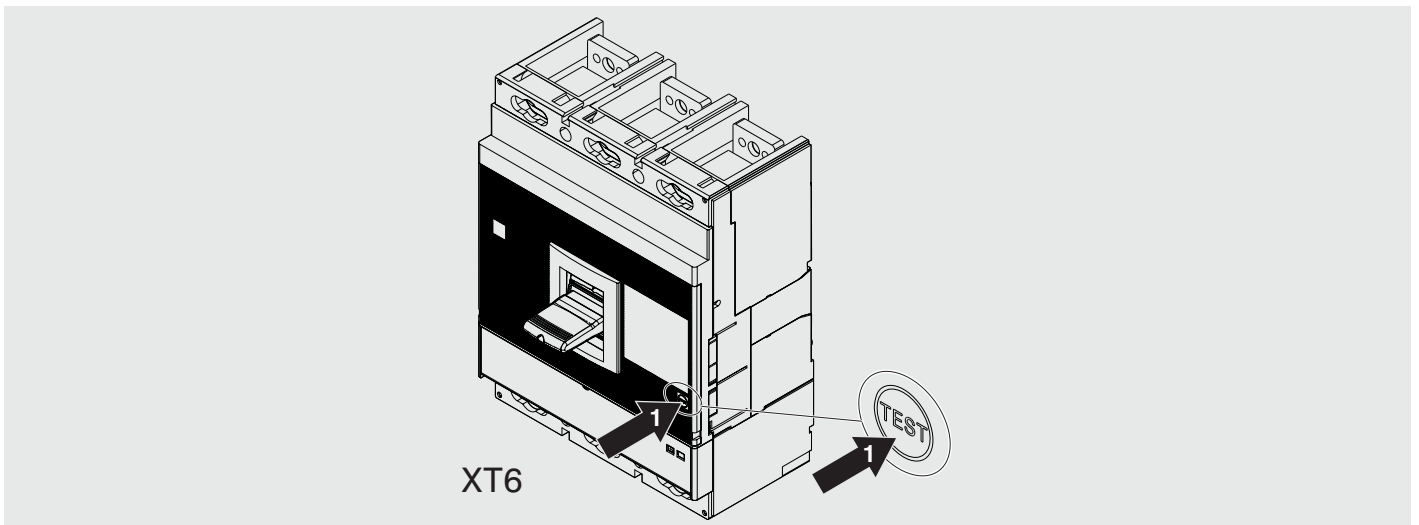


SACE Tmax XT

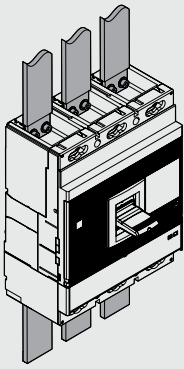


Istruzioni di installazione XT6 IEC
 Installation instructions XT6 IEC
 Installationsanleitung XT6 IEC
 Instructions pour l'installation XT6 IEC
 Instrucciones de instalación XT6 IEC
 安装说明书 XT6 IEC

XT6 3p-4p



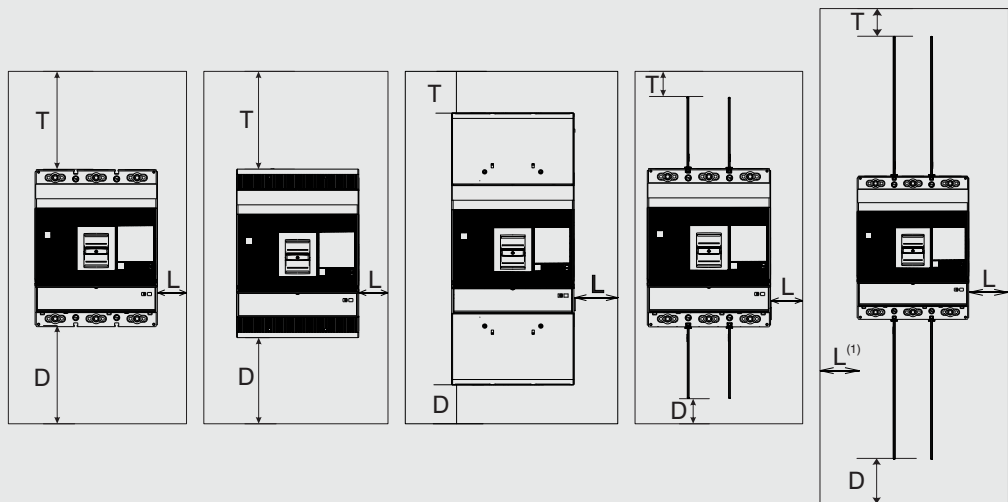
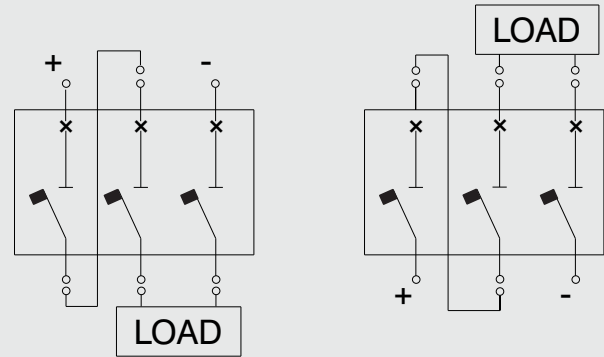
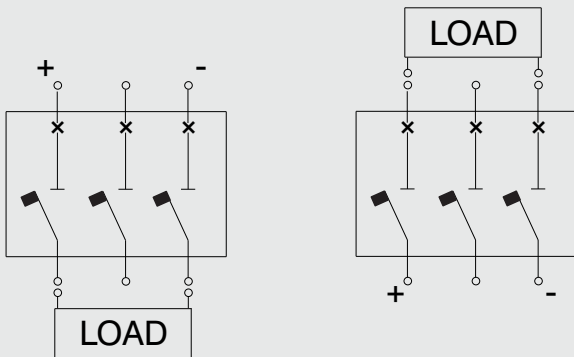
| | | A | B | C | D | E | F | G | H | I | L | M | N | O | P |
|---|----|----|----|----|-----|-----|----|----|----|----|----|----|----|----|----|
| | | | | | | | | | | | | | | | |
| F | 3p | x4 | x4 | x4 | x12 | x12 | x1 | x1 | - | - | - | x1 | x1 | x1 | - |
| | 4p | x4 | x4 | x4 | x16 | x16 | x1 | x1 | - | - | - | x1 | x1 | x1 | - |
| W | 3p | - | - | - | - | - | - | - | x4 | x4 | x4 | - | - | - | x1 |
| | 4p | - | - | - | - | - | - | - | x4 | x4 | x4 | - | - | - | x1 |



Usare cavi o barre isolate o eseguire prove di tipo specifiche sull' installazione.
 Use cable or insulated busbars or perform specific type test on the installation.
 Kabel oder isolierte Sammelschienen verwenden oder die spezifische Typprüfung auf der Installation durchführen.
 Utiliser un câble ou des barres isolées ou réalise run test de type spécifique sur installation.
 Utilizar un cable o barras aisladas o efectuar una prueba de tipo específico sobre instalacion.
 使用电缆或经绝缘处理的母排，否则需对安装进行指定的型式试验

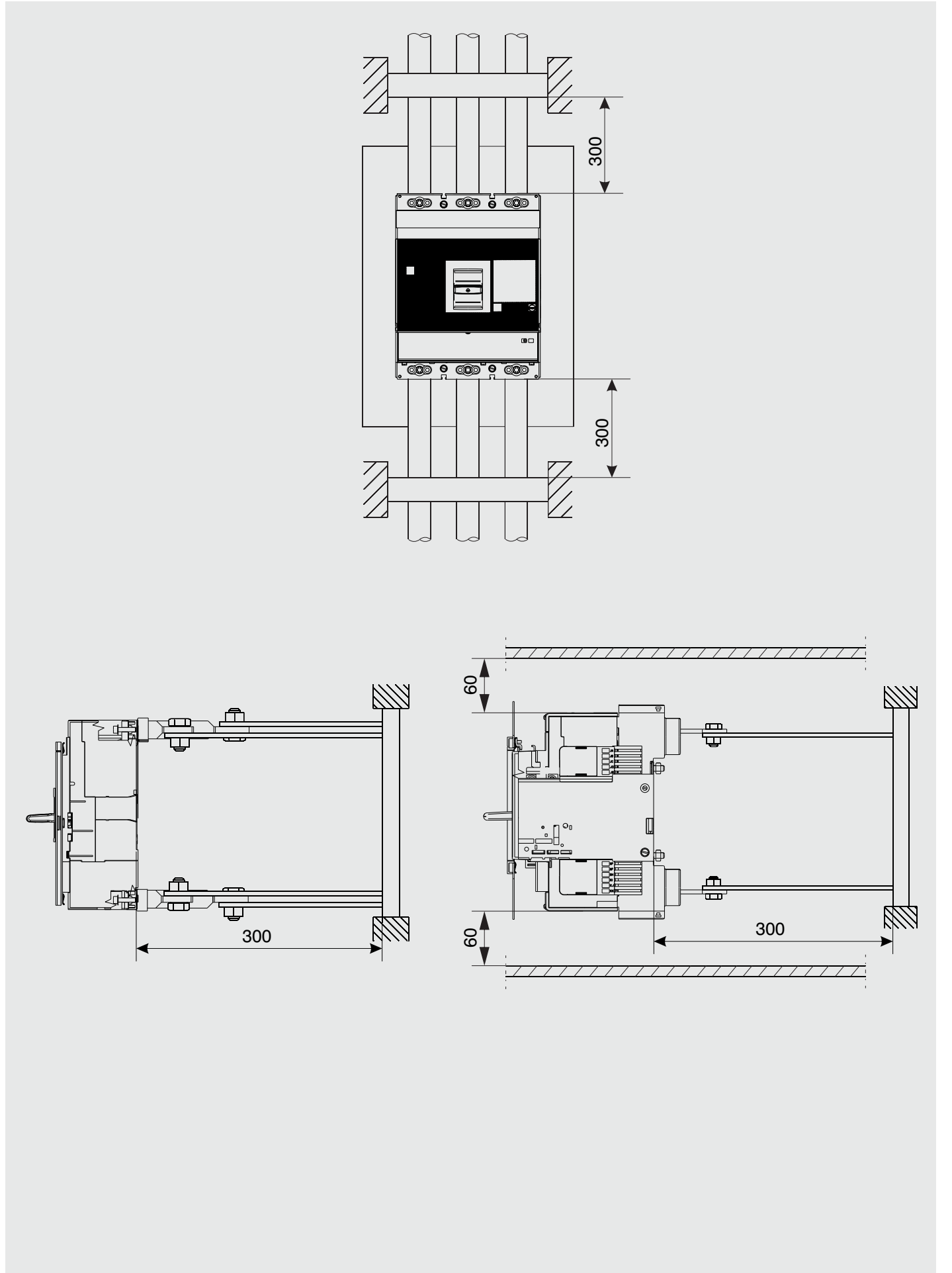
250V - GROUNDED - UNGROUNDED
 500V - UNGROUNDED

500V - GROUNDED
 750V - UNGROUNDED

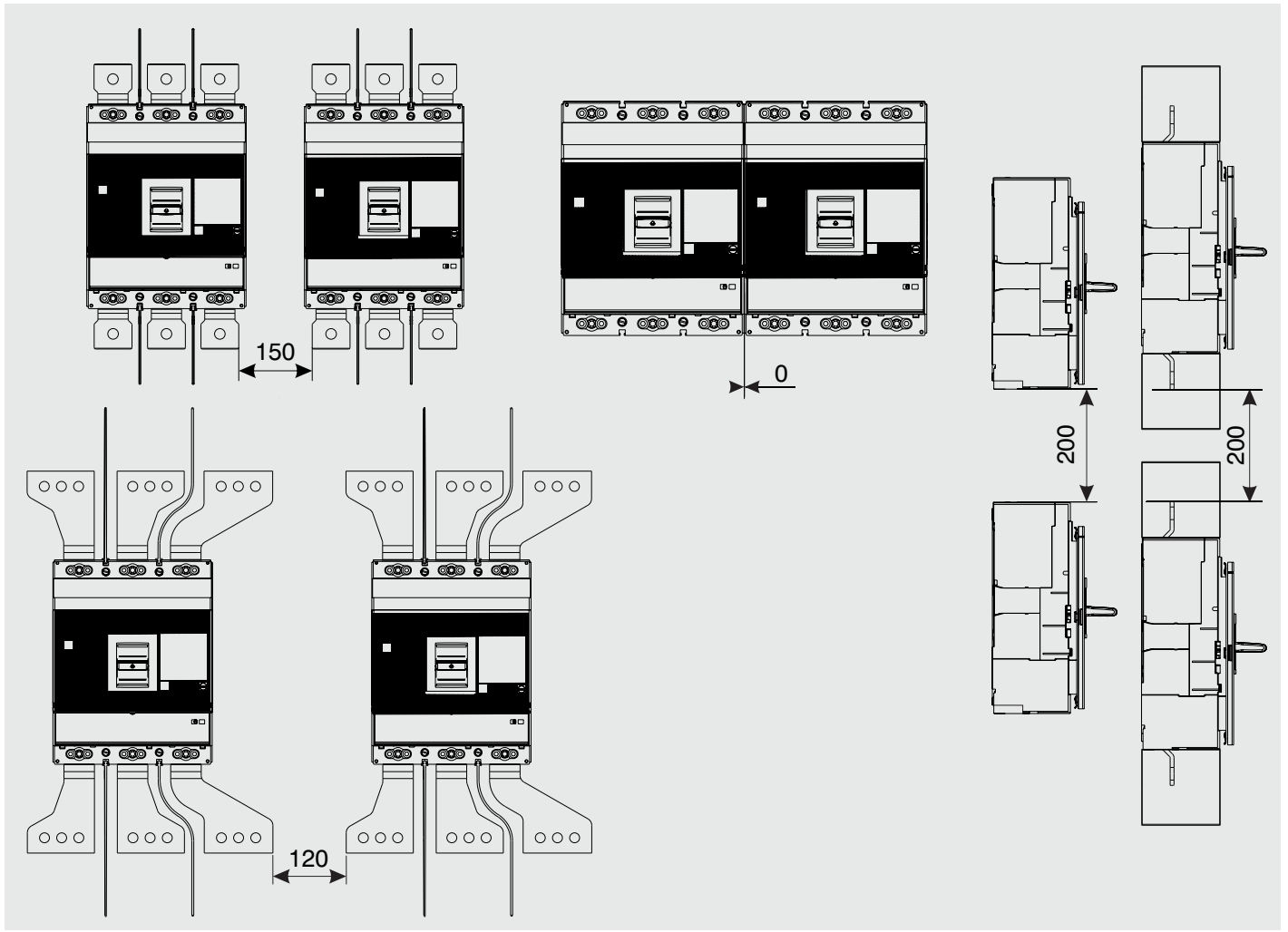


| | No accessories | | | Low terminal cover (LTC) | | | High terminal cover (HTC) | | | Phase Barriers 100mm | | | Phase barriers 200mm | | |
|-----------------------|----------------|----|----|--------------------------|----|----|---------------------------|----|----|----------------------|---|----|----------------------|---|----------------------|
| | T | D | L | T | D | L | T | D | L | T | D | L | T | D | L / L ⁽¹⁾ |
| U ≤ 440V AC | 35 | 20 | 25 | 35 | 20 | 25 | 35 | 20 | 25 | 0 | 0 | 25 | 0 | 0 | 25 |
| 440V AC < U ≤ 500V AC | 100 | 20 | 25 | 100 | 20 | 25 | 35 | 20 | 25 | 0 | 0 | 25 | 0 | 0 | 25 |
| 500V AC < U ≤ 690V AC | 100 | 20 | 25 | 100 | 20 | 25 | 35 | 20 | 25 | 0 | 0 | 25 | 0 | 0 | 25 |
| U ≤ 500V DC | 35 | 20 | 25 | 35 | 20 | 25 | 35 | 20 | 25 | 0 | 0 | 25 | 0 | 0 | 25 |
| 500V DC < U ≤ 750V DC | 100 | 20 | 25 | 100 | 20 | 25 | 35 | 20 | 25 | 0 | 0 | 25 | 0 | 0 | 25 |

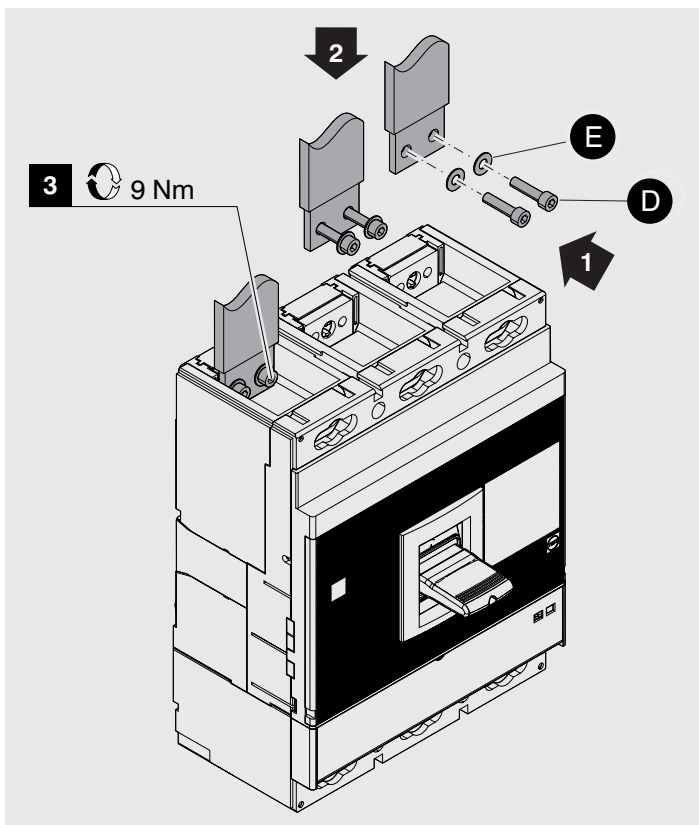
(1) In case of ES terminals, this distance must be added to the maximum lateral dimensions of the terminals



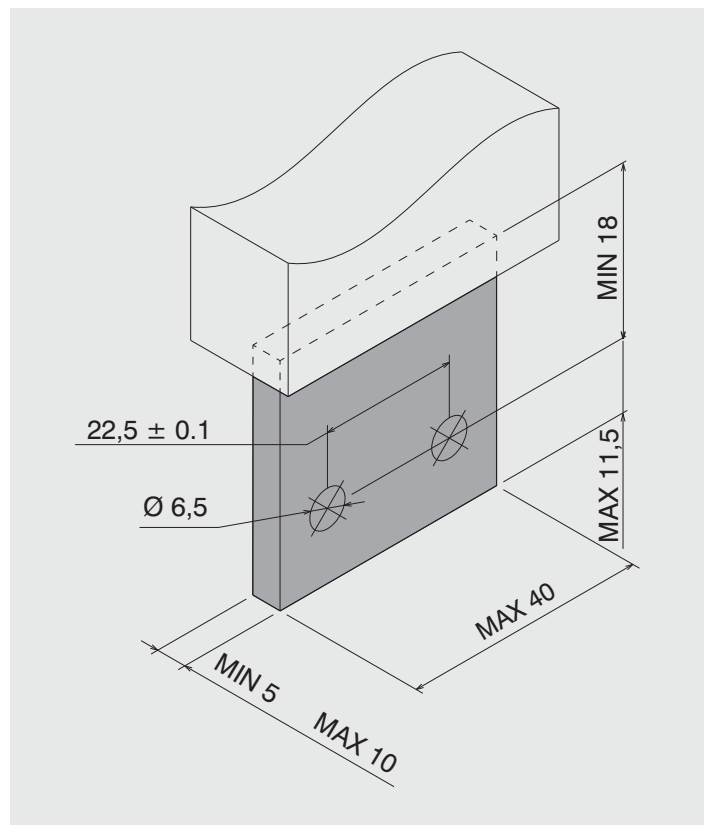
5

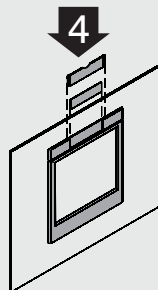
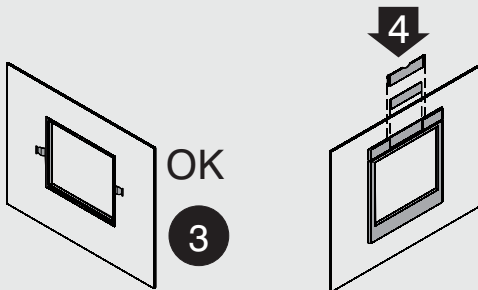
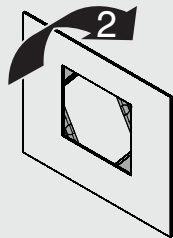
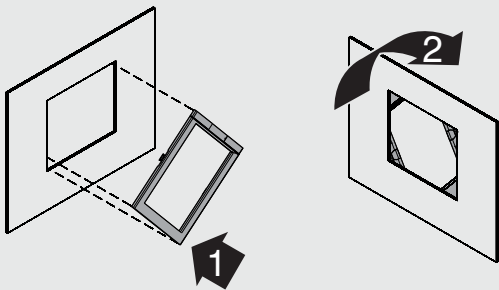
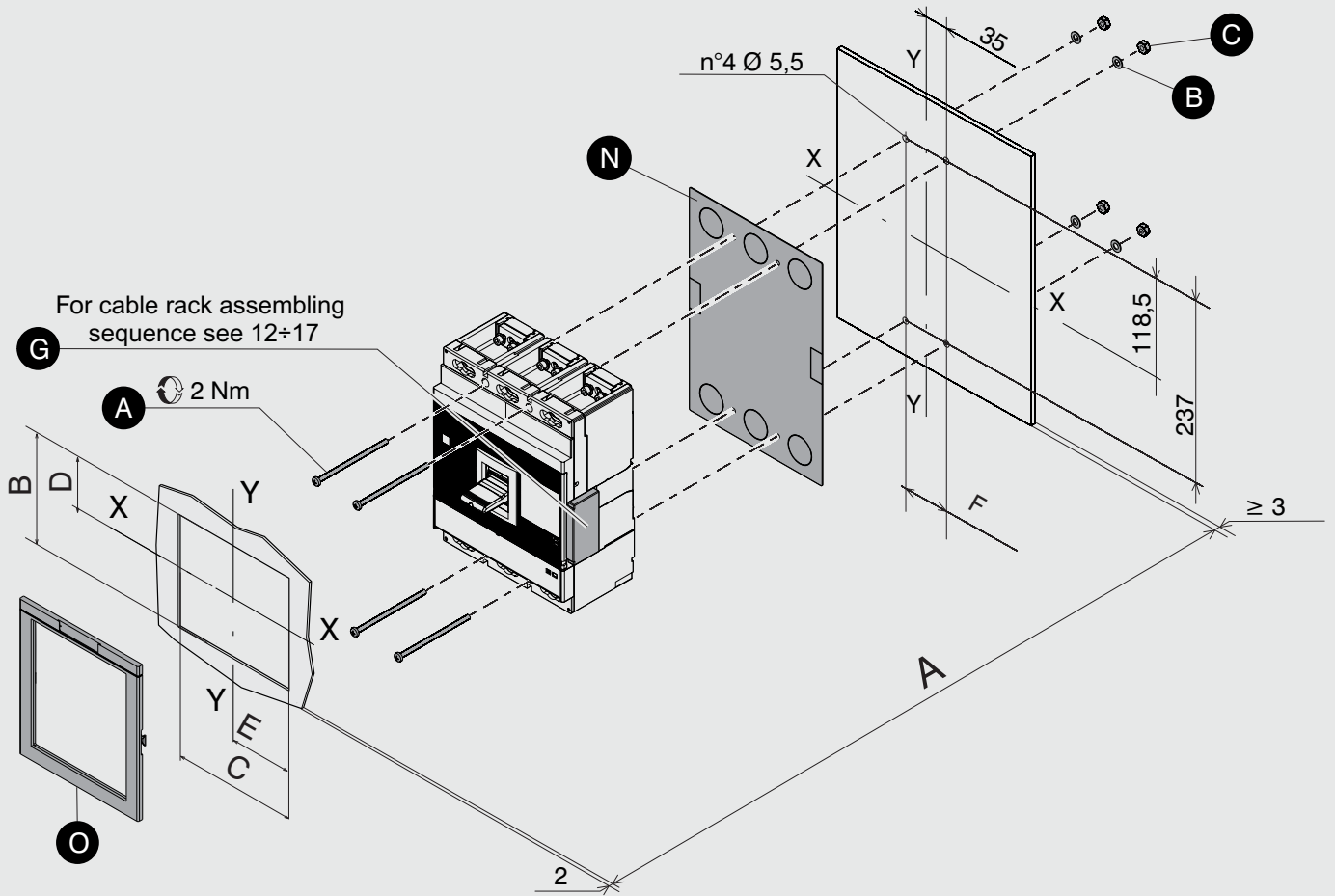


6



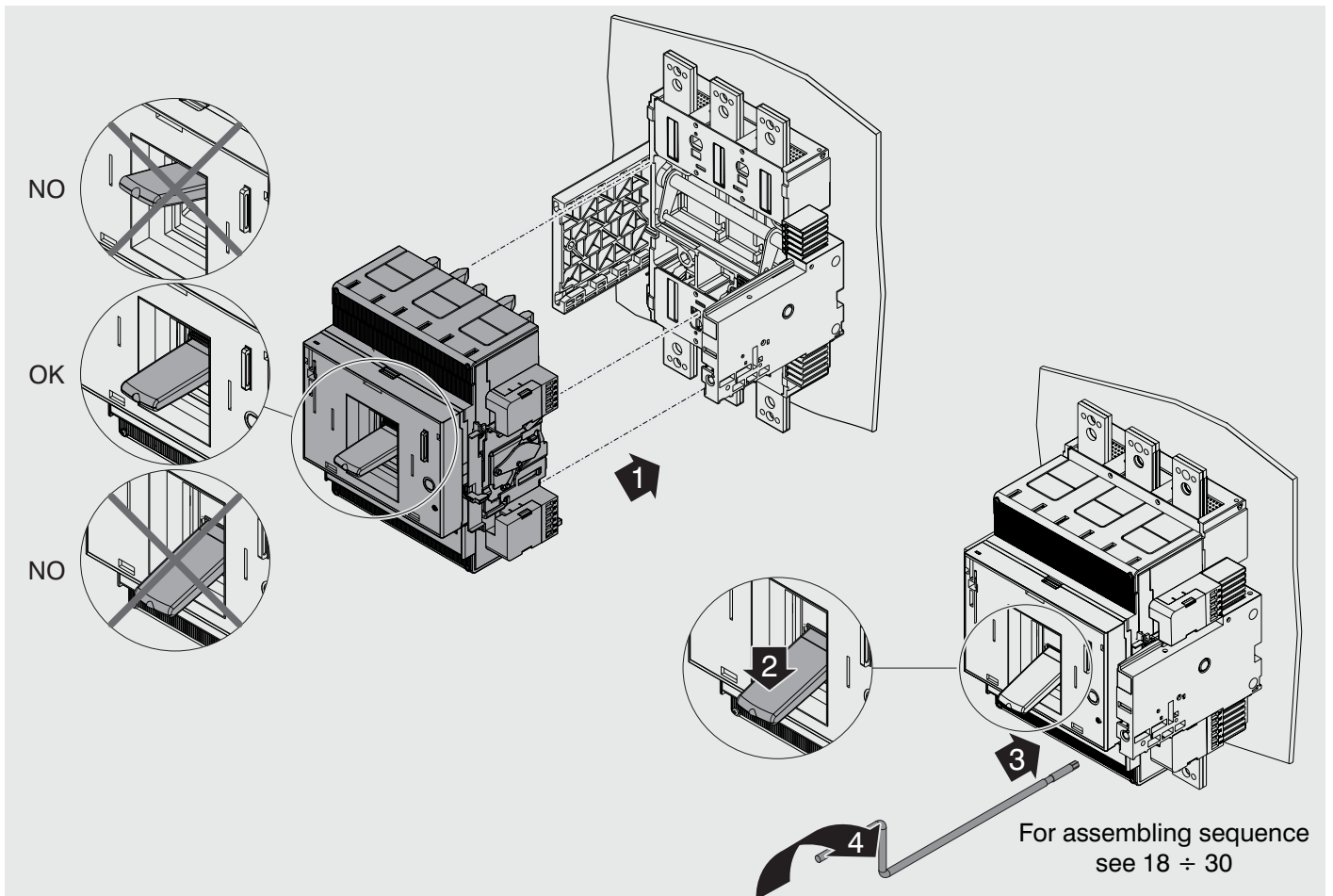
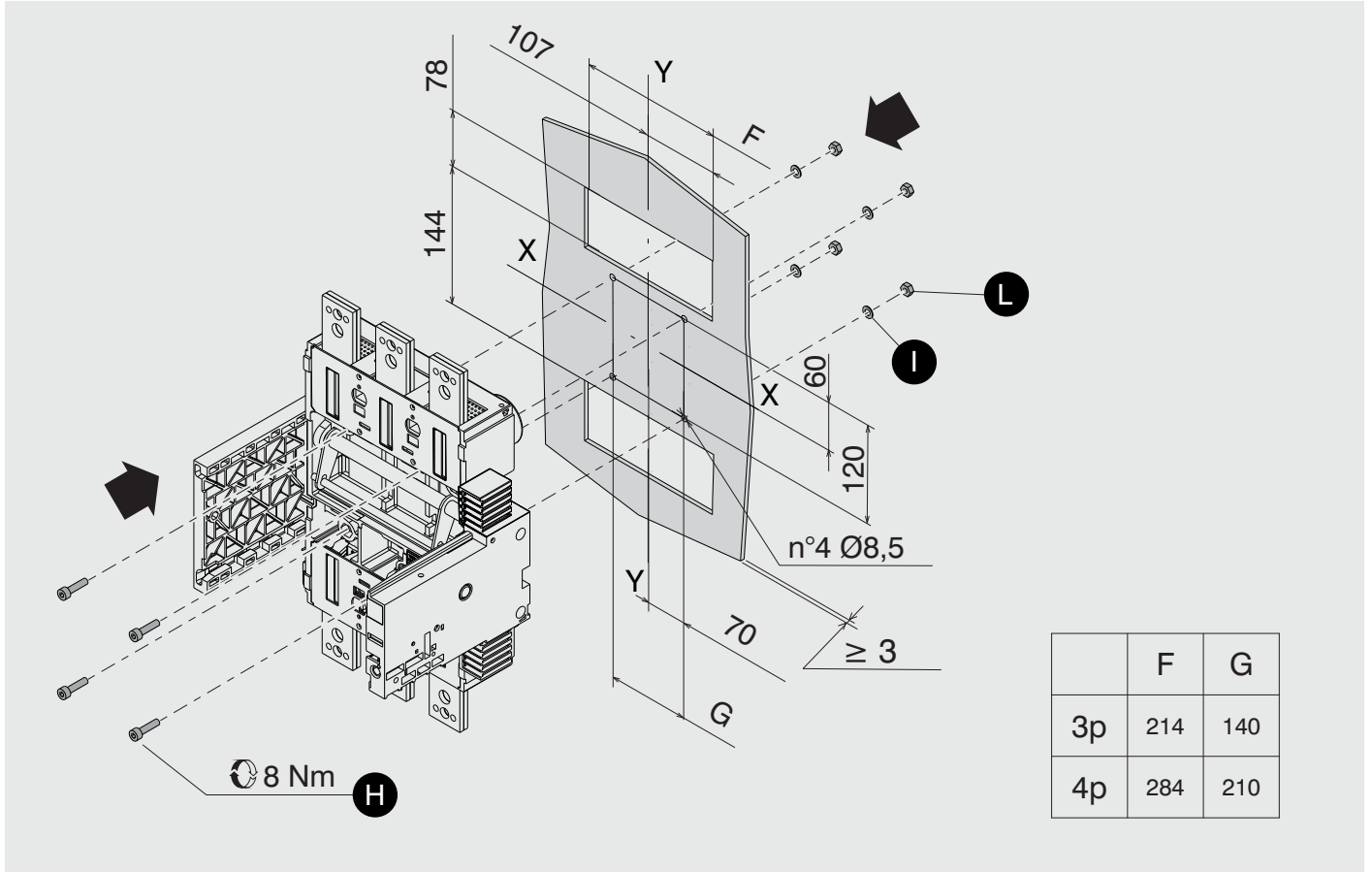
7

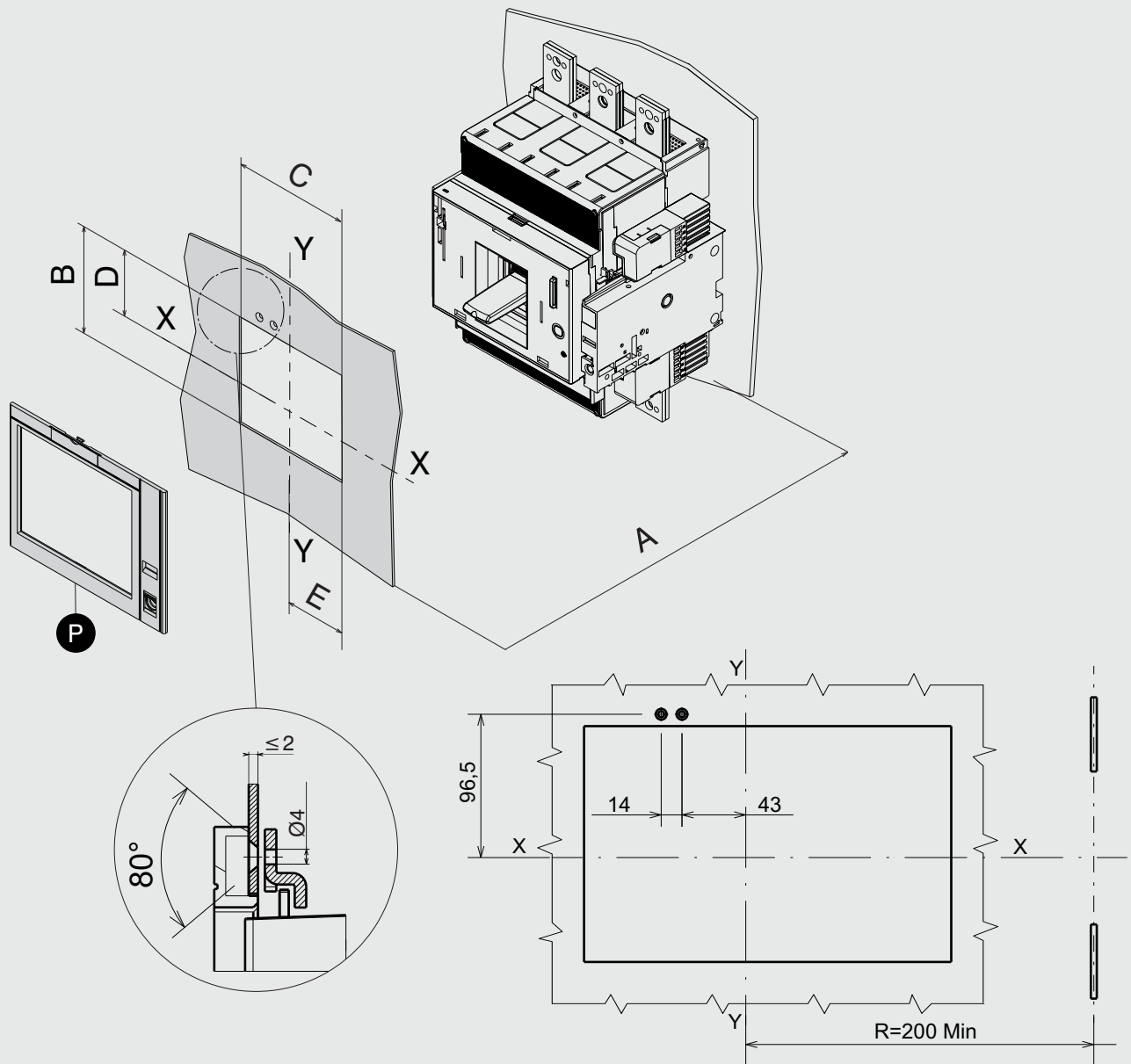




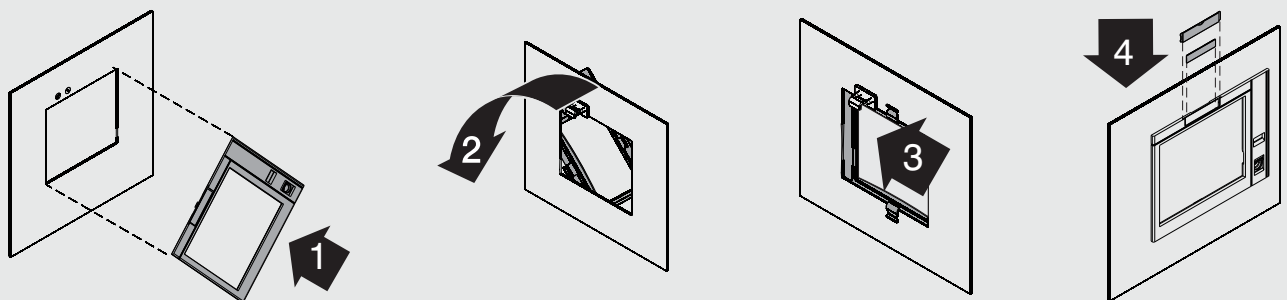
| | | A | B | C | D | E | F |
|--|----|-------|-----|-----|----|-----|-----|
| WITHOUT FLANGE SENZA MOSTRINA | 3p | 103,5 | 197 | 212 | 86 | 106 | 70 |
| | 4p | | | | | | 140 |

| | | A | B | C | D | E | F |
|-----------------------------------|----|-----|-----|-----|------|-------|-----|
| WITH FLANGE CON MOSTRINA | 3p | 108 | 202 | 217 | 88,5 | 108,5 | 70 |
| | 4p | | | | | | 140 |



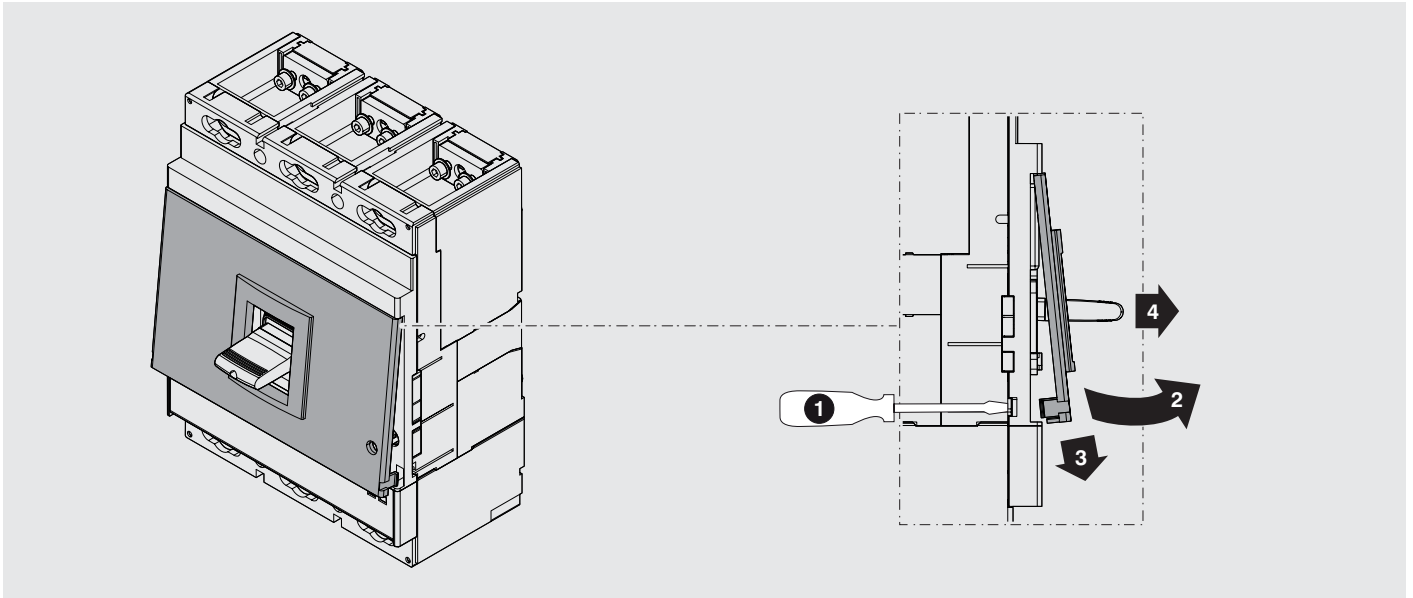


| | A | B | C | D | E |
|-------|-----|-----|-----|----|-----|
| 3p-4p | 192 | 159 | 248 | 89 | 139 |



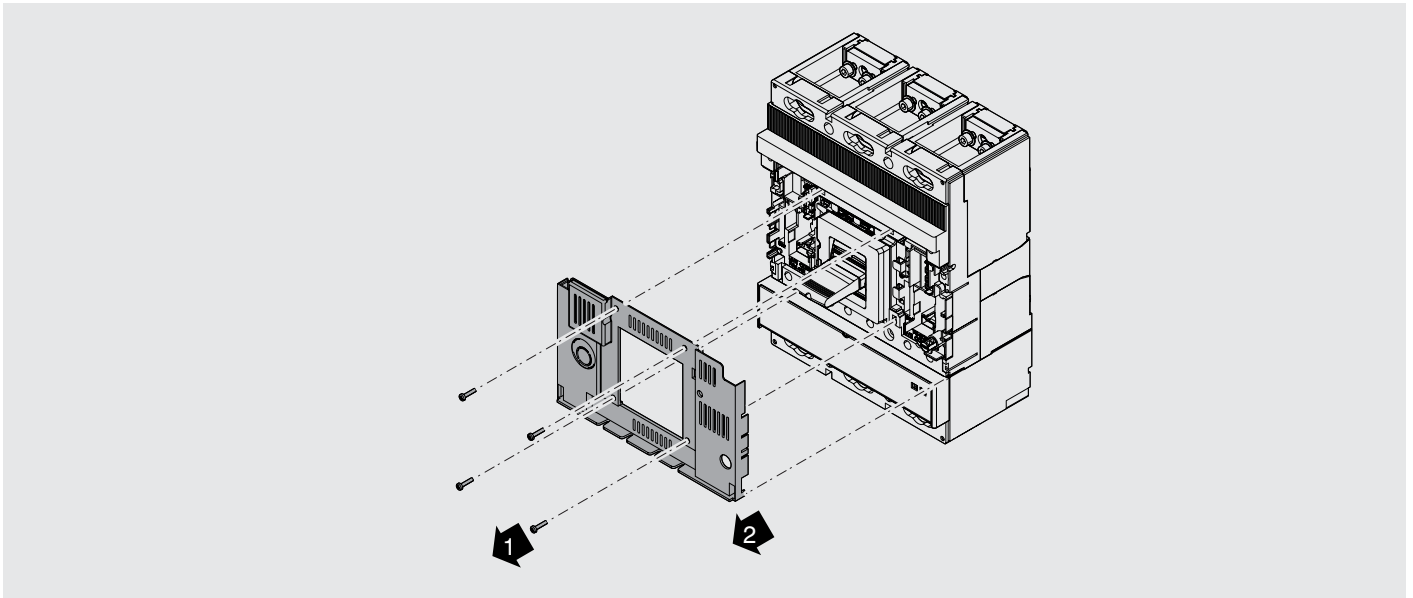
12

For cable rack assembling only - XT6 3p-4p



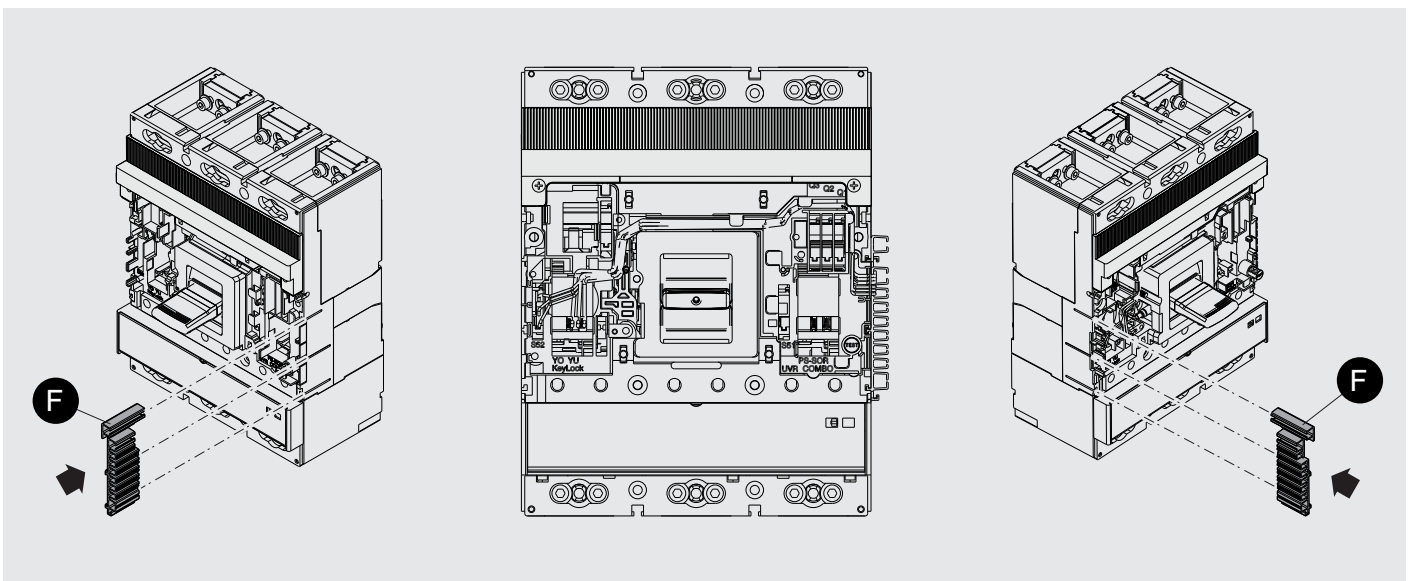
13

For cable rack assembling only - XT6 3p-4p



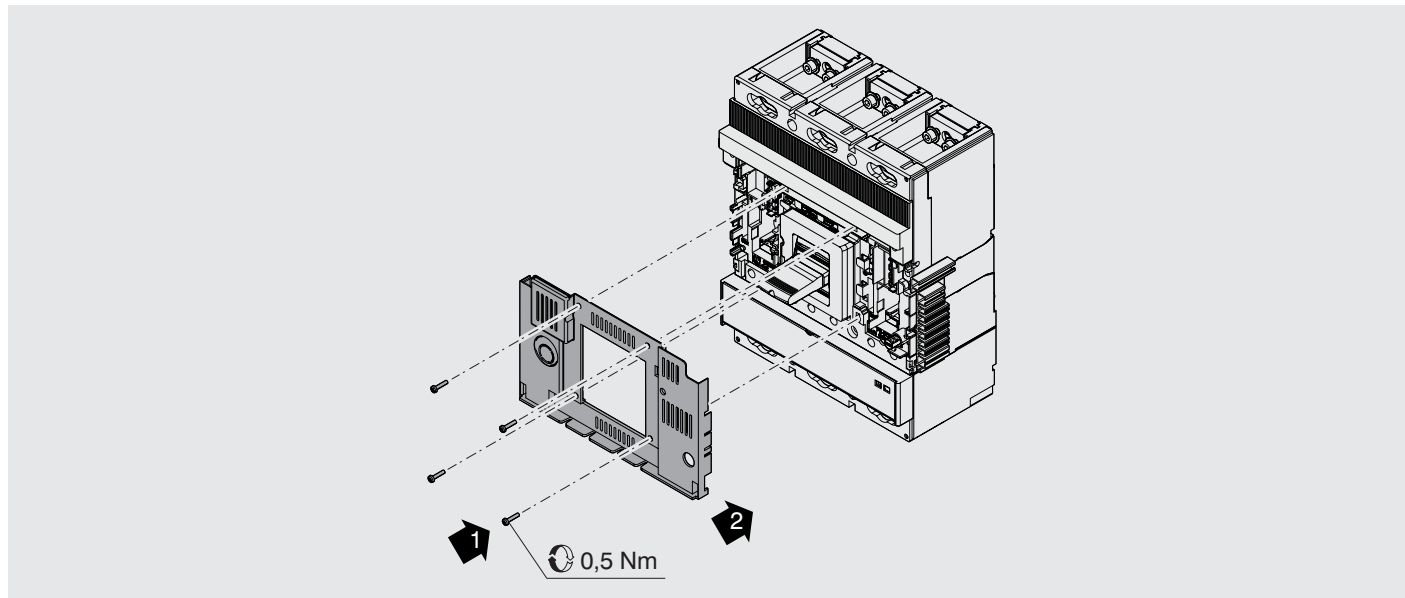
14

For cable rack assembling only - XT6 3p-4p



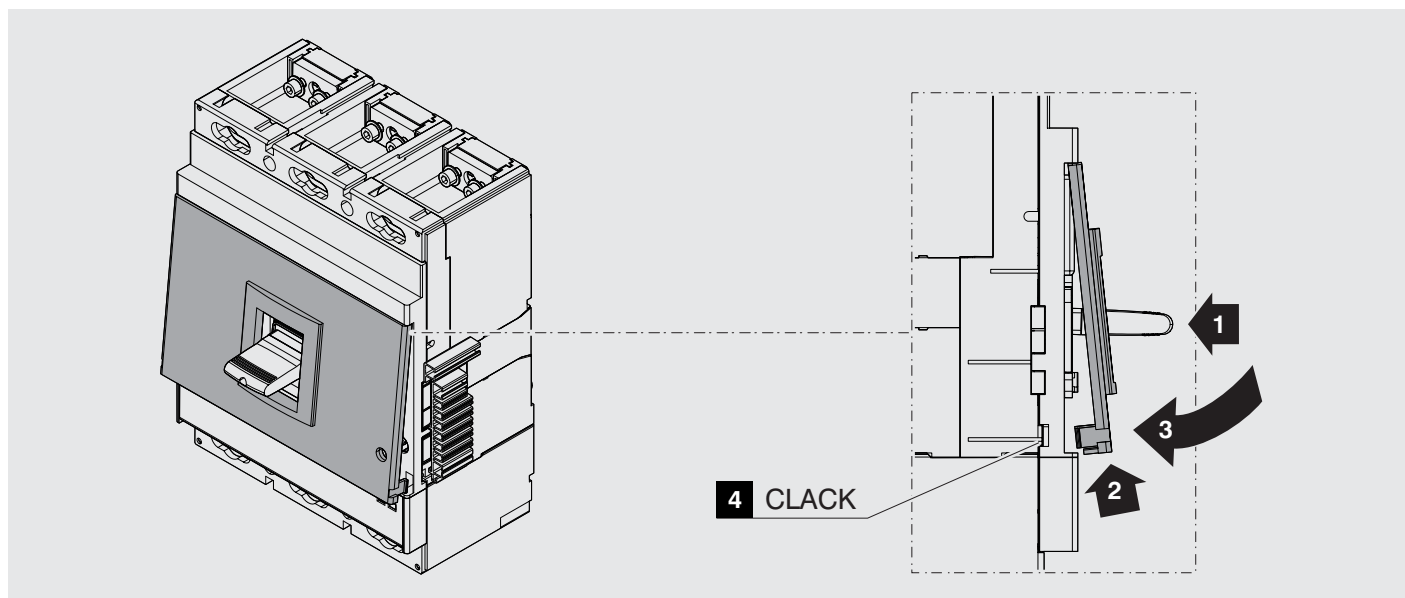
15

For cable rack assembling only - XT6 3p-4p



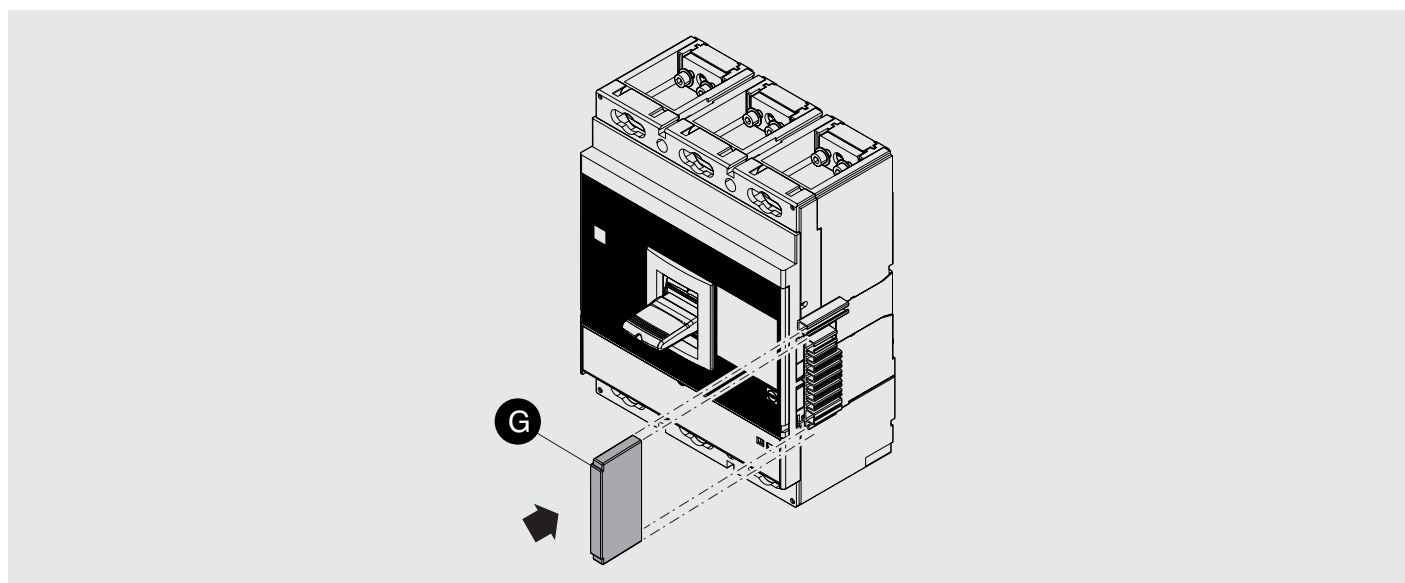
16

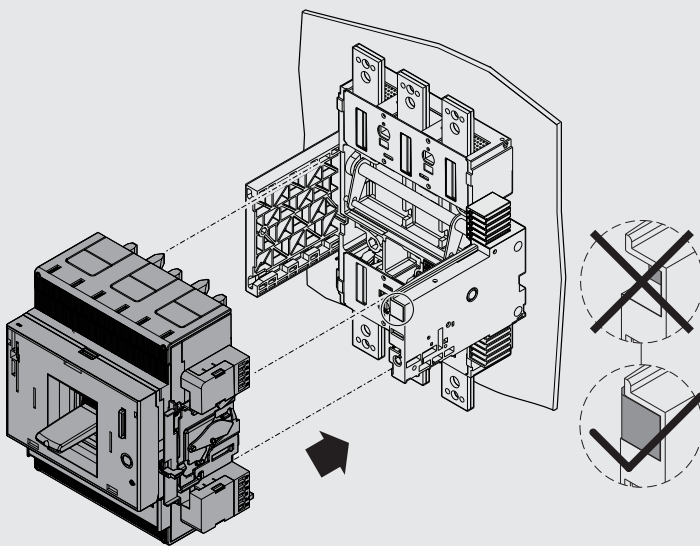
For cable rack assembling only - XT6 3p-4p



17

For cable rack assembling only - XT6 3p-4p





Posizionare la parte mobile nella parte fissa e spingerla sino a quando va in arresto.

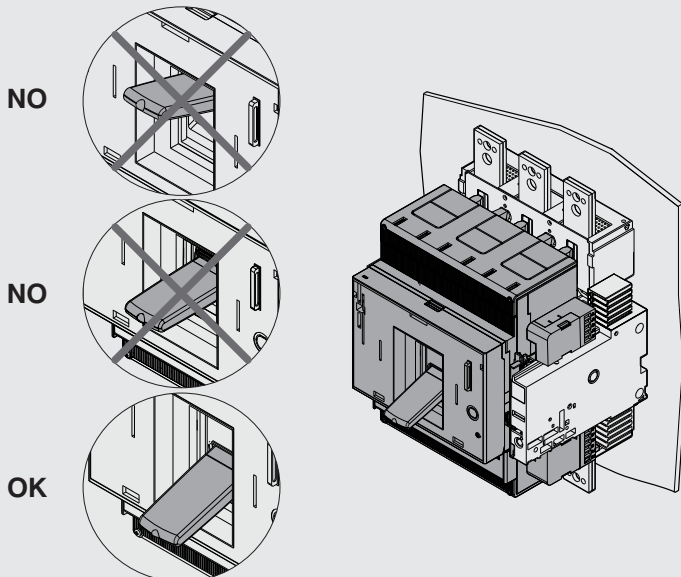
Position the moving part in the fixed part and push until it comes to a stop.

Das bewegliche Teil im festen Teil anordnen und es schieben, bis es anschlägt.

Placer la partie mobile dans la partie fixe et la pousser jusqu'à ce qu'elle arrive en butée.

Poner la parte móvil en la parte fija y empujarla hasta el bloqueo.

将活动部分调到固定部分的位置，并向前推动至停下。



Portare l'interruttore in posizione "Open"

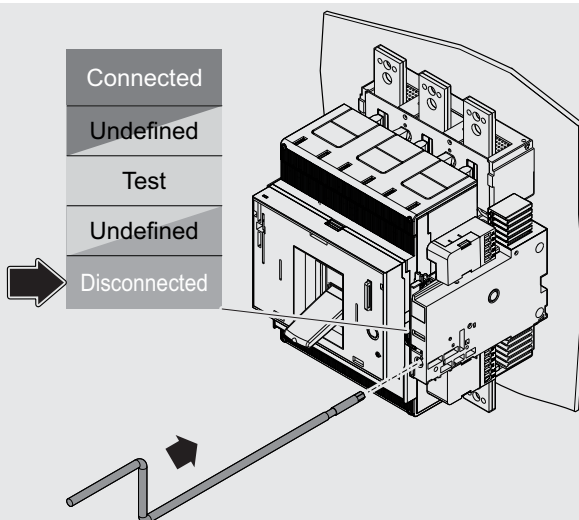
Switch the circuit-breaker to the "Open" position

Den Leistungsschalter in Position "Open" bringen

Placer le disjoncteur en position "Open"

Poner el interruptor en posición "Open"

将断路器切换到“Open”位置



Inserire la manovella nella parte fissa. In questa fase la parte mobile è in posizione DISCONNECTED.

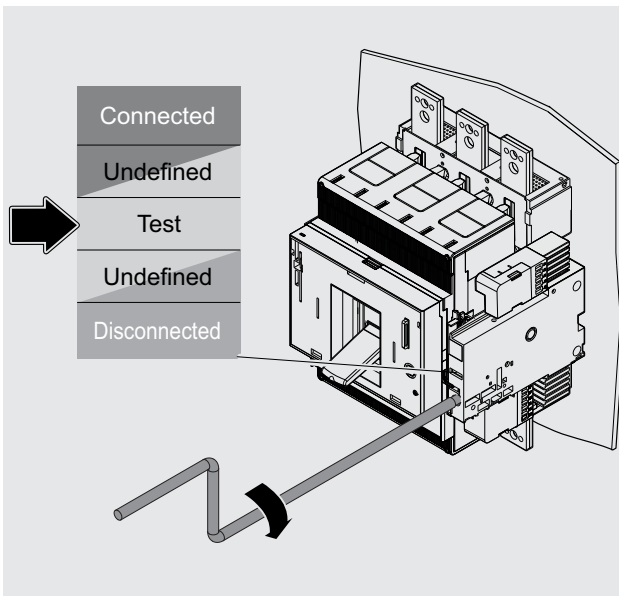
Insert the crank in the fixed part. In this phase the moving part is in DISCONNECTED position.

Die Handkurbel in das feste Teil stecken. In dieser Phase befindet sich das bewegliche Teil in der Position DISCONNECTED.

Introduire la manivelle dans la partie fixe. Dans cette phase la partie mobile est en position DISCONNECTED.

Introducir la manivela en la parte fija. En esta fase la parte móvil está en posición DISCONNECTED.

往移固定部分上插入摇把。这过程中，移动部分仍处于 DISCONNECTED 位置。



Ruotare la manovella in senso orario sino a quando il segnalatore indica che l'interruttore è in posizione TEST.

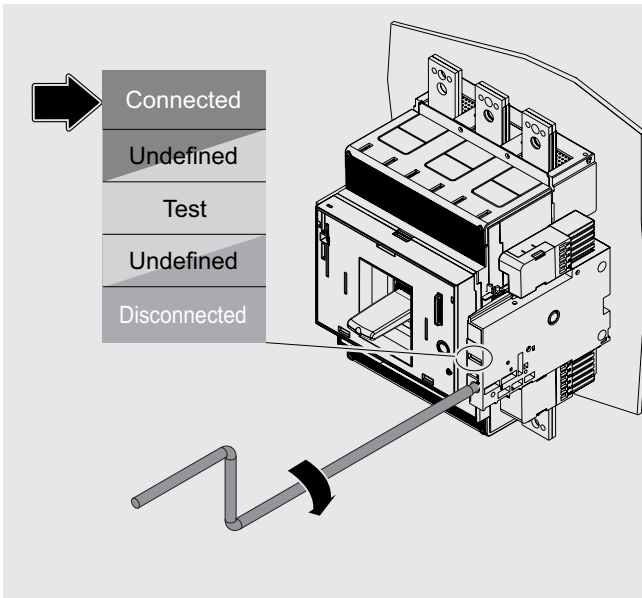
Turn the crank clockwise until the indicator shows that the circuitbreaker is in TEST position.

Die Handkurbel im Uhrzeigersinn drehen Die Anzeige meldet die Stellung des Leistungsschalters in der Position TEST.

Tourner la manivelle dans le sens horaire jusqu'à ce que l'indicateur signale que le disjoncteur est en position TEST.

Girar la manivela en sentido horario hasta que el indicador señale que el interruptor está en posición TEST.

顺时针转动手柄，直到出且位置指示装置显示断路器已处于 TEST 位置为止。



Ruotare la manovella in senso orario sino a quando il segnalatore indica che l'interruttore è in posizione CONNECTED.

L'interruttore si porta in posizione TRIPPED.

Turn the crank clockwise until the indicator shows that the circuitbreaker is in CONNECTED position.

The circuit breaker moves to TRIPPED position.

Die Handkurbel im Uhrzeigersinn drehen Die Anzeige meldet die Stellung des Leistungsschalters in der Position CONNECTED.

Der Leistungsschalter bewegt sich in die Position TRIPPED.

Tourner la manivelle dans le sens horaire jusqu'à ce que l'indicateur signale que le disjoncteur est en position CONNECTED.

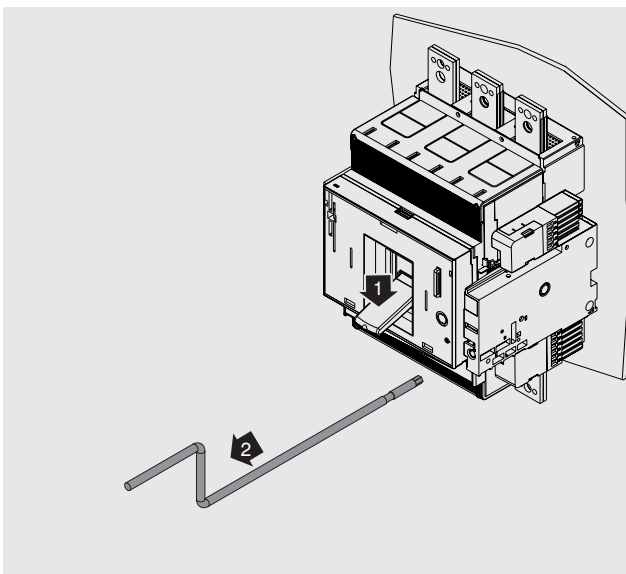
Le disjoncteur se déplace en position TRIPPED.

Girar la manivela en sentido horario hasta que el indicador señale que el interruptor está en posición CONNECTED.

El interruptor se mueve a la posición TRIPPED.

顺时针转动手柄，直到出且位置指示装置显示断路器已处于 CONNECTED 位置为止。

开关移到 TRIPPED 位置。



Portare l'interruttore in posizione "Open"

Estrarre la manovella. L'interruttore può essere chiuso.

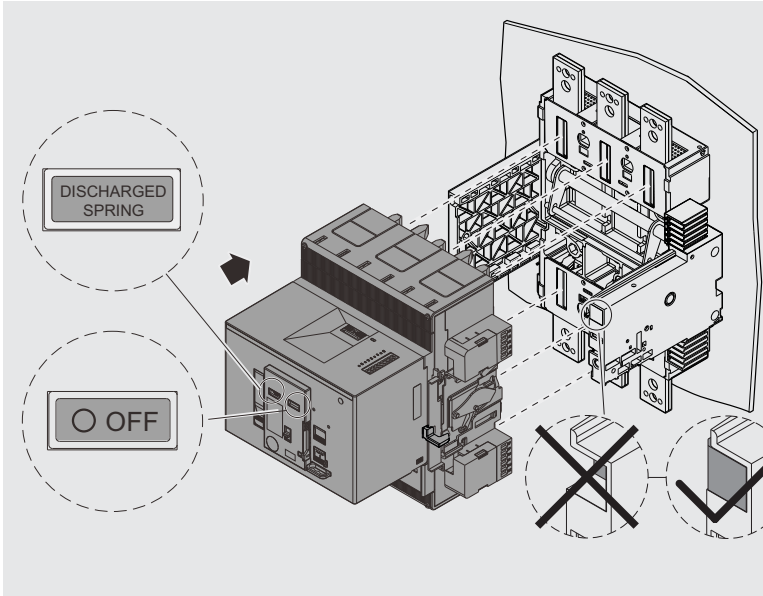
Switch the circuit-breaker to the "Open" position
Extract the crank. The circuit-breaker can be closed.

Den Leistungsschalter in Position "Open" bringen
Die Handkurbel herausziehen. Der Leistungsschalter kann eingeschaltet werden

Placer le disjoncteur en position "Open"
Extraire la manivelle. Le disjoncteur peut être fermé

Poner el interruptor en posición "Open"
Extraer la manivela. El interruptor se puede cerrar

将断路器切换到 "Open" 位置
取出摇柄。可对断路器进行闭合操作。



Portare la parte mobile in posizione "OFF" e "Discharged Spring", posizionarla nella parte fissa e spingerla sino a quando va in arresto.

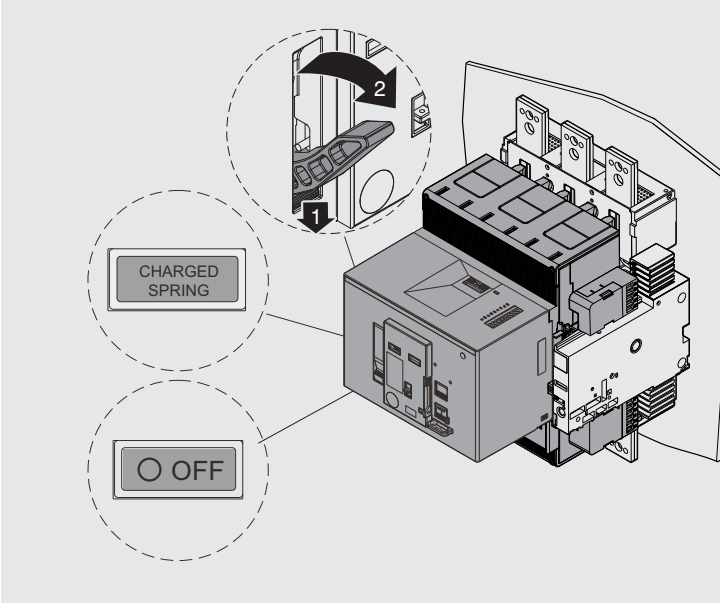
Switch the moving part to the "OFF" and "Discharged Spring" position, place it the in the fixed part and push until it comes to a stop.

Das bewegliche Teil in Position "OFF" und "Discharged Spring" bringen. Das bewegliche Teil im festen Teil anordnen und es schieben, bis es anschlägt.

Placer la partie mobile en position "OFF" et "Discharged Spring", placez-le dans la partie fixe et la pousser jusqu'à ce qu'elle arrive en butée.

Poner la parte móvil en posición "OFF" y "Discharged Spring", ponerla en la parte fija y empujarla hasta el bloqueo.

将断路器切换到“OFF-Discharged Spring”位置。将活动部分调到固定部分的位置，并向前推动至停下。



Caricare le molle mediante la leva di manovra del MOE (o con comando elettrico da remoto) (1-2). L'interruttore si porta in posizione "OFF" e "Charged Spring"

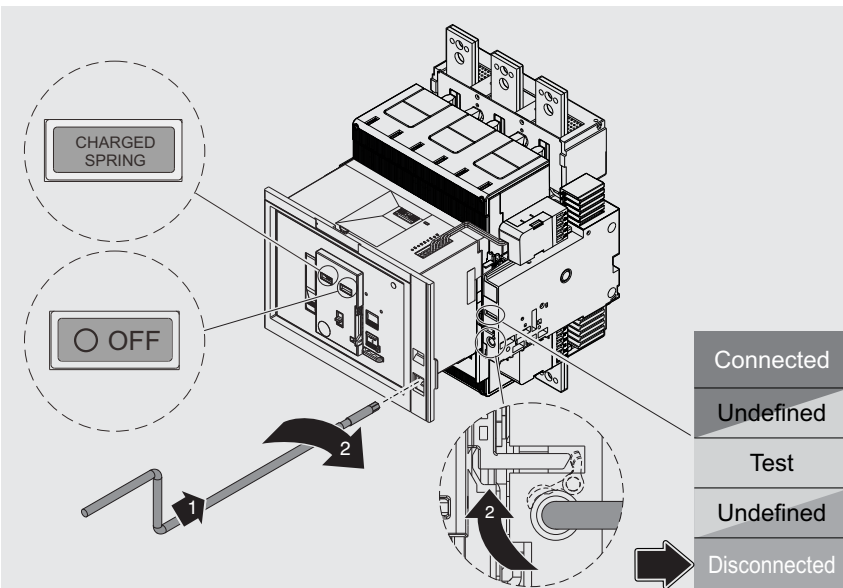
Charge the springs using the MOE operating lever (or by remote electrical control) (1-2). The circuit-breaker moves to the "OFF" and "Charged Spring" positions.

Die Federn mit Hilfe des MOE-Bedienungshebels (oder durch elektrische Steuerung von Remote) laden (1-2). Der Leistungsschalter schaltet in die Positionen "OFF" und "Charged Spring".

Chargez les ressorts à l'aide du levier de commande du MOE (ou par commande électrique de distant) (1-2). Le disjoncteur passe en position "OFF" et "Charged Spring".

Cargue los resortes mediante la palanca de mando del MOE (o con el mando eléctrico desde remoto) (1-2). El interruptor pasa a la posición "OFF" y "Charged Spring".

使用MOE操作杆（或通过远程电气控制）给弹簧充电（1-2）断路器移动到“OFF”和“Charged Spring”位置。



Inserire la manovella nella parte fissa. In questa fase la parte mobile è in posizione DISCONNECTED.

Insert the crank in the fixed part. In this phase the moving part is in DISCONNECTED position.

Die Handkurbel in das festen Teil stecken. In dieser Phase befindet sich das bewegliche Teil in der Position DISCONNECTED.

Introduire la manivelle dans la partie fixe. Dans cette phase la partie mobile est en position DISCONNECTED.

Introducir la manivela en la parte fija. En esta fase la parte móvil está en posición DISCONNECTED.

往移固定部分上插入摇把。这过程中，移动部分仍处于DISCONNECTED位置。

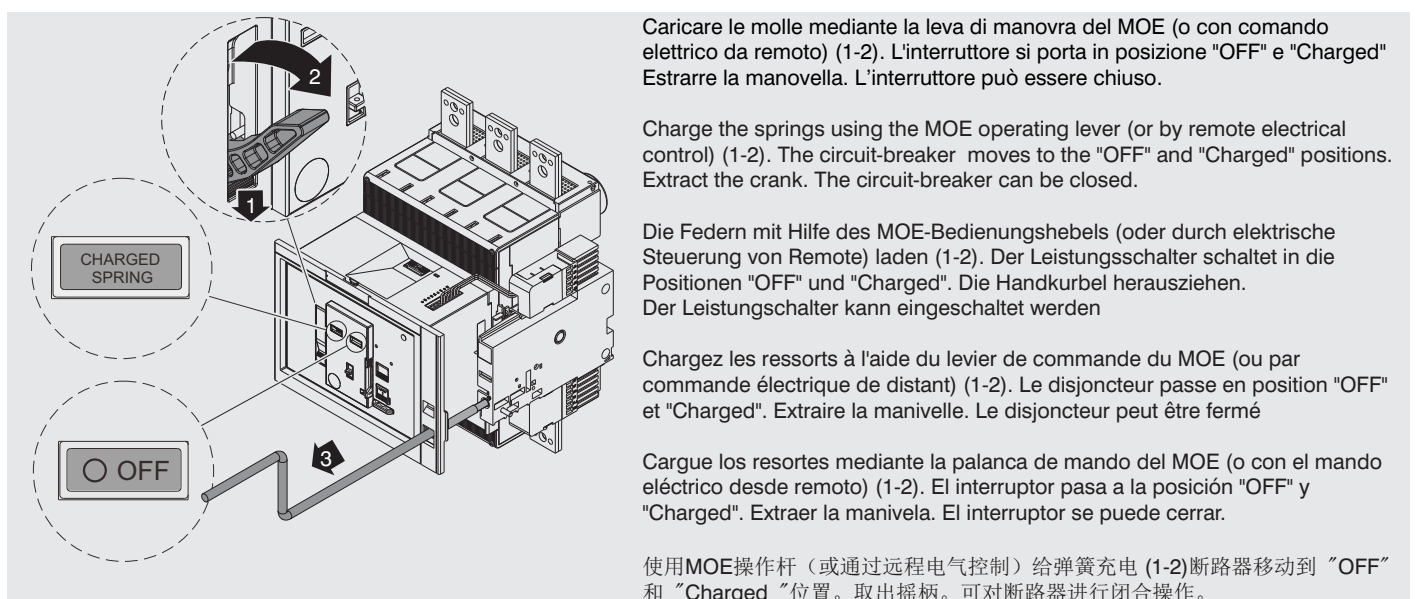
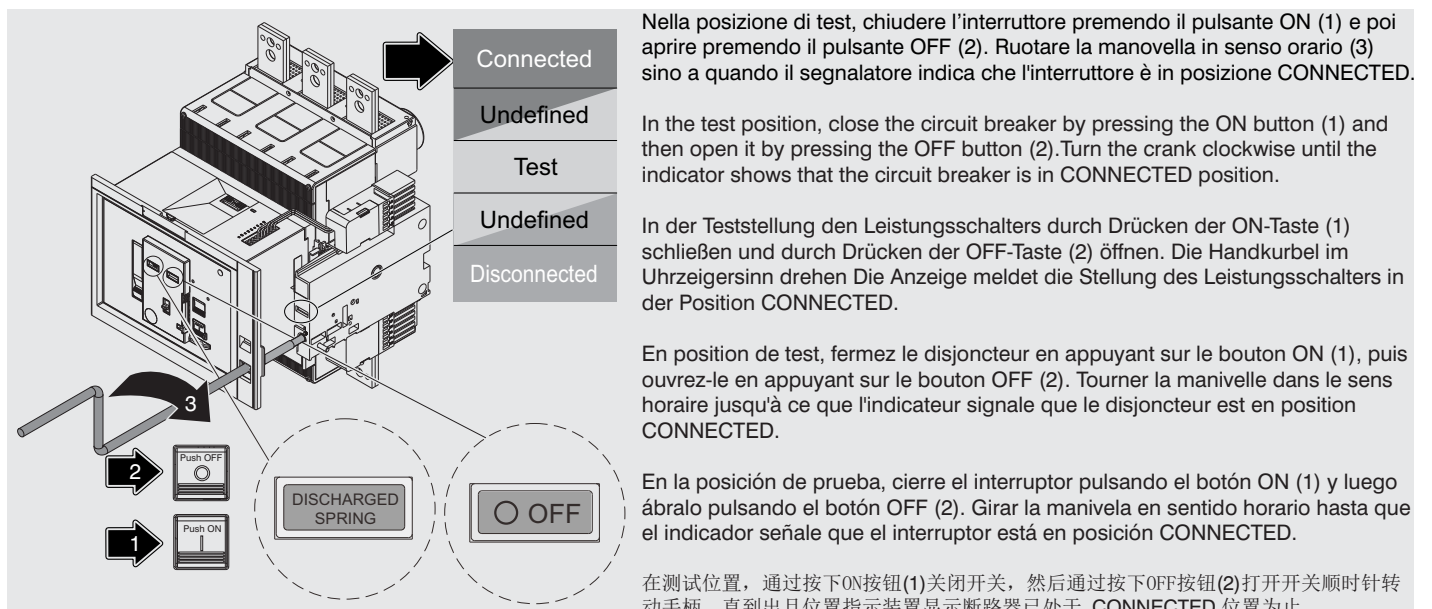
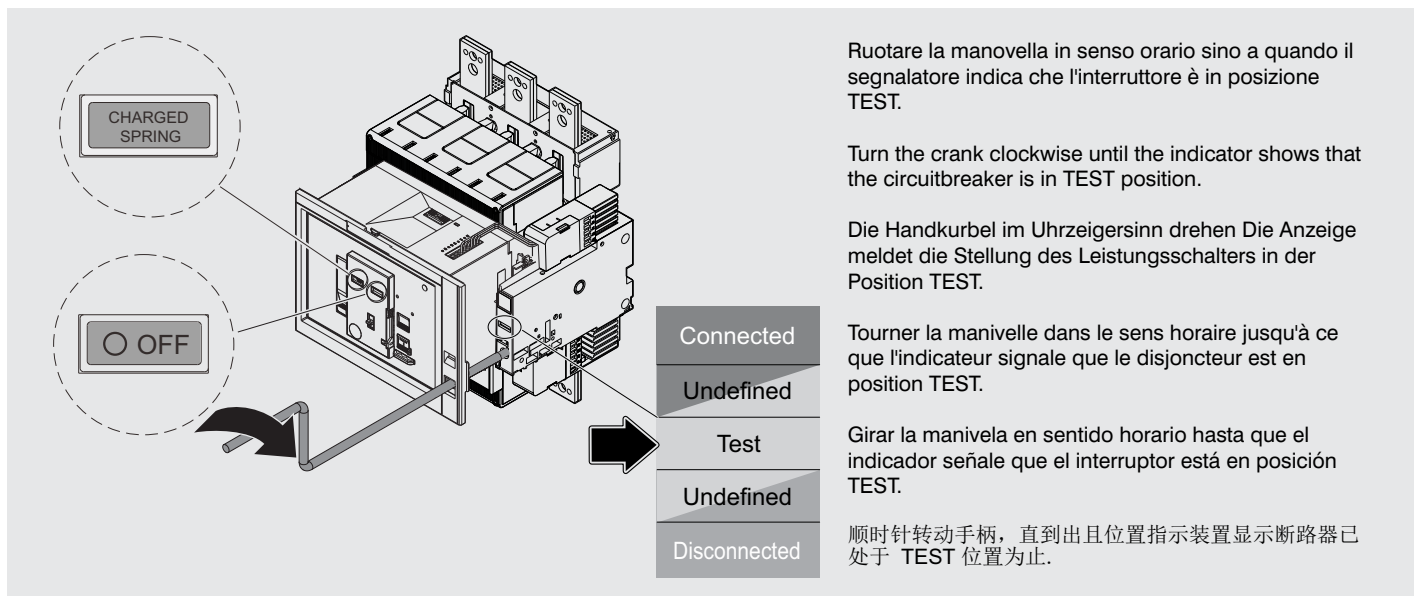
Connected

Undefined

Test

Undefined

Disconnected



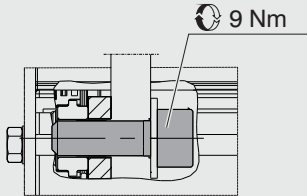
Terminali
Terminals
Anschlüsse
Prises
Terminales
端子类型

Codici
Codes
Codes
Codes
Códigos
物料编号

Istruzioni d'installazione
Installation instructions
Installationsanleitung
Instructions pour l'installation
Instrucciones de instalación
安装说明

Dimensioni di ingombro
Overall dimensions
Abmessungen
Dimensions d'encombrement
Dimensiones generales
全部尺寸

F - F

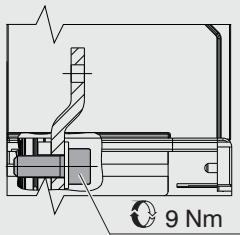


| | |
|--------------|------|
| 1SDA104732R1 | 3pcs |
| 1SDA104733R1 | 4pcs |

[1SDH002012A1801](#)

[1SDH002012A1101](#)

F 800 - EF

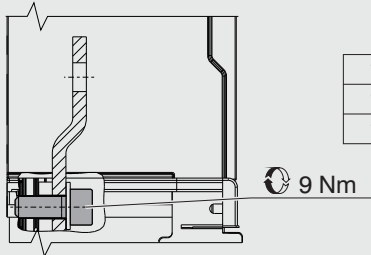


| | |
|--------------|------|
| 1SDA104736R1 | 3pcs |
| 1SDA104737R1 | 4pcs |

[1SDH002012A1802](#)

[1SDH002012A1104](#)

F/W - ES

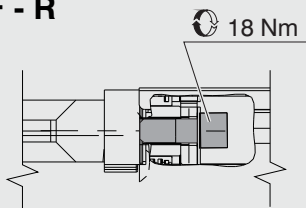


| | |
|--------------|------------|
| 1SDA104740R1 | 3pcs - Sup |
| 1SDA113127R1 | 3pcs - Inf |
| 1SDA104741R1 | 4pcs |

[1SDH002012A1803](#)

[1SDH002012A1106](#)

F - R

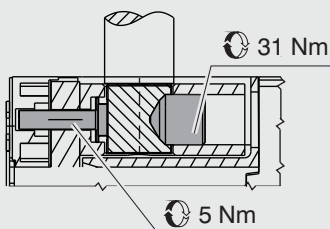


| | |
|--------------|------|
| 1SDA104762R1 | 3pcs |
| 1SDA104763R1 | 4pcs |

[1SDH002012A1807](#)

[1SDH002012A1102](#)

F/W - FC CuAl 2x120...240mm²



| | |
|--------------|------|
| 1SDA104750R1 | 3pcs |
| 1SDA104751R1 | 4pcs |

[1SDH002012A1805](#)

[1SDH002012A1107](#)

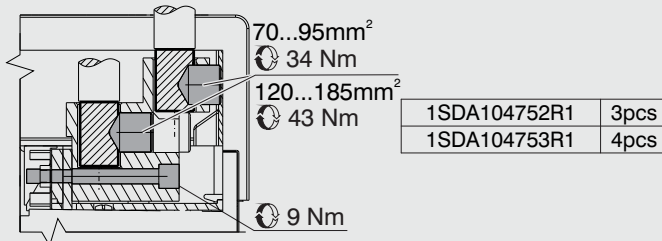
Terminali
Terminals
Anschlusse
Prises
Terminales
端子类型

Codici
Codes
Codes
Codes
Códigos
物料编号

Istruzioni d'installazione
Installation instructions
Installationsanleitung
Instructions pour l'installation
Instrucciones de instalación
安装说明

Dimensioni di ingombro
Overall dimensions
Abmessungen
Dimensions d'encombrement
Dimensiones generales
全部尺寸

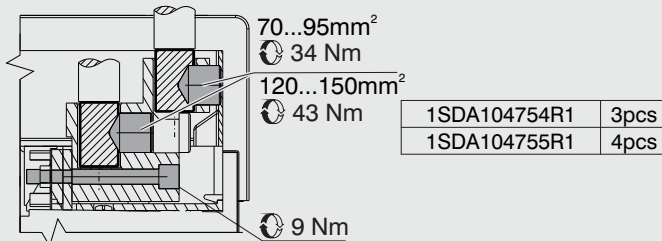
F/W - FC CuAl 3x70...185mm²



[1SDH002012A1806](#)

[1SDH002012A1107](#)

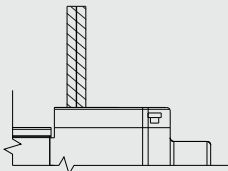
F/W - FC CuAl 4x70...150mm²



[1SDH002012A1806](#)

[1SDH002012A1105](#)

W - EF

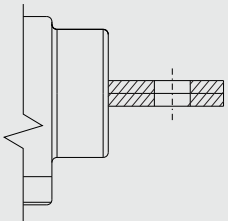


| | |
|--------------|------|
| 1SDA104768R1 | 3pcs |
| 1SDA104769R1 | 4pcs |

[1SDH002012A1808](#)

[1SDH002012A1115](#)

W - HR

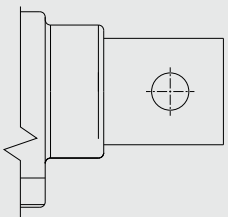


| | |
|--------------|------|
| 1SDA104772R1 | 3pcs |
| 1SDA104773R1 | 4pcs |

[1SDH002012A1808](#)

[1SDH002012A1116](#)

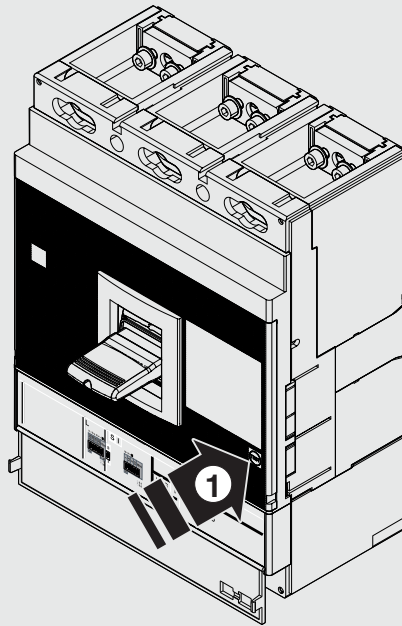
W - VR



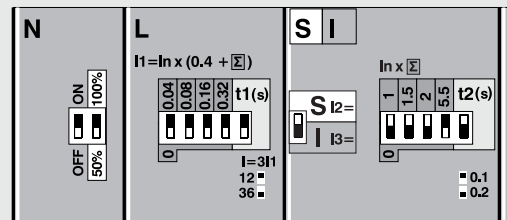
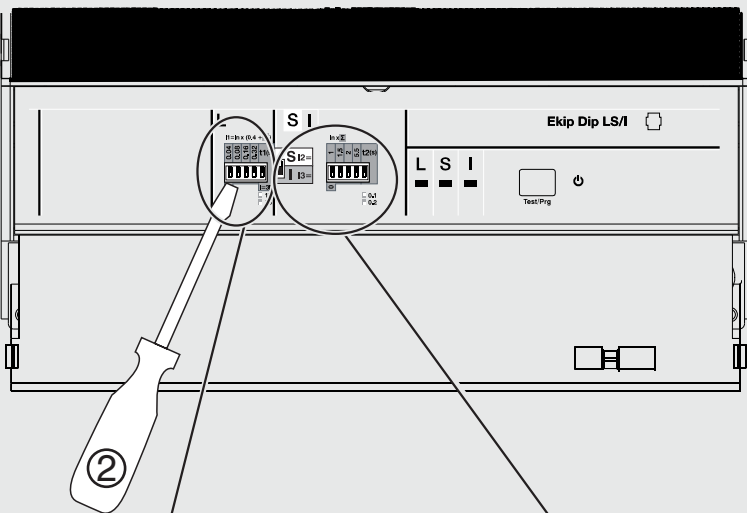
| | |
|--------------|------|
| 1SDA104782R1 | 3pcs |
| 1SDA104783R1 | 4pcs |

[1SDH002012A1808](#)

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| LED | Color | CONDITION Run time |
|-----------|--------|---|
| ⏻ | Green | LED ON (fixed) = Device active |
| L | Yellow | LED Fixed = L pre alarm ($0,9 \cdot I_1 < I < 1,2 \cdot I_1$) |
| L | Red | LED Blinking = L alarm ($I > 1,2 \cdot I_1$) |
| S | Red | LED Blinking = S alarm ($I > I_2$) |
| L S I | Red | LED Blinking = Parameters inconsistency - L = S or L = I. LED Blinking without Parameters inconsistency = generic fault (please contact ABB) |



Settaggio di default
 Default setting
 Default-Einstellung
 Configuration par défaut
 Ajuste de default
 默认设置

L $I_1 = I_n \times (0.4 + \Sigma)$

0.04 0.08 0.16 0.32 t1

0 12 36

I=3I1

Esempio: $I_n = 800 \text{ A}$
 Example: $I_1 = 800 \times (0,4 + 0,08 + 0,32) = 640 \text{ A}$
 $t_1 = 12 \text{ s @ } 1920 \text{ A (3I}_1)$

S I

S $I_2 =$

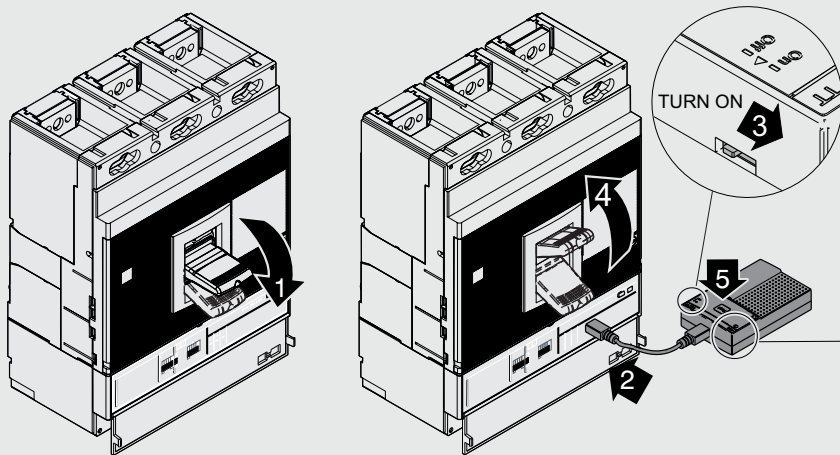
I $I_3 =$

$I_n \times \Sigma$

1 1.5 2 5.5 t2(s)


0 0.1 0.2

Esempio: $I_n = 800 \text{ A}$
 Example: $I_2 = 800 \times (1,5 + 2) = 2800 \text{ A}$
 $t_2 = 0,2 \text{ s @ } I_n > I_2$



| LED Ekip TT | |
|--|---|
| Verde Green Grün Vert Verde 绿 | Rosso Red Rot Rouge Rojo 红 |
| Dispositivo acceso Device ON Einrichtung eingeschaltet Dispositif allumé Dispositivo encendido 设备运行 | Sostituire batterie Change battery Batterie ersetzen Remplacer batteries Sustituir baterías 更换电池 |

Per il trip test, prima di collegare l'interruttore all'impianto, eseguire la seguente procedura (in ogni caso, durante il trip test, sia il circuito primario che quello ausiliario devono essere NON attivi):


- 1) Mettere l'interruttore in posizione aperta
- 2) Inserire il cavo dell'unità TT
- 3) Accendere l'unità TT e verificare che il LED  di alimentazione sullo sganciatore di protezione sia acceso.

Controllo LED:

- a) Se uno o più LED lampeggiano, fare riferimento alla tabella dei LED.
- b) Se tutti i led sullo sganciatore si accendono in sequenza: OK, pronto per trip test.
- 4) Chiudere l'interruttore.
- 5) Premere per 2 secondi il pulsante trip test dell'unità TT, l'interruttore esegue un trip.

Scollegare il cavo dell'unità TT.

For the trip test, before connecting the circuit-breaker to the system, perform the following procedure (in any case, during the trip test, both the primary and the auxiliary circuits must be NOT active):


- 1) Put the circuit-breaker in open position
- 2) Insert the TT cable
- 3) Turn on the TT and check that the power LED  on the protection unit is on.

LED control:

- a) If one or more LEDs are blinking, refer to the LED table.
- b) If all the LEDs on the release light up in sequence: OK, ready for trip test.
- 4) Close the circuit-breaker.
- 5) Press the trip test button on the TT for 2 seconds, the circuit-breaker performs a trip.

Disconnect the TT cable.

Führen Sie für den Auslösetest das folgende Verfahren durch, bevor Sie den Leistungsschalter an die Anlage anschließen (während des Auslösetests dürfen in jedem Fall sowohl der Primär- als auch der Hilfsstromkreis NICHT aktiv sein):


- 1) Stellen Sie den Cricuit Breaker in die geöffnete Position
- 2) Das Kabel die Einheit TT einstecken
- 3) Schalten Sie die Einheit TT ein und sich vergewissern, dass die Power-LED  auf dem Schutzauslöser leuchtet.

LED Kontrolle:

- a) Wenn eine oder mehrere LEDs blinken, ist Bezug auf die LED tabelle zu nehmen.
- b) Wenn alle LEDs auf dem Auslöser nacheinander aufleuchten: OK, bereit für den Auslösetest.
- 4) Den Leistungsschalter einschalten.
- 5) Die Taste Auslösetest am die Einheit TT für 2 Sekunden drücken, der Leistungsschalter führt eine Auslösung durch.

Das Kabel die Einheit TT abtrennen.

Pour le test de déclenchement, avant de connecter le disjoncteur à l'installation, suivre la procédure ci-dessous (dans tous les cas, pendant le test de déclenchement, aussi bien le circuit primaire que le circuit auxiliaire ne doivent PAS être actifs):


- 1) Mettre le disjoncteur en position ouverte
- 2) Brancher le câble de l'unité TT
- 3) Allumez l'unité TT et vérifiez que la LED d'alimentation  sur le déclencheur de protection est allumée.

Contrôle des LED:

- a) Si une ou plusieurs LED clignotent, se reporter au tableau LED.
- b) Si toutes les LED sur le déclencheur s'allument en séquence : OK, prêt pour le test de déclenchement.
- 4) Fermer le disjoncteur.
- 5) Appuyer sur le bouton de test du déclenchement de l'unité TT pendant 2 secondes, le disjoncteur effectue un déclenchement.

Débrancher le câble de l'unité TT.

Para el test de disparo, antes de conectar el interruptor a la instalación, realizar el siguiente procedimiento (durante la prueba tanto el circuito primario como el auxiliar deben estar siempre en estado NO ACTIVO):


- 1) Ponga el interruptor automático en posición abierta
- 2) Conectar el cable de la unidad TT
- 3) Encienda la unidad TT y verificar que el led de alimentación  en el relé de protección esté encendido.

Control del LED:

- a) Si uno o más LEDs parpadean, consulte la tabla LED.
- b) Si todos los LEDs en el relé se encienden secuencialmente: OK, está listo para el test de disparo.
- 4) Cerrar el interruptor.
- 5) Pulsar 2 segundos el botón de test de disparo de la unidad TT; el interruptor ejecuta un disparo.

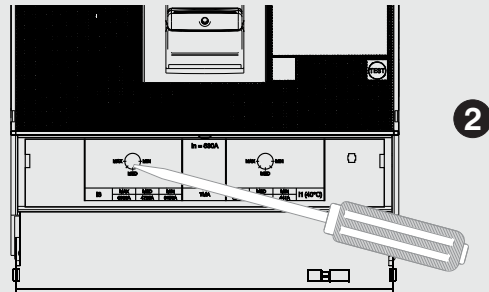
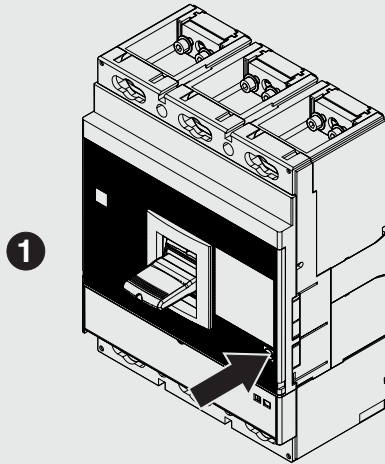
Desconectar el cable de la unidad TT.

进行脱扣测试时，先将断路器连接到设备上，然后执行以下程序（总之在脱扣测试期间，主回路和辅助回路都不能激活）：

- 1) 将断路器置于断开位置
- 2) 插入TT电线。
- 3) 开启TT，检查脱扣保护装置上的LED  灯是否点亮
检查LED灯：
 - a) 如果一盏或多盏LED闪烁，请参考表 LED。
 - b) 如果脱扣保护装置上的LED灯依次点亮：说明以准备好进行脱扣测试。
- 4) 关闭断路器。
- 5) 按住TT的脱扣测试按钮2秒钟，断路器就会执行一次脱扣。

断开TT的电线。

- Mettere l'interruttore in posizione Trip test prima di regolare il termomagnetico.
- Turn the circuit breaker to Trip test mode before adjusting the thermomagnetic release.
- Der Leistungsschalter muss vor Einstellung des thermomagnetischen Auslösers zwingend in die Prüfstellung geschaltet werden.
- Mettre le disjoncteur en position de Test de Déclenchement avant de régler le déclencheur magnétothermique.
- Situar el interruptor en posición "Test de Disparo" antes de realizar el ajuste del relé termomagnético.
- 调整热磁脱扣器前必须使开关处于跳扣状态



| | | I1 | | | |
|----------|-----|-----|--------------|---------------|------------|
| | | In | MIN (0,7×In) | MED (0,85×In) | MAX (1×In) |
| TMA | 630 | 441 | 536 | 630 | |
| | 800 | 560 | 680 | 800 | |
| TMA N50% | 400 | 280 | 340 | 400 | |
| | 500 | 350 | 425 | 500 | |

| | | I3 | | | |
|----------|-----|------|------------|--------------|-------------|
| | | In | MIN (5×In) | MED (7,5×In) | MAX (10×In) |
| TMA | 630 | 3150 | 4725 | 6300 | |
| | 800 | 4000 | 6000 | 8000 | |
| TMA N50% | 400 | 2000 | 3000 | 4000 | |
| | 500 | 2500 | 3750 | 5000 | |