

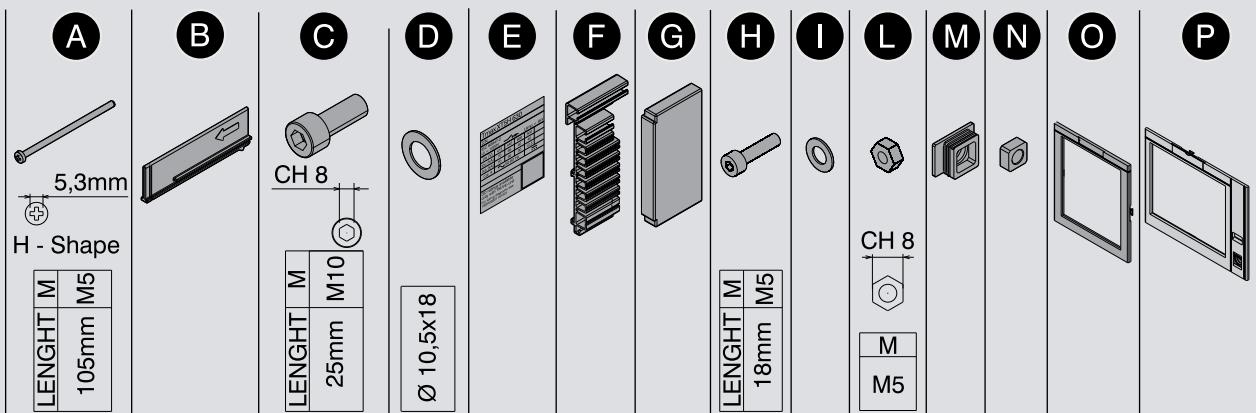
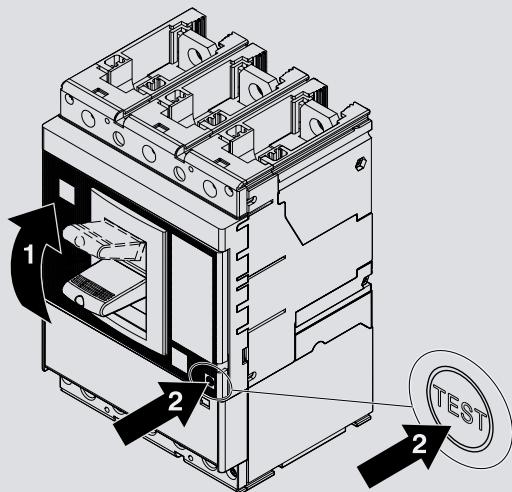
AEG MCXT



1SDH002011A1001

Istruzioni di installazione MCXT5 IEC
 Installation instructions MCXT5 IEC
 Installationsanleitung MCXT5 IEC
 Instructions pour l'installation MCXT5 IEC
 Instrucciones de instalación MCXT5 IEC
 安装说明书 MCXT5 IEC

MCXT5 3p-4p



F	3p	x4	x4	x6	x6	x1	x1	x1	-	x4	x4	x6	x6	x1	-
	4p	x4	x6	x8	x8	x1	x1	x1	-	x4	x4	x8	x8	x1	-
P	3p	x4	-	-	-	x1	x1	x1	x4	x8	x4	-	-	x1	-
	4p	x4	-	-	-	x1	x1	x1	x4	x8	x4	-	-	x1	-
W	3p	-	-	-	-	-	-	-	x4	x8	x4	-	-	-	x1
	4p	-	-	-	-	-	-	-	x4	x8	x4	-	-	-	x1

AEG

- Usare cavi/barre isolate o capocorda isolati o eseguire prove di tipo specifiche sull'installazione.
- Use insulated cables/bars or insulated cable terminals or perform specific type tests on the installation.
- Isolierte Kabel/Sammelschienen oder isolierte Kabelschuhe verwenden oder spezifische Typprüfungen an der Anlage ausführen.
- Utiliser câbles/barres isolées ou des cosses isolées ou réaliser un test de type spécifique sur l'installation.
- Usar cables/barras aislados o terminales aislados o bien ejecutar pruebas de tipo específicas en la instalación.
- 在安装时使用绝缘电缆/绝缘杆，或绝缘接线片，或执行特定的测试。

Terminal type		F	EF ⁽³⁾	ES	R	FC CuAl 1x35...185mm ² 1x120...240mm ²	FC CuAl 2x70...240mm ²
Ue < 500 V	Supply side BOTTOM/TOP	Back shield	-	S _T ⁽²⁾	S _T ⁽²⁾	S _T	-
		Phase barrier	-	S _T - 100 mm	S _T - 200 mm	-	-
		Terminal cover	-	-	-	S _T	-
Ue ≥ 500 V	Supply side TOP	Back shield	-	S _T	S _T	S _T	-
		Phase barrier	S _{CB} - 25 mm	S _T - 100 mm	S _T - 200 mm	-	S _{CB} - 25 mm
		Terminal cover	-	-	-	S _T	-
	Supply side BOTTOM	Back shield	Required ⁽¹⁾	S _T ⁽⁴⁾	S _T ⁽⁴⁾	S _T	Required ⁽¹⁾
		Phase barrier	S _{CB} - 25 mm	S _T - 100 mm	S _T - 200 mm	-	S _{CB} - 25 mm
		Terminal cover	-	-	-	S _T	-

(1) If back panel of the enclosure is bare metal, use back shield code 1SDA112971R1(3p), 1SDA112972R1(4p) or alternatively insulate back panel according to figure 3

(2) Mandatory only for MCXT5 with breaking capacity V, X

(3) At 690V insulate front panel of the enclosures only for MCXT5 with breaking capacity L, V, X according to figure 3

(4) In case of installation with double cable terminal, provide 100 mm additional insulation from breaker bottom edge downward
S_{CB} - Mandatory installation - Supplied as standard with circuit-breaker, not available in the loose terminals kit

S_T - Mandatory installation - Supplied as standard with the terminals kit



Different installation conditions shall be type tested

	No accessories	Terminal cover (LTC)	High terminal cover (HTC)	Phase barriers 25mm	Phase Barriers 100mm	Phase barriers 200mm
	T D L	T D L	T D L	T D L	T D L	T D L / L ⁽⁵⁾
U < 500V AC	30 25 25	5 0 25	10 10 25	10 10 25	10 10 25	0 0 25
500V AC ≤ U ≤ 690V AC	Not allowed	35 20 25	40 40 25 ⁽⁷⁾	35 20 ⁽⁶⁾ 25	10 10 25	0 0 50

(5) In case of ES terminals, this distance shall be assumed from the most external edge of the terminals

(6) In case of supply side bottom, D=60mm

(7) With ES and HTC L=50mm

- Usare cavi/barre isolate o capocorda isolati o eseguire prove di tipo specifiche sull' installazione.
- Use insulated cables/bars or insulated cable terminals or perform specific type tests on the installation.
- Isolierte Kabel/Sammelschienen oder isolierte Kabelschuhe verwenden oder spezifische Typprüfungen an der Anlage ausführen.
- Utiliser câbles/barres isolées ou des cosses isolées ou réaliser un test de type spécifique sur l'installation.
- Usar cables/barras aislados o terminales aislados o bien ejecutar pruebas de tipo específicas en la instalación.
- 在安装时使用绝缘电缆/绝缘杆，或绝缘接线片，或执行特定的测试。

Terminal type			F	EF	ES	R	FC CuAl 1x35...185mm ² 1x120...240mm ²	FC CuAl 2x70...240mm ²
Ue ≤ 250V Supply side BOTTOM/TOP	Supply side BOTTOM/TOP	Back shield	-	S _T	S _T	S _T	-	S _T
		Phase barrier	-	S _T - 100 mm	S _T - 200 mm	-	-	S _T - 100 mm
		Terminal cover	-	-	-	S _T	-	-
250V < Ue ≤ 500V Supply side BOTTOM/TOP	Supply side BOTTOM/TOP	Back shield	Required ⁽¹⁾	S _T	S _T	S _T	Required ⁽¹⁾	S _T
		Phase barrier	S _{CB} - 25 mm	S _T - 100 mm	S _T - 200 mm	-	S _{CB} - 25 mm	S _T - 100 mm
		Terminal cover	(2)	-	-	S _T	(2)	(2)
Ue > 500V Supply side TOP	TOP	Back shield	Required ⁽³⁾	S _T	S _T	S _T	Required ⁽³⁾	S _T
		Phase barrier	S _{CB} - 25 mm	S _T - 100 mm	S _T - 200 mm	-	S _{CB} - 25 mm	S _T - 100 mm
		Terminal cover	(2)	-	-	S _T	(2)	(2)

(1) Use back shield code 1SDA112971R1(3p), 1SDA112972R1(4p) or alternatively insulate back panel of the enclosure, if bare metal, according to figure 4

(2) Insulation of the panel, shown in figure 4, can be avoided if high terminal covers and back shield are used

(3) Use back shield code 1SDA112971R1(3p), 1SDA112972R1(4p)

(4) Insulation of the back panel, shown in figure 4, is mandatory

S_{CB} - Mandatory installation - Supplied as standard with circuit-breaker, not available in the loose terminals kit

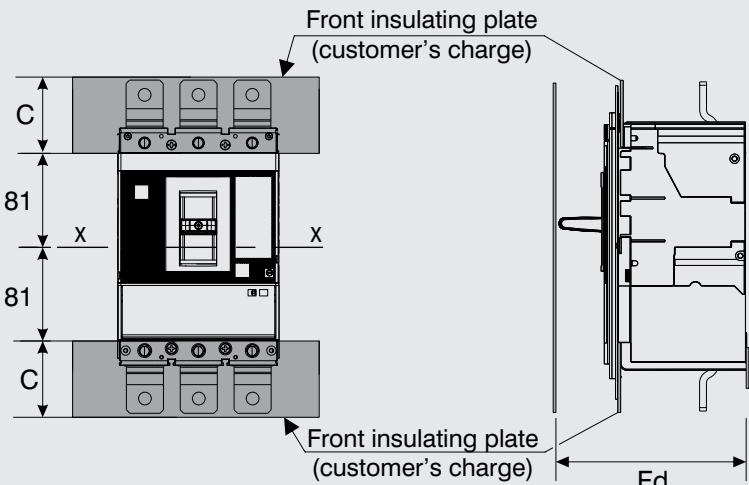
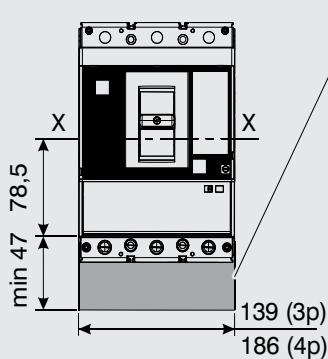
S_T - Mandatory installation - Supplied as standard with the terminals kit



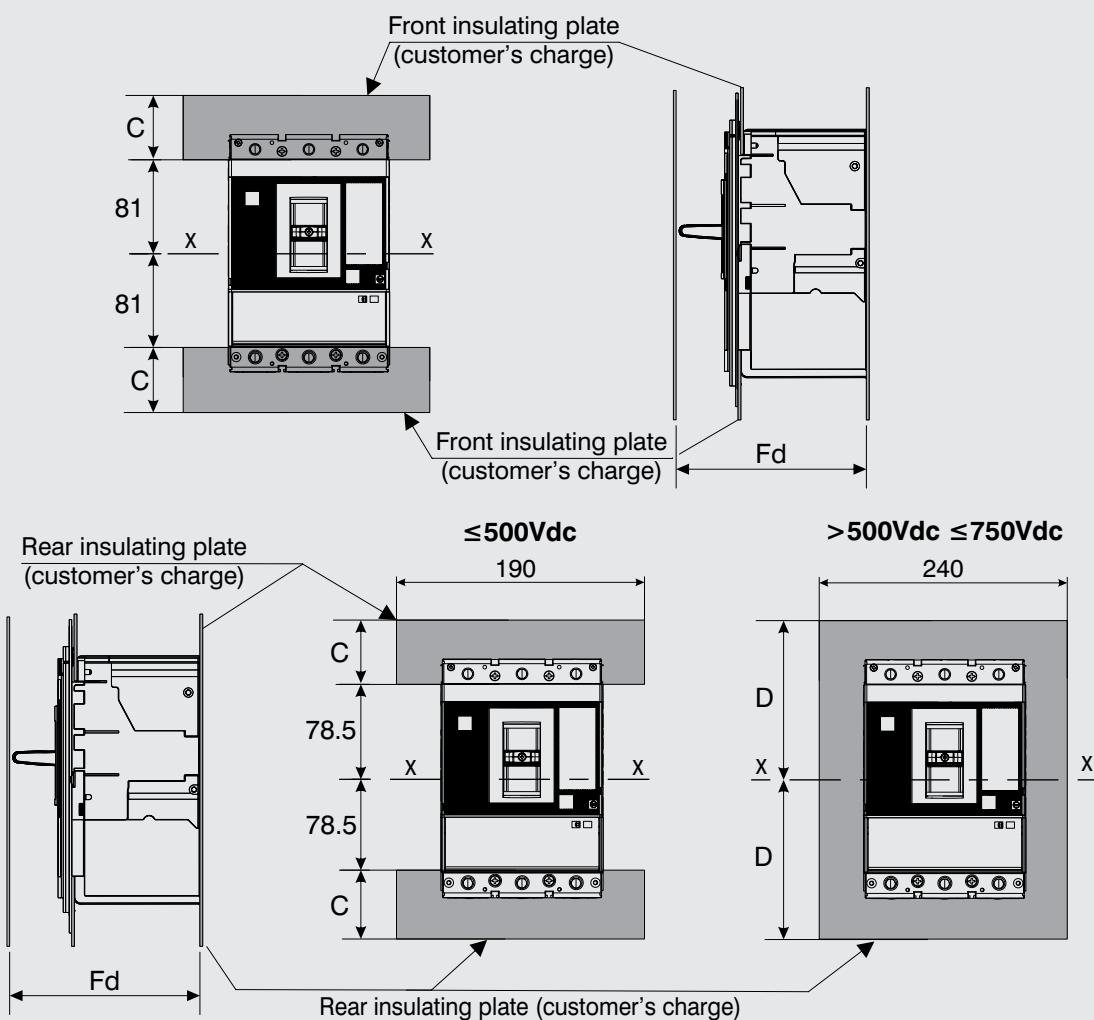
Different installation conditions shall be type tested

No accessories	Terminal cover (LTC)	High terminal cover (HTC)	Phase barriers 25mm	Phase Barriers 100mm	Phase barriers 200mm
T D L	T D L	T D L	T D L	T D L	T D L / L ⁽⁵⁾
U ≤ 500V DC	Not allowed	40 0 25	40 40 25	40 40 25	10 10 25
500V DC < U ≤ 750V DC	Not allowed	40 20 25	60 60 50	60 60 50	10 10 50
(5) In case of ES terminals, this distance shall be assumed from the most external edge of the terminals					

For fixed version at $U_e \geq 500$ V, with supply from lower terminals use insulating plate at the customer's charge max thickness 1mm or alternatively code 1SDA112971R1(3p), 1SDA112972R1(4p) to be ordered separately.

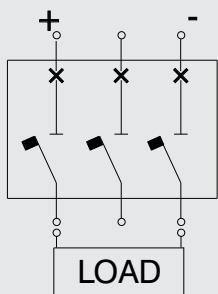


At 690V insulate front panel of the enclosures only for MCXT5 with breaking capacity L, V, X
Dimension C must be chosen in order to cover all the height of the front door/back panel
To avoid enclosures door insulation $F_d \geq 156$ mm



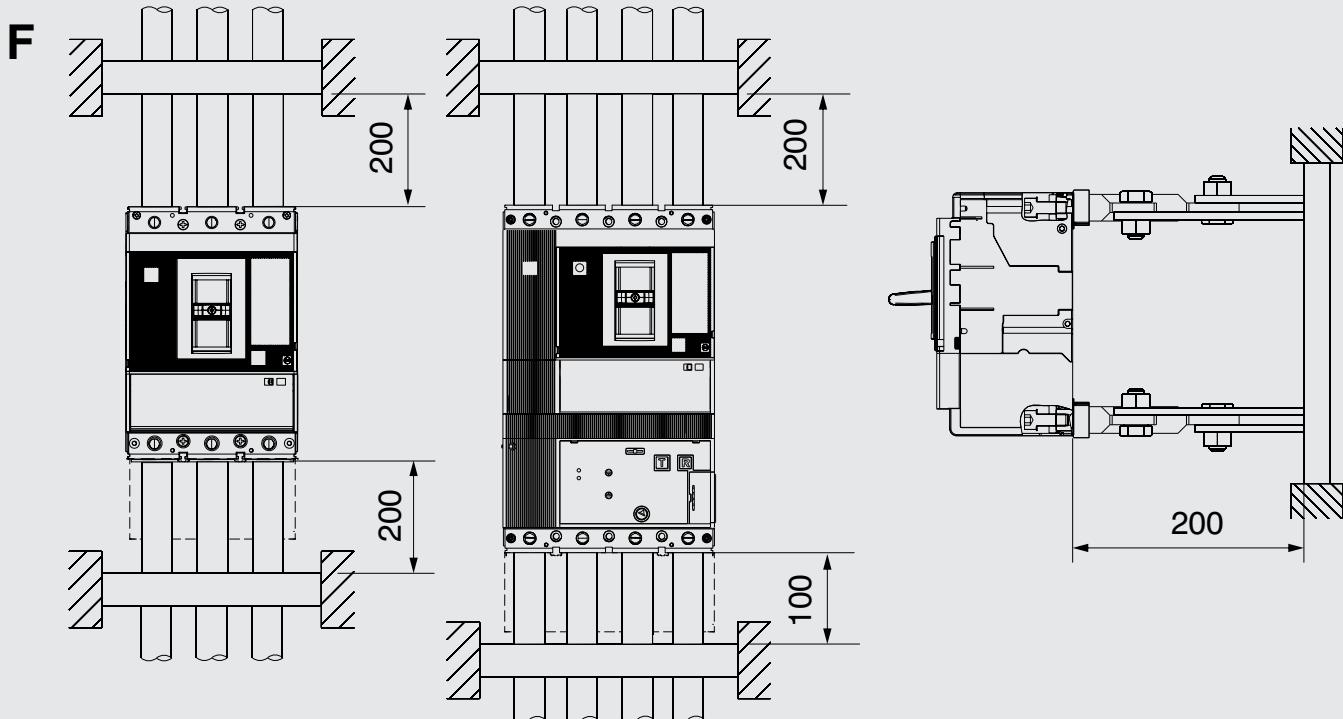
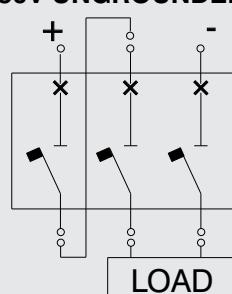
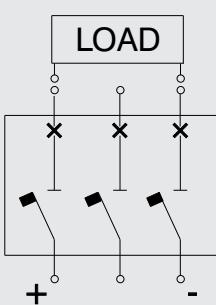
Dimension C,D must be chosen in order to cover all the height of the front door/back panel
To avoid enclosures door insulation $F_d \geq 156$ mm

250V - GROUNDED - UNGROUNDED
500V - UNGROUNDED

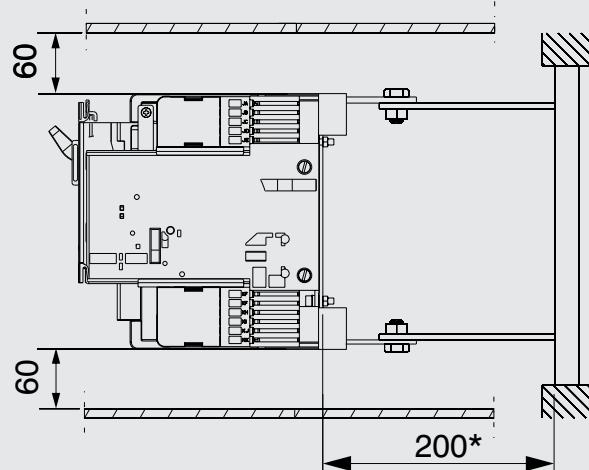
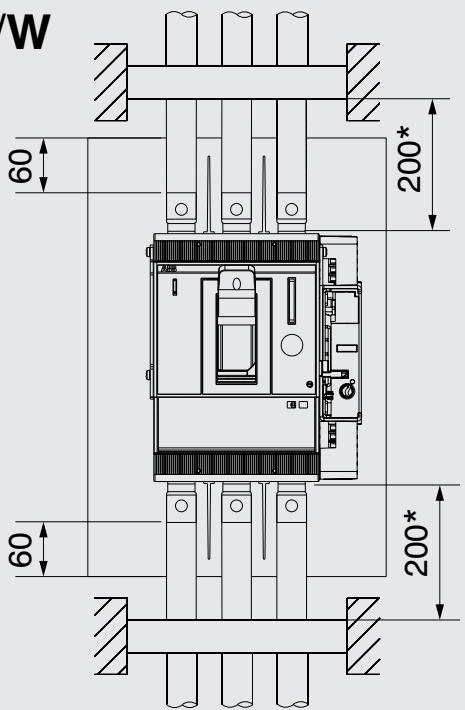


500V - GROUNDED

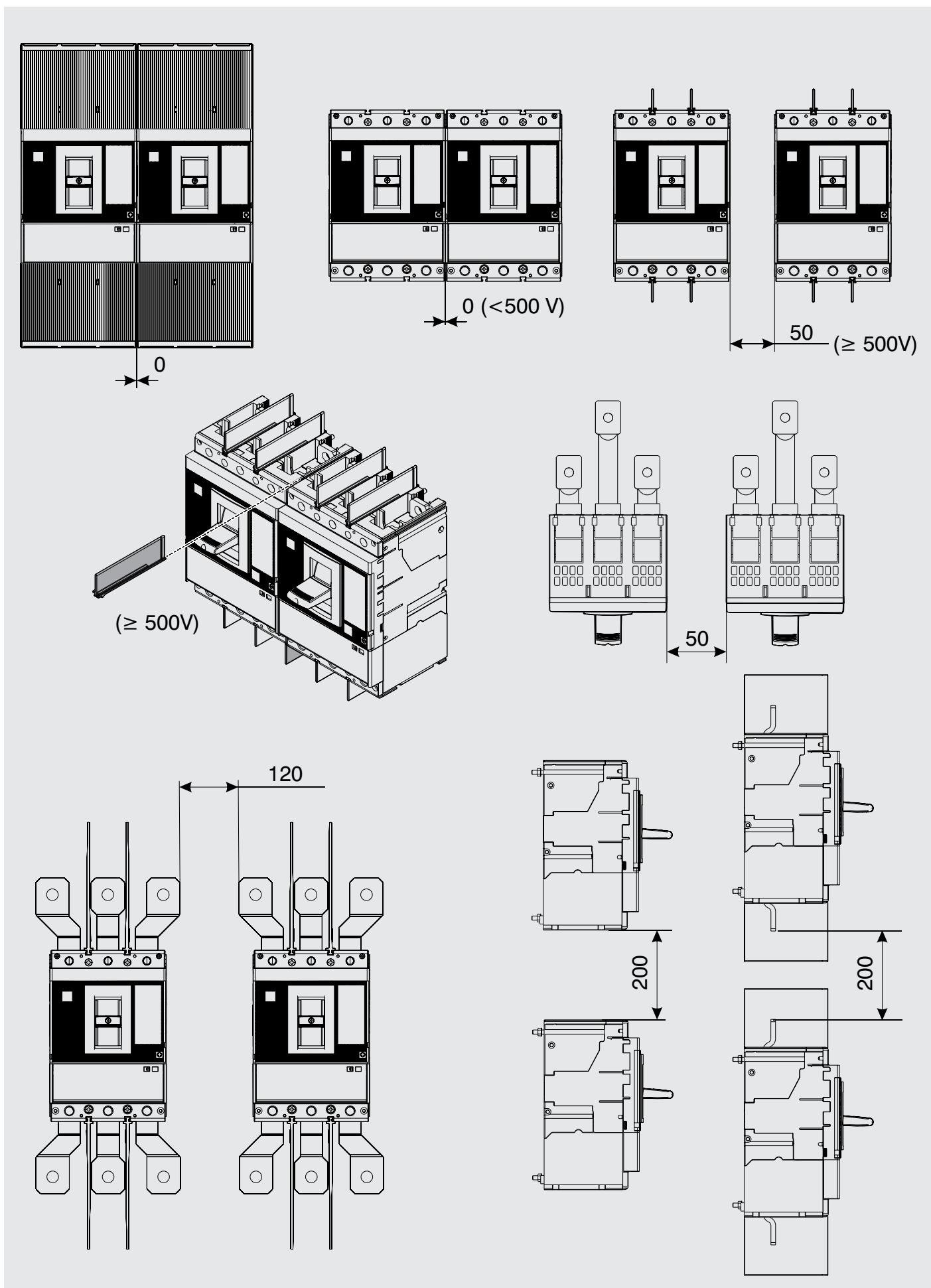
750V UNGROUNDED - Only for V, X versions



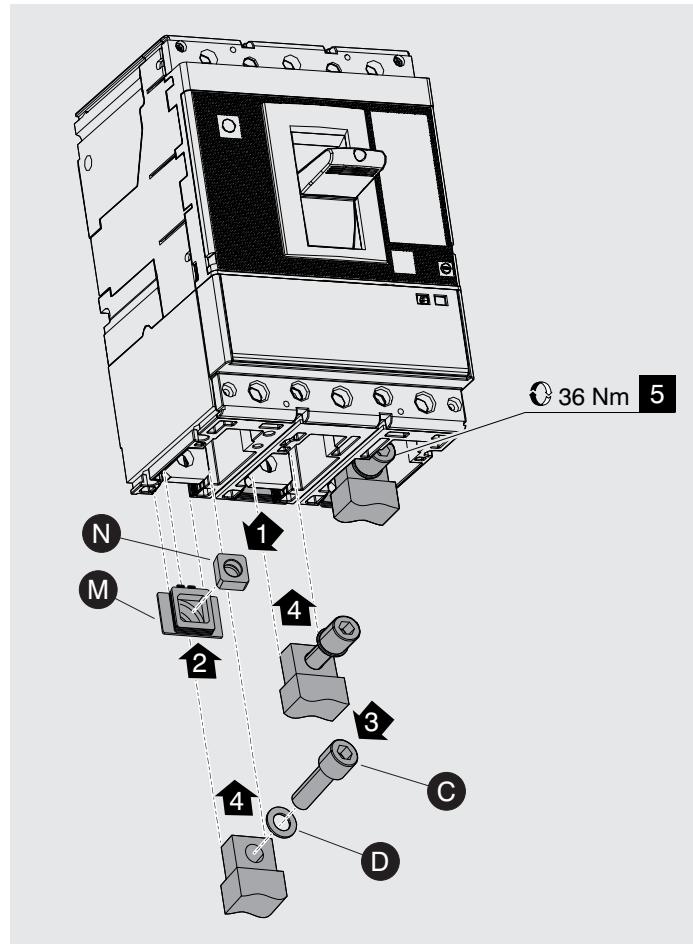
P/W



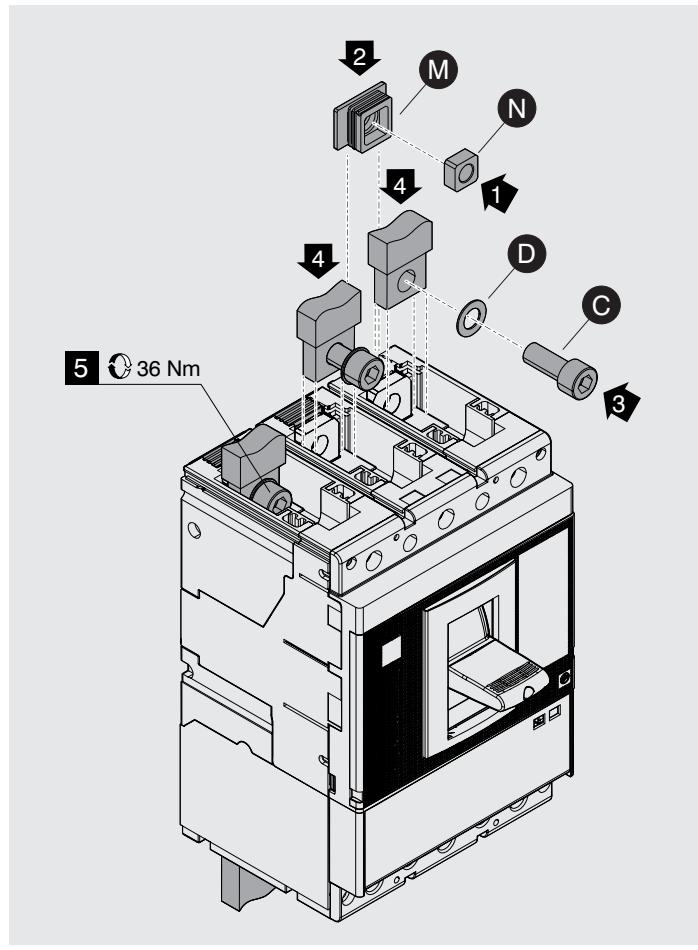
* 200 mm for MCXT5 N, S, H, L,
 V. 150 mm for MCXT5 X



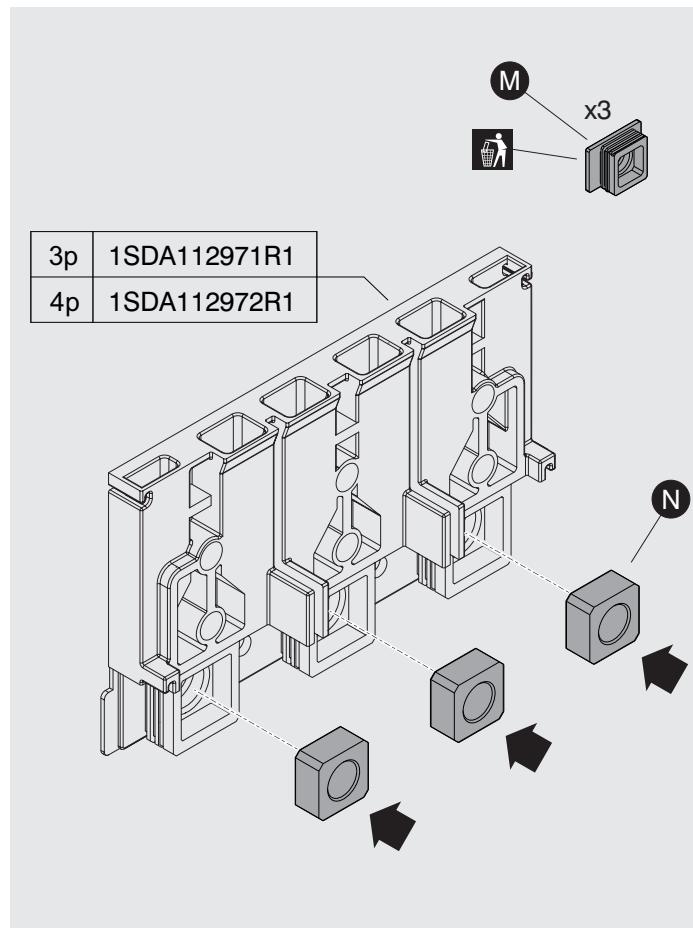
Example for Fixed breaker with F terminals lower



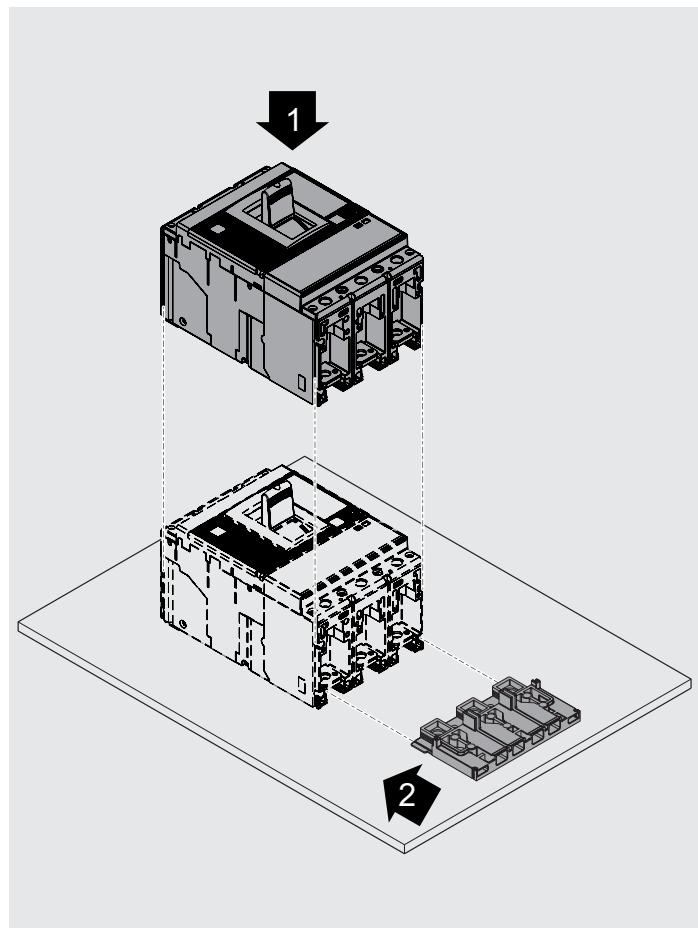
Example for Fixed breaker with F terminals upper



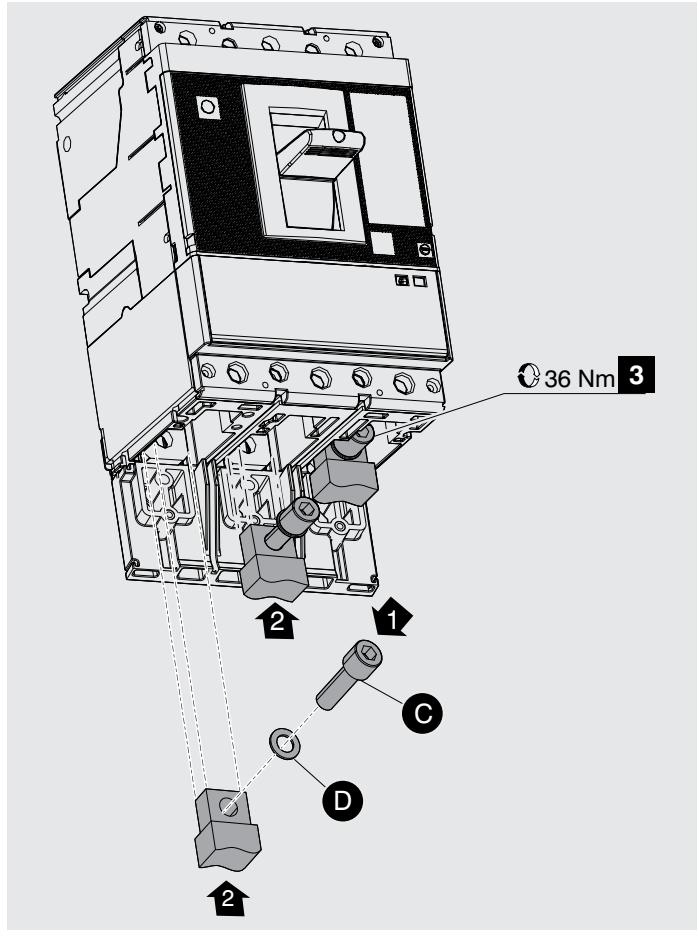
10 Example for F and Ue≥500V, supply side on lower terminals



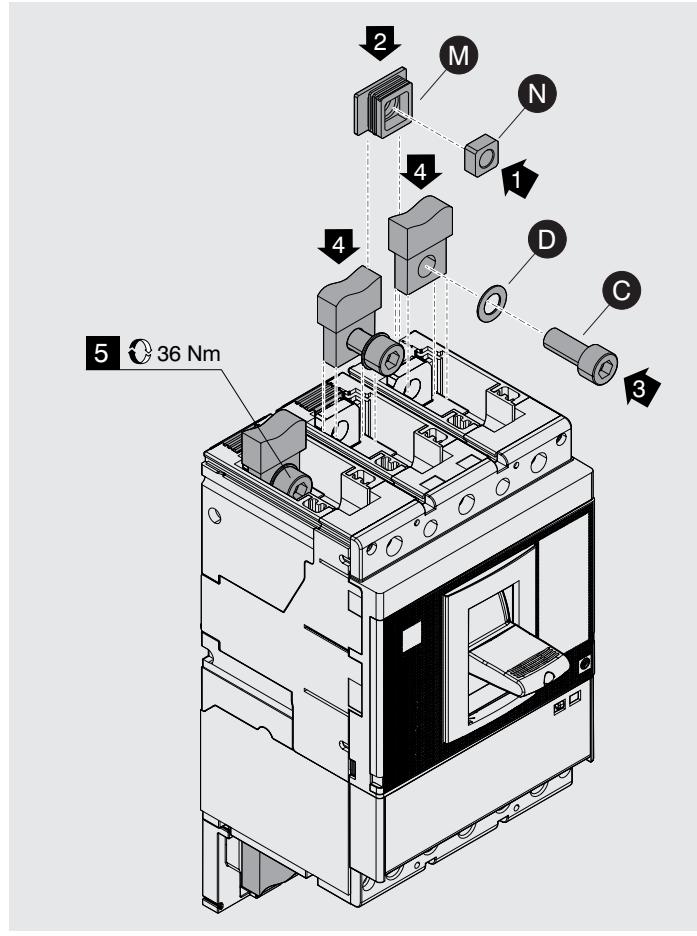
11 Example for F and Ue≥500V, supply side on lower terminals



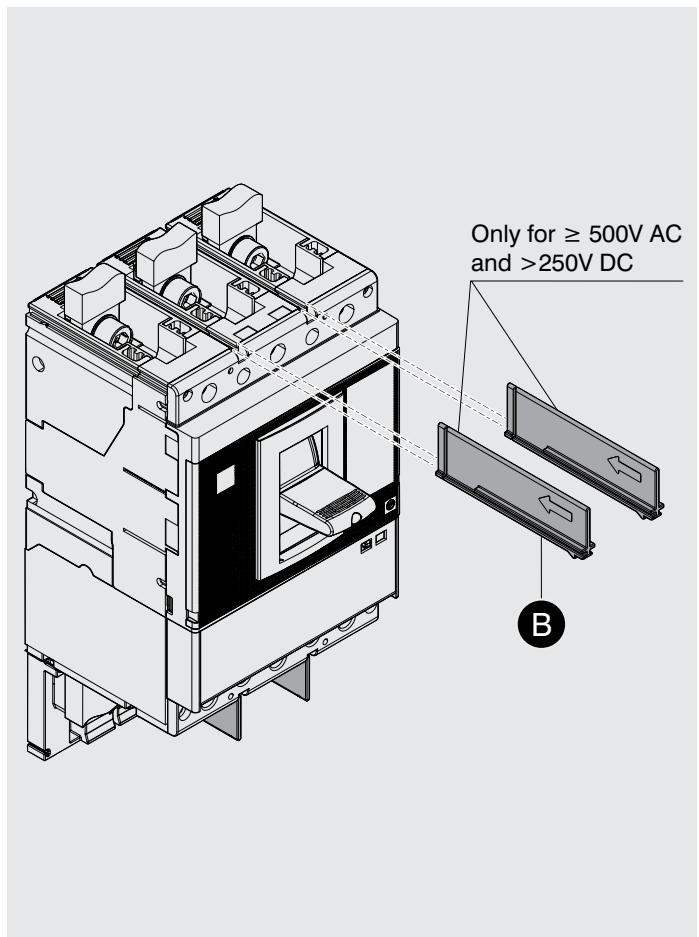
12 Example for F and Ue \geq 500V, supply side on lower terminals



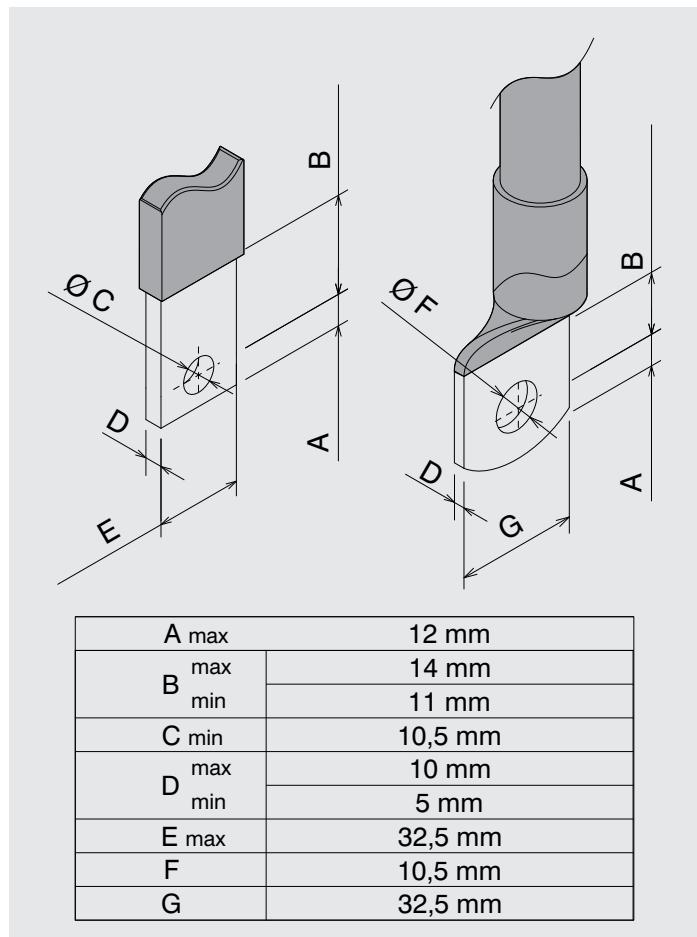
13 Example for F and Ue \geq 500V, supply side on lower terminals

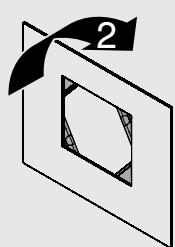
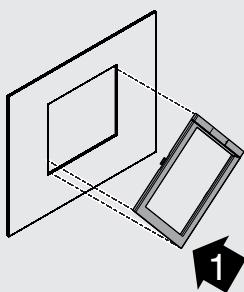
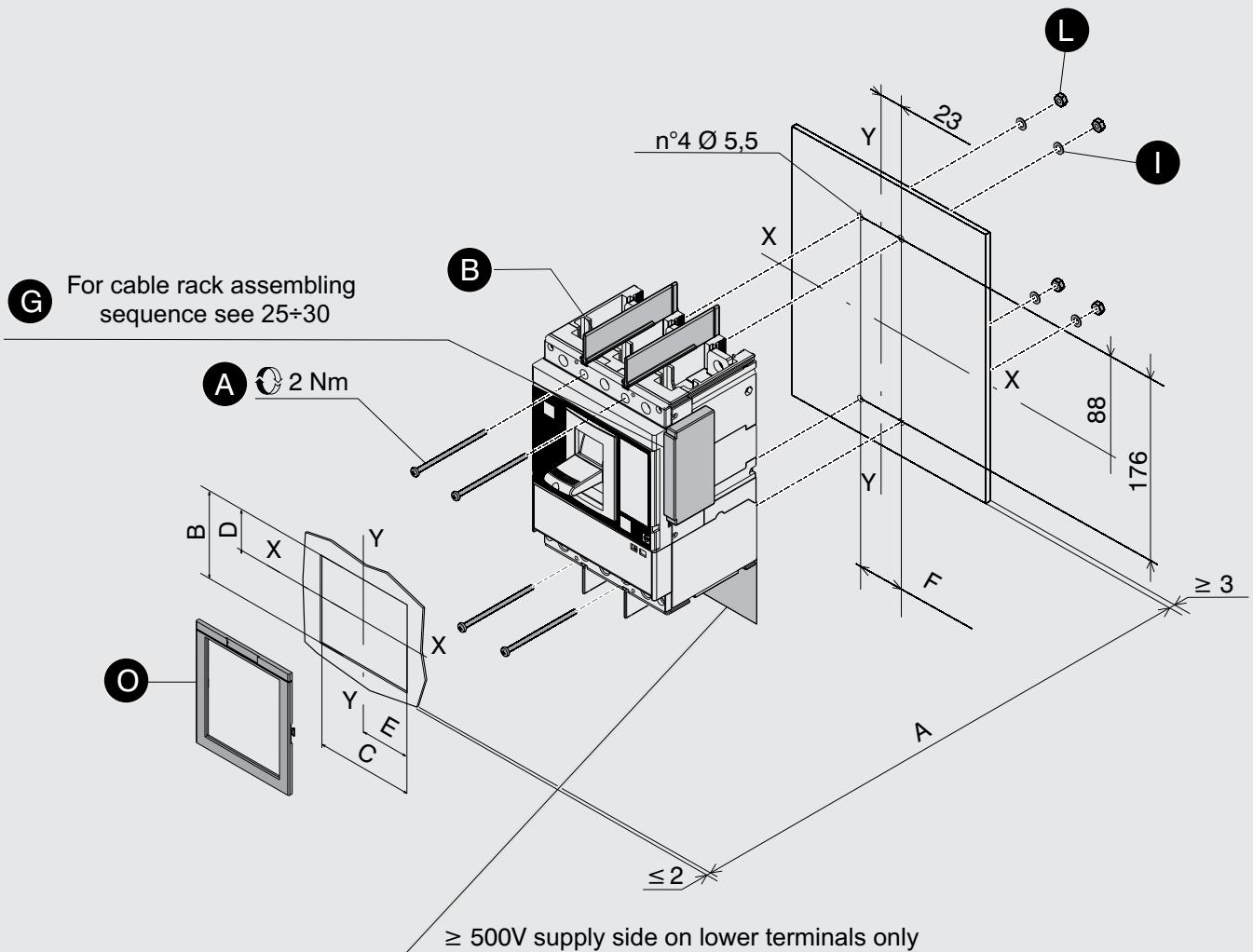


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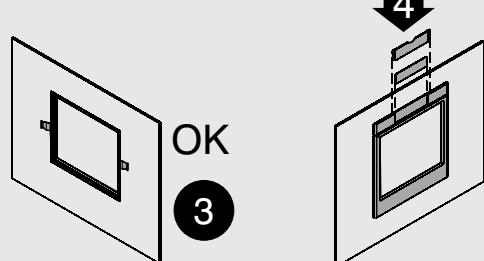


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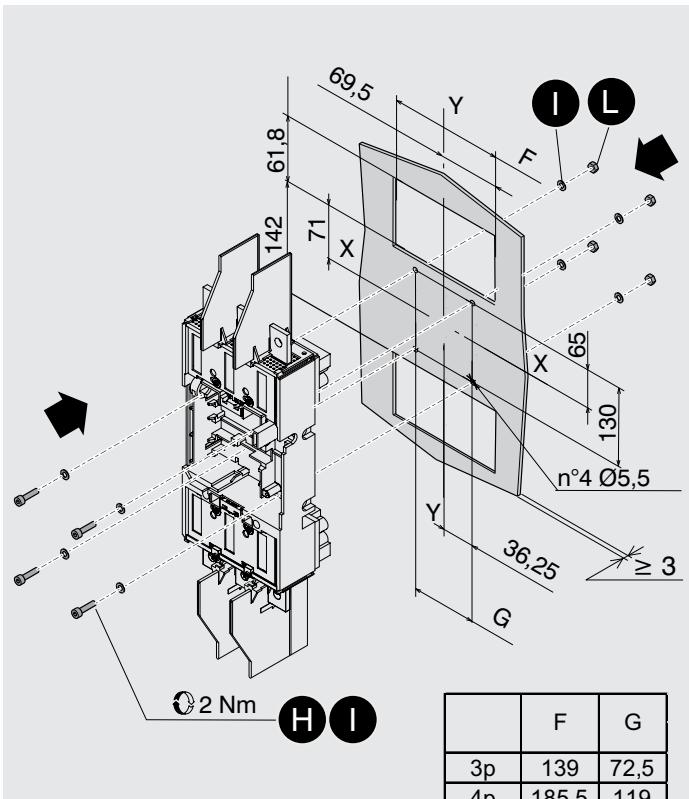
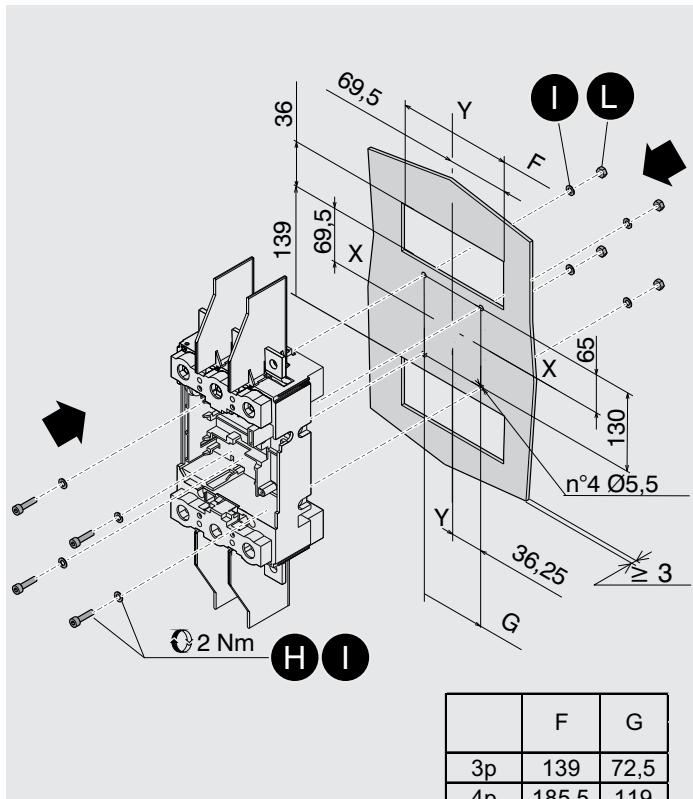




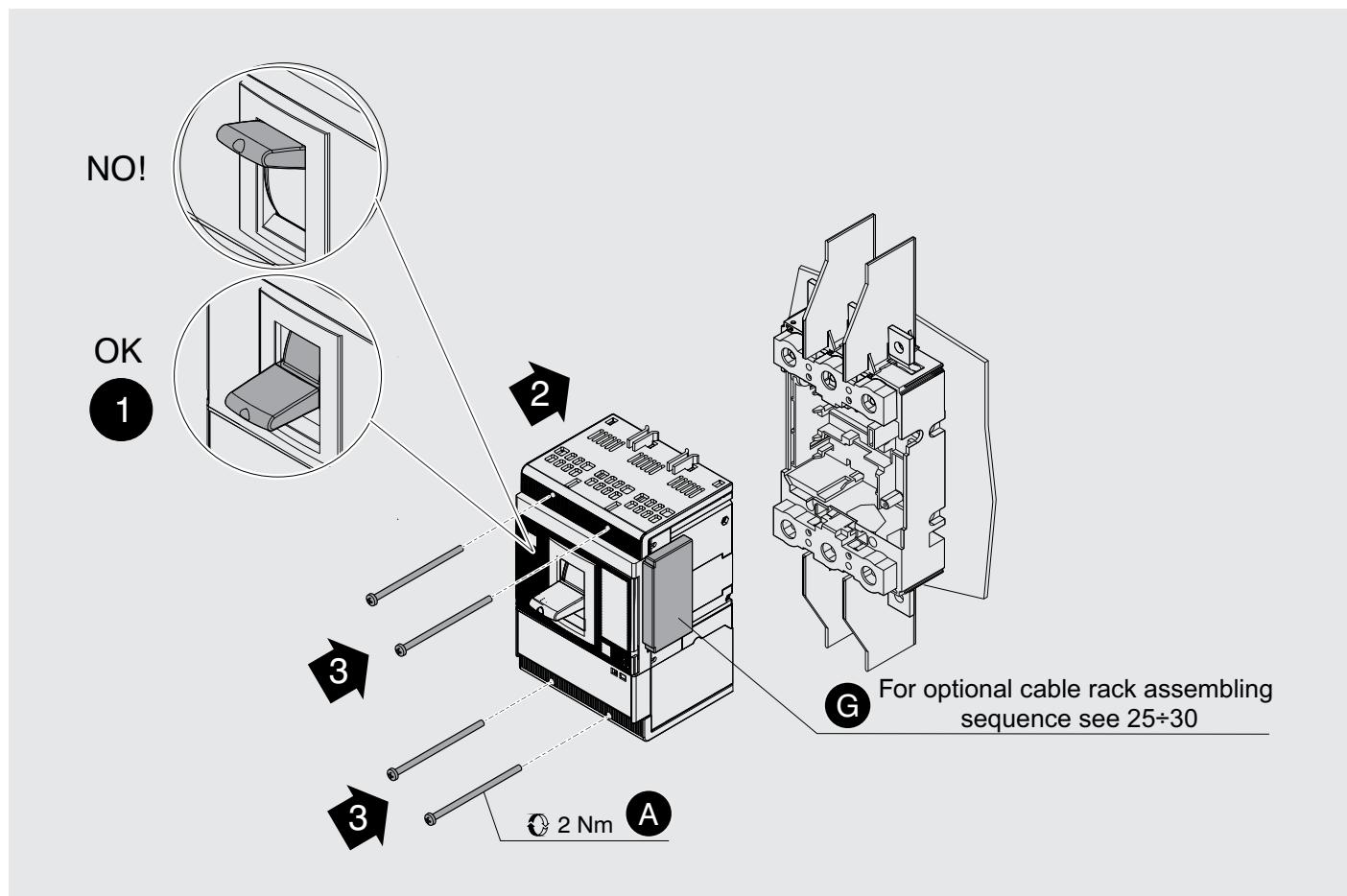
WITHOUT FLANGE SENZA MOSTRINA		A	B	C	D	E	F
	3p	108	165	143	82,5	71,5	46,5
	4p						93

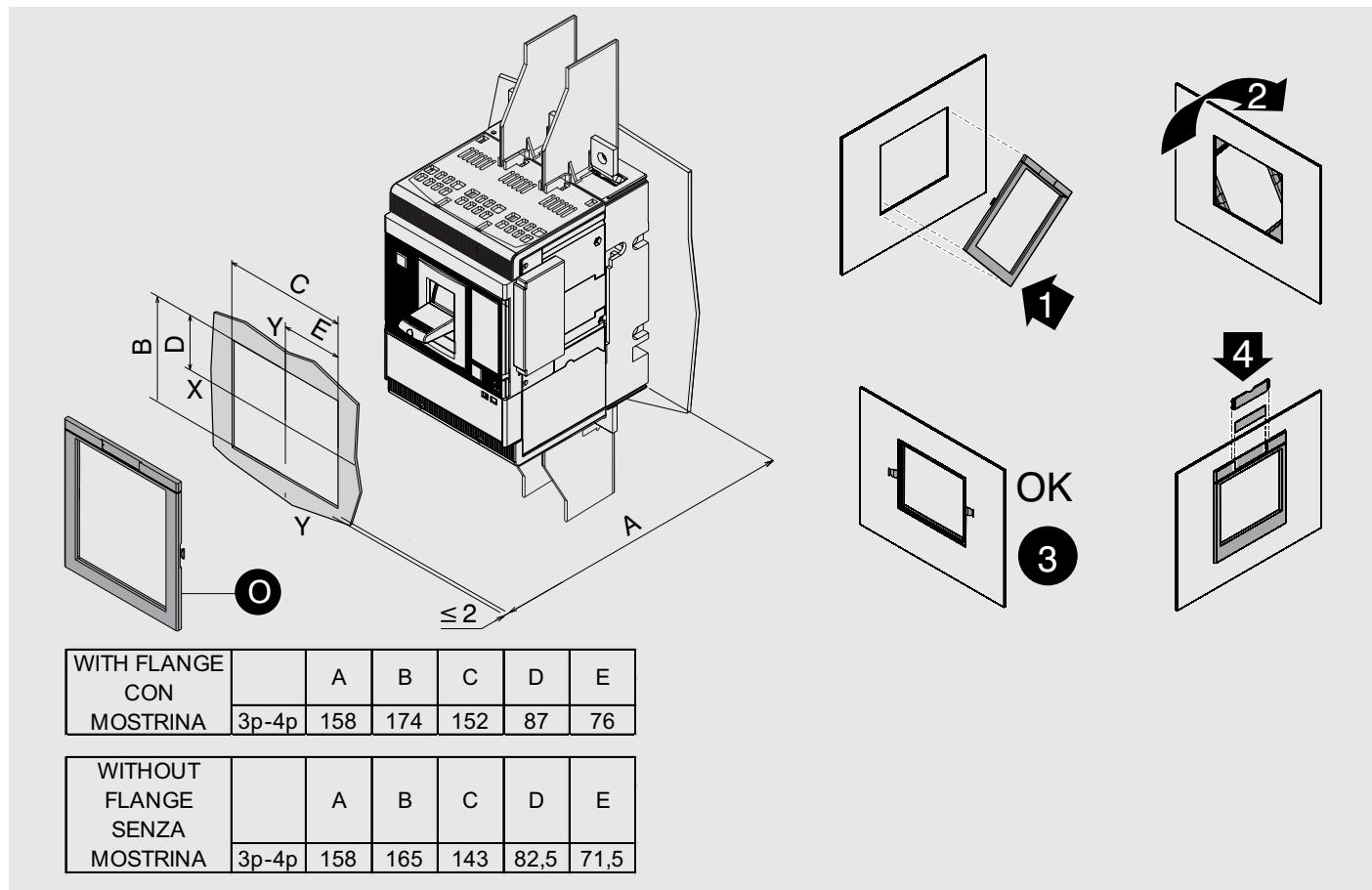


WITH FLANGE CON MOSTRINA		A	B	C	D	E	F
	3p	108	174	152	87	76	46,5
	4p						93

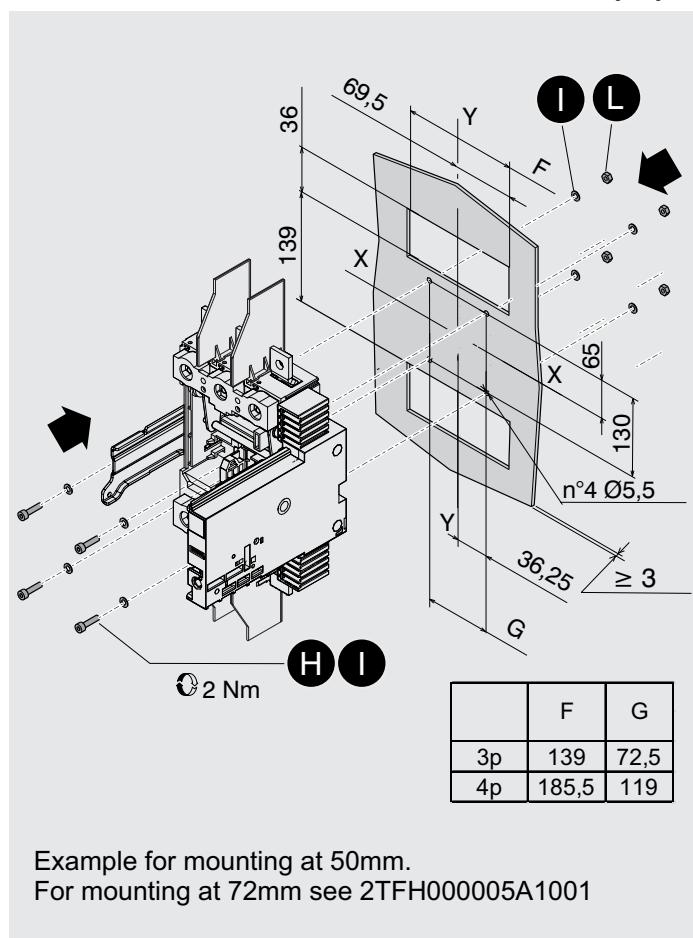


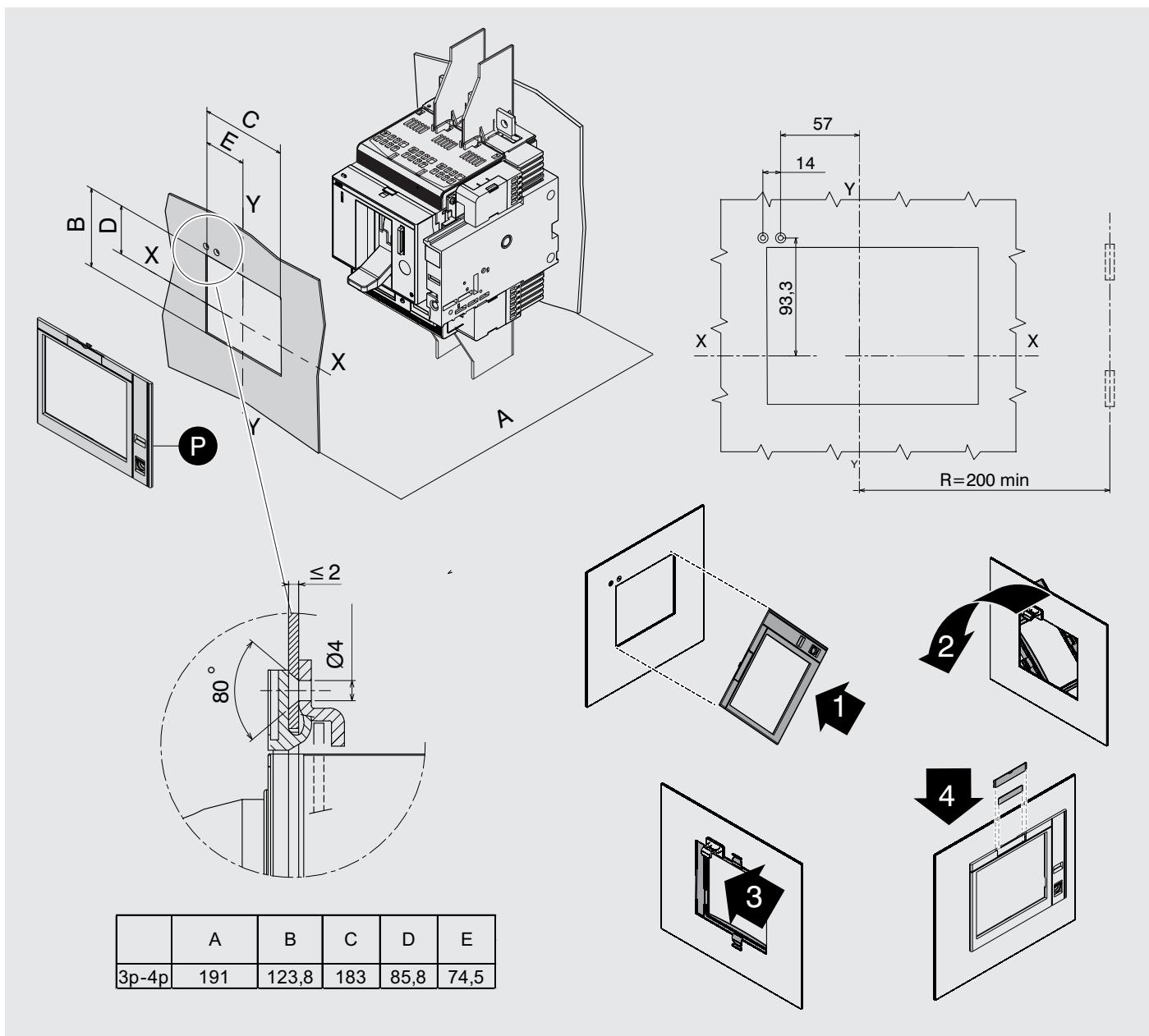
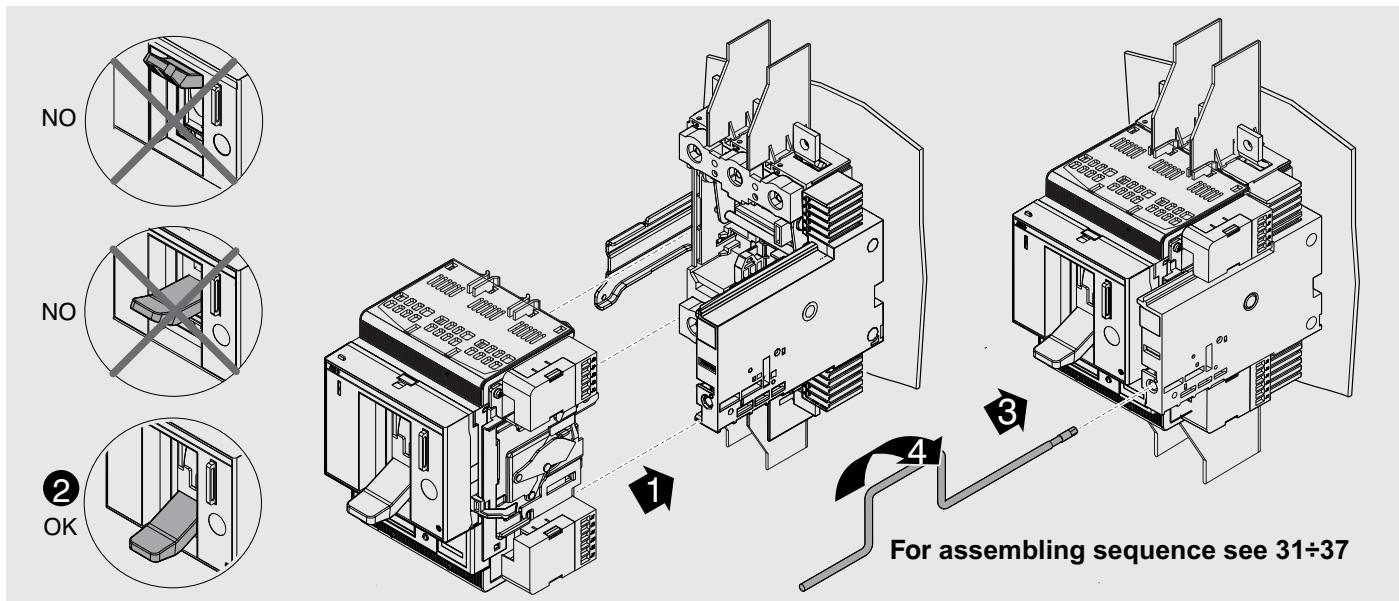
Example for mounting at 50mm.
For mounting at 72mm see 2TFH000004A1001

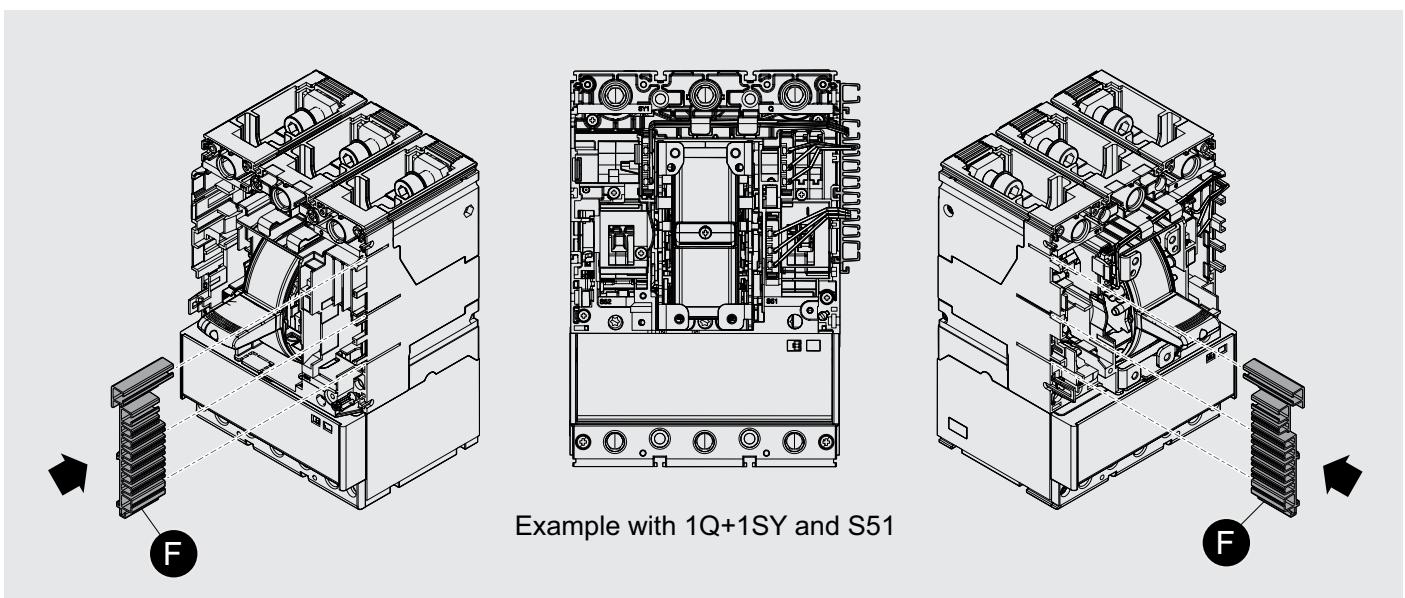
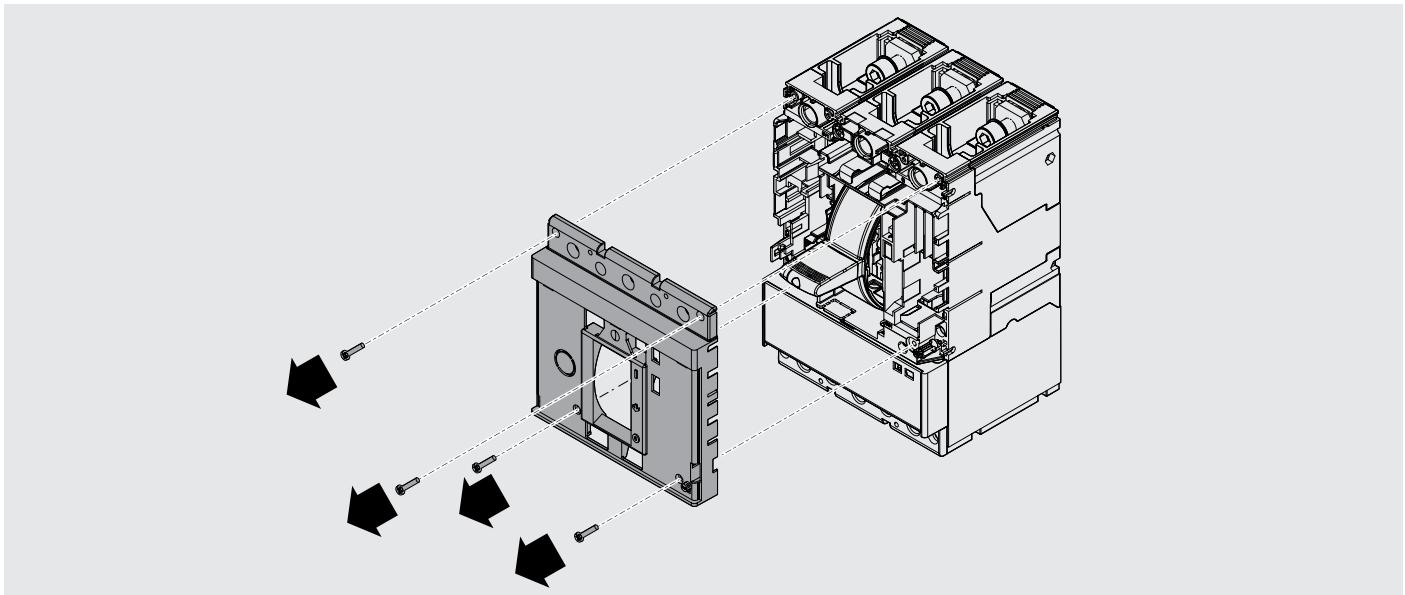
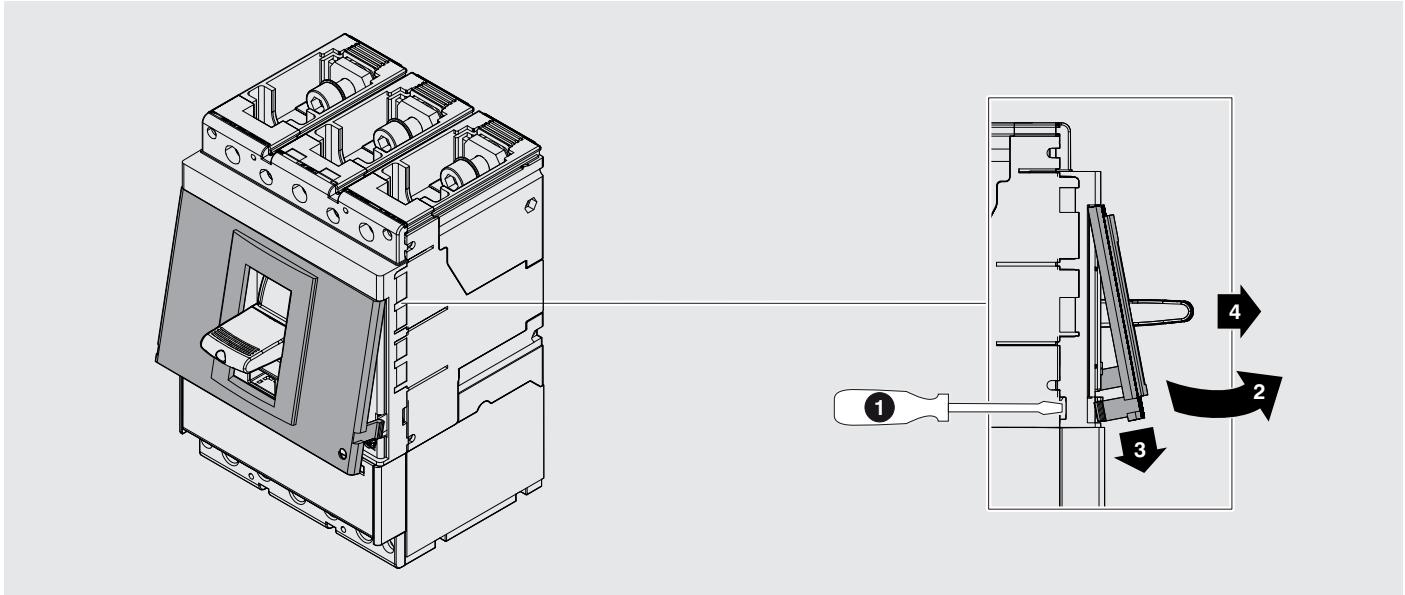


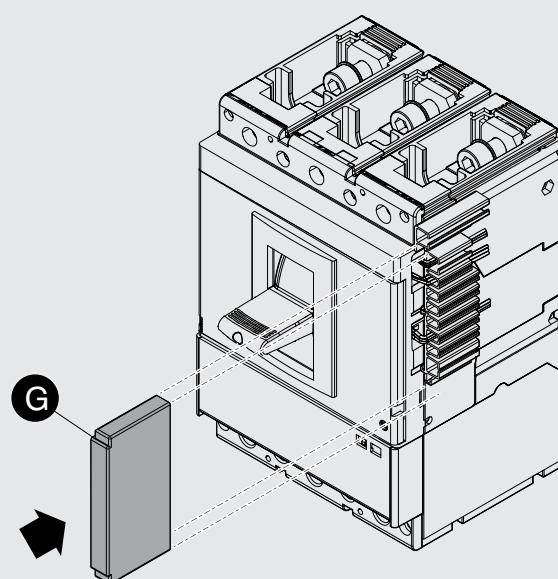
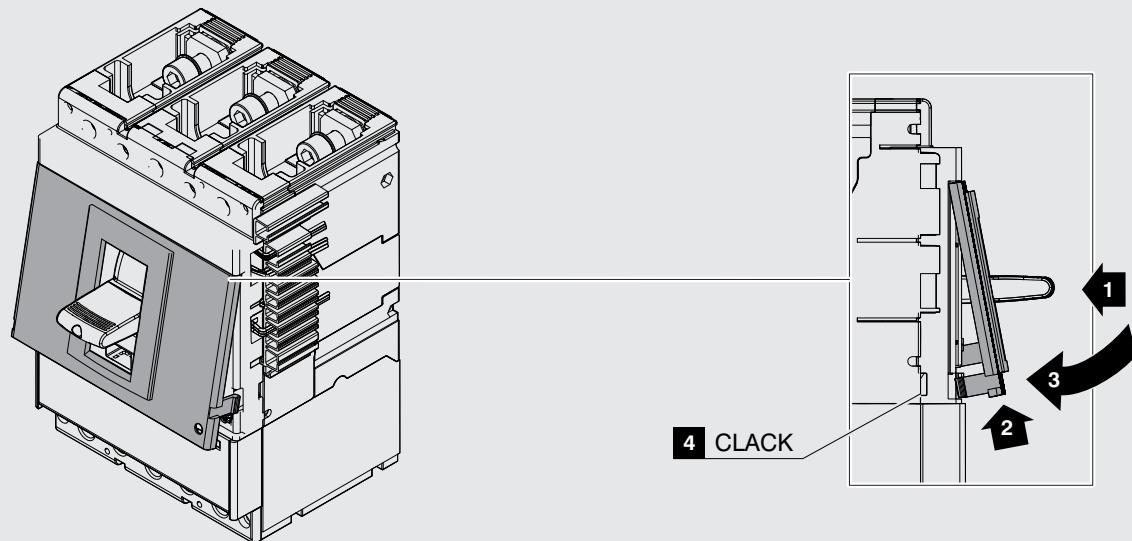
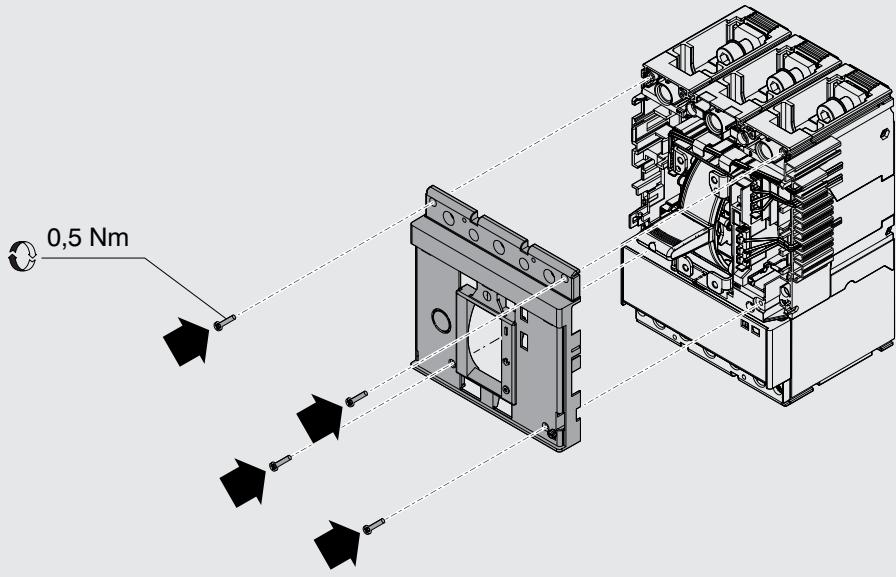


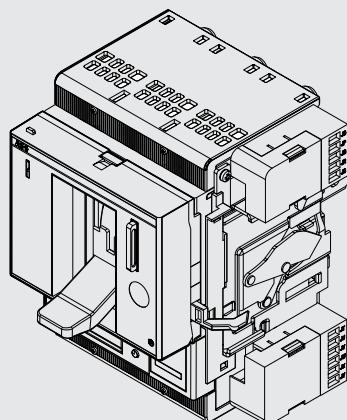
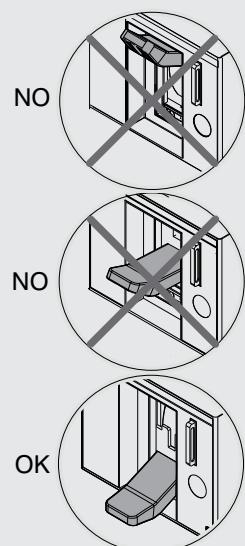
MCXT5 400 3p-4p W 22











Portare l'interruttore in posizione "Open"

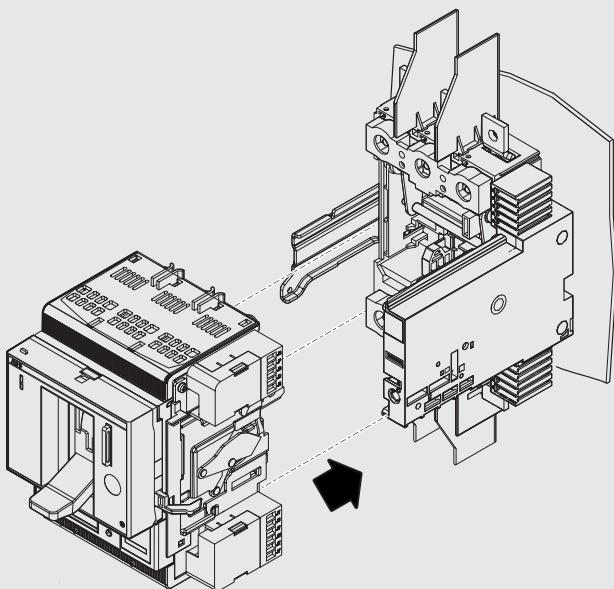
Switch the circuit-breaker to the "Open" position

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



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

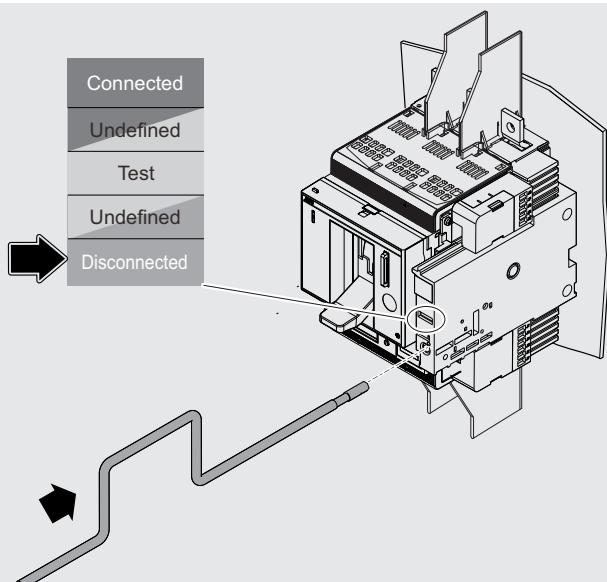
Position the moving part in the fixed part and push until it comes to a stop.

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。



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

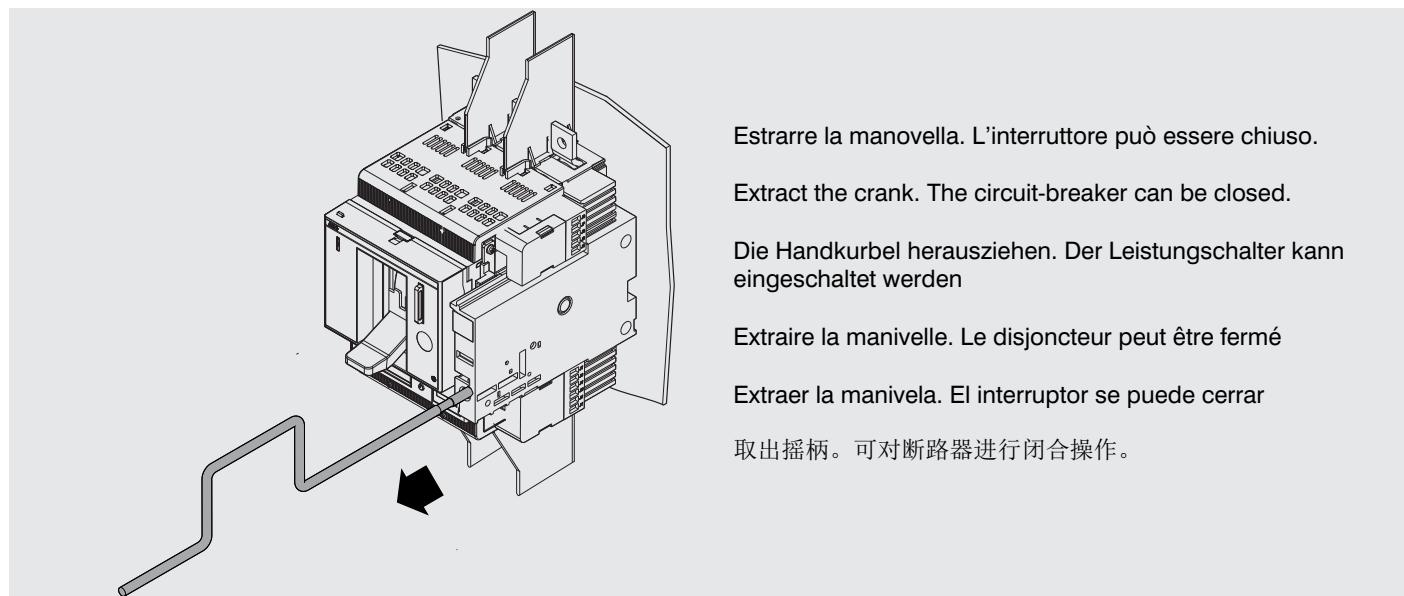
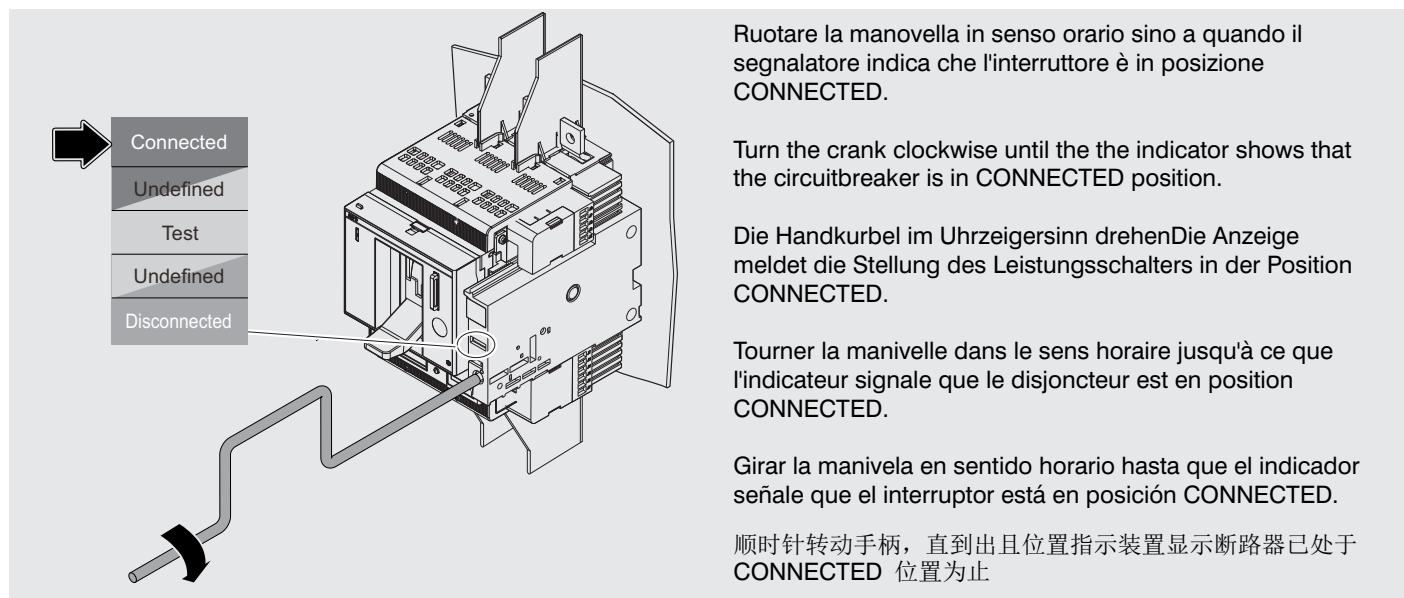
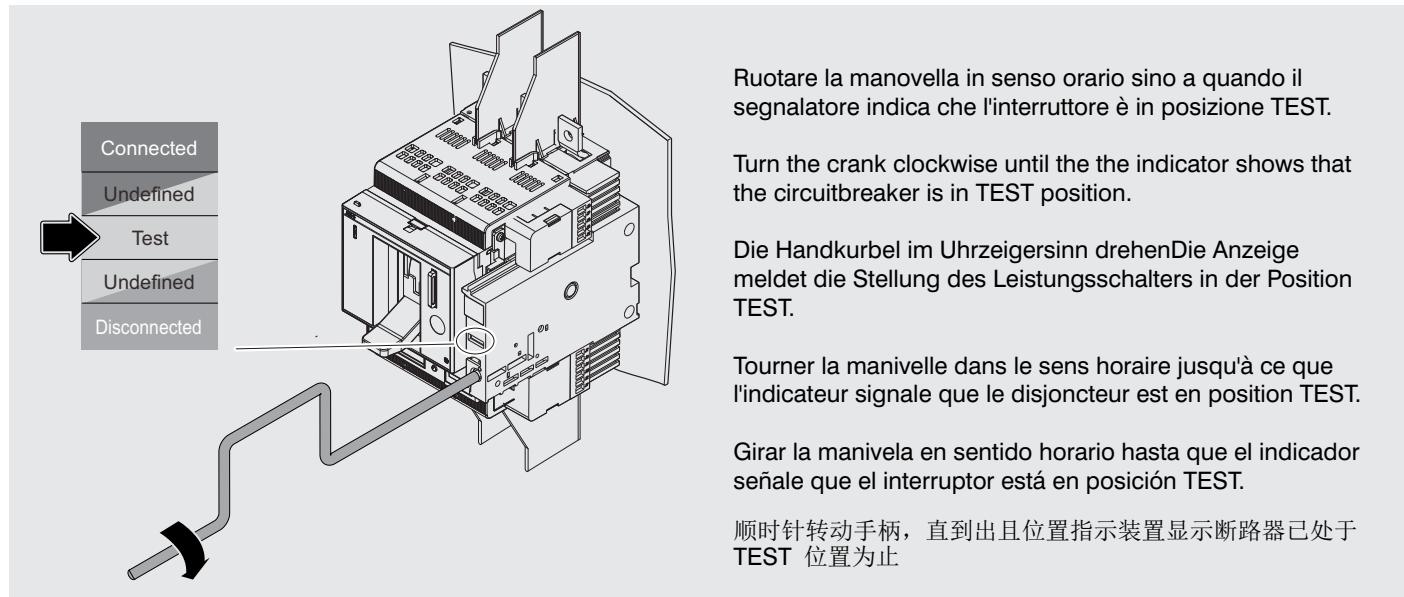
Insert the crank in the moving part. In this phase the moving part is in DISCONNECTED position.

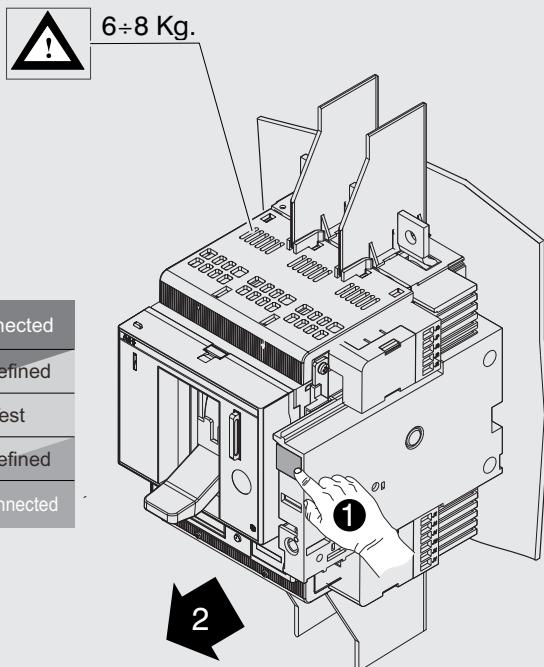
Die Handkurbel in das bewegliche Teil stecken. In dieser Phase befindet sich das bewegliche Teil in der Position DISCONNECTED.

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

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

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





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.

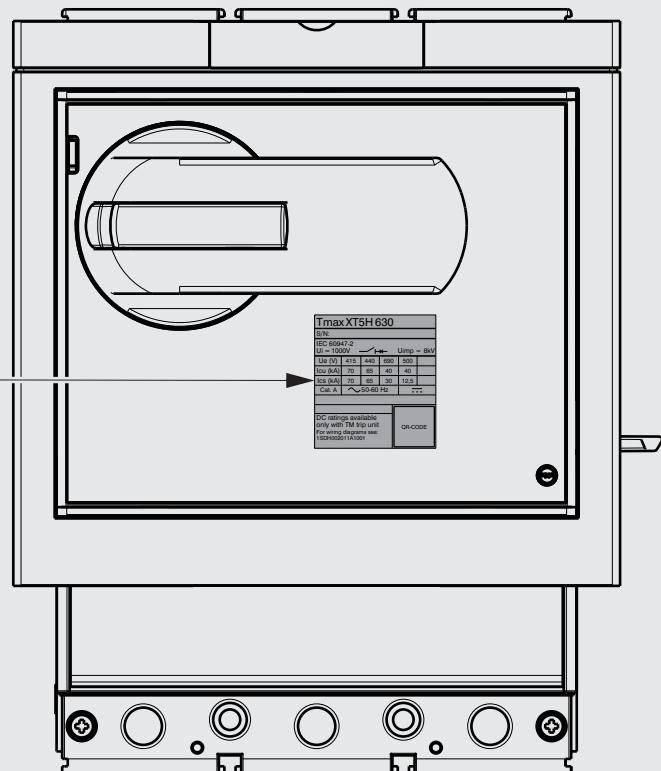
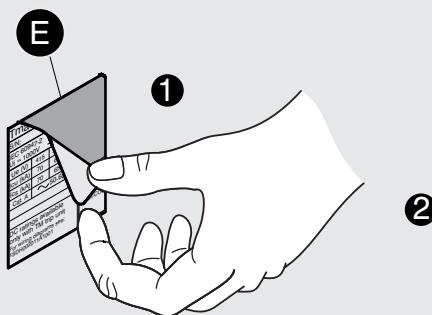
Um das bewegliche Teil aus dem festen Teil herauszuziehen, die gleichen Vorgänge, die zum Einfahren angegeben sind, in der umgekehrten Reihenfolge ausführen. Nach dem Ausfahren zum Entfernen des beweglichen Teil die Sicherheitsverriegelung entriegeln.

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

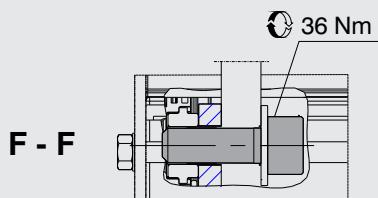


Terminali
Terminals
Anschlüsse
Prises
Terminales
端子类型

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

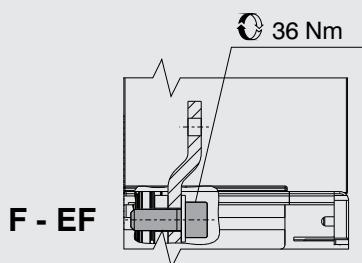
Dimensioni di ingombro
Overall dimensions
Abmessungen
Dimensions d'encombrement
Dimensiones generales
全部尺寸



1SDA104730R1	3pcs
1SDA104731R1	4pcs

[1SDH002011A1801](#)

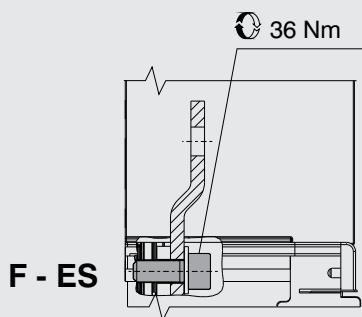
[1SDH002011A1101](#)



1SDA104734R1	3pcs
1SDA104735R1	4pcs

[1SDH002011A1802](#)

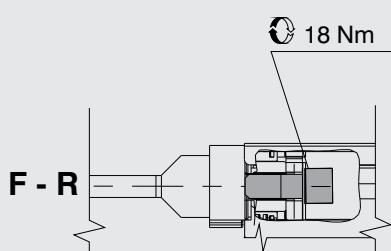
[1SDH002011A1103](#)



1SDA104738R1	3pcs
1SDA104739R1	4pcs

[1SDH002011A1803](#)

[1SDH002011A1104](#)



1SDA104760R1	3pcs
1SDA104761R1	4pcs

[1SDH002011A1807](#)

[1SDH002011A1102](#)

Terminali
Terminals
Anschlüsse
Prises
Terminales
端子类型

Codici
Codes
Codes
Codes
Códigos
物料编号

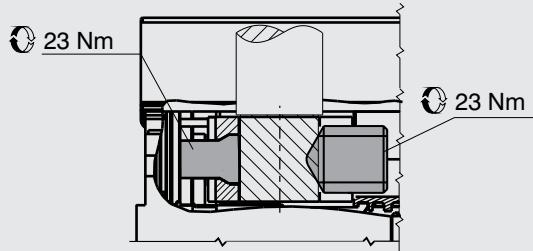
Istruzioni d'installazione
Installation instructions
Installationsanleitung
Instructions pour l'installation
Instrucciones de instalación
安装说明

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

F/P/W - FC CuAl
35mm²/185mm²

1SDA104746R1	3pcs
1SDA104747R1	4pcs

[1SDH002011A1804](#)

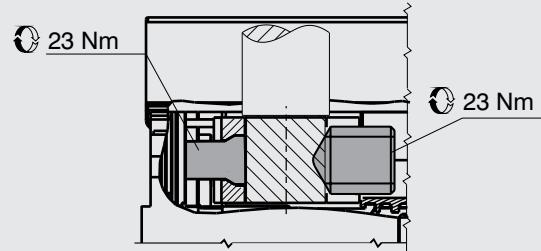


F/P/W - FC CuAl
120mm²/240mm²

1SDA104742R1	3pcs
1SDA104743R1	4pcs

[1SDH002011A1805](#)

[1SDH002011A1105](#)

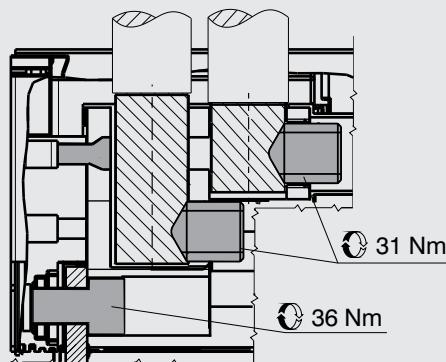


F/P/W - FC CuAl
2x70mm²/240mm²

1SDA104748R1	3pcs
1SDA104749R1	4pcs

[1SDH002011A1806](#)

[1SDH002011A1106](#)



Terminali
Terminals
Anschlüsse
Prises
Terminales
端子类型

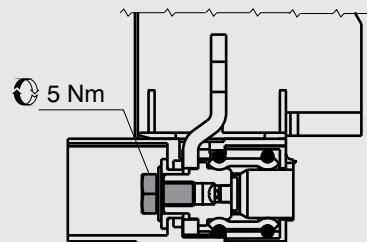
Codici
Codes
Codes
Codes
Códigos
物料编号

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

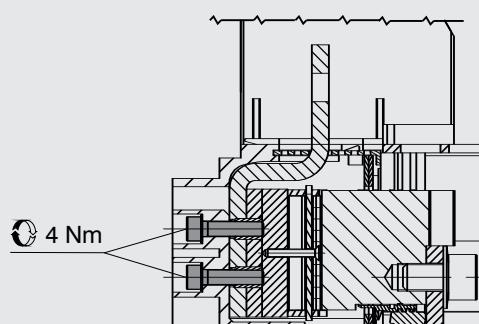
Dimensioni di ingombro
Overall dimensions
Abmessungen
Dimensions d'encombrement
Dimensiones generales
全部尺寸

P/W 400 - EF

1SDA104674R1	3pcs
1SDA104675R1	4pcs

[2TFH000019A1001](#)[2TFH001004A1001](#)**P/W 630 - EF**

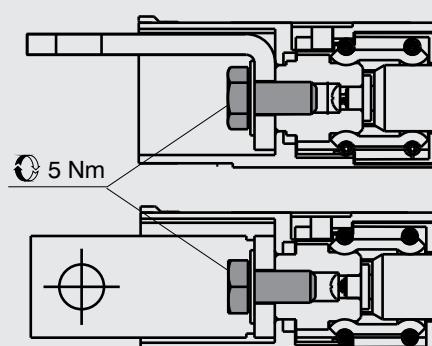
1SDA104766R1	3pcs
1SDA104767R1	4pcs

[2TFH000019A1001](#)[2TFH001008A1001](#)**P/W 400 - HR/VR**

1SDA104775R1	3pcs
1SDA104778R1	4pcs

[2TFH000023A1001](#)[2TFH001005A1001](#)

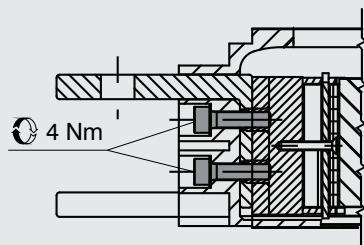
1SDA104774R1	3pcs	Same Length
1SDA104777R1	4pcs	Same Length

[2TFH001006A1001](#)

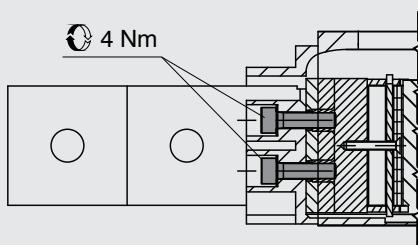
Terminali	Codici	Istruzioni d'installazione	Dimensioni di ingombro
Terminals	Codes	Installation instructions	Overall dimensions
Anschlüsse	Codes	Installationsanleitung	Abmessungen
Prises	Codes	Instructions pour l'installation	Dimensions d'encombrement
Terminales	Códigos	Instrucciones de instalación	Dimensiones generales
端子类型	物料编号	安装说明	全部尺寸

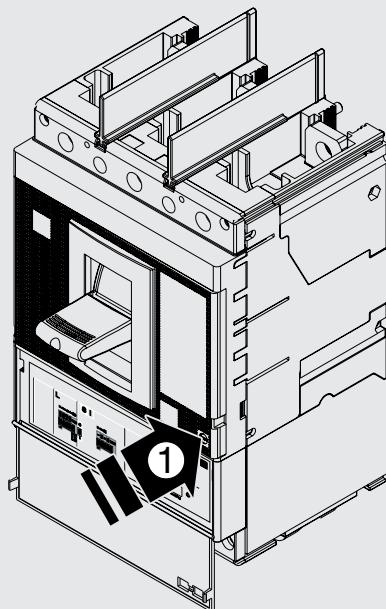
P/W 630 - HR

1SDA104770R1	3pcs
1SDA104771R1	4pcs

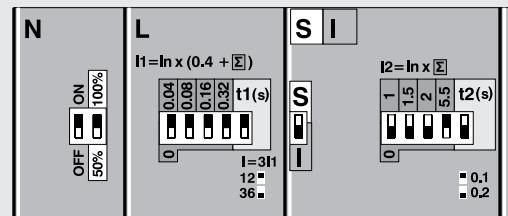
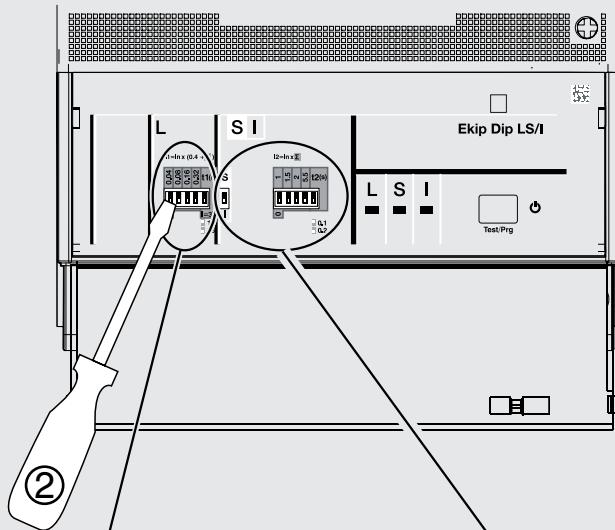
[2TFH000022A1001](#)[2TFH001007A1001](#)**P/W 630 - VR**

1SDA104780R1	3pcs
1SDA104781R1	4pcs

[2TFH000026A1001](#)[2TFH001009A1001](#)



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

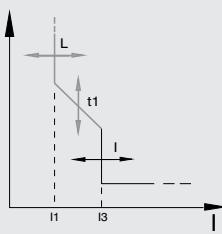
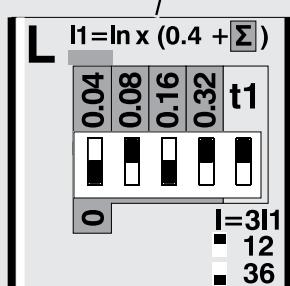
Default setting

Default-Einstellung

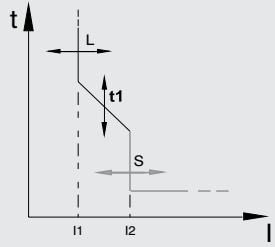
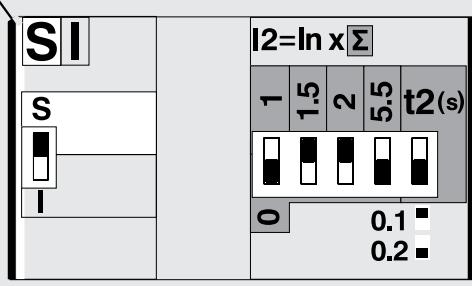
Configuration par défaut

Ajuste de default

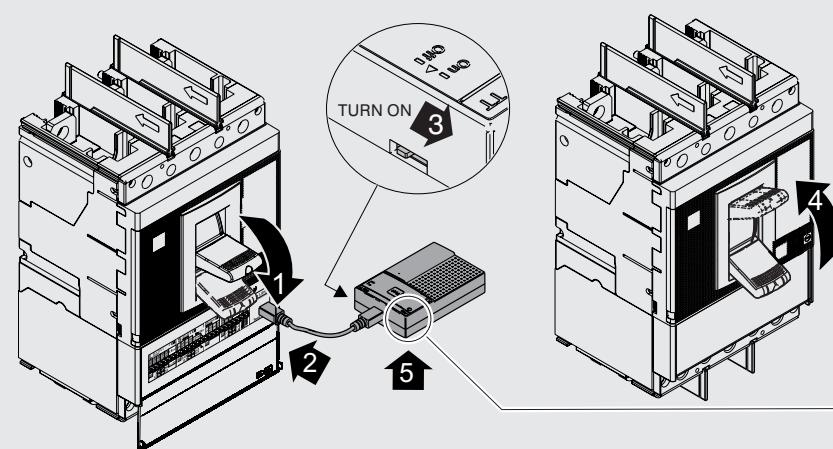
默认设置



Esempio: $In = 400 A$
Example: $I_1 = 400 \times (0,4+0,08+0,32) = 320A$
 $t_1 = 12 s @ 240 A (3I_1)$



Esempio: $In = 400 A$
Example: $I_2 = 400 \times (1,5+2) = 1400A$
 $t_2 = 0,2 s @ In > I_2$



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 Circuit 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 vérifier 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.

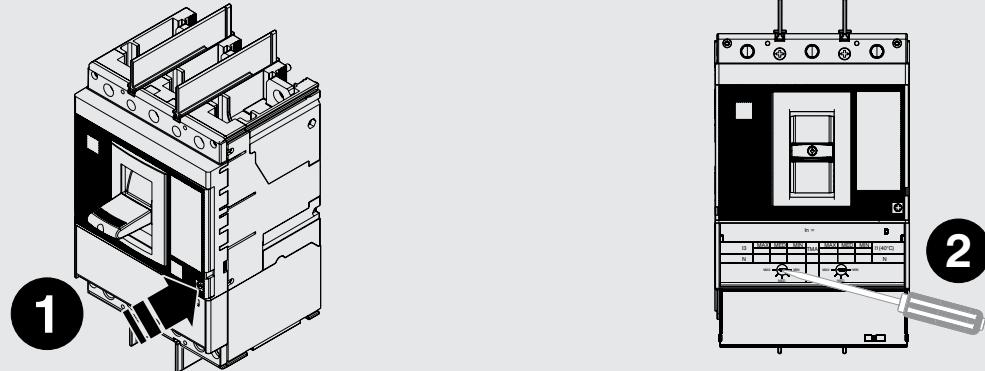
-Control del LED:

- 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。



		I1		
	In	MIN (0,7)	MED (0,85)	MAX (1xIn)
TMA	320	224	272	320
	400	280	340	400
	500	350	425	500
	630	441	535	630
TMG	320	224	272	320
	400	280	340	400
	500	350	425	500
	630	441	535	630

		I1		
	In	MIN	MED	MAX
TMA N50%	320	140	170	200
	400	175	212	250
	500	224	272	320
	630	280	340	400

		I3		
	In	MIN (5xIn)	MED (7,5xIn)	MAX (10xIn)
TMA	320	1600	2400	3200
	400	2000	3000	4000
	500	2500	3750	5000
	630	3150	4725	6300

		I3		
	In	MIN (2,5xIn)	MED (3,75xIn)	MAX (5xIn)
TMG	320	800	1200	1600
	400	1000	1500	2000
	500	1250	1875	2500
	630	1575	2363	3150

		I3		
	In	MIN (7xIn)	MED (10xIn)	MAX (13xIn)
MA	320	2240	3200	4160
	400	2800	4000	5200
	500	3500	5000	6500