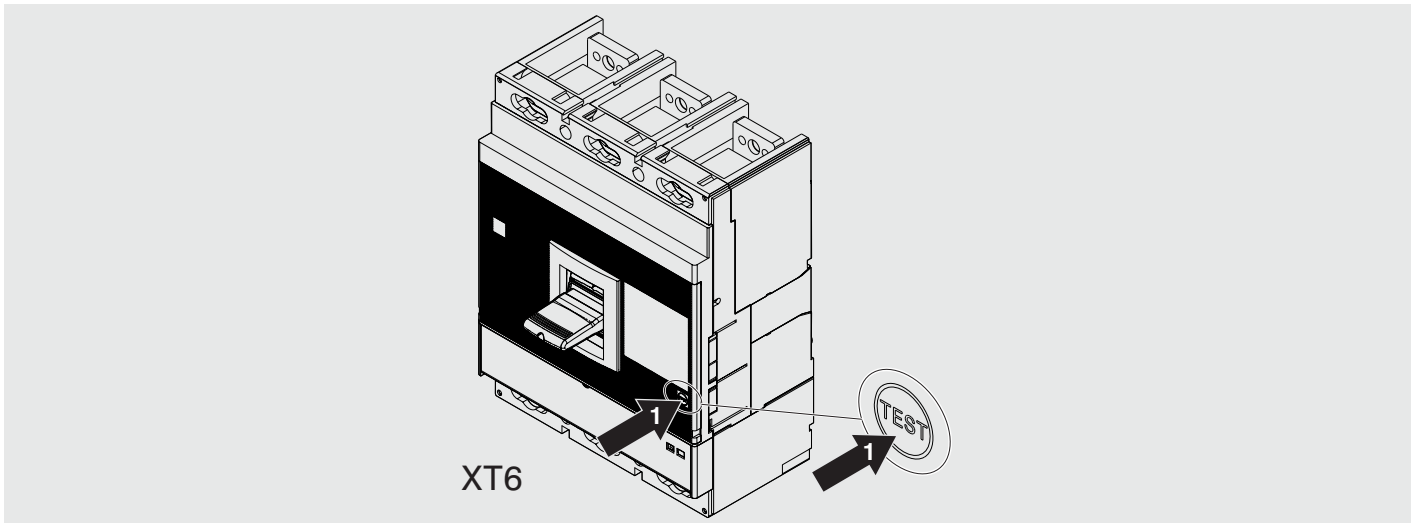


# SACE Tmax XT

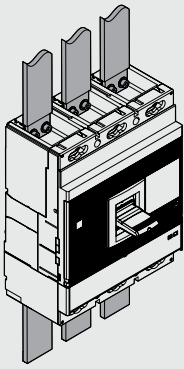


Istruzioni di installazione XT6 IEC  
 Installation instructions XT6 IEC  
 Installationsanleitung XT6 IEC  
 Instructions pour l'installation XT6 IEC  
 Instrucciones de instalación XT6 IEC  
 安装说明书 XT6 IEC

XT6 3p-4p

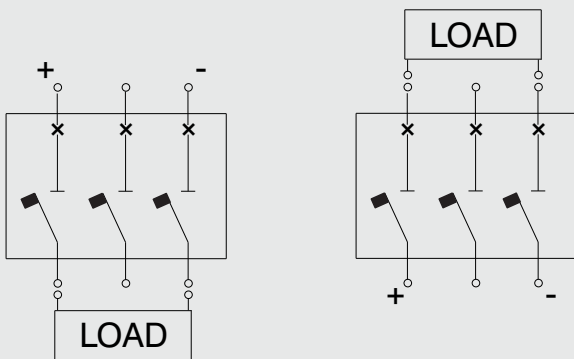


		A	B	C	D	E	F	G	H	I	L	M	N	O	P
				 CH 8	 CH 5						 CH 13				
		LENGHT M 70mm M5	Ø 5,3x10	M M5	LENGHT M 25mm M6	Ø 6,4x14			LENGHT M 36mm M8	Ø 8,4x15	M M8				
F	3p	x4	x4	x4	x12	x12	x1	x1	-	-	-	x1	x1	x1	-
	4p	x4	x4	x4	x16	x16	x1	x1	-	-	-	x1	x1	x1	-
W	3p	-	-	-	-	-	-	-	x4	x4	x4	-	-	-	x1
	4p	-	-	-	-	-	-	-	x4	x4	x4	-	-	-	x1

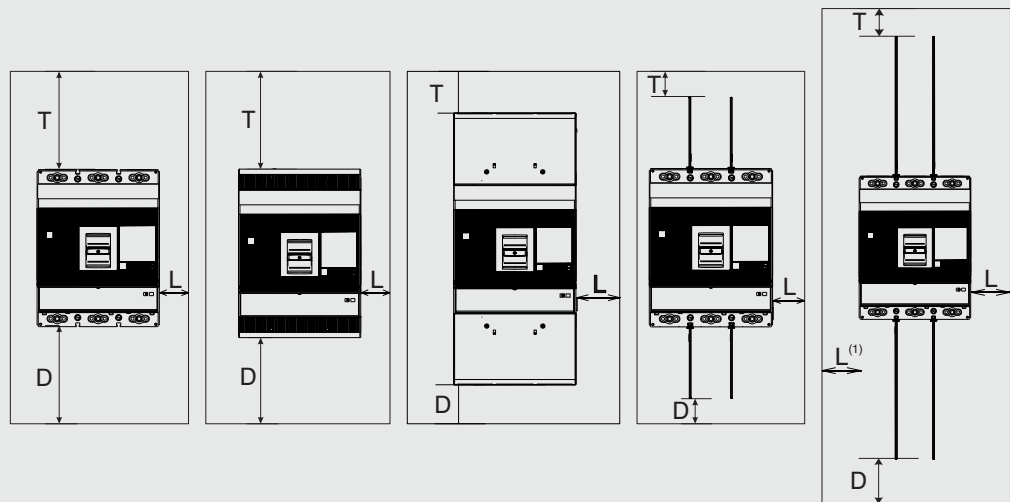
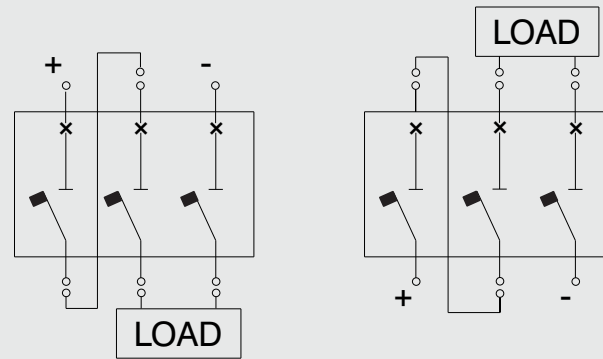


Usare cavi o barre isolate o eseguire prove di tipo specifiche sull' installazione.  
 Use cable or insulated busbars or perform specific type test on the installation.  
 Kabel oder isolierte Sammelschienen verwenden oder die spezifische Typprüfung auf der Installation durchführen.  
 Utiliser un câble ou des barres isolées ou réalisez un test de type spécifique sur installation.  
 Utilizar un cable o barras aisladas o efectuar una prueba de tipo específico sobre instalación.  
 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

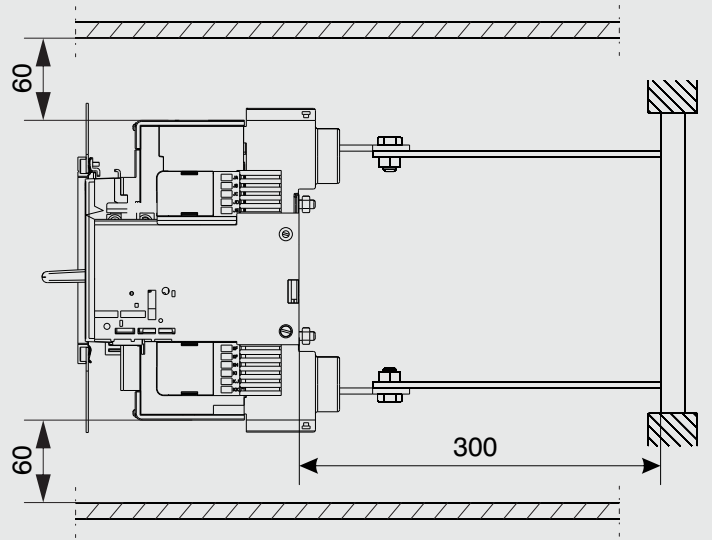
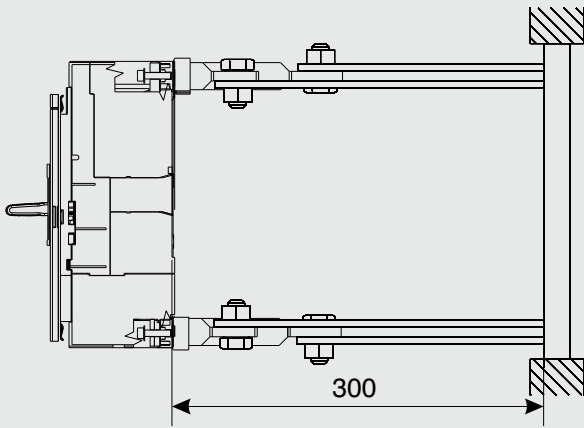
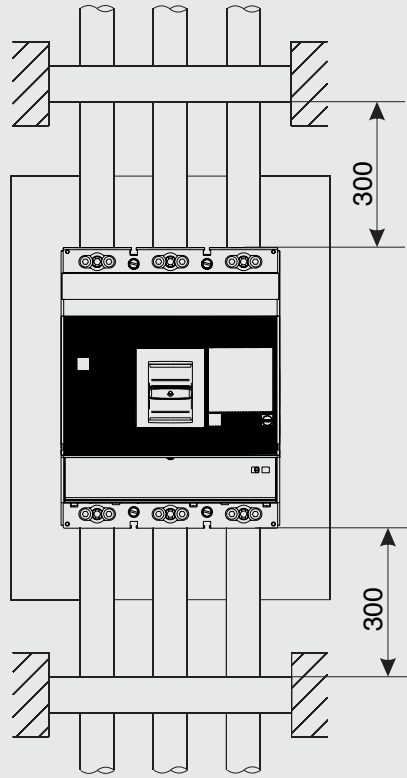


500V - GROUNDED  
 750V - UNGROUNDED

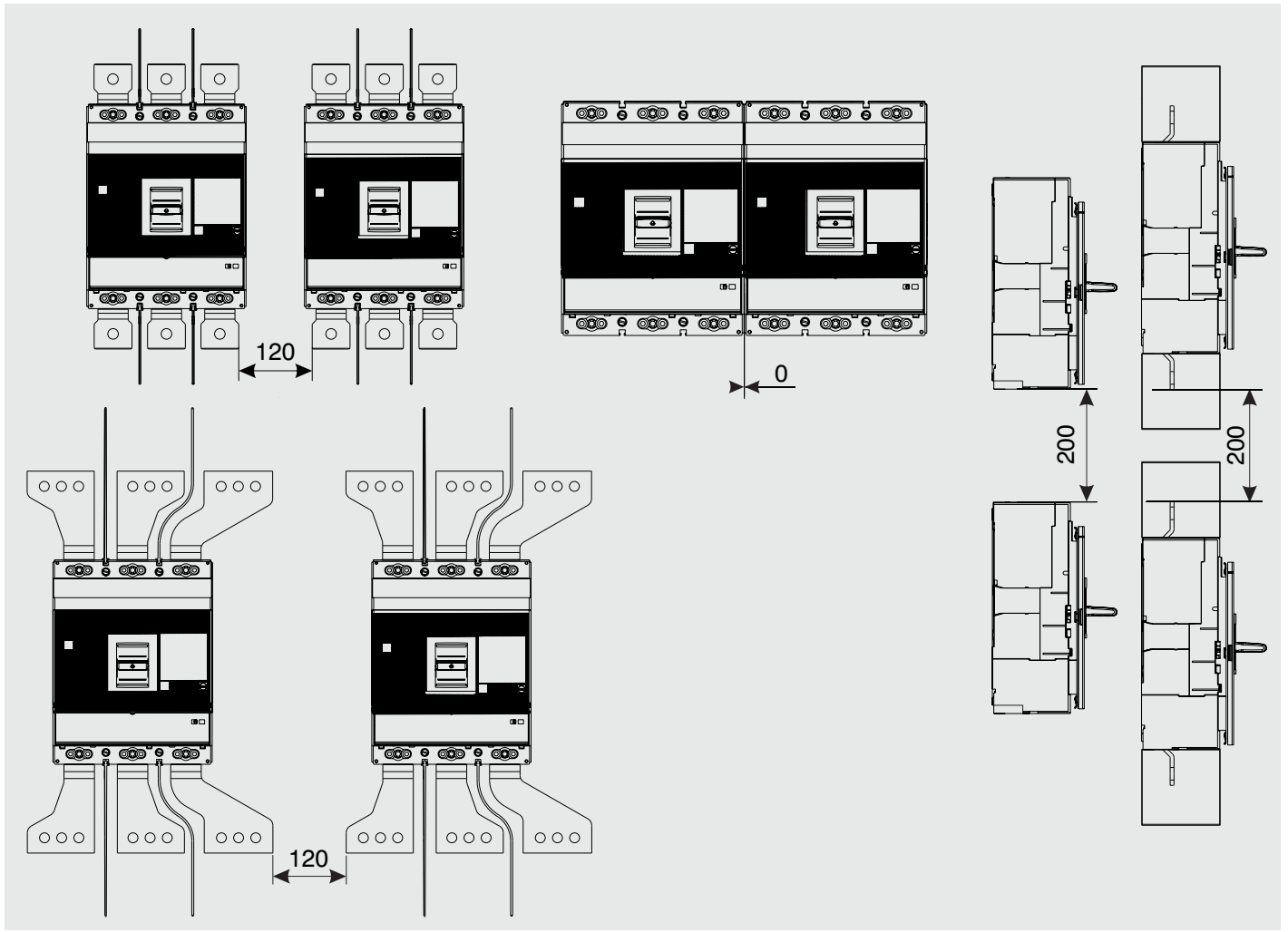


	No accessories			Low terminal cover (LTC)			High terminal cover (HTC)			Phase Barriers 100mm			Phase barriers 200mm		
	T	D	L	T	D	L	T	D	L	T	D	L	T	D	L / L <sup>(1)</sup>
U ≤ 440V AC	35	20	25	35	20	25	35	20	25	0	0	25	0	0	25
440V AC < U ≤ 500V AC	100	20	25	100	20	25	35	20	25	0	0	25	0	0	25
500V AC < U ≤ 690V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

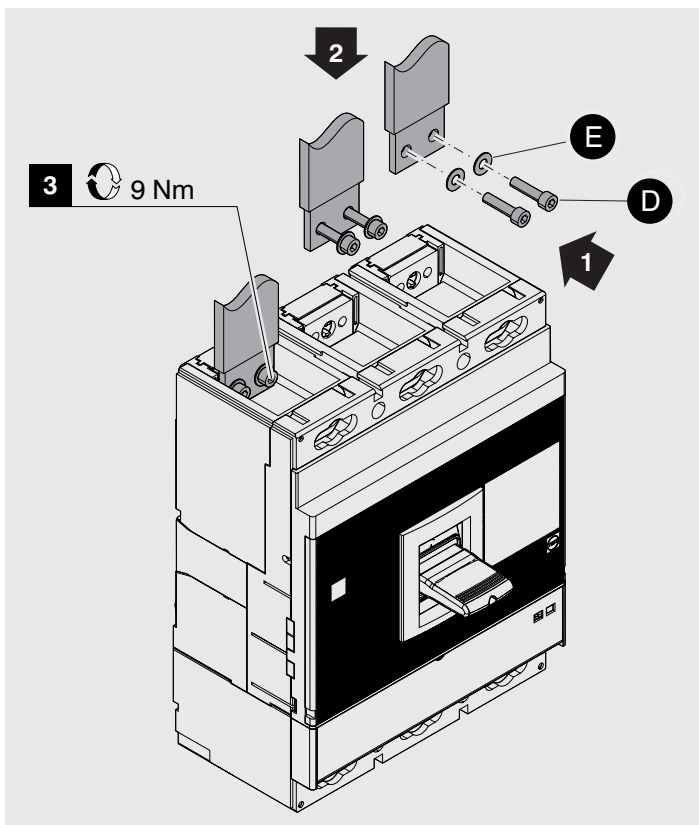
(1) In case of ES terminals, this distance must be added to the maximum lateral dimensions of the terminals



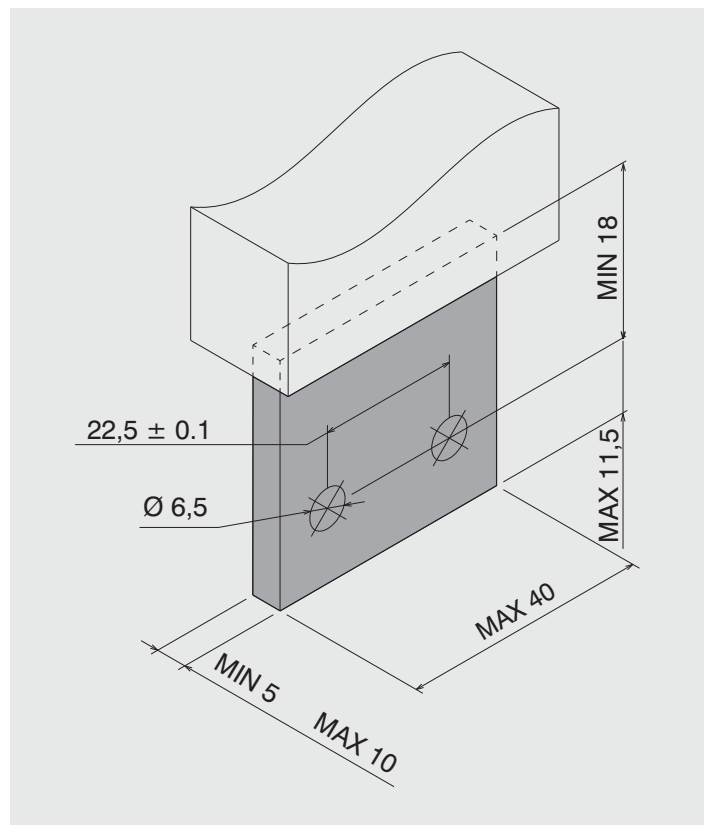
5

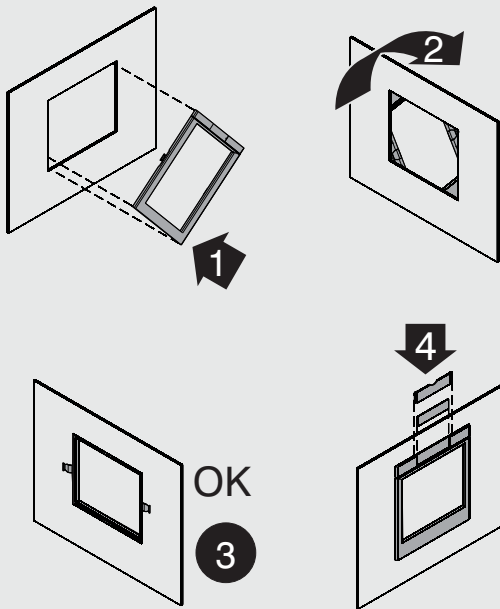
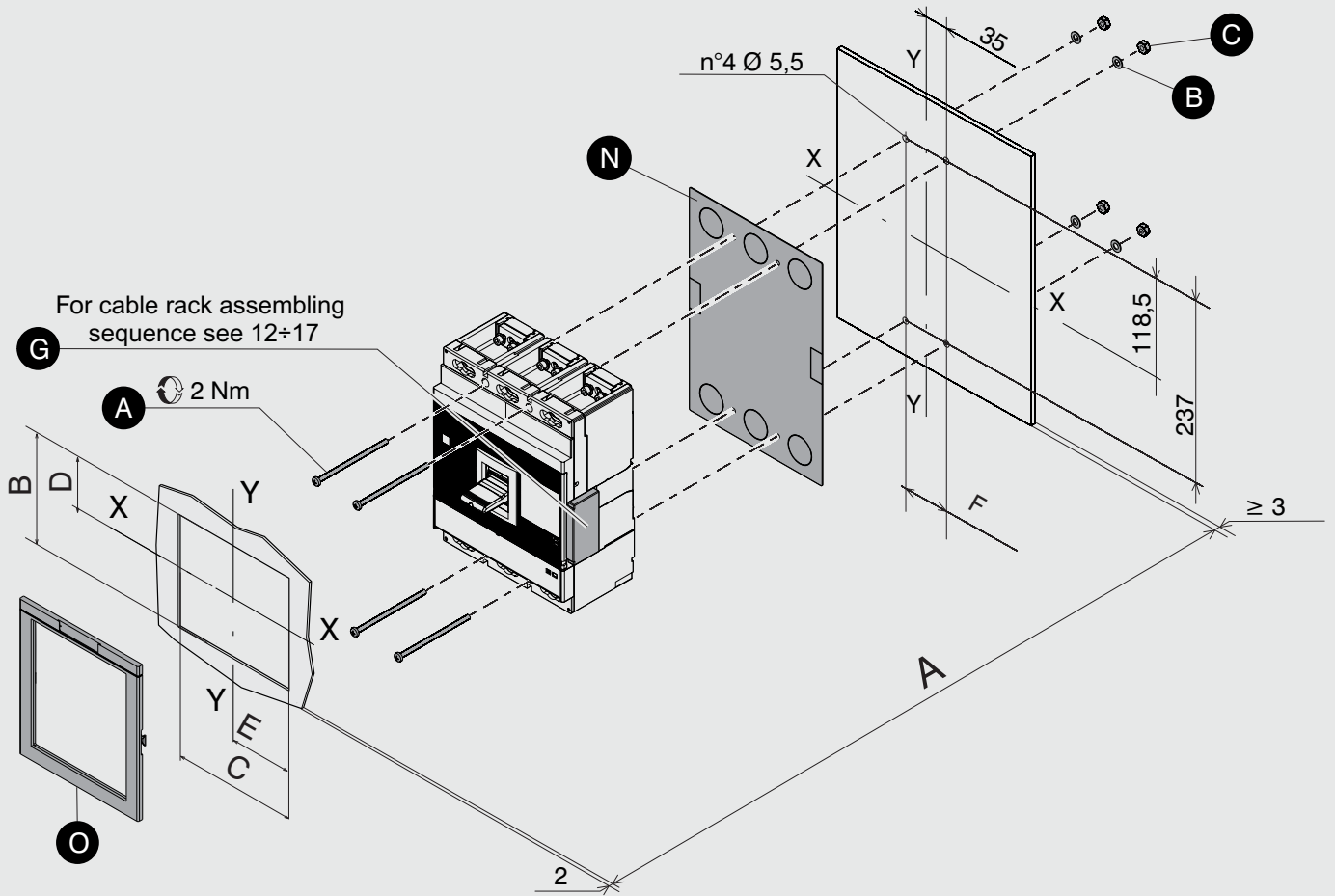


6



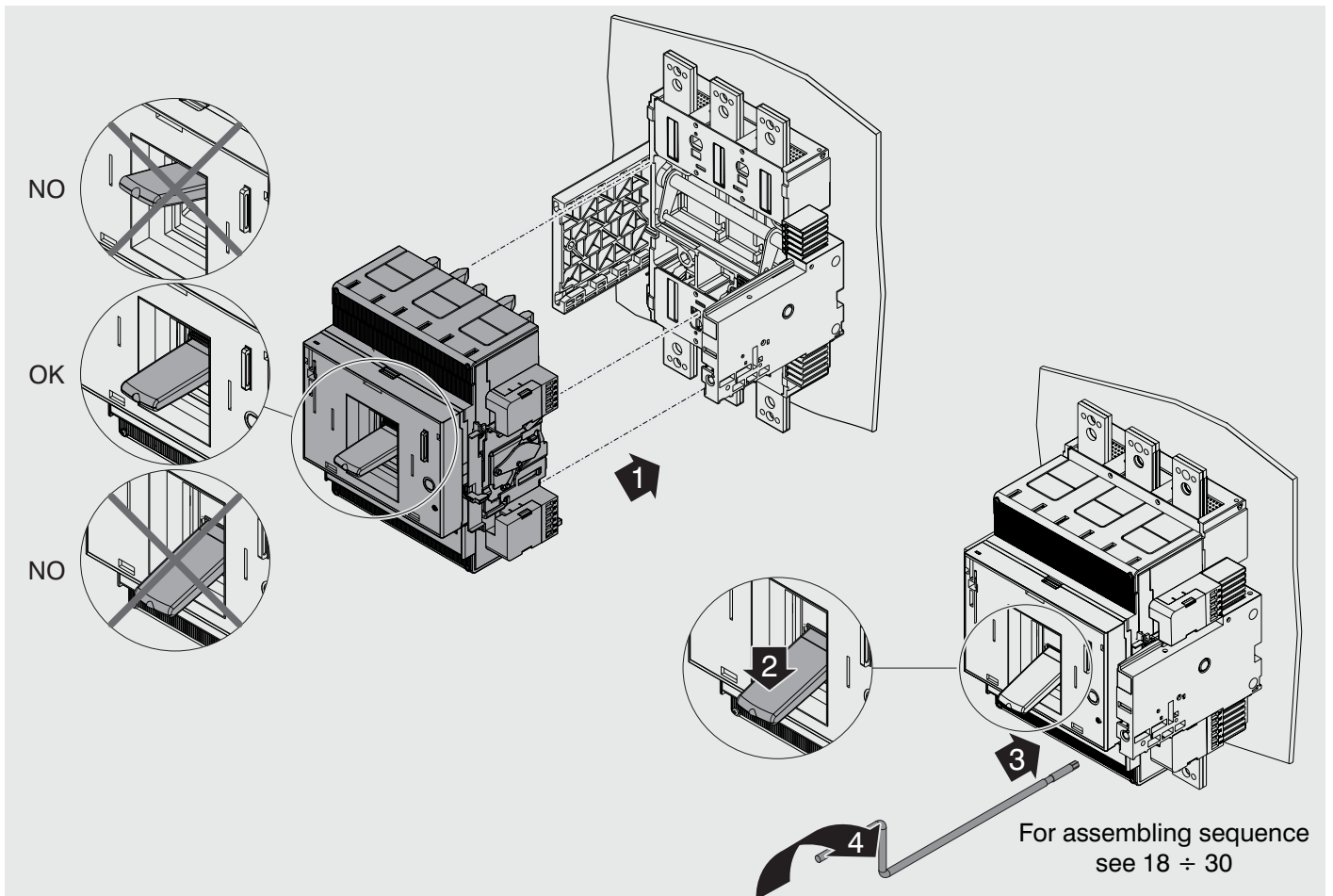
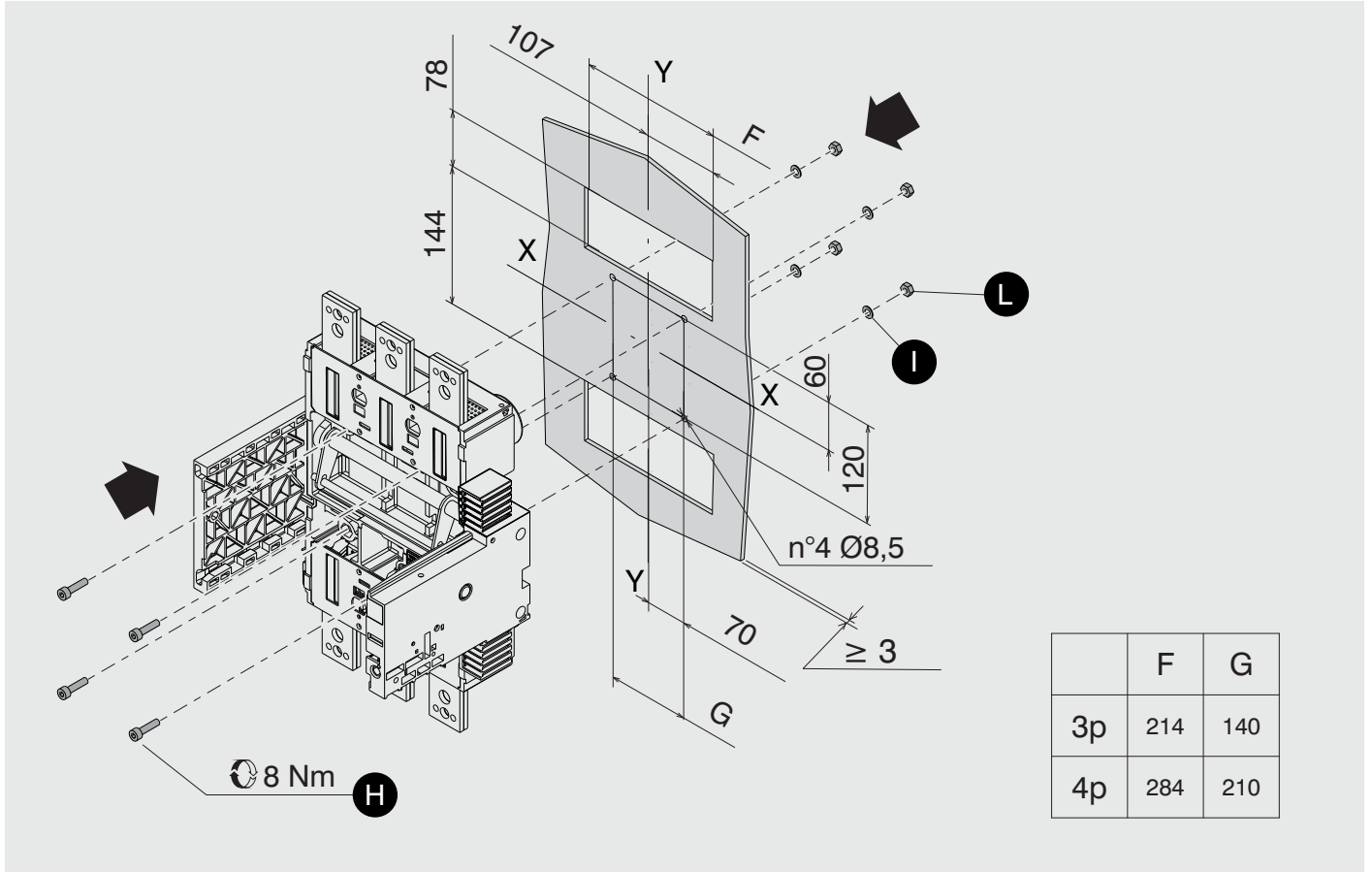
7

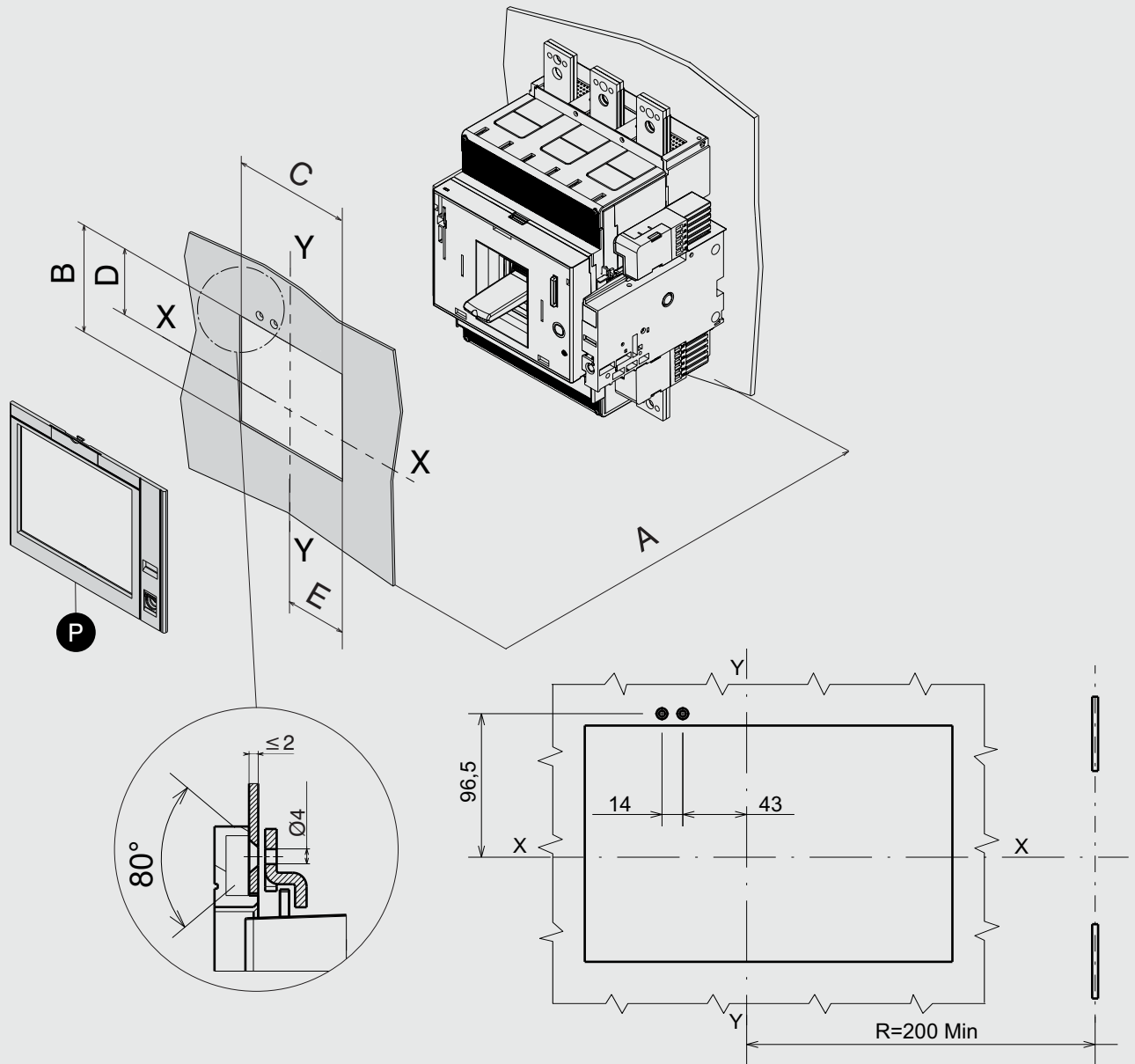




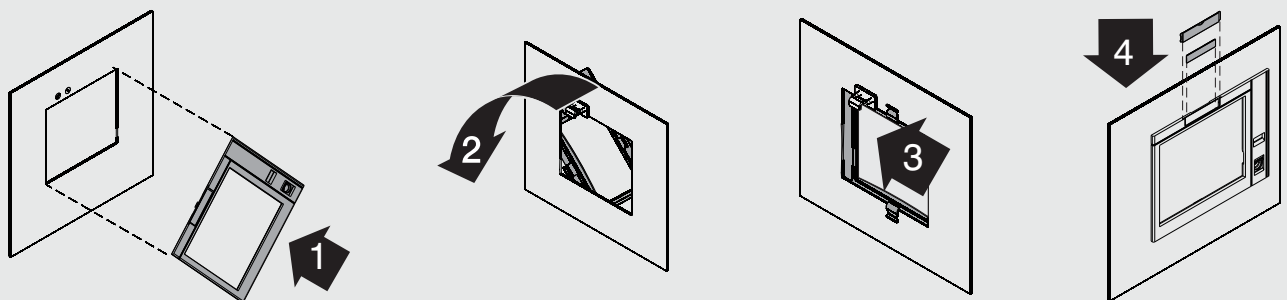
		A	B	C	D	E	F
WITHOUT FLANGE SENZA MOSTRINA	3p	103,5	197	212	86	106	70
	4p						140

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



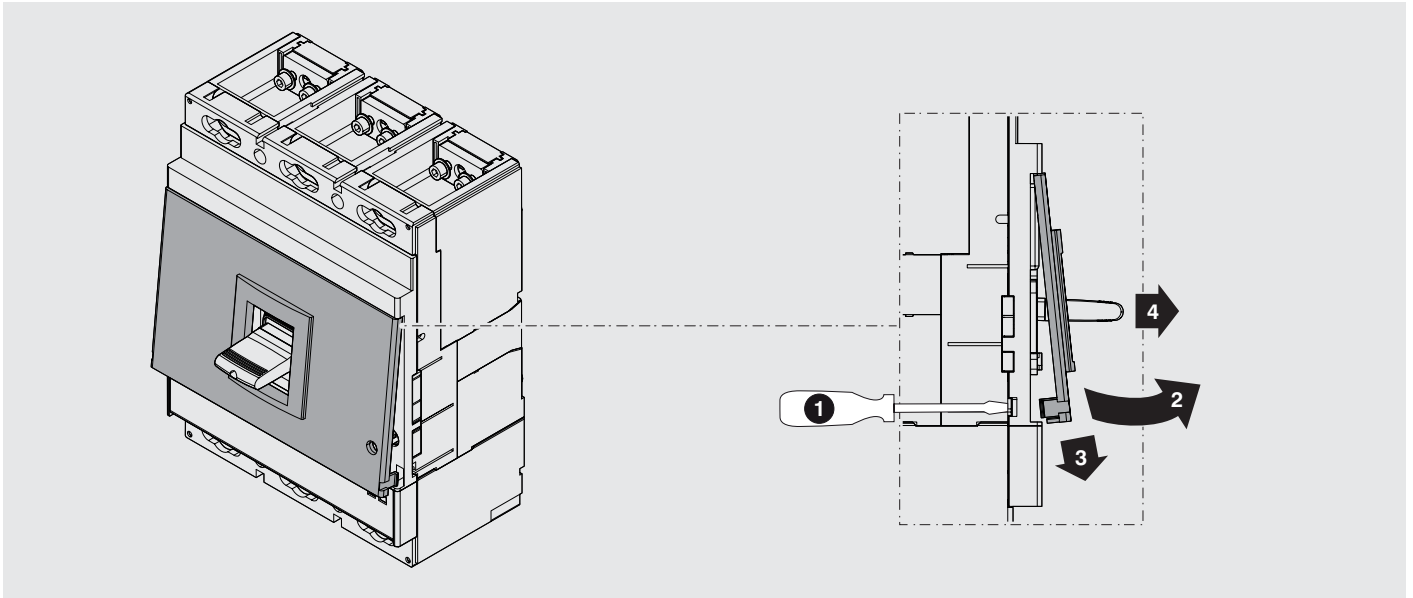


	A	B	C	D	E
3p-4p	192	159	248	89	139



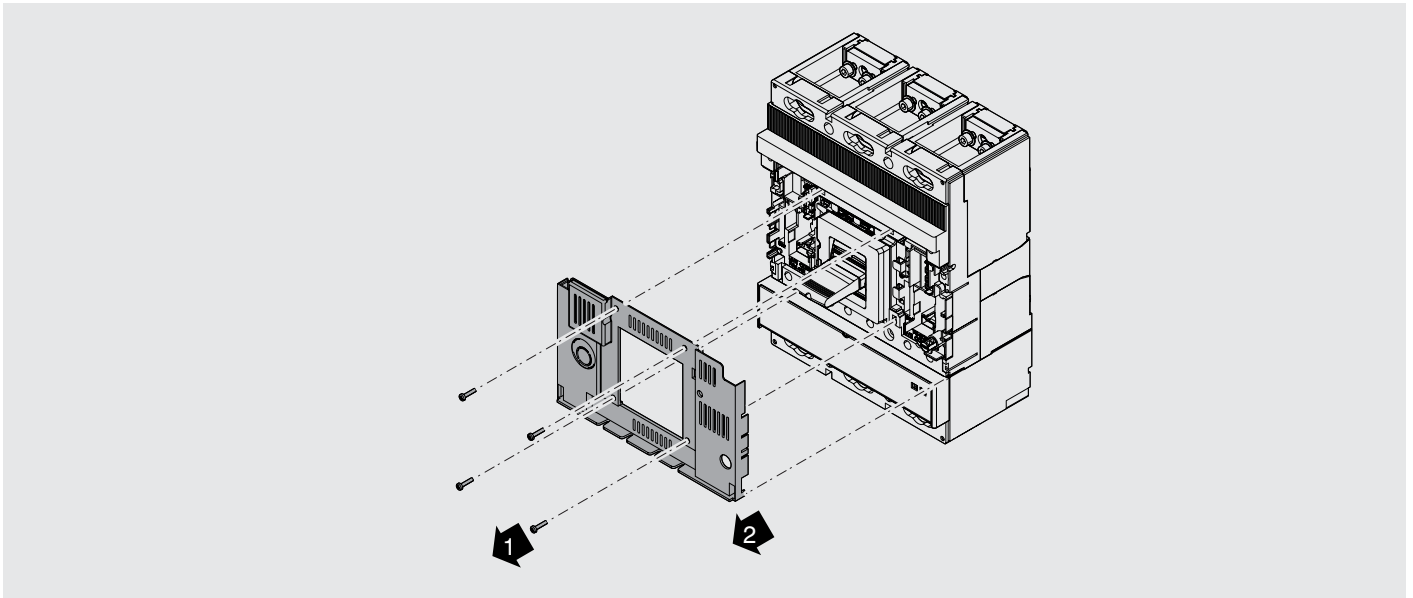
12

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



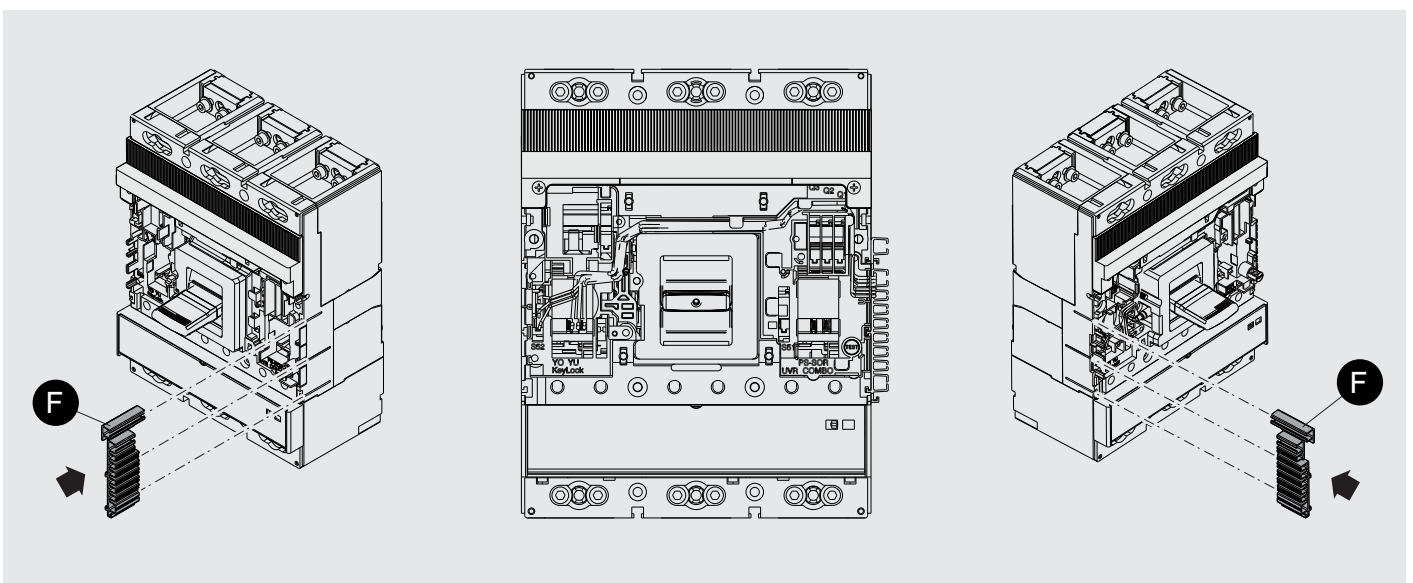
13

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



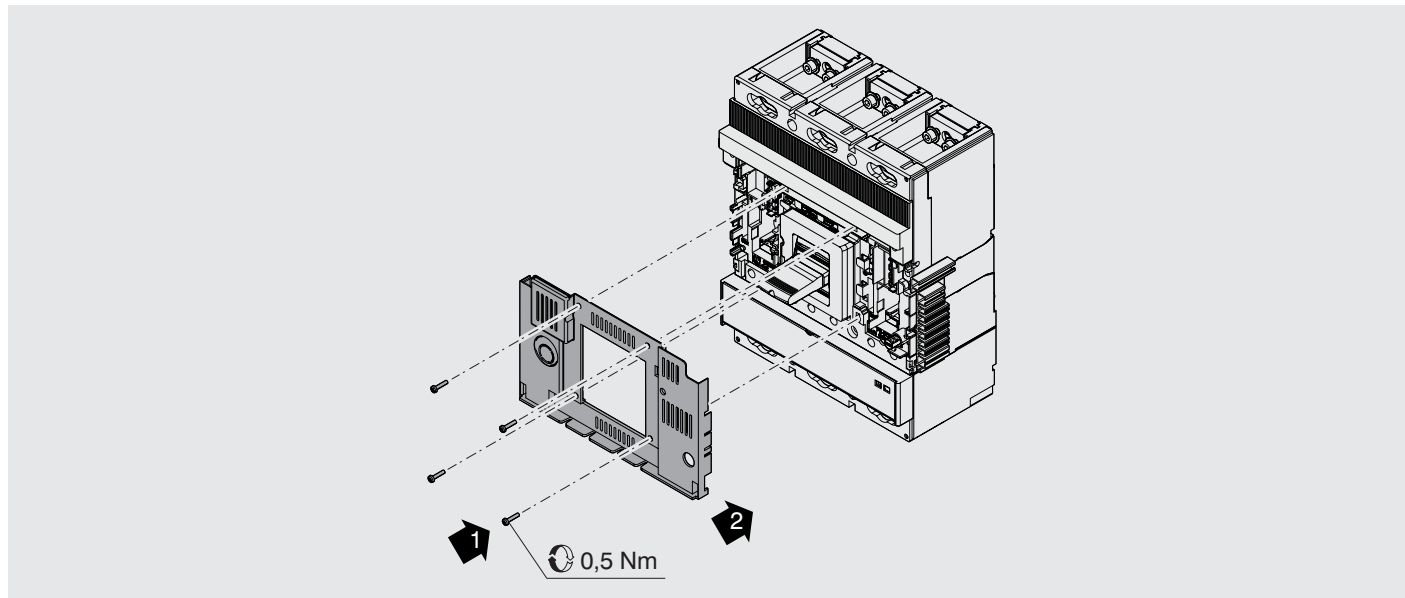
14

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



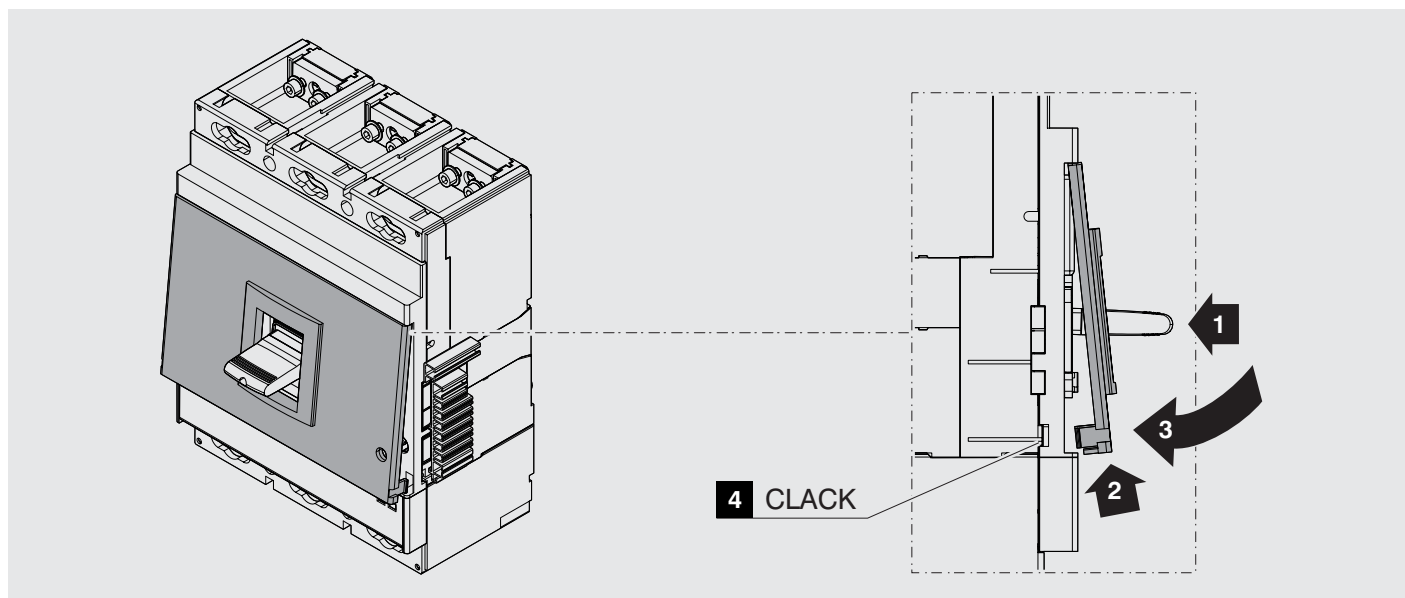
15

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



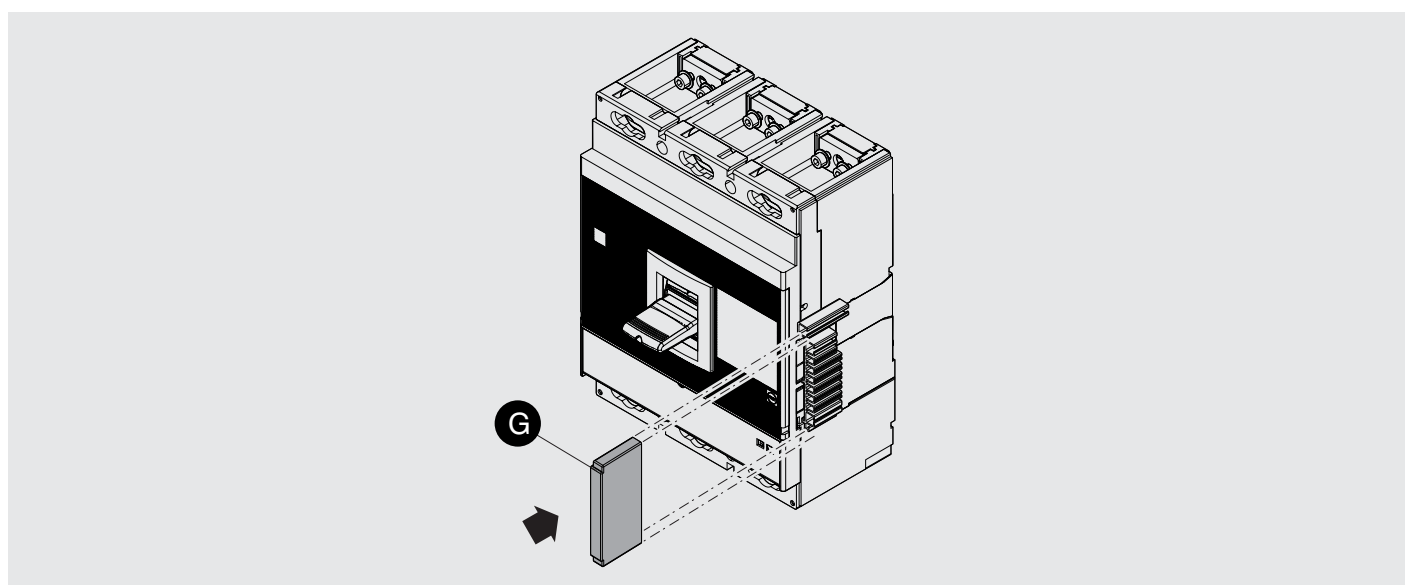
16

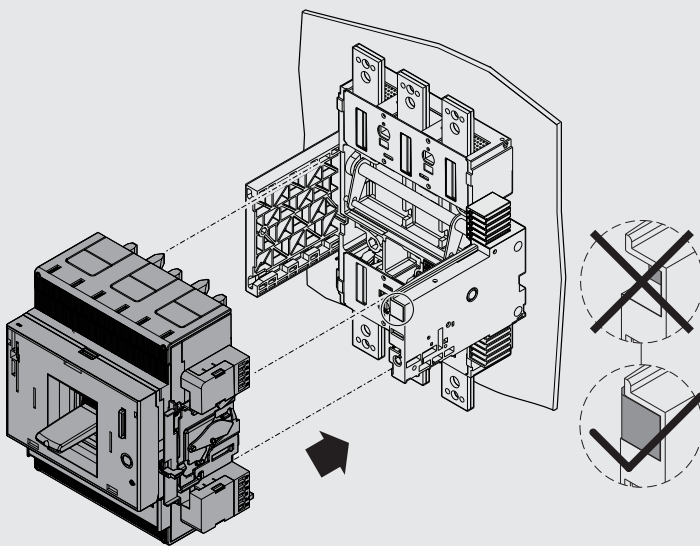
For cable rack assembling only - XT6 3p-4p



17

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





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

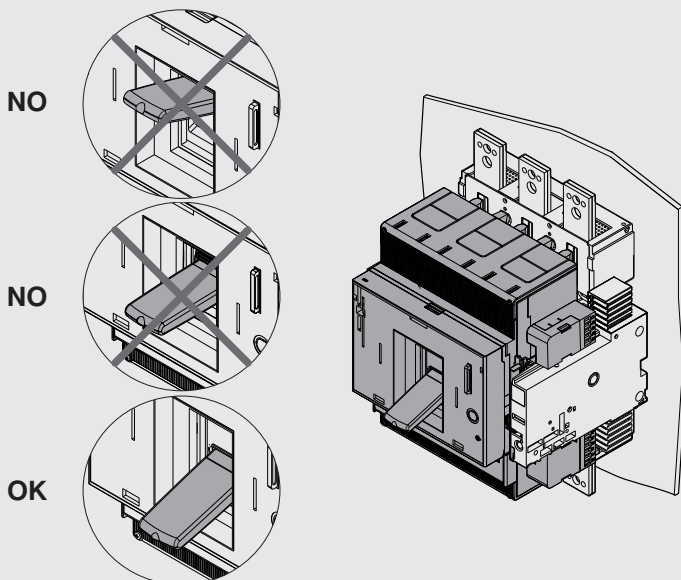
Position the moving part in the fixed part and push until it comes to a stop.

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"

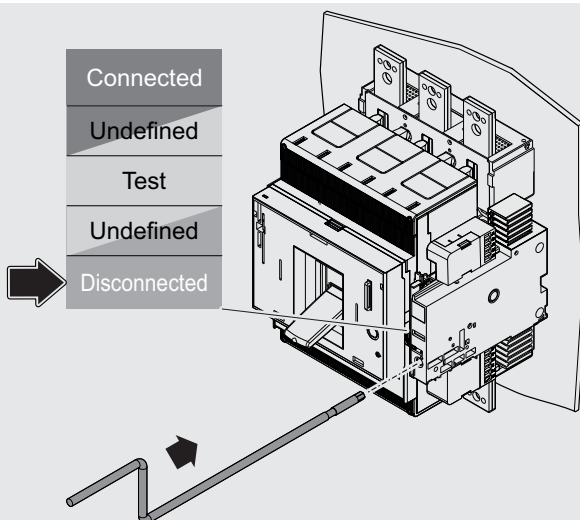
Switch the circuit-breaker to the "Open" position

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.

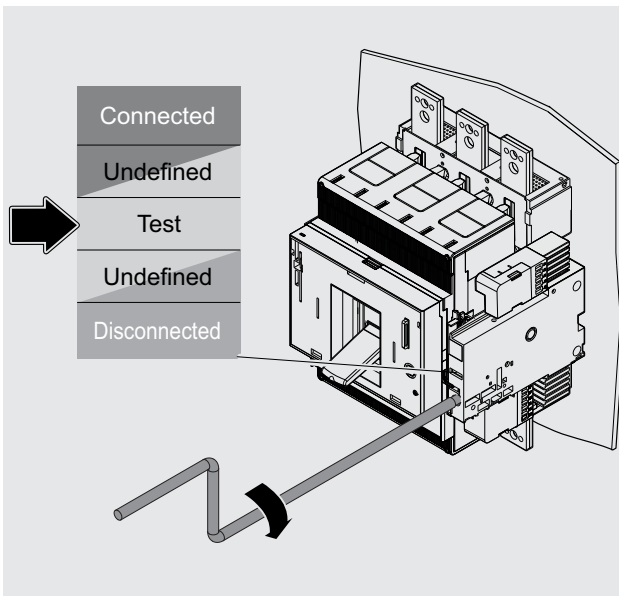
Insert the crank in the fixed part. In this phase the moving part is in DISCONNECTED position.

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.

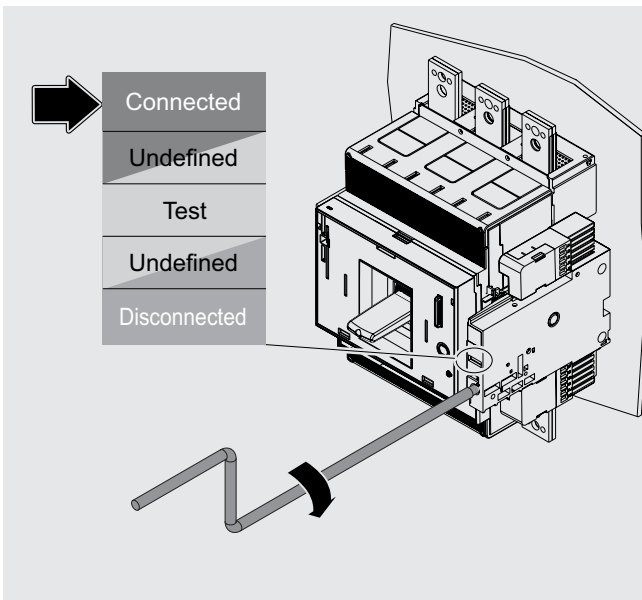
Turn the crank clockwise until the indicator shows that the circuitbreaker is in TEST position.

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.

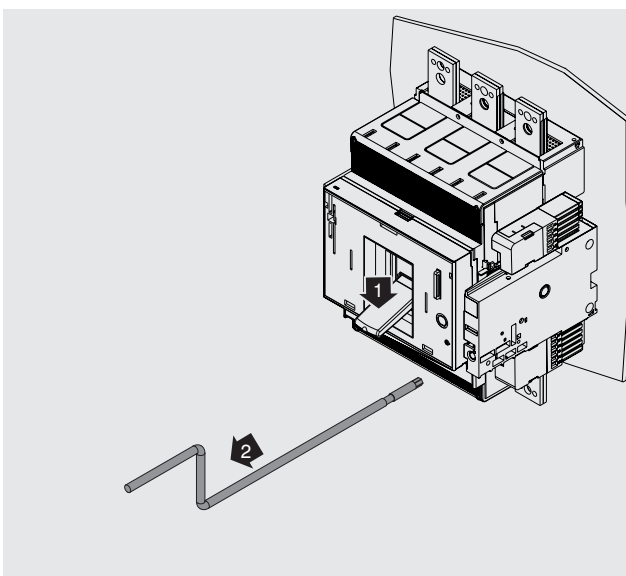
Turn the crank clockwise until the indicator shows that the circuitbreaker is in CONNECTED position. The circuit breaker moves to TRIPPED position.

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.

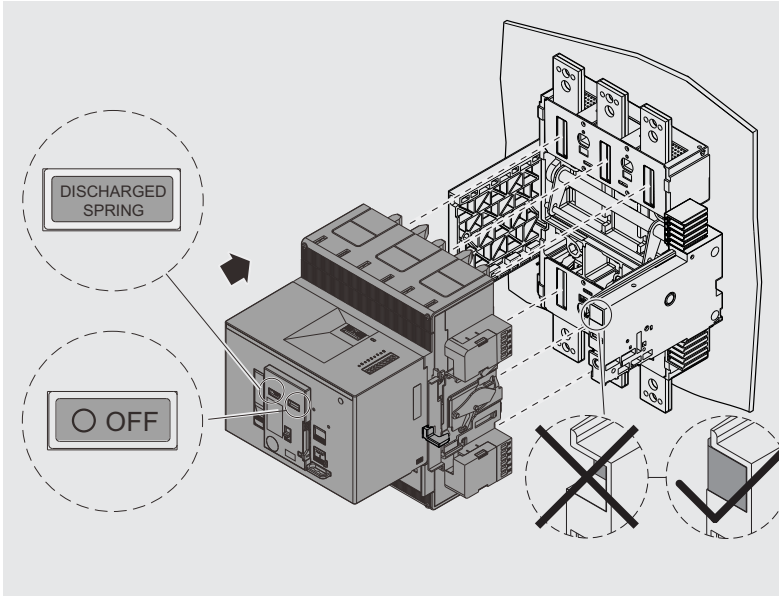
Switch the circuit-breaker to the "Open" position  
Extract the crank. The circuit-breaker can be closed.

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.

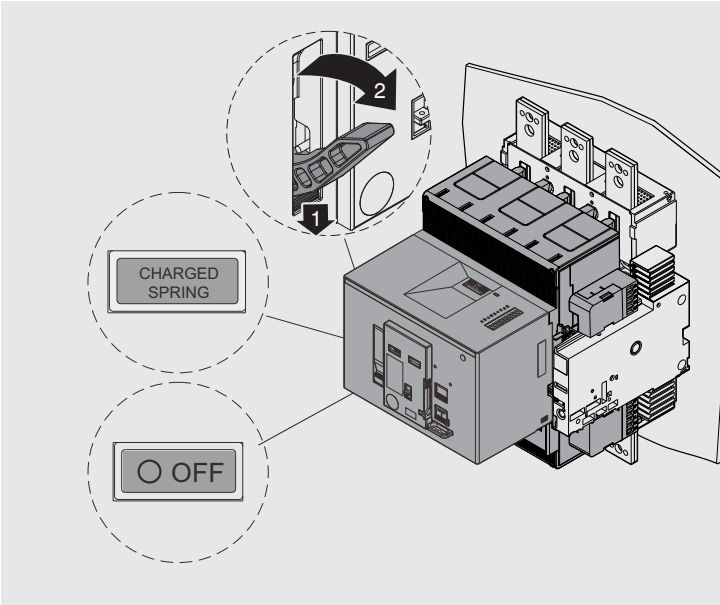
Switch the moving part to the "OFF" and "Discharged Spring" position, place it in the fixed part and push until it comes to a stop.

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"

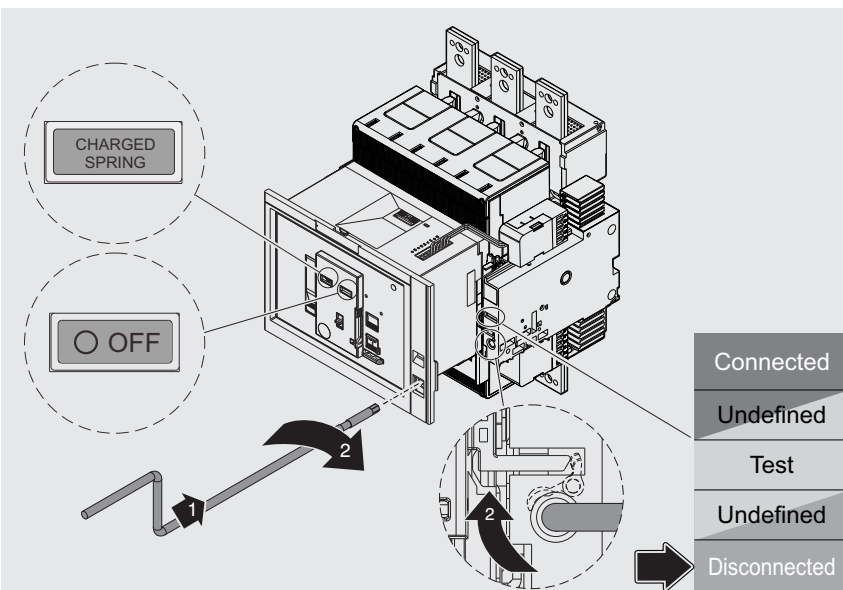
Charge the springs using the MOE operating lever (or by remote electrical control) (1-2). The circuit-breaker moves to the "OFF" and "Charged Spring" positions.

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.

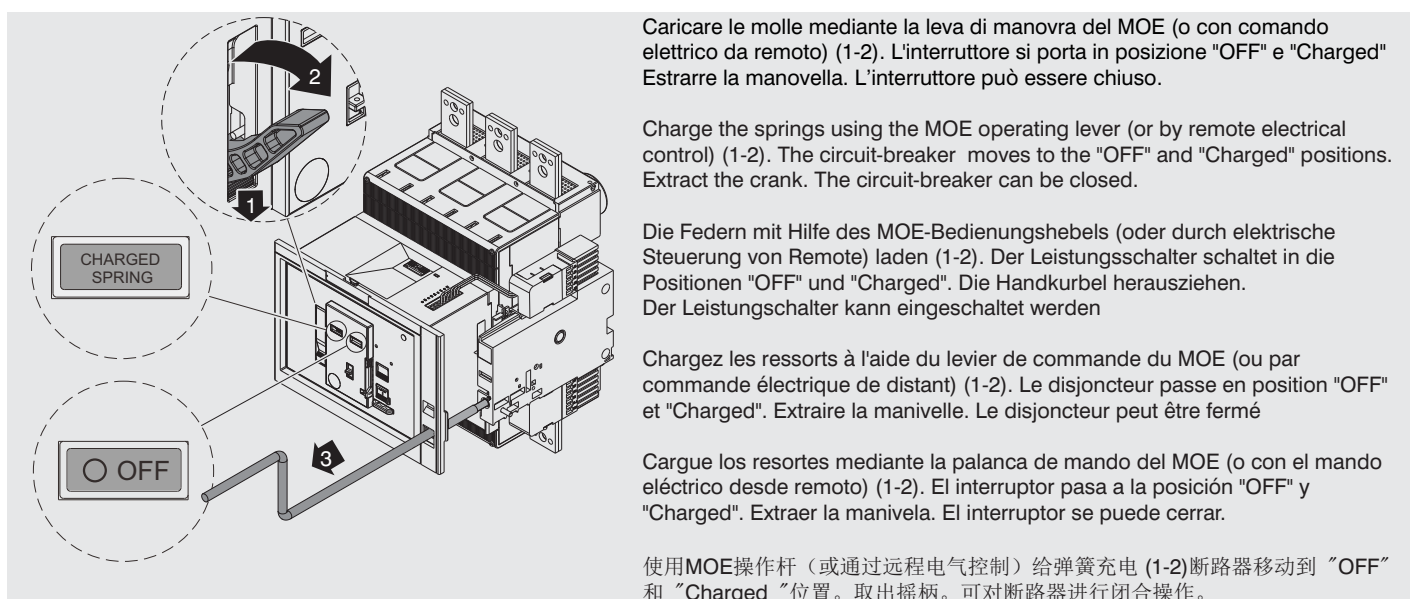
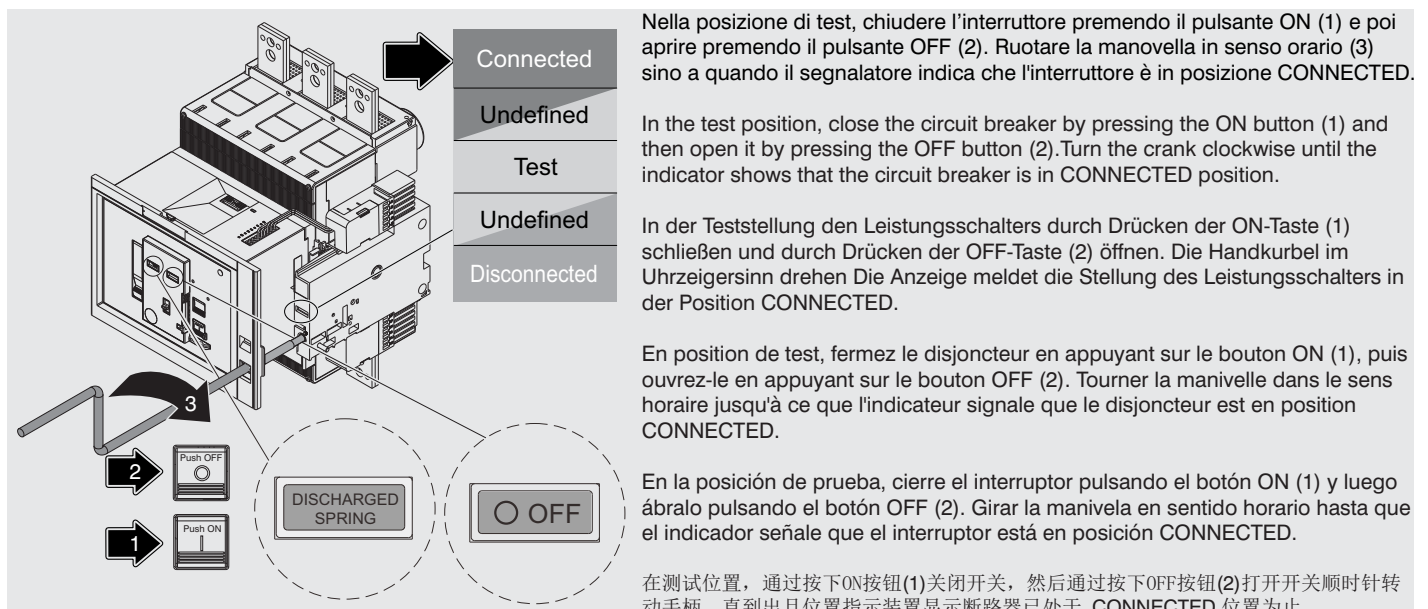
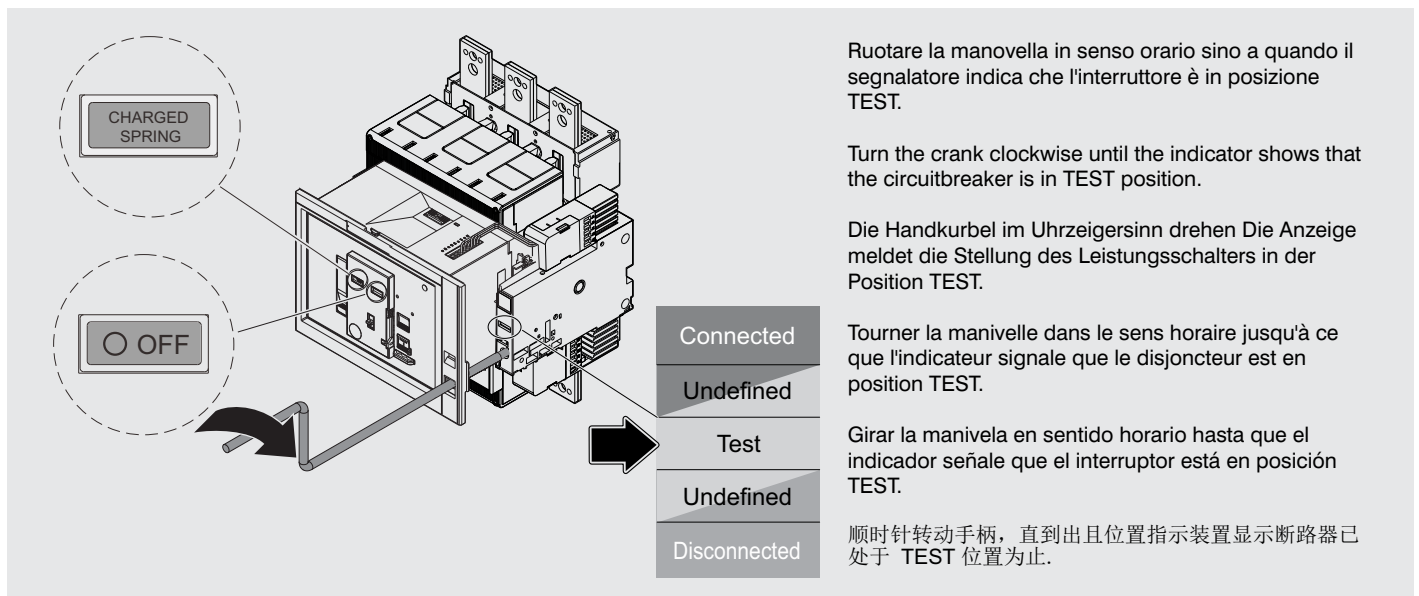
Die Handkurbel in das festen Teil stecken. In dieser Phase befindet sich das bewegliche Teil in der Position DISCONNECTED.

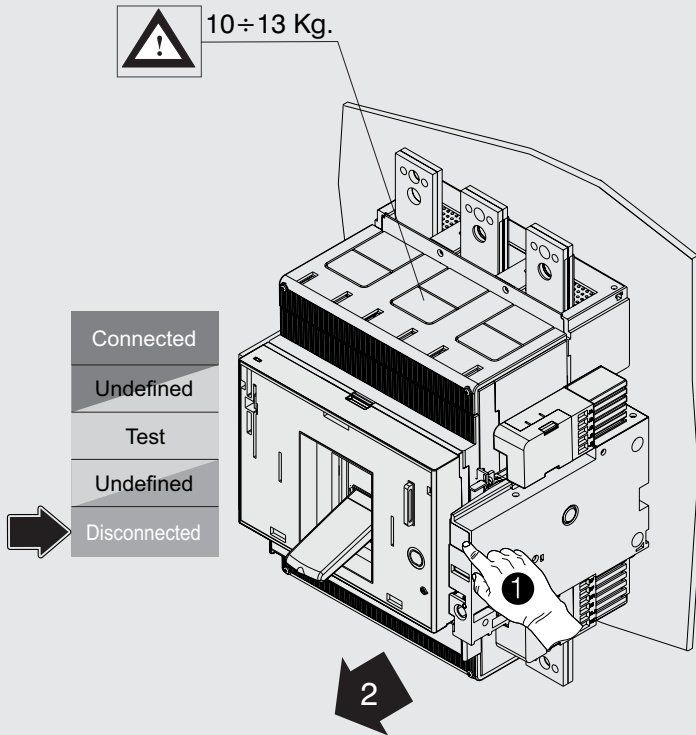
Introduire la manivelle dans la partie fixe. Dans cette phase la partie mobile est en position DISCONNECTED.

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





Per estrarre la parte mobile dalla parte fissa eseguire in senso inverso le medesime operazioni indicate per l'inserzione. Dopo l'estrazione, per rimuovere la parte mobile, sbloccare il blocco di sicurezza.

To extract the moving part from the fixed part, perform the same steps indicated for insertion in reverse order. After extraction, in order to remove the moving part, unlock the safety lock.

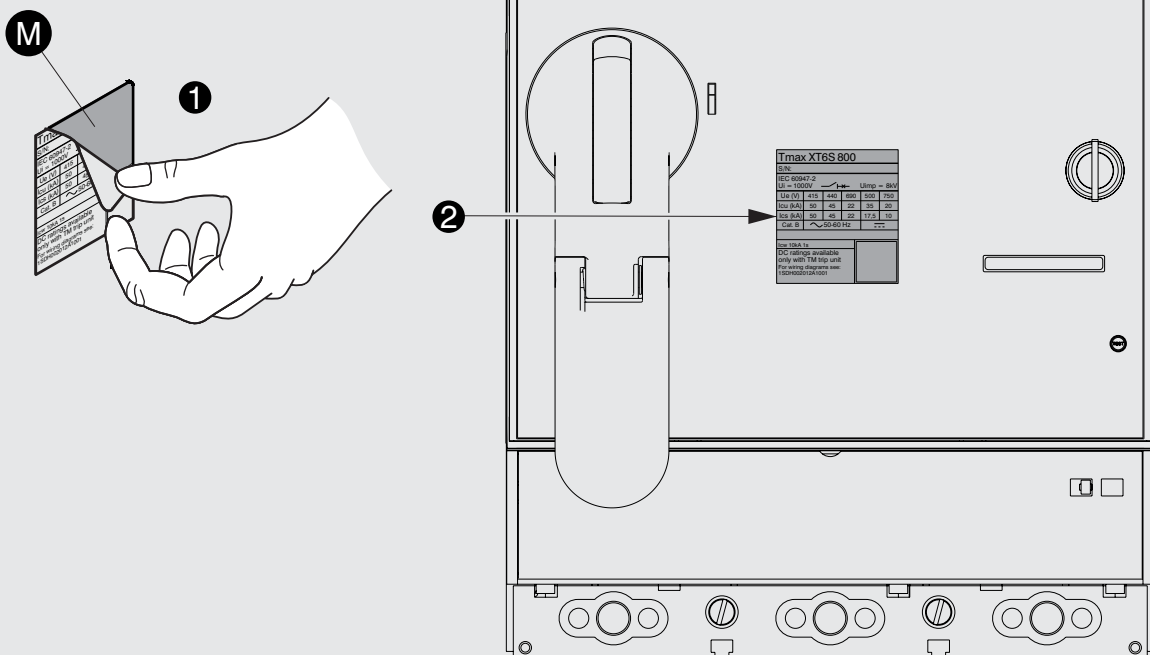
Um das bewegliche Teil aus dem festen Teil herauszuziehen, die gleichen Vorgänge, die zum Einfahren angegeben sind, in der umgekehrten Reihenfolge ausführen. Nach dem Ausfahren zum Entfernen des beweglichen Teil die Sicherheitsverriegelung entriegeln.

Pour extraire la partie mobile de la partie fixe effectuer les mêmes opérations indiquées pour l'embrochage dans le sens inverse. Après le débrogage, pour enlever la partie mobile, débloquent le verrou de sécurité.

Para extraer la parte móvil de la parte fija efectuar en sentido inverso las mismas operaciones indicadas para la inserción. Después de la extracción, para quitar la parte móvil, desbloquear el bloqueo de seguridad.

为将活动部分从固定部分拔下，应按照插入的步骤反向执行。拔下后，为移除活动部分，应解锁安全锁。

With front accessories only



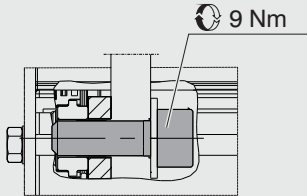
Terminali  
Terminals  
Anschlusse  
Prises  
Terminales  
端子类型

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 - F

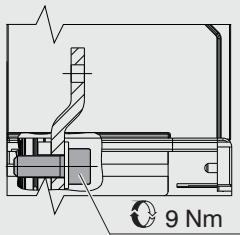


1SDA104732R1	3pcs
1SDA104733R1	4pcs

[1SDH002012A1801](#)

[1SDH002012A1101](#)

### F 800 - EF

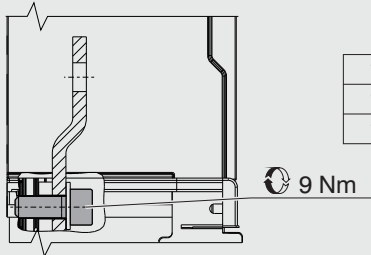


1SDA104736R1	3pcs
1SDA104737R1	4pcs

[1SDH002012A1802](#)

[1SDH002012A1104](#)

### F/W - ES

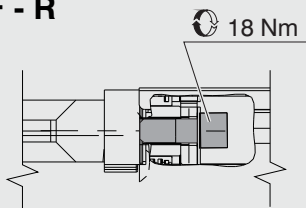


1SDA104740R1	3pcs - Sup
1SDA113127R1	3pcs - Inf
1SDA104741R1	4pcs

[1SDH002012A1803](#)

[1SDH002012A1106](#)

### F - R

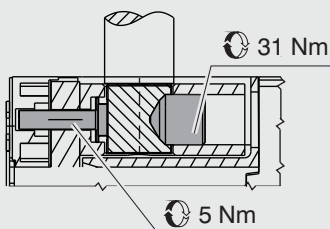


1SDA104762R1	3pcs
1SDA104763R1	4pcs

[1SDH002012A1807](#)

[1SDH002012A1102](#)

### F/W - FC CuAl 2x120...240mm<sup>2</sup>



1SDA104750R1	3pcs
1SDA104751R1	4pcs

[1SDH002012A1805](#)

[1SDH002012A1107](#)

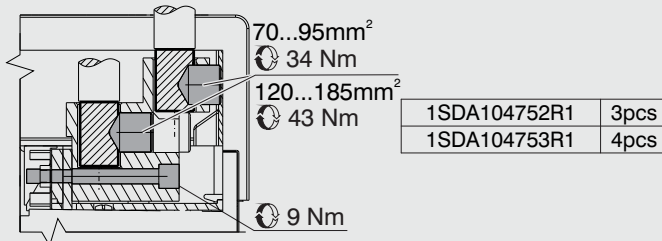
Terminali  
Terminals  
Anschlüsse  
Prises  
Terminales  
端子类型

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

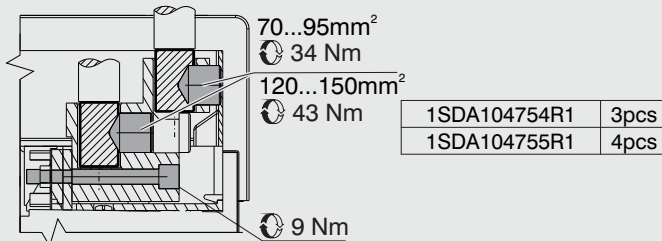
### F/W - FC CuAl 3x70...185mm<sup>2</sup>



[1SDH002012A1806](#)

[1SDH002012A1107](#)

### F/W - FC CuAl 4x70...150mm<sup>2</sup>



[1SDH002012A1806](#)

[1SDH002012A1105](#)

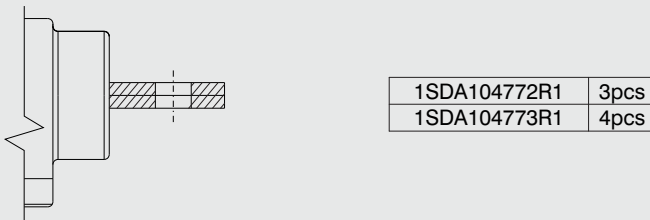
### W - EF



[1SDH002012A1808](#)

[1SDH002012A1115](#)

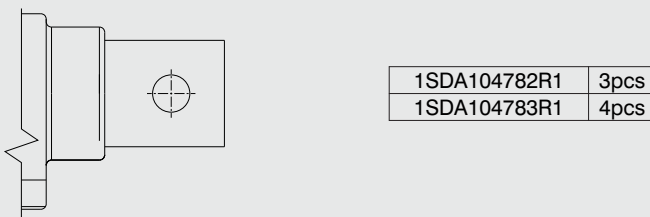
### W - HR



[1SDH002012A1808](#)

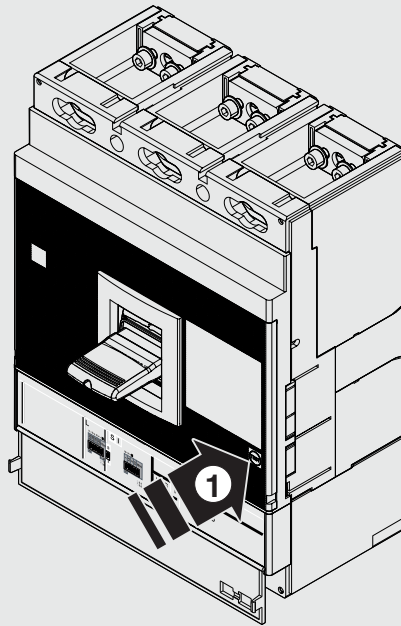
[1SDH002012A1116](#)

### W - VR

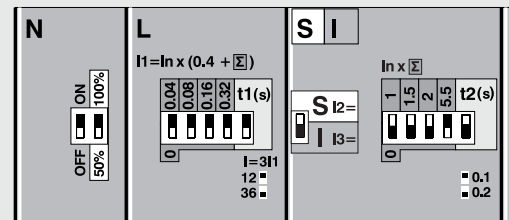
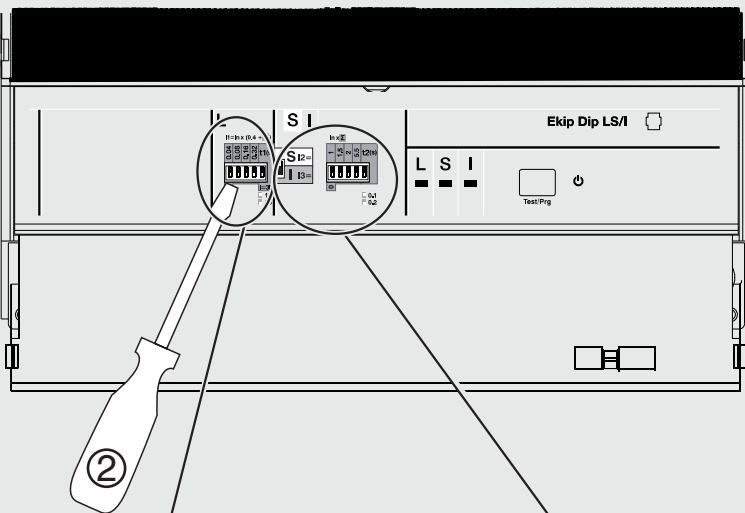


[1SDH002012A1808](#)

[1SDH002012A1116](#)



LED	Color	CONDITION Run time
⏻	Green	LED ON (fixed) = Device active
L	Yellow	LED Fixed = L pre alarm ( $0,9 * I_1 < I < 1,2 * I_1$ )
L	Red	LED Blinking = L alarm ( $I > 1,2 * I_1$ )
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**

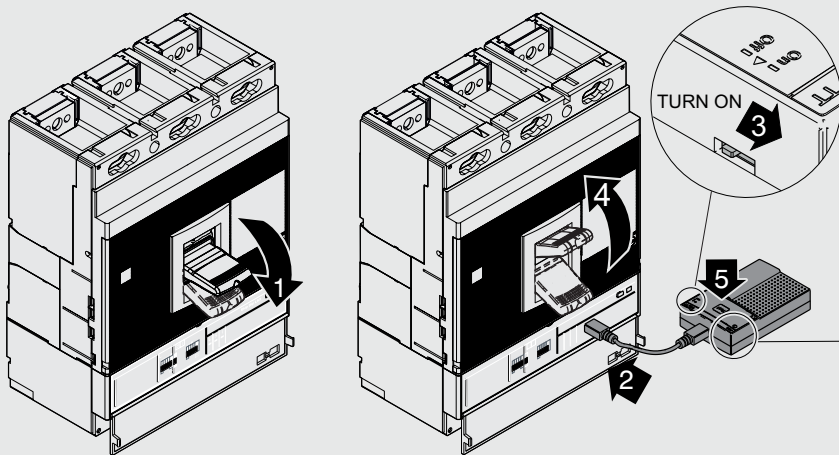
$I_n \times \Sigma$

1 1.5 2 5.5 t2(s)

0 0.1 0.2


I3=

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.

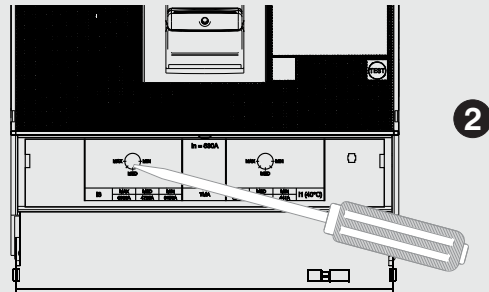
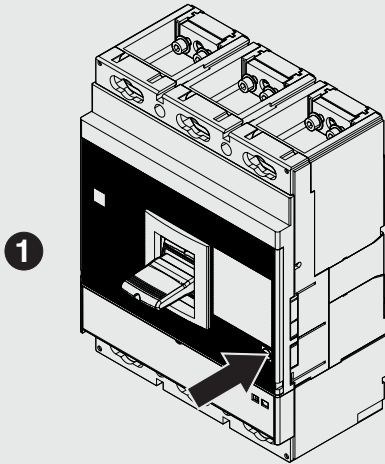
**Desconectar el cable de la unidad TT.**

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	