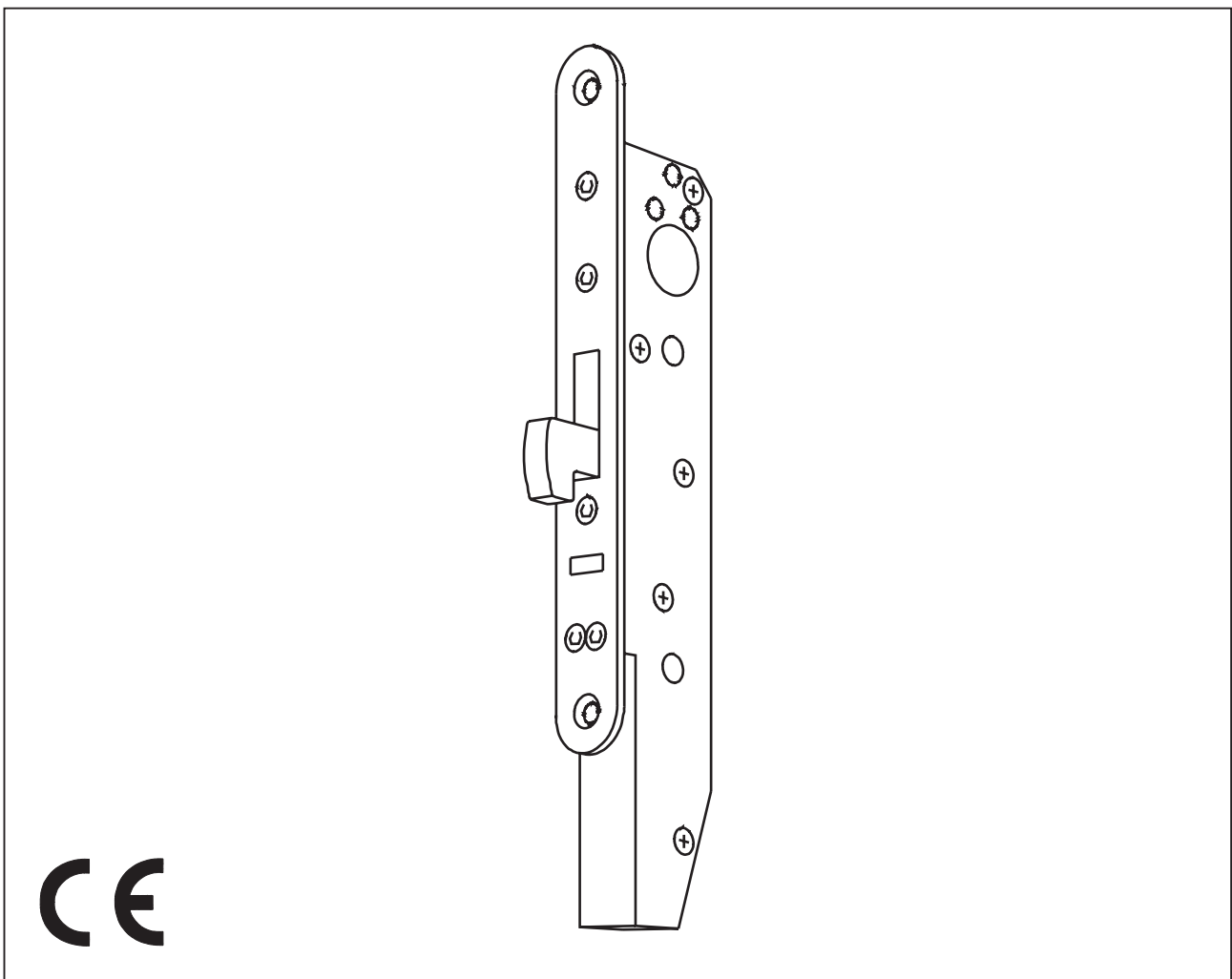
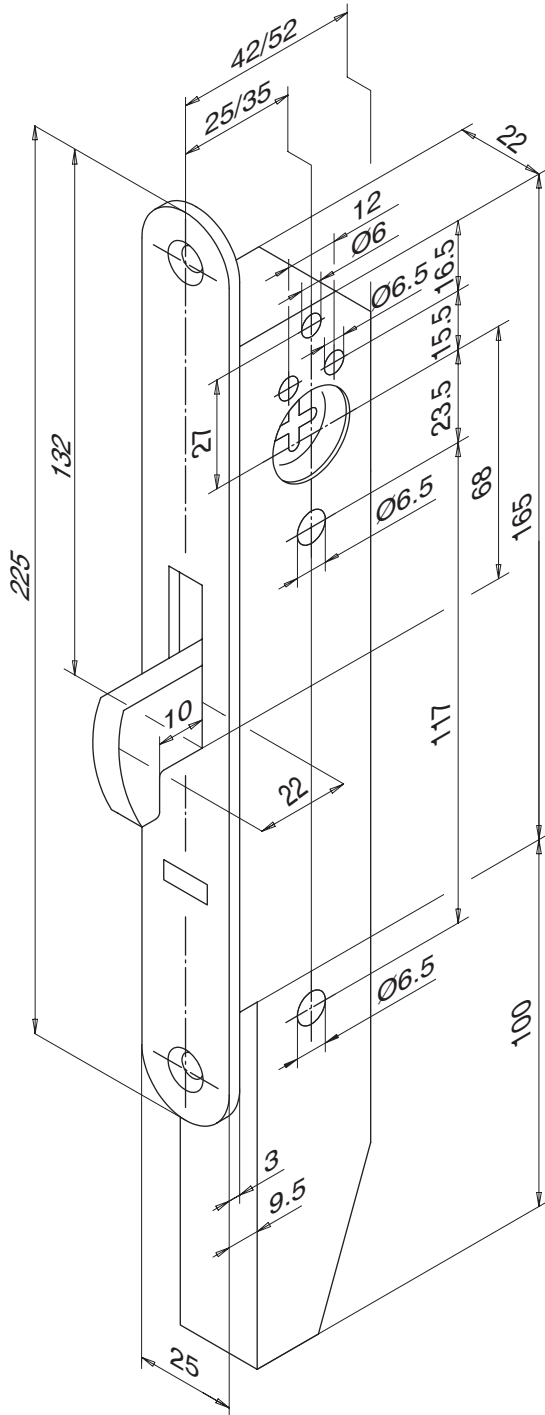


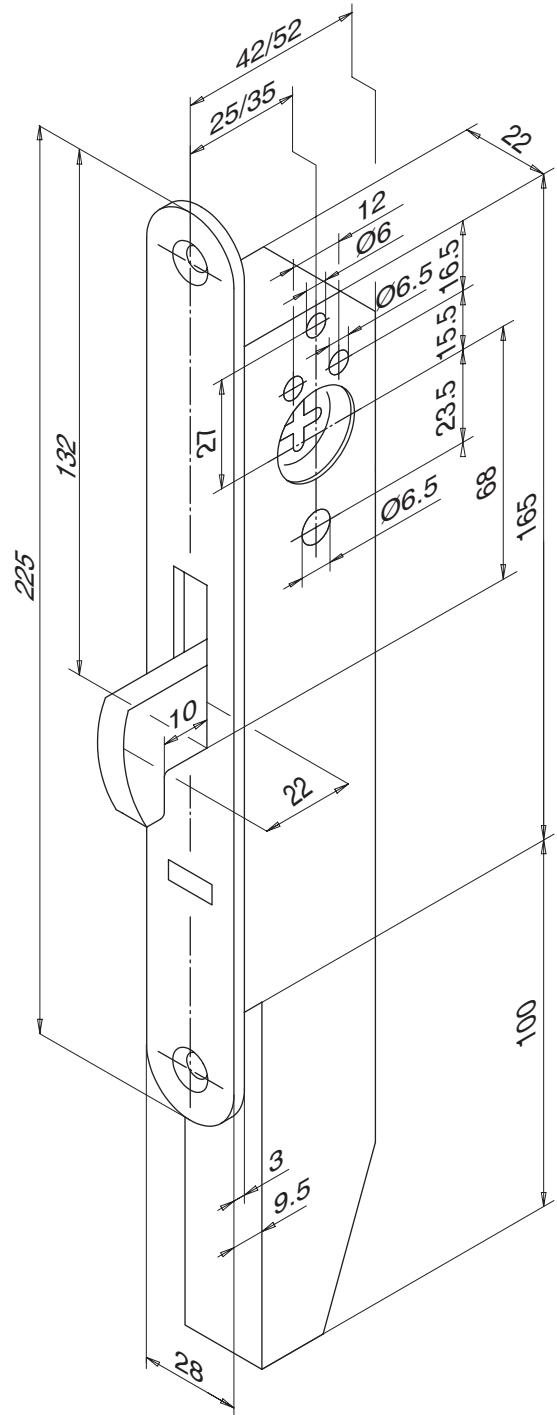
**ABLOY® EL654, EL655**  
*- Motor lock*



**EL654**



**EL655**



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ABLOY® EL654 / EL655 lock cases and ABLOY® EA470 control unit are ASSA ABLOY Hi-O Technology™ certified products.

## **Hi-O Technology™**

Hi-O (Highly Intelligent Opening) is a standardized new technology for security and control of door environments. Hi-O enables interconnectivity - communication capabilities between all the devices involved in a door environment. All devices have a built-in micro processor and can communicate with each other over a CAN network. CAN network enables plug-and-play installation, synchronizes the door operation and monitors door environment.

Hi-O is used to reduce wiring, to increase flexibility and to simplify retrofitting with new devices. Because of its intelligent message transfer Hi-O also increases the security of the door environment.

Hi-O complies with the CiA Standard „Building Door Control“ DSP416.

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**TECHNICAL DATA**

ENGLISH

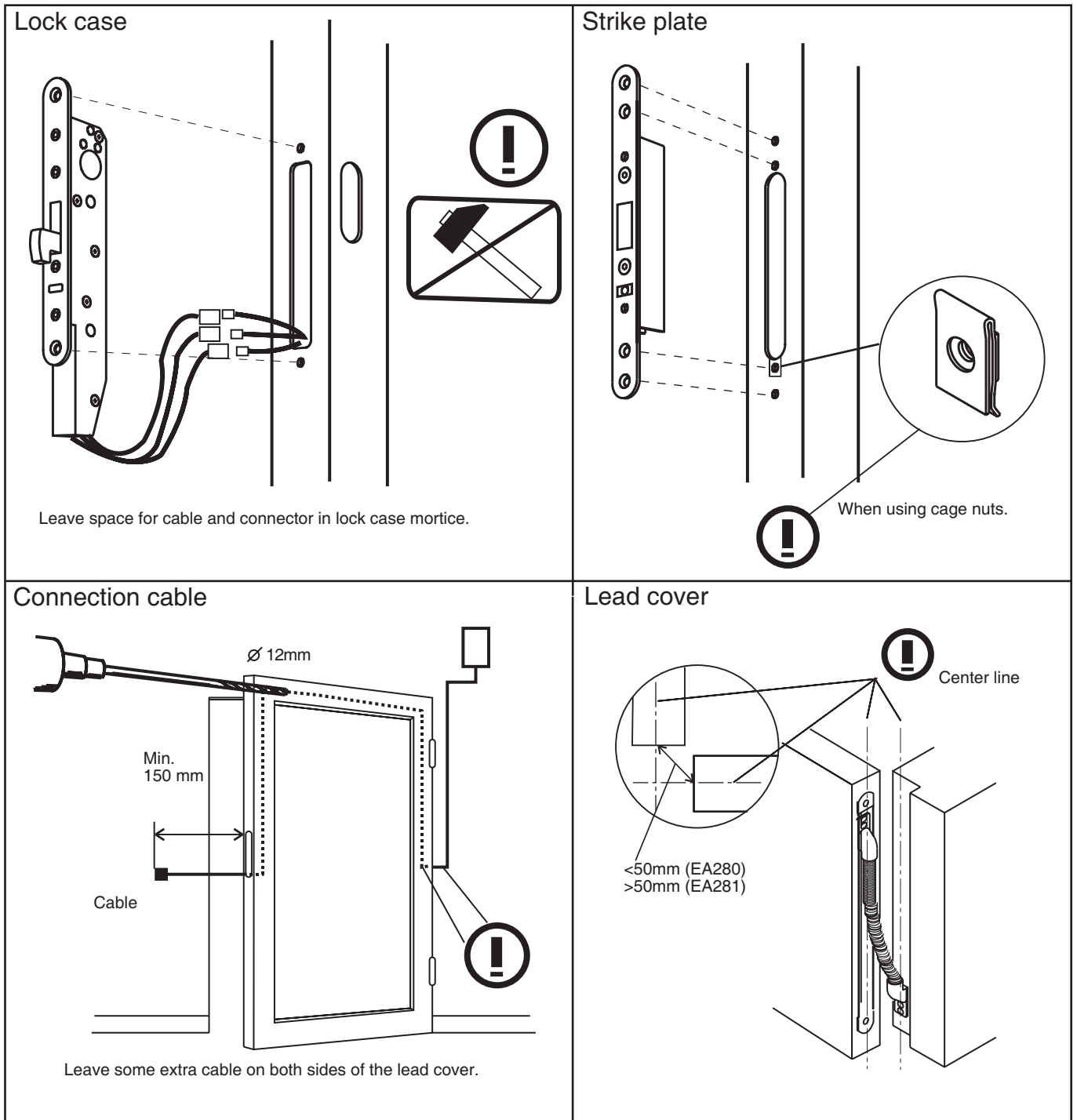
Operating voltage:	12 - 24 V DC (+15%) STAB.
Current:	normal 150 mA idle 70 mA max. 750 mA
Relays:	max. 0.8 A 30 V DC / AC resist. 20 W
Ambient temperature:	-20° - +60°C
Opening delay:	Delay is set from the controlling device (e.g. EA470 Control Unit, card reader etc.)
Bolt throw:	22 mm
Backsets:	25, 35 mm
Forend:	25 mm (EL654) 28 mm (EL655)
Forend for wooden doors and special profiles:	32 mm
Door clearance:	2 - 5.5 mm (between forend and striker plate)
Monitoring outputs:	- security bolt out - security bolt in - auxiliary lock locked / open - door closed / open
Control unit:	EA470
Cable:	EA235, EA236, EA226
Max. cable length:	50 m (total), 10 m (stub line)
Striker plate:	EA300 803677 flat strike + 803711 magnet 804811 flat strike + 803711 magnet

## DRILLINGS / INSTALLATION

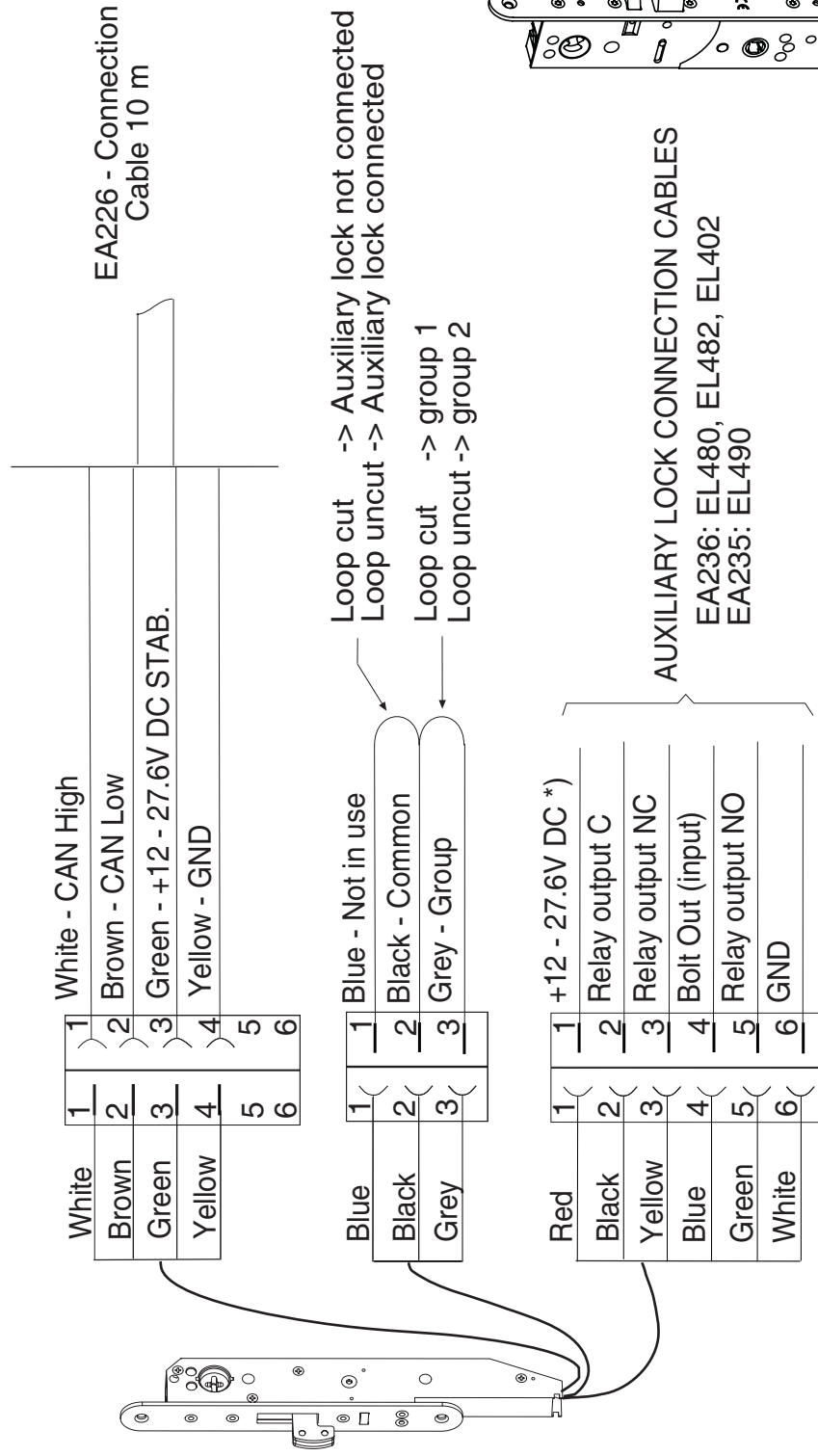
ENGLISH

For maintenance free operation, drillings and installation must be made according to the instructions in this manual. Door and door closer must be correctly installed and adjusted.

Please ensure that the hook bolt can move freely also when controlling the lock electrically.



The connection to the network is accomplished by four wires, two wires for the bus network and two wires for the power supply. Please use CAN-cable ABLOY® EA226 (9 x 0,14 mm<sup>2</sup>) with the lock.





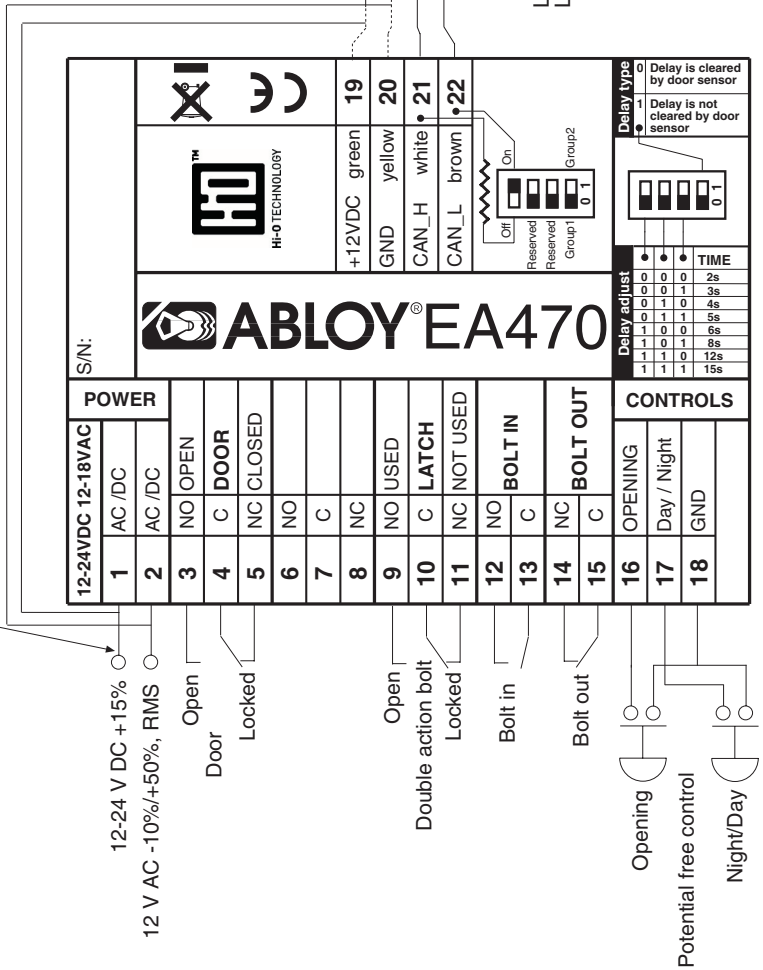
# WIRING DIAGRAM EA470 - EL654/EL655

Green and yellow wire from EA226 cable can be connected to pins 1 & 2 or 19 & 20.

- When connected to pins 1 & 2:

\* Make sure that the polarity is correct and that the voltage is +12 - 27.6V (EL654).

\* Do not use AC!



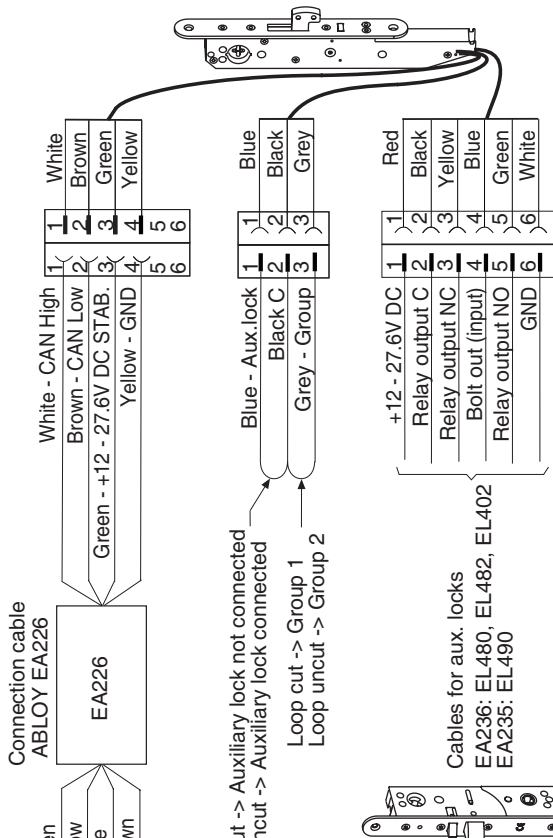
Green and yellow wire from EA226 cable can be connected to pins 1 & 2 or 19 & 20.

- When connected to pins 19 & 20:

\* Supply to one lock case only EL654/EL655 which, when needed, can be connected to an auxiliary lock case EL480, EL482, EL402, EL490.

Otherwise please use pins 1 & 2.

\* Power supply for lock case is 12V.



<b>Bus termination 120 ohms (Dip 1)</b> 0: Resistor is not connected 1: Resistor is connected (default setting)	<b>Delay (Dip 1-3)</b> Can be adjusted between 2 - 15 sec
<b>Groups (Dip 4)</b> 0: Lock case in group 1 1: Lock case in group 2	<b>Delay clearance (Dip 4)</b> 0: Delay is cleared by door sensor 1: Door sensor does not affect the delay





## CABLING INSTRUCTIONS EL654, EL655

ENGLISH

DATA CABLE ABLOY EA226, 10 m, 9 x 0.14 mm<sup>2</sup>

### BUS TERMINATION 120 Ω

In a bus network it is necessary to terminate the bus lines in order to avoid transmitting reflections. In this system, it is accomplished by one resistor. Please note that the lock case itself does not include the bus termination, but if the lock case is installed with EA470 control unit, the bus termination can be set by DIP-switch in the control unit.

Note! If more than one termination in the network is switched ON, this may cause problems. Only one 120 Ω termination resistor is allowed.

### SETTING THE GROUPS

It is possible to split the network devices into two logical independent groups. The lock is set to group 1 when the loop connector is not connected.

When the loop connector is connected, the lock is set to group 2.

Note! When EL654/ EL655 is set alone (without auxiliary lock) in group 2, the blue wire in the loop connector must be cut.

### CONNECTION BETWEEN EL654/EL655 AND AUXILIARY LOCK CASE

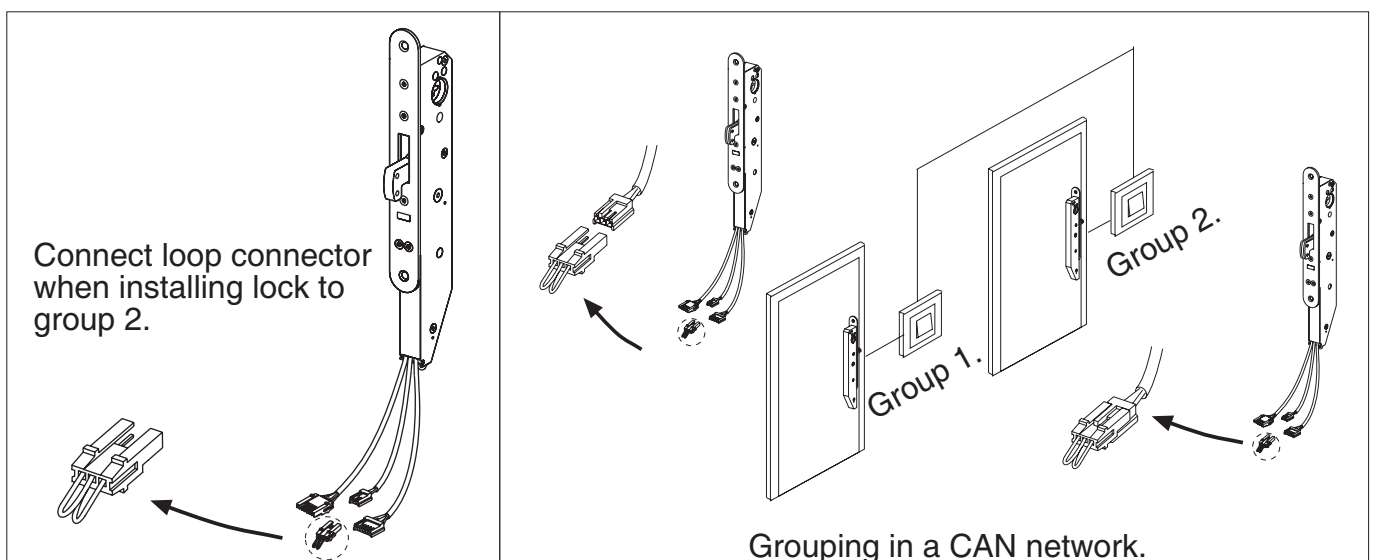
It is possible to connect EL654/EL655 together with lock cases ABLOY EL480, EL482, EL402 and EL490.

The wiring must be implemented by using ABLOY connection cables EA235 or EA236 depending on the lock type (see page 9).

The auxiliary lock case is activated by using the configuration connector loop connector as follows:

- Connect the loop connector to the EL654/EL655 cable (3-pin AMP connector).
- Turn the power off from EL654/EL655.

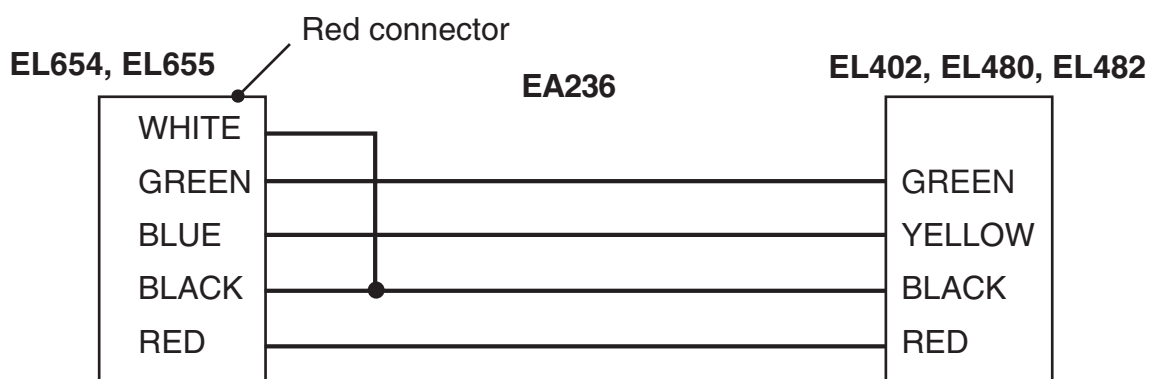
Note! The power must be turned off everytime you activate a new EL654/EL655 lock case.



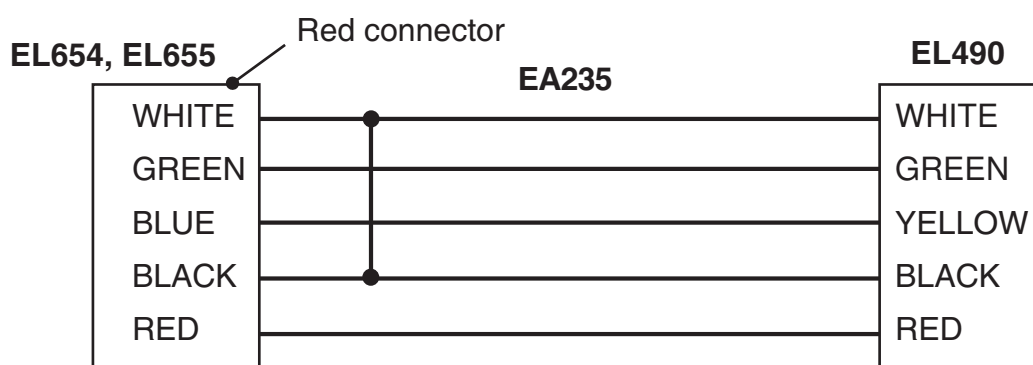
CABLE EA236 - EL654, EL655 <=> EL402, EL480, EL482

CABLE EA235 - EL654, EL655 <=> EL490

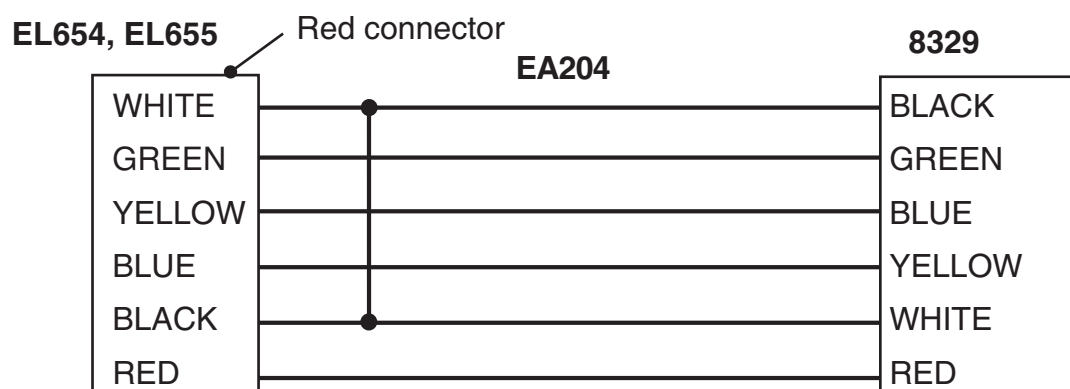
Connections between EL654 / EL655 and EL402 / EL480 / EL482



Connections between EL654 / EL655 and EL490



Connections between EL654 / EL655 and old motor lock case 8329



## FORENDS

Standard forends :

- EL654 25 mm backset 802395
- EL654 35 mm backset 802970
- EL655 25 mm backset 803180
- EL655 35 mm backset 803181

Forends for wooden doors and special profiles

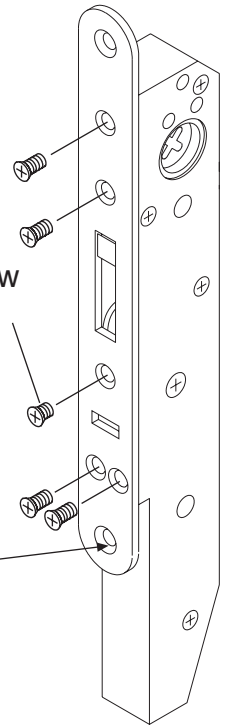
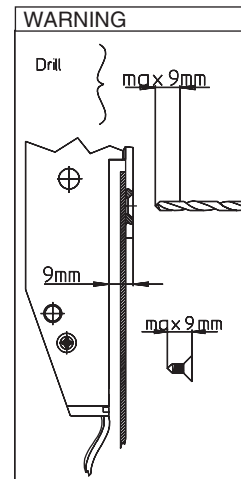
- 25 mm backset 803295
- 35 mm backset 803353

Note! Special drilling diagram

Retrofit forends (to cover 8349 / 8350 mortise)

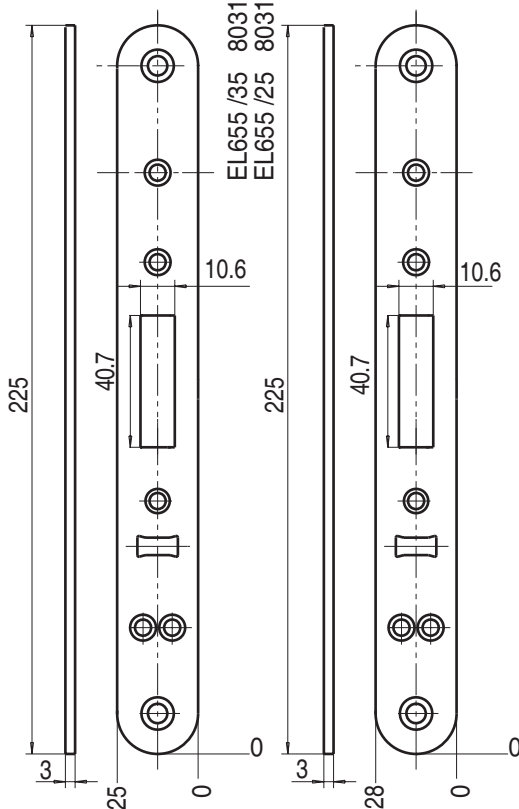
- 25 mm backset 803351
- 35 mm backset 803352 (8349)

Note! Short screw



EL654 /35 802970  
EL654 /25 802395

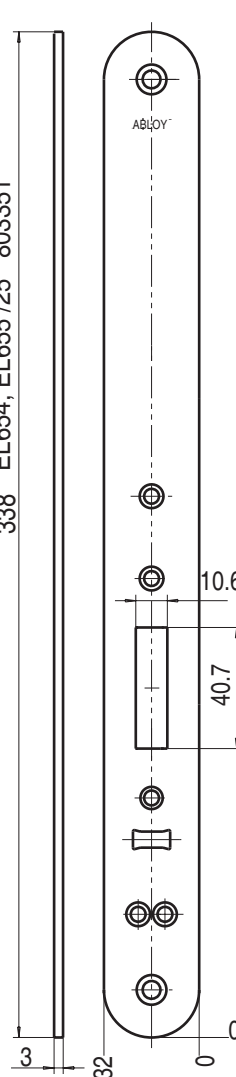
Standard



EL655 /35 803181  
EL655 /25 803180

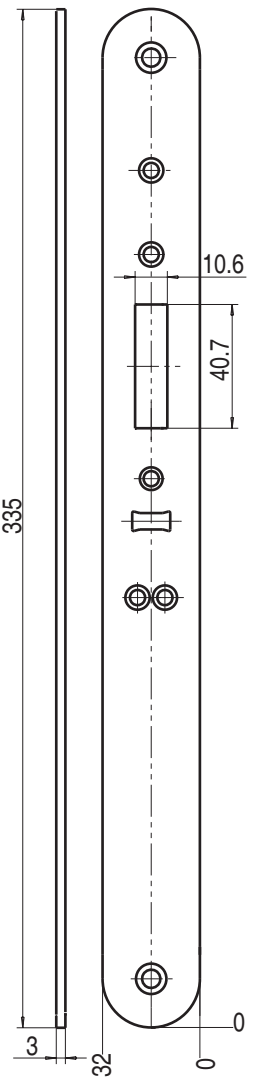
Retrofit forend for previous models

EL654, EL655 /35 803352  
EL654, EL655 /25 803351



For special profiles

EL654, EL6551 /35 803353  
EL654, EL655 /25 803295





**EL654  
EA300  
OVAL CYLINDER**

**DRILLING SCHEME**

EL654/long forend see page 11

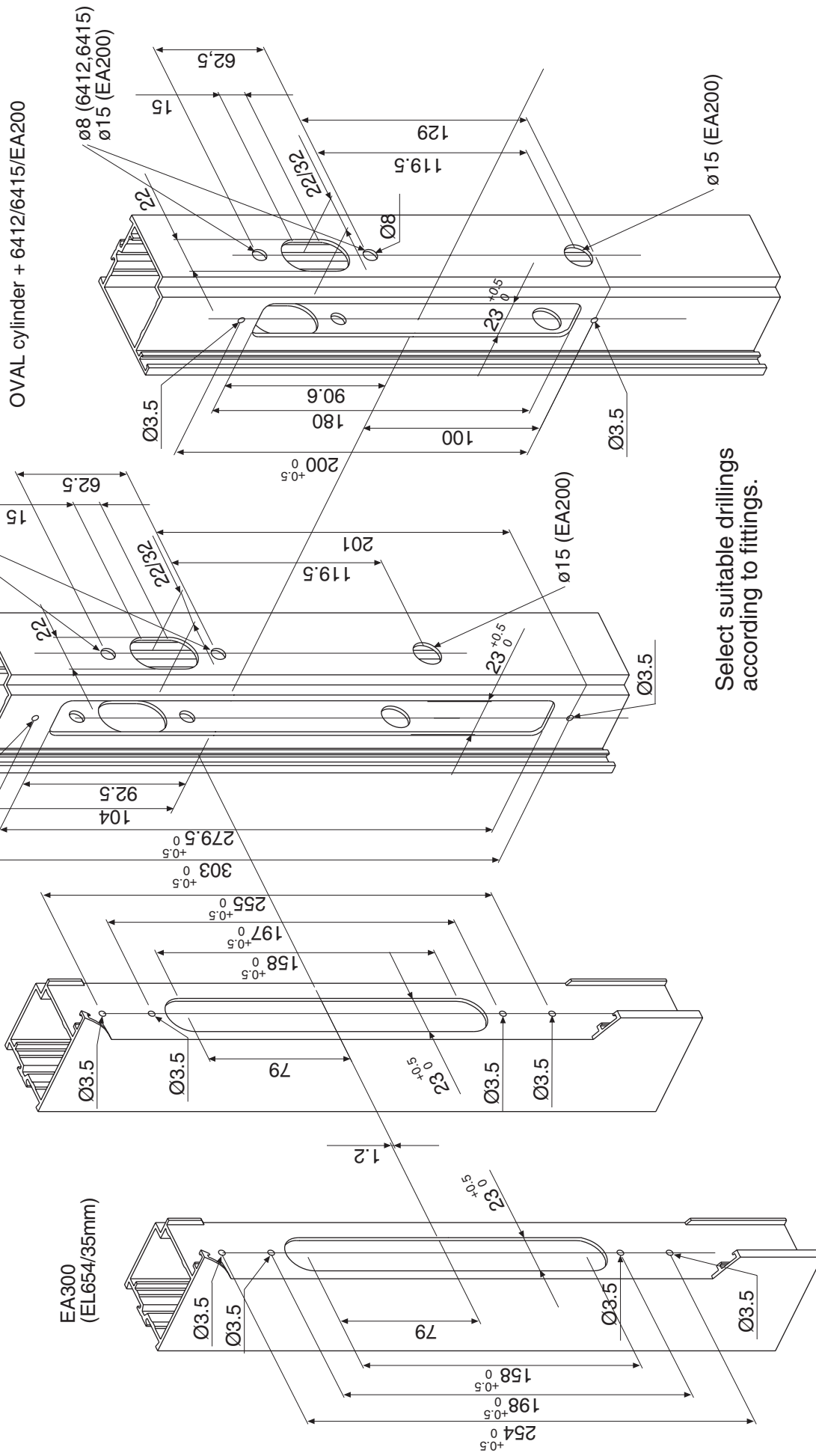
OVAL cylinder + 6412/6415/EA200

Ø8 (6412,6415)  
Ø15 (EA200)

EL654/standard forend see page 11  
OVAL cylinder + 6412/6415/EA200

EA300  
(EL654/35mm)

EA300  
(EL654/25mm)



Select suitable drillings according to fittings.



**EL655  
EA300**

**DRILLING SCHEME**

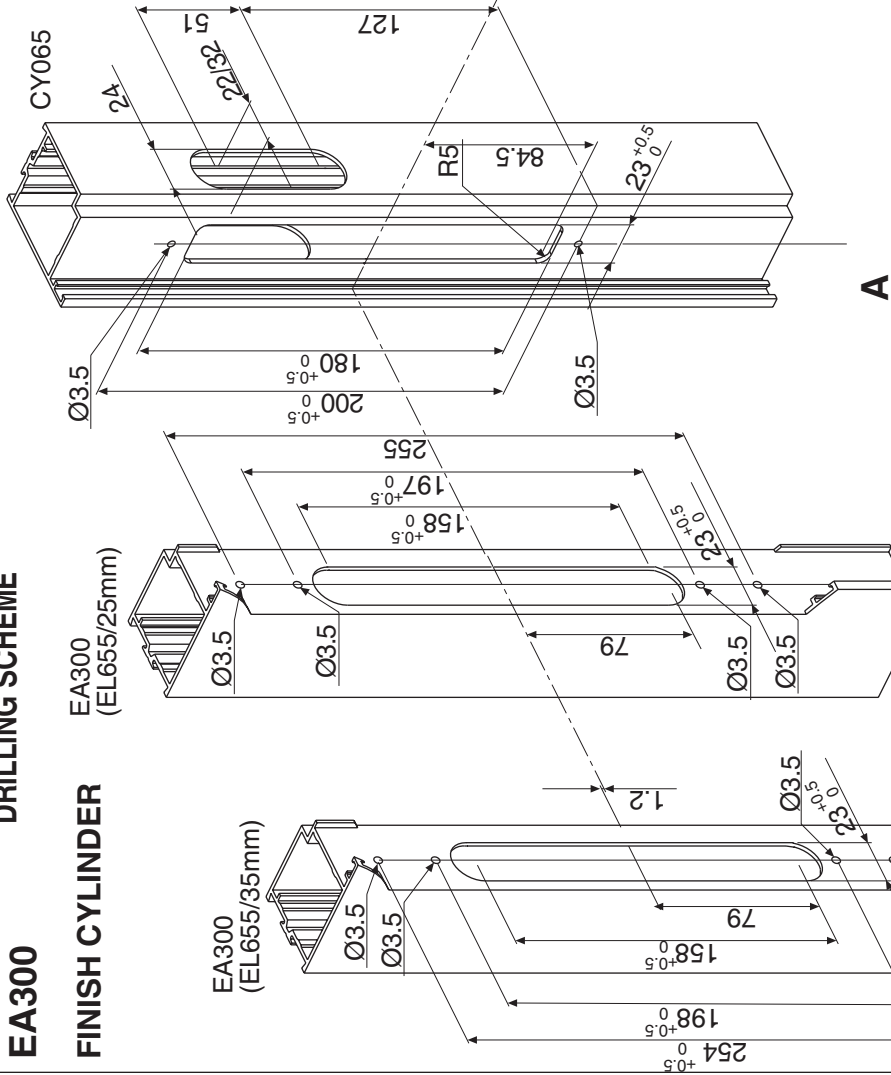
**FINISH CYLINDER**

EL655/standard forend see page 11

CY065

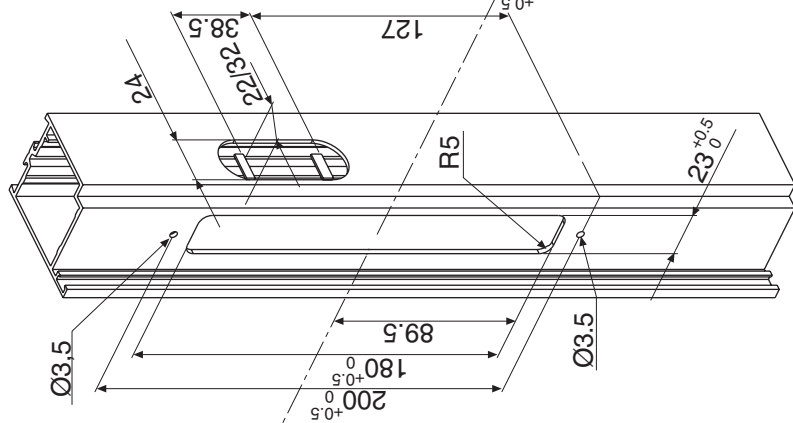
EA300  
(EL655/25mm)

EA300  
(EL655/35mm)



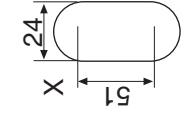
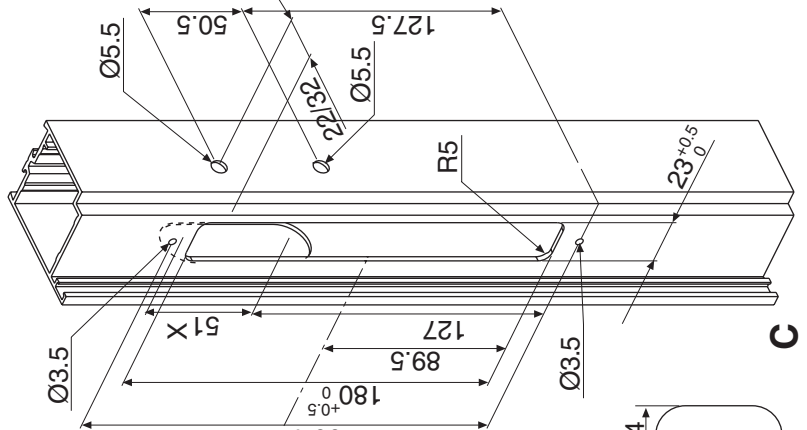
EL655/standard forend see page 11

CY064



EL655/standard forend see page 11

CY063



**B**

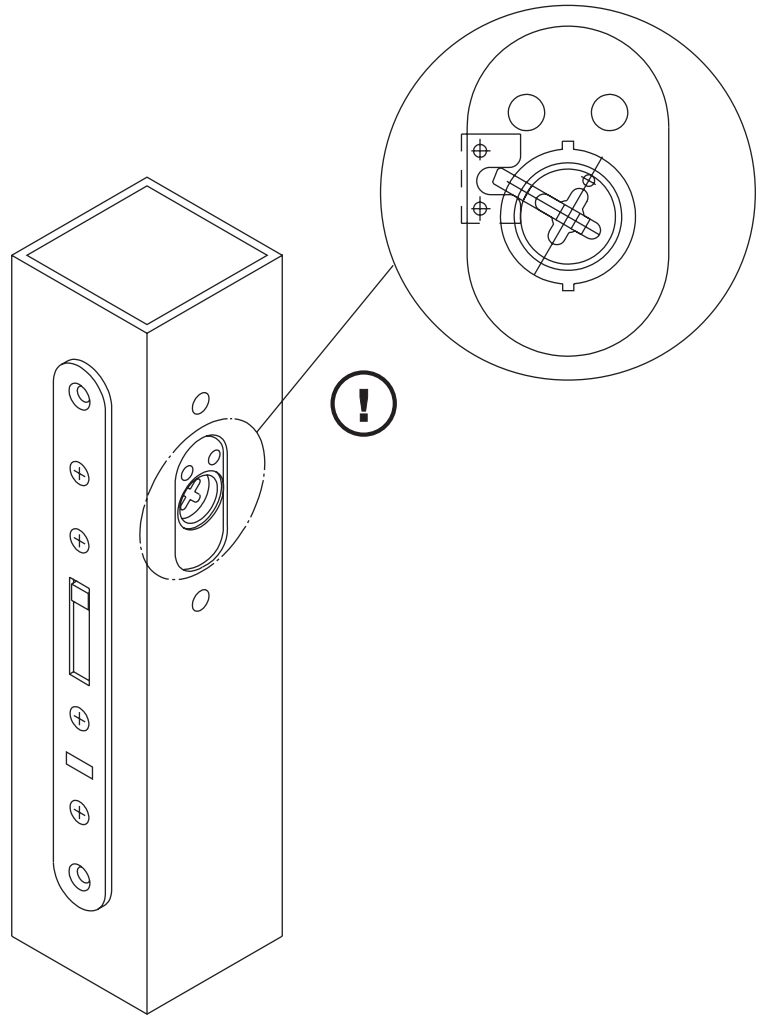
**A**

**C**

Select suitable drillings according to fittings.



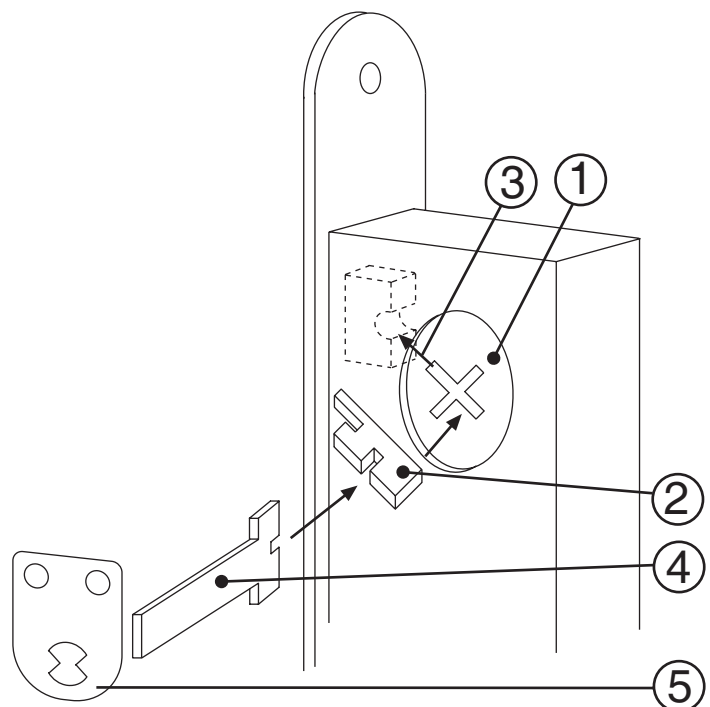
## CYLINDER / THUMBTURN INSTALLATION (EL654)



### INSTALLATION OF THUMBTURN

Set lock case in open position.

1. Turn cylinder follower as shown in the figure (mark pointing diagonally upper back corner).
2. Turn thumbturn tailpiece extension as shown in the figure, and
3. set it diagonally into the cylinder follower.
4. Install thumbturn tailpiece.
5. Install tailpiece plate.

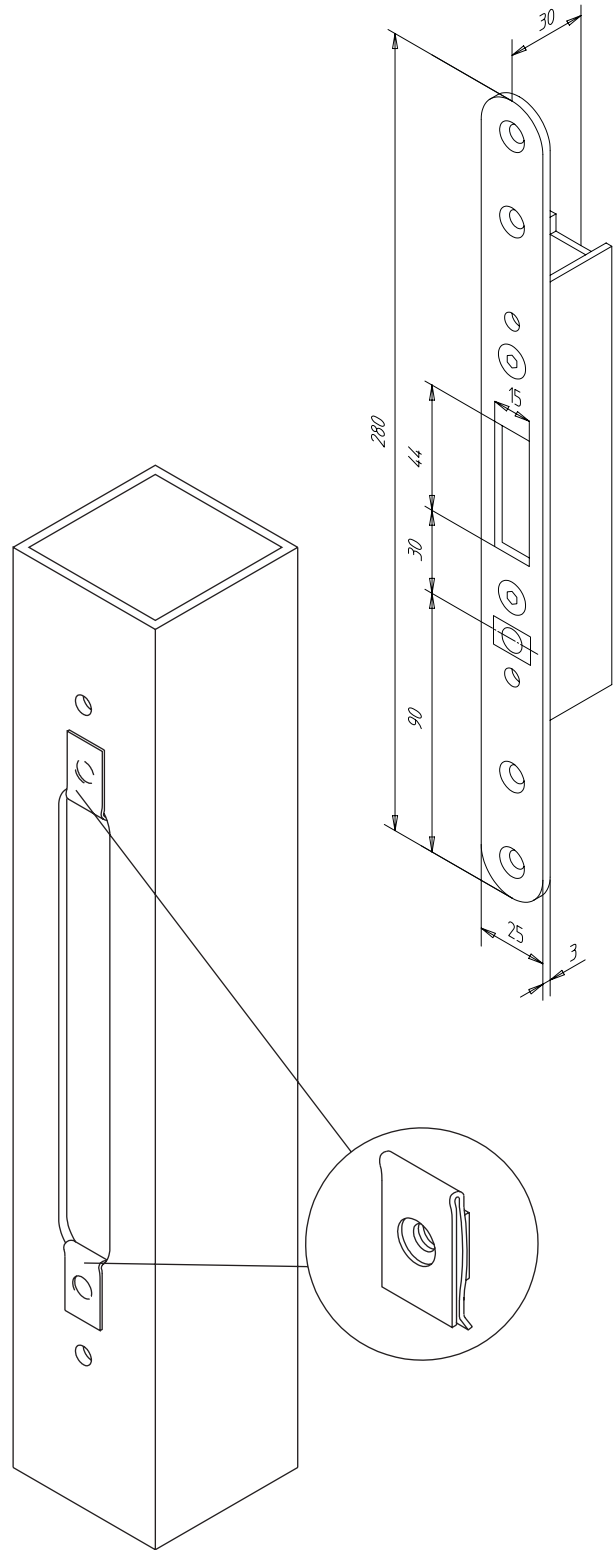


**INSTALLATION STRIKER PLATE EA300**

When using cage nuts.

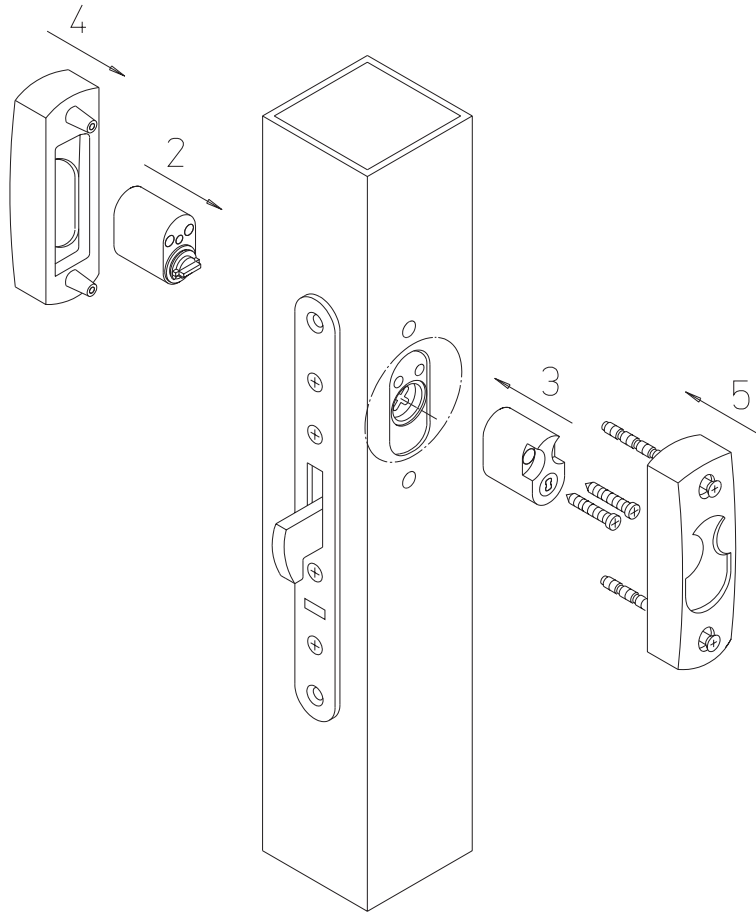
8410  
MICRO SWITCH KEEP

When using cage nuts.

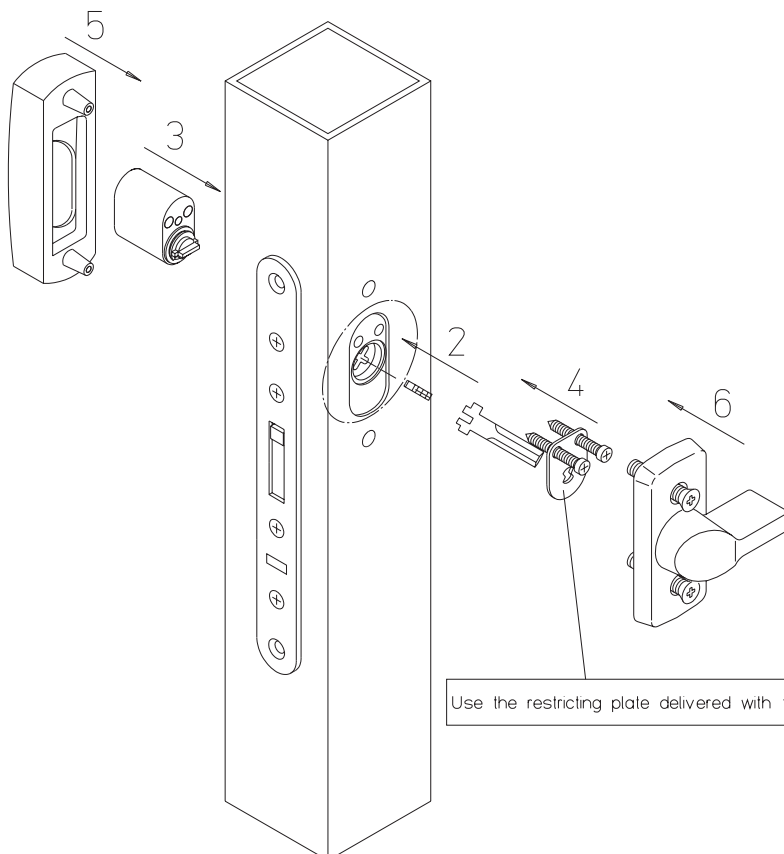




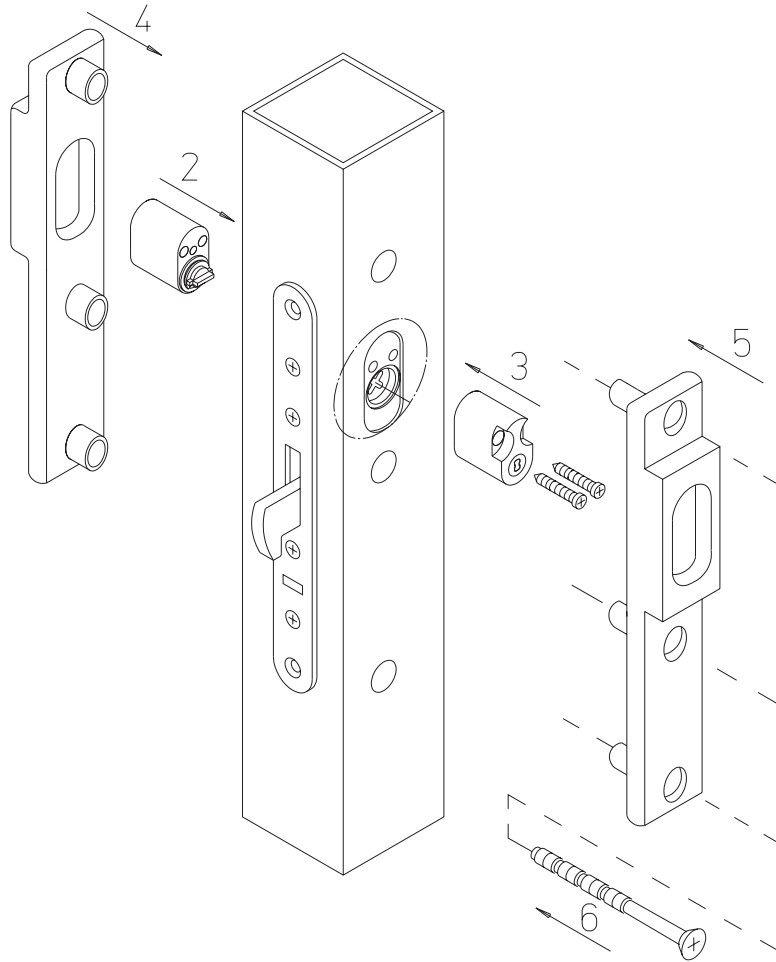
**EL654**



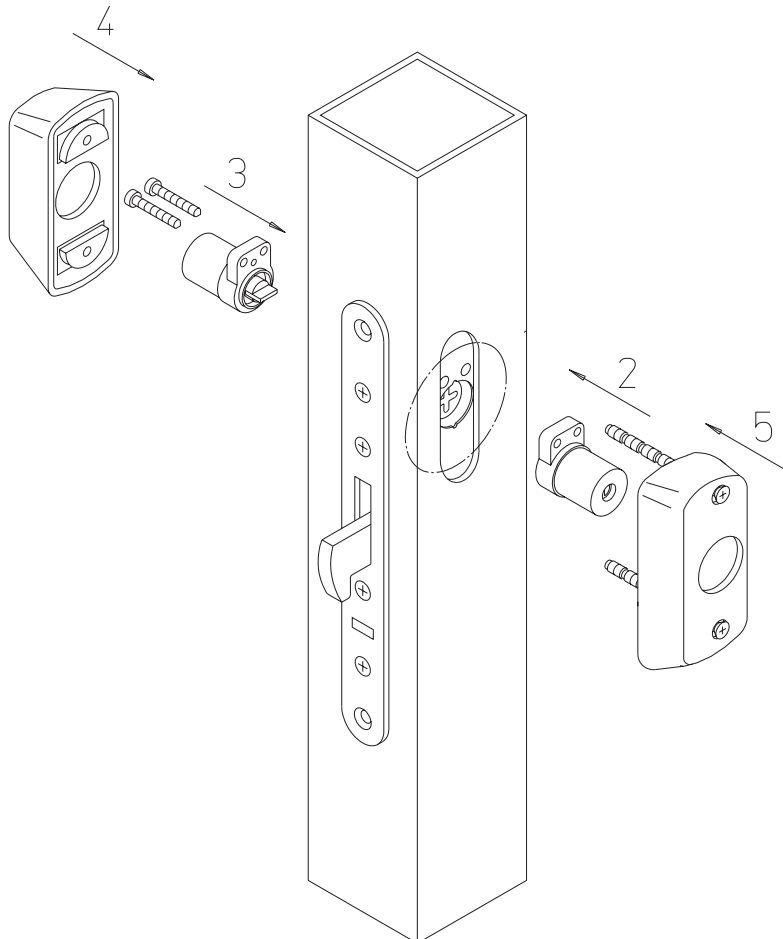
**EL654**



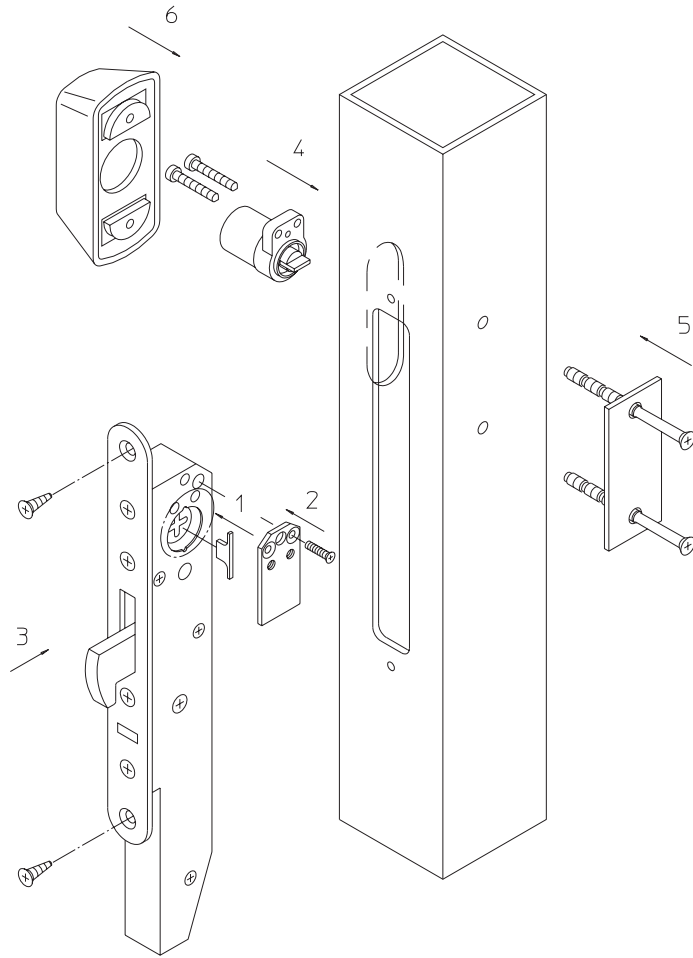
**EL654**



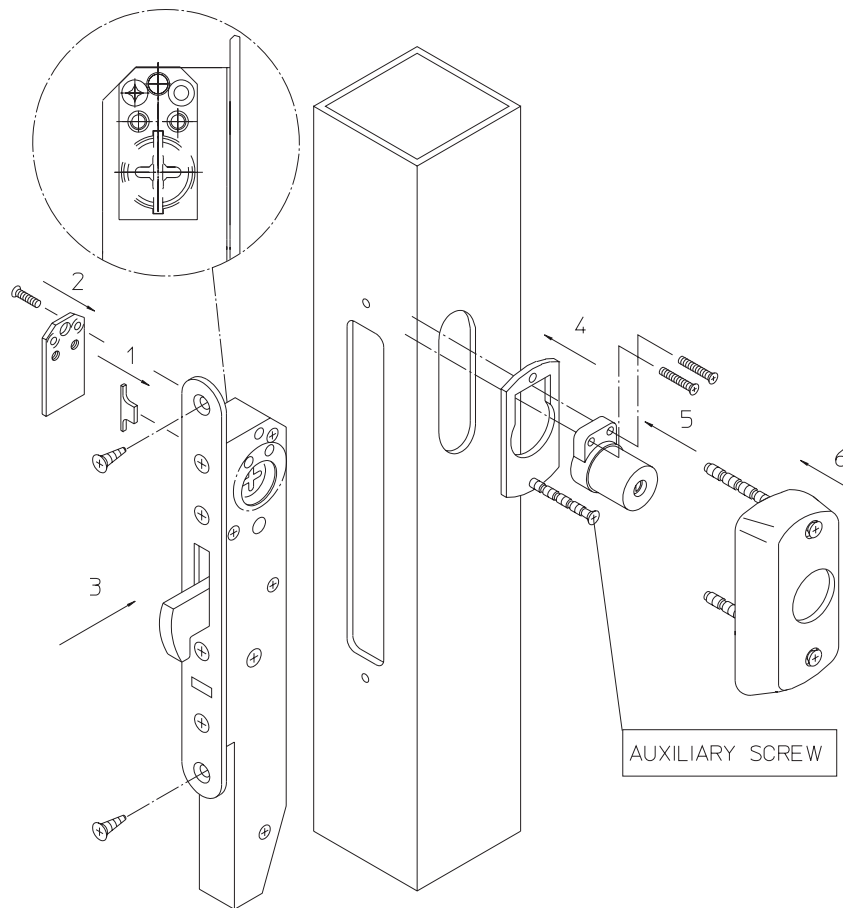
**EL655**

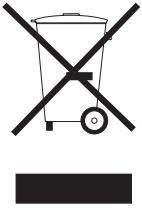


**EL655**



**EL655**





This product contains materials, such as electronics, which require specialist recycling techniques. When the product is taken out of use, disassemble it and sort and recycle the different materials as per valid recycling instructions.

STR/28.05.2008/PPH11

**We reserve the right to make alterations to the products described in this leaflet.**

Nimike  
**952033**  
Päiväys  
**05/2008**



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