

PRESIDENT SERIES COUNT / CONTROL

Position Control

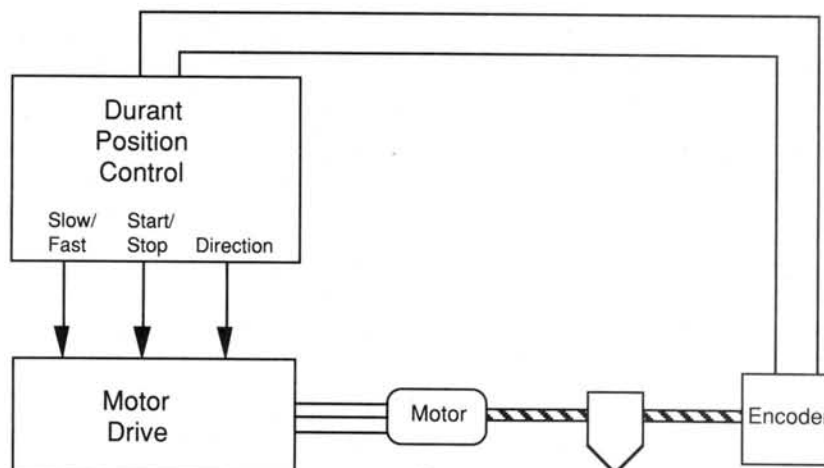
MODEL 58868-400



Model 58868-400

- Four move registers plus home
- Five dwell time settings
- 28 kHz count speed
- Count scaling
- Programmable decimal point
- 100% accuracy
- 20 mA loop serial communications
- Up to 9600 baud rate
- NEMA 4 front panel seal
- Manual or automatic operation
- Backlash operating modes
- Programmable offset, prewarn, and tool kerf values
- Optional password protection
- Add/subtract or quadrature x1, x2, or x4 input count
- Four run mode display options
- Programmable high and low position limits
- Remote operation, query or programming capability

OVERALL BLOCK DIAGRAM



Specifications and Operation

Physical and Environment

See President Series general specifications.

Power Requirements

AC 120/240 VAC +10%, -20%, 47 to 63 Hz.
 DC 11 to 28 VDC (.7 Amp max.).
 18 watts maximum input power.

DC Power Output

15 VDC +1, -2, 100 mA maximum, with AC input operation.

Control Input Response

Function	Response Time
Start/Stop	1 msec.
Go Home Input	5 msec.
Load Position	5 msec.
Reference Input	1.7 msec.

Input Voltage

Count Inputs: High 10.5 to 24.5 VDC, low 0 to 4.5 VDC.
 Control Inputs: High 3.8 to 15.0 VDC, low 0 to 1.2 VDC.

Input Impedances

Count Inputs: 6.8 kΩ to +15 VDC (2.2 mA at 0 VDC).
 Control Inputs: 2.2 kΩ to +5 VDC (2.3 mA at 0 VDC).

Relay Outputs (2)

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.
 5 Transistor outputs
 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.

Communication

Type: 20 mA loop (active transmit, passive receive).
 Load Voltage: 30 VDC maximum.
 Load Current: 300 mA maximum.

Saturation: 1.5 V max. @ 300 mA.
 Speed: 110, 300, 1200, 2400, 4800, 9600 Baud.
 Parity: Odd, even, space.
 Format: 1 start bit, 7 data bits (ASCII), 1 parity bit, 1 stop bit (100 baud uses 2 stop bits).

Input Frequency

The maximum input frequency only on the selected quadrature operation.

Quadrature Selection

	x1	x2	x4
High Speed	28 kHz	14 kHz	7 kHz
Low Speed	150 Hz	150 Hz	150 Hz

(low speed jumper installed)

Note: Only function 60 and the double jumper affect the maximum input speed. The scale factor does not affect the input speed.

Position Control Features

Setpoints: Four move setpoints plus one Home setpoint.
 Range for all setpoints is -99999 to 999999.

Decimal Point: Four positions, programmable.

Dwell Times: Five, one for each setpoint. Dwell time range is 00.01 to 99.98 seconds.

Scale Factor: Scale factor range is 0.00100 to 9.999999.

Count Accuracy: 100% when the position control is operated within the specified speeds and input voltages.

ORDERING INFORMATION

Model Number	Product Description
58868-400	Position Control