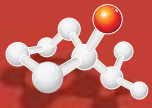


## ABLOY® DOOR OPERATORS/CLOSERS

**Making light work of door automation.** High specification door operators and closers providing reliable, long lasting hands free access - and Equality Act compliance.



*hands free  
operators*  
*Closers*



VERSION: AUGUST-11

Uniclass L418181
Cl/SfB   (31.59)   Xt7

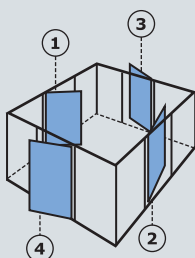
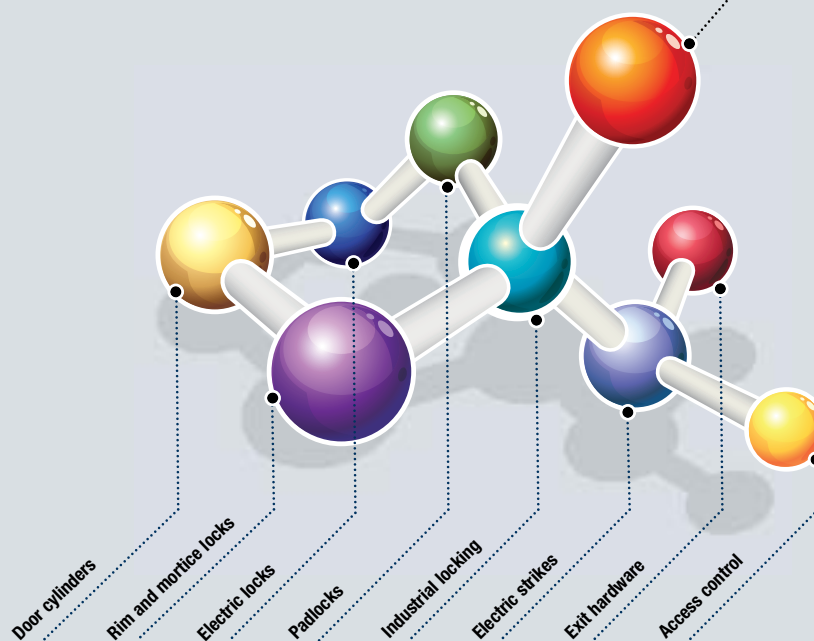


## Integrated door control solutions... it's in our DNA

Abloy UK are the leading electric locking provider in the UK and Ireland and we are pleased to welcome you to this catalogue of our products.

Door automation forms just part of our total service, with a wide range of products and capabilities that integrate perfectly - like our molecular diagram below - to provide a complete door security and functionality solution. There is a catalogue for every category below and you can find our products online at [www.abloy.co.uk](http://www.abloy.co.uk).

To gain advice or expertise with planning, specification and implementation of any door solution, call us on +44 (0)1902 364500.



### Handing

The correct hand of a door can be selected using this diagram. Standing inside the box looking out, choose your door hand from 1 to 4, determined by the hinge side and if the door opens inwards or outwards.



### The key flag logo confirms that ABLOY® products have a Finnish origin

Finnish-made ABLOY® products are known worldwide for their high quality and performance; globally ABLOY® is the leader in high quality locking solutions. You can be confident that the products in this catalogue have been manufactured in Finland to the highest standards.

## ABLOY® door operators and closers

# sophisticated, compliant door automation

ABLOY® automatic swing door operators and door closers provide an efficient, reliable, sophisticated and safe means of opening a hinged door automatically. Tried and tested over many years, ABLOY® automatic swing door operators are used extensively within both public buildings and private housing for the disabled and elderly.

Because of their versatility and functionality they are well suited to doors that require hands-free opening. Examples would be an operating theatre or a clean room, both requiring the door to be opened without touching contaminated areas on or around the door.

The Equality Act (2010) has implications on every aspect of life, not least the door environment. Our door automation systems address the legislative requirements, providing safe compliance and robust usage.

Door closers are used to control the opening and closing of a door. This has particular benefits when used in areas visited by the disabled, the elderly or children.

We offer a selection of ABLOY® door closers to suit most door types and situations.



### DA460/L

For heavy duty, high traffic interior/exterior doors. Pull function

### DA460/S

For heavy duty, high traffic interior/exterior doors. Push function

#### Features

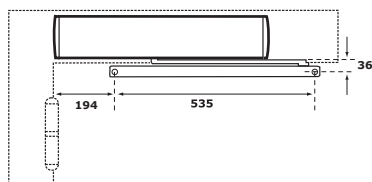
- Motor-driven opening and closing
- Protected against mechanical overload
- Integral control of electric locks (12V and 24V DC outputs)
- Low resistance when door is opened manually
- Compact design
- Basic functions and set up of door quickly and easily

- Adjustment of hold-open time, opening speed, force and angle
- Door hold closed force and hold-open function
- 'Push and go' function
- 'Free swing' function, door can be left in the open position when required
- Integral safety feature
- Operates with pressure pads, push button switches, card readers and radar (infra-red and microwave)
- For surface or concealed applications
- Supplied complete with arm and mounting plate

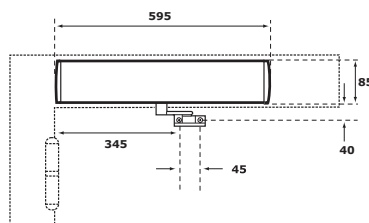
*N.B. Products are supplied on condition they are installed by trained ABLOY® door operator installers*



DA460/L  
Pull function  
(sliding arm)



DA460/S  
Push function  
(standard arm)



ARMS	MAX DOOR WIDTHS AND WEIGHTS
Standard arm	1,000mm - 120kg 1,150mm - 105kg 1,300mm - 90kg
Sliding arm	1,000mm - 80kg 1,150mm - 70kg 1,300mm - 60kg
SPECIFICATIONS	
Supply voltage	90-264V AC, 47-63Hz
Power consumption	70W
Weight	6.5kg
Operating temperature (°C)	-15 to +50
Ingress protection	IP20
Output voltage	12V DC (1.0A), 24V DC (0.5A)
Hold-open time	0-60 secs
Opening angle	100° (90° with pull arm mounted on closing side or 110° with pull arm on opening side)

ACCESSORIES AND OPTIONS	
Standard arm (push type) max door frame depth 150mm	DA147
Standard extended arm (push type) max door frame depth 150-250mm	DA148
Sliding arm (pull type)	DA149
Handing	Non handed
Mounting plate	DA103
Extension pieces (raise operator)	
10mm	DA150/01
20mm	DA150/02
60mm	DA150/06
Finish	Silver



**DA461/L**

For heavy duty, high traffic exterior/ interior fire doors. Pull function



**DA461/S**

For heavy duty, high traffic exterior/ interior fire doors. Push function

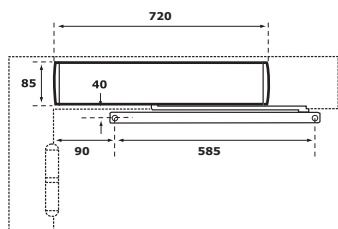
**Features**

- Motor-driven opening, closed hydraulically
- Protected against mechanical overload
- Integrated control of electric locks (24V DC output)
- Fire detector input
- Quick and easy installation and commissioning
- Vandal-resistant clutch mechanism
- Quiet operation
- 'Push and go' function
- Operates with pressure pads, push button switches, card readers and radar (infra-red and microwave)
- Low resistance when door is opened manually
- Lock control relay with NO/NC contacts
- Secondary DC inlet power back up
- Supplied complete with arm and mounting plate

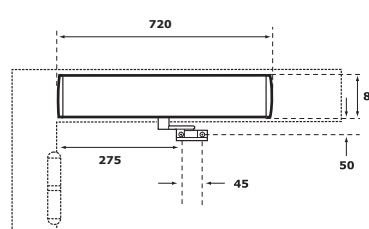
*N.B. Products are supplied on condition they are installed by trained ABLOY® door operator installers*



**DA461/L**  
Pull function  
(sliding arm)



**DA461/S**  
Push function  
(standard arm)



ARMS	MAX DOOR WIDTHS AND WEIGHTS
Standard arm	1,000mm - 125kg
	1,150mm - 100kg
	1,300mm - 90kg
Sliding arm	900mm - 100kg
	1,000mm - 90kg
	1,100mm - 80kg

SPECIFICATIONS	
Supply voltage	100/115/230V AC ±10%, 50 to 60Hz
Power consumption	100W
Weight	9.1kg
Operating temperature (°C)	-15 to +50
Ingress protection	IP20
Output voltage	24V DC (0.5A)
Hold-open time	0-60 secs
Opening angle (max)	100° (90° with pull arm mounted on closing side or 110° with pull arm on opening side)

ACCESSORIES AND OPTIONS	
Standard arm (push type) Max door frame depth 150mm	DA147
Standard arm (push type) Max door frame depth 150-250mm	DA148
Sliding arm (pull type)	DA149
Handing	Handed push/pull
Mounting plate	DA104
Finish	Silver
Extension pieces	10mm DA150/01 20mm DA150/02

**DA430/L**

For lightweight, medium traffic interior doors. Pull function

**DA430/S**

For lightweight, medium traffic interior doors. Push function

**Features**

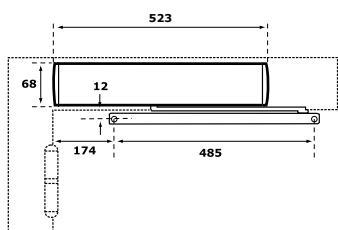
- Motor-driven opening and closing
- Protected against mechanical overload
- Integral control of electric locks (24V DC output)
- Easy to install
- Non-handed
- Vandal resistant clutch mechanism
- Quiet operation
- Compact, slimline design
- 'Push and go' function
- Built-in back check
- Operates with pressure pads, push button switches, card readers and radar (infra-red and microwave).
- Low resistance when door is opened manually Lock control relay with NO/NC contacts
- Secondary DC inlet power back up

- Supplied complete with arm and mounting plate

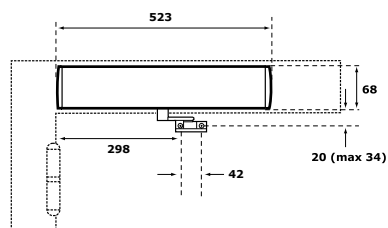
*N.B. Products are supplied on condition they are installed by trained ABLOY® door operator installers.*

**DA430/L**

Pull function (sliding arm)

**DA430/S**

Push function (standard arm)



ARMS	MAX DOOR WIDTHS AND WEIGHTS
Standard arm	1,000mm - 80kg
Sliding arm	1,000mm - 60kg
SPECIFICATION	
Supply voltage	115/230V AC $\pm 15\%$ , 50 to 60Hz
Power consumption	85W
Weight	3.5kg
Operating temperature (°C)	0 to +40
Ingress protection	IP20
Output voltage	24V DC (0.5A)
Hold-open time	0-60 secs
Opening angle	100° (90° with pull arm mounted on closing side)

ACCESSORIES AND OPTIONS	
Standard arm (push type)	DC190
Sliding arm (pull type)	DC194
Handing	Non handed
Mounting plate	DA105
Finish	Silver

**Series BEA810**

High Performance Infra-red  
Safety Sensor System

▼  
**BEA810/71**  
Master (340mm)

▼  
**BEA810/72**  
Master + Slave  
(700mm overall)

▼  
**BEA810/73**  
Master + 2  
Slaves  
(900mm overall)

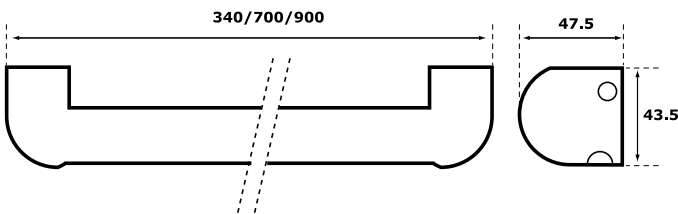
**Features**

- Strongly recommended when installing operators
- Fast detection speed stops door fast
- Insensitive to colour variations
- Insensitive to reflectivity of ground
- Precise infra-red technology
- Door stops or re-opens if sensor activated
- Immune to electrical and radio frequency

- Vandal-proof – if blinded, door goes to safety mode
- Range adjustable by rotating cam
- Easy installation and adjustment
- Not IP rated

**Finish**

SAA with black lens



**TECHNICAL DATA**

<b>Supply voltage</b>	Relay output 12-24V AC/DC (± 10%)
<b>Relay output</b>	Maximum constant rating – 1A under 30V (resistive)
<b>Current consumption</b>	On 60mA max/off 30mA max
<b>Standard output</b>	Relay with switch over contact (voltage free)
<b>Detection range</b>	0.7m to 2.5m (adjustable)
<b>Detection mode</b>	Presence (or motion)
<b>Response time</b>	< 50ms
<b>Max voltage</b>	30V DC
<b>Max current</b>	100mA
<b>Output hold time</b>	0.1 secs – 4.5 secs (adjustable)



## Eagle 1

Uni-directional sensor



### Features

- Sophisticated design
- Digital technology
- Very wide sensing field
- Compact size  
120mm(W) x 80mm(H) x 50mm(D)
- Virtually vandal-proof
- Fully controlled by coded infra-red remote control (supplied separately)

### Detection area

- Wide field 4m(W) x 2m(D)
- Narrow field 2m(W) x 2.5m(D)

### Tilt angle

- From 0° to 90° vertical
- From -30° to 30° lateral

### Remote control adjustment

- Sensitivity
- Hold time
- Detection direction
- Height
- Filter

### Finish

Anthracite grey

### Accessories

- ERA – rain protector
- Eagle remote control – for easy adjustment of advanced features

## TS4

RQE touch switch



### Features

- Proximity or touch
- No moving parts
- Built-in timer (adjustable) 0-45 secs
- Isolated relay contacts
- Robust housing with single gang back box

### Technical Specification

- 12V DC
- Current consumption:  
Non-active 40mA  
Active 50mA
- Range adjustable up to 20mm

### Finish

White ABS Cover

## DA033

Elbow contact



### Features

- For internal use only
- Simple to install

### Dimensions

180mm (H)  
x 90mm (W)  
x 22mm (D) (mm)

### Finish

ABS white

#### TECHNICAL DATA

<b>Supply voltage</b>	12V to 24V AC ± 10% 12V to 24V DC +30%/-10%
<b>Mains frequency</b>	50-60Hz
<b>Power consumption</b>	<2W
<b>Max switching power</b>	30W (DC)/60VA (AC)
<b>Temperature (°C)</b>	-20 to +55
<b>EMC compatibility</b>	Yes
<b>Mounting height</b>	4m max
<b>Cable length</b>	2.5m



**PBS.H****Square push plate****Features**

- Operates with a simple push
- Can be fully recessed
- Mechanical operation
- Waterproof seal
- For internal or external use
- Can be used with remote control when fitted with receiver

**Temperature range**

20°C to +55°C

**When used with EAS RF receiver and transmitter****Frequency**

433.92MHz

**Detection distance**

25m (max)

**Supply voltage**

12V to 24V AC  $\pm 15\%$   
24V to 30V DC  $\pm 10\%$

**Power consumption**

max 38mA at 24V DC

**Adjustable hold open time**

0.5 to 10 secs

**Max number of transmitters**

10

**Finish**

Steel face plate, housing stainless steel, black box

**PBJ.H****Jamb push plate****FP200****Roller blind system****Features**

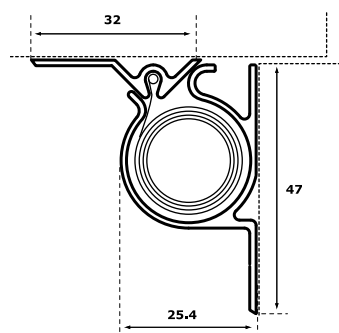
- Protects against trapped fingers on inside of door
- For use especially with automatic swing door operators
- Fits any hinged door
- Tested to 200,000 operations

**Standard length**

1,925mm (other lengths to special order)

**Finish**

SAA (dark bronze and white to special order), black blind

**PSU-4****PSU-4 dual voltage power supply****Features**

- Linear fan assisted
- Full short circuit protection
- Output rated @ 12V DC 8A – 24V DC 4A
- EMC compliant

**Technical Specification**

- Supply voltage: 230V AC, 50Hz
- Auto reset thermal shutdown @ 80°C
- Battery protection fuse @ 10A
- Mains fuse rated @ 2.0A

**Enclosure**

- 283mm (H) x 224mm (W) x 92mm (D)

*N.B. Enclosure will accommodate a 12V 7Ah battery only. Separate enclosure required for 24V DC back up.*

**DA136****Timer module****Features**

- For additional door control, can be used on rebated and four door combinations
- Dimensions 36mm x 16mm x 63mm
- Can be fitted inside the door operator or up to 30m away from the unit

**Output relay**

- Delay time 0-30 secs (non-linear)
- Hold open time 0-60 secs (non-linear)
- Operating temperature -15°C to +50°C



### DC240

#### Rack and pinion door closer

Suitable for external doors, large doors and internal doors exposed to conditions of pressure and heavy use

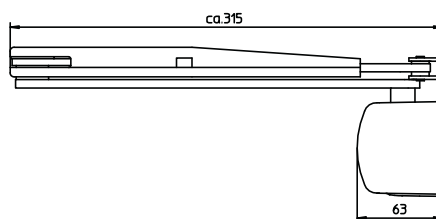
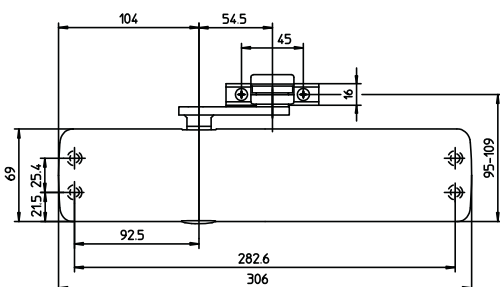
The maximum door weight 120 kg, and door leaf width 1400 mm with a standard arm installation.

When installed with a sliding arm maximum door weight is 80 kg and door leaf width is 1100 mm.

#### Features

- CE certified with standard and sliding arms
- Adjustable closing force size EN 2-6 with the standard arm and EN1-4 with the sliding arm according EN1154
- Separate adjusting valves for closing and latching speed
- Back check (BC) as a standard feature
- Delayed closing (DC) as an option
- Wide operating temperature range: -35oC to +45oC
- Adjustable latching and back check starting angle by grooved spindle
- Easy adjustment of arm height (14 mm)
- Two pressure relief valves to protect against abuse

- Die-cast aluminium body manufactured from high performance silicon alloy
- Finish silver, SSS
- Supplied with standard arm and PA bracket
- 10-year guarantee



#### Selecting the correct door closer

ABLOY door closers are available in a range of sizes to meet the different closing torque requirements of the CEN standards BS EN 1154, 1155 and 1158. The correct product should be selected to suit the application.

#### EN1154 REQUIREMENTS

DOOR CLOSER SIZE (CLASS)	CLOSING TORQUE NM (0-4°) MIN	RECOMMENDED MAX DOOR LEAF WIDTH (MM)	DOOR LEAF MASS (KG) MAX
1	9	750	20
2	13	850	40
3	18	950	60
4	26	1100	80
5	37	1250	100
6	54	1400	120
7	87	1600	160



## DC250

### Cam action door closer

Non-handed

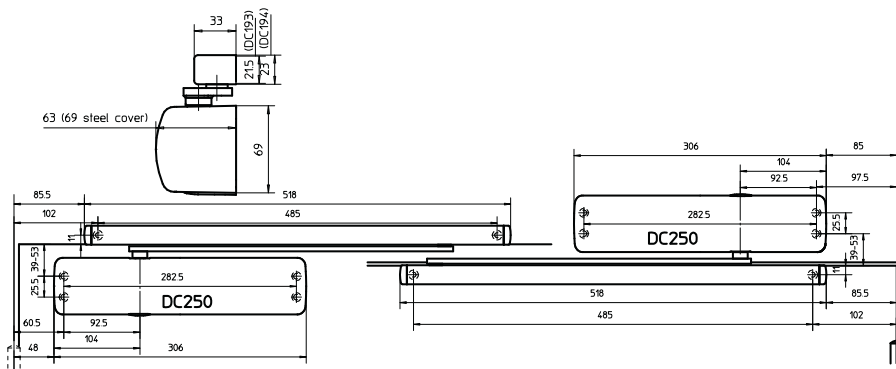
Very easy to install

Thanks to the cam construction it is extremely light to open, yet in terms of closing force strong enough for heavy duty applications. Suitable for external and internal doors.

Maximum door weight 120 kg and door leaf width 1400 mm with sliding arm installation.

### Features

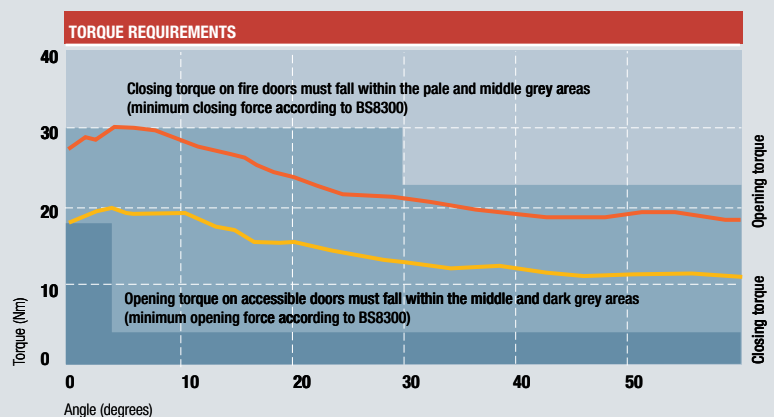
- CE certified with sliding arm
- Adjustable closing force size EN 1-6 with sliding arm according EN1154
- Separate adjusting valves for closing and latching speed
- Back check (BC) as a standard feature
- Delayed closing (DC) as an option
- Wide operating temperature range: -15°C to +45°C
- Adjustable latching and back check starting angle by grooved spindle
- Easy adjustment of arm height (14 mm)
- Two pressure relief valves to protect against abuse
- Die-cast aluminium body manufactured from high performance silicon alloy
- Finish silver, SSS
- Supplied with slide arm
- 10-year guarantee



Note that BS EN1154 states that door closers with a minimum power rating of 3 should be used on fire doors.

Accessible doors as defined in BS 8300 (amended 2005) should require no more than 30N force to open.

Due to their high efficiency rating, ABLOY cam action door closers are able to meet the requirements of both BS EN 1154 and BS 8300 and comply with Document M of the Building Regulations, as shown in the graph opposite.





### DC330

#### Cam action door closer

#### Non-handed

Thanks to CAM it is light to open but still strong enough to close the door in every situation.

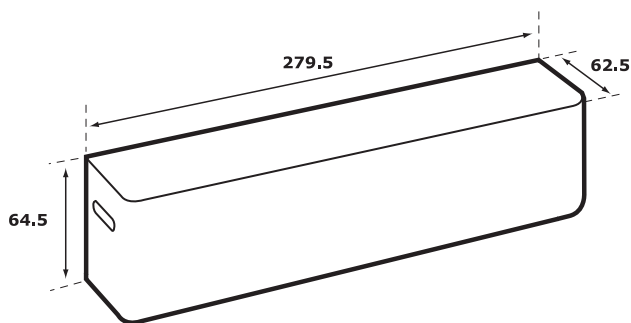
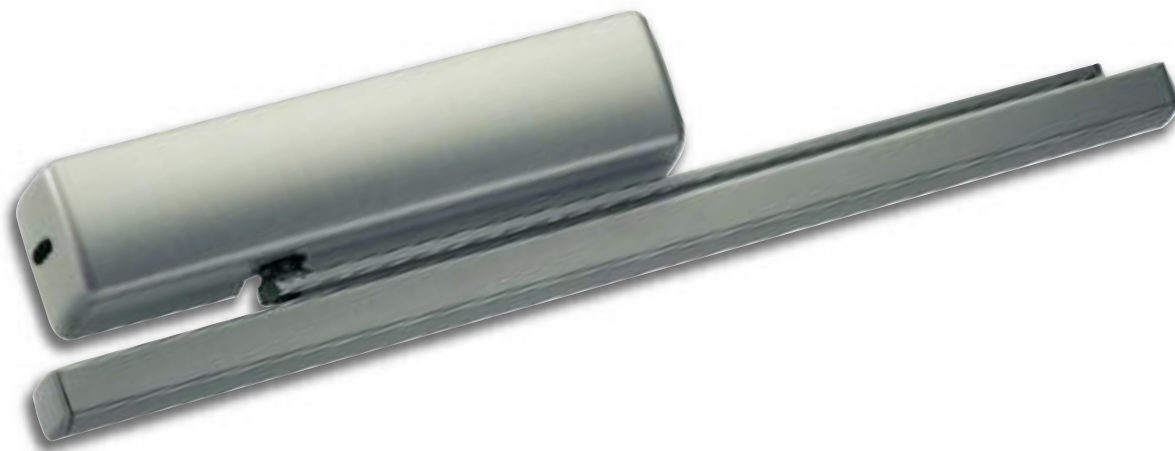
ABLOY® DC330 can be adjusted to meet the requirements of the light opening resistance, for example the Equality Act (2010) in the UK. Suitable for external and internal doors.

The Maximum door weight 80 kg and door leaf width 1100 mm with a sliding arm installation.

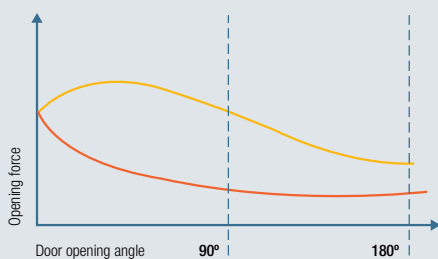
#### Features

- CE certified with the sliding arm
- Adjustable closing force size EN 1-4 with the sliding arm according EN1154
- Separate adjusting valves for closing and latching speed
- Wide operating temperature range: -15oC to +45oC
- Adjustable latching starting angle by grooved spindle

- Easy adjustment of arm height (14 mm)
- Pressure relief valve to protect against abuse
- Die-cast aluminium body manufactured from high performance silicon alloy
- Finish silver, SSS
- Supplied with slide arm
- 10-year guarantee



#### DOOR OPENING FORCE WITH SLIDING ARM



— RACK AND PINION DOOR CLOSER  
— CAM ACTION DOOR CLOSER

Cam action door closers are particularly suitable for many applications due to the extremely low opening force in the initial phase of a door opening cycle.

▼  
**DC190**

Standard arm (push type)  
 • Optimum closing strength  
 • Allows door to open 180°

▼  
**7199**

Special arm as DC190 but with lockable ball joint to protect against abuse



▼  
**DA147**

Standard arm (push type)  
 • Max door frame depth 150mm

▼  
**DA148**

Standard extended arm (push type)  
 • Max door frame depth 150-250mm

▼  
**7191**

Hold-open arm  
 • Angle adjustable to 150°



▼  
**DC194**

Sliding arm

▼  
**DA149**

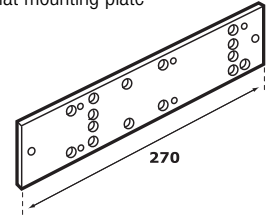
Sliding arm (pull type)  
 • Protects against abuse



**Mounting plates for door closers**

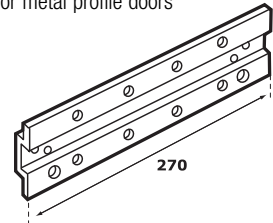
▼  
**101**

Flat mounting plate



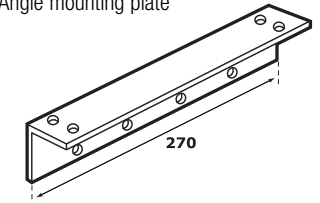
▼  
**102**

For metal profile doors



▼  
**103**

Angle mounting plate



COMPATIBILITY	ARMS						
	7191	7199	DA147	DA148	DA149	DC190	DC194

**OPERATORS**

DA460/L		•	•	•			
DA460/S			•	•	•		
DA461/L			•	•	•		
DA461/S			•	•	•		
DA430/L						•	•
DA430/S						•	•

**CLOSERS**

DC240	•	•				•	•
DC250							•
DC330	•	•				•	•

## A state of the art learning resource for the security industry.

Welcome to our Academy. We recognise that the high performance of our products can only be realised by the abilities of the people who install them. We have developed the ASSA ABLOY Academy to provide training of the highest standard, and the Academy

brand is recognised as a mark of excellence and accreditation. This gives reassurance to clients of your competence and specialist product understanding.

There are two one day Academy courses covering ABLOY® Door Operators:

### Door Operators 1 in the classroom

All ABLOY® Door Operator Installers must attend and pass this course before their company can purchase Door Automation products from Abloy UK.

It covers:

- Pre-Installation Checks
- Installation, both mounting and electrical, of all ABLOY® door operator equipment and accessories
- Commissioning, testing
- Software
- 81071/72, safety sensor, theory



WORKSHOP

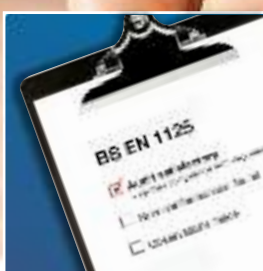
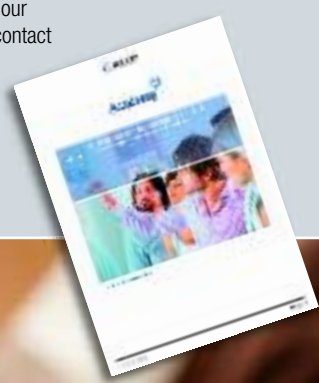
Workshop-based courses provide specific product training with realistic set up and applications



**Door Operators 2 in the workshop**

A hands-on course, putting into practice the theory learnt during the classroom sessions in our state-of-the-art Workshop, including dedicated door and work bench for each attendee.

To find out more or to receive our Academy prospectus, simply contact us by any of the following:  
Phone: +44(0)1902 364500  
Email: [academy@abloy.co.uk](mailto:academy@abloy.co.uk)  
or contact your Sales Account Manager.



CLASSROOM

Classroom-based courses give theoretical, strategic and legislative knowledge relating to door security and function



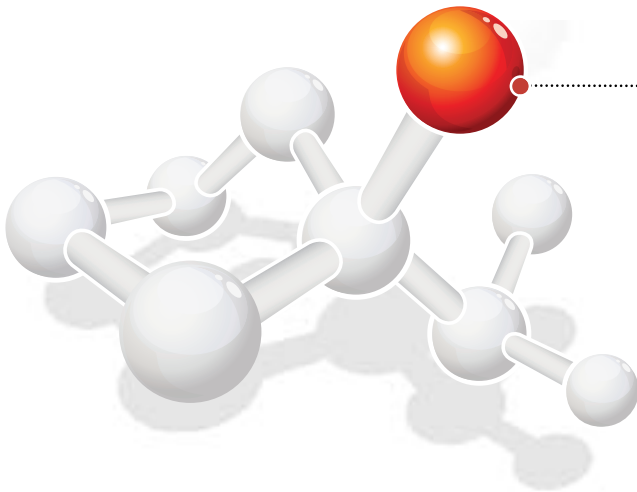
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[www.abloy.co.uk](http://www.abloy.co.uk)

Direct line - Sales Office  
0845 071 3844 (UK only)  
Direct line - Customer Services  
0845 071 3855 (UK only)  
Calls charged at local network rates

## From product supply through to planned and implemented door control solutions... it's in our DNA

We are the UK's leading experts on door locking and functionality. Our product range, including door operators and closers, connects like the molecular diagram below, to form complete, secure, compliant and lasting solutions trusted by organisations around the UK and Ireland for whom compromise is not an option.



### Product supply >

Simply order the products you need from our friendly and knowledgeable staff

### Expertise >

Helpful advice when you need it from our door control specialists

### Planning and specification >

For larger projects, call on us for full service assessment and planning of your needs, from fire exiting and compliance to master key strategies

Due to a continuous programme of development, Abloy UK reserves the right to make alterations without notice. For technical reasons connected with colour reproduction the colours shown may vary slightly from those of the product. All dimensions provided within this catalogue are approximate and for guidance only.

E. & O. E. For terms and conditions of sale, please refer to the current price list.

Abloy UK markets high quality products and accessories for security applications. Our customer base provides solutions to a broad spectrum of public and private organisations throughout the UK and Ireland.

