

PRESIDENT SERIES COUNT / CONTROL

5 Digit , Single - Preset Controls

MODELS

58820-400	Single-Preset
58821-400	Single-Preset with Scaling
58825-400	Single-Preset with Rate, Scaling
57820-400	Single-Preset with Rate Control

- Relay and Transistor Output
- Serial Communications
- NEMA 4 Front Panel
- DC Power Output for Sensors
- Optional Count Scaling and Rate Indication

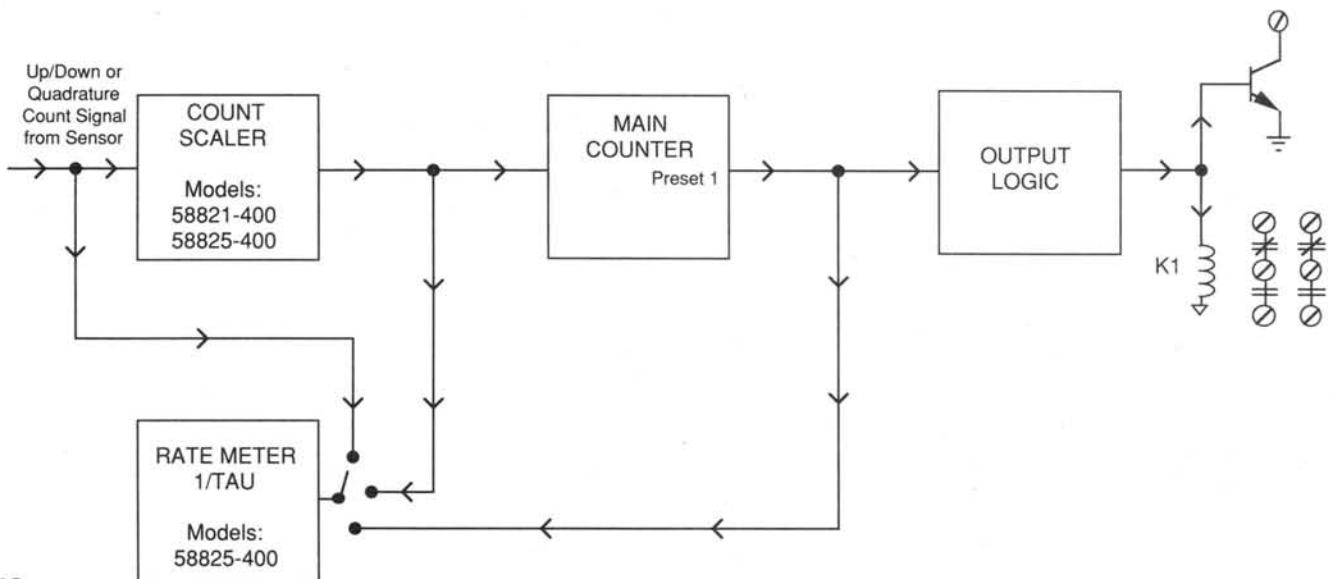


Model 58825-400

For most general applications, these versatile five-digit, single level controls offer all the predetermined count control capability your system may require. The innovations built into every President Series control provide the convenience you'll find in these economical models. They offer bidirectional counting and simple user programming, utilizing easy to use function codes. They can reset to zero and count up to provide a control relay or open collector transistor output at a preset number, or reset to a preset number and count down and provide an output at zero.

With features like a sealed front panel, quadrature count inputs, communications capability, relay latching, optional five-digit prescaling and a 1/tau ratemeter, as well as a broad selection of other accessories, they are the obvious choice when your application demands a quality control for basic preset capability. The functional block diagram below will give you a good overview of the capabilities of each model in the series. Models 57820-400/401 are similar to the 5882X-400 series, but include a rate control function. They do not have serial communications.

OVERALL BLOCK DIAGRAM



PRESIDENT SERIES COUNT / CONTROL

Specifications and Operation

Physical and Environment

See President Series general specifications.

Power Requirements

AC Operation: 120/240 VAC (+10%, -20%) 47 to 63 Hz.

DC Operation: 11 to 28 VDC.

Power: 18 Watts.

DC Power Output

15 VDC (+1, -2).

150 mA if powered from AC or less than 24 VDC.

100 mA if powered from 24 VDC or greater.

NOTE: DC power output is only regulated if unit is powered by AC or greater than 18.5 VDC.

Counter Modes

Reset to zero and count up.

Reset to preset and count down.

Auto recycle.

Control Inputs

Reset, output unlatch, program inhibit, print request/display latch.

All models have front panel reset (may be disabled).

Count Scaler Option

Models 58821-400, 58825-400

Scale Factor Range: 0.0001 to 9.9999.

Output Specifications

2 Relays with one set of Form C contacts.

Type: FORM-C (SPDT).

U.L./C.S.A. Contact Ratings:

10 amps, resistive, @ 24 VDC or 240 VAC.

1/3 HP @ 120 VAC or 240 VAC.

150 VDC maximum switched voltage.

Mechanical Life: 5,000,000 operations.

Electrical Life: 100,000 operations at resistive rating.

1 Transistor Output

Type: Open collector NPN transistor with Zener diode transient surge protection.

Load Voltage: 30 VDC maximum.

Load Current: 300 milliamps maximum per transistor.

480 milliamps total for all transistors. Use 90 milliamps per relay coil when calculating total transistor current.

Programmable Output Modes: Reverse, timeout, unlatch at reset, latch until reset complete.

Timeout: .01 to 99.99 Sec, $\pm 1\%$ (± 0.01 Sec if < 1 Sec).

Count Input Modes (2 input signals)

Add/subtract, add/count inhibit, count/direction control, quadrature. All modes except count/inhibit have count double function to count on both rising and falling edges of pulse.

Count Input Signal Requirements

Current sinking signal, must conduct to DC common. Must block 15 VDC in high state and sink 2.2 mA in low state. Current sourcing signals may be used with external resistor.

Maximum Count Speeds:

Model	SF=1	SF<1	SF>9	Low Speed
58820-400	10 kHz	N/A	N/A	150 Hz
58821-400	7.5 kHz	6.2 kHz	2.0 kHz	150 Hz
58825-400	7.5 kHz	4.2 kHz	1.8 kHz	150 Hz

SF= User programmable scale factor on models with scaling. Maximum input frequency is reduced by approximately 50% when count input doubling or quadrature mode is used.

Ratemeter Option Specifications

58825-400

Rate Source: Count input, scaled count input or output.

Accuracy: $\pm 1\%$.

Resolution: 4 digits with floating or fixed decimal point.

Maximum Time Between Rate Pulses: 1-90 Seconds.

Serial Communication Interface

20 mA current loop, 110, 300 or 1200 Baud.

(Not available on models 57820-400/401.)

ORDERING INFORMATION

Model Number	Product Description
58820-400	5 Digit, Single-Preset Control
58821-400	5 Digit, Single-Preset Control with Scaling
58825-400	5 Digit, Single-Preset Control with Rate and Scaling
57820-400	5 Digit, Single-Preset Control with Rate, 120 VAC
57820-401	5 Digit, Single-Preset Control with Rate, 240 VAC

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