



48 x 96 mm

Features :

- Compact PLC with Built - in HMI
- Configurable LED Display
- RS485 Based Communication with MODBUS RTU Protocol

Display Specifications

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	6 - 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	12 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 endurance	5 x 10 ⁶
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, Rampsoak
Memory retention	10 years (2KB memory)
RTC	No

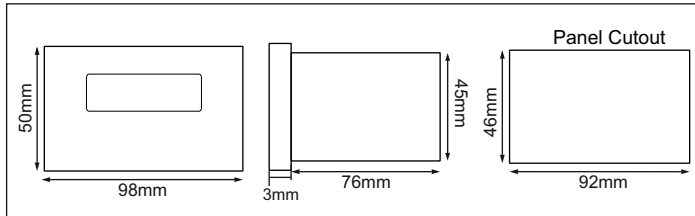
*Usage Limited to 4 nos

Supply Specification

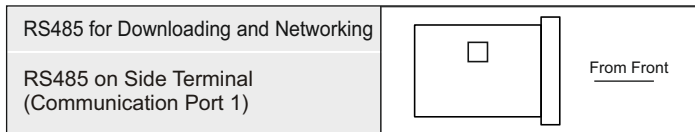
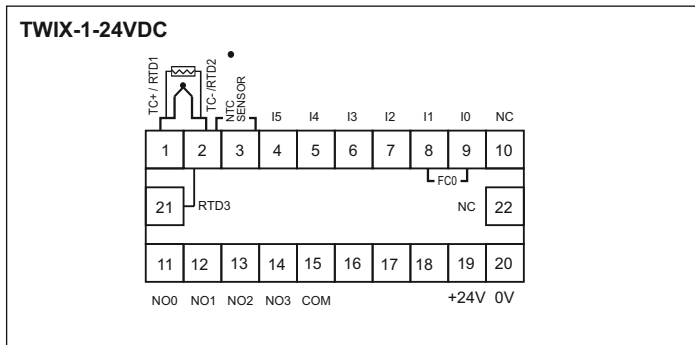
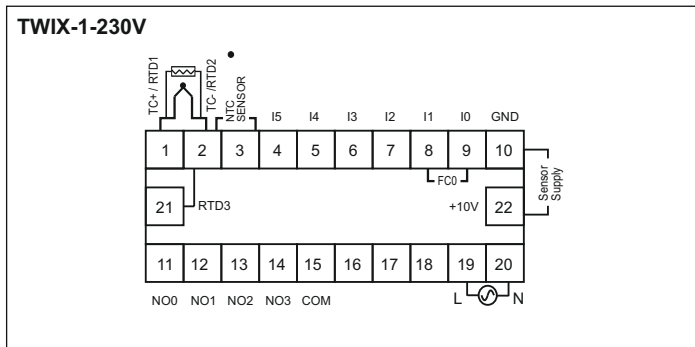
Supply Voltage	90 to 270V AC 50 / 60 Hz, 18-28 VDC
Power Consumption	6W Max
Source Supply (SS)	10V, 50mA (Applicable only for 230V AC model)

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

Dimensions (in mm)



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)
Power Supplies	RPS60-24-CE-RoHS
Relay Module	
1) RLYMD-1-S4-1CO-24VDC	4 Channel 1 change over Relay module
2) RLYMD-1-S4-2CO-24VDC	4 Channel 2 change over Relay module
3) RLYMD-2-S8-1CO-24VDC	8 Channel 1 change over Relay module
4) RLYMD-2-S8-2CO-24VDC	8 Channel 2 change over Relay module
5) ERLYMD-2-1-S8-1CO-24VDC	8 Channel 1 change over communication based relay module