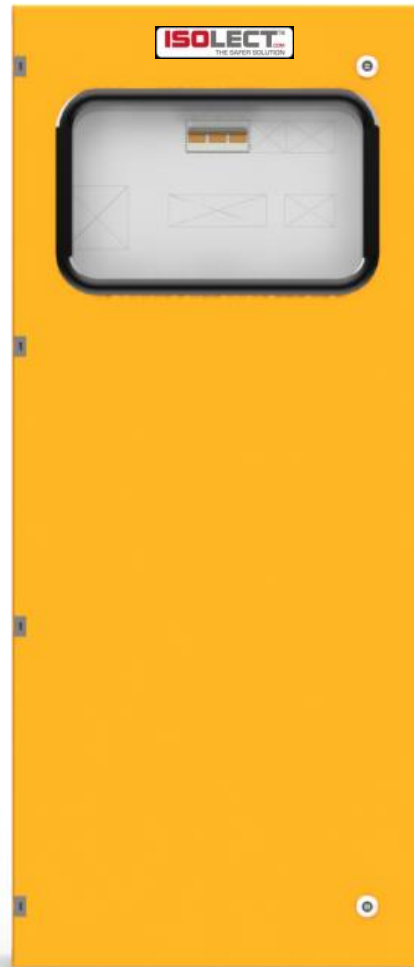


**ISOLECT**<sup>TM</sup>  
THE SAFER SOLUTION





### ■ PLEASE NOTE

For clarity, the following images show only a single circuit breaker on the chassis.

The chassis should always be fully populated with circuit breakers fitted and terminal covers in place!





- An optional Voltage test point can be provided.  
Check that your voltage tester is functioning correctly.

# STEP 1

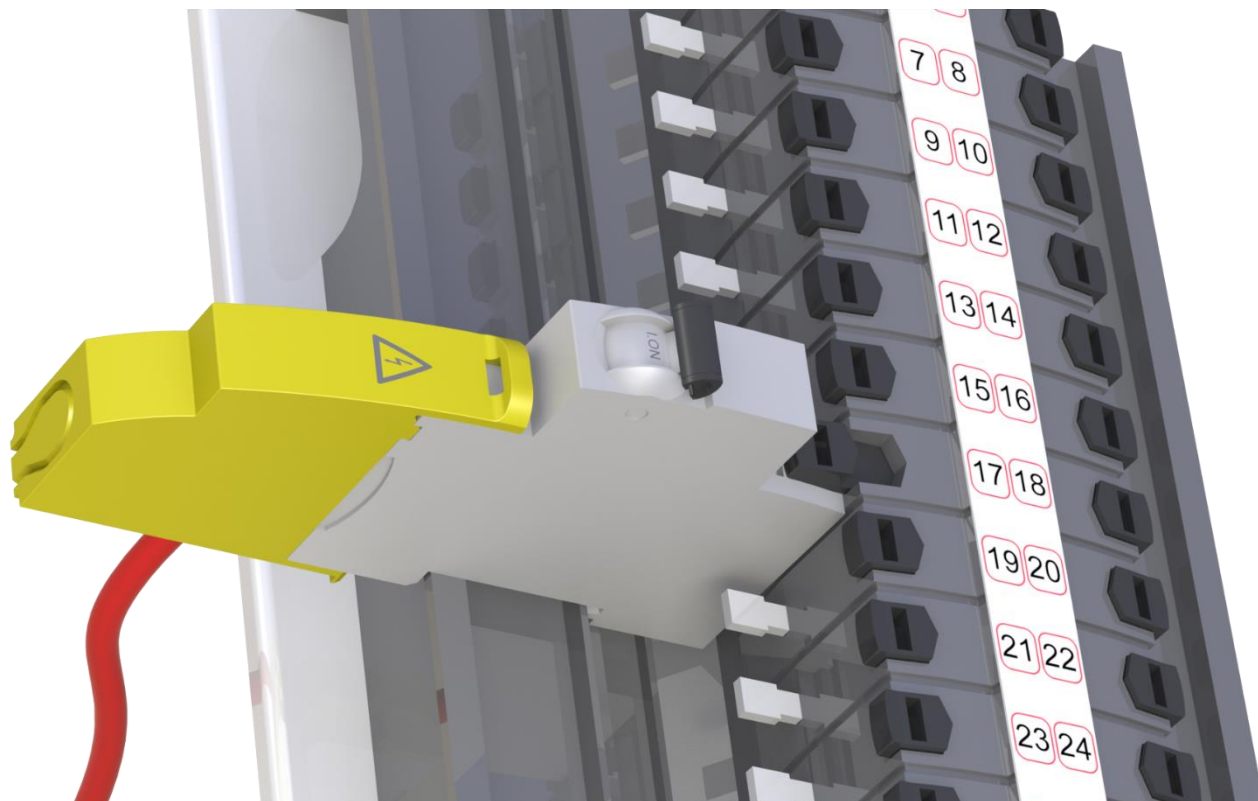
Before you begin,  
identify the:

**ACTIVE**

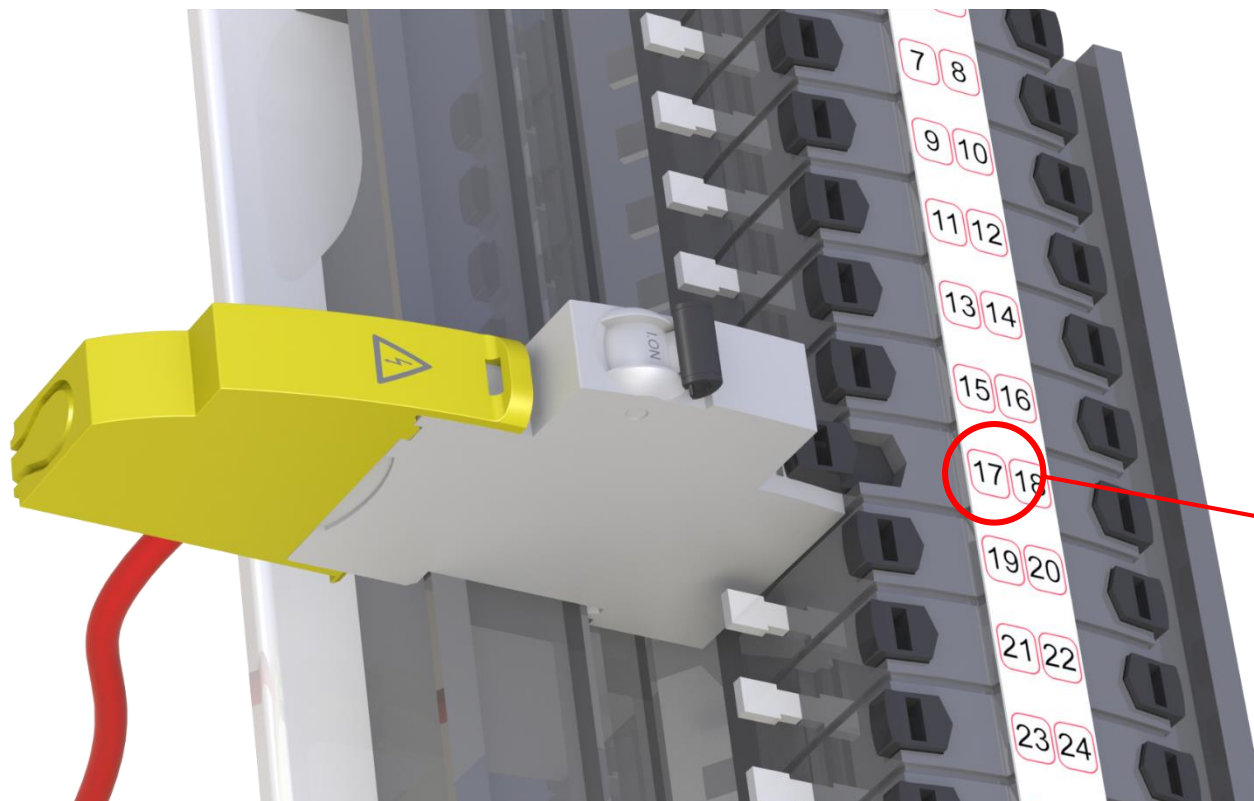
**NEUTRAL**

**EARTH**

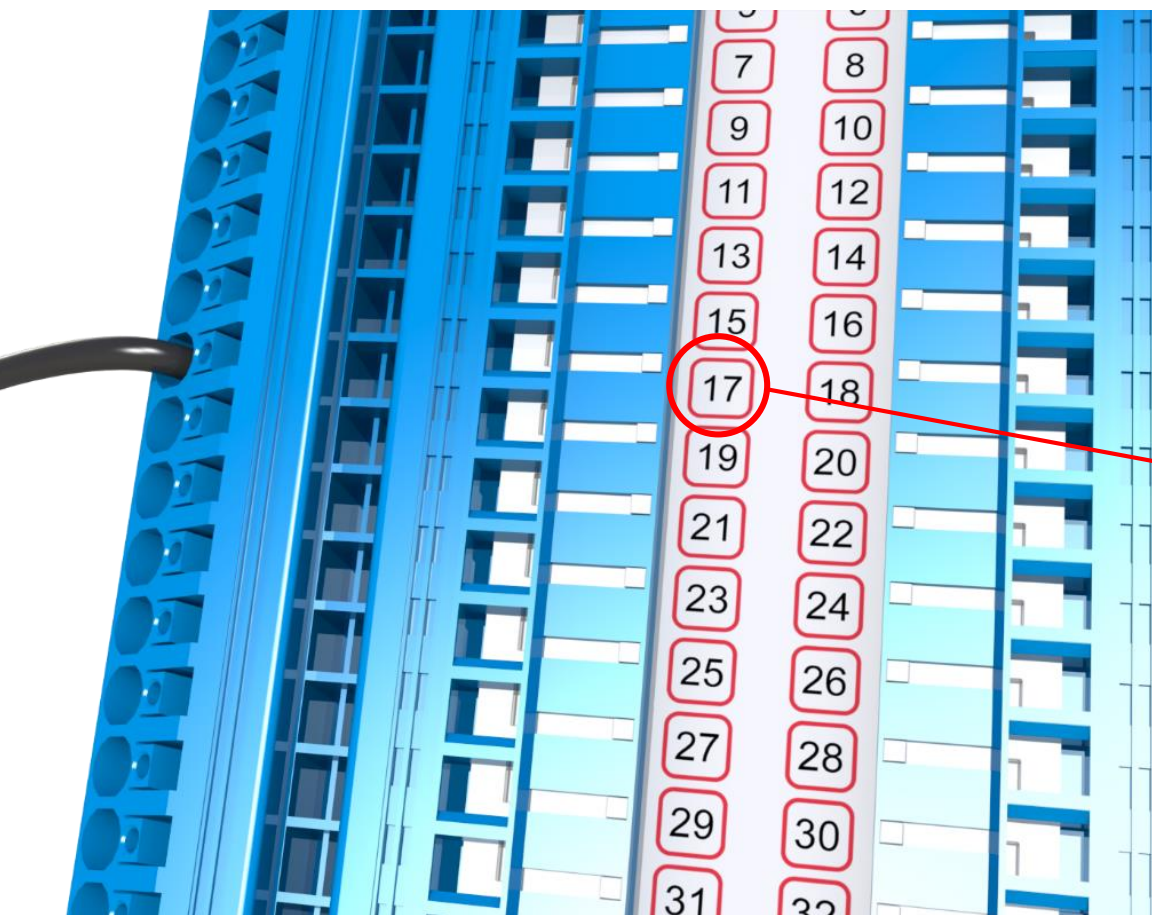
of the circuit breaker  
you wish to replace.



- Before you begin, identify the:
  - ACTIVE**
  - NEUTRAL**
  - EARTH**of the circuit breaker you wish to replace.



- Before you begin, identify the:
  - ACTIVE**
  - NEUTRAL**
  - EARTH**of the circuit breaker you wish to replace.
- Each circuit is identified by a number.



Before you begin,  
identify the:

**ACTIVE**

**NEUTRAL**

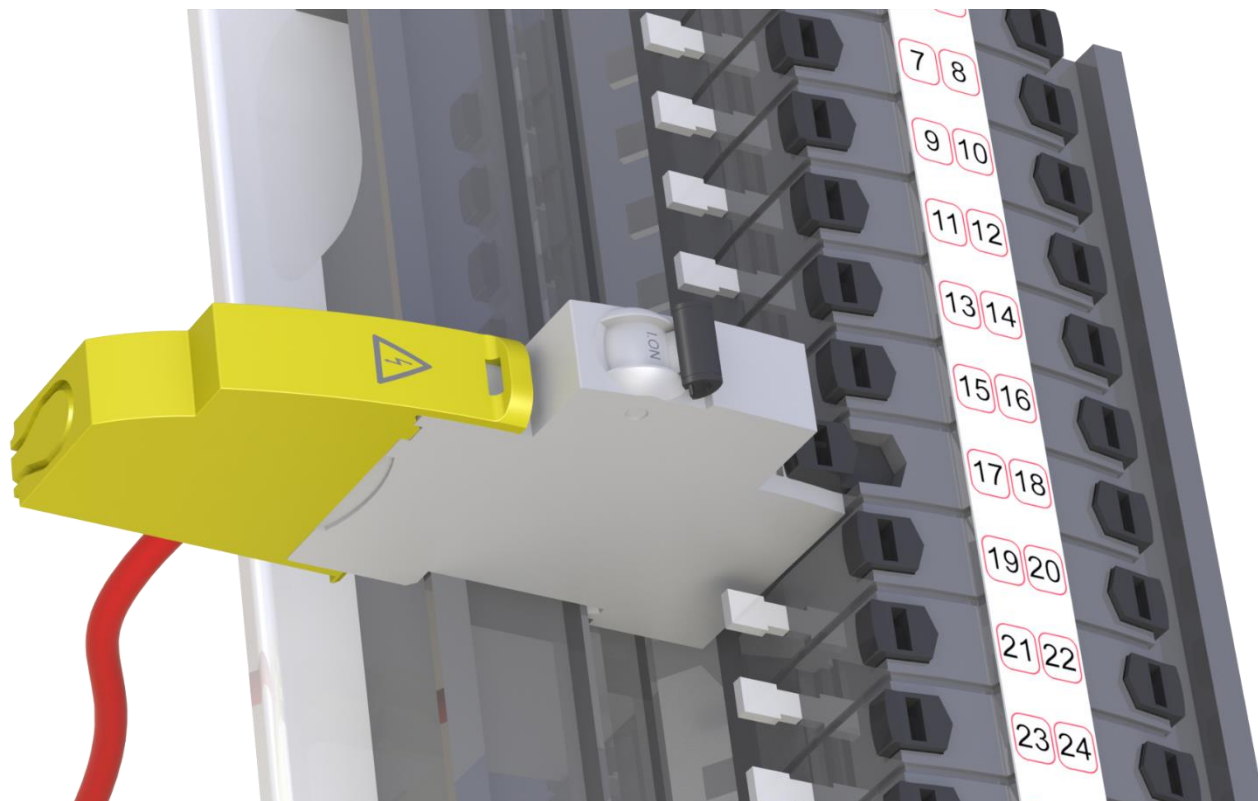
**EARTH**

of the circuit breaker  
you wish to replace.

Each circuit is  
identified by a number.

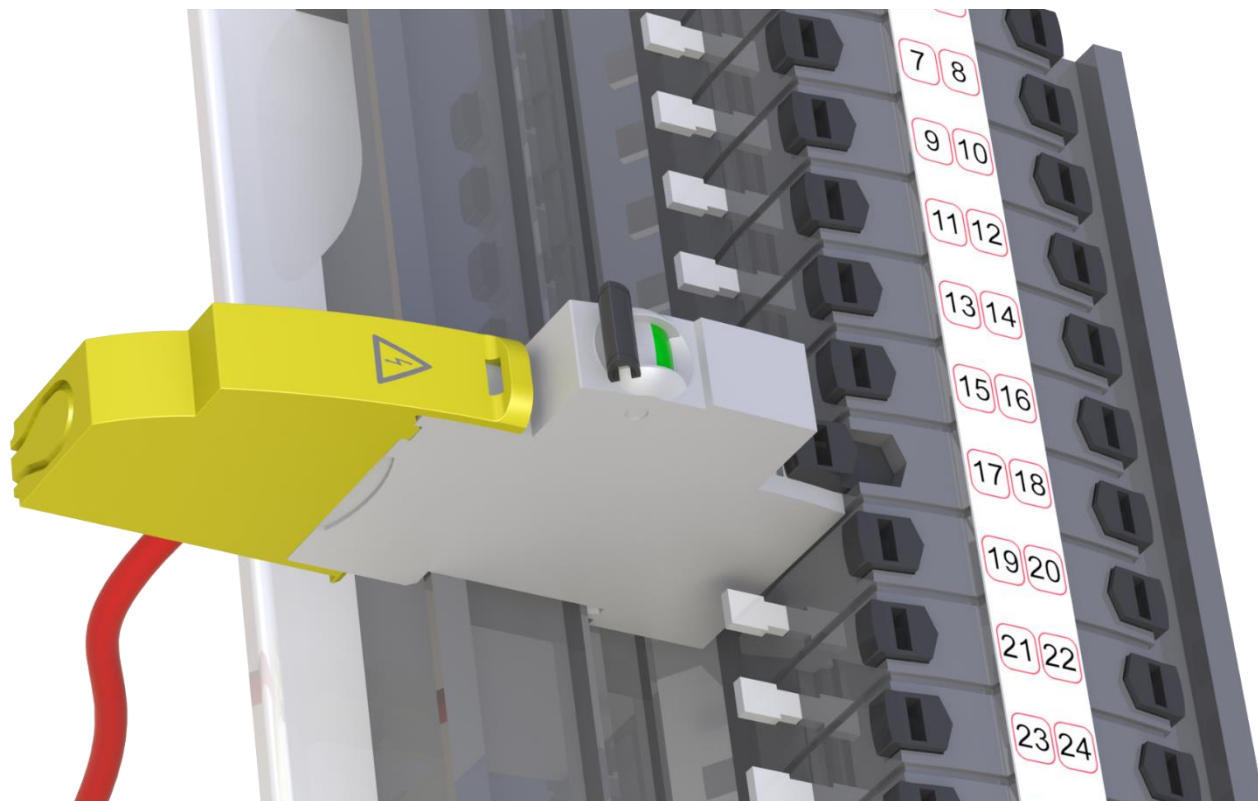
## STEP 2

Switch the circuit  
breaker toggle to the  
**OFF** position



■ Switch the circuit breaker toggle to the **OFF** position





- Switch the circuit breaker toggle to the **OFF** position



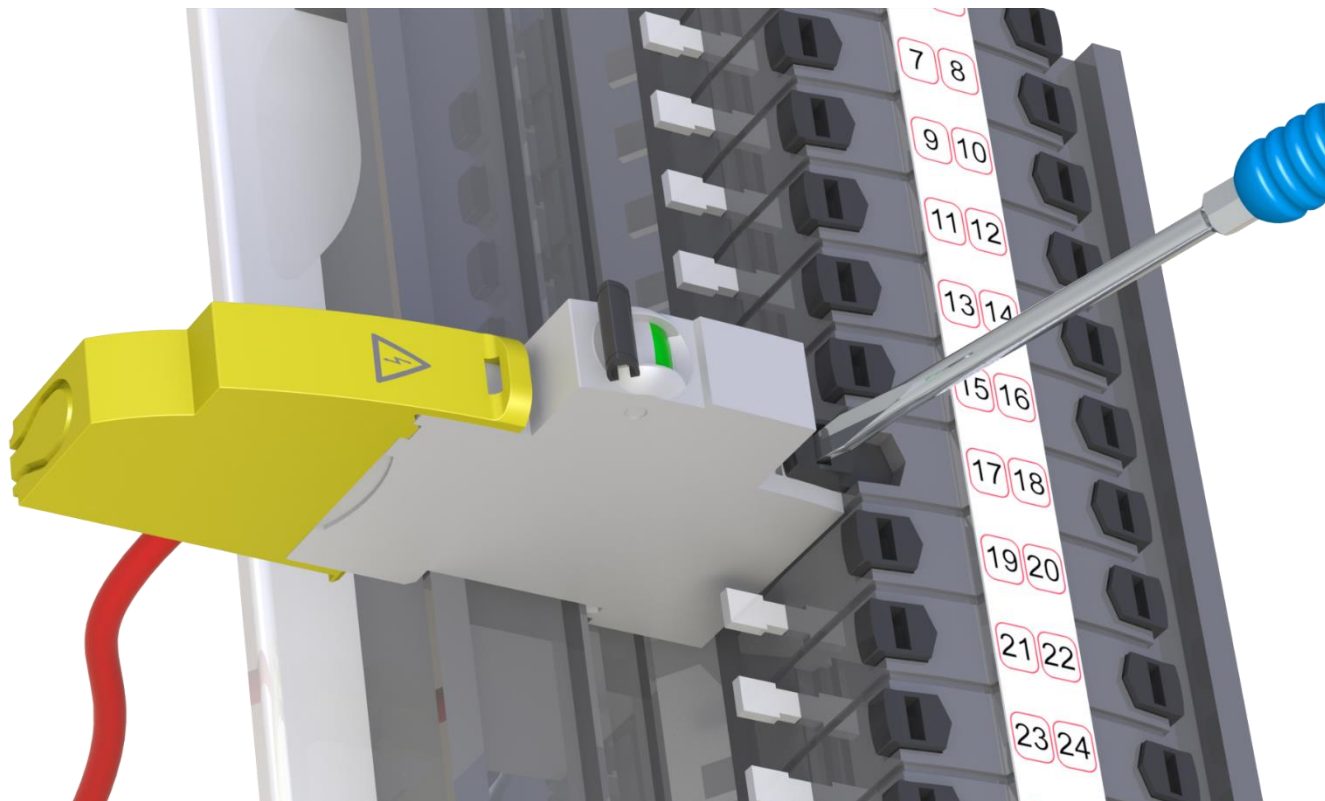
## STEP 3

Using the black chassis isolation slide, isolate the circuit breaker pole

### WARNING



DO NOT OPERATE  
THE BLACK  
ISOLATION SLIDE  
WITH THE CIRCUIT  
BREAKER ON!

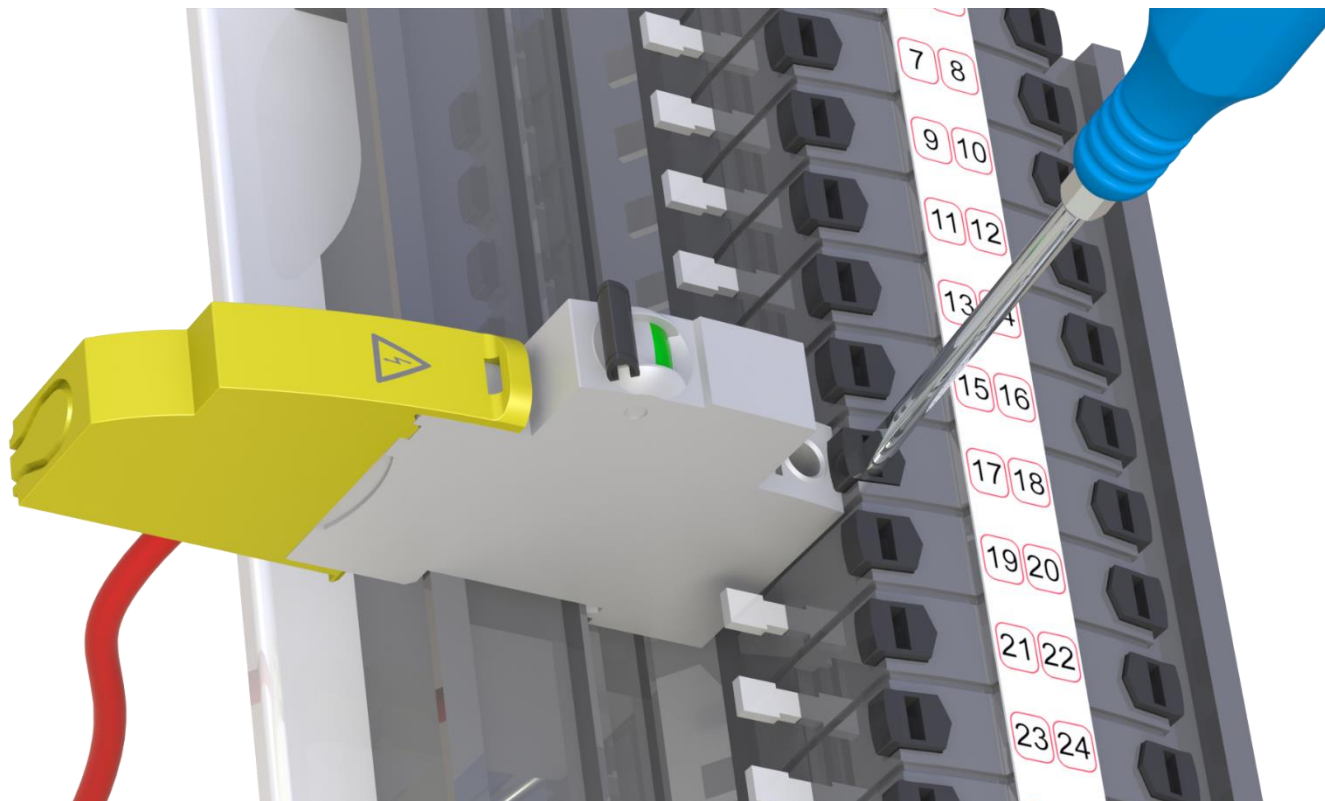


Using the black chassis isolation slide, isolate the circuit breaker pole



## **WARNING**

**DO NOT OPERATE  
THE BLACK  
ISOLATION SLIDE  
WITH THE CIRCUIT  
BREAKER ON!**



Using the black chassis isolation slide, isolate the circuit breaker pole



## **WARNING**

**DO NOT OPERATE  
THE BLACK  
ISOLATION SLIDE  
WITH THE CIRCUIT  
BREAKER ON!**

## STEP 4

Using the insulated neutral slide, disconnect the **NEUTRAL** terminal from the neutral bar



### WARNING

DO NOT OPERATE  
THE NEUTRAL SLIDE  
IF THE CIRCUIT  
BREAKER IS ON OR  
THE CHASSIS  
SLIDES ARE  
ENERGISED!



- Using the insulated neutral slide, disconnect the **NEUTRAL** terminal from the neutral bar



## **WARNING**

**DO NOT OPERATE  
THE NEUTRAL SLIDE  
IF THE CIRCUIT  
BREAKER IS ON OR  
THE CHASSIS  
SLIDES ARE  
ENERGISED!**



- Using the insulated neutral slide, disconnect the **NEUTRAL** terminal from the neutral bar



## **WARNING**

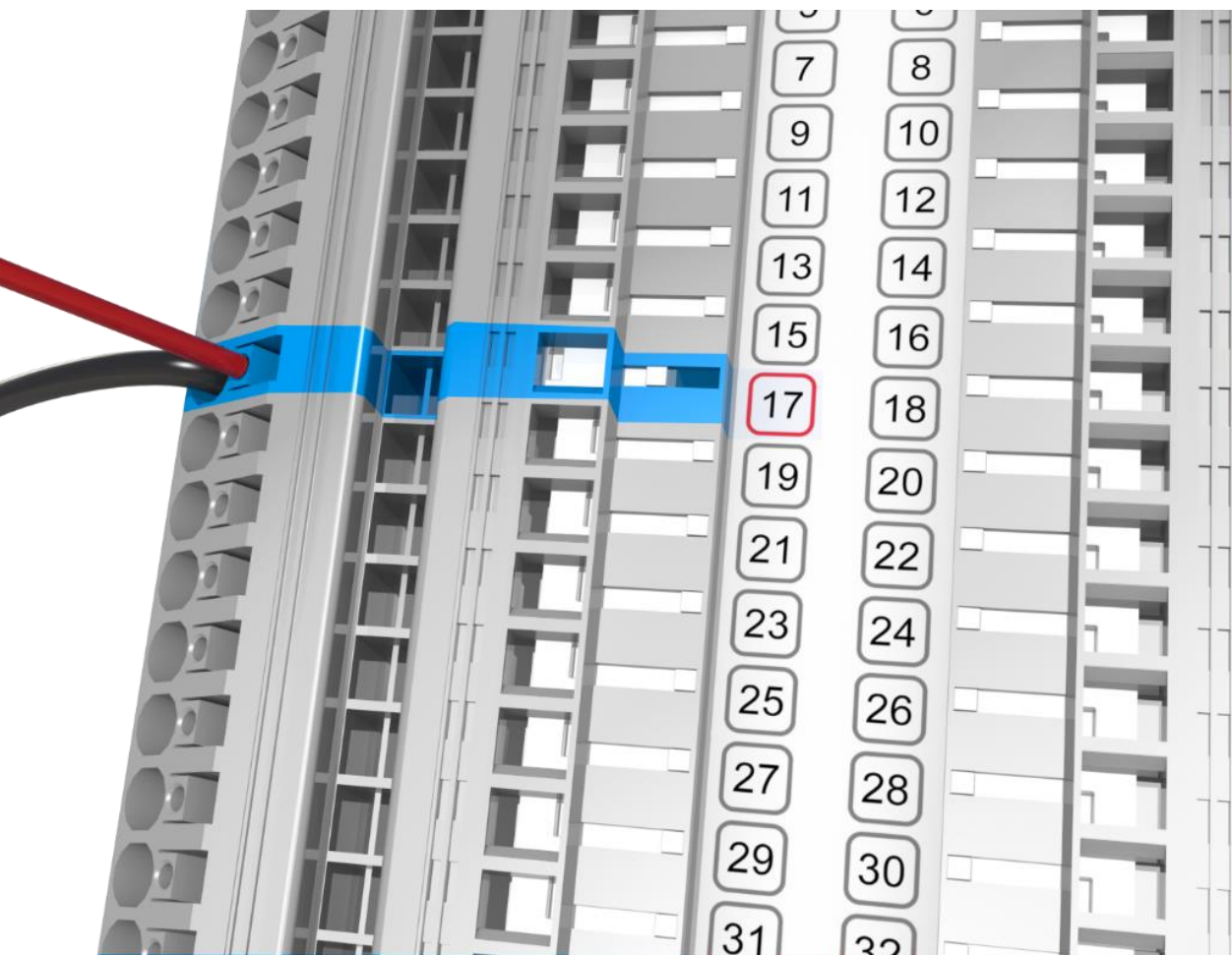
**DO NOT OPERATE THE NEUTRAL SLIDE IF THE CIRCUIT BREAKER IS ON OR THE CHASSIS SLIDES ARE ENERGISED!**



Use the Voltage tester to test from the neutral cable termination to earth.

This will verify the neutral is no longer live.





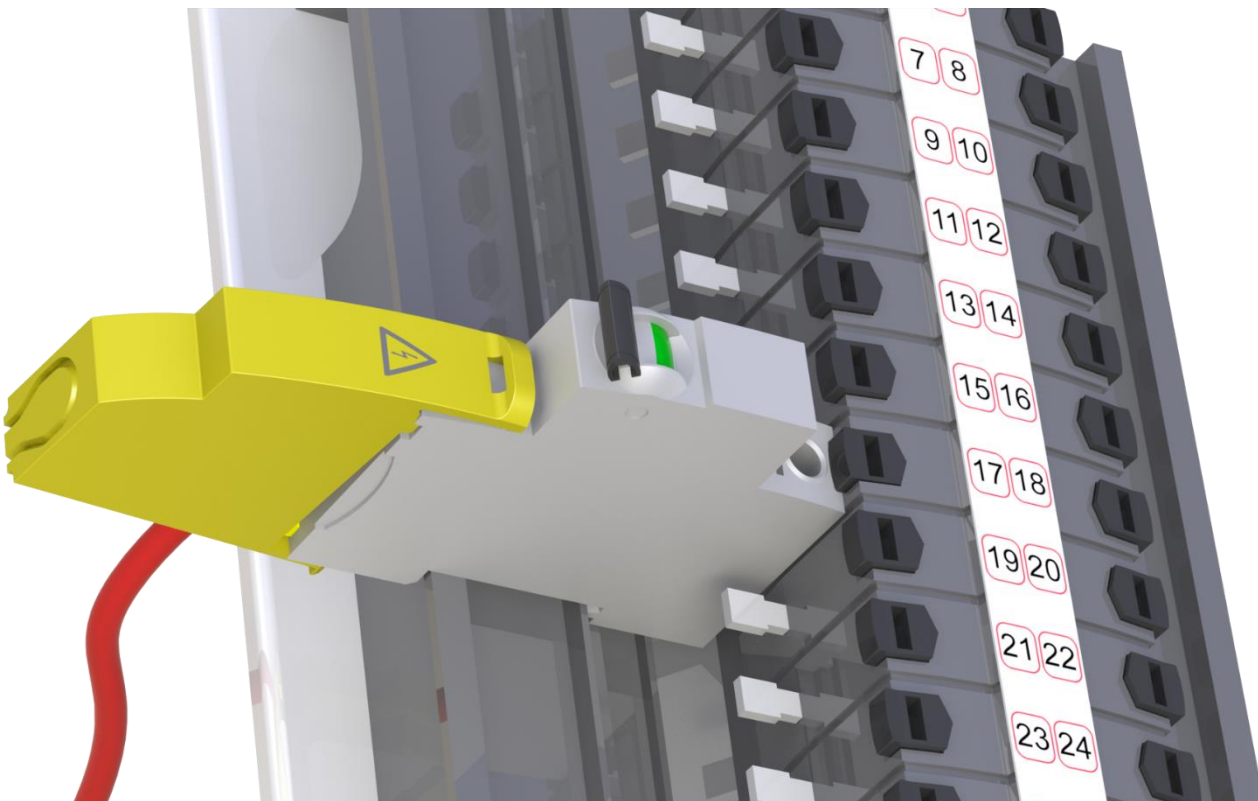
Use the Voltage tester to test from the neutral cable termination to earth.

This will verify the neutral is no longer live.

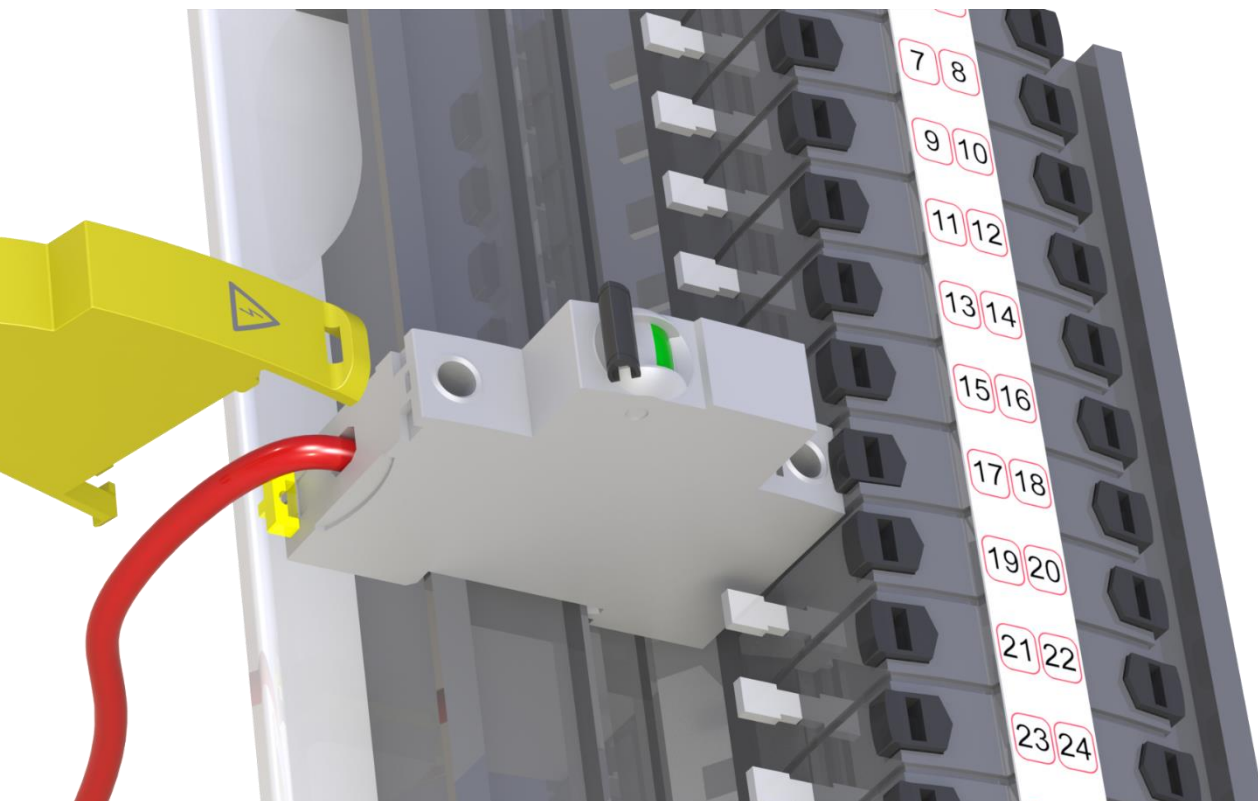


## STEP 5

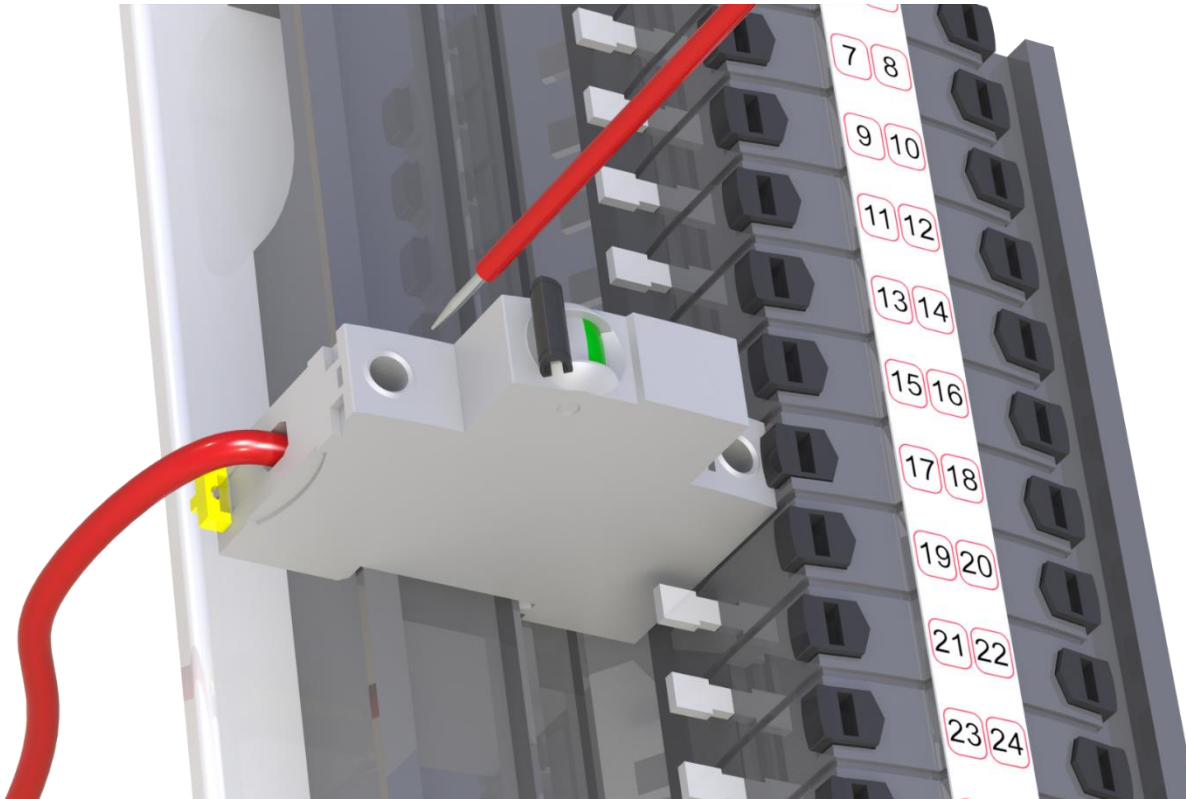
Remove the circuit  
breaker terminal cover



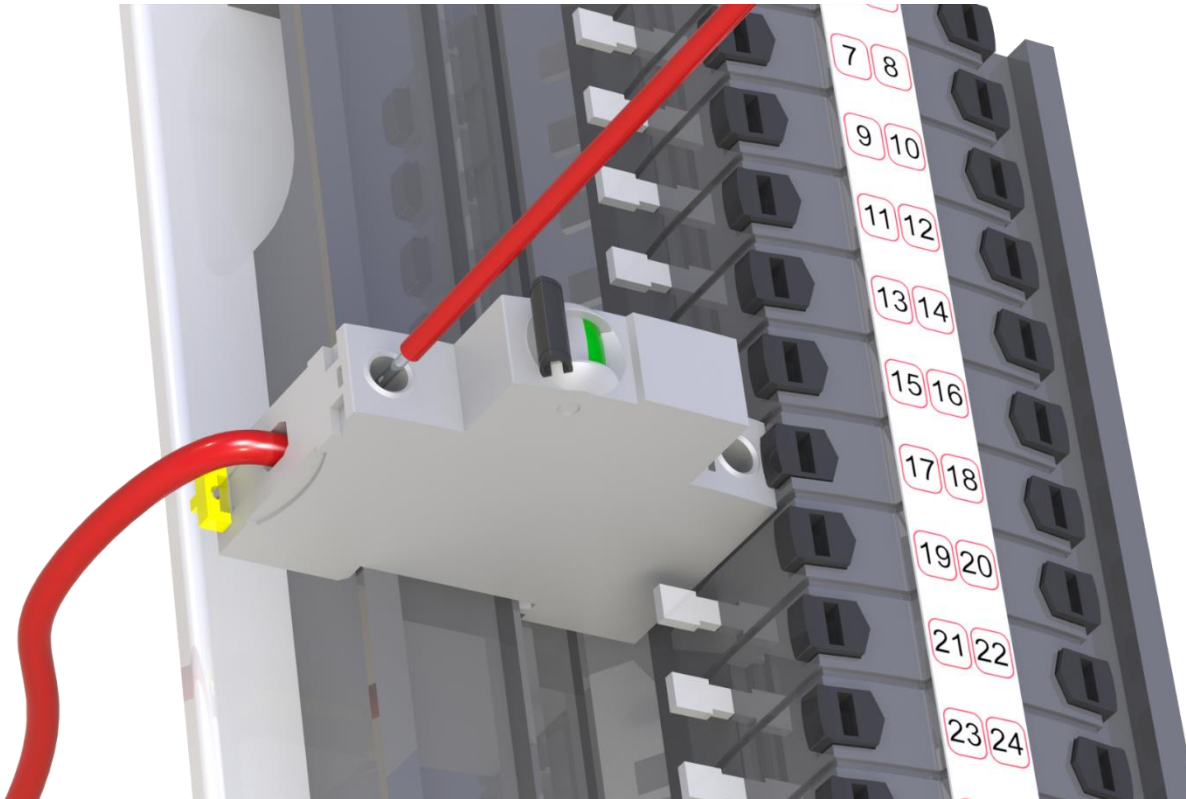
- Remove the circuit breaker terminal cover



- Remove the circuit breaker terminal cover



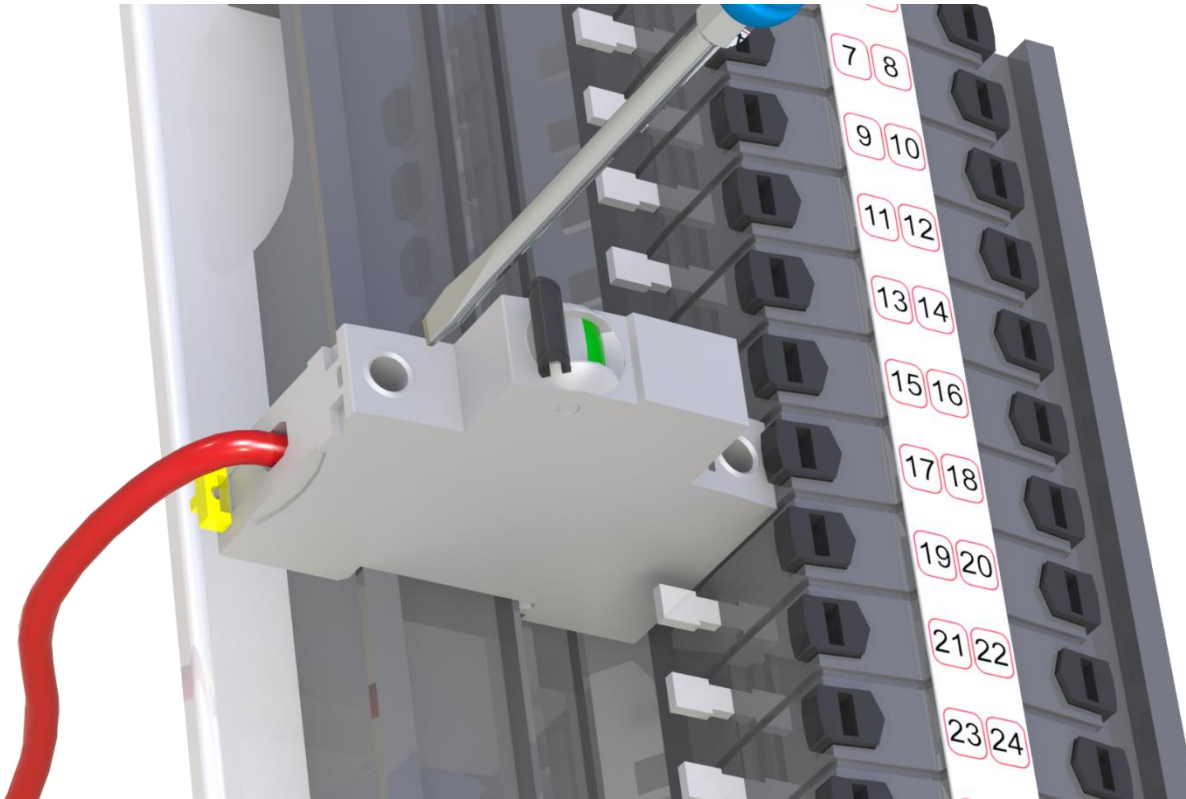
- Test the terminal to ensure there is no voltage present.



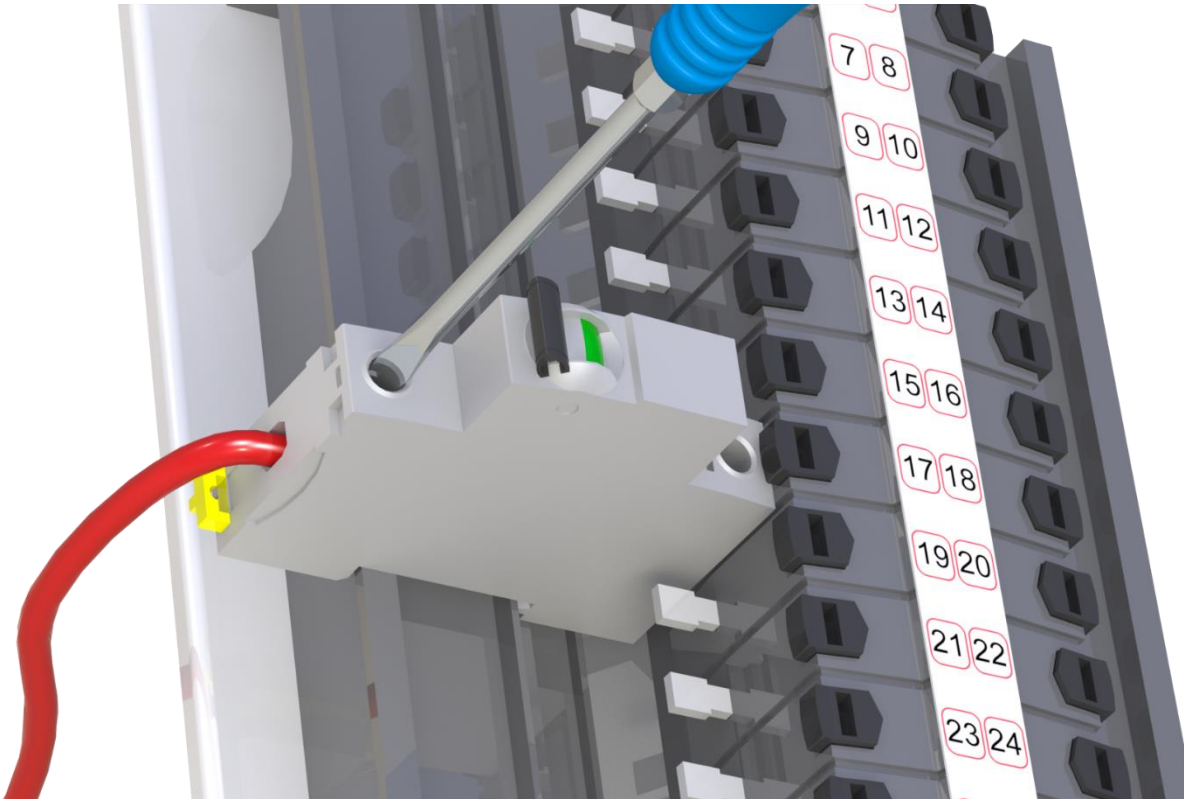
- Test the terminal to ensure there is no voltage present.

## STEP 6

Remove the cable from the circuit breaker and locate safely

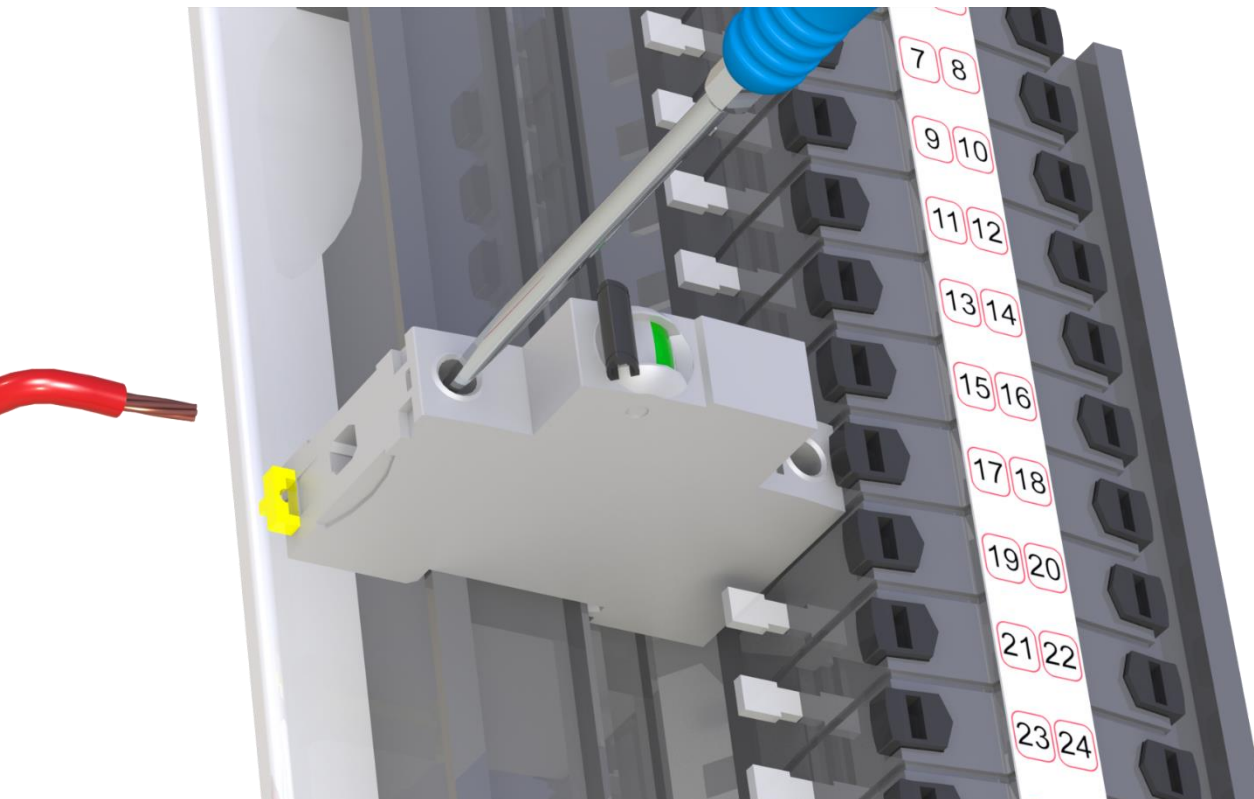


- Remove the cable from the circuit breaker and locate safely

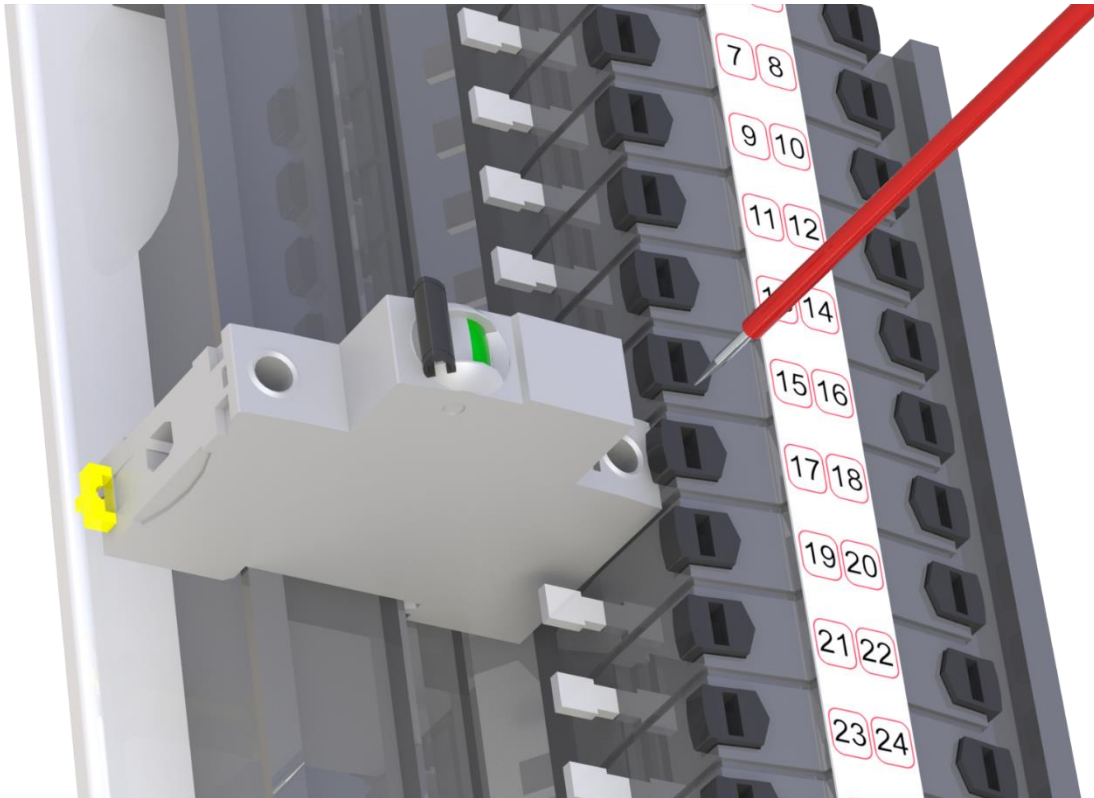


- Remove the cable from the circuit breaker and locate safely

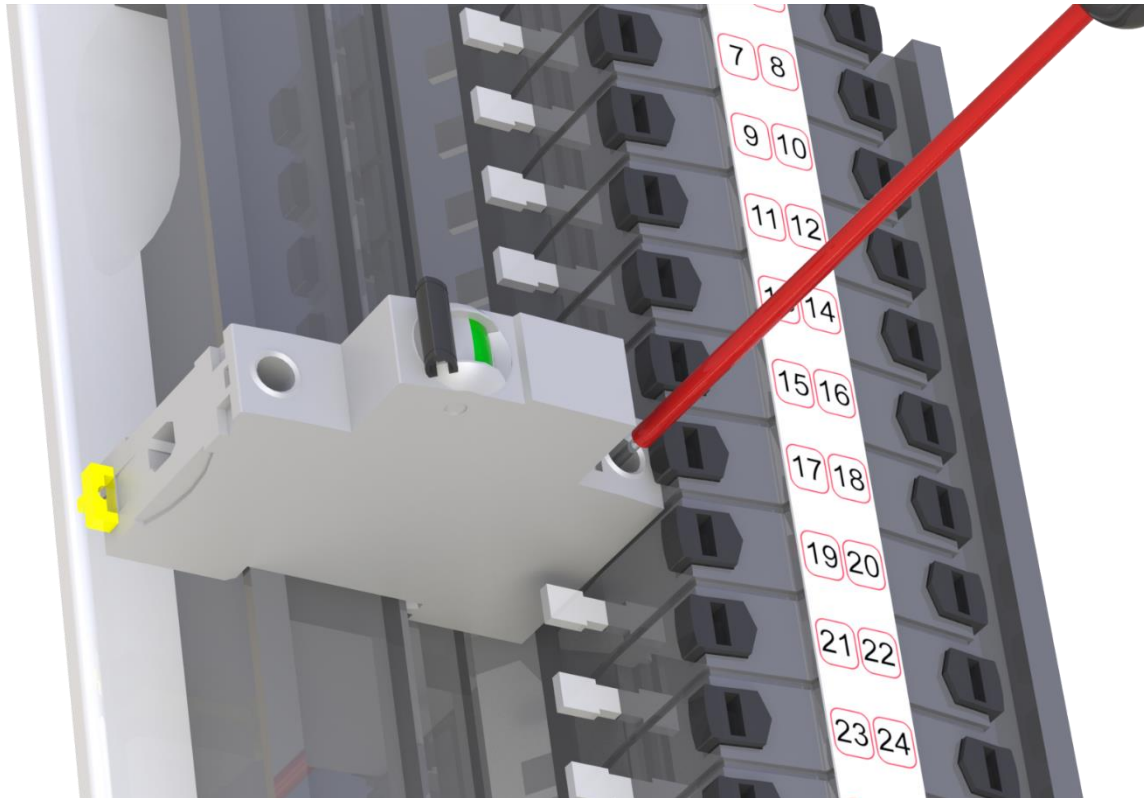




- Remove the cable from the circuit breaker and locate safely



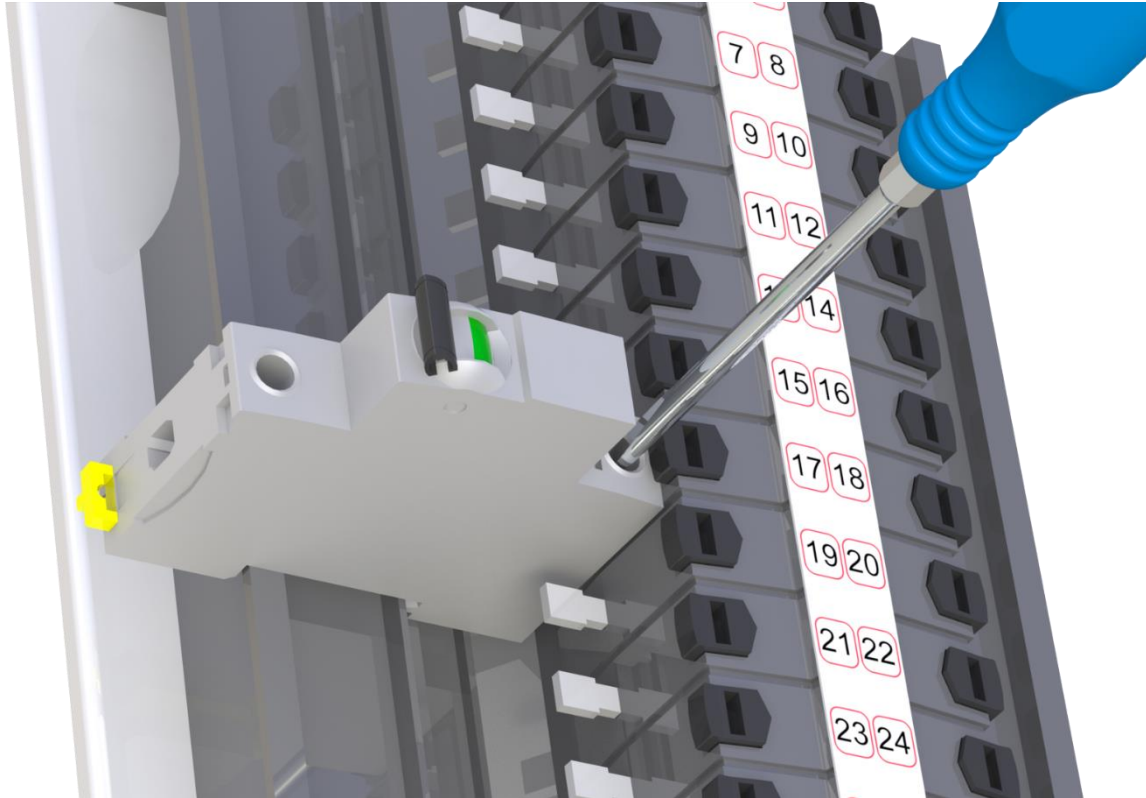
Test the terminal to ensure there is no voltage present.



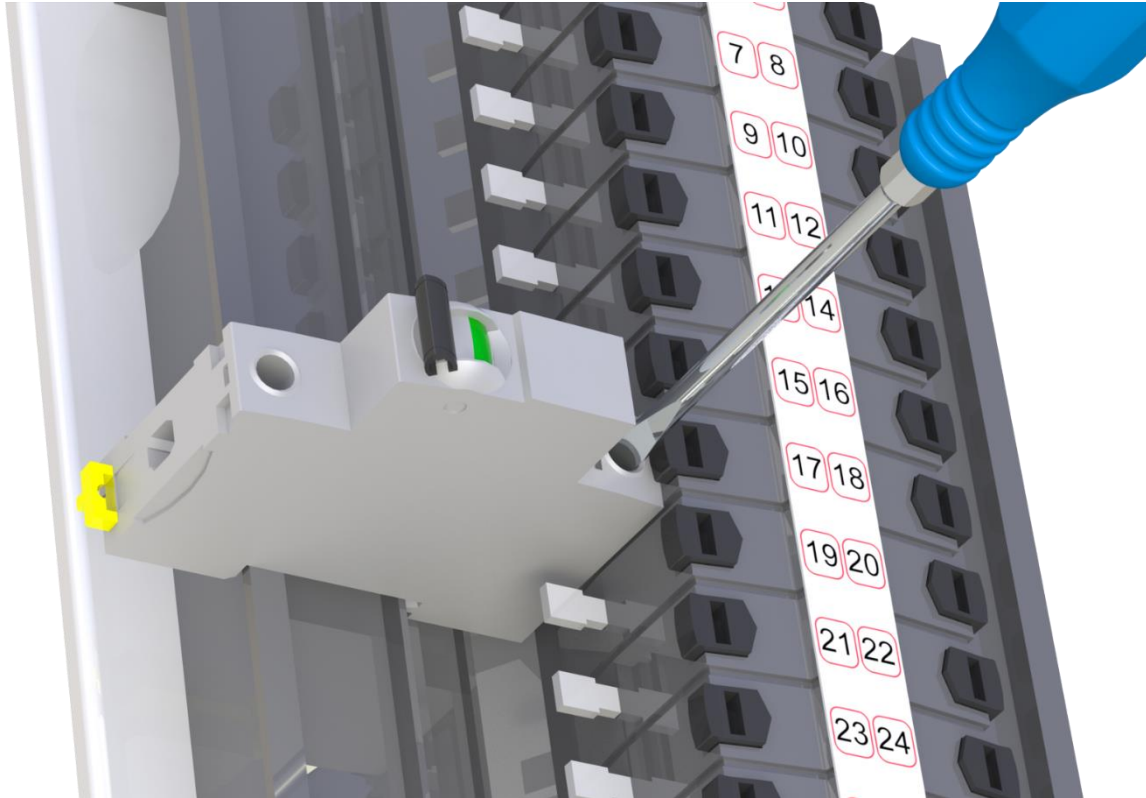
Test the terminal to ensure there is no voltage present.

## STEP 7

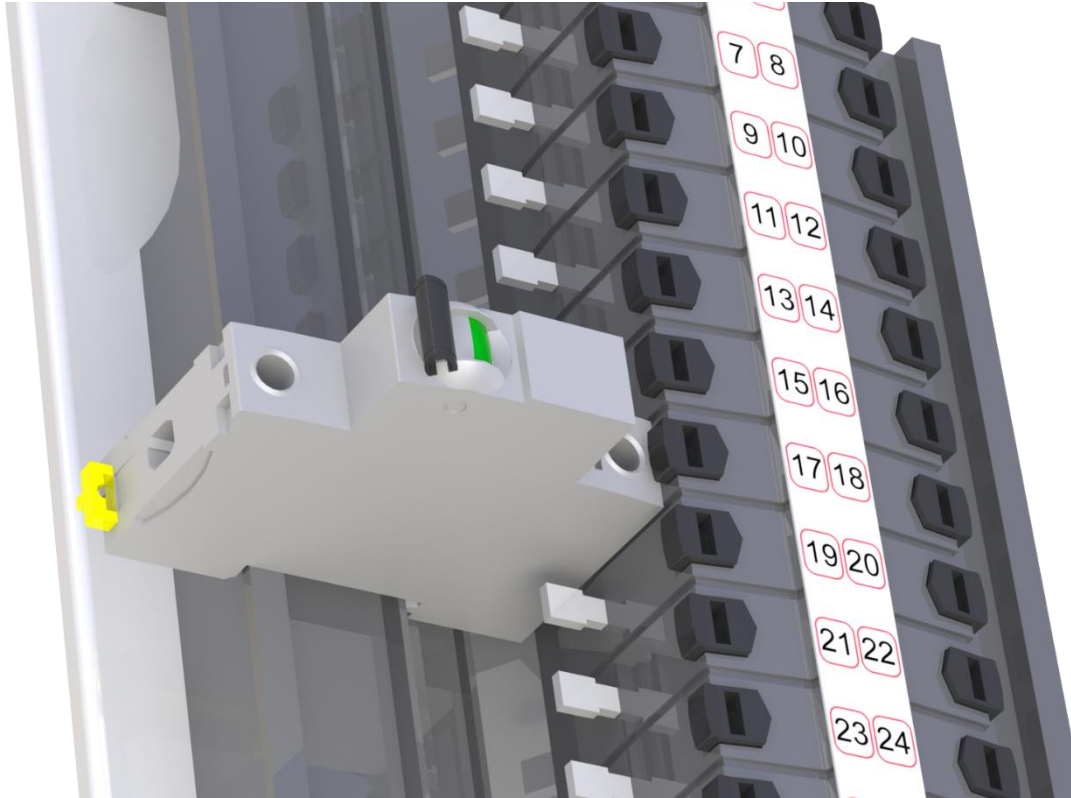
Undo the line side termination of the circuit breaker with the correct sized screwdriver and remove



Undo the line side termination of the circuit breaker with the correct sized screwdriver and remove

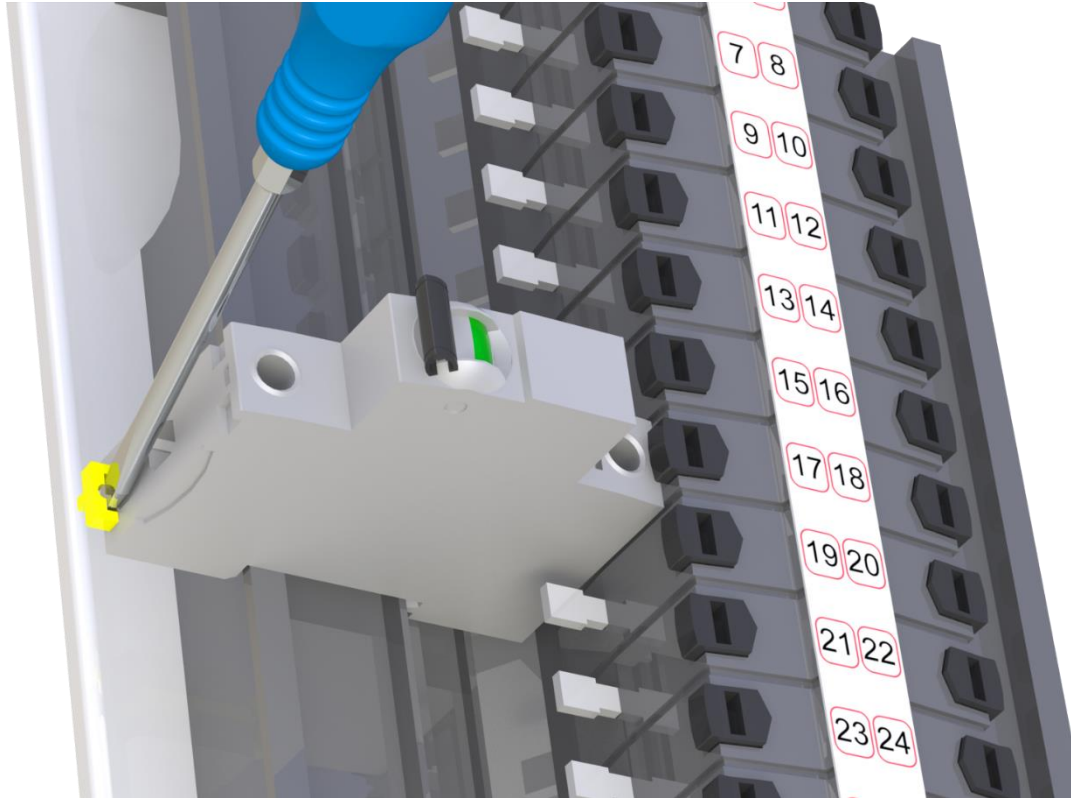


Undo the line side termination of the circuit breaker with the correct sized screwdriver and remove



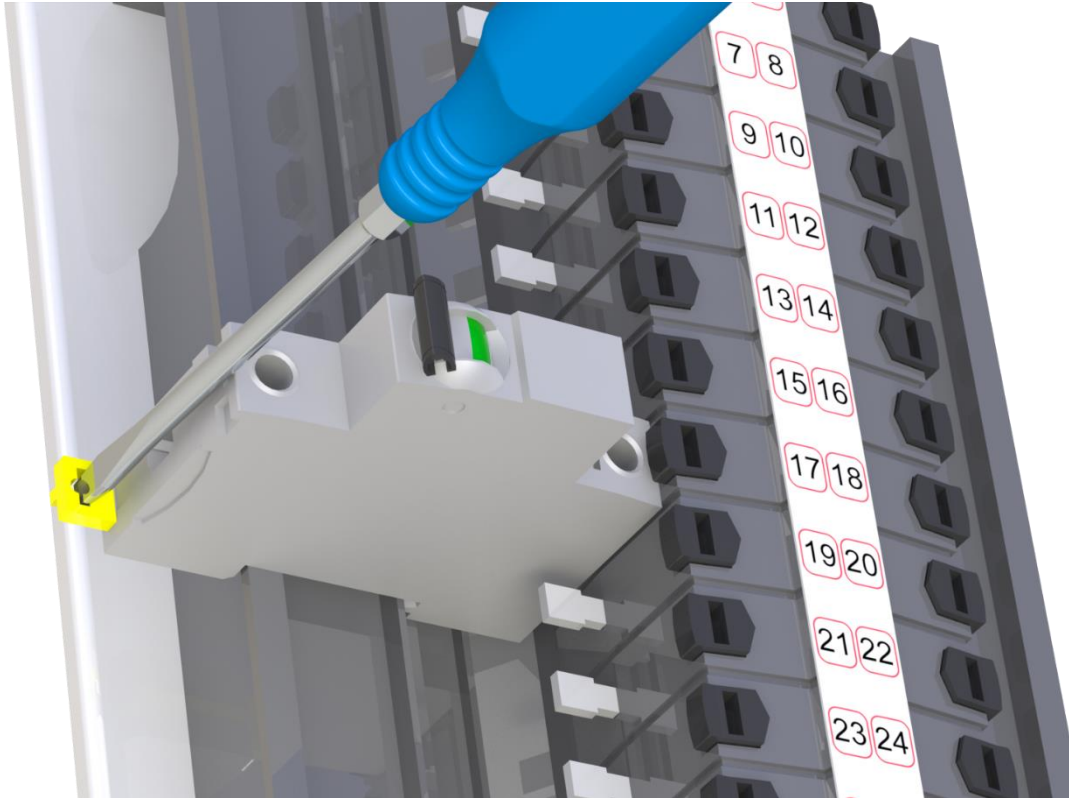
- Undo the line side termination of the circuit breaker with the correct sized screwdriver and remove



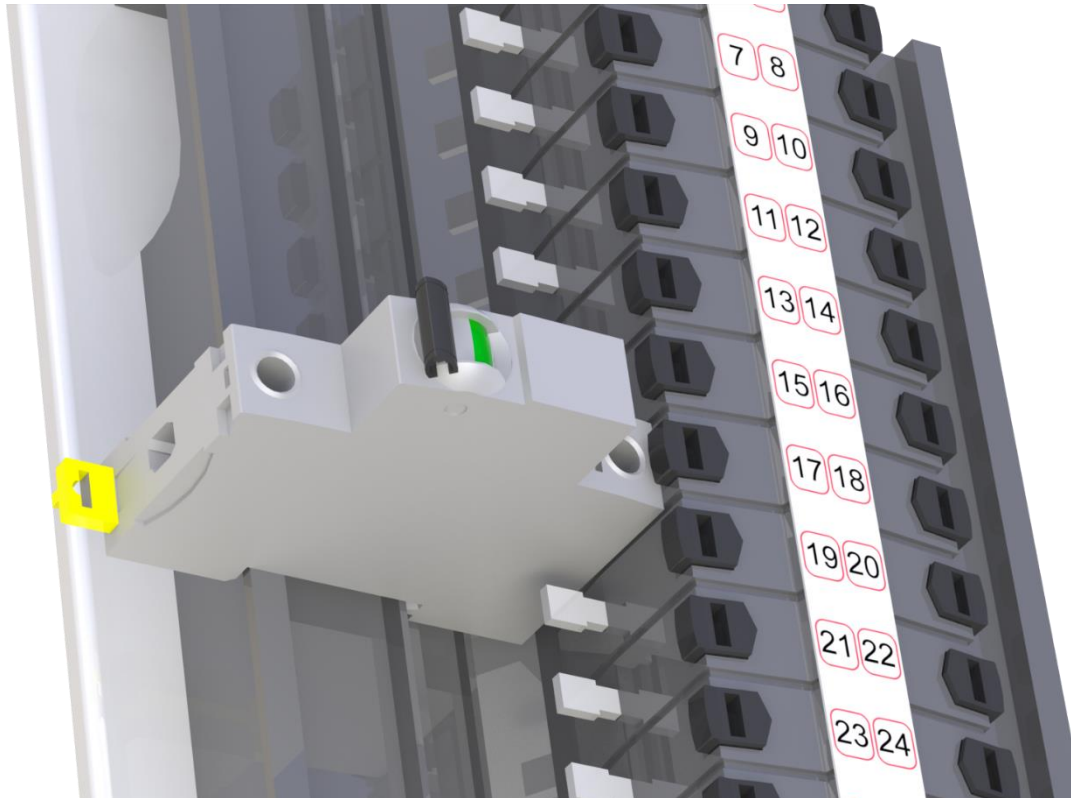


- Undo the line side termination of the circuit breaker with the correct sized screwdriver and remove

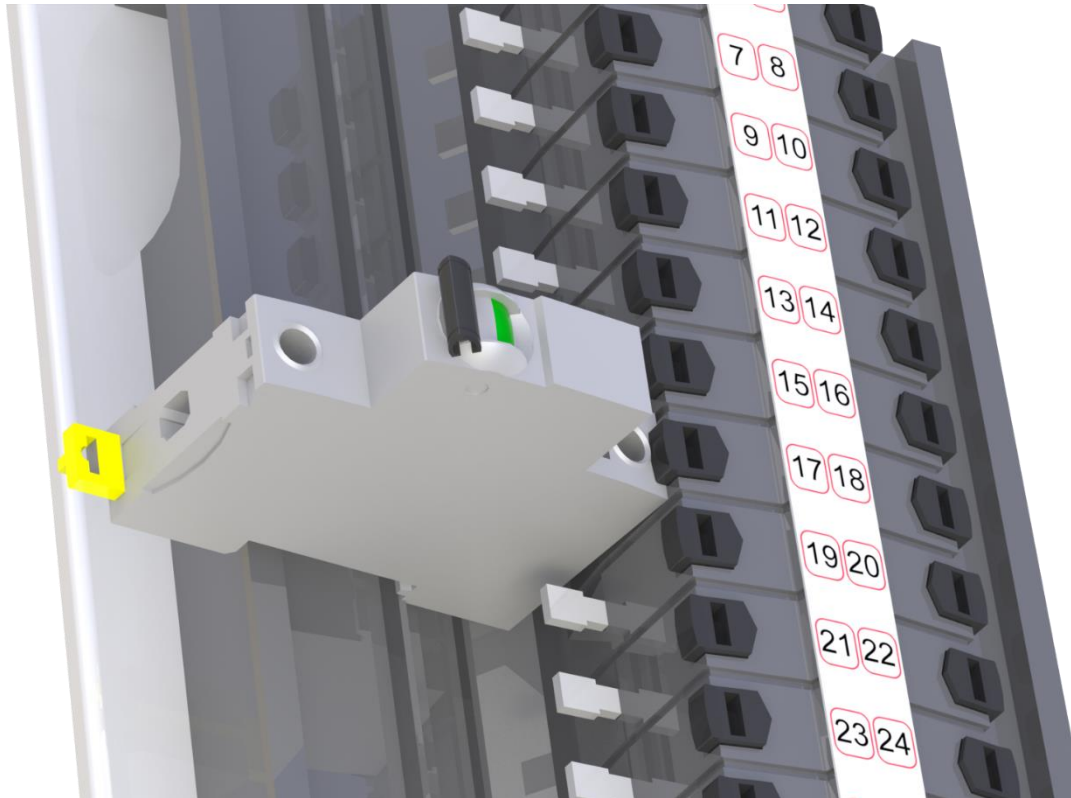




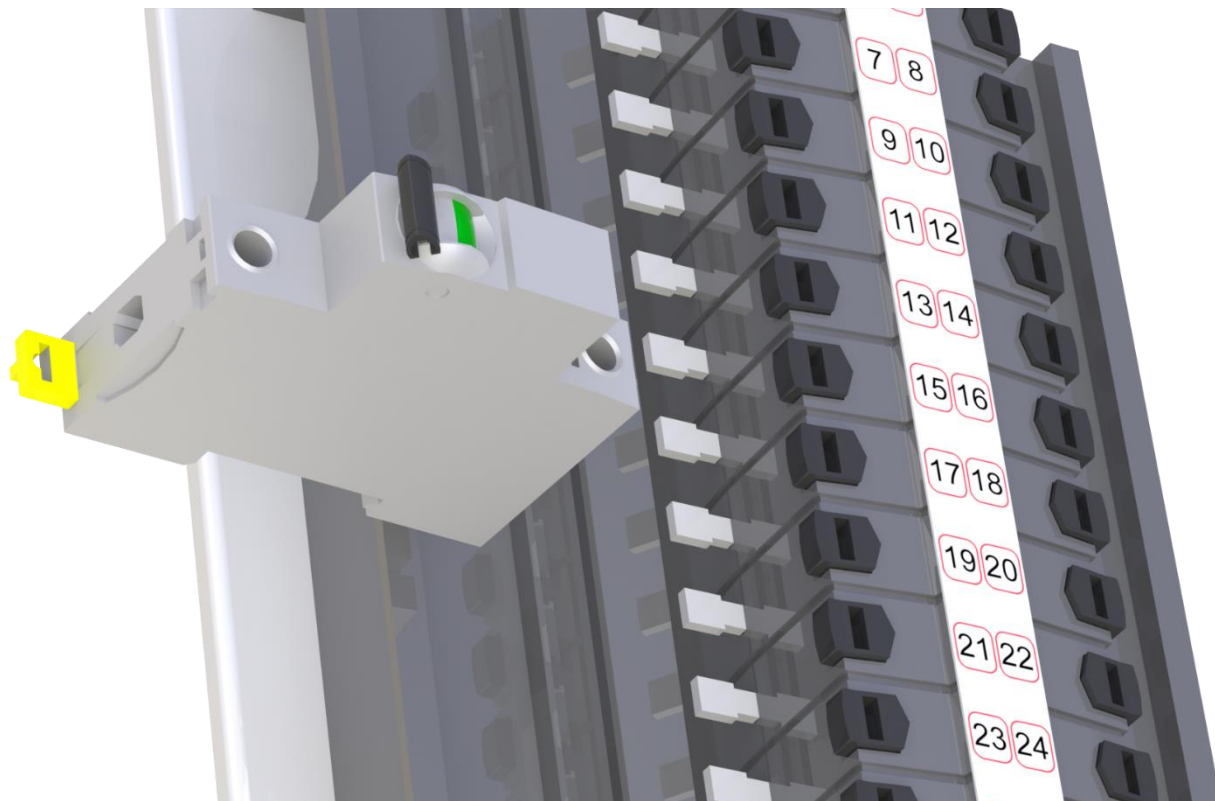
- Undo the line side termination of the circuit breaker with the correct sized screwdriver and remove



- Undo the line side termination of the circuit breaker with the correct sized screwdriver and remove



- Undo the line side termination of the circuit breaker with the correct sized screwdriver and remove



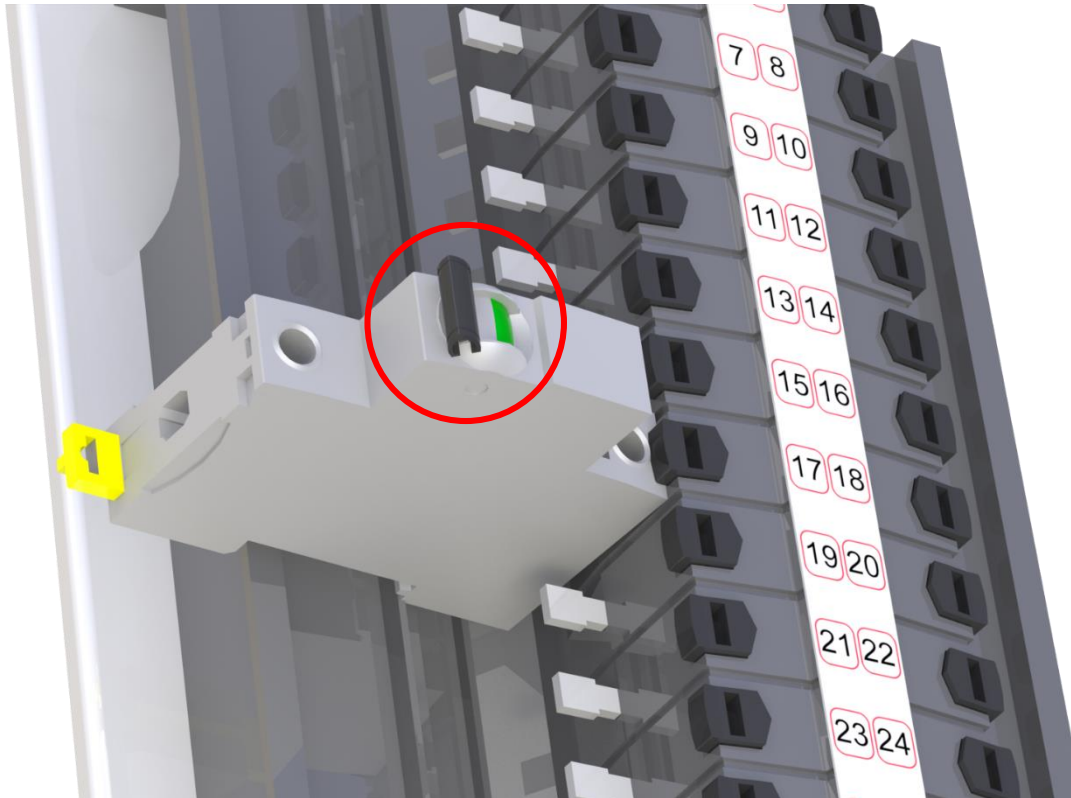
- Undo the line side termination of the circuit breaker with the correct sized screwdriver and remove



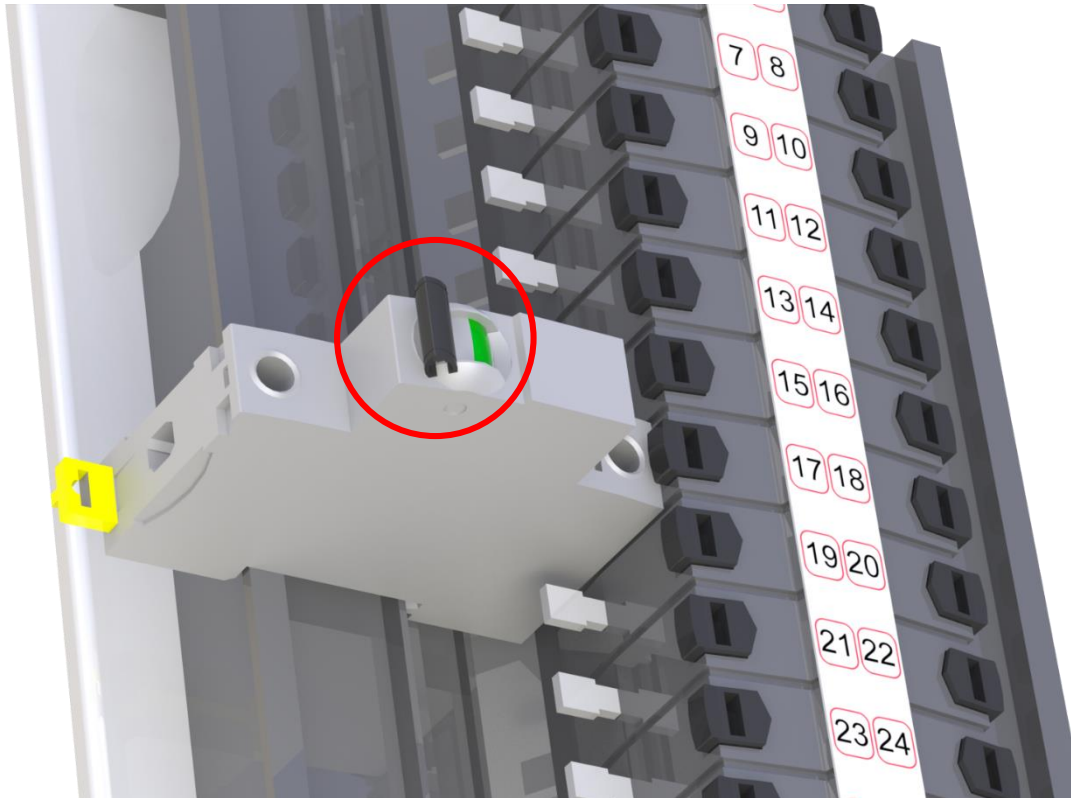
DO NOT OPERATE  
THE BLACK  
ISOLATION SLIDE  
WITHOUT THE  
CIRCUIT BREAKER  
INSTALLED!

## STEP 8

Fit the new circuit breaker into position ensuring the toggle is in the **OFF** position!

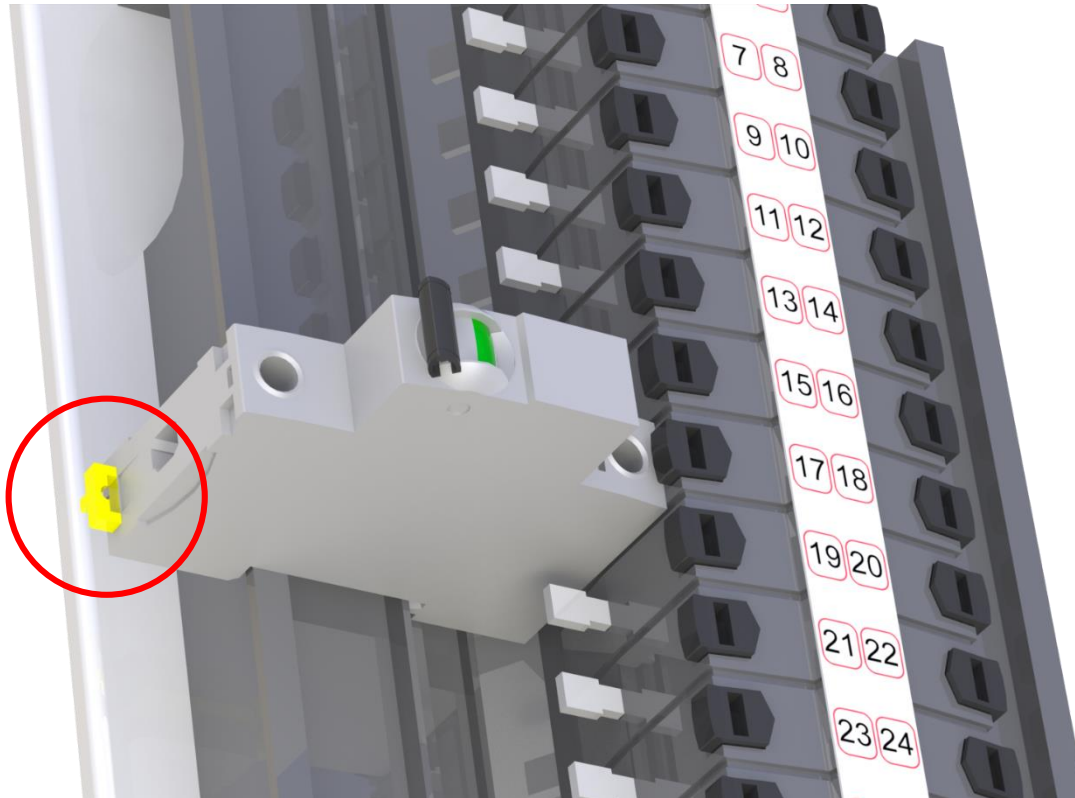


Fit the new circuit breaker into position ensuring the toggle is in the **OFF** position!



- Fit the new circuit breaker into position ensuring the toggle is in the **OFF** position!

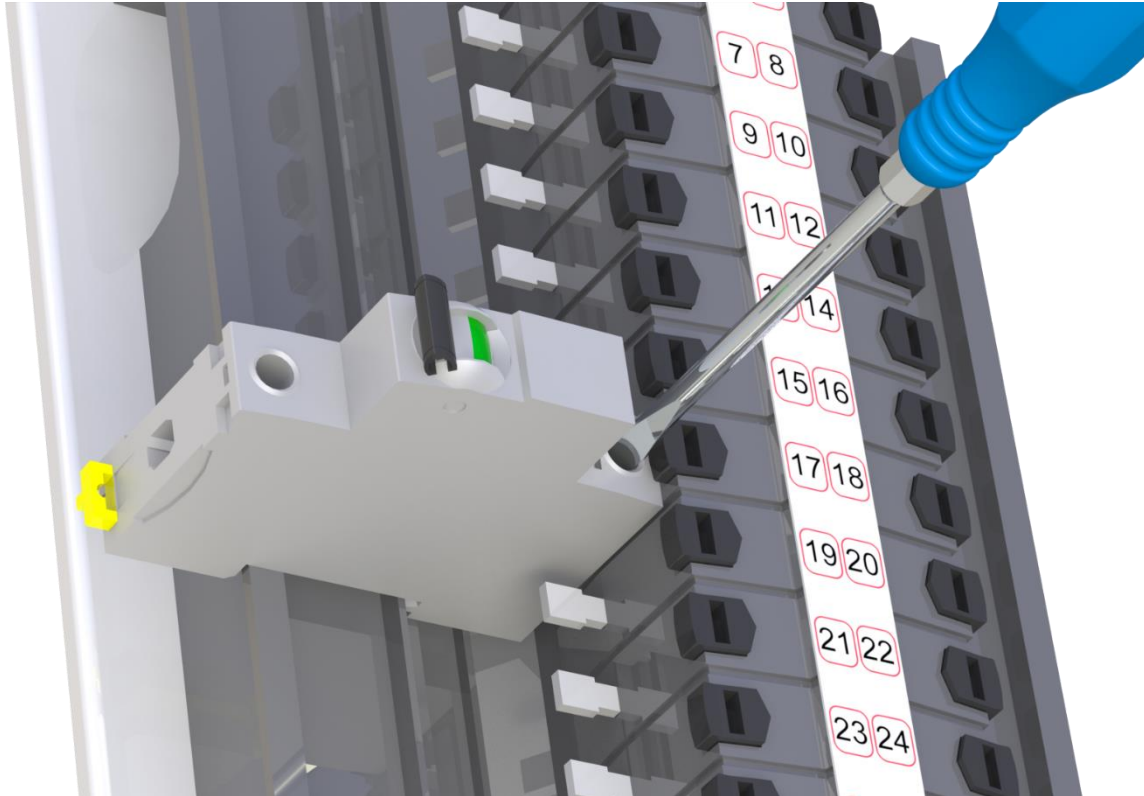




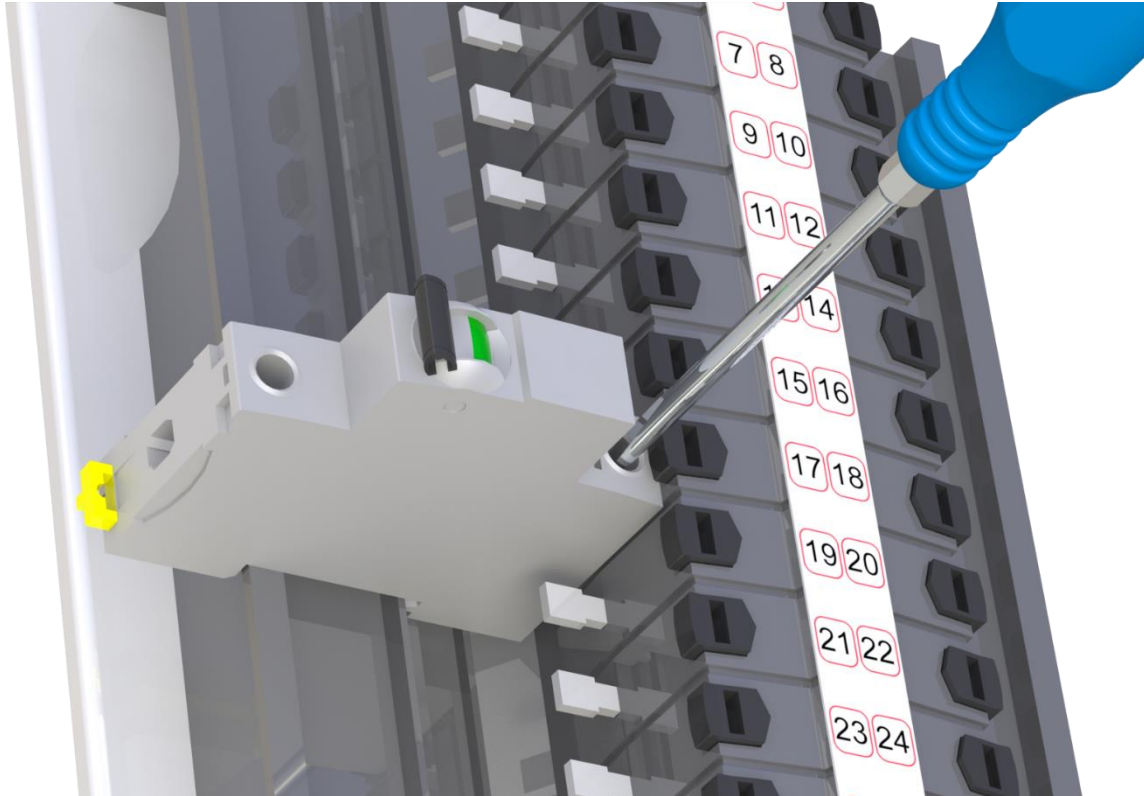
- Fit the new circuit breaker into position ensuring the toggle is in the **OFF** position!

## STEP 9

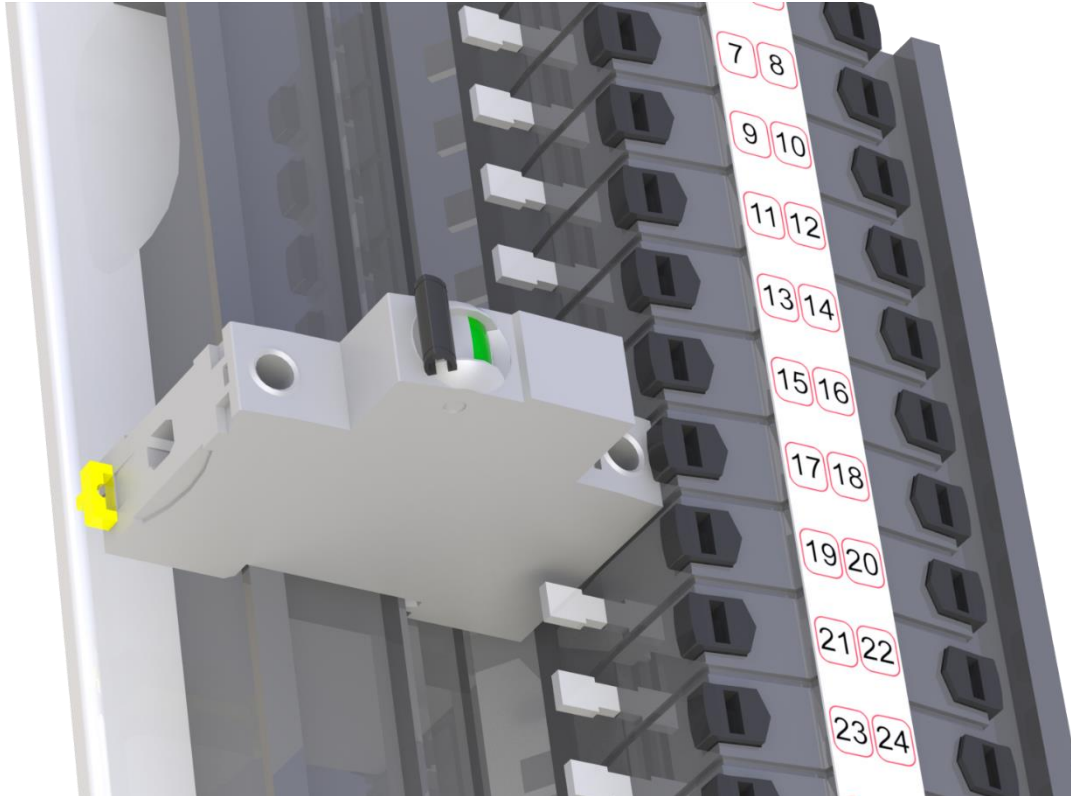
Securely do up the line side termination screw with the correct sized screwdriver



Securely do up the line side termination screw with the correct sized screwdriver



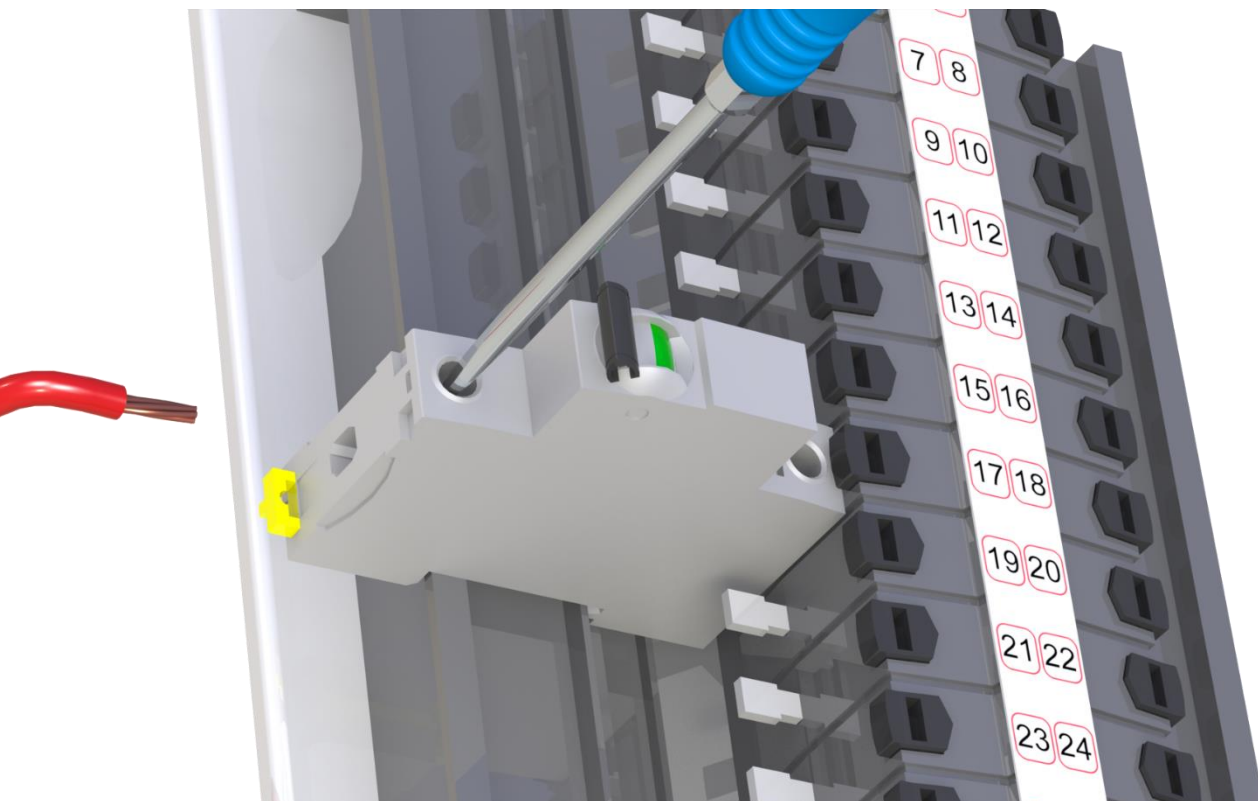
Securely do up the line side termination screw with the correct sized screwdriver



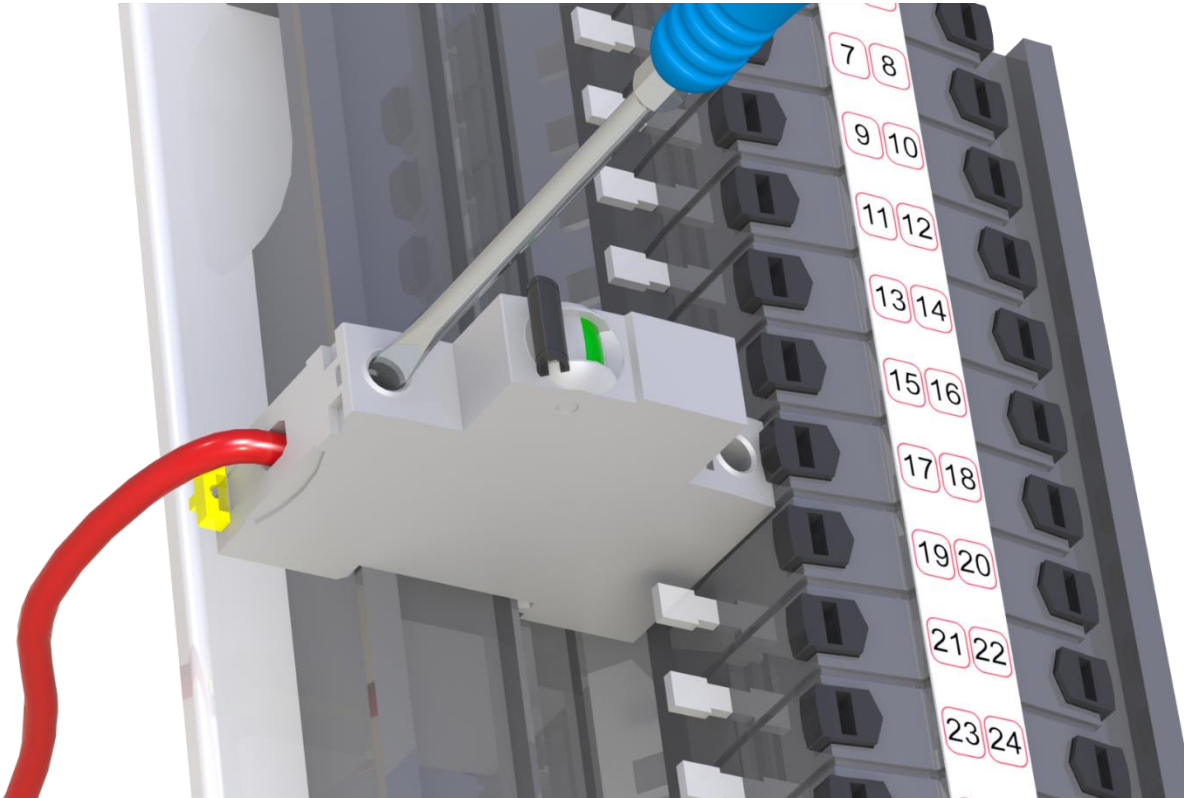
- Securely do up the line side termination screw with the correct sized screwdriver

## STEP 10

You may now reconnect the **ACTIVE** cable to the circuit breaker and do up securely

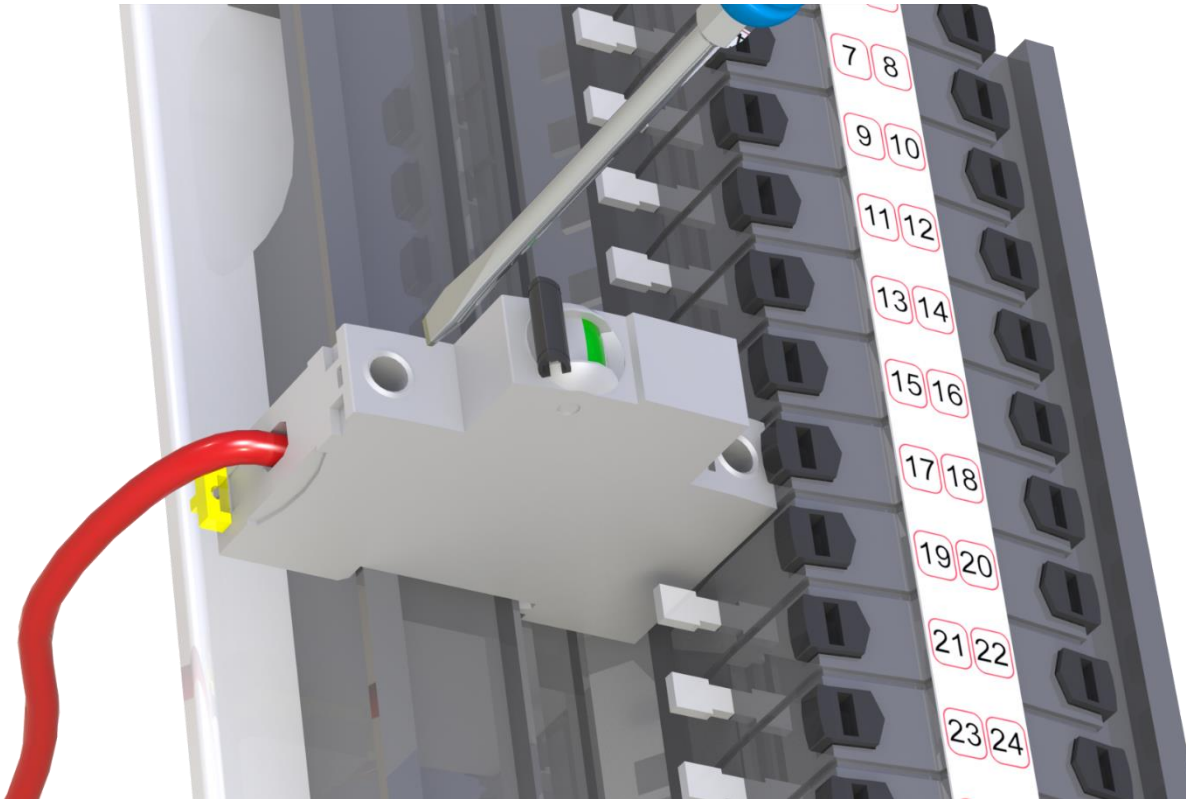


- You may now reconnect the **ACTIVE** cable to the circuit breaker and do up securely



- You may now reconnect the **ACTIVE** cable to the circuit breaker and do up securely

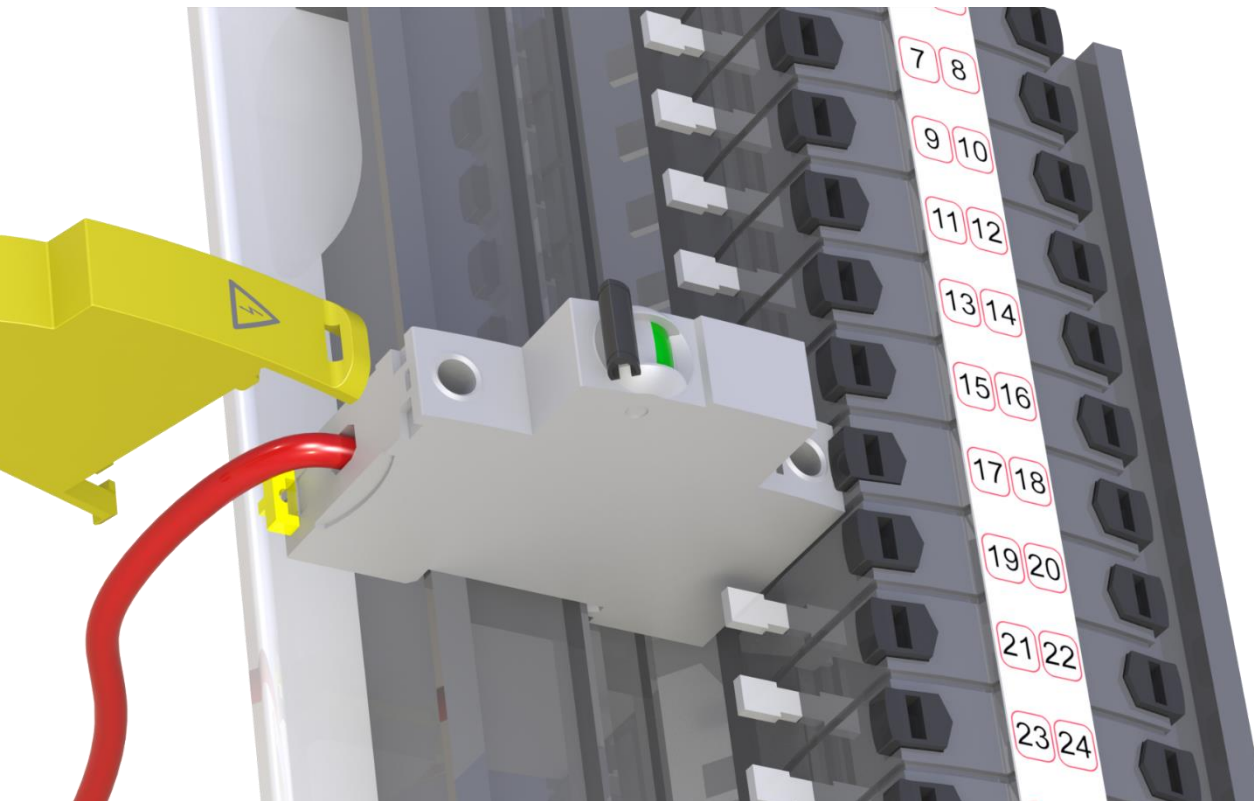




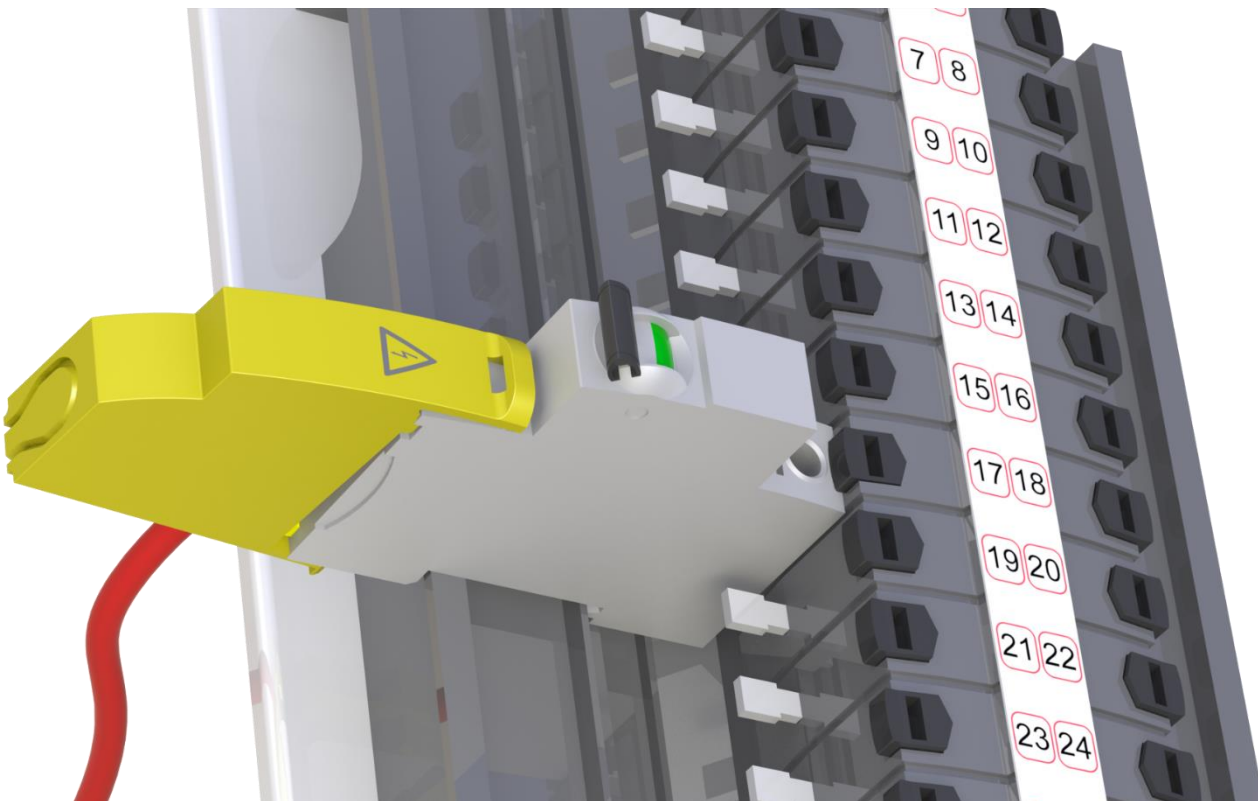
- You may now reconnect the **ACTIVE** cable to the circuit breaker and do up securely

## STEP 11

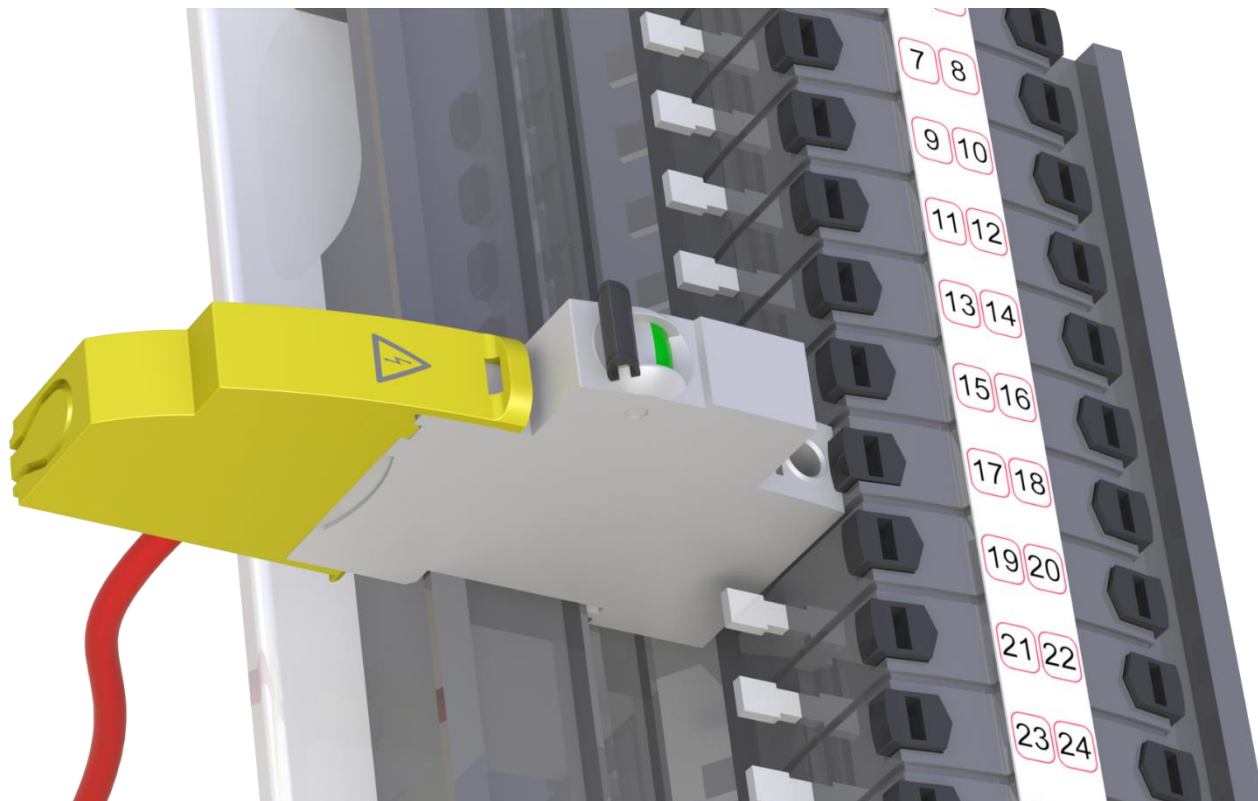
Replace the circuit  
breaker terminal cover



- Replace the circuit breaker terminal cover



- Replace the circuit breaker terminal cover



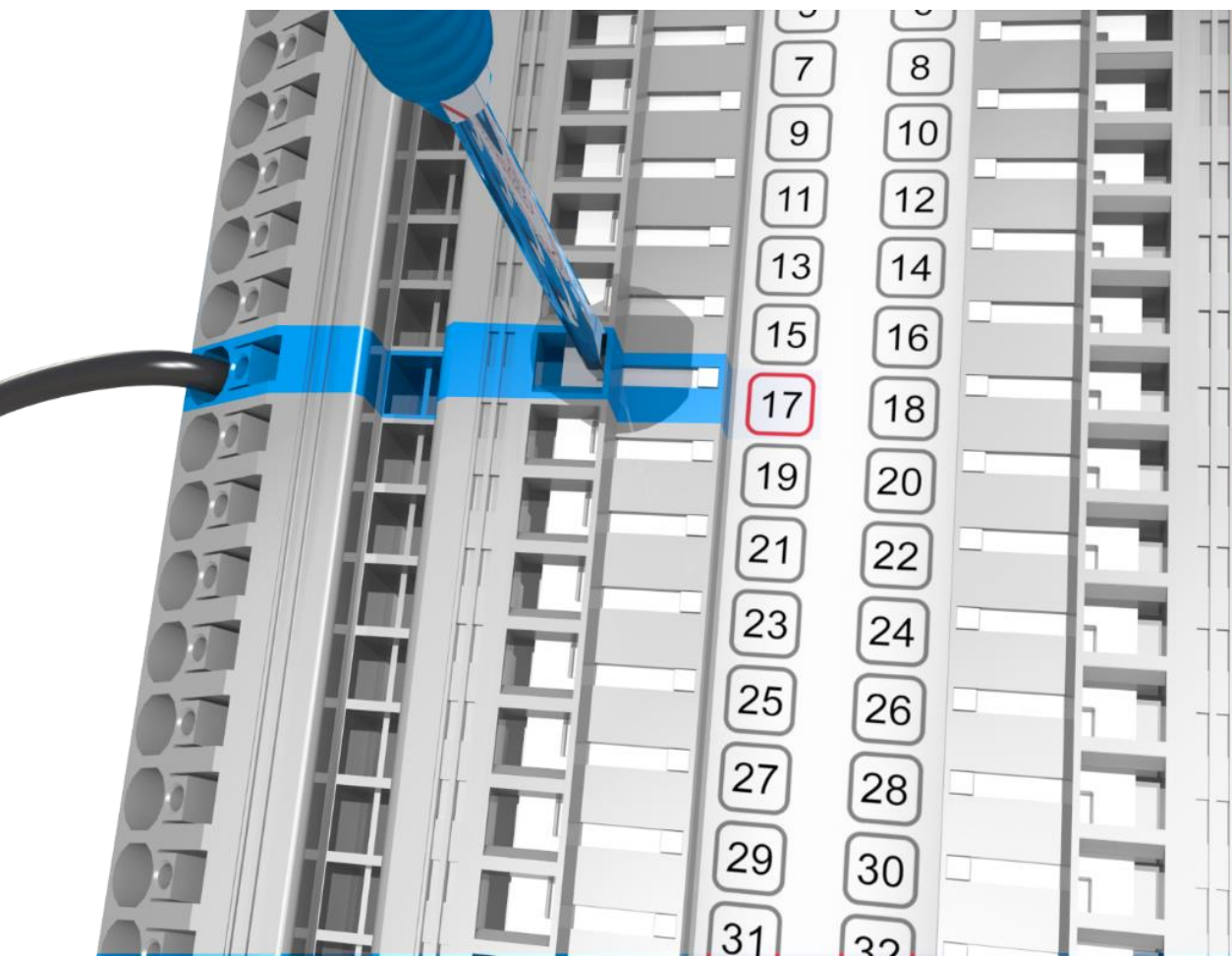
- Replace the circuit breaker terminal cover

## STEP 12

Reconnect the insulated neutral slide to the **NEUTRAL** bar and ensure it is in position!

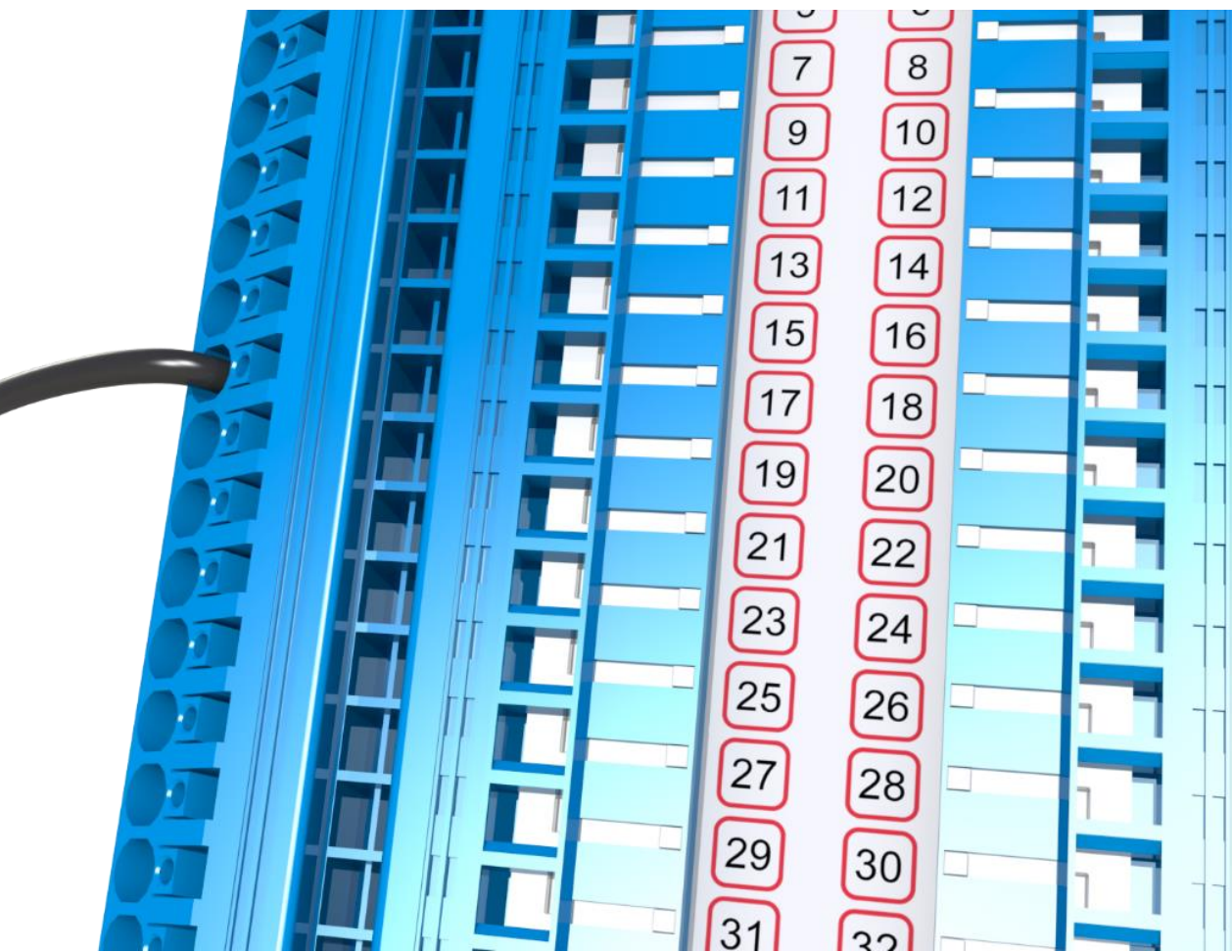


- Reconnect the insulated neutral slide to the **NEUTRAL** bar and ensure it is in position!



- Reconnect the insulated neutral slide to the **NEUTRAL** bar and ensure it is in position!

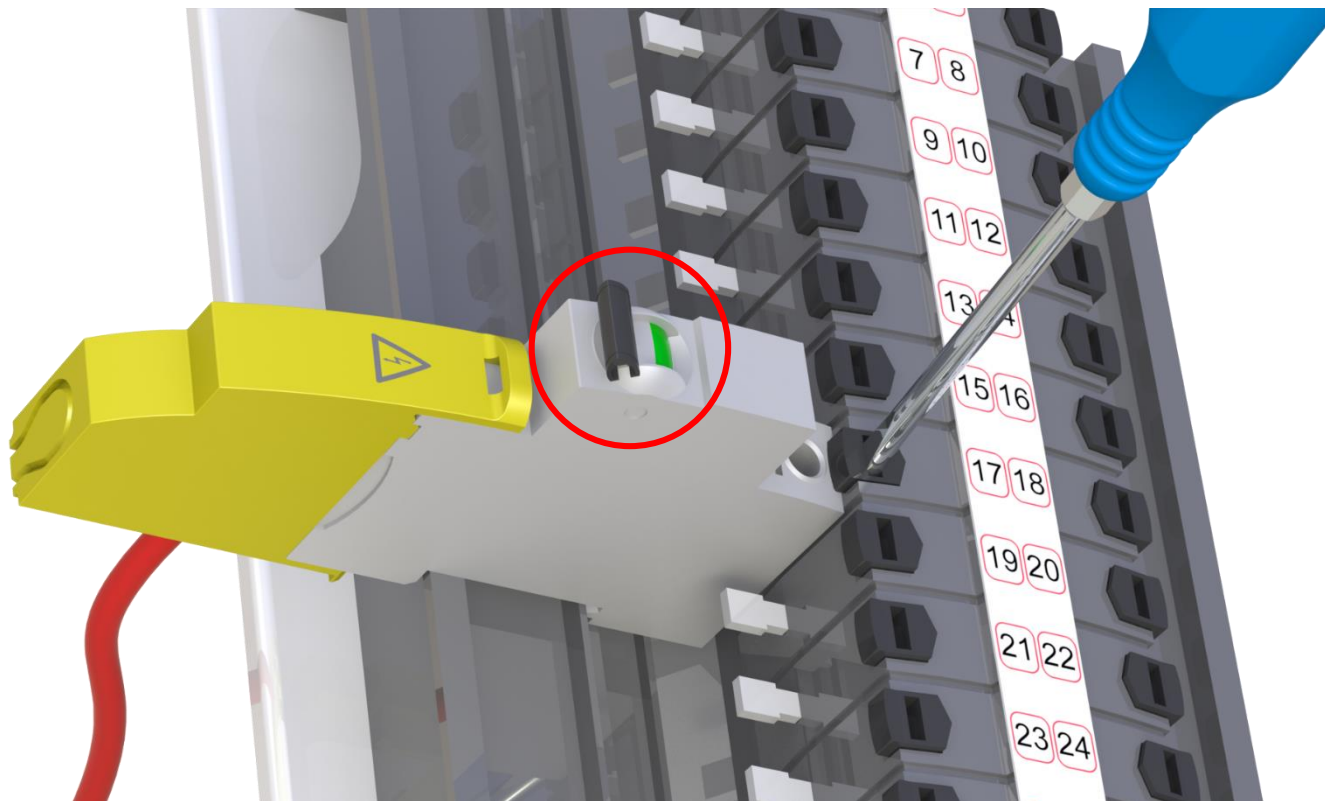




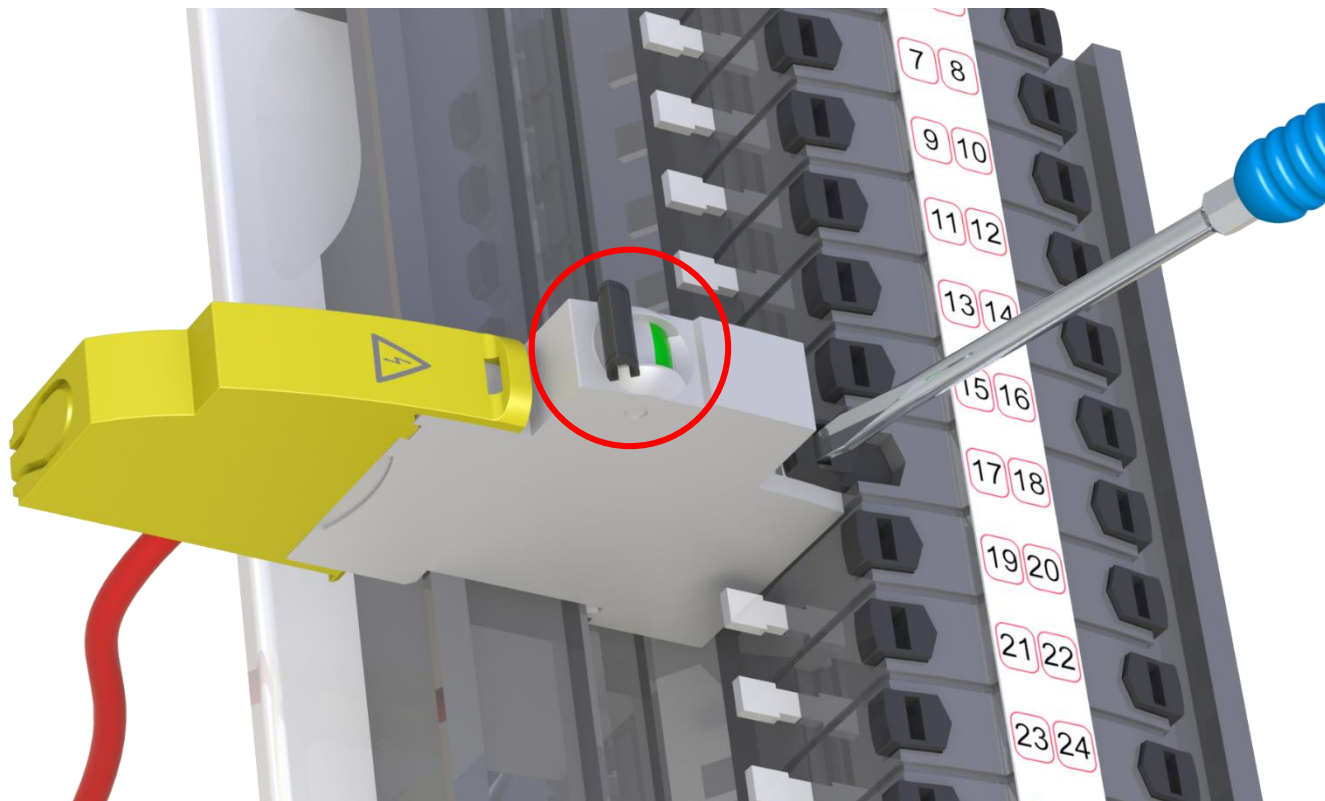
Reconnect the insulated neutral slide to the **NEUTRAL** bar and ensure it is in position!

## STEP 13

With the circuit breaker still in the **OFF** position, operate the black isolation slide so it is fully pushed towards the circuit breaker and re-check



With the circuit breaker still in the **OFF** position, operate the black isolation slide so it is fully pushed towards the circuit breaker and re-check




With the circuit breaker still in the **OFF** position, operate the black isolation slide so it is fully pushed towards the circuit breaker and re-check

## STEP 14 Ensure the following:

 **no tools are left  
in the  
switchboard**

and that

 **all connections  
are sound**

## STEP 14 Ensure the following:



**no tools are left  
in the  
switchboard**

and that



**all connections  
are sound**

## STEP 14 Ensure the following:



**no tools are left  
in the  
switchboard**

and that



**all connections  
are sound**

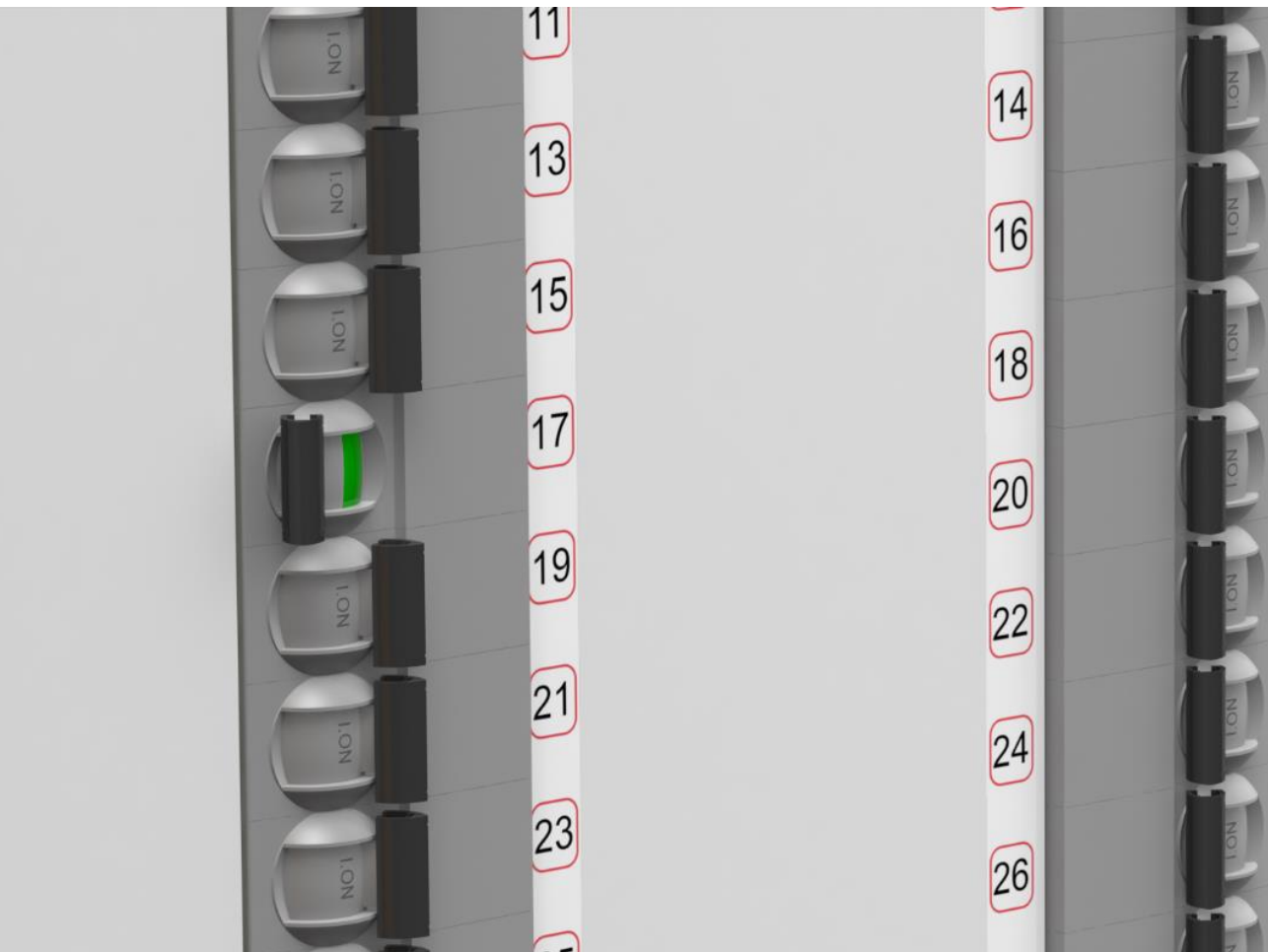


**STEP 15** Close the escutcheon



## STEP 16

The circuit breaker may now be switched to the **ON** position



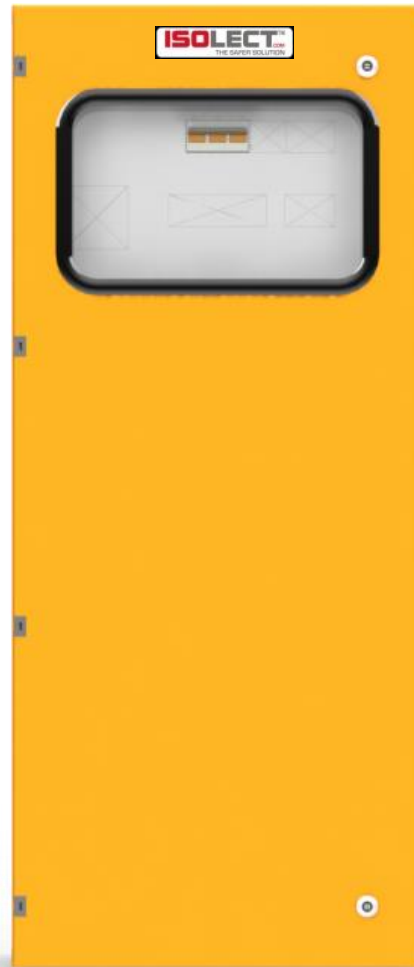
■ The circuit breaker  
may now be switched  
to the **ON** position



■ The circuit breaker may now be switched to the **ON** position

■ You have successfully completed the replacement of a circuit breaker!

**ISOLECT**<sup>TM</sup>  
THE SAFER SOLUTION







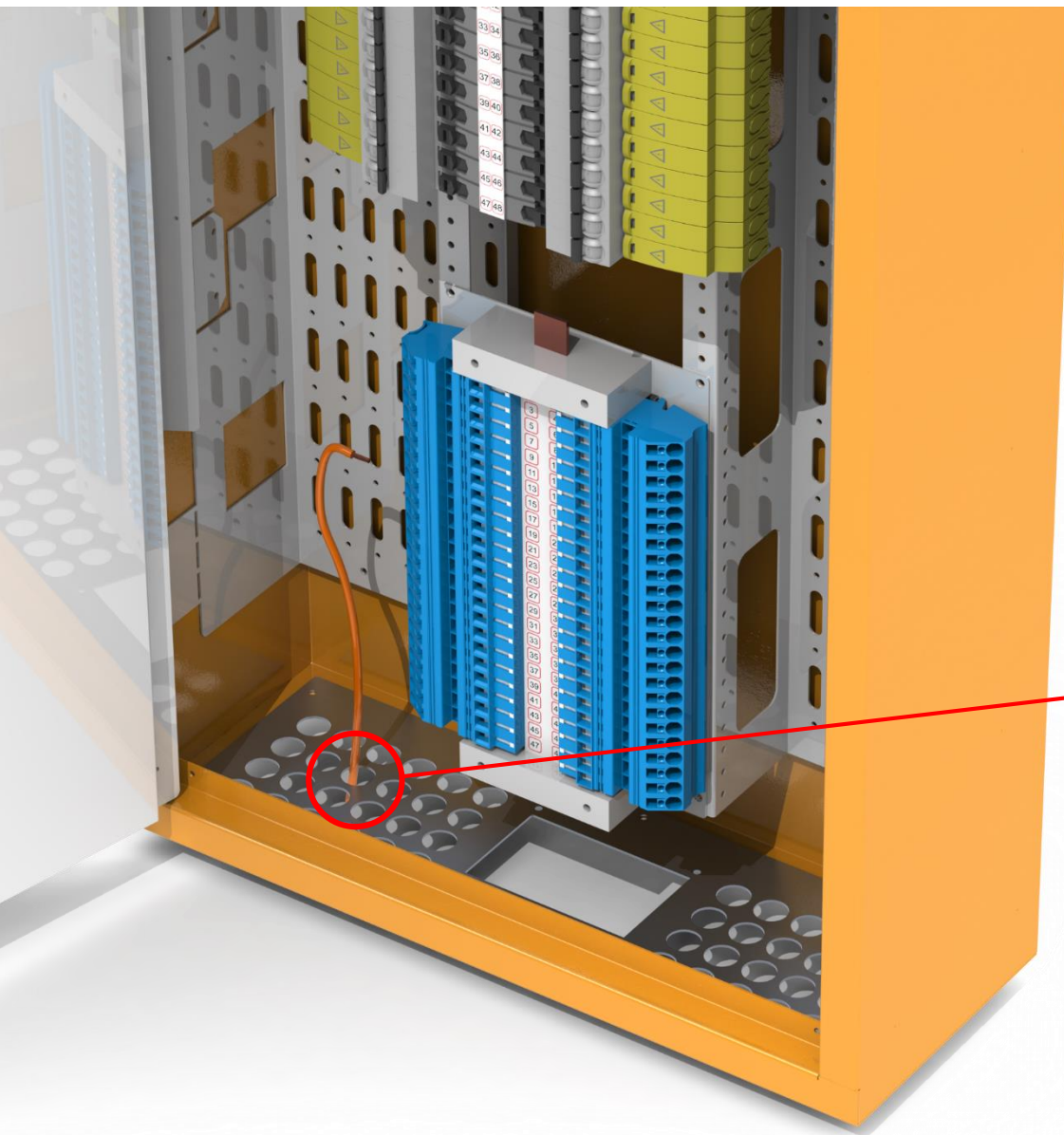
- An optional Voltage test point can be provided.  
Check that your voltage tester is functioning correctly.



**STEP 1** Decide on  
**OVERHEAD** entry  
or  
**UNDER FLOOR** entry

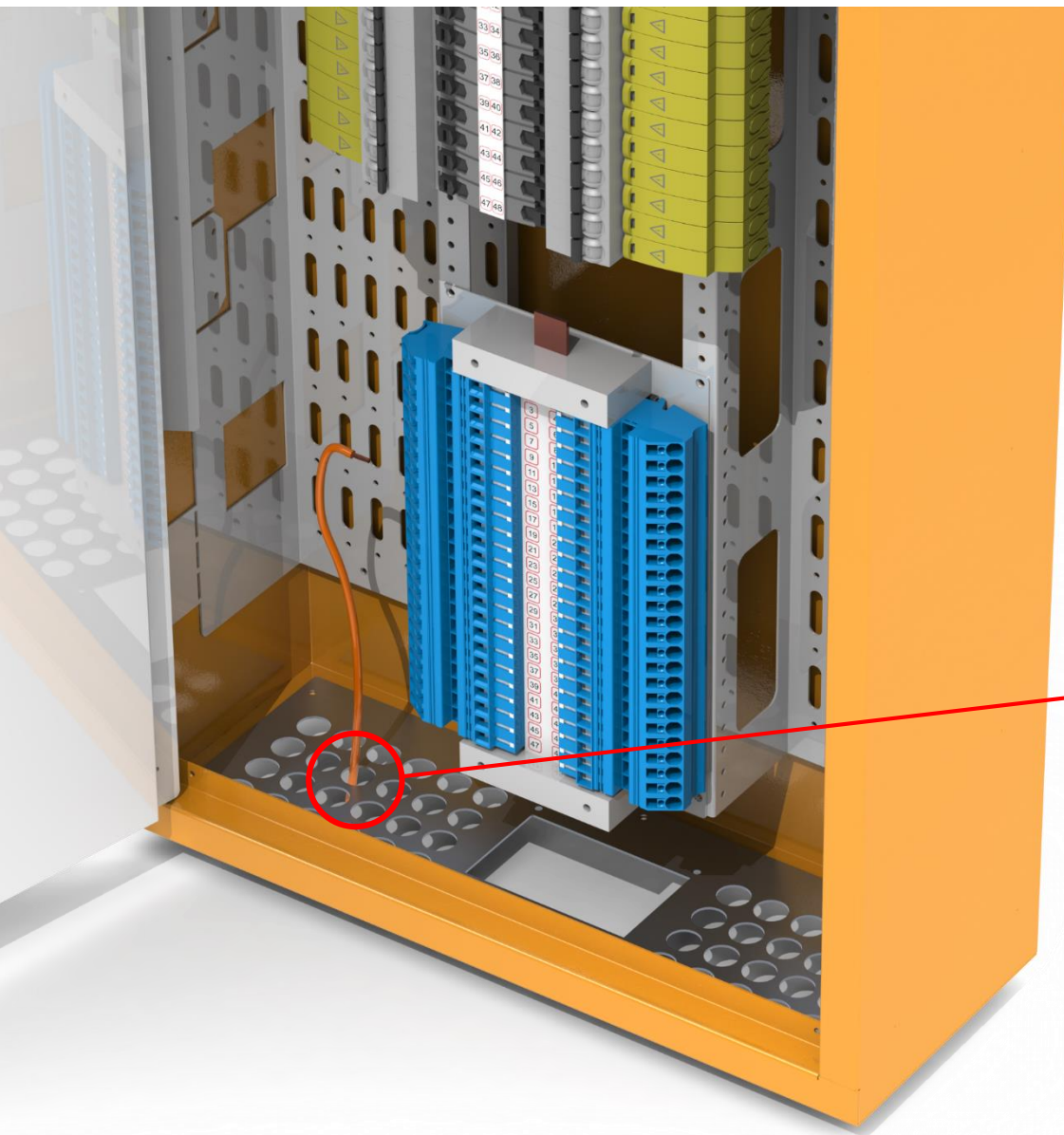


Decide on  
**OVERHEAD** entry  
or  
**UNDER FLOOR** entry



Decide on  
**OVERHEAD** entry  
or  
**UNDER FLOOR** entry

Select the pre-punched  
hole in the combination  
neoprene / aluminium  
entry plate and push  
the cable through

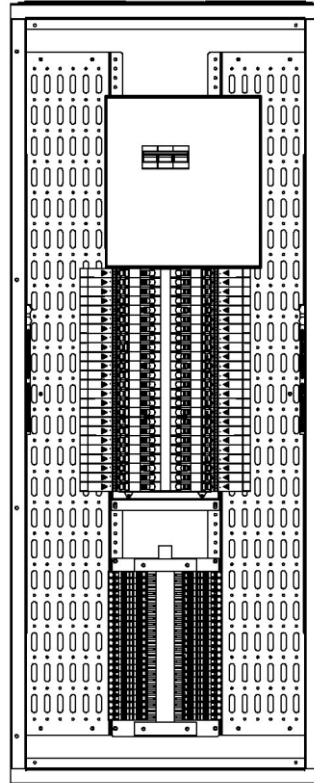


Decide on  
**OVERHEAD** entry  
or  
**UNDER FLOOR** entry

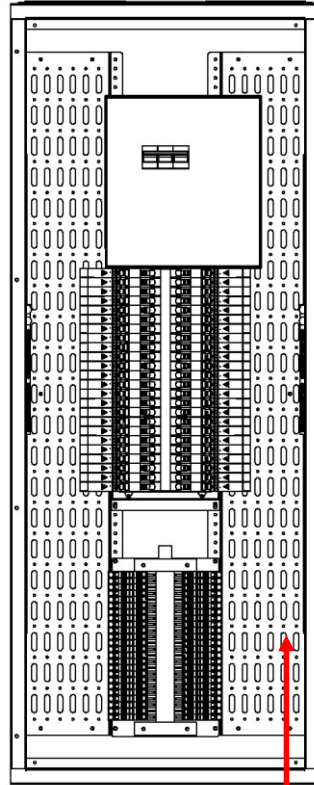
Select the pre-punched  
hole in the combination  
neoprene / aluminium  
entry plate and push  
the cable through

Start with the rear of  
the board

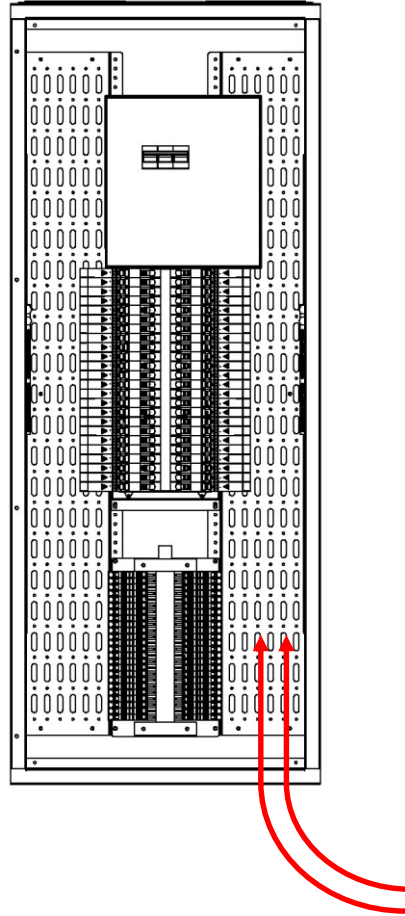
## STEP 2 Draw cables to the required point



■ Draw cables to the required point

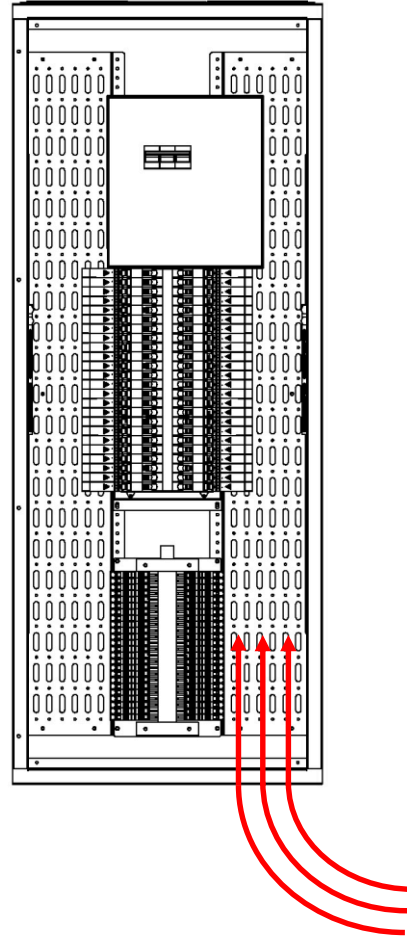


Draw cables to the  
required point

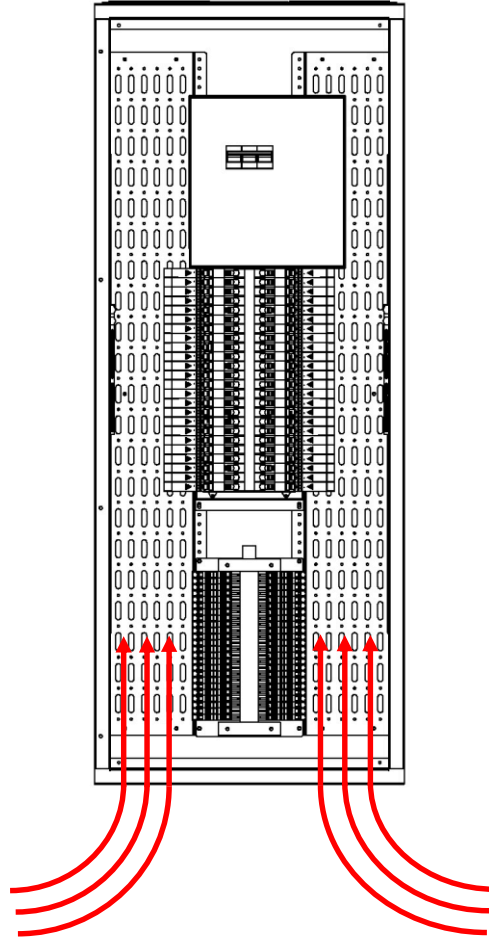


■ Draw cables to the required point

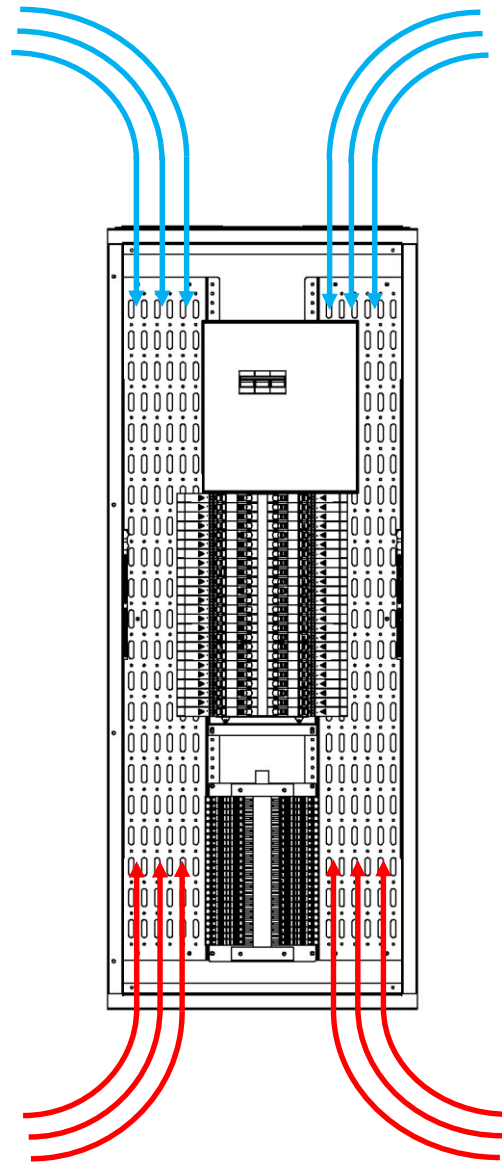




■ Draw cables to the required point



■ Draw cables to the required point



■ Draw cables to the required point



## CABLING REQUIREMENT

Sheath of cable should  
be left on as long as  
possible before  
connection



## CABLING REQUIREMENT

Sheath of cable should be left on in the duct and for a short space outside the duct

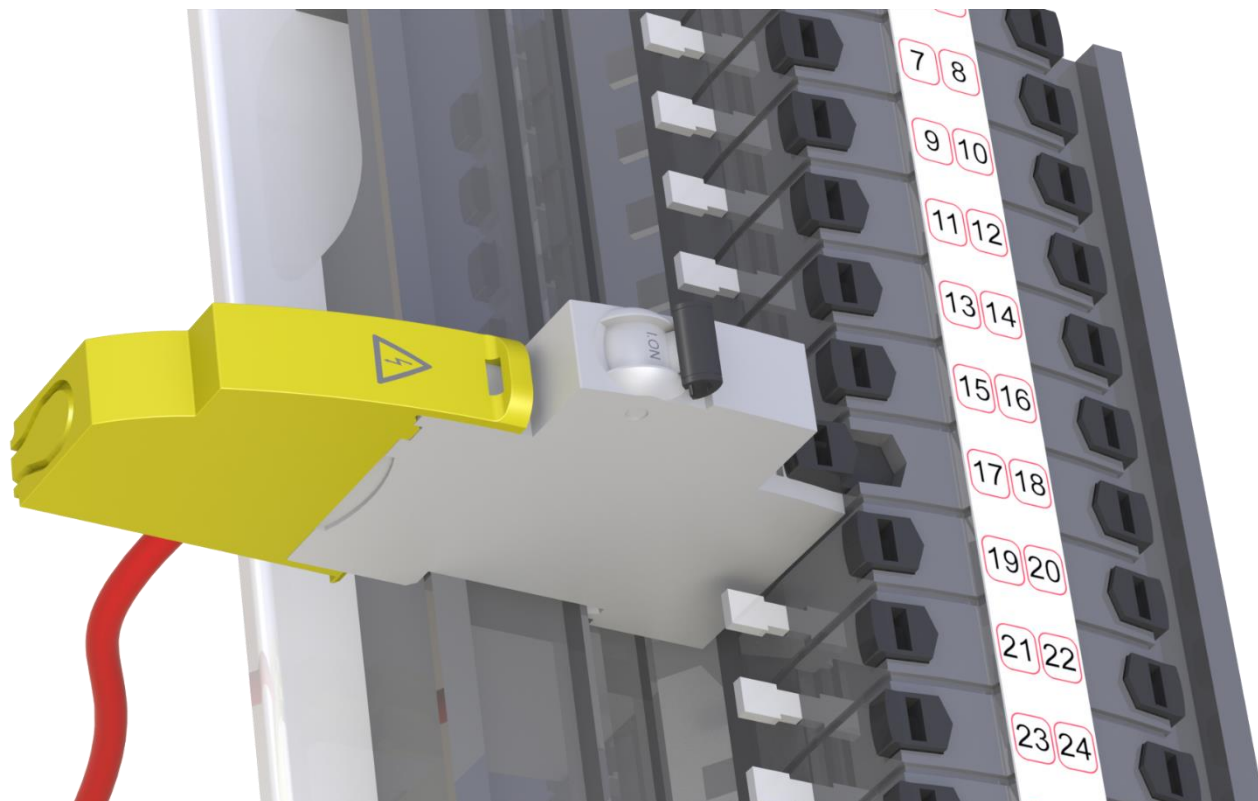
This assists with easy identification of which **NEUTRAL** and **EARTH** are associated with the relevant **ACTIVE**

### ■ PLEASE NOTE

For clarity, the following images show only a single circuit breaker on the chassis.

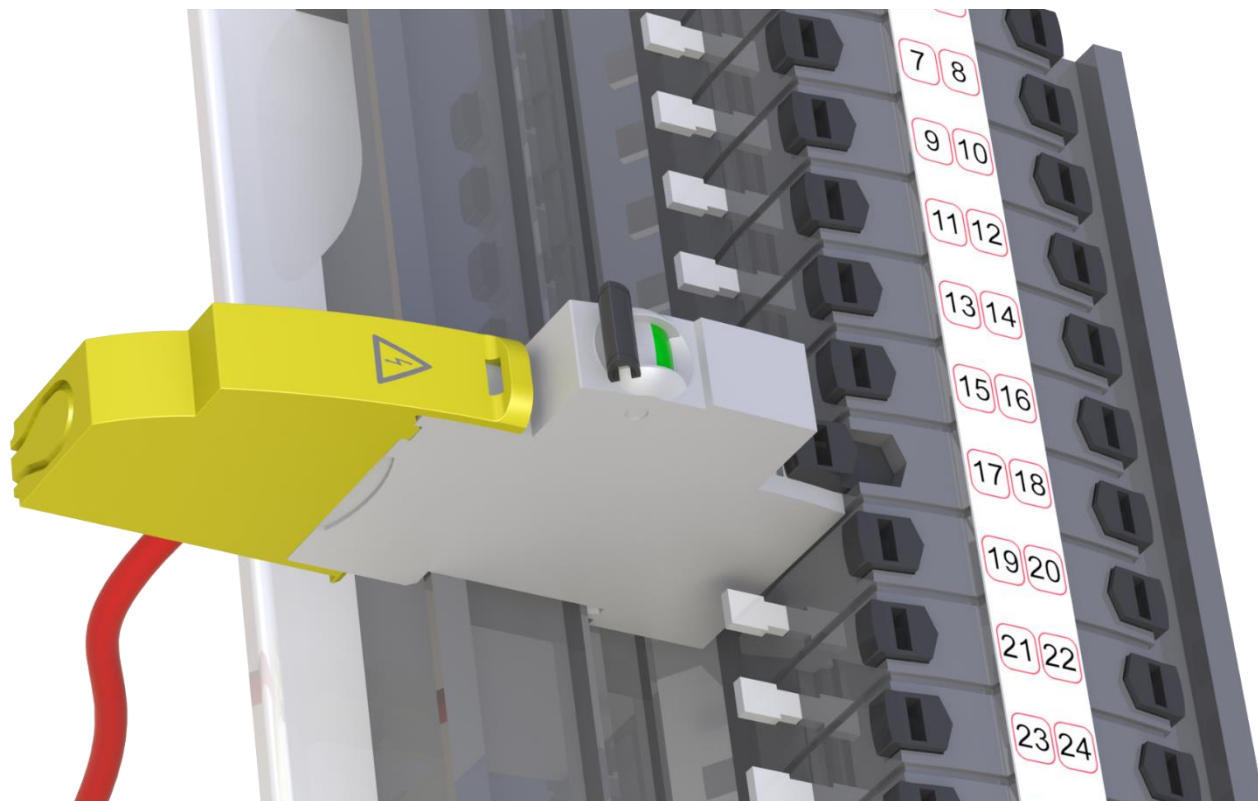
The chassis should always be fully populated with circuit breakers fitted and terminal covers in place!

**STEP 3** Switch the circuit  
breaker toggle to the  
**OFF** position



■ Switch the circuit breaker toggle to the **OFF** position





- Switch the circuit breaker toggle to the **OFF** position

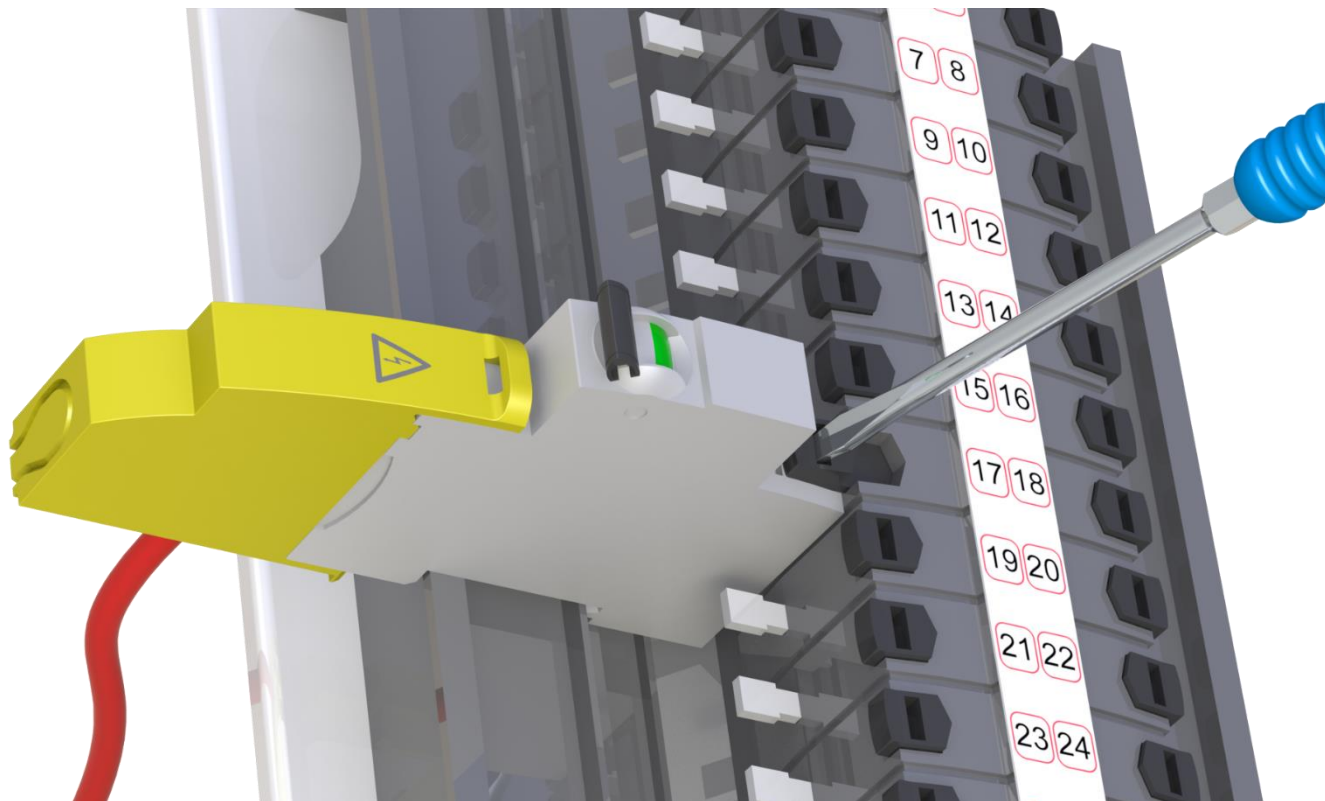
## STEP 4

Using the black chassis isolation slide, isolate the circuit breaker pole

### WARNING



DO NOT OPERATE  
THE BLACK  
ISOLATION SLIDE  
WITH THE CIRCUIT  
BREAKER ON!

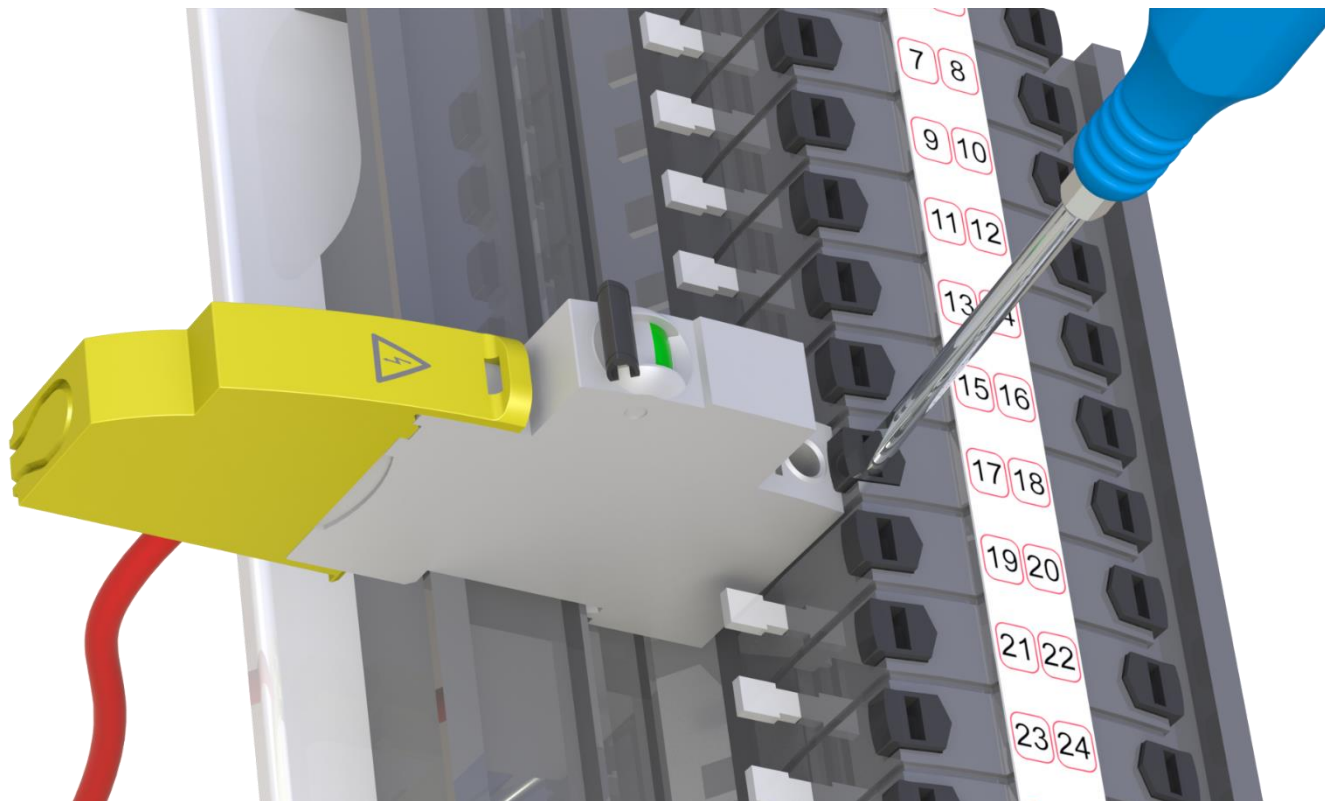


Using the black chassis isolation slide, isolate the circuit breaker pole



## **WARNING**

**DO NOT OPERATE  
THE BLACK  
ISOLATION SLIDE  
WITH THE CIRCUIT  
BREAKER ON!**



Using the black chassis isolation slide, isolate the circuit breaker pole



## **WARNING**

**DO NOT OPERATE  
THE BLACK  
ISOLATION SLIDE  
WITH THE CIRCUIT  
BREAKER ON!**

## STEP 5

Using the insulated neutral slide, disconnect the **NEUTRAL** terminal from the neutral bar



### WARNING

DO NOT OPERATE  
THE NEUTRAL SLIDE  
IF THE CIRCUIT  
BREAKER IS ON OR  
THE CHASSIS  
SLIDES ARE  
ENERGISED!



- Using the insulated neutral slide, disconnect the **NEUTRAL** terminal from the neutral bar



## **WARNING**

**DO NOT OPERATE  
THE NEUTRAL SLIDE  
IF THE CIRCUIT  
BREAKER IS ON OR  
THE CHASSIS  
SLIDES ARE  
ENERGISED!**



- Using the insulated neutral slide, disconnect the **NEUTRAL** terminal from the neutral bar

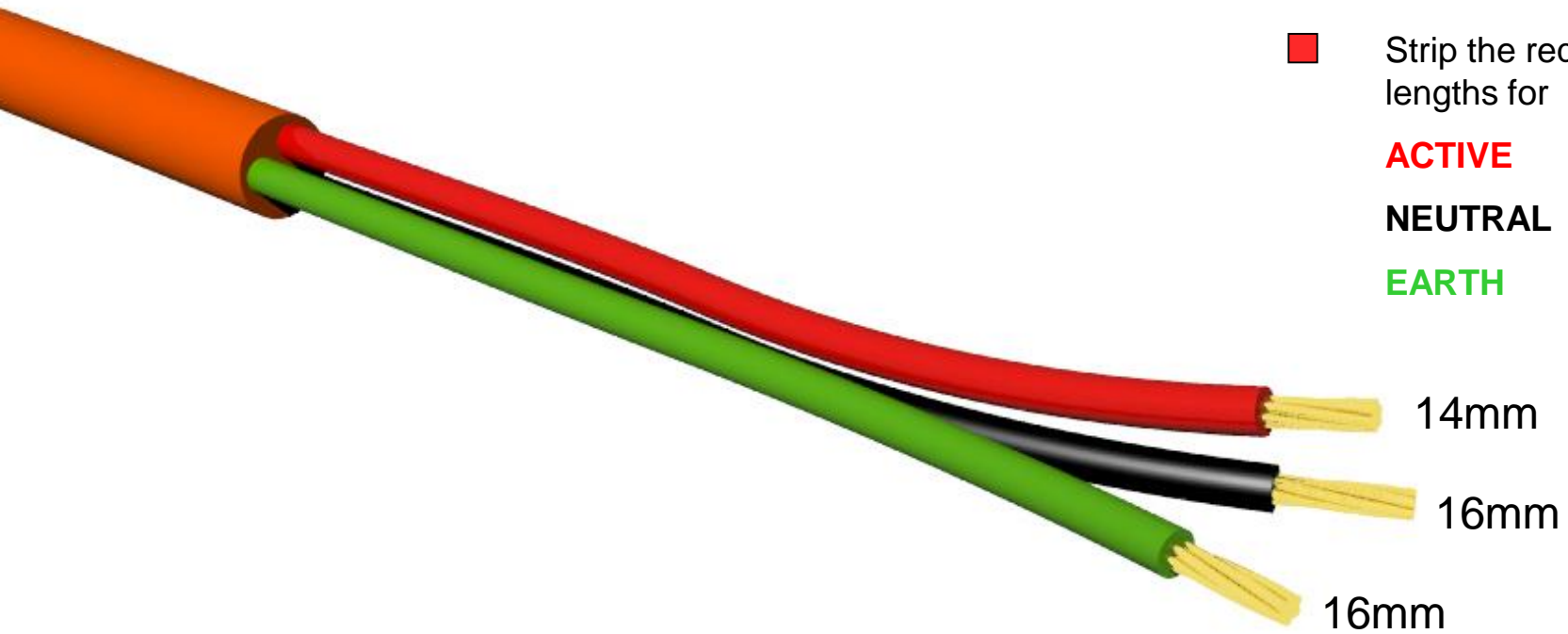


## **WARNING**

**DO NOT OPERATE THE NEUTRAL SLIDE IF THE CIRCUIT BREAKER IS ON OR THE CHASSIS SLIDES ARE ENERGISED!**

**STEP 7** Strip the required  
lengths for  
**ACTIVE**  
**NEUTRAL**  
**EARTH**



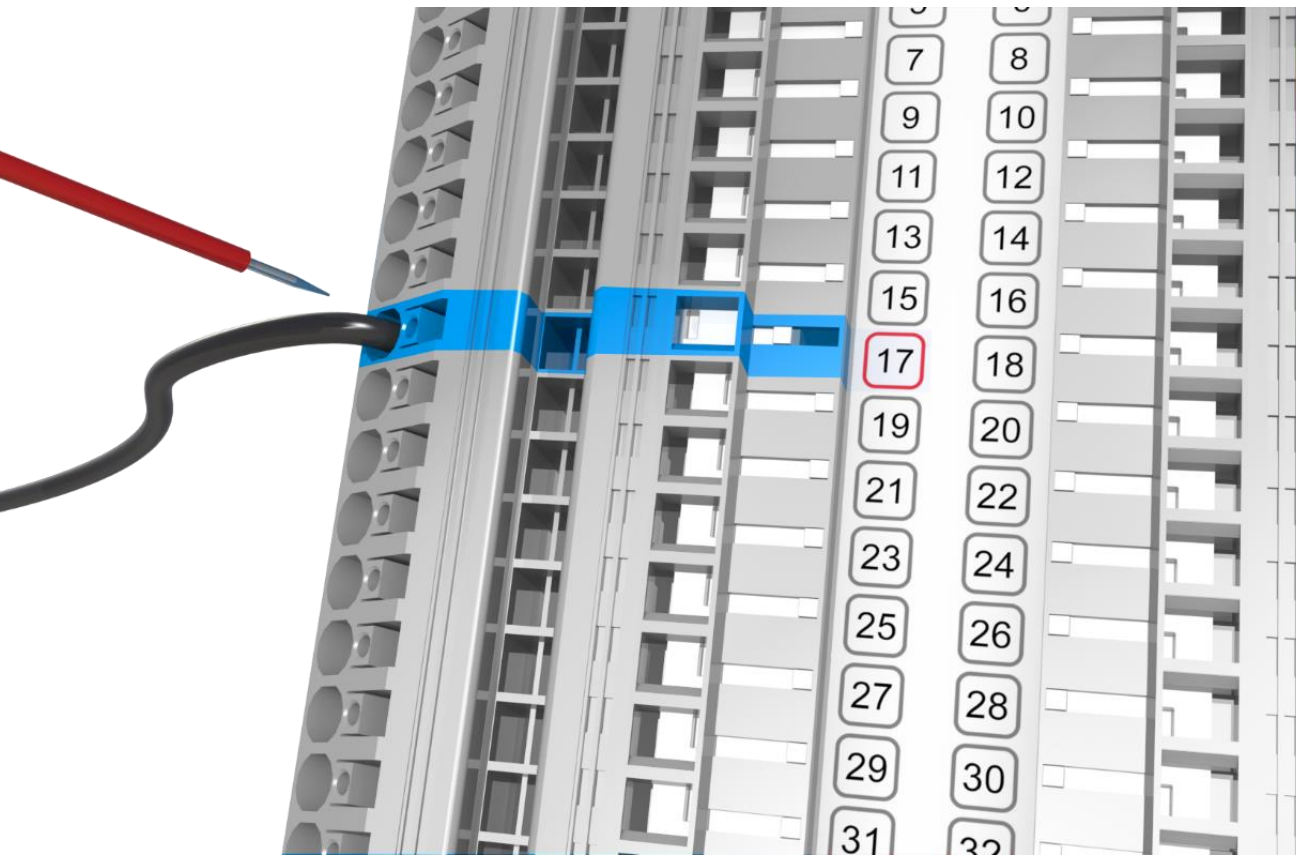


## STEP 8

Select the correct **EARTH** termination and connect to the brass link with the screw connection

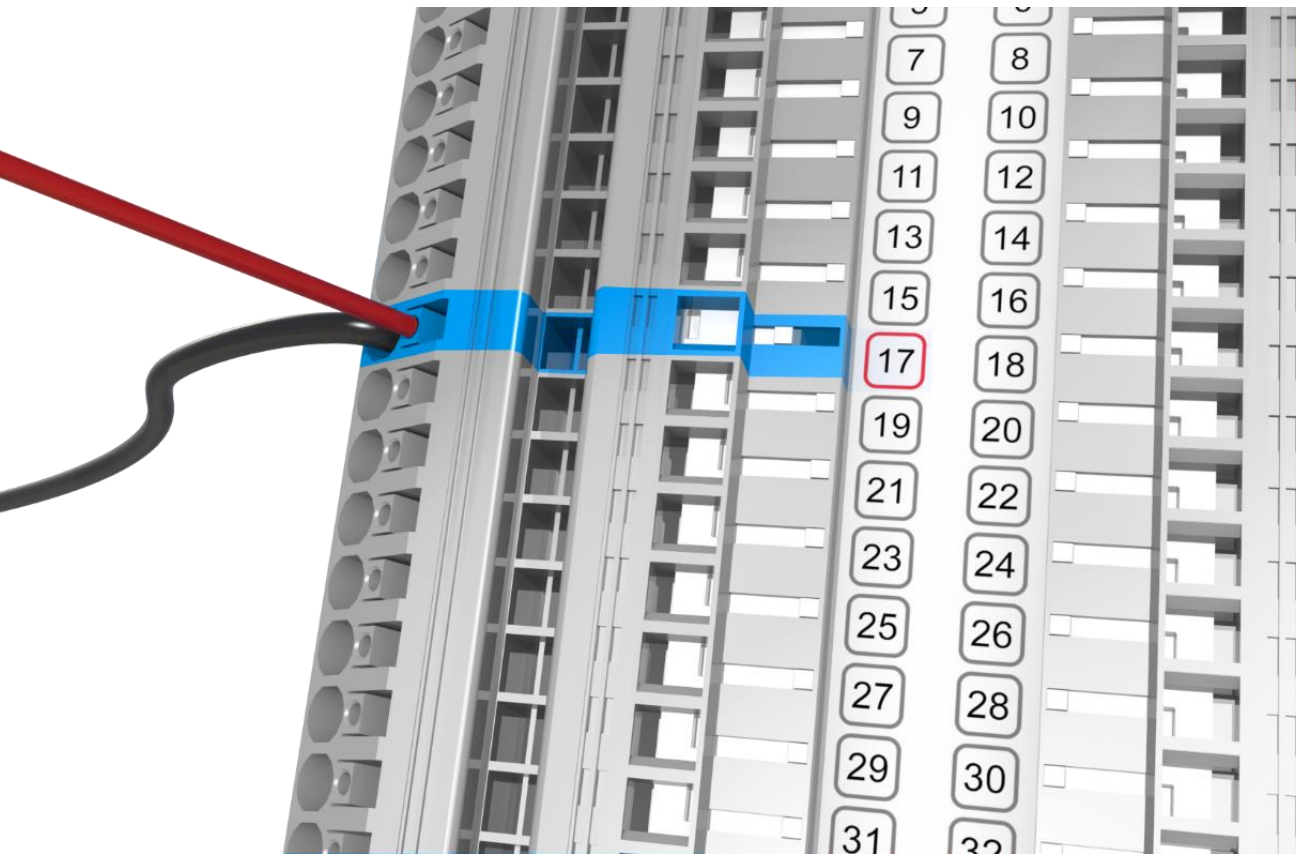
## STEP 9

Test to ensure the neutral is dead.



Use a Voltage tester to test from the neutral cable termination to earth.

This will ensure the neutral is no longer live.

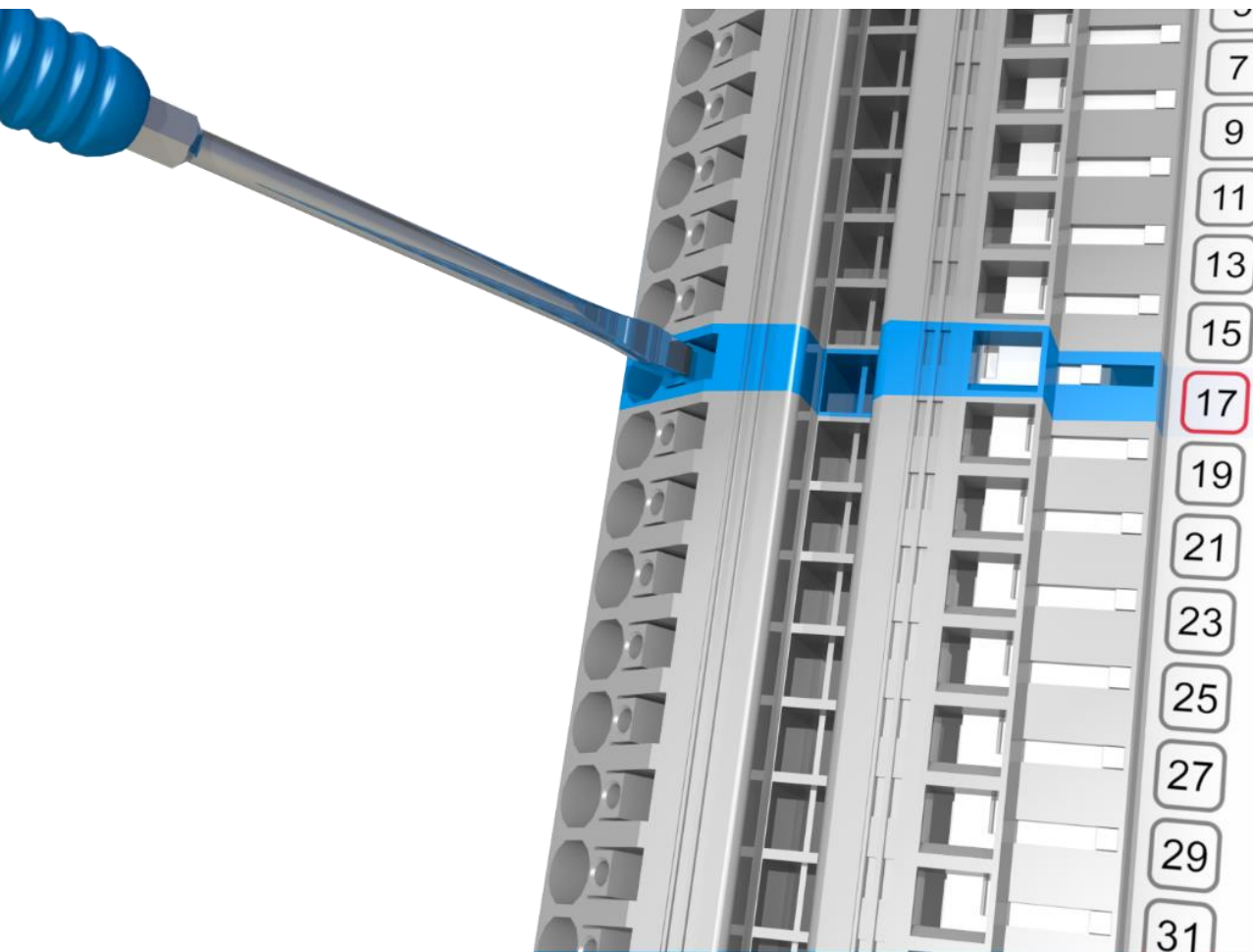


Use a Voltage tester to test from the neutral cable termination to earth.

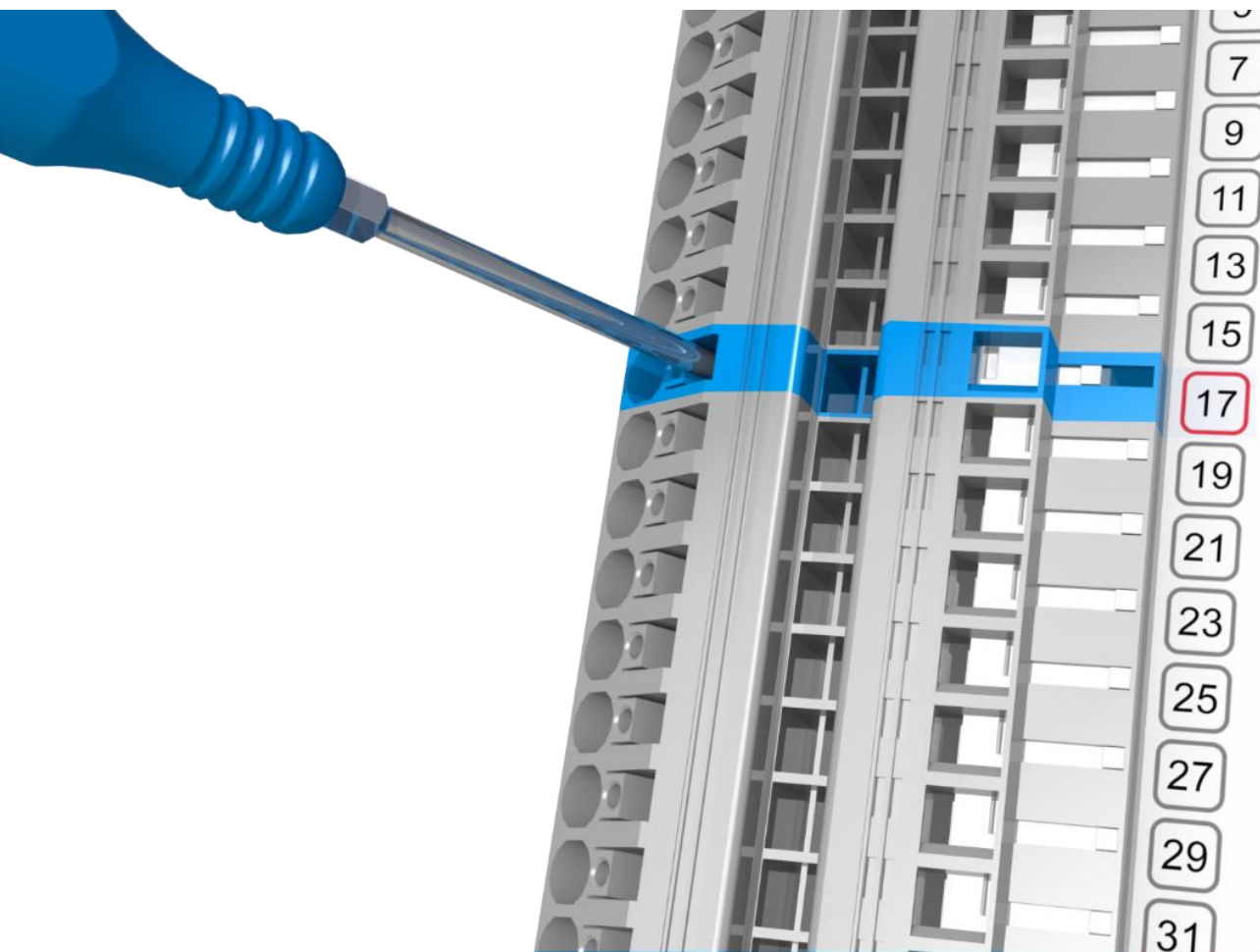
This will ensure the neutral is no longer live.

## STEP 10

Select the correct **NEUTRAL** termination and push a terminal screwdriver into the spring clamp release

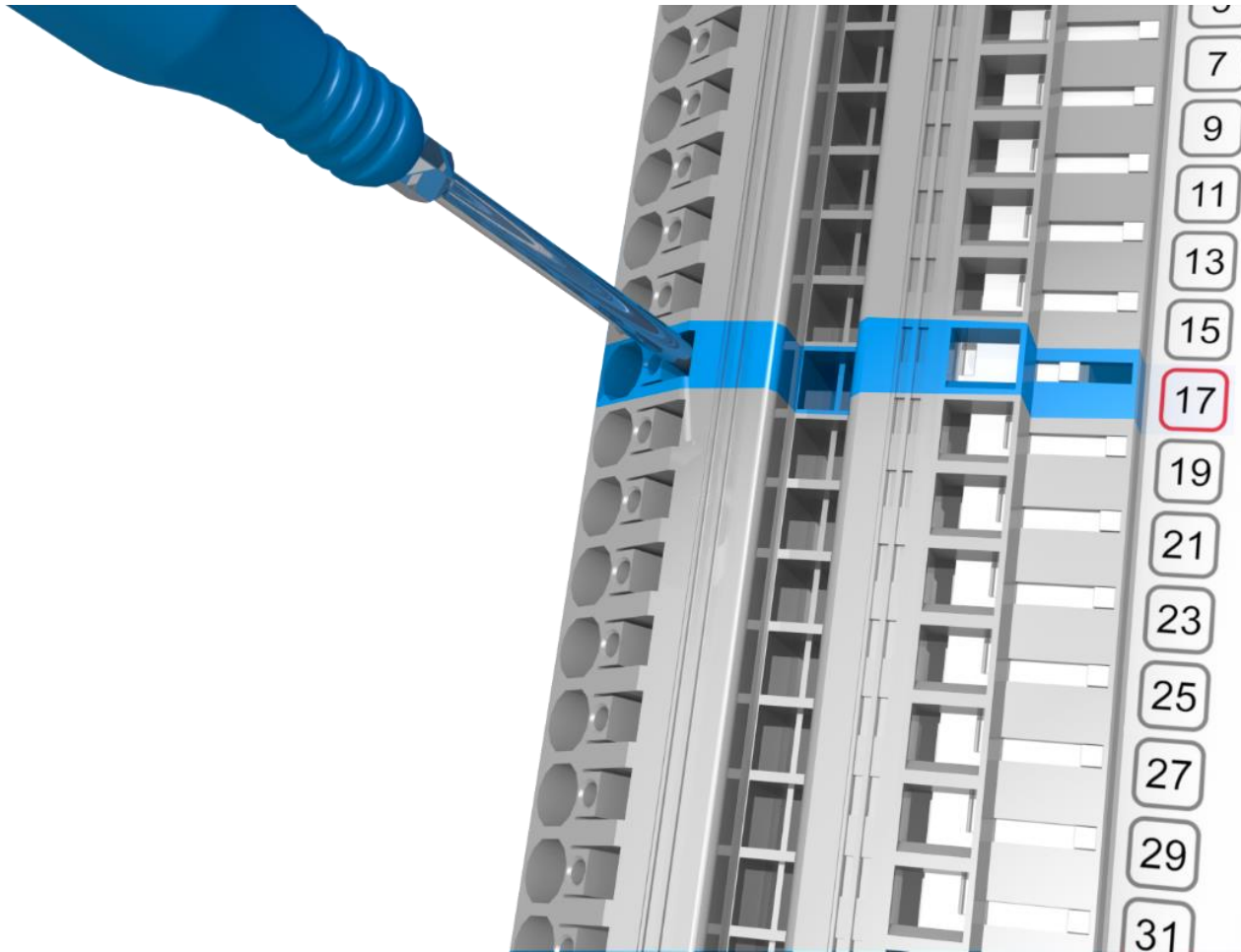


Select the correct  
**NEUTRAL** termination  
and push a terminal  
screwdriver into the  
spring clamp release



Select the correct  
**NEUTRAL** termination  
and push a terminal  
screwdriver into the  
spring clamp release

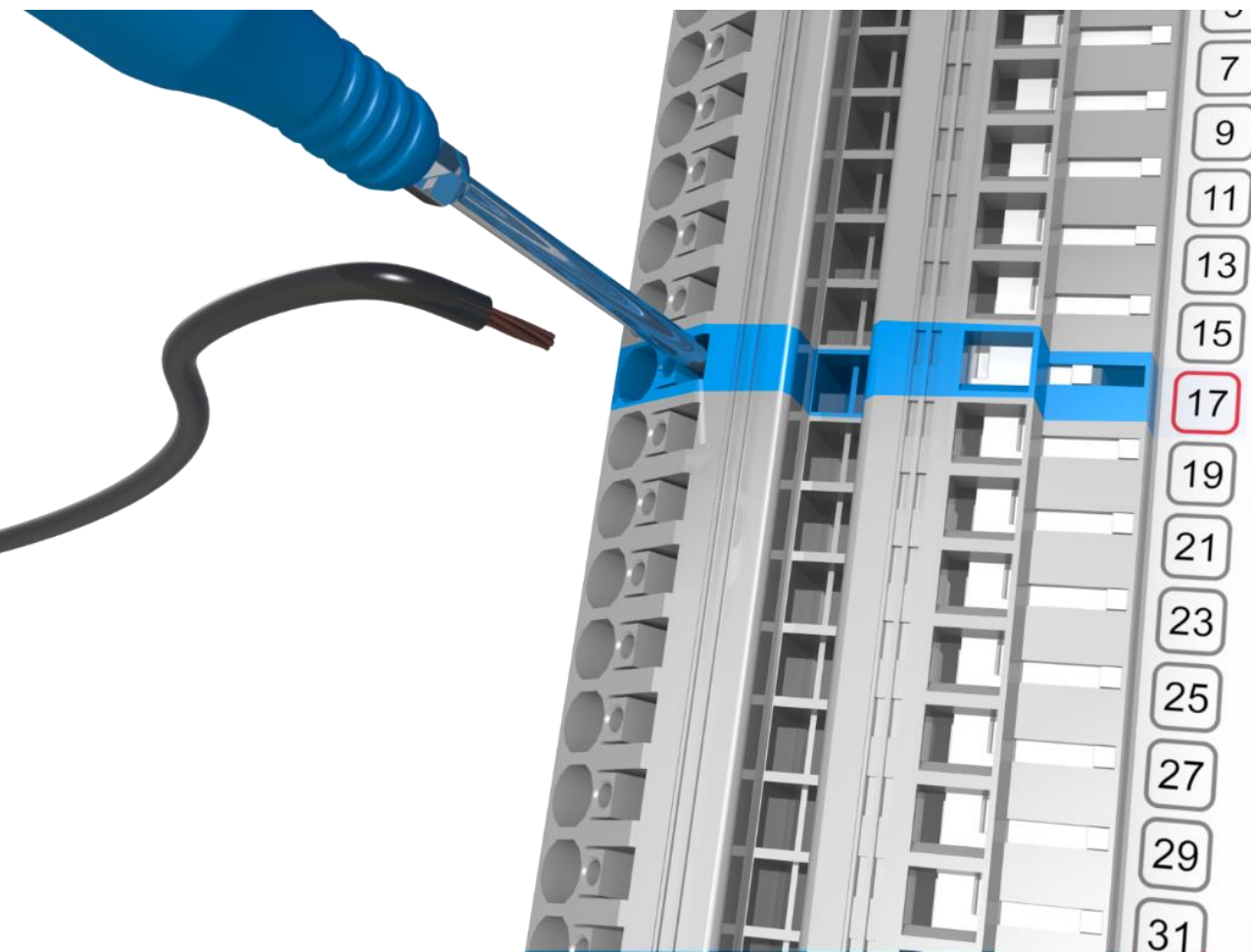




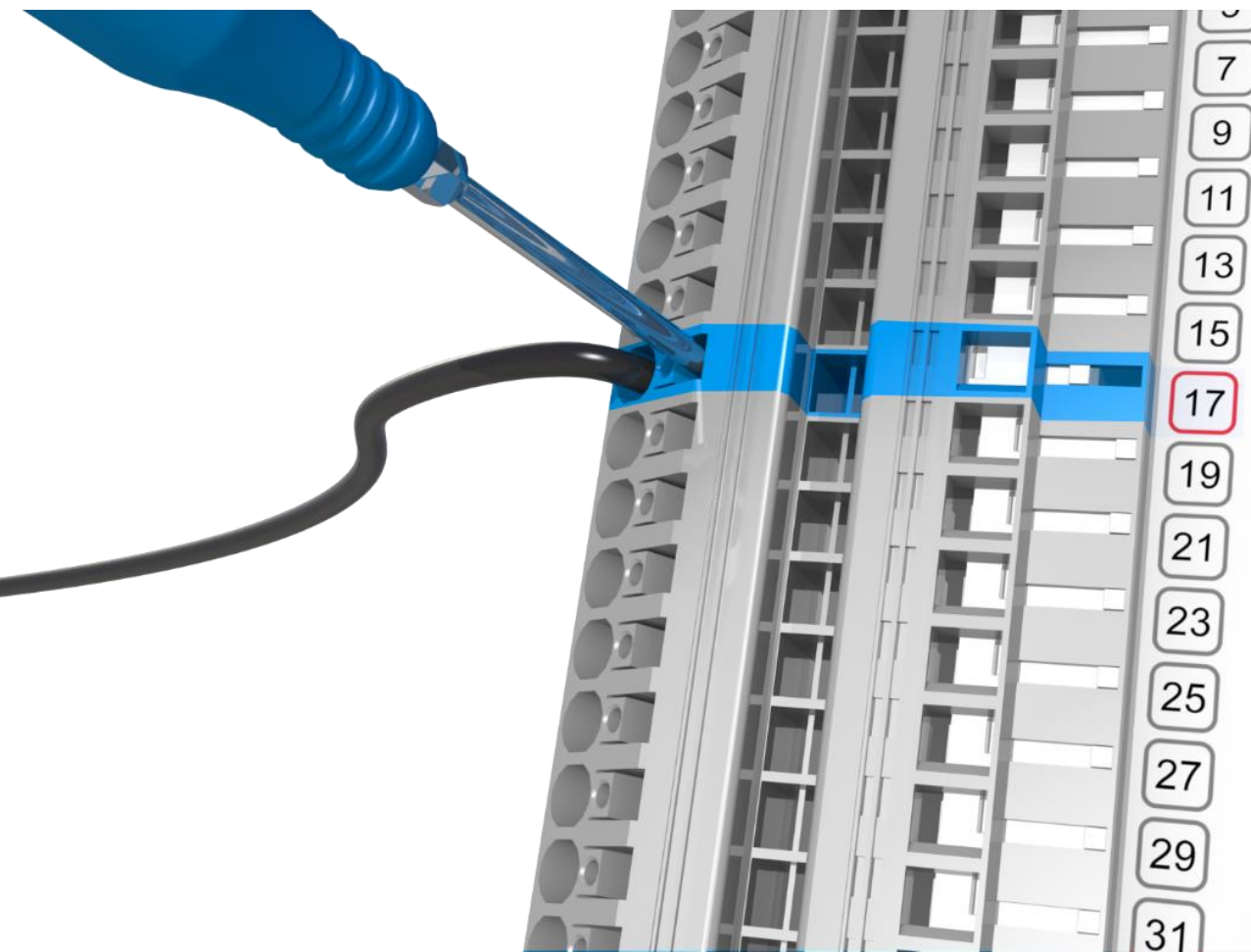
Select the correct  
**NEUTRAL** termination  
and push a terminal  
screwdriver into the  
spring clamp release

## STEP 11

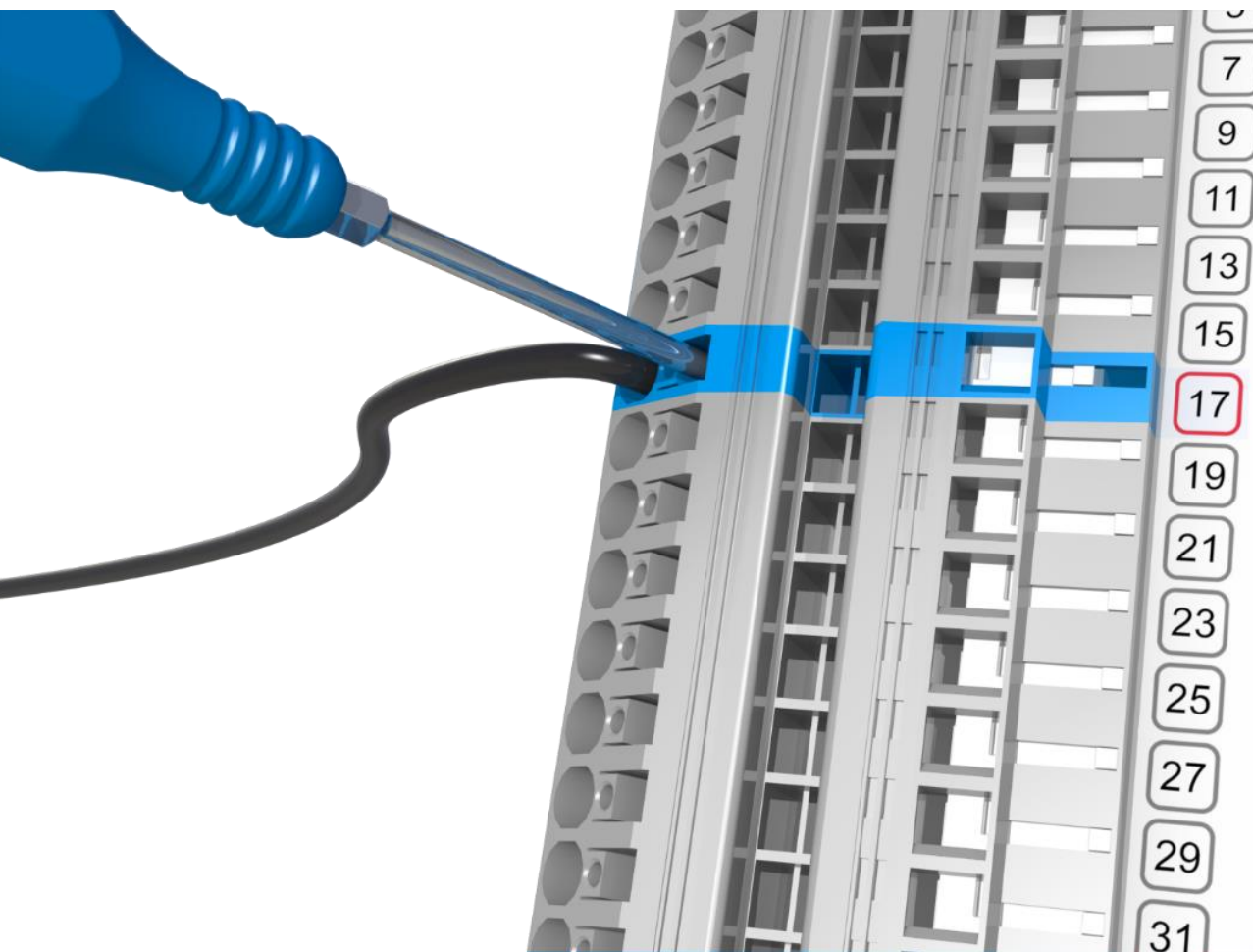
Insert the stripped  
section of the  
**NEUTRAL**  
conductor...



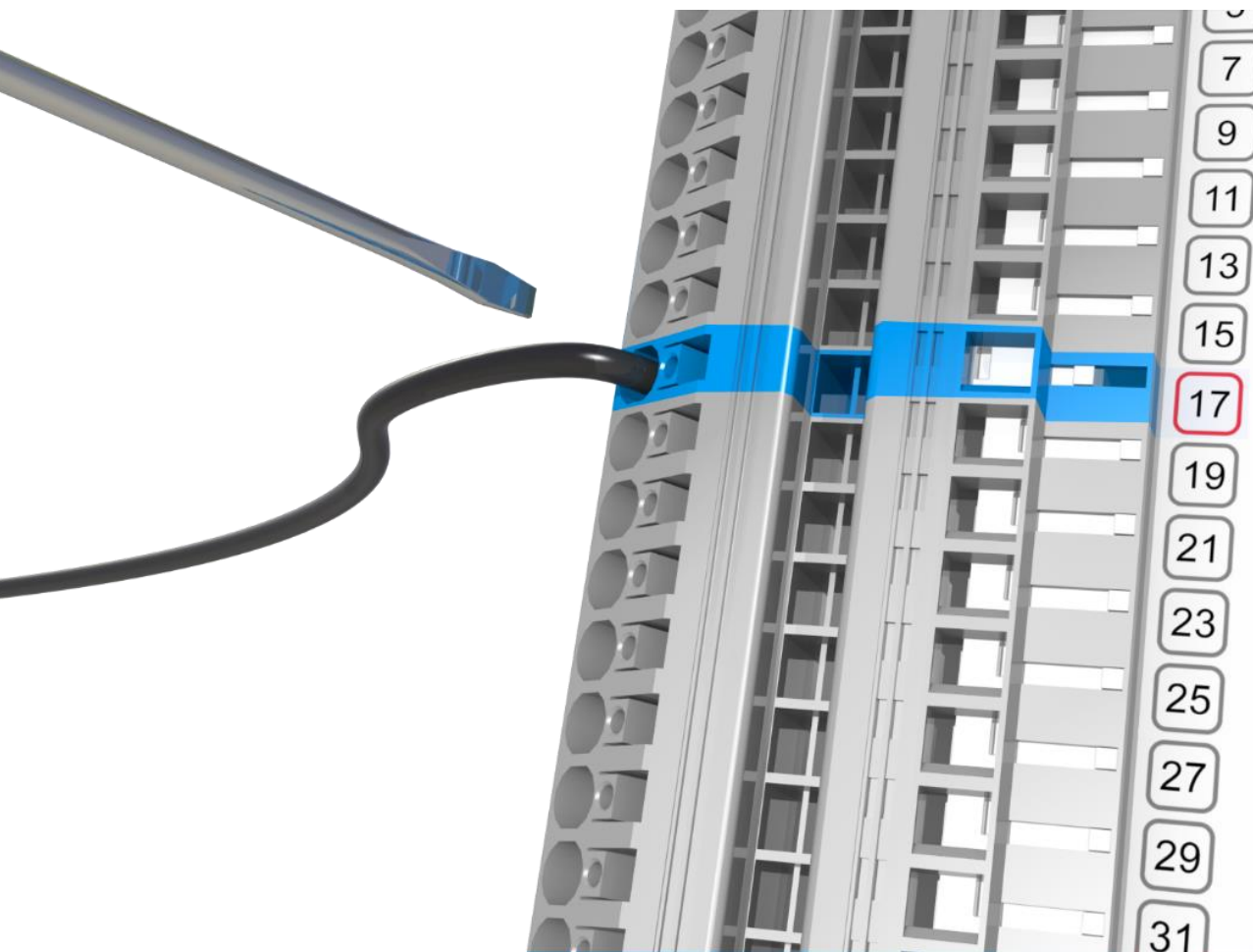
■ Insert the stripped section of the **NEUTRAL** conductor...



■ Insert the stripped section of the **NEUTRAL** conductor...



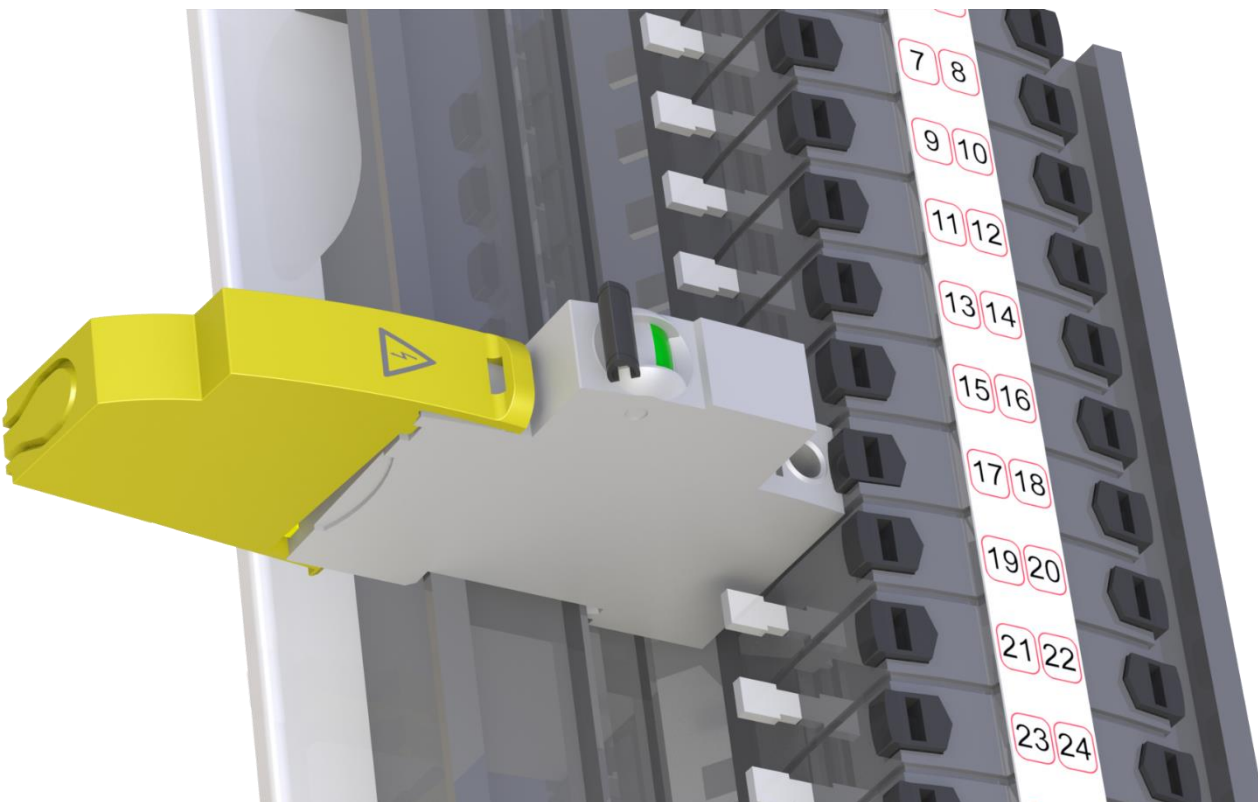
- and release the screwdriver, clamping the **NEUTRAL** in position



and release the  
screwdriver, clamping  
the **NEUTRAL** in  
position

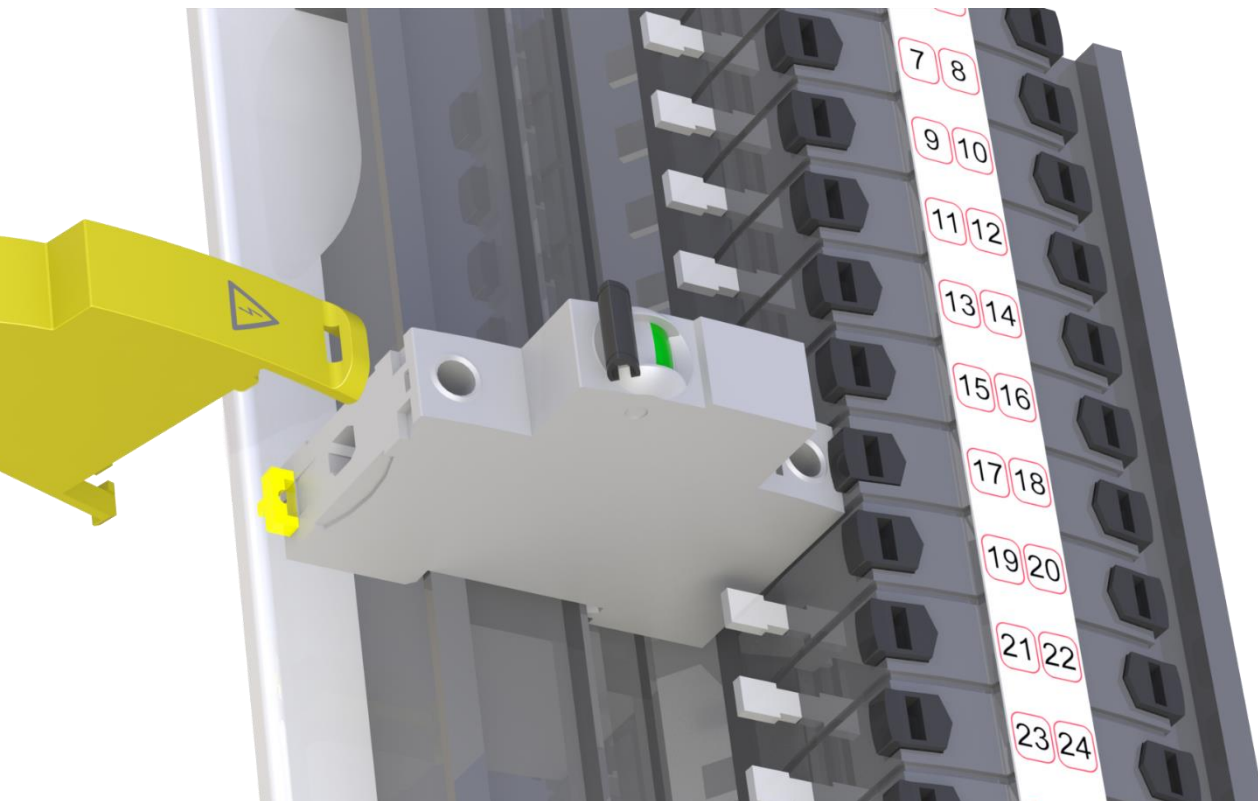
## STEP 12

Remove the circuit  
breaker terminal cover

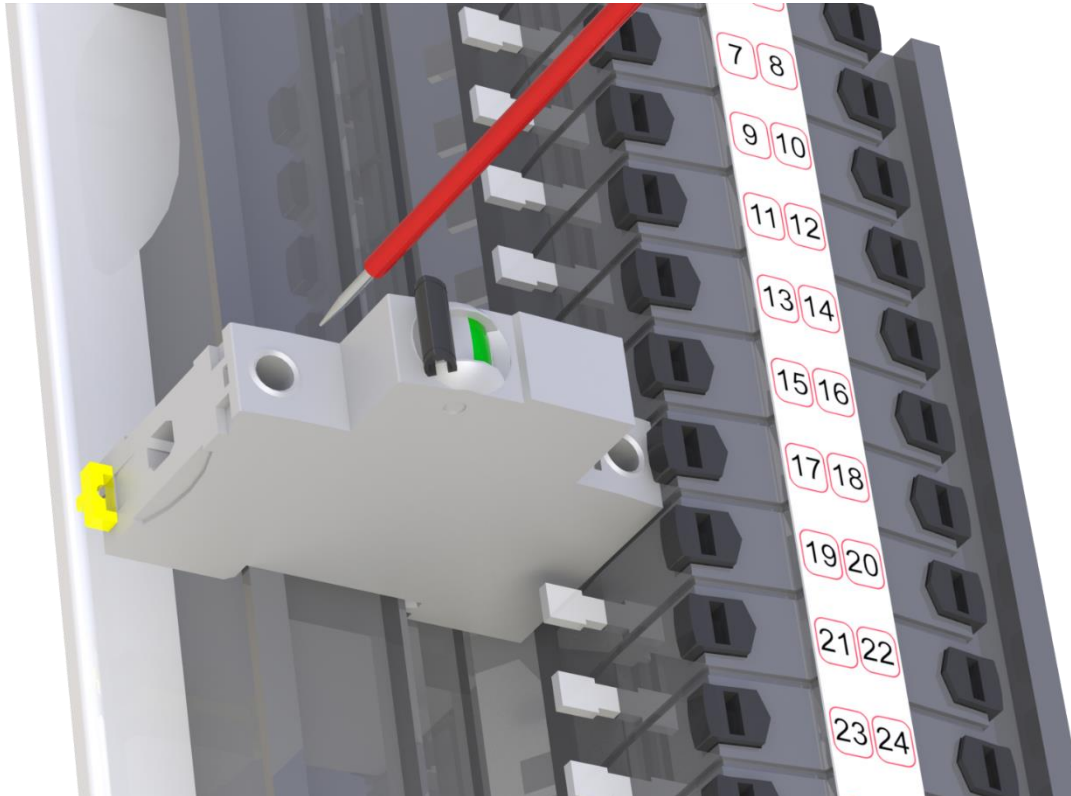


Remove the circuit  
breaker terminal cover

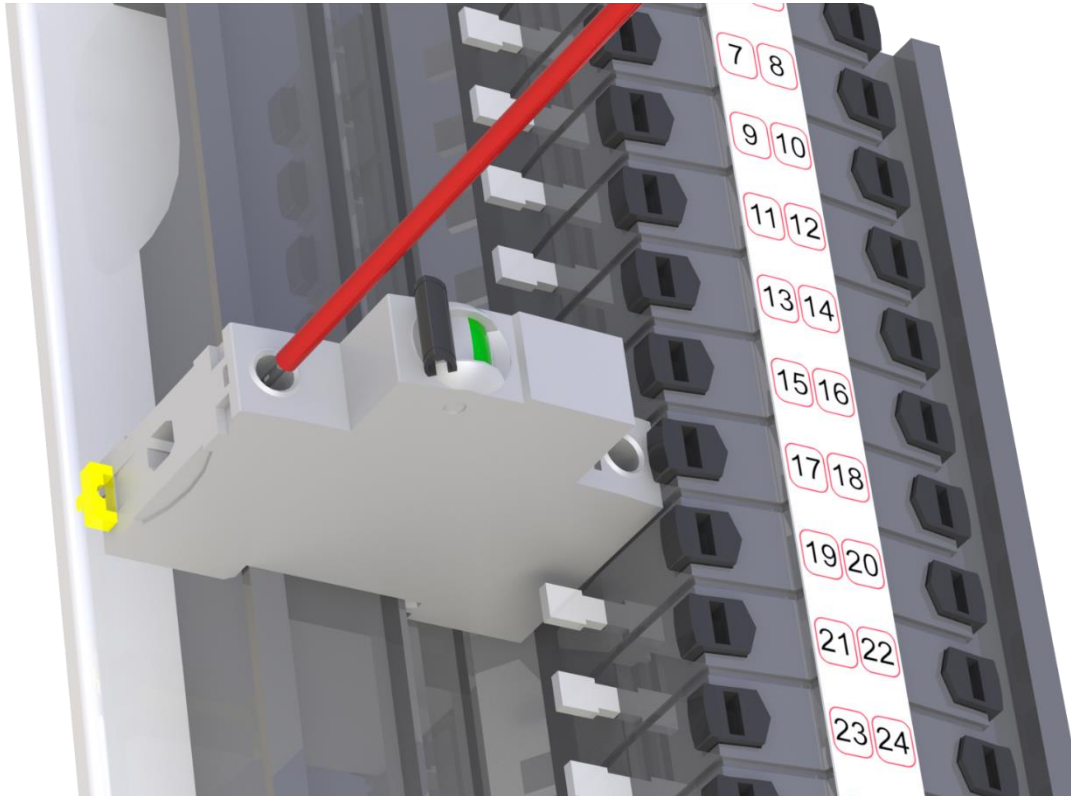




■ Remove the circuit  
breaker terminal cover



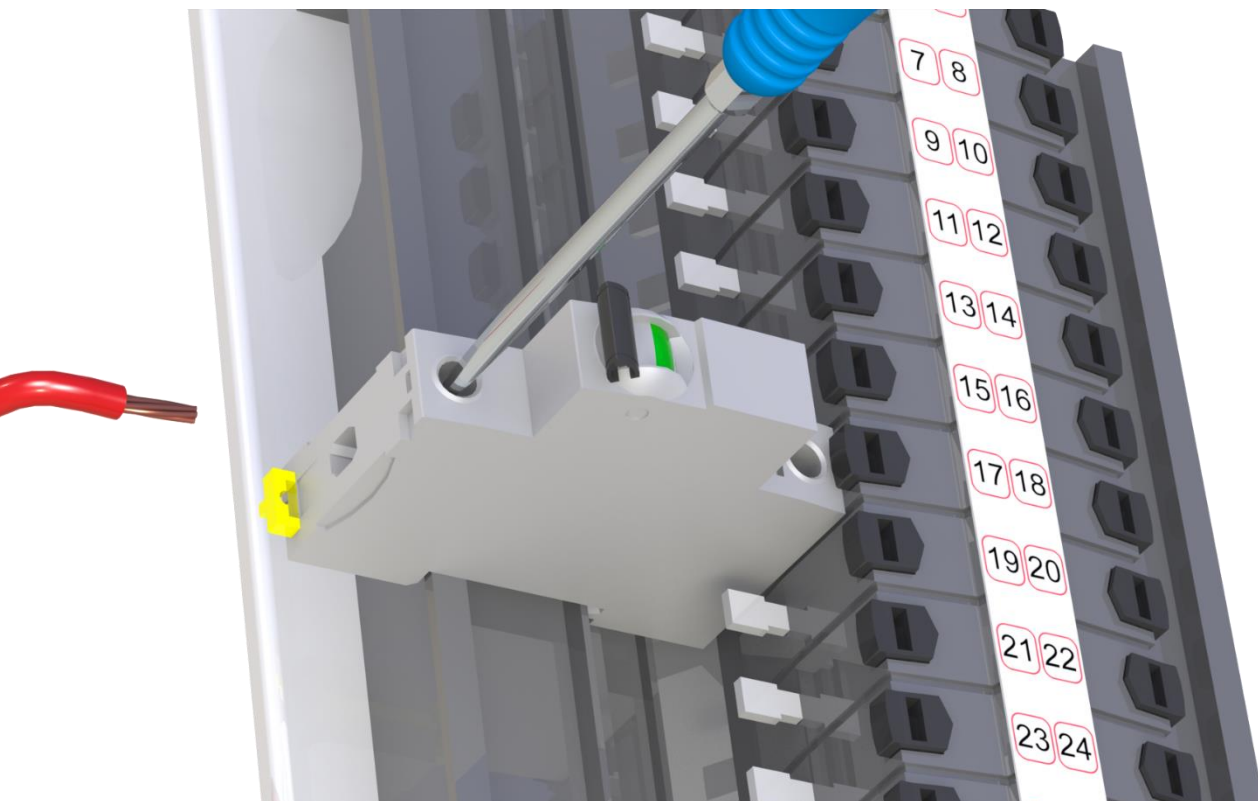
- Test the terminal to ensure there is no voltage present.



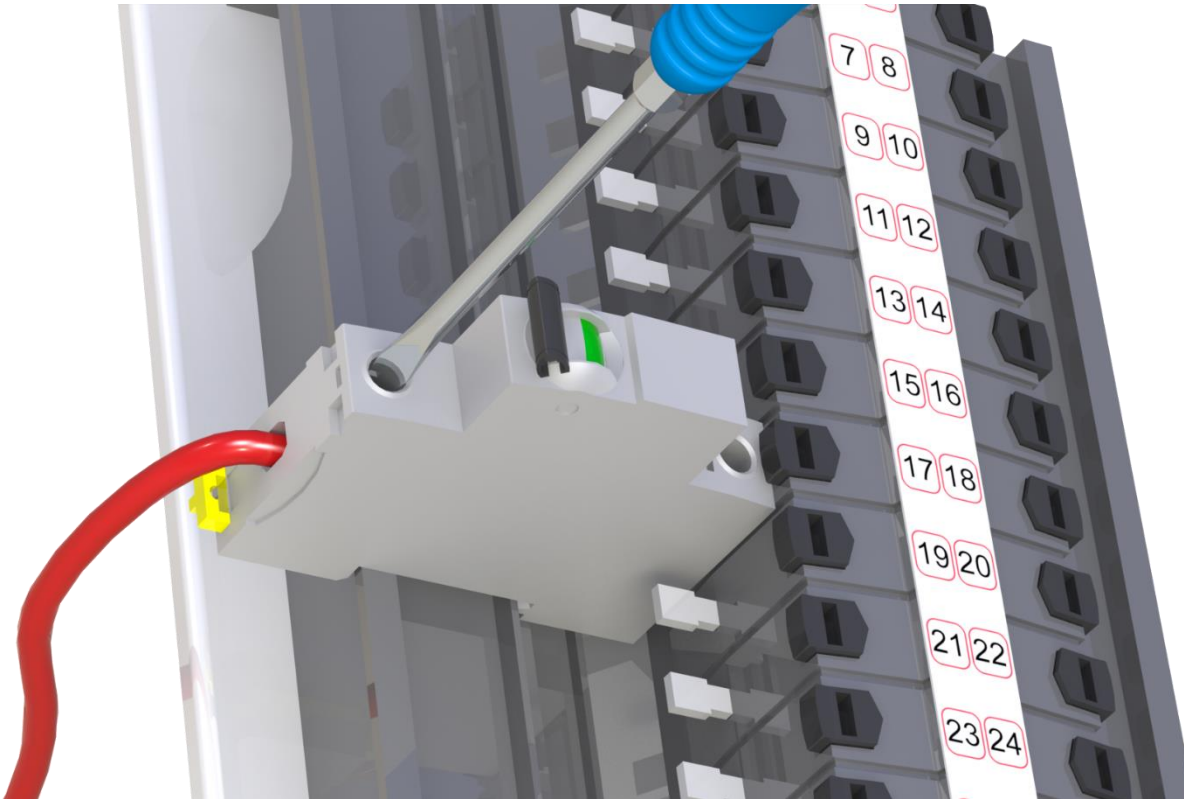
- Test the terminal to ensure there is no voltage present.

## STEP 13

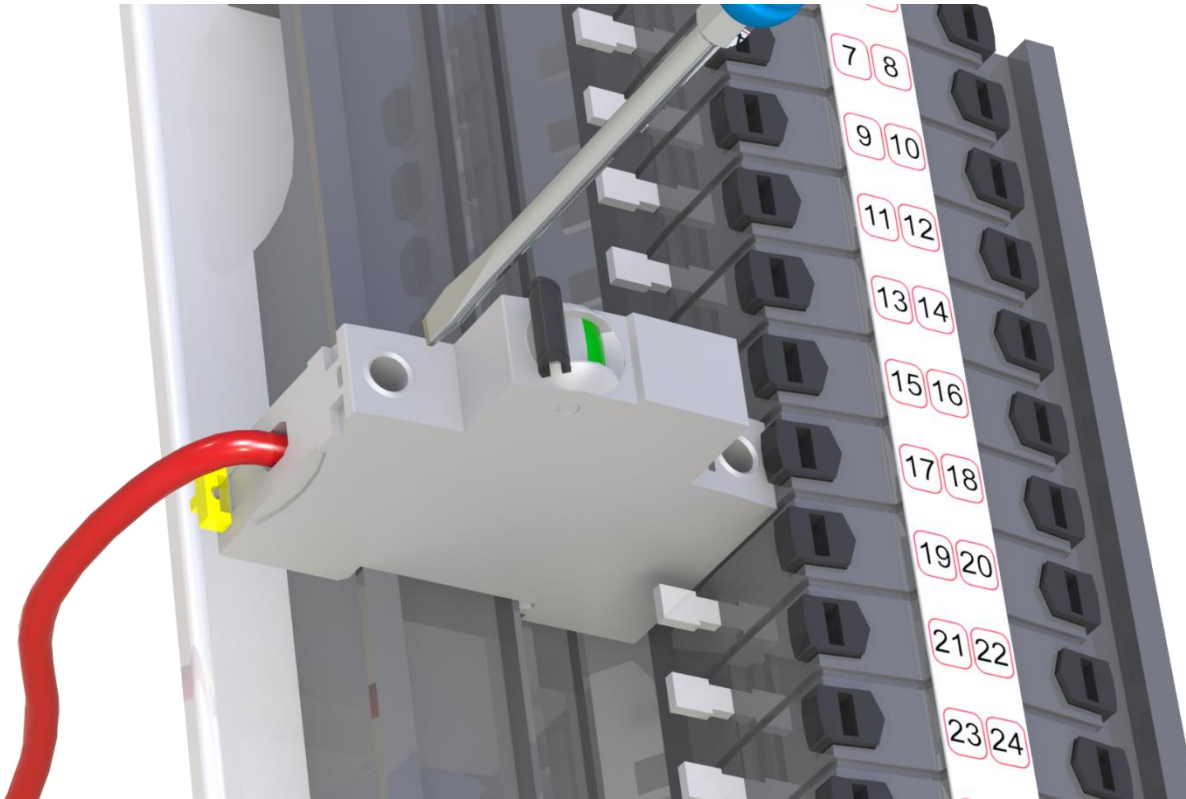
Connect the **ACTIVE** cable to the circuit breaker and check the terminal is done up securely



- Connect the **ACTIVE** cable to the circuit breaker and check the terminal is done up securely



- Connect the **ACTIVE** cable to the circuit breaker and check the terminal is done up securely

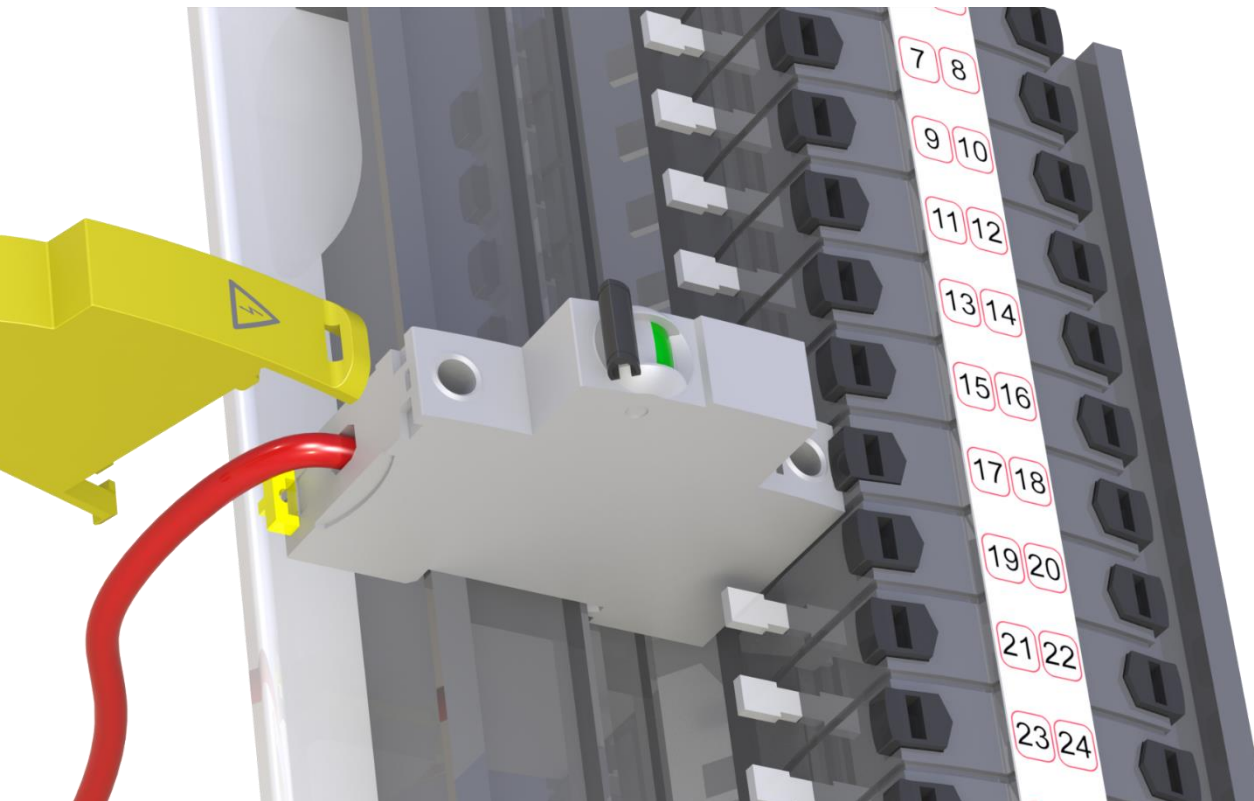


- Connect the **ACTIVE** cable to the circuit breaker and check the terminal is done up securely

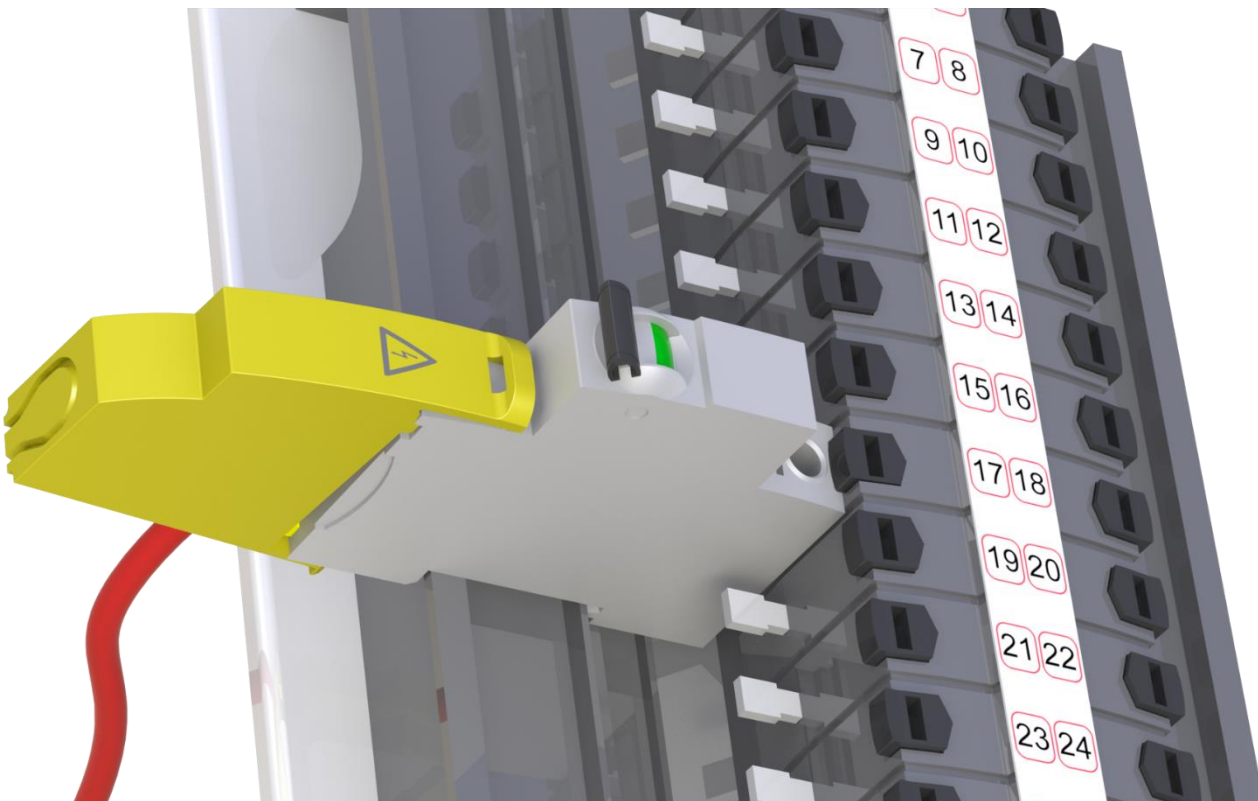
## STEP 14

Replace the circuit  
breaker terminal cover

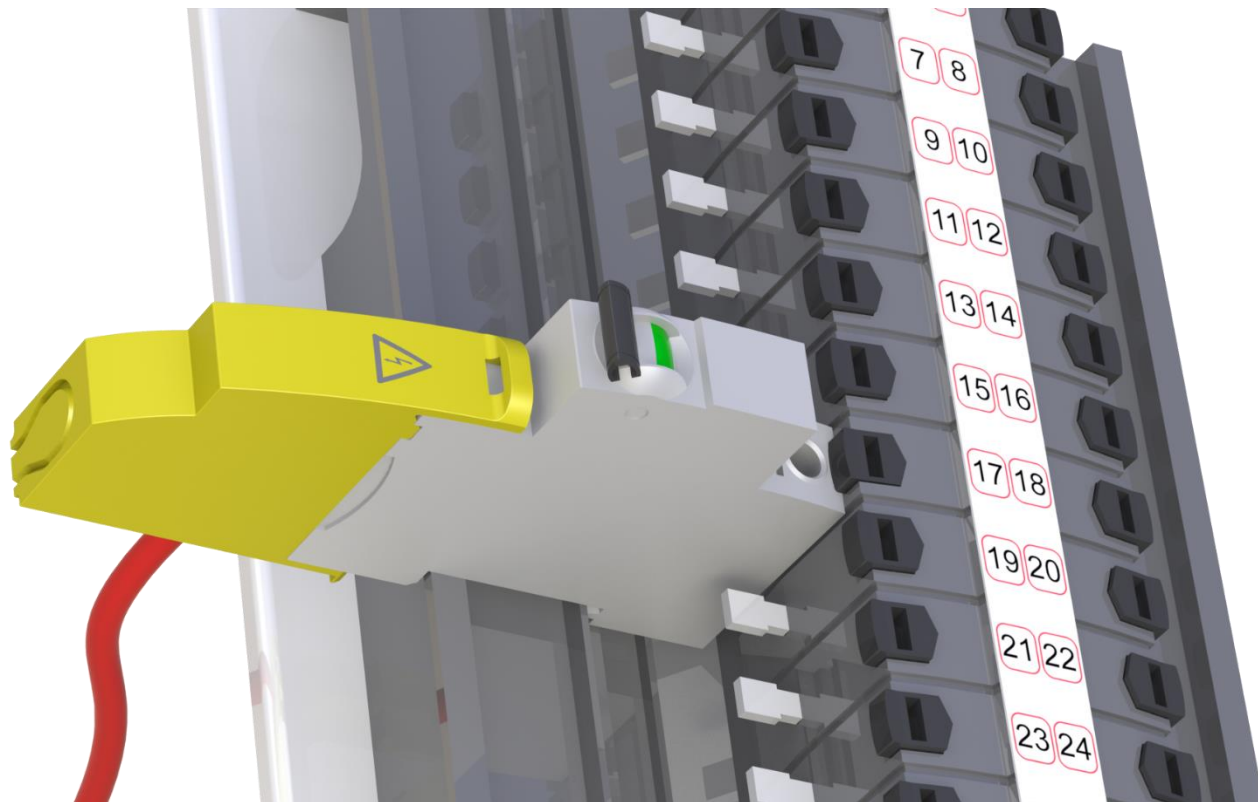




- Replace the circuit breaker terminal cover



- Replace the circuit breaker terminal cover



- Replace the circuit breaker terminal cover

## STEP 15

Re-connect the insulated neutral slide to the **NEUTRAL** bar and ensure it is fully extended into position!



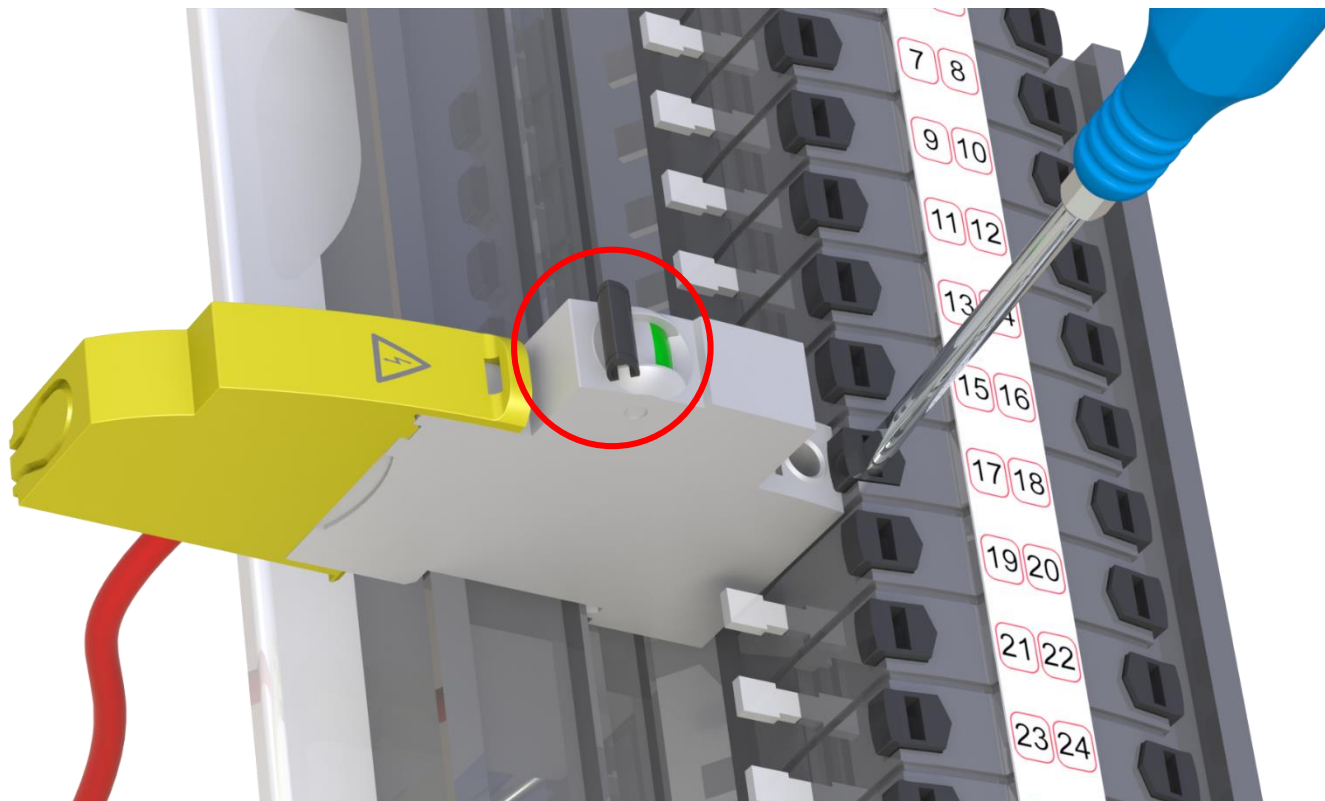
- Re-connect the insulated neutral slide to the **NEUTRAL** bar and ensure it is fully extended into position!



Re-connect the insulated neutral slide to the **NEUTRAL** bar and ensure it is fully extended into position!

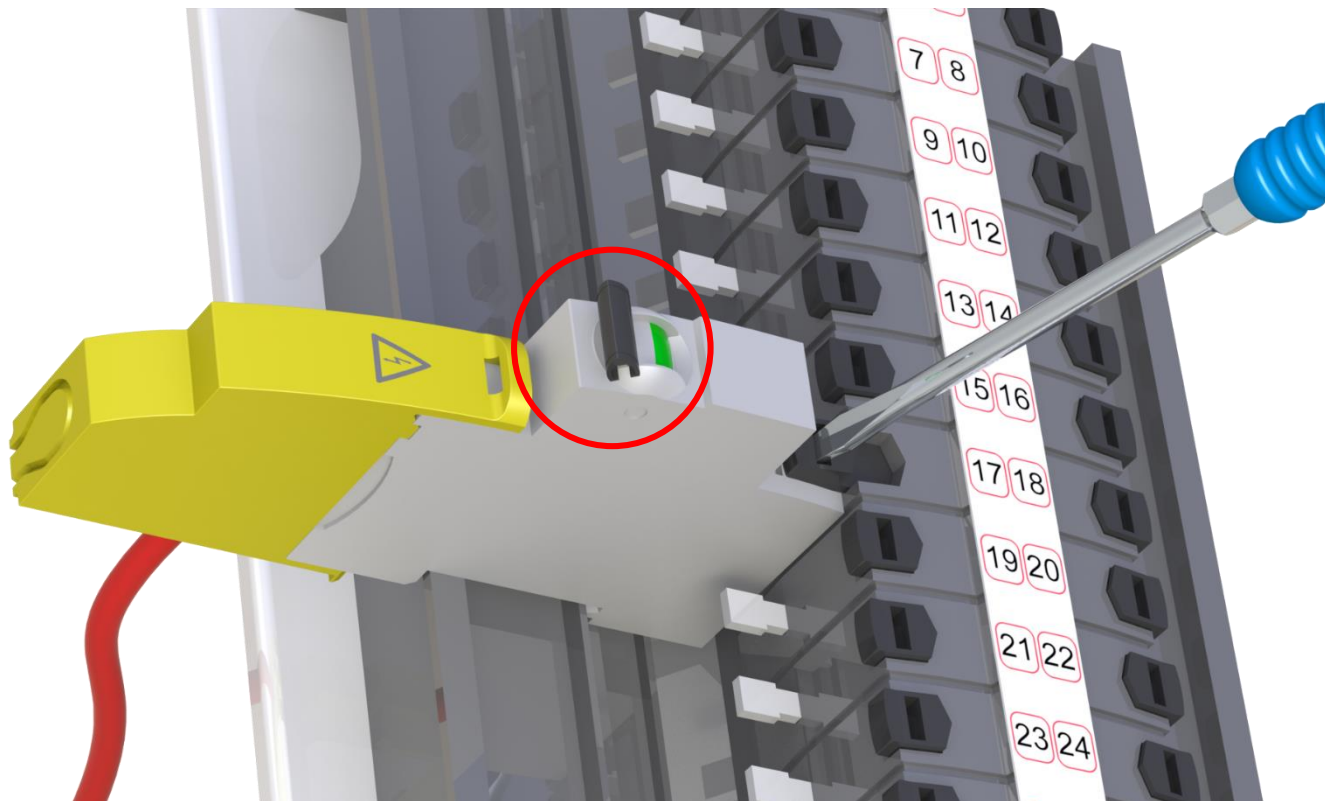
## STEP 16

With the circuit breaker still in the **OFF** position, operate the black isolation slide so it is fully pushed towards the circuit breaker and re-check



With the circuit breaker still in the **OFF** position, operate the black isolation slide so it is fully pushed towards the circuit breaker and re-check





With the circuit breaker still in the **OFF** position, operate the black isolation slide so it is fully pushed towards the circuit breaker and re-check

## STEP 17

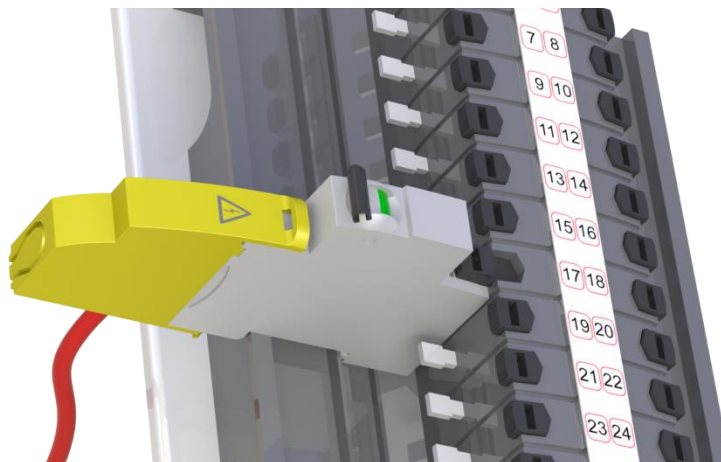
You will now have the

**ACTIVE**

**EARTH**

**NEUTRAL**

connected



■ You will now have the  
**ACTIVE**  
**EARTH**  
**NEUTRAL**  
connected

## STEP 18 Ensure the following:



**no tools are left  
in the  
switchboard**

and that



**all connections  
are sound**

## STEP 18 Ensure the following:



**no tools are left  
in the  
switchboard**

and that



**all connections  
are sound**

## STEP 18 Ensure the following:



**no tools are left  
in the  
switchboard**

and that



**all connections  
are sound**

## STEP 19

Ensure that the load end of the cable or equipment is safe to energise

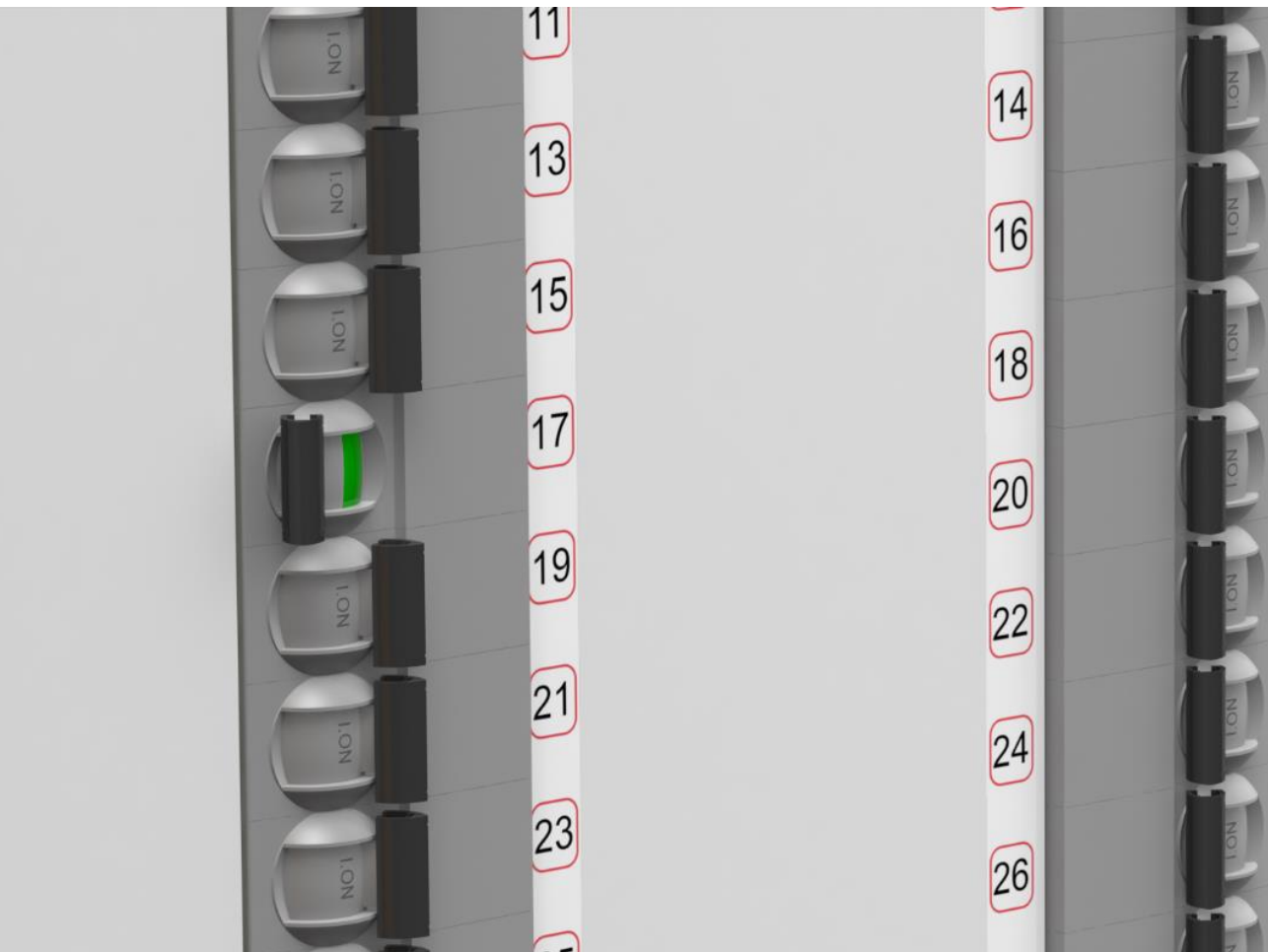


**STEP 20** Close the escutcheon



## STEP 21

The circuit breaker may now be switched to the **ON** position



■ The circuit breaker may now be switched to the **ON** position



The circuit breaker  
may now be switched  
to the **ON** position

- You have successfully completed the addition of a circuit to an existing circuit breaker!

- Once you have completed the training and fully understood the process, take a copy of the **SIGN OFF SHEET** in the **MANUAL** and provide a **signed** copy to the equipment owner for their records.

- The **MANUAL** has a work log that is to be filled out for all work carried out on these switchboards!

The disc located in the **MANUAL** has a file that may be printed if additional copies of the log are required.



END OF PRESENTATION