



405-4IN

Large Display Indicator

Advanced Features with Large Display

405-4IN is the large display Indicator which can be monitored up to distance of 160 feet (50m). Its large digits facilitate process value to be monitored across wider geographical area in plant. It has most advanced features for monitoring and communication of process status.

This Indicator accepts 18 different industry standard inputs with high accuracy of 0.1% to measure temperature, pressure and other process variables. It can be interfaced with SCADA/PLC using optional RS485 communication and analog retransmission output for process automation. It has two-way communication facility allowing user to read and write PV over Modbus between any Master device and Indicator.

Alarm can be configured for two set points which are indicated on front Status LEDs. This Indicator has SMPS power supply for smooth and reliable performance. It is also equipped with transmitter power supply.

Features

- 4" (100mm) Large LED Display
- 18 selectable input types (TC, RTD, mV, mA, V, Ω)
- Transmitter Power Supply
- RS485 serial communication (optional)
- Two-way communication facility over Modbus
- Programmable retransmission output (optional)
- Two programmable alarm outputs (optional)
- Available in IP20 Panel & IP20/IP65 Wall mount option

Applications

- Temperature & process indication
- Pressure/ Level/ Flow Monitoring
- Plastics molding/extrusion temperature monitoring
- Heat treatment - furnace temperature monitoring
- Weighing platform
- Remote Process Supervision

Technical Specifications

Input		Power Supply			
Input Type	Thermocouple (E, J, K, T, B, R, S), RTD (Pt100), Current, Voltage, Resistance	Supply Voltage	85-265VAC/ 125-300VDC		
Display Range	Table-1	Power Consumption	<12VA		
Accuracy		Isolation (Withstanding voltage)			
±0.1% of FS (B, R, S, 0-6KΩ: ±0.15% of FS)		<ul style="list-style-type: none"> Between primary terminals* and secondary terminals**: At least 1500 V AC for 1 minute Between primary terminals* and grounding terminal: At least 1500 V AC for 1 minute Between grounding terminal and secondary terminals**: At least 1500 V AC for 1 minute Between secondary terminals**: At least 500 V AC for 1 minute 			
ADC Resolution	15 bits	* Primary terminals indicate power terminals and relay output terminals.			
Display Resolution	1°C/ 1 Count	** Secondary terminals indicate analog I/O signal and Communication O/P.			
Sampling Rate	4 Samples/Sec	Insulation resistance: 20MΩ or more at 500 V DC between power terminals and grounding terminal			
CJC Error	±2.0 °C				
Sensor open	All inputs except 0-5V				
Sensor Burnout current	0.25uA				
RTD excitation current	1mA (Approx.)				
NMRR	> 50 dB				
CMRR	> 100 dB				
Temp-co	< 150ppm/°C				
Input Impedance	> 1MΩ				
Max Voltage	20VDC				
Special function					
Square root extraction					
Display & Keys		Physical			
Process Value	4" Four-digit Seven segment Red LED	Enclosure Protection	IP20		
Set Value	Same as PV Display		IP65		
Status Indication	Red LEDs	Mounting	19" Rack / Panel Mount / Wall Mount		
Keys	Menu, Increase, Decrease	Enclosure Material	Aluminum		
		Dimensions (in mm)	177(H) x 483(W) x 110(D)		
		Weight	5 Kg (Approx.)		
		Wiring	2.5 Sq. mm Terminal		
		Standard Accessories	Not Applicable		
			4 Nos. Wall Mounting Bracket.		
			3 Nos. of PG 13 Gland (For Cable entry).		
Output					
Retransmission Output (Optional)					
Number of output	1 (one)	Environmental			
Output Signal	4-20mA/ 0-20mA/1-5VDC/ 0-10V DC	Operating temperature	0 to 55 °C		
Load resistance		Storage temperature	-40 to 85 °C		
For Current o/p	600Ω Max.	Humidity	20 to 95 % at 40 °C non-condensing		
For Voltage o/p	2KΩ Min.				
Output accuracy	±0.25% of span				
Alarm Output (Optional)					
Relays	2 Nos.	Table-1: Display Range			
Type	Single Change over (C, NO, NC)	Input Type	Range		
Rating	2A @ 230VAC / 30VDC	Thermocouples	E -200 to 1000°C		
			J -200 to 1200°C		
			K -200 to 1372°C		
			T -200 to 400°C		
			B 450 to 1820°C		
			R 0 to 1768°C		
			S 0 to 1768°C		
		RTD	Pt-100 -199.9 to 850.0°C		
			0-400Ω		
		Resistance	0 - 6000Ω		
			1-5V		
			0-5V		
			0-75mV		
			±75 mV		
			0-10 V		
		Linear	-1999 to 9999		
Transmitter Power Supply					
24VDC (±5%) @50mA		Ordering code			
Model	Input	Communication	Relay	Retransmission o/p	Mounting Protection
405-4IN	1 E	N None	N None	N None	P0 19" Rack (IP20)
	2 J	Y RS485	Y 2 Relays	C 4-20mA	W0 Wall (IP20)
	3 K			D 0-20mA	W1 Wall (IP65)
	4 T			E 1-5V	
	5 B			F 0-5V	
	6 R			G 0-10V	
	7 S				
	9 Pt-100				
	C 4-20mA				
	D 0-20mA				
	E 1-5V				
	F 0-5V				
	G 0-10V				
	R ±75mV				
	U 0-75mV				
	V 0-400Ω				
	W 0-6000Ω				

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All specifications are subject to change without notice due to continuous improvements.

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