ELECTRONIC ACCESS CONTROL

ED900 Low Energy Operator



DORMA ED900
Low Energy Operator



DORMA's innovative, whisper quiet low energy operator with electromechanical drive and advanced power assist.

Innovative Technology
Employing an innovative electromechanical drive and a state-of-the-art microprocessor motion control system, the new ED900 is DORMA's most advanced low-energy swing door power operator. The operator is exceptionally quiet, safe, and easy to use.

When operated manually, the ED900 demands little physical effort. Advanced power assist through the entire opening cycle makes even the heaviest-rated door feel light.

Fully ADA Compliant
The new operator is especially helpful for children, the elderly, persons with disabilities, or those carrying objects or pushing carts. This fully ADA-compliant device opens doors at precisely controlled speeds and forces, assuring safety for all users.

Advanced Features
The ED900 also includes a blow-open feature for smoke ventilation (per NFPA code 92B), permanent hold-open, and an onboard power supply delivering 1.5 amps @ 24-volt DC, which eliminates the need for a secondary power supply. It includes twelve programmable options to accommodate even the most challenging door installations.

In addition, it boasts the smallest footprint in the industry, up to 65 percent smaller than some other manufacturers' operators.



Advanced power assist through the entire opening cycle makes even the heaviest-rated door feel light.

Performance Driven Solutions

ED900 Features

- **Advanced Power Assist** through entire opening cycle (from 0° to 85°). When opened manually, even the heaviest rated door feels light—about 5 lb.
- **Blow Open** for integration into smoke ventilation systems per NFPA 92B.
- **Permanent Hold Open** triggered two ways: (1) by onboard toggle switch or (2) by input from a remote source.
- **Onboard Power Supply** delivers an unprecedented 1.5 amps @ 24 VDC:
  – 3× more power than the competition.
  – No need for separate power supply.
  – Powers most EAC devices, including electromagnetic locks, electric strikes, RF transmitters/receivers, illuminated push buttons, wall switches, presence detectors, motion sensors, and key pads.
- **Obstacle Detection**—The door closes if an obstacle is detected during the opening cycle and reopens if an obstacle is detected during the closing cycle.
- **Push & Go** triggered by manually opening the door 4° from the closed position.
- **Motion and Presence Sensors** can be installed on both the push and pull side of the opening.
- **Closing Speed and Latching Force** under power failure conditions are field adjustable as part of installation set-up and commissioning.
- **Positive Mechanical Stops** with both Pull Side track mount and Push Side arms are included. In the event of power failure conditions, the stops prevent the door from opening past 90° or a pre-determined opening angle.
- **Vestibule Function Synchronizing Options**
- **Synchronized (Master/Slave) Integration for Pair of Doors**—monitors both doors to open and close at the same rate.
- **Pull Side or Push Side Applications**
- **Full Complement of Painted and Architectural Finishes**—custom and designer.
- **Self-diagnosing Status Indicator**—LED display error code messages.

ED900 Programmable Options

- **Back Check and Latching Angles**
- **Opening Cycle Hold Open Time**:
  – From 0 to 30 seconds.
- **After Hours Access (night bank) Hold Open Time:**
  – From 0 to 30 seconds.
- **Day/Night (Push-Pull)**:
  – Unlocking during business hours.
- **Delayed Unlocking**:
  – From 0 to 400 milliseconds.
  – Use with electromechanical access control peripherals such as electric strikes or exit devices with electric latch retraction.
- **Closing Force Prior to Unlocking**:
  – Works with the Delayed Unlocking feature and accommodates reduction of latch bolt locking force prior to releasing the electromechanical access control device.
- **Latching Action Force**:
  – Power boost during latching cycle to overcome resistance for door seals, locking devices, or door/frame misalignment.
- **Latching Action Angle** for engaging the programmable latching action feature:
  – Opening angle range: 2° to 5°
- **Keep Closed Force**:
  – Designed to keep the door in the closed position when unlocked.
- **Wind Load Control**:
  – Opening and closing cycles.
  – Variables: Door size and weight, hinging, alignment, wind loads, HVAC imbalance.
  – Forces measured at the door must conform with ANSI 156.19 to maintain ADA compliance.
- **Door Position Status**:
  – Monitors when door has reached fully open or fully closed.
  – Can communicate status to external monitoring device or console.
- **Synchronized Pair of Doors (master/slave) integration**:
  – Opening and closing at the same rate of speed.
  – Opening of the second leaf can be delayed by up to 30° of when the first leaf is opened.

EAC Solutions Featuring ED900 & DORMA Approach™

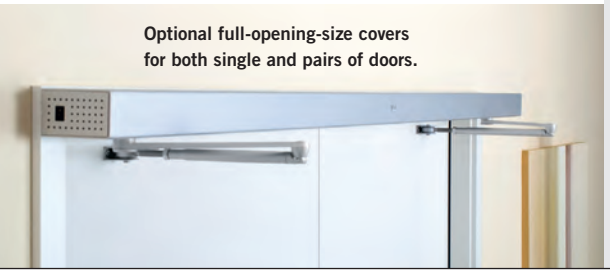
The ED900 integrates seamlessly with the DORMA Approach™ door controller. DORMA Approach EAC Solutions are an affordable, easy-to-use, and attractive alternative to traditional electronic access control panels. Each Solution is pre-configured to create a single package that includes everything required for an access-controlled entrance.





ED900
Low Energy Operator





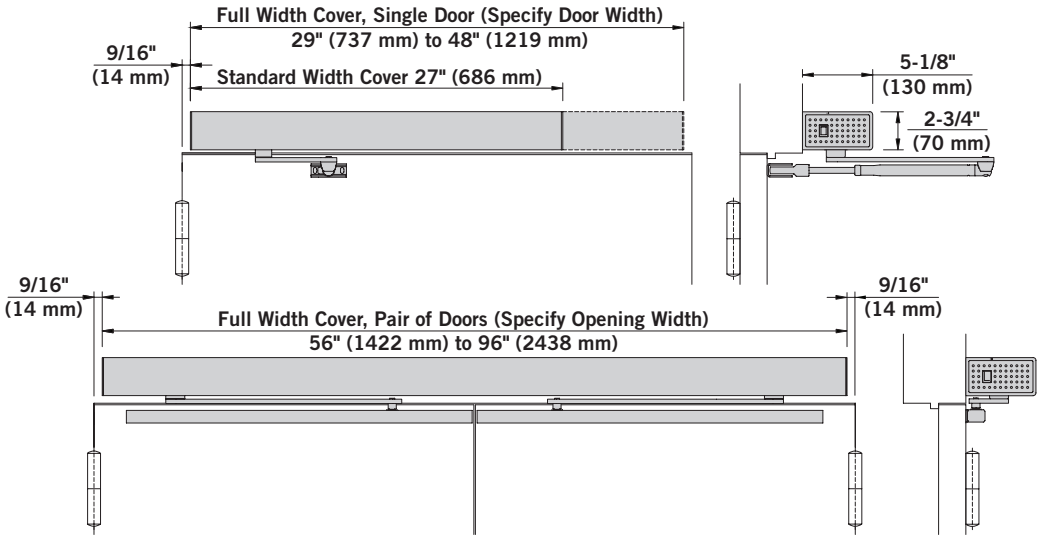
Optional full-opening-size covers
for both single and pairs of doors.

Technical Specifications

- Power Requirements
  – 115 Vac +/–10%, 50/60 Hz, 6.6A max
  – Branch Circuit Protection: 15A min
- Onboard Power Supply for Access Control Devices
  – 1.5A @ 24 VDC
- Max Door Size
  – 48" wide, 220 lb
- Operator Weight
  – 26.5 lb
- Operating Temperatures
  – 5° F to 122° F (–15° C to 50° C)
- Standard Operator Dimensions
  – 27" W × 2-3/4" H × 5-1/8" D
  (685 mm x 70 mm × 130 mm)
- Max Opening Angle
  – Powered: 110°
  – Manual: 180°
- Non-handed
- On-board cycle counter

Certifications, Listings & Approvals

- Americans for Disabilities Act (ADA)
- ICC/ANSI A117.1 Accessible and Useable Buildings and Facilities
- Underwriters Laboratories—ANSI/UL 325 Door, Drapery, Gate, Louver, and Window Operators and Systems
- ANSI/BHMA 156.19 Power Assist and Low Energy Power Operated Doors (Pending)
- UL 10C Fire Listing (Pending)
- California State Fire Marshal (Pending)
- Onboard Power Supply—ANSI/UL 294 Access Control System Units (Pending)



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