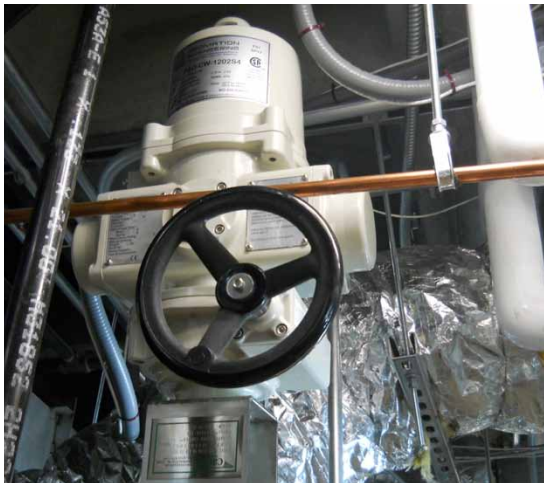
PROMATION ENGINEERING
Precision Actuation for Industry

Fail Safe Actuation



PAO Spring Return Actuator on a damper for air handling.

Fail Safe Operation – operating an actuator when power is lost

When automatic valve control must be managed and controlled after the power is out.
Where flow must be maintained or operated quickly and efficiently for safety.

Effective for:

Isolation Valves to separate one system from another upon loss of power, such as heat exchangers in heating or cooling systems

Ventilation damper systems to provide or prevent air flow in emergency situations where power is lost

Steam or Fuel supply valves that need to be shut or opened with loss of power

Remote valves where power is intermittently disrupted, but control is still needed

ProMation Engineering has two distinct lines of fail-safe solutions to protect lives and processes.

Mechanical - Spring Return Actuators
(PA Series)
Electrical - Battery Back-up for All Actuators
(PBU Series)

With the use of either fail-safe line that ProMation Engineering offers, users can rest at ease knowing their processes or facilities are fully protected in the event of power outage.

PA Spring Return Actuator, 24 vac, controlling condensate in a chiller system. This model has no manual handwheel.

PA Series Spring Return Actuators

The PA Series quarter turn spring return actuators compress several internal springs in one direction and use the springs to drive in the opposite direction. While power is present, the actuator will respond to drive control signals depending on the method of control chosen.

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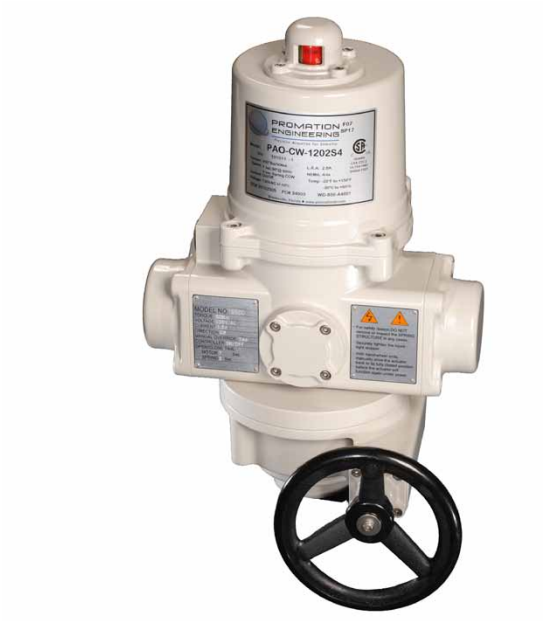
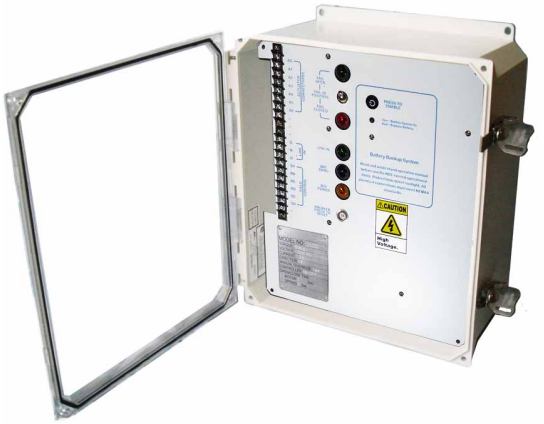


PAO-CW-1202S4
Spring Return Actuator.
445 in lbs Torque.



PBU 100 Series Power Backup Unit suitable for powering P2-P13 Series On/Off Actuators.

For an on/off actuator, (2 position), the motor will drive until it reaches its spring-loaded position and spring in the opposite direction with loss of power. For Proportional control, the unit responds to an analog control signal for positioning, whether to open or close (clockwise or counterclockwise).
In both control options, when power is lost, the springs drive the actuator, either clockwise or counterclockwise, to its unsprung position.

- Torques from 445"lbs / 50Nm to 2300"lbs / 260Nm.
- 120/230VAC (On/Off or Proportional Control) or 24VAC/DC (On/Off only) supply voltages.
- Integral Manual Handwheel option available. (Factory installed option).
- Mechanical connections utilize an ISO5211 mounting with an 8 point female drive.

PBU Series Battery Back-Up System for Electric Actuators

The ProMation battery back-up units (PBU) can provide power to operate any electric actuator upon loss of power. The PBU's are designed to provide power to all ProMation actuators for a minimum of 5 cycles at full torque load.

The PBU series utilizes proven battery systems and switching electronics that are compatible with all ProMation Engineering actuators. The separate local control station has field selectable fail-safe position, battery status and power indicators that can be used in conjunction with 2 position or proportionally controlled models.

- Automatic power control switching system to charge the battery and then provide power to actuator when needed
- Field Selectable Fail Direction
- Readily available sealed Battery packs
- Lockable Fiberglass NEMA 4X enclosure
- Simple User Interface with Indication Lights
- Cold Weather functionality available

Created for industrial use!

There is much more at www.promationei.com.

If you have any questions or comments, please feel free to contact us at any time at 352-544-8436.