### Carey Automatic Door, LLC (203) 267-4278

100% Pneumatic (ALL AIR), Explosion Proof OSX Door Operator Description

## AIR OPENING and AIR CLOSING (No Electricity Involved)

# **Non-Sparking Moving Components**





- Entire system driven by pneumatic cylinders and valves.
- Pneumatically controlled from central air supply or separate compressor.
- Opening and closing action will be individually controlled by separate built-in pressure regulators and opening and closing valves. Adjustable for pressure and volume for required speed and power.
- All regulators and valves are self contained within Operator case.
- Operator will be capable of operating doors against wind velocities (and equivalent stack pressures) up to 40 miles per hour.
- Built-in two stage checking cylinders for both opening and closing limits.
- Operator will instantaneously recycle the door to the full open position from any point in the closing cycle.
- Operator to be activated by two pneumatic palm button or pneumatic pull cords.

Opening and closing valves (pneumatically activated) mounted in Operator to control opening speed. Closing speed may be by:

- Springs mounted in Operator (single acting)
- Pneumatically activated closing valve mounted in Operator (double acting)
- Counterweights (sliding fire doors)

#### Interlock Door Systems:

Provide for opening of one set of doors and latching of the other set pneumatically to prevent simultaneous opening of both sets of doors (can be multiple doors).

Considered the Most Intrinsically Safe, Reliable & Cost Effective Automatic Door Operator in the Industry since 1970!

### Virtually Maintenance Free for 20 - 30+ years!

100% Woman Owned Small Business

www.careydoor.com

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## 100% Pneumatic (ALL AIR), Explosion Proof OSX Door Operator Operation

#### Standard Activation:

Push palm button or pull cord, power open, 0-30 second hold open time delay, automatic spring close (single acting), automatic power close (double acting), counterweights (sliding fire doors) depending on weight of door.

The Operator is an air powered cylinder. When one of the palm buttons or pull cords is activated, a signal is sent through a series of valves to activate and open the door. Upon completion of the opening cycle of the power cylinder, a pneumatic trip rod switch is actuated which then sends a signal to the time delay that holds the door open. Once the time delay has reached its completion, a signal is sent to the main valve. The valve shifts and air is exhausted which then allows the springs, power or counterweights to close the door. Checking cylinders are provided to smooth out the final opening and closing door motions. At any point during the closing cycle, system can be reactivated to re-open the door.

#### **Optional Activation:**

Push palm button or pull cord to open, door stays open, push palm button or pull cord to close door.

When one of the palm buttons or pull cords is activated, a signal is sent through a series of valves to activate and open the door. Upon completion of the opening cycle of the power cylinder, the system remains open until one of the palm buttons or pull cords is activated to close the door. Checking cylinders are provided to smooth out the final opening and closing door motions. At any point during the closing cycle, system can be reactivated to re-open the door.

#### Pneumatic Fire Exit Device for Swinging Doors:

A signal is sent to the air cylinder of the pneumatic exit device. With this signal, the latch within the exit device is retracted allowing the door to be opened freely. A built-in time delay temporarily delays the signal to the operator to ensure the exit device is retracted. At any point in the closing cycle, the system can be reactivated to re-open the door by activating one of the palm buttons or pull cords.

#### Pneumatic Safety Edge for Sliding Doors:

A sensing edge attaches to the leading edge of the door. When the sensing edge is compressed, air is pushed into the pneumatic amplifier which then sends a signal to the Operator to reverse the door motion.

#### Fire Door Application for Swinging Doors:

When the temperature reaches 165° F., the fuse in the fusible nozzle melts and allows air to exhaust out of the power cylinder and springs close the swinging door. When the door reaches the closed position, the door latches automatically through the pneumatic fire exit device hardware. Door can be opened manually for emergency egress only by operating the fire exit device hardware crossbar. System will automatically reset by reactivation of the air compressor system.

#### Fire Door Application for Sliding Doors:

When the temperature reaches 165° F., the fuse in the fusible nozzle melts and allows air to exhaust out of the power cylinder. The counterweight assembly closes the sliding door. System will automatically reset by reactivation of the air compressor system.

#### What Happens in the Event of a Power Failure:

A residual air reservoir in the compressor will allow automatic use of the door until the air supply is exhausted. Door can be opened manually for emergency egress only by operating the fire exit device hardware crossbar (swinging doors). System will automatically reset by reactivation of the air compressor system. As an option, an air reservoir tank can be added to the system to store additional air.

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100% Pneumatic (ALL AIR), Explosion Proof OSX Door Operator Applications

#### Single Swinging Doors:

**0-1S Pneumatic Operator Packages**. For use with single swinging doors in industrial applications. One operator designed to swing a single hinge hung door either IN or OUT. Maximum door opening width is 72+.

#### **Double Swinging Doors:**

**0-4S Pneumatic Operator Packages**. For use with pairs of swinging doors that require complete speed control for varying conditions in industrial applications. Two operators coupled to operate a pair of doors swinging IN or OUT. Maximum door opening width is 144+.

**Swinging Fire Door Packages**. An automatic fire door package is available and will interface with the single acting 14+stroke operator.

#### Single Sliding Doors:

**0-7 Pneumatic Operator Packages**. For use with single sliding doors in industrial applications. Available for labeled fire door applications. For doors that slide either Left or Right of the opening. Maximum door opening width is 96+.

**07-D Pneumatic Operator Packages**. For use with heavy single sliding doors in industrial applications. Available for labeled fire door applications. For doors that slide either Left or Right of the opening. Maximum door opening width is 144+.

#### **Bi-Part Sliding Doors:**

**0-9 Pneumatic Operator Packages**. For use with pairs of sliding doors in industrial applications. Available for labeled fire door applications. Maximum door opening width is 192+.

**09-D Pneumatic Operator Packages**. For use with pairs of heavy sliding doors in industrial applications. Not available for labeled fire door applications. Maximum door opening width is 288+.