

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		
Digital Input		
No. of Digital Inputs	6 + 2*	
Input Type	PNP	
Input Voltage Range	5 - 30V DC	
Response Time	Typical 2 mSec (Based on Ladder Scan Time) & 100µSec for Fast Input	
Debounce Time	0 to 255 mSec (Default 10 mSec)	
Fast Counter Input		
Input Type	PNP	
No. of Fast Input Channels	1	

5kHz Max Speed

**Analog Input** No. of channels 2 (TC/RTD), 2 (0-20mA DC) + 2\* (0-10V DC) Sensors J, K, T, R, S, C, E, B, N, L, U, W, PLTNL,

> mVolt (-5 to 65mV), 0 - 10V, 0 - 20mA 12 bit for temperature, 12 bit for Al's  $0.25\% \pm 1^{\circ}$ C (TC),  $0.1\% \pm 1^{\circ}$ C (RTD) at  $25^{\circ}$ C

> > ±0.25% of FS. ±1 count for Als

Conversion time 100 ms

## **Output Specifications**

Resolution

Accuracy

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Digital Output - Relay		
Digital Outputs	5 (NO Type with 2 COM Point)	
Contact Rating	5A @ 240V AC (Resistive) 5A @ 28V DC (Resistive)	
Response Time	10 mSec	
Mechanical Life	2000000 Cycles	
Isolation	No	
Analog Output		
No. of Channels	1	
Output Range	Current (0 - 20mA DC) / Voltage (0 - 10V DC)	

Resolution	12 Bits
Digital Resolution	0.0 - 100.0% = 0.0 - 10.000V = 0.0 - 20.000mA
Conversion time	20 ms

### Communication

RS485 [Slave]
MODBUS RTU
Screw Terminal
Half duplex
9600, 19200, 38400, 57600, 115200 bps
7 or 8
None, Odd, Even, Space, Mark
1 or 2

# **Functional Specifications**

Programming Method	Windows Based Software for Ladder
	Programming and HMI Configuration
Memory	Data Memory : 16 KB
	Code Memory : 240 KB
	EEPROM Memory : 1 KB
Max. no. of Objects	2000 (As per Memory)
Minimum Scan Time	200 μSec
Typical Scan Time	2 ms (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

<sup>\*</sup> Digital input(s) configurable as Analog input(s) (0-10VDC)

### **Functional Features**

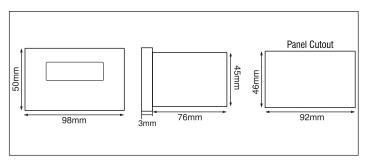
Timer Operational Modes	On Delay, Off Delay, Pulse, Special [Up / Down] Timer, 1ms Timer*
Timer Resolution	1 ms (Accurate only for 1 msec Timer block)
Counter	Up Counter, Down Counter, Up / Down Counter, Special [Up / Down] Counter
Other Blocks	Analog input & output, FTC, PIDT, Rampsoak
Memory Retention	10 years (2KB memory)
RTC	No
*Usage Limit Only 4 Nos.	

## **Supply Specification**

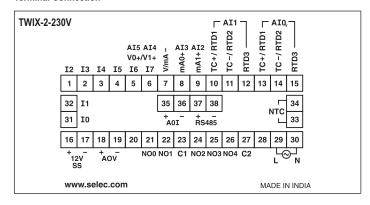
Supply Voltage	90 to 270V AC 50 / 60 Hz, 18 - 28VDC
Power Consumption	6W Max
Source	12V, 50mA

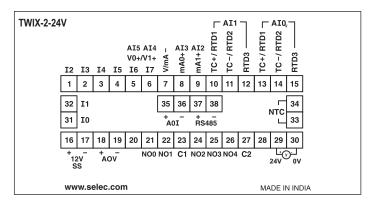
VAR IN\_OUT & VAR OUTPUT types Variables Maximum Retention 25 variables only each of 32 bit @ 110V AC & 24V DC

#### Dimensions (in mm)



# **Terminal Connection**





# **Ordering Information**

Product Code	Description	Certification
TWIX-2-230V	PLC – 6DI, 5RO, 6AI (2TC/RTD, 2I, 2V*), 1AO(V/I) & 230VAC	<b>C</b> € <b>RoHS</b> in Process
TWIX-2-24V	PLC – 6DI, 5RO, 6AI (2TC/RTD, 2I, 2V*), 1AO(V/I) & 24VDC	<b>C</b> € <b>RoHS</b> in Process

<sup>\* =</sup> Voltage Input(s) can be configured as Digital Input(s)

## **Accessories** (To be ordered separately)

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

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