TWIX-2



48 x 96 mm

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	6 + 2 (Including fast Input & Analog Input Configurable as Digital 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)
Fast Input	
Input Type	PNP
No. of fast Input channels	1
Max Speed	5kHz
Analog Input	
No. of channels	6 [2 (TC / RTD), 2 (0 - 10V DC), 2 (0 - 20mA DC)]
Sensors	J, K, T, R, S, C, E, B, N, L, U, W, PLTNL, PT100
	mVolt (-5 to 65mV), 0 - 10V, 0 - 20mA
Resolution	12 bit
Accuracy	0.25% ± 1°C (TC), 0.1% ±1°C (RTD) at 25°C
	±0.25% of FS. ±1 count for Als
Conversion time	100 ms

Output Specifications

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 endurance	5 x 10 °
Isolation	No
Analog Output	
No. of Channels	1 (Selectable)
Output Range	Current (0 - 20mA DC) / Voltage (0 - 10V DC)
Resolution	12 Bit
Digital Resolution	0.0 - 100.0% = 0.0 - 10.000V = 0.0 - 20.000mA

Features :

- Compact PLC with built-in HMI
- Configurable LED display
- RS485 based communication with MODBUS Protocol

Conversion time	20 ms	
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Communication

Communication Port	RS485 [Slave]
Communication Protocol	MODBUS RTU
Connector	Screw Terminal
Transmission Mode	Half duplex
Transmission Speed	9600, 19200, 38400, 57600, 115200
Data Bits	7 or 8
Parity	None, Odd, Even, Space, Mark
Stop Bits	1 or 2
Settable Slave	1D - 1 - 255

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, PID, Ramp soak
Memory Retention	10 years (2k memory)
RTC	No

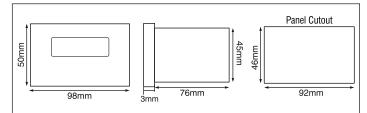
*Usage limited to only 4 Nos

Supply Specification

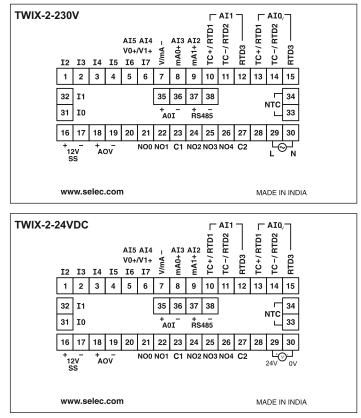
Supply Voltage	90 to 270V AC 50 / 60 Hz / 18 -28 VDC
Power Consumption	6W Max
Source	12V, 50mA

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	6DI, 5RO, 6AI (2TC/RTD, 2I, 2V/2DI), 1AO(V/I) -230VAC	CE RoHS in Process
TWIX-2-24VDC	6DI, 5RO, 6AI (2TC/RTD, 2I, 2V/2DI), 1AO(V/I) - 24VDC	CE RoHS in Process

Accessories (To be ordered separately)

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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
	ACH-004 (RJ25 Cable)
Networking	AC-IOEXP-03 (Expansion Adaptor)
	AC-USB-RS485-03 (USB to RS485 Cable)