Door closers are an integral part of many commercial and semicommercial entrances

Their self-closing function provides an important level of security for external doors, while also preventing them from slamming, staying open unintentionally or blowing open in the wind. Additionally, door closers maintain the integrity of fire doors along exit routes in buildings used by the general public and also help maintain indoor temperatures by ensuring that the door is always fully closed when not in use.

EM Entrematic can supply a wide variety of door closers for virtually any application, ranging from light-duty door closers for residences to advanced fire door closing systems for large commercial and public buildings, meeting both ANSI and CE requirements for compliance, quality and safety.

Our door closers are designed to complement the appearance and functionality of EM Entrematic automatic swing door operators, but they perform equally well with equipment supplied by others.

A good range of door closers with high quality coming from the largest producer in the world. The products are used in many applications such as hospitals, airports etc. The range goes from light duty doors to heavy metal doors following the EN 1154 standard. All door closers can be mounted on door or frame, and inside or outside of the door.

How to select the correct Door Closer

<table>
<thead>
<tr>
<th>Closing Torque requirements (EN 1154)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Door closer size</td>
<td>Closing torque Nm (0-4°) min</td>
</tr>
<tr>
<td>EN1</td>
<td>9</td>
</tr>
<tr>
<td>EN2</td>
<td>13</td>
</tr>
<tr>
<td>EN3</td>
<td>18</td>
</tr>
<tr>
<td>EN4</td>
<td>26</td>
</tr>
<tr>
<td>EN5</td>
<td>37</td>
</tr>
<tr>
<td>EN6</td>
<td>54</td>
</tr>
<tr>
<td>EN7</td>
<td>87</td>
</tr>
</tbody>
</table>
EM U234

A small rack and pinion door closer that have selectable door closer force in the EN1154 sizes 2, 3 and 4 by changing the door closer position on the door. It is designed for lighter doors and is CE marked and approved for fire doors.

**Specification**
- Adjustable closing speed, latching speed and back check valve are standard
- Mounted on the frame or door
- Delivered in one package with door closer body, standard arm, installation instruction and screws
- Available in silver, white and brown color

**Accessories**
- Hold open arm can also be used

A: 220 mm  
B: 50 mm  
C: 47 mm

EM EV200

A rack and pinion door closer that have adjustable spring force 2-4 according to EN1154. It has a slim design with a slide on cover and hidden adjustment valves. The door closer is CE marked and approved for fire doors.

**Specification**
- Adjustable closing speed, latching speed and back check valve are standard
- Maximum door width 1100 mm and/or 80kg door weight
- Mounted on the frame or door
- Delivered in one package with door closer body, screws and installation instructions
- Arm system to be ordered separately;  
  - Standard arm  
  - Hold open arm (not for fire doors)
- Available in silver, white and brown color

**Accessories**
- Flat mounting plate
- Angle mounting plate
- Drop plate

A: 234 mm  
B: 42 mm  
C: 61 mm
EM EV300

A rack and pinion door closer that have adjustable force 2-5 according to EN1154 standard. Slim design with a slide on cover and hidden adjustment valves. The door closer is CE marked and approved for fire doors.

The EV300 is the most common door closer choice due to adjustable closing force and easy installation. The closer has a number of choices when it comes down to arm systems and mounting possibilities.

This is a very cost effective closer that meet most demands in most markets.

Specification
- Adjustable closing speed, latching speed and back check valve are standard
- Maximum door width 1100mm and/or 80kg door weight
- Can be used on fire doors
- Mounted on the frame or door
- Delivered in one package with door closer body, screws and installation instructions
- Arm system to be ordered separately
  - Standard arm, Hold open arm (not for fire doors) and Sliding arm
- Available in silver, white and brown color
- Parallel arm brackets

Accessories and Dimensions
- Standard mounting plate
- Flat mounting plate
- Drop plate
- Multi mounting plate for narrow profile
- Hold open device and opening damper for the sliding arm

A: 284 mm
B: 54 mm
C: 62 mm
The DC335 and DC336 closers are rack and pinion and are CE marked and EN1154 tested. Closing latching and back check are standard adjustments and delayed closing (DC) can be ordered upon request. They have adjustable latching and back check starting angle by the grooved spindle. They have two pressure valves to protect against abuse and die-cast aluminum bodies manufactured from high performance silicon alloy.

DC335 adjustable closing force EN 3-5 and is supplied with a standard arm.
- Maximum door weight (DC335): 100 kg and a door leaf width of 1250 mm.
- DC336 adjustable closing force 1-3 supplied with a sliding arm.
- Maximum door weight (DC336): 60 kg and a door leaf width of 950 mm.
- The arm is height adjustable 0-14 mm for easy installation.
- Wide operating temperature range: +45°C.. -35°C
- Painted stainless steel cover as a standard

EM DC335/336

EM DC240

A rack and pinion closer that have adjustable spring force 2-6 with standard arm and size 1-4 with sliding arm according to EN1154 standard. The door closer is CE marked and approved for Fire doors. It also meets the ANSI standard for more than 2 million cycles minimum performance. Probably one of the best door closers ever made due to very high performances and durability, tested in-house to more than 11 million cycles. The door closer can be used together with the fire door systems that are available in the program.

Adjustable closing speed, latching speed and back check valve are standard
- Delayed closing is an option
- Wide operating temperature range: +45°C.. -35°C
- Arm system to be ordered separately
  - Standard arm, sliding arm and hold open arm
- The arm is height adjustable 0-14 mm for easy installation
- Available in silver, white and brown color
- Also available in extra strong EN size 7, DC247

Specification

DC335 adjustable closing force EN 3-5 and is supplied with a standard arm.
- Maximum door weight (DC335): 100 kg and a door leaf width of 1250 mm.
- DC336 adjustable closing force 1-3 supplied with a sliding arm.
- Maximum door weight (DC336): 60 kg and a door leaf width of 950 mm.
- The arm is height adjustable 0-14 mm for easy installation.
- Wide operating temperature range: +45°C.. -35°C
- Painted stainless steel cover as a standard

Specifications

DC335 adjustable closing force EN 3-5 and is supplied with a standard arm.
- Maximum door weight (DC335): 100 kg and a door leaf width of 1250 mm.
- DC336 adjustable closing force 1-3 supplied with a sliding arm.
- Maximum door weight (DC336): 60 kg and a door leaf width of 950 mm.
- The arm is height adjustable 0-14 mm for easy installation.
- Wide operating temperature range: +45°C.. -35°C
- Painted stainless steel cover as a standard

Accessories and Dimensions

Mounting plate DC130
- Parallel arm brackets
- Flat mounting plate, drop plate and angle mounting plate
- Sliding arm
- Hold open device and opening damper for the sliding arm
- Available in silver, white and brown color
- Also available in extra strong EN size 7, DC247

A: 518 mm
B: 280 mm
C: 63 mm
D: 65 mm

A: 518 mm
B: 306 mm
C: 63 mm
D: 69 mm
EM DC330 CAM

The EM DC 330 CAM Closer is a non-handed cam action door closer. Thanks to symmetric cam shaft, that enables all installation possibilities, it is easy to open but still strong enough to close in every situation. DC330 can be adjusted to meet the requirements of the light opening resistance, for example the DDA (Disability Discrimination Act) in UK.
The closer has an adjustable closing force size EN 1-4 with the sliding arm according to EN1154 standard. It is suitable for external and internal doors.
The closer is CE marked and approved for fire doors.

Specification
- Adjustable latching starting angle by grooved spindle
- Separate adjusting valves for closing and latching speed
- Wide operating temperature range: +45C..-15C
- The arm is height adjustable 0-14 mm
- Pressure relief valve to protect against abuse
- Die-cast aluminum body manufactured from high performance silicon alloy

Accessories and Dimensions
- Mounting plate DC130

A: 518 mm  
B: 280 mm  
C: 63 mm  
D: 65 mm

EM DC250

A CAM action door closer that has adjustable spring force 1-6 with sliding arm according to EN1154 standard and the door closer is CE marked and approved for fire doors. It also meets the ANSI standard for more than 2 million cycles minimum performance.
The DC250 also meets the British Standard disable disability act (DDA) for maximum opening resistance of 30NM.
The door closer can be used together with the fire door systems that are available in the program.

Specification
- Adjustable closing speed, latching speed and back check valve are standard
- Delayed closing is an option
- Wide operating temperature range: +45C..-15C
- Non handed, can be installed on the door leaf or on the door frame
- The arm is height adjustable 0-14 mm
- Available in silver, white and brown color
- Sliding arm to be ordered separately

Accessories and Dimensions
- Opening damper (115 degrees and hold opening 120 degrees for the slide rail)
- Flat mounting plate and drop plate
- Angle mounting plate
- Hold open device and opening damper for the sliding arm

A: 306 mm  
B: 63 mm  
C: 69 mm
EM FD440

The Door Closer EM FD440 has an integrated electro-hydraulic hold-open device. In combination with the free swing sliding arm or the free-swing standard arm it’s particularly useful for frequently used doors where the opening resistance from a normal door closer is too high. In case of fire alarm or power switch-off the door closes safely regardless of door position. Mounting plate is included. A typical installation with FD440 could be hospitals into the wards or at elderly homes where a normal door closer would make the opening of the door difficult or impossible.

Here is a solution that meets the demands from the users like nurses and fire authority.

Specification

- FD440 is certified according to EN1155
- Spring tension adjustable for EN2-6 (standard arm) or EN1-4 (sliding arm)
- For maximum door width 1400 mm and weight 120 kg (standard arm system)
- Non handed, can be installed on the door leaf or on the door frame
- Arm system to be ordered separately,
  - “Free-swing” sliding arm and “Free-swing” standard arm
  - Standard arm and sliding arm for fixed position
- The arm is height adjustable 0-14 mm
- More efficient and less time-consuming service
- The FD440 can also be used in combination with our fire door systems FD462 and FD464 for special solutions.

Dimensions

A: 400 mm  
B: 70 mm  
C: 70 mm

EM FD460

The sliding arm type EM FD460 has an electro-mechanical hold open device in the sliding rail. The door is kept open at the selected angle. In case the smoke detector reacts or if the fire alarm is activated, the power is switched off and the door closes.

The hold open angle could be adjusted from 70 degrees up to 130 degrees. The hold open force can also be adjusted.

Current consumption 60 mA (24V).

We recommend always using door closer type DC250 in combination with the FD sliding arms.

Specification

- FD460 is certified according to EN1155
- FD460 has one electromechanical hold-open device for single doors
- FD460 for single doors max. 1400 mm wide and 120kg
- Suitable for most fire-rated doors
- Available in silver color
- There is a need for a door closer in combination with the guide rail FD460, DC240 or DC330 or DC250 depending on door size and usage.

Accessories and Dimensions

- FD600 Optical smoke detector
- EA701 Power supply transformer
- Door release button mortise mounted

A: 400 mm  
B: 70 mm  
C: 70 mm

Min. 70°  
70° – 130°
**EM FD461**

FD461 is a mechanical coordinator that keeps the active door open as long as the inactive door is open. The active door starts to close when the inactive door is almost closed. The coordinator is also the arm system for the door closers; DC240 that can only be used on the opening side. The DC330 or DC250 can be used on both sides of the doors. This fire door system gives an aesthetically nice looks with less parts involved in the complete system.

The doors are normally closed and the active door is used for passage. If both doors need to stay open, the active door must be opened first, and then the inactive door can be opened. The coordinator holds the active door in the desired position while the inactive door is kept open. The inactive door stays open as long as someone holds it or if a wall magnet is used. Important to use a carry bar in order to make sure that the closing sequence is working 100%.

### Specification

- For double doors with maximum width 1250-2800 (DC250)
- If the FD461 is installed on closing side there is a need for accessory set FD120.
- Suitable for most fire rated doors where the doors need to stay in open position during normal operation but need to be securely closed in case of fire
- You must order 2 door closer with the FD461 (order separately)
- Carry bar FD101 (order separately)

### Dimensions

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>307 mm</td>
</tr>
<tr>
<td>B</td>
<td>69 mm</td>
</tr>
</tbody>
</table>

**EM FD462-464**

The sliding arms type FD462 and FD464 have electromechanical hold-open devices, built in the sliding rail. The doors are kept open at the selected angle. In case the smoke detector reacts or if the fire alarm is activated, the power is switched off and the door closes. It is recommended always to use door closer type DC250 or DC330.

### Specification

- FD462 and FD464 are certified according to EN1155 and EN1158
- FD462 and FD464 for double doors,
  - Width 1250-2800 mm (DC250) or 1250-2200 mm (DC330)
- FD462 has two electromechanical hold-open devices for both doors and the FD464 have on electromechanical hold-open device. The active door only or both doors can be kept open.
- A mechanical coordinator keeps the inactive door open as long as the active door is open
- The inactive door closes first and when it’s almost closed, the active door starts to close
- Suitable for most fire-rated doors
- You must order 2 door closer in combination with the FD462 or FD464. Recommendation is DC330 or DC250.
- Carry bar FD101 (order separately)

### Accessories and Dimensions

- FD120 Accessory set for closing side installation
- Maximum door width: 1400-2800 (DC250) and 1400-2200 (DC330)

- **FD462**
  - A: 70 – 130°
  - B: Max. – 150°

- **FD464**
  - A: 307 mm
  - B: 69 mm
Coordinator FD110/FD111

This mechanical coordinator ensures that the closing sequence is correct for double doors. It is always mounted on the closing side and works in combination with approved door closer in the program. It is normally used for heavy doors or where it is not possible to use a built in coordinator with the arm systems. When the coordinator is used with wall magnets, the hold open angle could be up 180 degrees.

**Specification**

The coordinator is available in two lengths:
- FD110 is 650 mm long and takes care of a maximum door width of 1500 - 2000 mm.
- FD111 is 1050 mm long, has a maximum door width of 2000 - 3000 mm and a door weight of 160kg each door.

**Accessories and Dimensions**

- You will need two door closers in combination with a product. A recommendation is DC240, DC330 or DC250.
- Carry FD101 bar ensures for 100% that the opening and closing sequence works properly.
- Flush bolt FD108 (2 Pcs) that locks the passive door when the active door is closed.
- Wall magnets (2 Pcs) if needed.

<table>
<thead>
<tr>
<th>L</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>650</td>
<td>466</td>
</tr>
<tr>
<td>1050</td>
<td>866</td>
</tr>
</tbody>
</table>

IC1020/IC103

The IC020 is a fixed size EN 2 and the IC030 is a fixed size EN 3. This is a low cost alternative with very high quality. Both concealed closers are rack and pinion and CE marked and EN1154 tested.

They are delivered with arm systems and installation instructions.

**Specification**

- Body dimensions: L 230mm x W 32 mm x H 76.8mm
- Standards: Complies with CE marks for IC1020E & IC1030
- Opening angle: 180 degree maximum for EN2 & EN3
- Closing speed control: Valve 1: controls 180 to 15 degrees
- Latching speed control: Valve 2: controls 15 to 0 degrees
- Back-check (available upon request)
- Body material: Cast aluminum
- Installation instructions and mounting template included
- Wide operating temperature range: +40..-15C
- Maximum door weight (kg) and Maximum door leaf width (mm):
  - EN2 - Door weight <= 40kgs - Door width <=850m
  - EN3 - Door weight <= 60kgs - Door width <=950mm
- Body and arm packed in one box with installation instructions.
DC840/860

DC840 and DC860 are, thanks to CAM construction, extremely light to open but strong enough to close the door in every situation.

DC840 is suitable for 40 mm doors, internal and fire doors and DC860 is suitable for external, internal doors and fire doors.

DC860 is a non-handed cam action door closer and therefore very easy to install.

Both can be adjusted to meet the requirements of the light opening resistance for example the DDA (Disability Discrimination Act) in UK. They are used with FD480 series fire door closing systems.

### Specification

- CE certified
- Adjustable closing force size EN 1-4 (DC840 and EN 1-5 (DC860)
- Separate adjusting valves for closing and latching speed, mechanical BC
- Pressure relief valve to protect against abuse
- Wide operating temperature range: -15...45°C
- Anodized aluminium door closer body
- Two different arm systems: DC892, DC893

### Dimensions DC840

<table>
<thead>
<tr>
<th>A</th>
<th>32 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>364 mm</td>
</tr>
<tr>
<td>C</td>
<td>338 mm</td>
</tr>
<tr>
<td>D</td>
<td>177,5 mm</td>
</tr>
</tbody>
</table>

### Dimensions DC860

<table>
<thead>
<tr>
<th>A</th>
<th>40 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>378 mm</td>
</tr>
<tr>
<td>C</td>
<td>352 mm</td>
</tr>
<tr>
<td>D</td>
<td>177,5 mm</td>
</tr>
</tbody>
</table>

FD480-FD484

Coordinator for double doors with maximum door width of 1350 - 2800 mm. Hold open function can be made by using wall magnets.

During the day the doors are normally closed and the active door is used as passage door. If both doors need to stay open, the active door must be opened first and after that the inactive door can be opened.

The co-ordinator holds the active door in the desired angle during the time when inactive door is open. The inactive door stays open only if someone holds it or a wall magnet is used. When the inactive door is closed the active door starts to close.

### Specification

- FD480 and FD484 are certified according to EN1155 and EN1158
- Small rail size, height 30 mm and depth 26 mm
- Pre-wired products guarantee easy installation
- Available in silver and RAL colours
- Recommended to use with DC860 door closers

### Dimensions

<table>
<thead>
<tr>
<th>A</th>
<th>70 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>352 mm</td>
</tr>
<tr>
<td>C</td>
<td>177,5 mm</td>
</tr>
</tbody>
</table>
Accessories

**EA701**
- Power Supply 230 AC
- Output voltage 24VDC
- Max. current 2.5 A

**Mounting plate for DC240/250**

**Wall magnets 7438 and 7439**
- Operating voltage 24VDC
- Normal current 16mA
- Hold open force 500 N

**Smoke detector**
- FD600 (optional)
- FD602 (heat)
  - Operating voltage 15-30 VDC
  - Maximum current 30 mA

**Carrybar FD101**
- Enables the correct closing sequence

**Battery backup 7404**
- Capacity 0.7 Ah

**Control Unit 7400**
- Power Supply 230 AC
- Output voltage 24VDC
- Max. current 2.5 A

**Flush bolt**
- Useful in double doorsystems for locking the passive door leaf

**EVA120 Multi Mounting plate for EV300**
- For narrow profile doors

**Door release button**
- 7463 (mortice)

**Hold open device DC152**
- For sliding arm DC194 and DC892

**Opening Damper DC153**
- For sliding arm DC194 and DC892