## EA401

## Features

- DC Pulse Input
- Separate Scaling Factors For Rate \& Total
- Display Rate \& Total
- Count Inhibit Input
- Security Lockout
- Batching Capability
- NEMA 4X / IP65 Front Panel
- 4-20mA Analog Output
- CSA Approved


## DESCRIPTION:

The CSA Approved non-integrated totalizer and ratemeter each have their own 5 digit dividing scale factor. The two 5 AMP preset relay outputs can be programmed by the user to apply to the "A" total counter or the "A" ratemeter. The user can view the rate, total and grand total. The B relay can be used to create a scaled pulse output.

## SPECIFICATIONS:

DISPLAY: 6 digit, 0.55" High LED

## INPUT POWER:

110 VAC $\pm 15 \%$ or 12 to 15 VDC
CURRENT: 6.5 VA AC
OUTPUT POWER (AC powered units only)
+12 VDC @ 50 mA , unregulated $-10+50 \%$

## TEMPERATURE:

Operating:
$+32^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right)$ to $+130 \mathrm{~F}\left(+54^{\circ} \mathrm{C}\right)$
Storage:
$-40 \mathrm{~F}\left(-40^{\circ} \mathrm{C}\right)$ to $+200^{\circ} \mathrm{F}\left(93^{\circ} \mathrm{C}\right)$
MEMORY: EEPROM stores data for 10 years if power is lost.

## INPUTS:

High Impedance DC pulse input 4-30 VDC (high), Open or 0-1 VDC (low), $10 \mathrm{~K} . \mathrm{imp} .10 \mathrm{kHz}$ max. speed.

## RESET:

Front Panel: Resets displayed total value and control output. Remote: 4-30 VDC (75-240 V AC/DC, Input 8) negative edge resets total and relay control output.
NOTE: The remote reset does not reset the grand total.
LISTING: CSA (File No. LR91109), UL Pending


## K FACTOR/SCALING:

The K-Factors are used to convert the input pulses to engineering units. The 5 digit K-Factor dividers, with decimal keyed into any position, allow easy direct entry of any K-Factor from 0.0001 to 99999. Separate factors may be entered for rate and total.

## CONTROL OUTPUTS:

Relays:
2 each N.O. Relay; 5 Amps120/240 VAC or 28 VDC.
(N.C. relay contacts and NPN transistor output available with solder jumpers.)
Analog Output:
The $4-20 \mathrm{~mA}$ Analog output can be programmed to track rate or total. Connections are
via a 2 terminal pluggable screw connector.
Programming is accomplished by using the front panel
in conjunction with rear dip switches.
Accuracy: $\pm 0.25 \%$ FS
Compliance Voltage: 3 to 30 VDC non inductive.

## PRESETS:

Two control outputs are provided. The A and B outputs can be assigned to the rate alarm
(high/low), or for total/grand total. A 5 digit value can be entered for both presets $A$ and $B$. The decimal point location is the same as the counter. The outputs can be set to energize from 0.1 to 99.9 seconds or latch (0.0). If a value other than 0.0 is entered, the corresponding totalizer will auto reset at the preset. This may be used to create a relay scaled pulse output.

## HOUSING:

Standard 1/8 DIN, high impact ABS plastic case (NEMA 4x/IP 65 front panel, bezel mount.

## LOCKOUT:

Unauthorized front panel changes can be prevented by entering a user selected 5 digit code, in the "LOC" mode. The front panel can be completely locked out or the presets can remain accessible.

## RATEMETER

Accurate to $41 / 2$ digits ( $\pm 1$ display digit). The ratemeter can be programmed to:

- accept almost any number of pulses per unit of measurement
- sample from 2 to 24 seconds maximum
- auto-range up to 5 digits of significant information.

The display can be programmed to read in units per Second, Minute, Hour , or Day.

## TOTALIZER:

The two 6 -digit totalizers can count at 10 kHz speed. They share a 5 -digit dividing scale factor. The totalizer advances on the positive edge of each pulse.

WIRING:


## Dimensions:



## TYPICAL HOOKUP:



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SERIES:
EA401-00 Totalizer/Ratemeter
Power Input : 110 VAC $\pm 15 \%$ or 12 to 15 VDC Input: Standard, 4-30 VDC inputs, from McCrometer pulse transmitters (E7000, E7500, E8000, EA550, EA630) and digital registers (R0900, RE100) with pulse output options.
Output: Two Relay or NPN transistor pulse outputs and one $4-20 \mathrm{~mA}$ analog output.

