



72mm x 72mm

FEATURES

- PLC with built-in HMI
- Configurable LED display
- RS485 based communication with MODBUS RTU protocol

SPECIFICATIONS

Display	Top Red – 6 digits & Bottom Green- 4 digits(7 segment)
	4 LED's (2 Red + 2 Green)
No. of Keys	3 (2-user configurable)
Supply Voltage	230V AC (90 - 270 VAC)
Sensor Source (SS)	12V DC, 50mA
Transistor Output Supply	24V DC, 250mA

FUNCTIONAL SPECIFICATIONS (CPU)

Programming Language	Windows based user friendly SELPRO software for ladder logic programming.
Memory	Program Memory : 240 kB
	Data Memory : 32 kB
	EEPROM Memory : 2 kB
	VAR_INOUT & VAROUTPUT TYPE Variable :- Max 120 bytes retention
Scan Time	Typical 1ms
Function Blocks	Timer On delay, Timer Off delay, Pulse Timer, Special Timer, Up/Down Counter, PID control etc.
Memory Retention	10 Years

DIGITAL INPUTS

*1 = 90° Phase shift signals

Number of Digital Inputs		4 (including 1 input (0-10Vdc) & 1 fast input)				
Operating Modes (user configurable)		Unidirectional / Bidirectional / Quadrature / Dual Unidirectional / None				
Channel	DI	MODE				
		UNI	BI	QUAD	DUAL UNI	None
FC0	I0	Rate Totalizer	Rate Totalizer	1st input*1	Rate Totalizer	Digital Input
	I1	Digital Input	Direction	2nd input*1	Totalizer	Digital Input
Operating Range		5 ~ 30V DC				
Input current		3 mA @10V				
Action Level	Level 1 ➡ Level 0	<3V DC				
	Level 0 ➡ Level 1	≥5V DC				
Response Time	Digital Input mode	Typical 1ms (based on ladder scan time)				
	Fast Input mode	100µsec				
Input Impedance		7.5 kΩ				
Debounce Time		0 ~ 255 ms (Default = 10 ms)				
Maximum counting Frequency (Fast Input)		5kHz (Normal DI upto 25Hz)				
Protection against polarity Inversions		Yes				

RELAY OUTPUTS

Number of Relay Outputs	2
Output Type	NO contact type
Output Current	5A @28VDC (Resistive), 5A @240VAC (Resistive)
Response Time	10ms
Life Expectancy	Mechanical -: 2 x 10 ⁷ ops Electrical -: 1 x 10 ⁵ ops
Isolation	No
Existence of common points between channels	2 COM for 2 Relay Outputs

TRANSISTOR OUTPUT

Number of channel	2
Output Type	PNP
Output Current	100mA Max @ 24V DC
Response Time	1msec. (Based on ladder scan time)
Isolation	Yes

ANALOG INPUTS

	TC Type	RTD Type	Voltage	Current
Number of channels	1		1	1
Sensor type	J, K, T, R, S, C, E, B, N, L, U, W, PLATINEL II, MILLIVOLT (-5 to 65mV)	PT100	0-10V	0-20mA
Type of input	Non-differential			
Temperature Resolution	0.1°C		--	
Digital Resolution for MILLIVOLT	12 bits	NA	12 bits	
Input impedance in signal range	560 kΩ	750 kΩ	330 kΩ	100 Ω
Analog input error at 25°C	0.25% of full scale ±1°C	0.1% of full scale ±1°C	0.25% of full scale	
Conversion time	100 ms			
Protection against polarity inversion	Yes	NA	Yes	Yes
Channel isolation	No			

COMMUNICATION

Communication Port	RS485 Slave
Communication Protocol	MODBUS RTU
Baud Rate	9600, 19200, 38400, 57600, 115200 (user configurable via software and hardware) Default = 19200 (Preferred ladder downloading at 19200)

ENVIRONMENTAL CONDITIONS

Operating Temperature	0 to 55°C
Storage Temperature	-20 to 70°C
Humidity (non-condensing)	95%
Mounting	Panel Mounted
Weight	Approx. 232 gms

SAFETY PRECAUTIONS

This manual is meant for personnel involved in wiring, installation, operation and routine maintenance of the equipment.

All safety related conditions, symbols and instructions that appear in this operating manual or on the equipment must be strictly followed to ensure operator and instrument safety. Any misuse may impair the protection provided by the equipment.

CAUTION : Read complete instructions prior to installation and operation of the unit.

! CAUTION

- Doc. name : OP INST UNIX-1-230V OP669-V01(Page 2 of 2)