



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	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)
<b>Fast Counter Input</b>	
Input Type	PNP
No. of Fast Input Channels	1
Max Speed	5kHz
<b>Analog Input</b>	
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
Resolution	12 bit for temperature, 12 bit for AI's
Accuracy	0.25% ± 1°C (TC), 0.1% ±1°C (RTD) at 25°C ±0.25% of FS. ±1 count for AI's
Conversion time	100 ms

\* Digital input(s) configurable as Analog input(s) (0-10VDC)

**Output Specifications**

<b>Digital Output - Relay</b>	
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
<b>Analog Output</b>	
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**

Communication Port	RS485 [Slave]
Communication Protocol	MODBUS RTU
Connector	Screw Terminal
Transmission Mode	Half duplex
Transmission 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 : 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

**Functional Features**

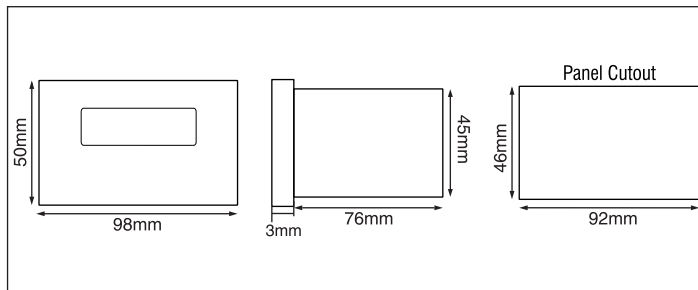
Timer Operational Modes	On Delay, Off Delay, Pulse, Special [Up / Down] Timer, 1ms Timer*
Timer Resolution	1 ms (Accurate only for 1 msec Timer block)
Counter	Up Counter, Down Counter, Up / Down Counter, Special [Up / Down] Counter
Other Blocks	Analog input & output, FTC, PIDT, Rampsoak
Memory Retention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

**Supply Specification**

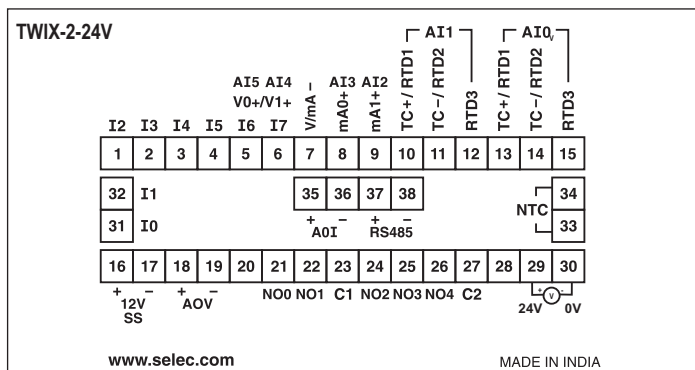
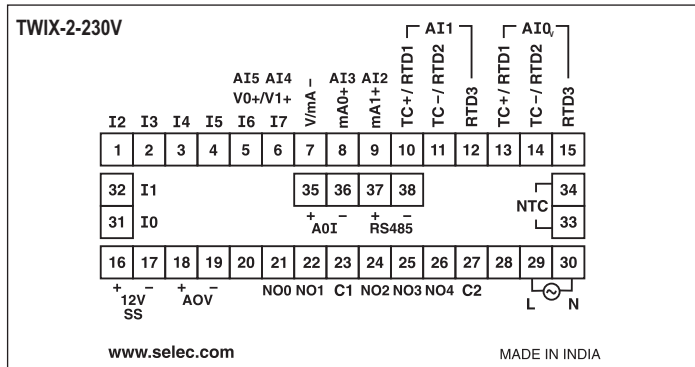
Supply Voltage	90 to 270V AC 50 / 60 Hz, 18 - 28VDC
Power Consumption	6W Max
Source	12V, 50mA

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

\* = Voltage Input(s) can be configured as Digital Input(s)

**Accessories (To be ordered separately)**

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