |

Ordering Information

| Product Code | Description | Certification |
|--------------|---------------------------------------|--------------------|
| TWIX-1-230V | PLC – 6DI, 4RO, 1AI (TC/RTD) & 230VAC | CE RoHS in Process |
| TWIX-1-24VDC | PLC – 6DI, 4RO, 1AI (TC/RTD) & 24VDC | CE RoHS in Process |

Accessories (To be ordered separately)

| | |
|-------------------|--------------------------------------|
| Downloading cable | AC-USB-RS485-03 |
| Networking | ACH-004 (RJ25 Cable) |
| | AC-IOEXP-03 (Expansion Adapter) |
| | AC-USB-RS485-02 (USB to RS485 Cable) |