3030F Batch Controller Indicator/Totalizer

Description

Indicates rate, total, and provides single or dual stage batch control. Two parameters can be simultaneously displayed. The unit contains two process inputs, five control inputs, and four control outputs. A user-friendly menu system provides scrolling help messages to make programming simple when changes are required. The unit contains a set point lock out system to prevent unauthorized changes from the front panel and a 10-year memory backs up all program settings and flow parameters in case of a power failure. The unit can be factory programmed for your application. Use with Aaliant and Niagara's Target, Nutating Disc, Oscillating Piston, Turbine flowmeters.

Technical Information

Functional Specifications

Power Supply	18 to 27 VDC/6 Watts max, 0.4 Amps max and 1 phase 50/60 Hz 115/230 VAC +10% - 15%/0.2/0.1 Amps
Accessory Power	Only if unit is AC powered/24 VDC ± 5%/100 mA max
Temperature	Operating: 32° F to 131° F (0° C to 55° C) Storage: - 40° F to 158° F (- 40° C to 70° C)
Display Outputs	Two parameters simultaneously
Display digits	6 for Rate, 10 for Total, 6 for Batch, 3 for alphabetical characters
Flow Inputs	
Type	Current sinking (contact closure or npn transistor to ground)
Impedance	5.8 KΩ pull-up resistor to + 5 VDC
Logical Voltages	0.0 to 2.2 VDC low, 2.8 to 24 VDC high
Response	0 to 40 Hz max with 10 msec minimum pulse width 0 to 400 Hz max with 1.5 msec minimum pulse width 0 to 7.5 KHz max with 50 μsec minimum pulse width
Input A	Flow
Input B	Flow input inhibit (flow input ignored when pulled low)
Start	Batch Controller: disabled, only start, or reset batch count, and start Rate Meter: No function Totalizer: none, reset totalizer count, unlatch totalizer set point output, or reset totalizer count and unlatch totalizer set point output
Reset	Batch Controller: none, reset batch count, unlatch batch overrun set point output, or reset batch count and unlatch batch overrun set point output Rate Meter: none, or unlatch rate hi/lo set point outputs Totalizer: none, reset totalizer count, unlatch totalizer set point output, or reset totalizer count and unlatch totalizer set point output
Stop	Batch Controller: only stop, or stop and unlatch batch overrun set point output Rate Meter: none, or unlatch rate hi/lo set point outputs Totalizer: no function
Control Inputs	
Qty	5
Type	Current sinking (contact closure or npn transistor to ground)
Impedance	5.8 KΩ pull-up resistor to + 5 VDC
Logical Voltages	0.0 to 1.0 VDC low, 3.5 to 24 VDC high
Response	30 msec input
Control Input 1	Use: Batch start
Control Input 2	Use: Reset batch count and unlatch batch overrun set point output, unlatch rate hi/lo set point outputs, and unlatch totalizer set point output
Control Input 3	Use: Batch stop
Control Input 4	Use: Batch jog
Control Input 5	Use: Unlatch batch overrun set point output, unlatch rate hi/lo set point outputs, and unlatch totalizer set point output

Model 3030FW Batch Controller Indicator/Totalizer

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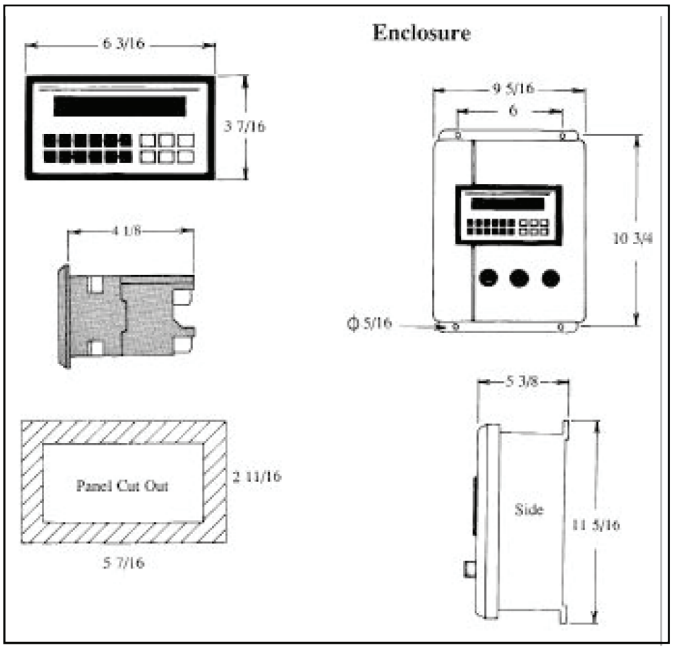
Rate Meter	K factor: 0.0001 to 99999
	Rate multiplier: 0.00001 to 999999 Accuracy: ± 0.05% Rate Smoothing: Designate 0.5 to 7.5 second dynamic averaging in 0.5 second increments Rate Update: 0.5 seconds
Control Outputs	
Qty	4
Type	Current sinking (contact closure or npn transistor to ground) Rating: 150 mA @ 30 VDC blocking maximum
Relay Outputs	Form C (spdt), 5 A resistive, 240 VAC 1 - Fast delivery (batch prewarn or preset quantity) 2 - Slow delivery (batch final quantity)
Control Output 1	Response: 0 to 10 Hz max with 50 msec minimum pulse width 0 to 200 Hz max with 2 msec minimum pulse width 0 to 1.5 KHz max with 125 μsec minimum pulse width OR Totalizer set point output Use: Scaled totalizer pulse output with designated pulse width/latched or timed from 0.1 to 999.9 seconds
Control Output 2	Use: Overrun set point output/latched or timed from 0.1 to 999.9 seconds
Control Output 3	Use: Low rate set point output/follow flow, be latched, or timed from 0.1 to 999.9 seconds
Control Output 4	Use: High rate set point output/follow flow, be latched, or timed from 0.1 to 999.9 seconds
Communications	Type: RS-485 Baud: 300, 600, 1200, 2400, 4800, 9600, 19200 Parity: space, even, or odd Protocol: Opto-22 compatible

Physical Specifications

Display	Vacuum fluorescent
Panel Mount	NEMA 4X front panel with gasket for mounting
Wall Mount (opt.)	NEMA 4X enclosure with NEMA 4X front panel
Wiring	14 AWG maximum
Weight	Panel Mount: 2 lbs Wall Mount: 7 lbs

Dimensions



Ordering Information

Part #	Description
60380G285	Model 3030 FP: Panel Mount
60380G289	Model 3030 FW: Wall Mount

venture MEASUREMENT

BAC-A Rev. D