



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 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	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 2msec (Whichever is greater)
Fast Counter Input	
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 Bit
Input Impedance	560kΩ 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
Transmission Mode	Half Duplex
Transmission speed	9600, 19200, 38400, 57600, 115200 bps
Parity	None, Odd, Even, Mark, Space
Data bits	7 or 8
Stop bits	1 or 2
Settable Slave ID	1 - 255

Output Specifications

Digital Output - Transistor	
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, Ramps oak
Memory Retention	10 years (2KB)

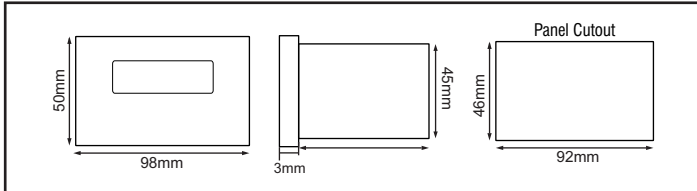
*Usage Limited to 4 No.s only

Supply Specification

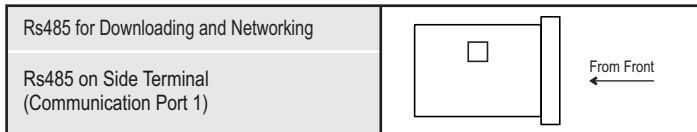
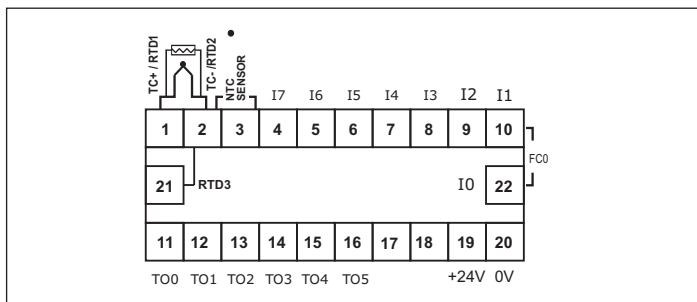
Supply Voltage	18 to 30V DC
Power Consumption	6W Max

VAR IN_OUT & VAR OUTPUT types variables Maximum Retention 25 variables only each of 32 bits @ 24VDC

Dimensions (in mm)



Terminal Connections



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)