



Size: 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 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**

<b>Digital Input</b>	
No. of Digital Inputs	8
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 mSecs)
Timer Accuracy	0.1% or 2ms (Whichever is greater)
<b>Fast Counter Input</b>	
Input Type	PNP
No. of fast Input channels	1
Max Speed	5 kHz
<b>Analog Input</b>	
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 25C
Conversion time	50 mSec
Resolution	14 Bits
Input Impedance	560k for TC 750kΩ for RTD
Maximum Non destructive Input	5V

**Communication**

Communication Port	RS485 Port [Slave]
Communication Protocol	MODBUS RTU
Connector	RJ25,6 pin Jack

**Output Specifications**

<b>Digital Output - Transistor</b>	
No. of Digital Outputs	6
Output Type	Source 100mA each @ 24V DC
Response Time	10 ms
Short Circuit Protection	Yes
Isolation between CPU & Output	No
Isolation between Outputs	No
Nominal Load	240 E
Breaking Current	110mA

**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

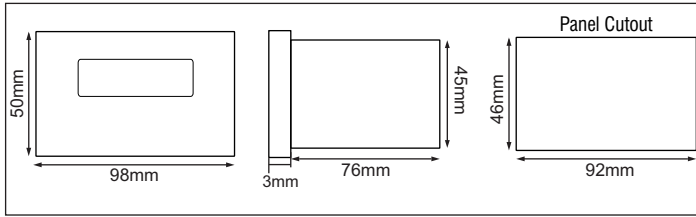
**Functional Features**

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)

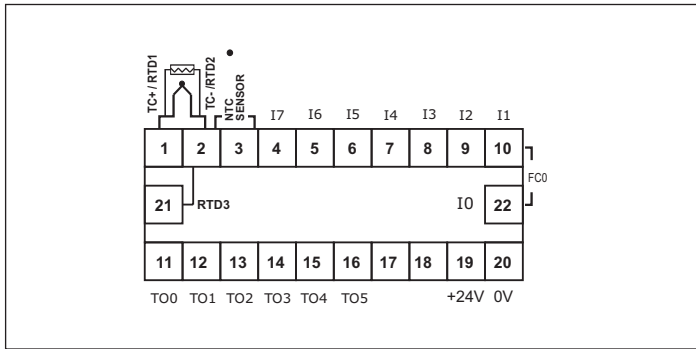
**Supply Specification**

Supply Voltage	18 to 30V DC
Power Consumption	6W Max

### Dimensions (in mm)

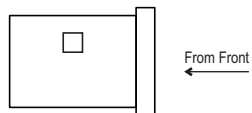


### Terminal Connections



RS485 for downloading and networking

RS485 on side terminal  
(Communication port 1)



### Port Description

Port 1 (6 Pin Jack)	
Pin	Description
1	RS485 + ve
2	NC
3	NC
4	NC
5	NC
6	RS485 - ve

### Ordering Information

Product Code	Description	Certification
TWIX-3-24VDC	PLC – 8DI, 6DO, 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)