



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	
Digital Inputs	8 (Including Fast Channel Input)
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)
Timer Accuracy	0.1% or 2ms (Whichever is greater)
Fast 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 Bit
Input Impedence	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
Transmission Mode	Half duplex
Transmission speed	9600, 19200, 38400, 57600, 115200
Parity	None, odd, Even, Space
Data bits	8
Stop bits	1 or 2
Settable Slave ID	1 - 255

Output Specifications

Digital Output - Transistor	
No. of 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

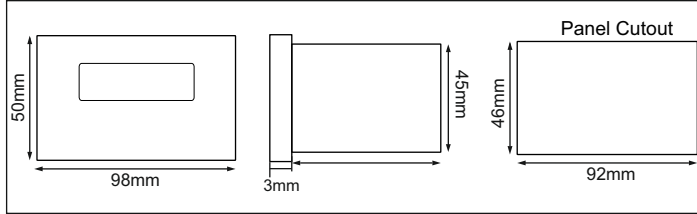
Timer Operational Modes	On Delay, Off Delay, Pulse, Special [Up/Down] Timer, 1ms Timer*
Timer Resolution	1 msec (Accurate only for 1 msec Timer block)
Counter	Up Counter, Down Counter, Up/Down Counter, Special [Up/Down] Counter
Other Blocks Memory Retention	Analog input, FTC, PID, Rampsoak 10 years (2kB)

*Usage limited to only 4 Nos

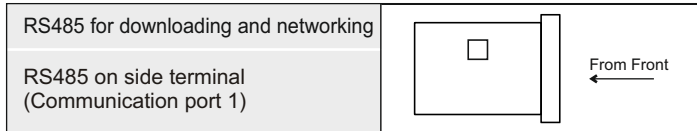
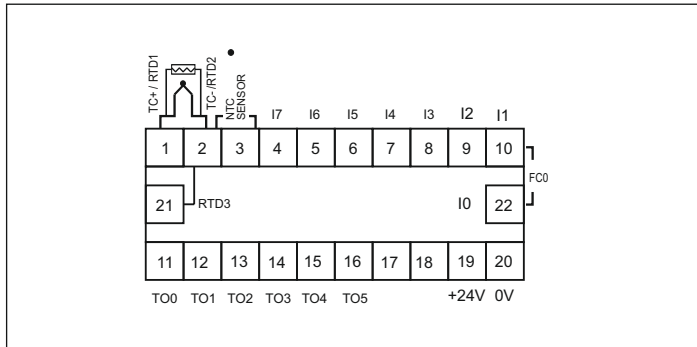
Supply Specification

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

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-RS485-02
Power Supplies	RPS60-24-CE-RoHS
Relay modules	
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
Networking	ACH-004 (RJ25 Cable)
	AC-IOEXP-03 (Expansion Adaptor)
	AC-USB-RS485-02 (USB to RS485 Cable)