

# MASSbatch

## TEMP./DENSITY COMPENSATED BATCH CONTROLLER

### Features

- Display Mass or Corrected Volume, Rate, Grand Total, Temperature or Density
- Accepts 4-30V Inputs or Pulses Directly From Magnetic Pickup Meters (no pre-amp required)
- Takes a Direct 100Ω Platinum RTD or Analog Signal For Compensation Input
- RS232/422 Communications (optional)
- Scalable 4-20mA Output of Rate/Total



### Description:

Featuring 8 digits of bright, .55", alphanumeric display, the MASSbatch can accept up to 10,000 pulses per second and a direct 100Ω platinum RTD or analog input. The MASSbatch has two separate, 8 digit, floating decimal, "K" factors to convert the inputs to meaningful total and rate data. The user, with the push of a button, can toggle back and forth to view the total of the batch, the rate of flow, temperature or density and the grand total. Two control outputs are provided for two-stage valve control.

A scaled pulse output is also provided by an open collector driver. Since the output frequency is user selectable at 10, 200, 2K or 20K Hz, the unit can transmit the count data to remote electromechanical or electronic counters as well as computers, programmable controllers or other monitor equipment.

An optional analog output allows the user to select low and high settings to control strip recorders or other peripherals.

### Specifications:

**DISPLAY:** 8 Digit, .55" High, 15 Segment, Red Orange, LED.

**INPUT POWER:** (Internally Fused)

A: 110 VAC ±15% or 15 to 27 VDC

B: 220 VAC ±15% or 15 to 27 VDC

**CURRENT:** Maximum 350 mA DC or 8.8 VA (8.8W) at rated AC voltage.

**OUTPUT POWER:** (On AC powered units only):

+12 VDC at 100mA. Separate Isolated 12 VDC at 100mA to allow +12 VDC or +24 VDC regulated +5% worst case.

The 24VDC Output is supplied with a self resetting fuse.

**MEMORY:** EEPROM stores all program and total data for minimum of 10 years if power is lost.

**PULSE INPUT:**

**3A:** (Standard) 4-30VDC 30 k Ohm impedance to GND, 10 kHz max. input speed (min. on/off 50µsec.).

**3C:** (Magnetic Pickup) 30mV to 30V P/P min., 2 Hz to 5 kHz Input Speed.

**ENVIRONMENTAL:**

Temperature:

Operating: +41°F (5°C) to +130°F (+54°C).

Storage: -40°F (-40°C) to +200°F (+93°C).

ET: Extended Temperature -40° to 158°F (-40° to 70° C)

Humidity: 0-90% Noncondensing

Dimensions: See BATCHtrol II

**Listing:** CE Compliant, UL/CSA Pending

**FACTORED OUTPUT:** The MASSbatch gives one pulse out for each factored count. The open collector sinks 30 VDC maximum to 1 volt maximum at 100mA maximum. Output speed is user selectable (see table below). An internal buffer holds up to 10,000 pulses for output at the selected frequency before "DATA LOST" flashes, indicating pulses are lost. If factored rate exceeds 7 digits "RFF..." flashes. These alarms indicated that speed has been exceeded.

### Ordering Information

**Example: MB8 A 3A 2 H R3**

**Series:** \_\_\_\_\_

MASSbatch

**Operating Voltage:** \_\_\_\_\_

A: 110 VAC ±15% or 15 to 27 VDC

B: 220 VAC ±15% or 15 to 27 VDC

**Count Inputs:** \_\_\_\_\_

3A: (STD) Pulse 4-30 VDC 10 kHz Max. (jumper selectable)

3C: (Mag. Pickup) 30mV 2 Hz to 10 kHz (jumper selectable)

**Control Outputs:** \_\_\_\_\_

1: Open Collector

2: SPDT Relay 10A

**Input Speed:** \_\_\_\_\_

L: (Low Speed) 0-40 Hz

H: (High Speed) 0-10 kHz

**Options:** (Multiple Options Available) \_\_\_\_\_

R: RTD and 4-20mA input (jumper selectable) ..... Standard

1: RS232 Serial Interface

2: RS422 Serial Interface

3: 4-20 mA Output (jumper selectable)

3Y: 0-5VDC Output (jumper selectable)

3Z: 0-10VDC Output (jumper selectable)

4: 16 Point Linearization

ET: Extended Temperature:

-40° to 158°F (-40° to 70° C)

CSA: CSA Approved Unit (pending) ..... (consult factory)

**Accessories:**

FLEXCOVER #36120

XTROL7/4- Explosion proof housing, see XTROL 7/4

NEMA 4X wall mount enclosure available, see NEMATROL

Serial printer available, see P1000, P295

Ethernet Port Server available, see IEPS

RS-422/485 to RS-232 Communication Adaptor available, see CA285