

Surface Mounted Rack & Pinion Overhead Door Closer

24044

EN2-4 power adjustable by spring door closer




- Cast Body
- Rack and Pinion mechanism with matching flat form armset
- Adjustable closing speed and latch action
- Backcheck
- Optional Delayed Action*
- Universal Application (Fig 1, Fig 6 & Fig 61)
- Semi Radius cover
- Grade 304 material is specified for all stainless steel covers
- Same footprint and fixing positions as Briton 2003

Technical Data

 **Declaration of Performance:**
Available upon request

 **Certifire Certificate No.:**
CF 5294

 **Classification:**
Fig 1

| | | | | | |
|---|---|---|---|---|---|
| 3 | 8 | 4 | 1 | 1 | 4 |
| | | 2 | | | |

Fig 6

| | | | | | |
|---|---|---|---|---|---|
| 3 | 8 | 4 | 1 | 1 | 4 |
| | | 2 | | | |

CE Certificate No.:
1121-CPD-AD5194

Available Cover & Arm Finishes

Metallic Finishes



PSC SES SSN

RAL Colours available to Special Order

*The product falls outside of its CE & Certifire approval with this feature in use



SDS LONDON

Fixing Instructions for : 24044/45 Door Closer Power Adjustable EN 2-4

| | | | | | | | | |
|------------|--|---------------|----|-------------------------|---|--------|---|---|
| CE 1121 | Synergy Hardware Limited Lifford Lane, Kings Norton, Birmingham B30 3JN | CPR AD5194 | 15 | BS EN1154:1997+ A1:2002 | | | | |
| | | | | 3 | 8 | 4 2 | 1 | 1 |

APPROVED PRODUCT CF5294

Regular Fixing

| | | | | | |
|---|--|---|--|---|--|
| 1 | <p>Using the templates provided, mark and drill pilot holes into the door and frame.</p> | 2 | <p>Using the templates provided, fix the mechanism to the door as well as the armset and any necessary brackets. PLEASE NOTE If a cover is to be fitted over the mechanism, the template for this arrangement can be found with the cover itself and should be referred to at this point.</p> | 3 | <p>Attach the armset to the mechanism ensuring the pre-loading requirement has been completed.</p> |
|---|--|---|--|---|--|

Transom Fixing

| | | | | | |
|---|--|---|--|---|--|
| 1 | <p>Using the templates provided, mark and drill pilot holes into the door and frame.</p> | 2 | <p>Using the templates provided, fix the mechanism to the door as well as the armset and any necessary brackets. PLEASE NOTE If a cover is to be fitted over the mechanism, the template for this arrangement can be found with the cover itself and should be referred to at this point.</p> | 3 | <p>Attach the armset to the mechanism ensuring the pre-loading requirement has been completed.</p> |
|---|--|---|--|---|--|

Installation Instructions: Please refer to actual size template for exact fitting dimensions

| <p>Pre-Loading of Arm</p> <p>For the unit to provide the optimum performance and overcome any resistance upon closing it is recommended that the armset is "pre-loaded". To pre-load, reposition the fixing angle of the arm onto the mechanism so that the end of the closing cycle would be past the stop position, as indicated below.</p> <div style="text-align: center;"> <p>Before After</p> </div> | <p>Adjustment Details</p> <p>This unit is a power adjustable mechanism. Power / force adjustment is carried out by a single adjustment valve in the end of the mechanism. The unit is pre-set in the factory at EN size 3. Please see table below for adjustment details for each power size. Instructions for adjusting this product are detailed overleaf.</p> <p>Fixing in Fig.1 / Fig.61</p> <table border="1"> <thead> <tr> <th>Power size</th> <th>Max. Door width</th> <th>Max. Door weight</th> <th>Max. Door opening</th> <th>Number of turns</th> </tr> </thead> <tbody> <tr> <td>No.1</td> <td>750mm</td> <td>20Kg</td> <td>180°</td> <td>7CCW</td> </tr> <tr> <td>2</td> <td>850mm</td> <td>40Kg</td> <td>180°</td> <td>4CCW</td> </tr> <tr> <td>* 3</td> <td>950mm</td> <td>60Kg</td> <td>180°</td> <td>0</td> </tr> <tr> <td>4</td> <td>1100mm</td> <td>80Kg</td> <td>165°</td> <td>4CW</td> </tr> </tbody> </table> <p>* Factory preset CW:Clockwise CCW:Counterclockwise</p> | Power size | Max. Door width | Max. Door weight | Max. Door opening | Number of turns | No.1 | 750mm | 20Kg | 180° | 7CCW | 2 | 850mm | 40Kg | 180° | 4CCW | * 3 | 950mm | 60Kg | 180° | 0 | 4 | 1100mm | 80Kg | 165° | 4CW |
|--|--|------------------|-------------------|------------------|-------------------|-----------------|------|-------|------|------|------|---|-------|------|------|------|-----|-------|------|------|---|---|--------|------|------|-----|
| Power size | Max. Door width | Max. Door weight | Max. Door opening | Number of turns | | | | | | | | | | | | | | | | | | | | | | |
| No.1 | 750mm | 20Kg | 180° | 7CCW | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 850mm | 40Kg | 180° | 4CCW | | | | | | | | | | | | | | | | | | | | | | |
| * 3 | 950mm | 60Kg | 180° | 0 | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 1100mm | 80Kg | 165° | 4CW | | | | | | | | | | | | | | | | | | | | | | |



SDS LONDON

Fixing Instructions for : 24044/45 Door Closer Power Adjustable EN 2-4

| | | | |
|------------|--|---------------|-------------|
| CE 1121 | Synergy Hardware Limited Lifford Lane, Kings Norton, Birmingham B30 3JN | CPR AD5194 | 15 |
| | | | |
| 3 | 8 | 4 2 | 1 1 4 |



Parallel Fixing

Using the templates provided, mark and drill pilot holes into the door and frame.

1

Using the templates provided, fix the mechanism to the door as well as the armset and the parallel arm bracket.
PLEASE NOTE If a cover is to be fitted over the mechanism, the template for this arrangement can be found with the cover itself and should be referred to at this point.

2

Rotate the bottom pinion at approximately 90° with a wrench as illustrated and then assemble the main arm.

3

Make sure the main arm is parallel to the door. Then attach the connecting arm.

4

Closer Adjustments

The following adjustment valves have a maximum adjustment of 1 full turn per valve.
PLEASE NOTE over adjustment will damage the mechanism and/or the performance of the door closer and invalidate its guarantee. Adjust Backcheck (valve #4) and the optional Delayed Action (valve #3) before adjusting the Closing Speed (valve #1) and Latching Action (valve #2).

After ensuring all fixings are tightened, operate the door closer to check its performance, making adjustments as necessary.

Fixing in Fig.66

| Power size | Max. Door width | Max. Door weight | Max. Door opening | Number of turns |
|------------|-----------------|------------------|-------------------|-----------------|
| No.1 | 750mm | 20Kg | 180° | 7CCW |
| 2 | 850mm | 40Kg | 180° | 4CCW |
| * 3 | 950mm | 60Kg | 180° | 0 |

* Factory preset
CW:Clockwise CCW:Counterclockwise

Installation and Maintenance Instructions:

Warning

- Please note the minimum power size requirement for fire / smoke door assemblies is 3 as required by Approved Document B.
- Do not install mechanical hold open devices on fire / smoke door assemblies.
- Take care not to exceed the maximum opening angle as detailed above.
- Care and attention must be taken when adjusting any of the units control valves to avoid damage through over adjustment.
- All closer units are sealed for life and the internal components assembled under high load, therefore, tampering with the mechanism is to be strictly avoided.

After Installation

- When the closer operates to close the door from its maximum opening position, it should ensure the lock latchbolt and any seals are overcome and the leaf returned into its frame.
- When the door is slightly open and the latch bolt resting against the strike, release the door to ensure the leaf fully closes into its frame.

Maintenance

- Once the unit has been correctly fitted it is recommended that periodic checks (every six months) are carried out to ensure all fixings are tight and the door closes freely and positively into the frame, without slamming.
- A light oil lubricant (non-graphite) should be applied to the moving joints and exposed pivot points.

