

# Johnson Controls

# Fire and Security Protection

Peace of mind starts with our promise



Technical Submittal regarding Door Types for CHT Whiteleys Shopping Centre

20/04/2023

13559723 - 07399040 (ACS) - Rev P02

ADT House  
Mucklow Hill  
Halesowen  
West Midlands  
B62 8DA

**Johnson** Controls

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## I. **About the Technical Submission**

This document covers the different door type E9 Bin Store Doors and door type E4 within the Whiteleys Project.

## II. Project Overview

Client:	Crown House Technologies Limited	
Address:	Bridge Place 2, Anchor Boulevard, Admirals Park, Crossways, Kent, Kent DA2 6SN	
Contact:	01322 730224	Fax: +44 132 231 7789

Site Details:	CHT Whiteleys Shopping Centre
Address:	Queensway, Bayswater, London, W2 4YN

The Technical Submission covers the door types and the locks to be fitted to each door type.

The site comprises of CHT Whiteleys Shopping Centre

Site related reference number(s):

Enquiry Number (s)	Job Number (s)	Revision (s)
13559723	176046	P02

### III. ACS Door Type Overview

The following specification is for an ACS system intended to comply with National Security Inspectorate Code of Practice NCP 109: (design, installation, and maintenance of access control systems) including the requirements of BS EN 60839-11-1.

Also covered in this document is the requirement for any door covered by EN179 or EN1125 to have a lock and furniture installed that meet the appropriate standard.

This document covers the lock types to be fitted on each door type as per the JCI drawing WHIT-6620-ZZ-ZZ-SC-X-1016.

The models used in this drawing are based on the models outlined in the Blend drawing WHIT-BLD-ZZ-ZZ-DR-Y-66217.

The door types covered in the JCI drawing are as follows.

- Type E1 – Single Door with Single Magnetic Lock (Mag Lock)
- Type E2 – Double Door with Double Magnetic Lock (Mag Lock)
- Type E3 – Lift Access Control No Locks (Card Reader ONLY)
- Type E4 – Single Door with Electromechanical Lock
- Type E5 – Double Door with Electromechanical Lock
- Type E6 – Offline Salto Lock
- Type E7 – Double Door with Double Magnetic Lock (Reader In/Out) (Mag Lock)
- Type E8 – Long Range Reader Car Park Entrance No Locks (Card Reader ONLY)
- Type E9 – Same as Type E2 but with a Break glass on both sides of the door. (Mag Lock)
- Type E10 - Single Door with Single Magnetic Lock (Reader In/Out) (Mag Lock)

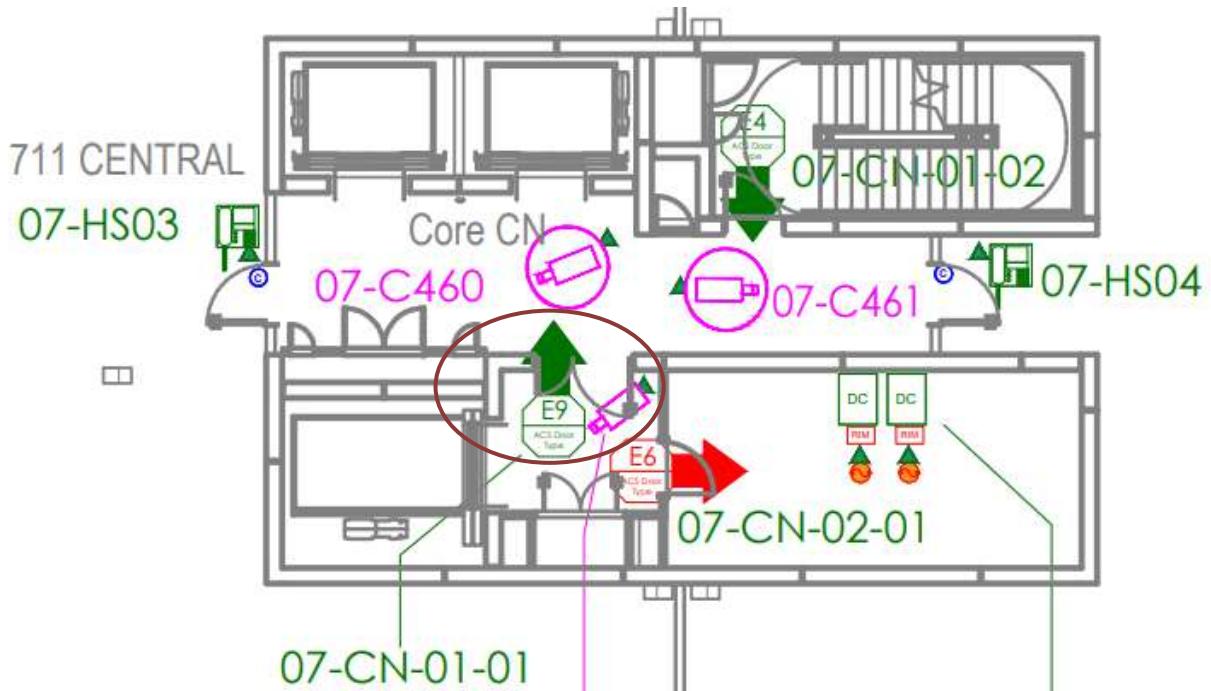
This document covers the equipment required for an E9 door; the doors shown in this document are typically Bin Store doors from the communal lift lobby to the Bin storage area. The equipment is not limited to this specific door but covers all E9/E2 door types.

These doors shown in this document are a Type E9 door type.

This document covers the equipment required for an E4 door; the doors shown in this document are typically Escape route doors from the communal lift lobby to the escape route. The equipment is not limited to this specific door but covers all E4 type doors including external entrance doors and doors to secure areas.

The doors shown in this document are a type E4 door type.

#### IV. Bin Store Typical E9 Door



Bin Store Door 07-CN-01-01 - Image 001.

The area in image 001 is a typical layout of a Bin Store door Type E9 from the communal lift lobby.

The door circled is the that connects directly to the Bin Store to the communal lift lobby.

The door will typically require a Break glass Unit locate on both sides of the door, so it does not form a trap point within the bin store.

The locking equipment required for each door is as follows

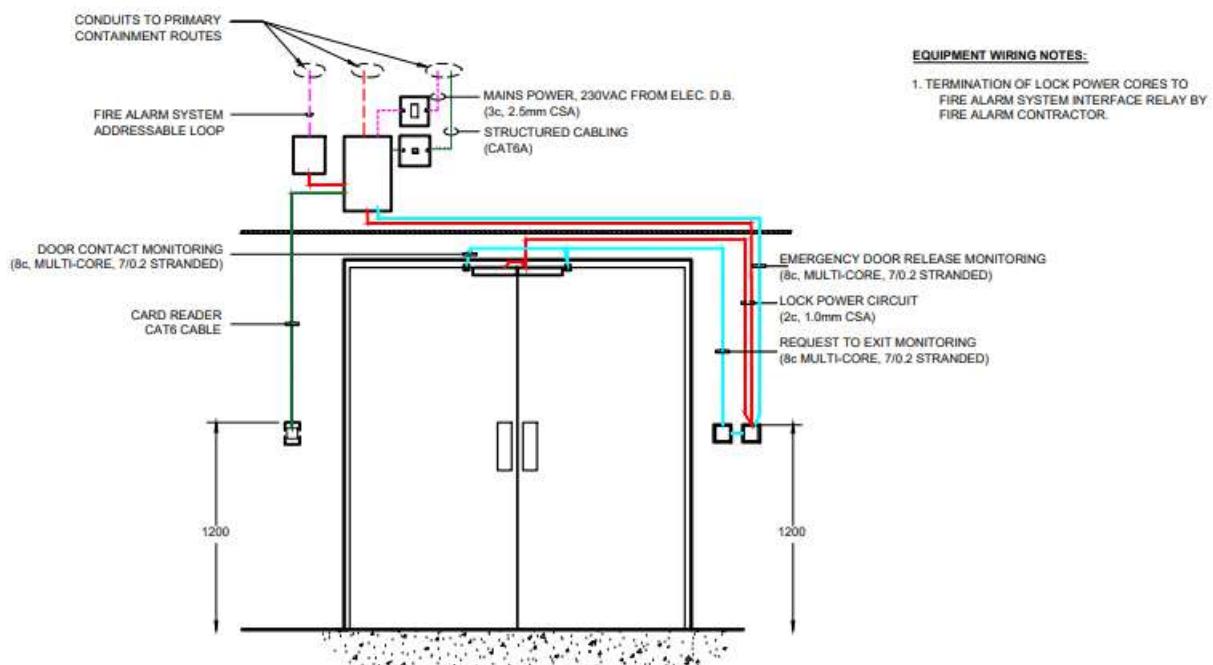
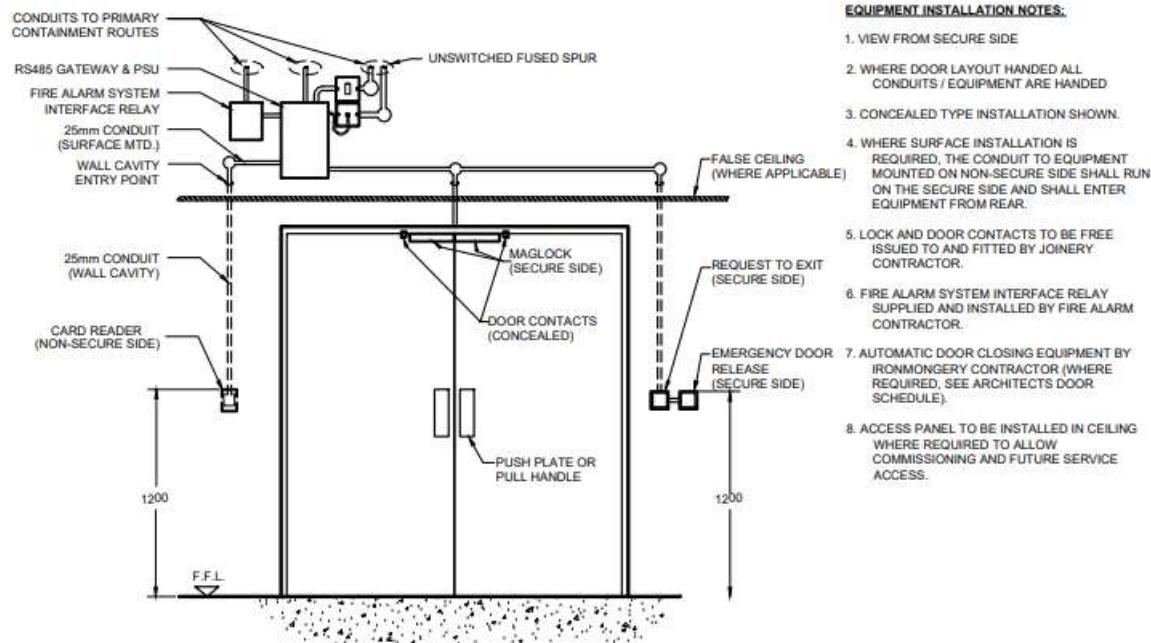
- EM40DS-Fire Magnetic lock – Supplied by JCI fitted by others
- Z and L Brackets as required dependent on direction of door opening – Supplied by JCI fitted by others.
- Door Contacts – Supplied by JCI fitted by others.

All other furniture for the doors is to be supplied and fitted by others.

All other equipment, containment and wiring that is required for the Access control system will be supplied and installed/commissioned by JCI.

**The door in image 002 shows the control equipment located locally to the door, most of the doors to the Bin Store will have the control equipment located in a local riser area and not local as shown on the drawing.**

Included in this document is a 3D rendered drawing (Image 003) showing the Magnetic locks mounted on a door, the doors shown in the drawing are for reference only and may differ from the actual doors.

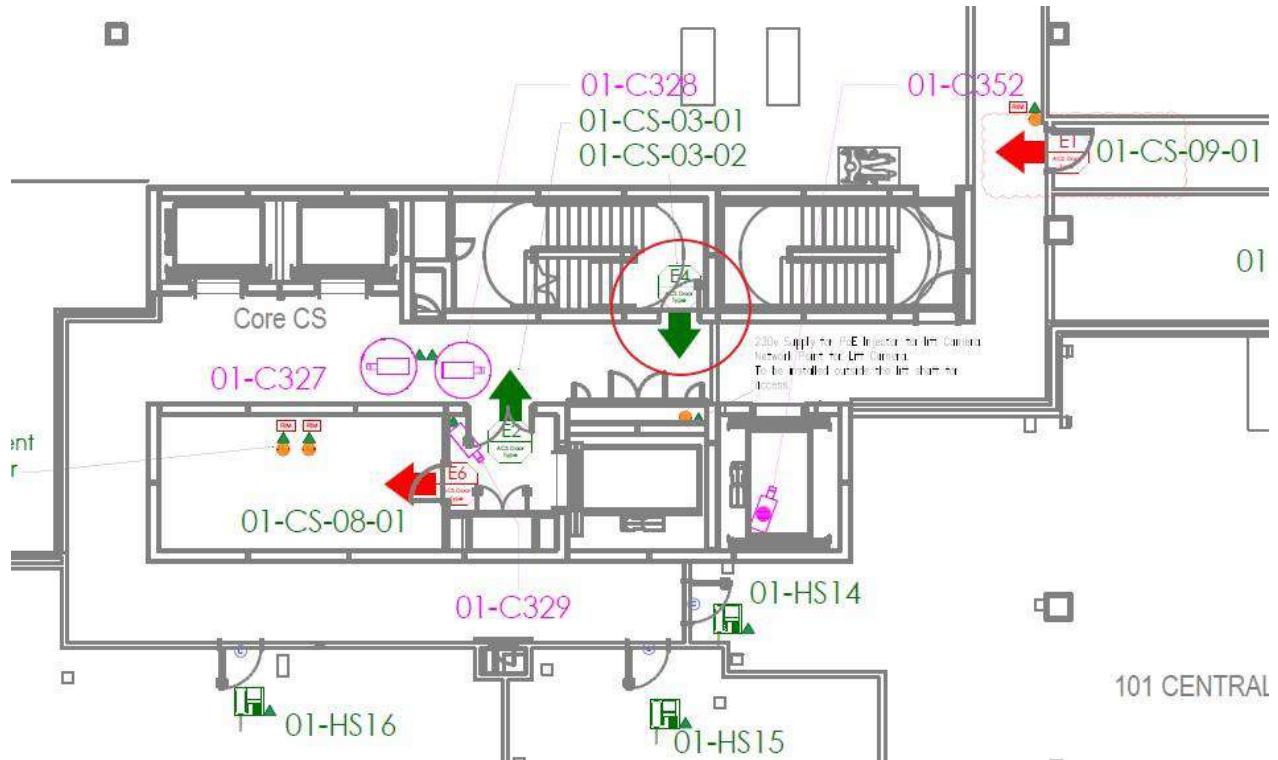


Bin Store Typical Layout Type E9 - Image 002.



**Bin Store 3d Rendered view - Image 003.**

## V. Escape Stairwell Typical E4 Door



**Escape Route Door - Image 004.**

The area in image 004 is a typical layout of an escape door from the communal lift lobby.

The door circled is the that connects directly to the escape stairwell and is required to have a type E4 lock installed.

The door will require a handle set or push pad installed on the communal lobby side to comply to EN179.

Image 005 shows the typical layout of a door with an electromechanical lock including cabling and containment requirements.

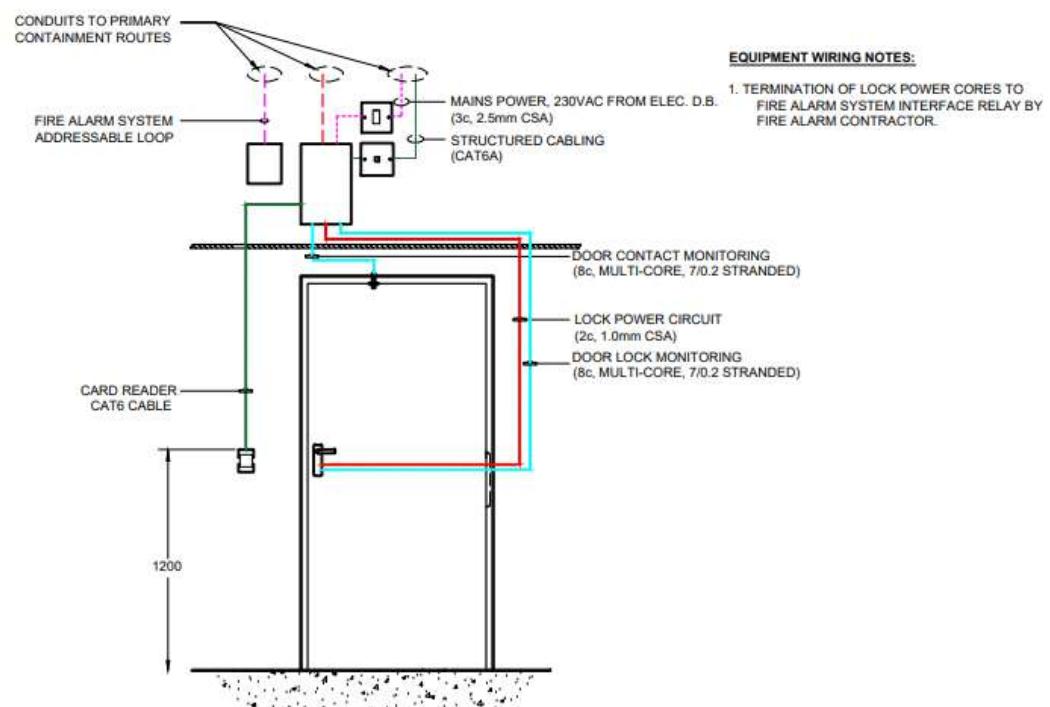
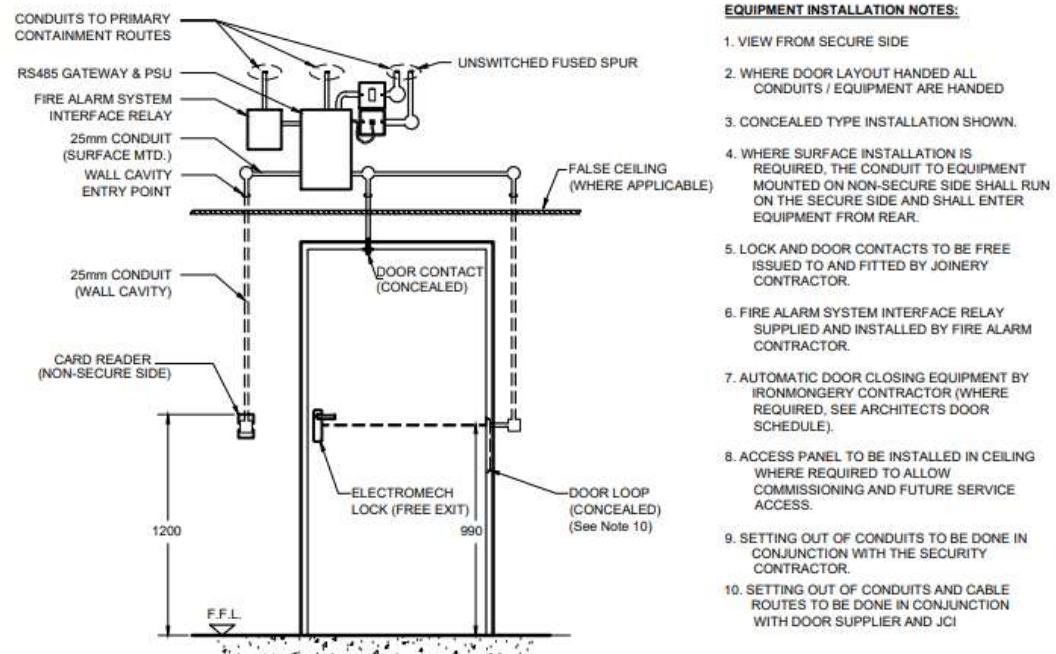
The door in image 005 shows the control equipment located locally to the door, most of the doors to the Escape stairwell will have the control equipment located in a local riser area and not local as shown on the drawing.

The locking equipment required for each E4 door is as follows

- Assa Abloy EL560 Electromechanical lock – Supplied by JCI fitted by others
- Concealed Door Loop – Supplied by JCI fitted by others.
- Flush Door Contact – Supplied by JCI fitted by others.
- Standard Euro Cylinder – Supplied and fitted by others.
- Handle set for EL560 Lock – Supplied and fitted by others.

All other furniture for the doors is to be supplied and fitted by others.

All other equipment, containment and wiring that is required for the Access control system will be supplied and installed/commissioned by JCI.



**E4** ACCESS CONTROL WITH ELECTROMECHANICAL LOCK - SINGLE DOOR  
SCALE = NTS

Escape Route Typical Door Type E4 - Image 005.

## VI. Datasheets

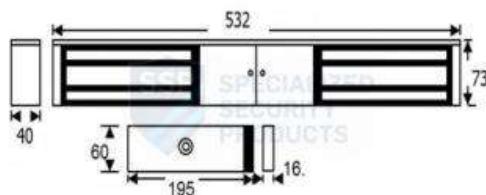
### A. EM40DS-FIRE – Magnetic Lock



sales@specialized-security.co.uk  
www.specialized-security.co.uk

01763 274 223

#### EM40DS-FIRE



#### FIRE RATED STANDARD MONITORED MAGLOCK WITH DOOR STATUS

Fire rated standard monitored double magnetic lock designed for indoor applications where 545kg holding force is required. LED lock status indication and relay contacts for signalling. Includes door status monitoring contacts to monitor the door position.

##### FEATURES

- MOV provides spike and surge protection
- Fail-safe operation (power to lock)
- Anti-residual magnetism protection
- Top-plate, armature-plate and fixings included
- Dual voltage 12Vdc or 24Vdc (selectable)
- Surface mount
- Silver anodised aluminium finish
- Lock monitoring
- Door status monitoring

##### TECHNICAL INFORMATION

- Holding force: up to 545kg (1200lb) per side
- Current draw = 500mA @ 12Vdc / 250mA @ 24Vdc per side
- Voltage tolerance: +/- 15%
- Operating temp: -10°C to +55°C
- Humidity: 0-95% non-condensating
- Weight: 9.6kg approx.
- Relay: COM/NO/NC (1A@ 24Vdc) (one per side)
- Reed switch door contact (one per side)

B. EM500ZL-FIRE – Door Mount Bracket



[sales@specialized-security.co.uk](mailto:sales@specialized-security.co.uk)  
[www.specialized-security.co.uk](http://www.specialized-security.co.uk)

01763 274 223

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**EM500ZL-FIRE**



**Z&L BRACKET FOR STANDARD FIRE RATED MAGLOCK**

Fire rated adjustable Z & L bracket to suit standard fire rated maglocks. Selectable fixing points allow optimum positioning of the maglock on an inward opening door.

**FEATURES**

- Compatible with SSP Standard fire rated maglocks
- Adjustable Z bracket
- Satin anodised aluminium finish

**TECHNICAL INFORMATION**

- Z = 186mm(L) x 60mm(D) x 140mm(H)
- L = 268mm(L) x 72mm(D) x 45mm(H)
- Suitable for use on inward opening doors
- Maximum horizontal adjustment of the Z bracket = 35mm

## C. ASSA Abloy EL560 – Electromechanical Lock

**Abloy Oy** Wahlforssinkatu 20 P.O. Box 108 FI-80101 Joensuu, Finland | Tel. +358 20 599 2501 | abloy.com

### ABLOY® EL560, EL561, EL562, EL563 High security DIN standard handle controlled lock for wooden and metal doors



#### Product description

High security locks EL560/561/562/563 are used especially in situations where the advantages of handle-controlled unlocking have to be combined with the mechanical security requirements. The integrated monitoring contacts from the lock can be connected to the different systems.

When door closes, dead bolt is thrown out automatically, double action latch is blocked and the lock case is secured in two points.

The exit side settings (EL560/562) and selecting between fail-locked and fail-unlocked can be performed on the lock as required.

#### EL560/562 with split spindle function

Outside handle is engaged electrically, e.g. by electric access control. By pressing engaged handle, dead bolt is retracted and double action latch released.

Inside handle opens lock mechanically (exit function), no need for electric control.

#### EL561/563 with straight spindle function

Both handles are engaged electrically e.g. by electric access control. By pressing engaged handles, dead bolt is retracted and double action latch released.

#### Overview of Advantages

- Mechanical automatic locking system
- Non handed, left / right
- Exit side can be changed over \*
- Can be changed between fail-unlocked & fail-locked
- Burglary-resistant due to dead bolt with 20 mm throw
- Exit function by inside handle \*
- Suitable for fire doors
- Controllable outside handle \*
- Mechanical override with cylinder
- Monitoring functions
  - Door status
  - Handle down
  - Bolt deadlocked
  - Bolt in
  - Key cylinder used
  - Sabotage loop

\* EL560/EL562

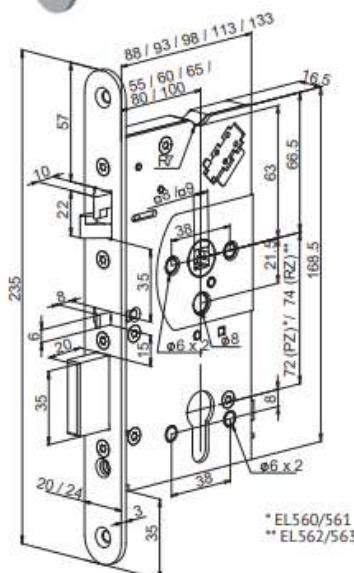
#### Scope of delivery

- 1 pcs lock case
- Operating manual

#### Ordered separately

- Strike plate (e.g. EA324)
- Cable EA21B (6m) / EA219 (10m)
- Lead cover EA280/281
- Handle set (e.g. EH006/042) and spindle
  - Split spindle EA288/289 with EL560/562
- Cylinder(s) (e.g. CY321T)

#### Technical data



Handing	Non-handed, left/right
Exit function	Yes (EL560/562)
Mechanical cylinder override	Yes
Latch	Double action latch
Dead bolt	Yes, 20mm
Input operating voltage	12-24 VDC
Rated current consumption	12V DC idle 240 mA, max. 550 mA 24 V DC idle 130 mA, max. 300 mA
Microswitch capacity (monitoring contacts)	Max. 0.5 A 30 VAC/DC resist. 10 W
Suitable for fire doors	Yes
EN 14846:2008	3S8D-L611
EN 179:2008	376B1342AB (EL560/562)
EN 1125:2008	376B1321AB (EL560/562)

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An ASSA ABLOY Group brand **ASSA ABLOY**

**ABLOY**

D. **DL400 Concealed Door Loop**



## **DL Range Door Loops**

### **Features:**

DL400

- Concealed door loop
- Armoured
- 290mm cable length

Where locks or electric releases are fitted into the controlled door and will require electrical connection to control their operation and/or for monitoring purposes. A door loop will be required for the electrical cable connections so that the cable is physically protected and able to withstand the movement of the door.

A Tyco International Company

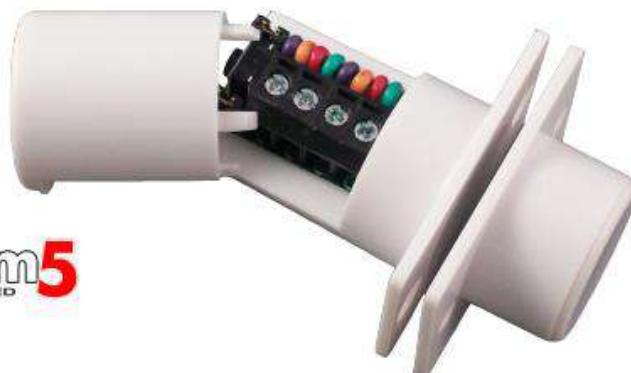


## E. FC508/WH – Standard G3 Flush Contact for E9 Doors

**FC508/WH or BR/MULTI/G3/EN**  
**FLUSH QUICK FIT DOOR CONTACT**

**CQR**  
*First choice for quality*

**System5**  
 APPROVED



- Screw terminal block, no junction box required
- Microswitch tamper
- Selectable end of line resistor
- Can use own resistors
- Available in white or brown
- Can be fitted in double pole systems
- Can be used on double door configuration
- Magnetic Immunity



Product codes		Technical data	
Code	Description	Connections	4 Terminals
FC508/WH/MULTI/G3/EN	Flush Contact Grade 3 White	Switches	2
FC508/BR/MULTI/G3/EN	Flush Contact Grade 3 Brown	Pull-In Gap	4mm
		Material	High Impact Polystyrene
		Contact Size	33 x 22 x 32mm
		Magnet Size	33 x 22 x 13mm
		Contact Form	SPST form A
		Voltage Range	12Vdc
		Switching Current	500mA @ 12Vdc
		Contact Material	Rhodium
		Colours	White or Brown
		Tamper	Cover & RFMS
		Magnetic Immunity	Yes
		Standards	EN50131-2-6 Grade 3
		Environmental Class	II



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

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Sales: +(0)151 606 1000 Tech: +(0)151 606 6311

CQR Security Ltd, 125 Pasture Road, Moreton, Wirral, CH46 4TH, UK



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## F. FC508/WH/MULTI/G3/FR – Flame Retardant G3 Flush Contact for E4 Type Door

**FC508/WH/MULTI/G3/FR**  
**FLAME RETARDANT GRADE 3 FLUSH CONTACT**

CQR's magnetic contacts are known throughout the security industry for their quality. Many of the contacts have been independently certified to meet EN50131 Grade 2 and Grade 3.



**CQR**  
*First choice for quality*



- Flame retardant
- Screw terminal block, no junction box required
- Microswitch tamper
- Selectable end of line resistor
- Can use own resistors
- Can be configured for double-pole systems
- Suitable for double-door applications
- Magnetic Immunity
- EN50131-2-6 Grade 3
- Environmental Class II

**Grade 2 also available**

**Flame retardant material**

- UL94-V0 classification, tested to IEC 60695-11-10 and -20
- Glow wire test 960°C, IEC 60695-2-12
- Glow wire ignition 825°C, IEC 60695-2-13



**Product codes**

Code	Description
FC508/WH/MULTI/G3/FR	Flame Retardant Flush Contact Grade 3 White

**Technical data**

Connections	4 Terminals	Switching Current	500mA @ 12Vdc
Output	Microswitch	Colours	White
Pull-in Gap	4mm	Tamper	Cover & RFMS
Material	Flame Retardant	Magnetic Immunity	Yes
Contact Size	33 x 22 x 32mm	Standards	EN50131-2-6 Grade 3
Magnet Size	33 x 22 x 19mm	Environmental Class	II
Contact Form	SPST form A		



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