Emax 2

DOC. N° 1SDH001567R0001 - ECN000092911 - Rev. B

Retrofitting tra interruttori Estraibili Emax 2 e Novomax G3-G4.
Retrofitting between Emax 2 and Novomax G3-G4 Withdrawable circuit-breakers.
Nachrüstung zwischen Steckbarer Leistungsschaltern Emax 2 und Novomax G3-G4.
Reconfiguration entre disjoncteurs Débrochables Emax 2 et Novomax G3-G4.
Retrofitting entre interruptores Extraíble Emax 2 y Novomax G3-G4.

Il presente kit di retrofitting, è costruito per la sostituzione totale di interruttori aperti estraibili Novomax G3-G4 con interruttori aperti in esecuzione estraibile di più moderna fattura tipo Emax 2 di medesima taglia, senza dover eseguire alcuna modifica alle parti attive del quadro.
E' garantita la totale corrispondenza delle caratteristiche elettriche (corrente nominale e potere di interruzione) a condizione che
1.La scelta sia effettuata in conformità a quanto riportato nei cataloghi tecnici relativi ai prodotti di retrofitting.
2.L'interruttore Novomax da sostituire sia installato in conformità al proprio manuale di installazione, rispettando le distanze di isolamento verso massa, il dimensionamento delle sbarre di connessione, il posizionamento del primo setto di ancoraggio.

IMPORTANTE
L'attività di retrofitting consente una sostituzione di un dispositivo di comando e protezione divenuto obsoleto ma non di alterare in maniera alcuna i dati di progetto originali del quadro esistente. Qualora il nuovo interruttore presentasse dati di targa superiori, i kit di retrofitting sono dimensionati per le prestazioni del vecchio dispositivo.
Verificare la dimensione effettiva della cella prima di procedere all'acquisto.
Per le dimensioni vedere questo manuale.
Per ulteriori chiarimenti contattare ABB.

Attenzione Istruzioni riguardanti il solo assemblaggio del kit di retrofitting, non sono da intendersi come sostitutive del manuale di installazione, uso e manutenzione del nuovo interruttore Emax 2.

Cablare i circuiti ausiliari del nuovo interruttore secondo lo schema elettrico Emax 2 documento 1SDM000105R0001.

MESSA IN SICUREZZA DELL'IMPIANTO
A) A garanzia dell'incolumità del personale addetto all'installazione del kit, prima di operare la sostituzione dell'interruttore, si raccomanda di seguire, scrupolosamente, le seguenti azioni:
- Mettere fuori servizio il quadro ospitante
- Portare l'interruttore da sostituire in posizione di aperto e molle scariche
- Disconnettere le applicazioni ausiliarie
- Prima di estrarre l'apparecchio, controllare nuovamente il fuori servizio dell'utenza

B) Smantellare completamente il vecchio interruttore conservando le viti di connessione dei poli del vecchio interruttore Novomax alla barratura del quadro.

This retrofitting kit allows withdrawable Novomax G3-G4 circuit-breakers to be fully replaced with the more modern Emax 2 plug-in air circuit-breakers of the same size without having to modify the live parts of the switchgear in any way.
Full correspondence of the electrical characteristics is guaranteed (rated current and breaking capacity) so long as:
1.The kit is chosen in accordance with the indications in the technical catalogues dedicated to retrofitting products.
2.The Novomax circuit-breaker to be replaced has been installed in compliance with the instructions in the relative installation manual, and with the specified insulation clearance towards earth, connection busbar size and position of the first anchor plate.

IMPORTANT
Retrofitting allows an obsolete control and protection device to be replaced, but does not allow the data of the original project of the existing switchboard to be altered in any way.
If the rating plate data of the new circuit-breaker are higher, the retrofitting kits are sized for the performance of the old device.
Verify the actual size of the cell before purchasing.
For the dimensions see this manual.
Consult ABB for further details.

Warning The instructions concern the sole assembly of the retrofitting kit. They do not substitute the instructions in the installation, operation and maintenance manual of the new Emax 2 circuit-breaker.
Wire auxiliary circuits of new circuit-breaker as shown in Emax 2 circuit diagram, document 1SDM000105R0001

SETTING THE INSTALLATION IN SAFE CONDITIONS
A) To ensure that the persons who install the kit work in safe conditions, strictly comply with the following instructions before replacing the circuit-breaker:
- Close down the switchboard in which the circuit-breaker is to be installed.
- Set the old circuit-breaker to the open position with the springs unloaded.
- Disconnect the auxiliary circuit applications.
- Check to make sure that the user is disconnected before removing the device.

B) Completely disassemble the old circuit-breaker, but keep the screws that connect the poles of the old Novomax circuit-breaker to the switchboard bars.

Die offenen Leistungsschalter Novomax G3-G4 ganz durch die offenen Leistungsschalter in der ausfahrbaren Ausführung mit modernerer Bauart vom Typ Emax 2 der gleichen Baugröße auszutauschen, ohne irgendeine Änderung an den aktiven Teilen der Schaltanlage vornehmen zu müssen.
Die vollständige Übereinstimmung der elektrischen Eigenschaften (Bemessungs-Strom und Ausschaltvermögen) ist unter der Voraussetzung gewährleistet,
1.Dass die Wahl in Konformität mit dem erfolgt, was in den technischen Katalogen zu den Nachrüstprodukten angegeben ist.
2.Dass der zu ersetzende Leistungsschalter Novomax in Übereinstimmung mit dem eigenen Installationshandbuch installiert wird, d.h. dass die Isolationsabstände gegen Masse, die Dimensionierung der Anschlusssammelschienen, die Positionierung der ersten Verankerungswand wie vorgeschrieben installiert sind

WICHTIG
Die Nachrüstung gestattet das Austauschen einer nunmehr obsoleten Schalt- und Schutzeinrichtung, ohne die ursprünglichen Projektdaten der vorhandenen Schaltanlage auf irgendeine Weise ändern zu müssen.
Sollte der neue Leistungsschalter höhere Typenschildwerte aufweisen, sind die Nachrüstsätze auf die Leistungen der alten Einrichtung auszulegen.
Überprüfen Sie die tatsächliche Größe der Zelle vor dem Kauf.
Für die Abmessungen siehe dieses Handbuch.
Für weitere Erläuterungen wenden Sie sich bitte an ABB.

Achtung Anweisungen, die sich lediglich auf den Einbau des Nachrüstsatzes beziehen und nicht so zu verstehen sind, dass sie die Installations-, Betriebs- und Wartungsanleitungen des neuen Leistungsschalters Emax 2 ersetzen.
Die Hilfsstromkreise des neuen Schalters gemäß das Schaltbild Emax 2 1SDM00015R0001 verdrahten.

SICHERHEITSTECHNISCHE MASSNAHME FÜR DIE ANLAGE
A) Um die Sicherheit des Personals zu gewährleisten, das mit der Installation des Nachrüstsatzes beauftragt ist, sind vor dem Austausch des Leistungsschalters gewissenhaft die folgenden Vorgänge durchzuführen:
-Die Schaltanlage, in der sich der Leistungsschalter befindet, außer Betrieb setzen.
- Den auszutauschenden Leistungsschalter in die AUS-Stellung mit entspannten Federn bringen.
- Die Hilfsanwendungen abklemmen.
- Bevor man das Schaltgerät herauszieht, erneut sicherstellen, dass der Stromverbraucher außer Betrieb genommen ist.
B) Den alten Leistungsschalter ganz ausbauen und die Schrauben zum Anschluss der Pole des alten Leistungsschalters Novomax an der Sammelschienen der Schaltanlage aufbewahren.

Le présent kit de « retrofitting », est conçu pour la reconfiguration totale de disjoncteurs ouverts Novomax G3-G4 par des disjoncteurs ouverts dans la version débrochable sur chariot de conception plus moderne type Emax 2 de même taille, sans devoir effectuer aucune modification aux parties actives du tableau.
La correspondance totale des caractéristiques électriques est garantie (courant nominal et pouvoir de coupure) à condition que :
1.Le choix soit effectué conformément aux catalogues techniques relatifs aux produits de « retrofitting ».
2.Le disjoncteur Novomax à remplacer soit installé conformément à son manuel d'installation, en respectant les distances d'isolation vers la masse, le dimensionnement des barres de connexion, le positionnement du premier diaphragme d'ancrage.

IMPORTANT
L'activité de reconfiguration permet le remplacement d'un dispositif de commande et de protection devenu obsolète mais de ne pas altérer en aucune manière les données d'origine de projet du tableau existant.
Si le nouveau disjoncteur devait avoir des données de plaque supérieures, les kits de « retrofitting » sont dimensionnés pour les performances de l'ancien dispositif.
Vérifiez la taille réelle du compartiment avant l'achat. Pour les dimensions voir ce manuel.
Pour plus d'informations veuillez contacter ABB.

Attention Ces instructions concernent uniquement l'assemblage du kit de « retrofitting », elles ne remplacent en aucun cas celles du manuel d'installation, utilisation et entretien du nouveau disjoncteur Emax 2.
Câbler circuits auxiliairesi de nouveau disjoncteur comme montré le schéma électrique Emax 2 1SDM000105R0001.

MISE EN SÉCURITÉ DE L'INSTALLATION

A) En garantie de la sécurité du personnel préposé à la mise en place du kit, avant de remplacer le disjoncteur il est recommandé d'effectuer scrupuleusement les opérations suivantes :
- Mettre hors service le tableau d'accueil ;
- Placer le disjoncteur à remplacer en position ouvert et ressorts débandés ;
- Débrancher les applications auxiliaires;
- Avant d'extraire l'appareil contrôler de nouveau que l'utilisation est hors service.
B) Démanteler entièrement l'ancien disjoncteur en conservant les vis de connexion des pôles de l'ancien disjoncteur Novomax au jeu de barres du tableau.

El presente kit de retrofitting, ha sido realizado para la sustitución total de interruptores Novomax G3-G4 con interruptores abiertos en ejecución extraíble de realización más moderna, tipo Emax 2, del mismo tamaño, sin tener que modificar ninguna parte activa del cuadro.
Está garantizada la total correspondencia entre las características eléctricas (corriente asignada y poder de corte):
1.Siempre que la selección se efectúe de conformidad con lo expuesto en los catálogos técnicos relativos a los productos de retrofitting.
2.El interruptor Novomax a sustituir esté instalado de conformidad con el respectivo manual de instalación, respetando las distancias de aislamiento hacia la masa, el dimensionamiento de las barras de conexión, la colocación del primer tabique de fijación.

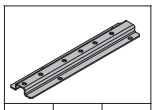
IMPORTANTE
Las operaciones de retrofitting permiten una sustitución de un dispositivo de mando y protección ya obsoleto sin alterar en ningún modo los datos de proyecto originales del cuadro existente.
Si el nuevo interruptor presentara características nominales superiores, los kits de retrofitting están dimensionados para las prestaciones del viejo dispositivo.
Verificar el tamaño real de la celda antes de la compra. Para conocer las dimensiones véase este manual.
Para ulteriores aclaraciones contactar ABB.

Atención Instrucciones relativas exclusivamente al ensamblado del kit di retrotitting. Estas instruciones no sustituyen aquellas presentes en el manual de instalación, uso y mantenimiento del nuevo interruptor Emax 2.
Cablear los circuitos auxiliares del nuevo interruptor siguiendo el esquema eléctrico Emax 2 1SDM000105R0001.

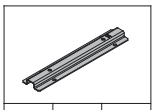
PUESTA EN SEGURIDAD DE LA INSTALACIÓN

A) Para garantizar la incolumnidad del personal encargado de la instalación del kit, antes de efectuar la sustitución del interruptor, se aconseja respetar escrupulosamente los siguientes pasos:
- Poner fuera de servicio el cuadro que alojará el interruptor
- Poner el interruptor a sustituir en posición de a bierto y con los resortes sin carga
- Desconectar las aplicaciones auxiliares
- Antes de extraer el aparato, controlar nuevamente la condición de fuera de servicio del respectivo circuito
B) Desmantelar completamente el viejo interruptor conservando los tornillos de conexión de los polos del viejo interruptor Novomax en las barras del cuadro.

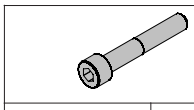
Novomax G3 1600A HR W => E2.2 1600A W



	III	IV
H1	2	2



	III	IV
L1	3	-
L2	-	3



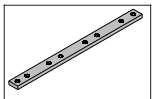
	III	IV
M12 X 50 B1	12	16
M6 X 45 B5	6	8

	III	IV
M8 x 25 C1	4	4
M8 x 16 C2	16	16
M6 x 12 C3	2	2

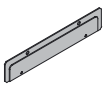
	III	IV
13x24 D1	24	32
8,4x17 D2	20	20
6,4x12,5 D3	14	18

	III	IV
M12 G1	12	16
M8 G3	4	4
M6 G4	8	10

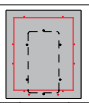
	III	IV
13 E1	12	16
8,4 E2	16	16
6,4 E3	6	6



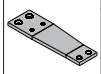
	III	IV
K5	2	-
K6	-	2



	III	IV
Q1	1	1



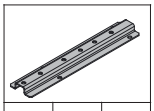
	III	IV
P1	1	1



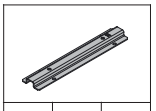
	401	402	403	404	405	406	407	408
III	2	2	2	2	2	2	-	-
IV	2	2	2	2	2	2	1	1

	III	IV
N2	-	2

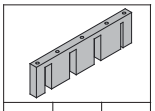
Novomax G3 1600A VR W => E2.2 1600A W



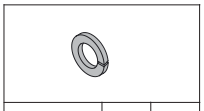
	III	IV
H1	2	2



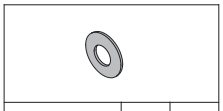
	III	IV
L1	3	-
L2	-	3



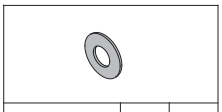
	III	IV
M8	1	-
M9	1	-
M10	-	1
M11	-	1



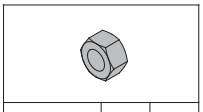
	III	IV
13 E1	24	32
8,4 E2	16	16



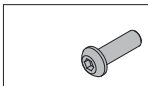
	III	IV
10,5x22 F2	8	10



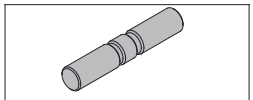
	III	IV
13x24 D1	12	16
8,4x17 D2	20	20
6,4x12,5 D3	2	2



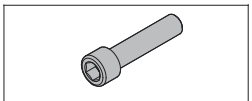
	III	IV
M12 G1	12	16
M10 G2	8	10
M8 G3	4	4
M6 G4	2	2



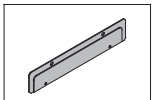
	III	IV
M8 x 25 C1	4	4
M8 x 16 C2	16	16
M6 x 12 C3	2	2



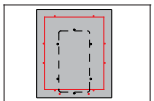
	III	IV
M10 x 280 A2	4	5



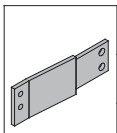
	III	IV
M12 X 50 B1	12	16



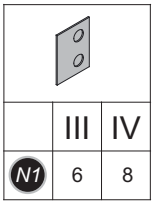
	III	IV
Q1	1	1



	III	IV
P1	1	1

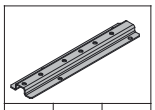


	409	410	411	412	413
III	2	2	2	-	-
IV	2	2	2	2	2

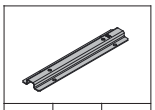


	III	IV
N1	6	8

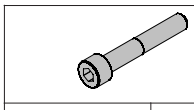
Novomax G3 2500A HR W => E2.2 2500A W



	III	IV
H1	2	2



	III	IV
L1	3	-
L2	-	3

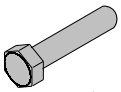


	III	IV
M8 X 65 B2	12	12
M8 X 45 B3	-	4

	III	IV
M8 x 25 C1	4	4
M8 x 16 C2	16	16
M6 x 12 C3	2	2

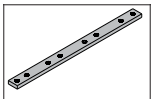
	III	IV
13x24 D1	24	32
8,4x17 D2	44	52
6,4x12,5 D3	2	2

	III	IV
M12 G1	12	16
M8 G3	16	20
M6 G4	2	2

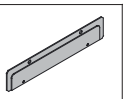


	III	IV
M12 x 70 J1	12	16

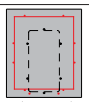
	III	IV
13 E1	12	16
8,4 E2	28	32



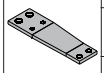
	III	IV
K1	2	-
K2	-	2



	III	IV
Q1	1	1

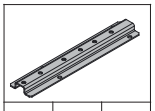


	III	IV
P1	1	1

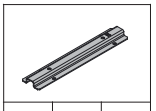


	361	362	363	364	365	366	367	368	369	370
III	4	4	4	2	2	2	-	-	-	-
IV	4	4	4	2	2	2	1	1	1	1

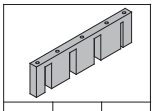
Novomax G3 2000/2500A VR W => E2.2 2500A W



	III	IV
H1	2	2



	III	IV
L1	3	-
L2	-	3



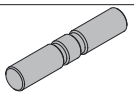
	III	IV
M1	2	-
M2	-	2

	III	IV
13 E1	-	4
8,4 E2	16	16

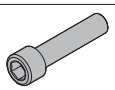
	III	IV
13x28 F1	24	24
10,5x22 F2	8	10

	III	IV
13x24 D1	-	8
8,4x17 D2	20	20
6,4x12,5 D3	2	2

	III	IV
M12 G1	24	28
M10 G2	8	10
M8 G3	4	4
M6 G4	2	2

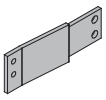


	III	IV
M12 x 65 A1	12	12
M10 x 280 A2	4	5

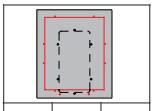


	III	IV
M12 X 50 B1	-	4

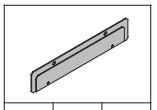
	III	IV
N1	12	14



	039	040	041	042	043	044	045	046
III	2	2	2	-	2	2	2	-
IV	2	2	2	1	2	2	2	1



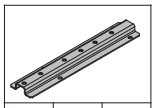
	III	IV
P1	1	1



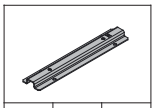
	III	IV
Q1	1	1

	III	IV
M8 x 25 C1	4	4
M8 x 16 C2	16	16
M6 x 12 C3	2	2

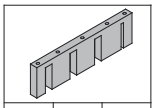
Novomax G3 3000A VR W => E4.2 3000A W



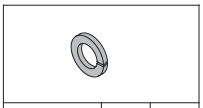
	III	IV
H1	2	2



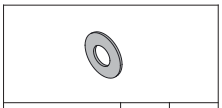
	III	IV
L1	3	-
L2	-	3



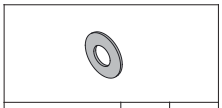
	III	IV
M3	2	-
M4	-	1
M5	-	1



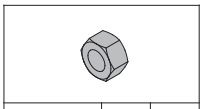
	III	IV
13 E1	12	16
8,4 E2	16	16



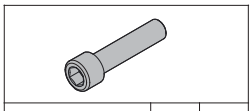
	III	IV
10,5x22 F2	8	10



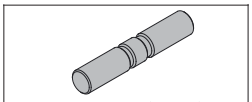
	III	IV
13x24 D1	24	32
8,4x17 D2	20	20
6,4x12,5 D3	2	2



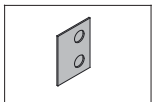
	III	IV
M12 G1	12	16
M10 G2	8	10
M8 G3	4	4
M6 G4	2	2



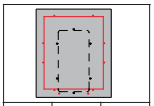
	III	IV
M12 x 70 B4	12	12
M12 x 50 B1	-	4



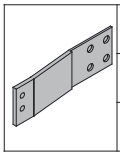
	III	IV
M10 x 310 A3	4	5



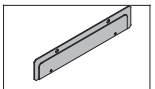
	III	IV
N1	-	2



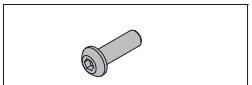
	III	IV
P1	1	1



	047	048	049	050	051	052	053	054	055	056	057	058	059	060	061	062	063
III	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-
IV	2	2	2	1	2	2	2	1	2	2	2	1	2	2	2	1	1

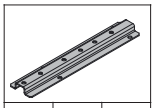


	III	IV
Q1	1	1

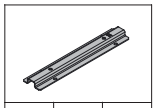


	III	IV
M8 x 25 C1	4	4
M8 x 16 C2	16	16
M6 x 12 C3	2	2

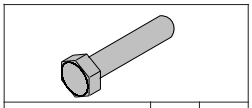
Novomax G4 3200A HR W => E4.2 4000A W



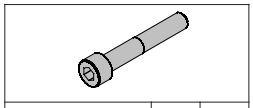
	III	IV
H1	2	2



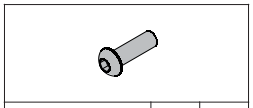
	III	IV
L3	3	-
L4	-	3



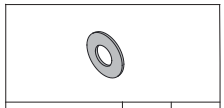
	III	IV
M12 x 80 J2	12	16



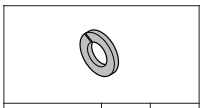
	III	IV
M8 X 65 B2	12	12
M8 X 45 B3	-	4



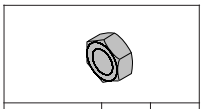
	III	IV
M8 x 25 C1	4	4
M8 x 16 C2	16	16
M6 x 12 C3	2	2



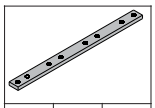
	III	IV
13x24 D1	24	32
8,4x17 D2	44	52
6,4x12,5 D3	2	2



	III	IV
13 E1	12	16
8,4 E2	28	32



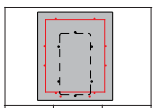
	III	IV
M12 G1	12	16
M8 G3	16	20
M6 G4	2	2



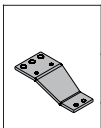
	III	IV
K3	2	-
K4	-	2

	III	IV
Q1	1	1

	III	IV
N3	-	2

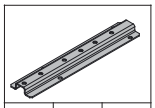


	III	IV
P1	1	1



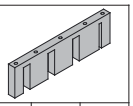
	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390
III	2	2	2	-	2	-	-	1	1	1	2	2	2	1	1	1
IV	2	2	2	1	2	1	1	1	1	1	2	2	2	1	1	1

Novomax G4 3200A VR W => E4.2 3000A W



	III	IV
H1	2	2

	III	IV
L3	3	-
L4	-	3



	III	IV
M12	2	-
M13	-	2

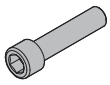
	III	IV
13 E1	12	16
8,4 E2	16	16

	III	IV
10,5x22 F2	8	10

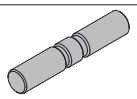
	III	IV
13x24 D1	24	32
8,4x17 D2	20	20
6,4x12,5 D3	2	2

	III	IV
M12 G1	12	16
M10 G2	8	10
M8 G3	4	4
M6 G4	2	2

	III	IV
M8 x 25 C1	4	4
M8 x 16 C2	16	16
M6 x 12 C3	2	2

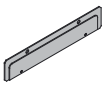


	III	IV
M12 x 70 B4	12	12
M12 x 50 B1	-	4

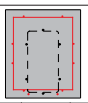


	III	IV
M10 x 280 A2	4	5

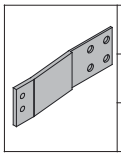
	III	IV
N1	12	14



	III	IV
Q1	1	1

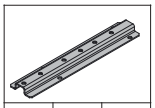


	III	IV
P1	1	1



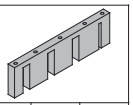
	422	423	424	425	426	427	428	429	430	431
III	2	2	2	2	2	2	2	2	-	-
IV	2	2	2	2	2	2	2	2	1	1

Novomax G4 3600A VR W => E4.2 4000A W



	III	IV
H1	2	2

	III	IV
L3	3	-
L4	-	3



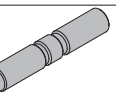
	III	IV
M6	2	-
M7	-	2

	III	IV
13 E1	-	4
8,4 E2	16	16

	III	IV
13x28 F1	24	24
10,5x22 F2	8	10

	III	IV
13x24 D1	-	8
8,4x17 D2	20	20
6,4x12,5 D3	2	2

	III	IV
M12 G1	24	28
M10 G2	8	10
M8 G3	4	4
M6 G4	2	2

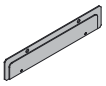


	III	IV
M12 x 95 A4	12	12
M10 x 310 A3	4	5

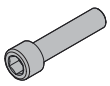
	III	IV
N1	-	4

	III	IV
P1	1	1

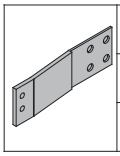
	III	IV
M8 x 25 C1	4	4
M8 x 16 C2	16	16
M6 x 12 C3	2	2



	III	IV
Q1	1	1



	III	IV
M12 x 70 B4	-	4



	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142
III	2	2	2	2	2	2	2	2	2	2	2	2	-	-	1	1	1	1	1	1	1	1	1	1	1	1
IV	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1

ATTENZIONE! La sequenza di montaggio a seguire è quella proposta da ABB, ma può essere variata a cura del cliente, in funzione delle dimensioni e dell'accessibilità del quadro.

WARNING! The required assembly sequence is the one proposed by ABB, but the customer can change it to suit the size and accessibility of the switchgear.

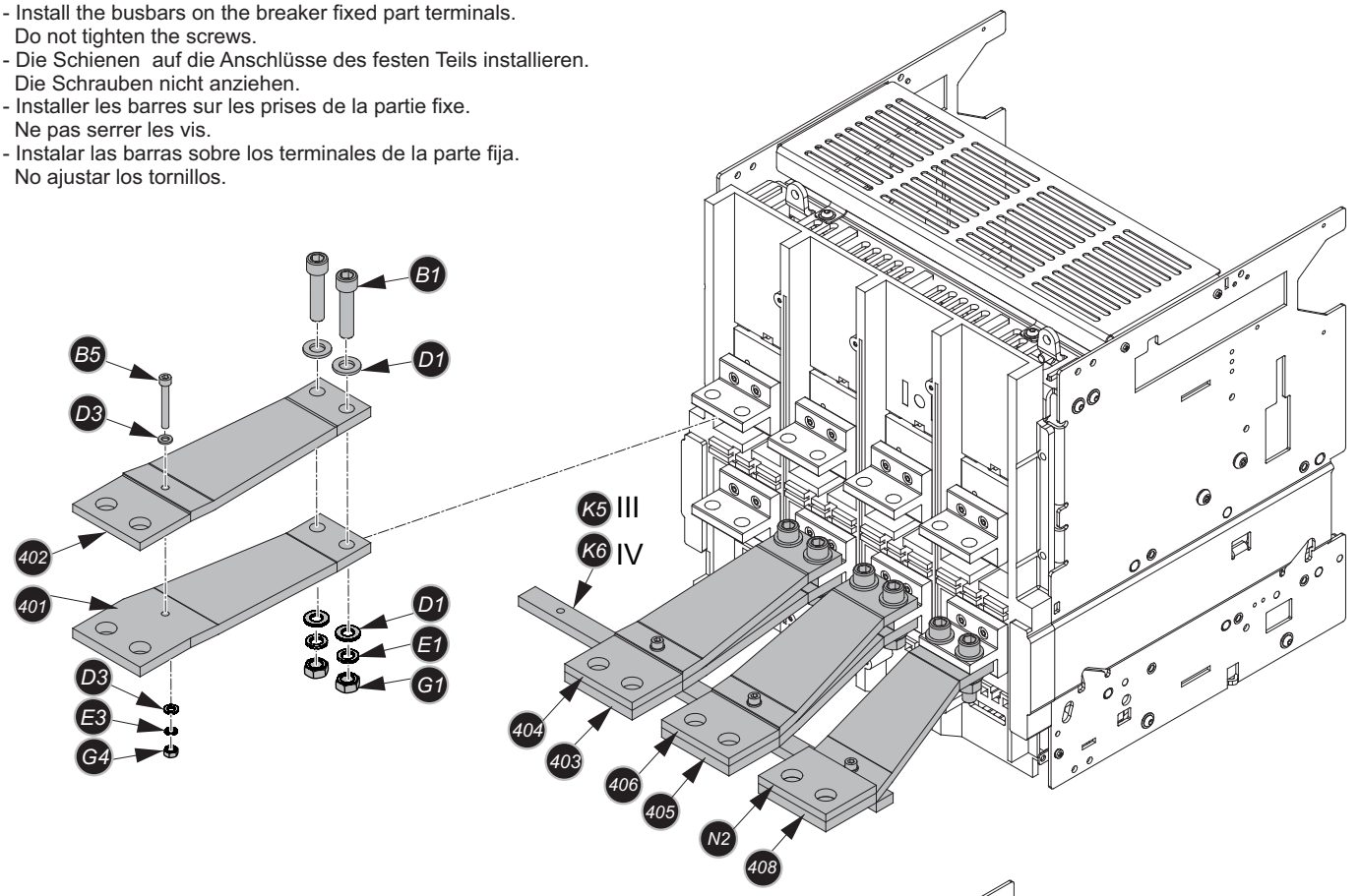
ACHTUNG! Die unten stehende Montagesequenz ist die von ABB vorgeschlagene, kann aber vom Kunden je nach den Abmessungen und den Zugangsmöglichkeiten des Schaltschranks geändert werden.

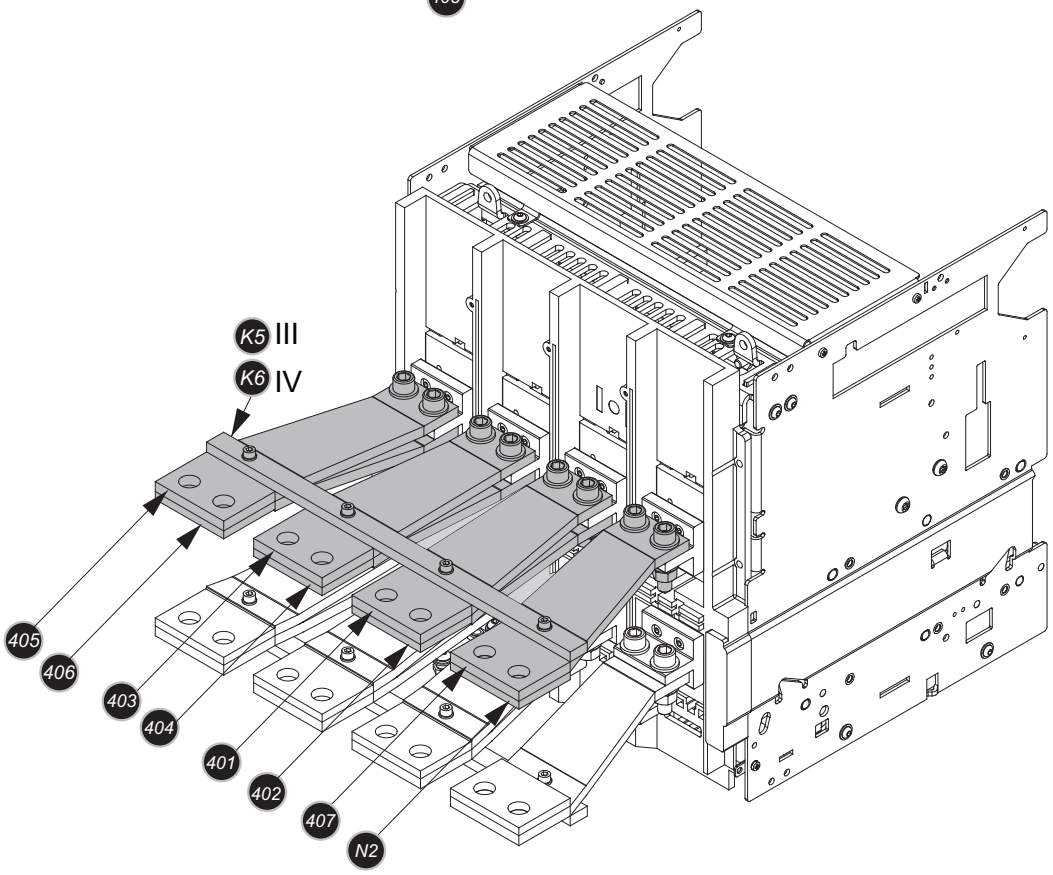
ATTENTION! La séquence de montage ci-dessous est celle proposée par ABB, mais elle peut être changée par le client, en fonction des dimensions et de l'accessibilité du tableau.

ATENCIÓN! La secuencia de montaje correcta es la indicada por ABB, pero el cliente puede de todos modos modificarla en función de las dimensiones y de la accesibilidad del cuadro.

Novomax G3 1600A HR W => E2.2 1600A W

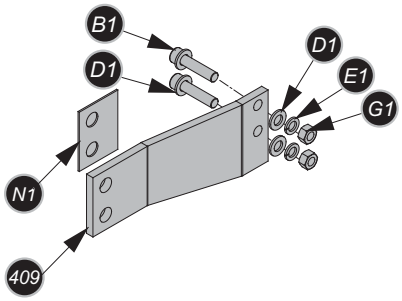
- Installare le sbarre sui terminali della parte fissa dell'interruttore.
  Non serrare le viti.
- Install the busbars on the breaker fixed part terminals.
  Do not tighten the screws.
- Die Schienen auf die Anschlüsse des festen Teils installieren.
  Die Schrauben nicht anziehen.
- Installer les barres sur les prises de la partie fixe.
  Ne pas serrer les vis.
- Instalar las barras sobre los terminales de la parte fija.
  No ajustar los tornillos.

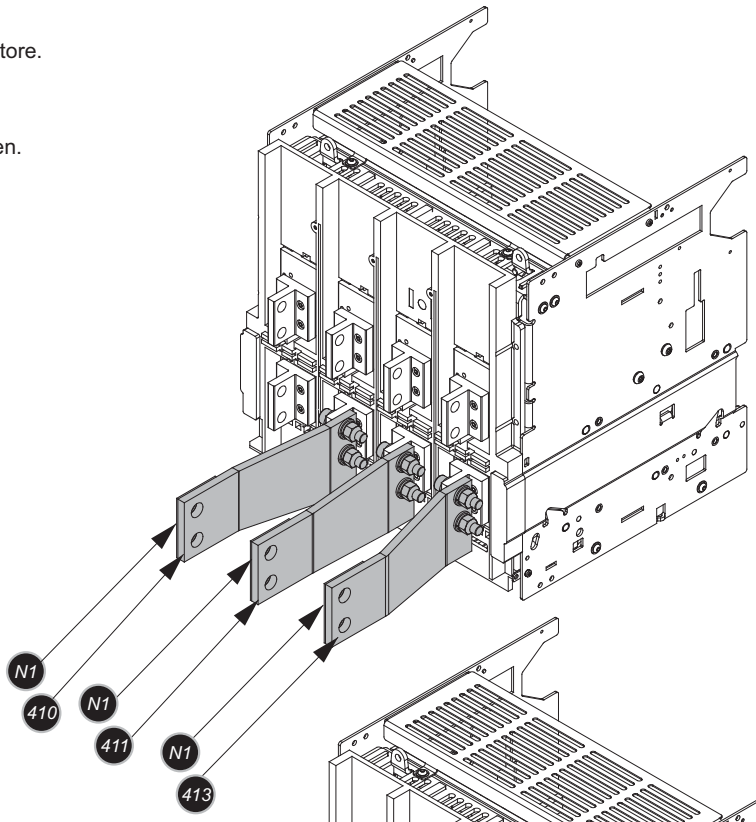




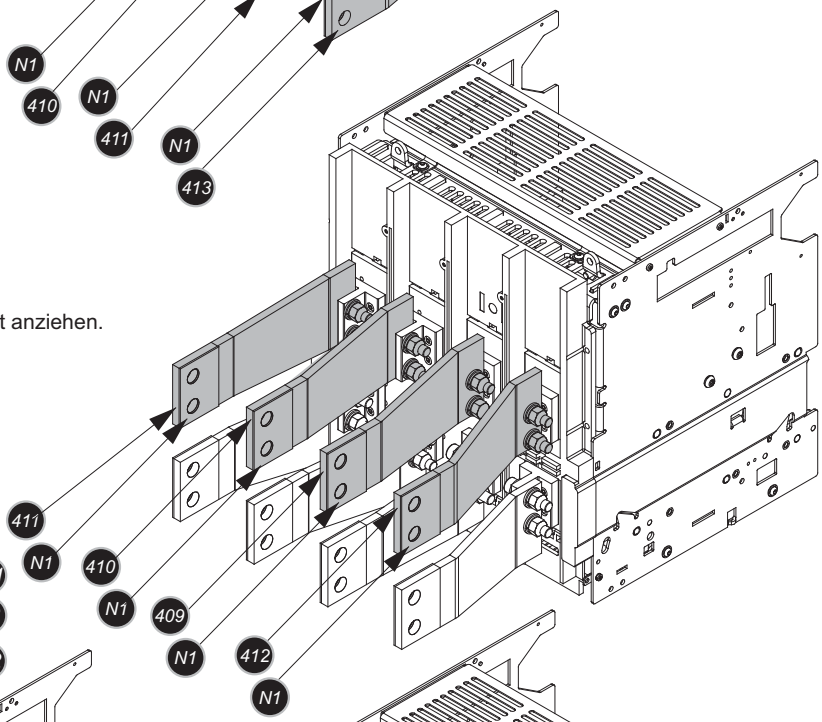
Novomax G3 1600A VR W => E2.2 1600A W

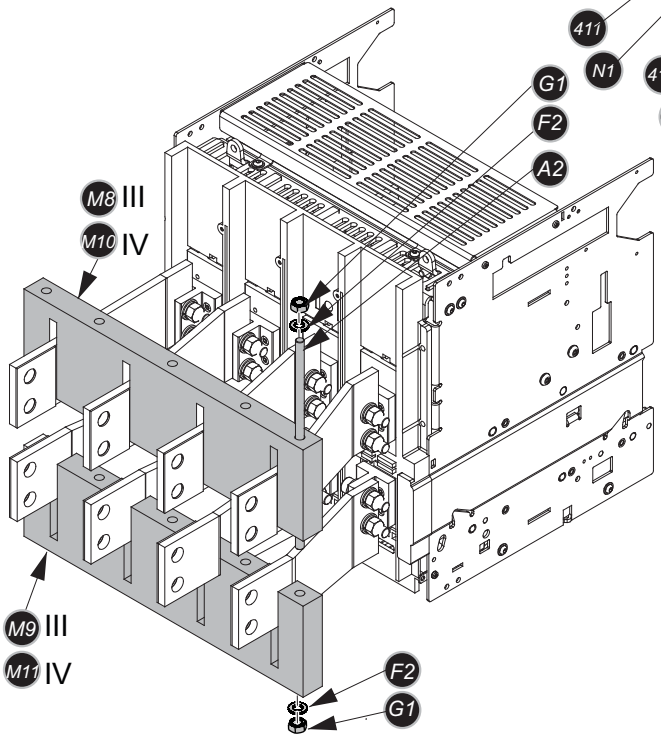
- Installare le sbarre sui terminali della parte fissa dell'interruttore. Non serrare le viti.
- Install the busbars on the breaker fixed part terminals. Do not tighten the screws.
- Die Schienen auf die Anschlüsse des festen Teils installieren. Die Schrauben nicht anziehen.
- Installer les barres sur les prises de la partie fixe. Ne pas serrer les vis.
- Instalar las barras sobre los terminales de la parte fija. No ajustar los tornillos.

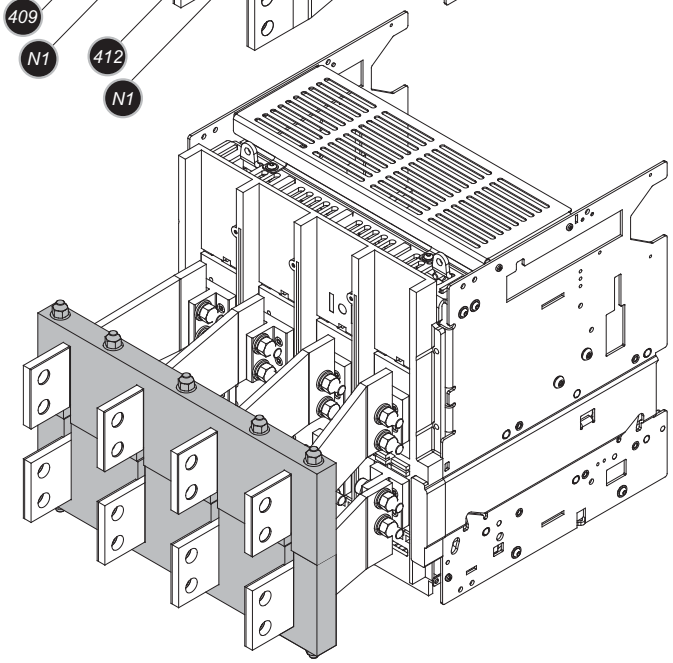




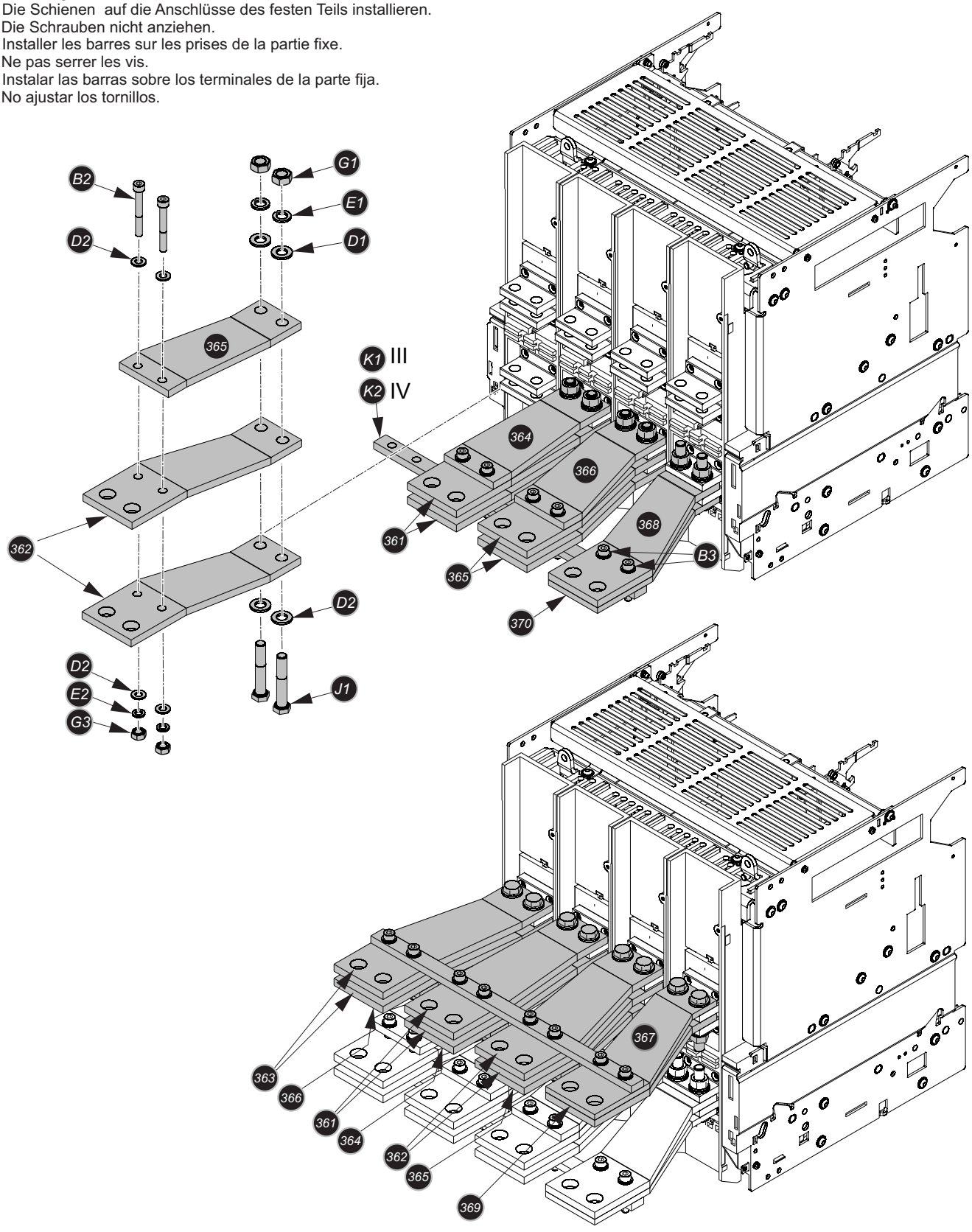
- Installare il distanziatore tra le barre. Non fissare le viti.
- Install the spacer among the bars. Do not tighten the screws.
- Der Spacer zwischen die Bars installieren. Die Schrauben nicht anziehen.
- Monter l'entretoise entre les barres. Ne pas serrer les vis.
- Instalar el espaciador entre las barras. No ajustar los tornillos.

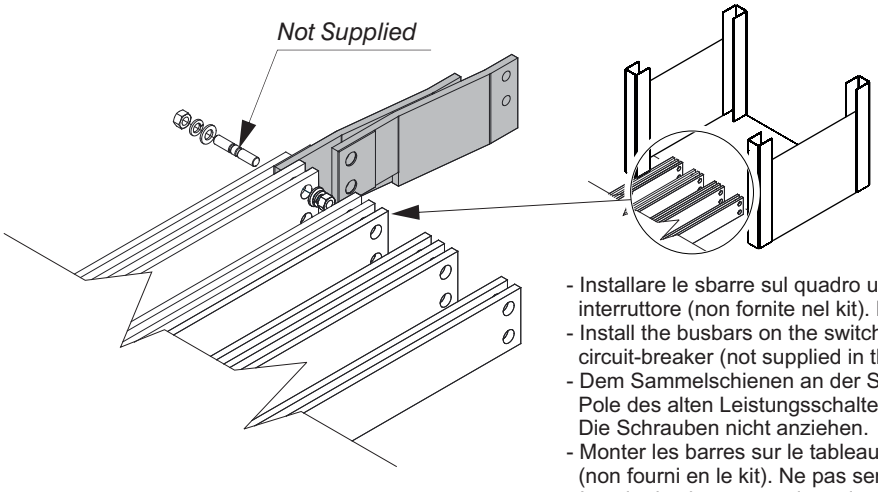




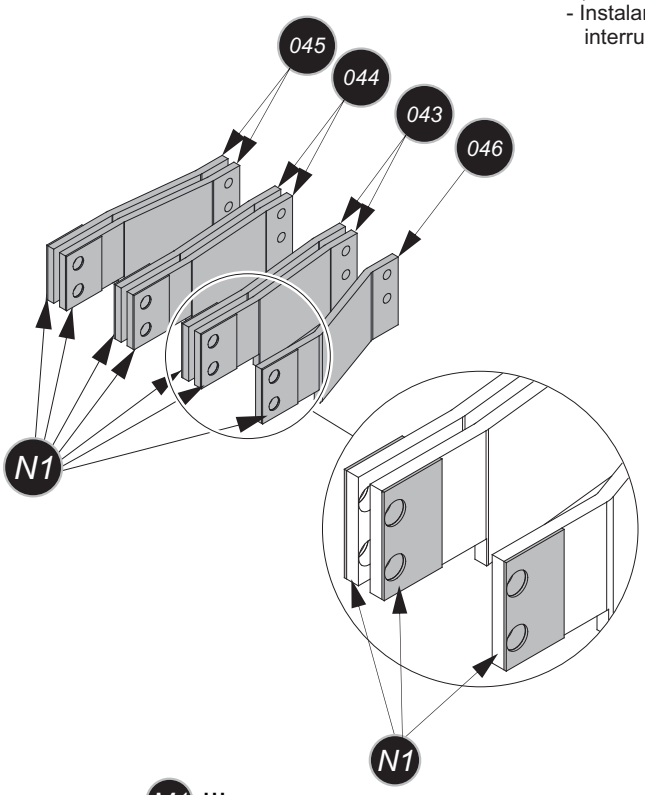


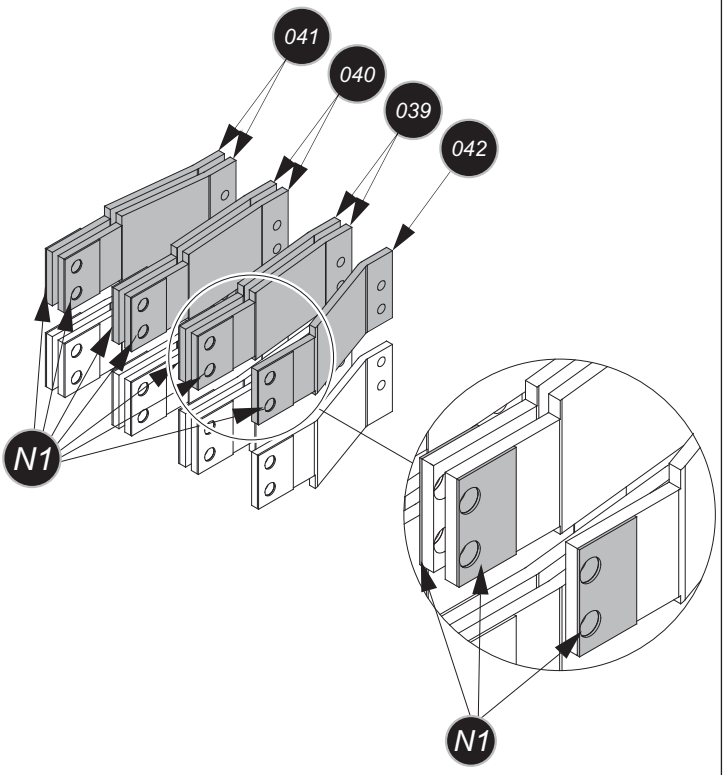
- Installare le sbarre sui terminali della parte fissa dell'interruttore.
  Non serrare le viti.
- Install the busbars on the breaker fixed part terminals.
  Do not tighten the screws.
- Die Schienen auf die Anschlüsse des festen Teils installieren.
  Die Schrauben nicht anziehen.
- Installer les barres sur les prises de la partie fixe.
  Ne pas serrer les vis.
- Instalar las barras sobre los terminales de la parte fija.
  No ajustar los tornillos.

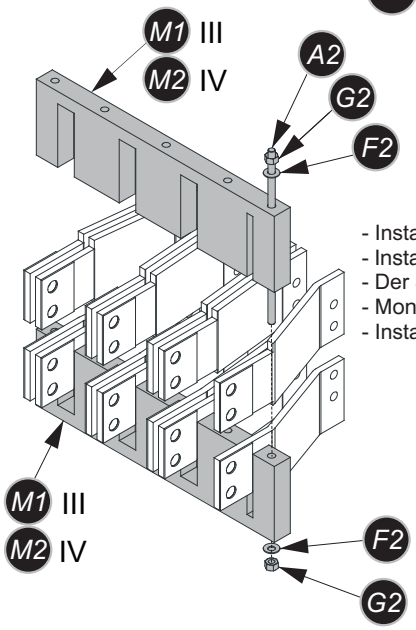




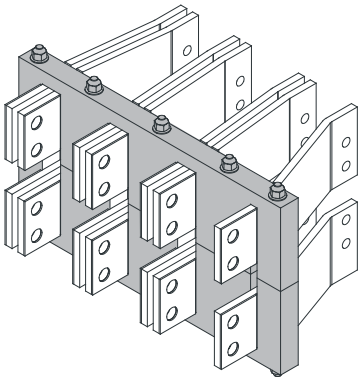
- Installare le sbarre sul quadro usando le viti di connessione dei poli del vecchio interruttore (non fornite nel kit). Non fissare le viti.
- Install the busbars on the switchboard using the poles connecting screws of the old circuit-breaker (not supplied in the kit). Do not tighten the screws.
- Dem Sammelschienen an der Schaltanlage installieren. Verbindungsschrauben die Pole des alten Leistungsschalters benutzen (nicht geliefert mit Satz). Die Schrauben nicht anziehen.
- Monter les barres sur le tableau en utilisant les vis de raccordement de vieux disjoncteur (non fourni en le kit). Ne pas serrer les vis.
- Instalar las barras en el cuadro usando los tornillos de conexión de los polos de viejo interruptor (no equipado en el kit). No ajustar los tornillos.

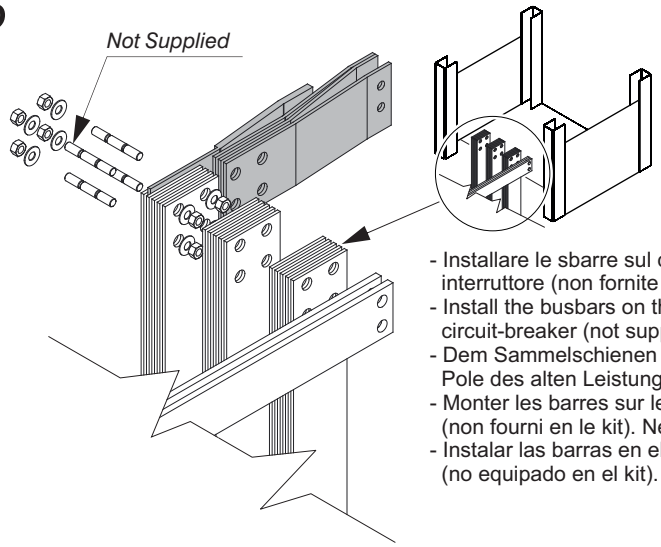




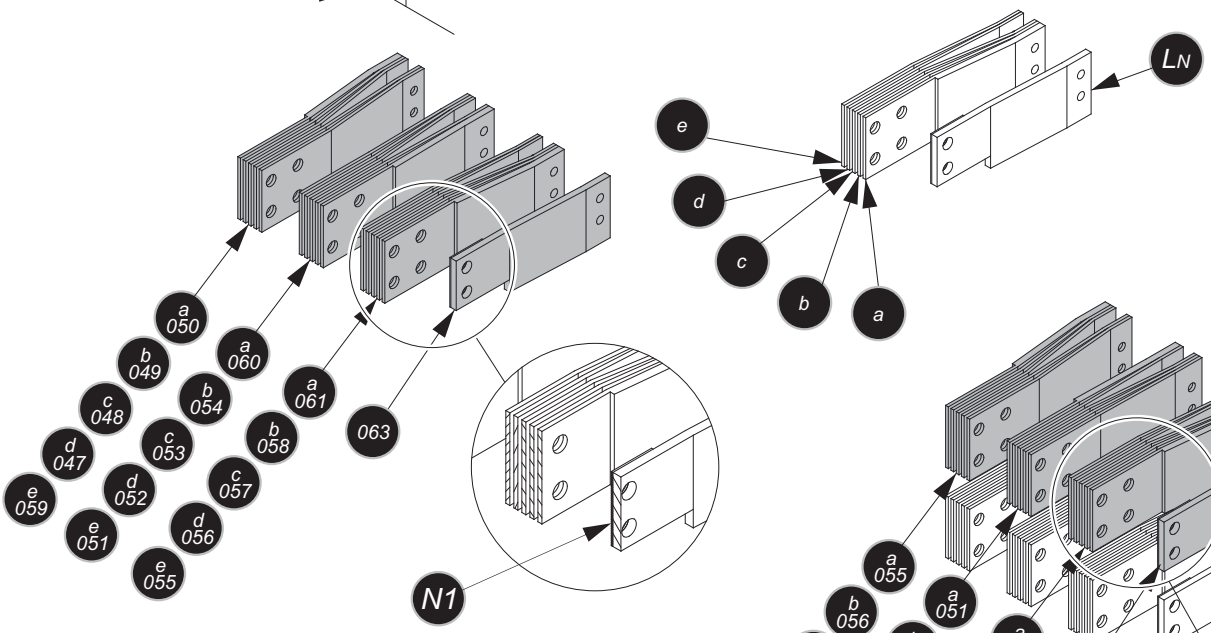


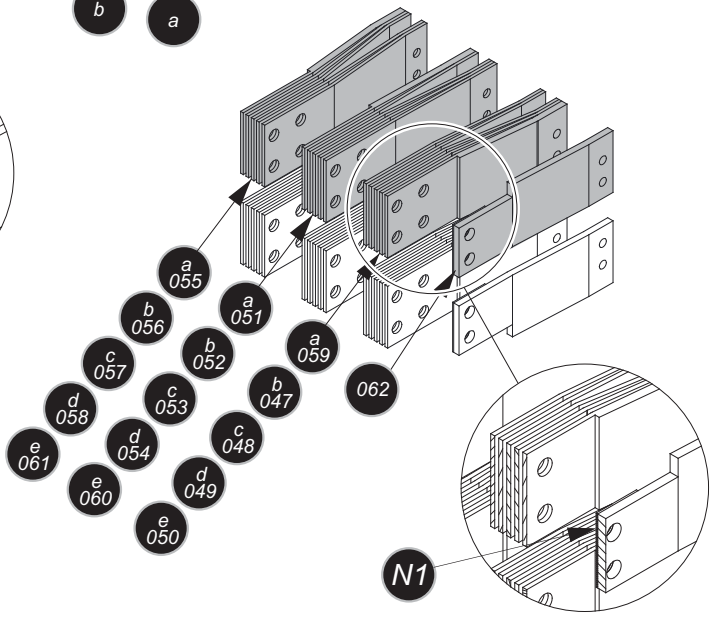
- Installare il distanziatore tra le barre. Non fissare le viti.
- Install the spacer among the bars. Do not tighten the screws.
- Der Spacer zwischen die Bars installieren. Die Schrauben nicht anziehen.
- Monter l'entretoise entre les barres. Ne pas serrer les vis.
- Instalar el espaciador entre las barras. No ajustar los tornillos.

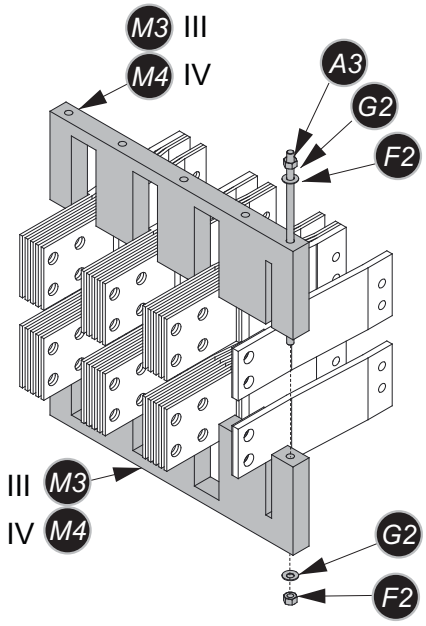




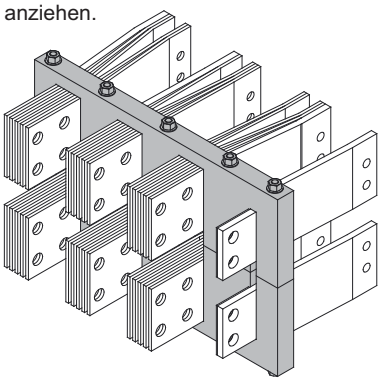
- Installare le sbarre sul quadro usando le viti di connessione dei poli del vecchio interruttore (non fornite nel kit). Non fissare le viti.
- Install the busbars on the switchboard using the poles connecting screws of the old circuit-breaker (not supplied in the kit). Do not tighten the screws.
- Dem Sammelschienen an der Schaltanlage installieren. Verbindungsschrauben die Pole des alten Leistungsschalters benutzen (nicht geliefert mit Satz). Die Schrauben nicht anziehen.
- Monter les barres sur le tableau en utilisant les vis de raccordement de vieux disjoncteur (non fourni en le kit). Ne pas serrer les vis.
- Instalar las barras en el cuadro usando los tornillos de conexión de los polos de viejo interruptor (no equipado en el kit). No ajustar los tornillos.



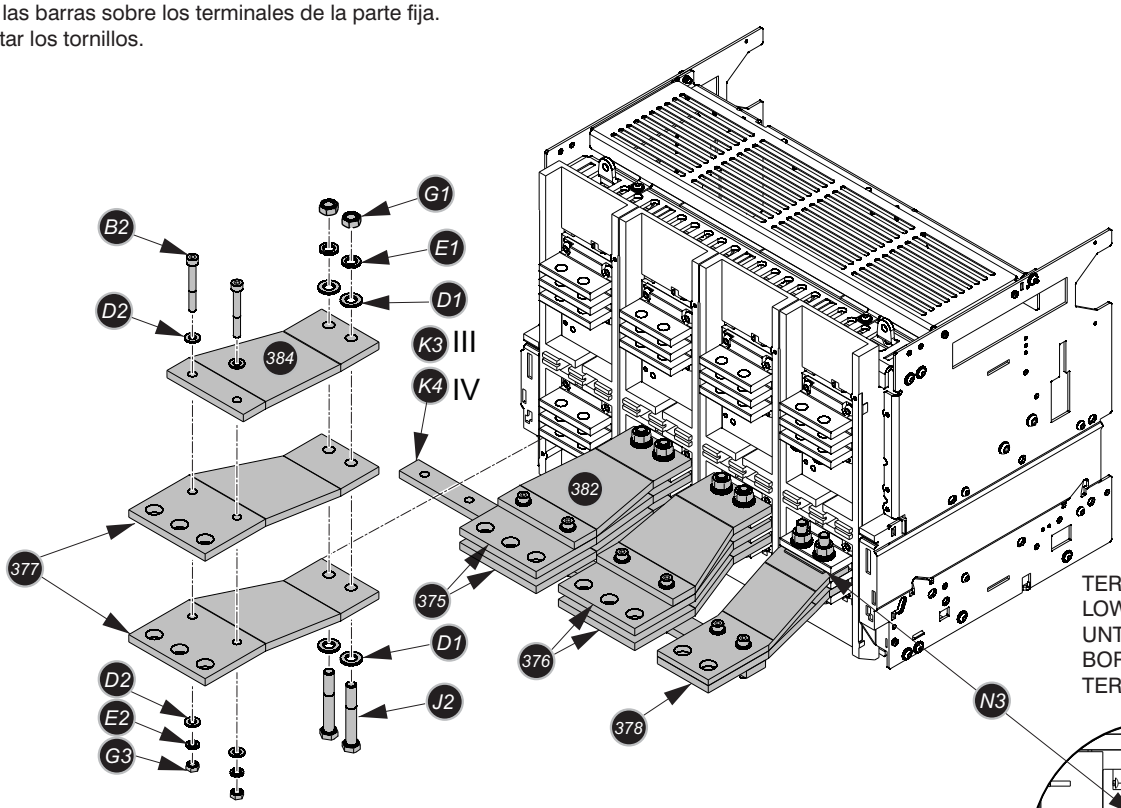




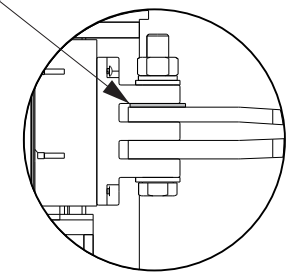
- Installare il distanziatore tra le barre. Non fissare le viti.
- Install the spacer among the bars. Do not tighten the screws.
- Der Spacer zwischen die Bars installieren. Die Schrauben nicht anziehen.
- Monter l'entretoise entre les barres. Ne pas serrer les vis.
- Instalar el espaciador entre las barras. No ajustar los tornillos.

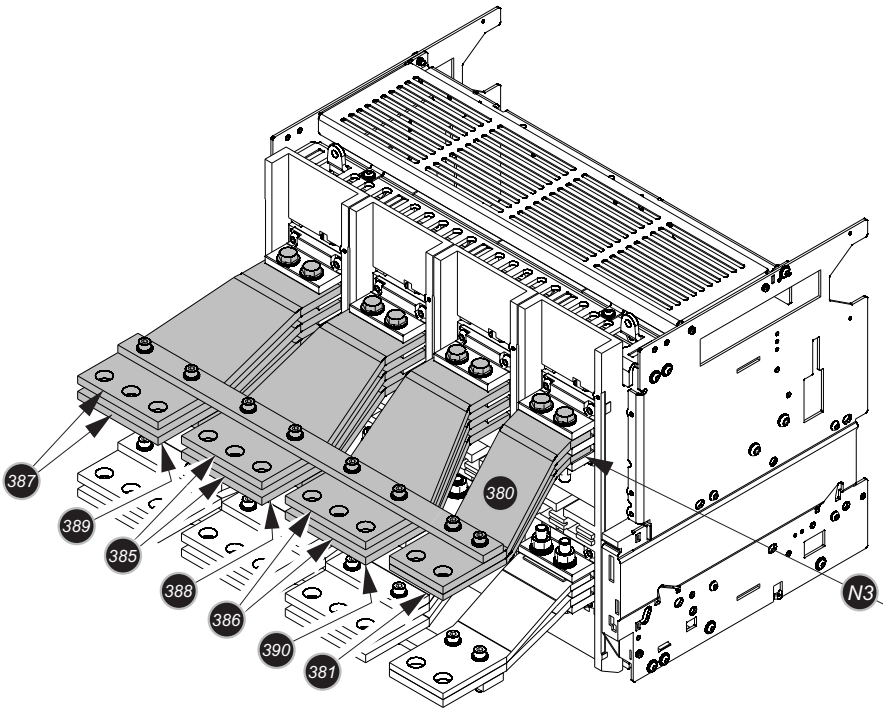


- Installare le sbarre sui terminali della parte fissa dell'interruttore.
  Non serrare le viti.
- Install the busbars on the breaker fixed part terminals.
  Do not tighten the screws.
- Die Schienen auf die Anschlüsse des festen Teils installieren.
  Die Schrauben nicht anziehen.
- Installer les barres sur les prises de la partie fixe.
  Ne pas serrer les vis.
- Instalar las barras sobre los terminales de la parte fija.
  No ajustar los tornillos.

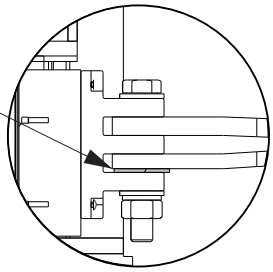


TERMINALE INFERIORE
LOWER TERMINAL
UNTERE ANSCHLUSS
BORNE INFÉRIEUR
TERMINALES INFERIOR



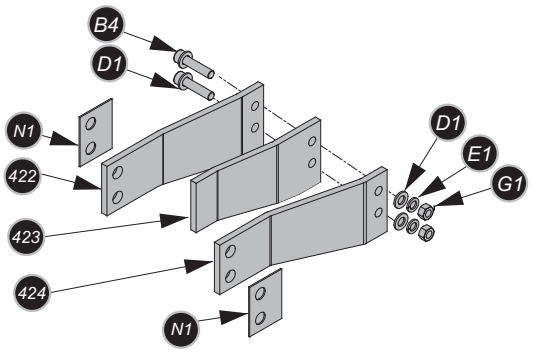


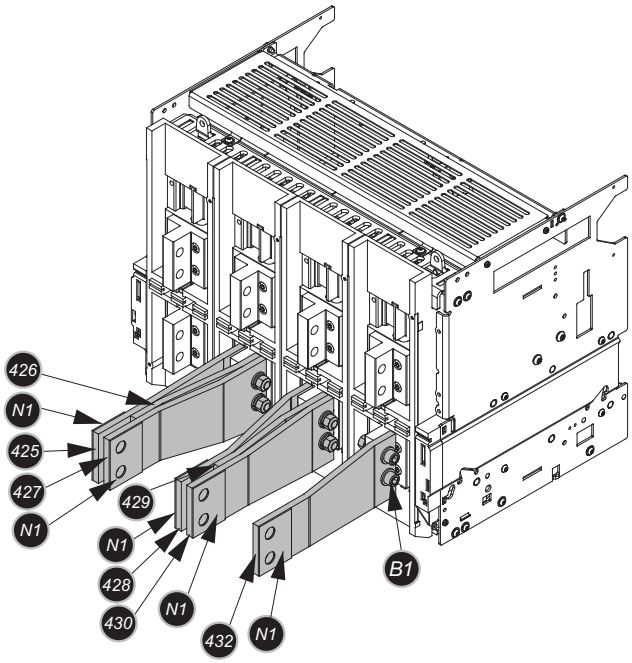
TERMINALE SUPERIORE
UPPER TERMINAL
OBERE ANSCHLUSS
BORNE SUPÉRIEURE
TERMINALES SUPERIOR



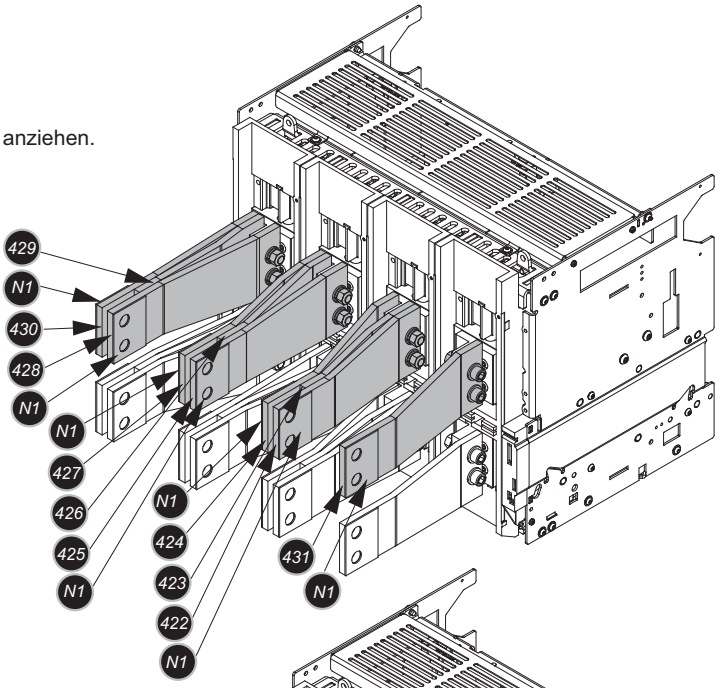
Novomax G4 3200A VR W => E4.2 3200A W

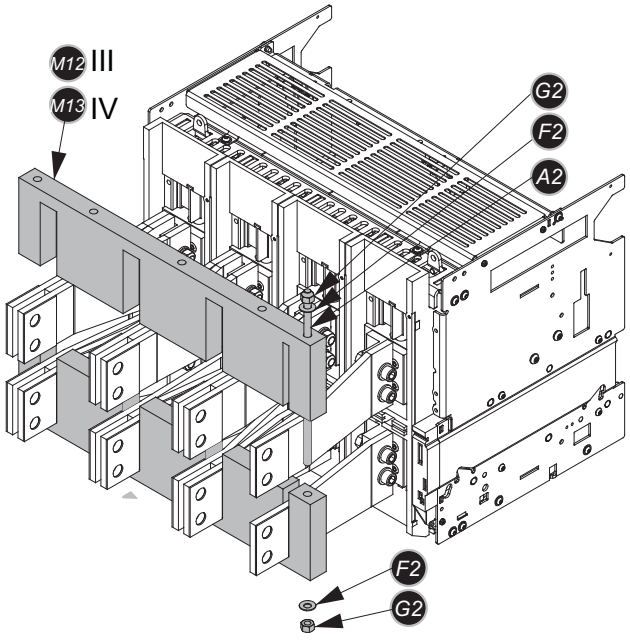
- Installare le sbarre sui terminali della parte fissa dell'interruttore.
  Non serrare le viti.
- Install the busbars on the breaker fixed part terminals.
  Do not tighten the screws.
- Die Schienen auf die Anschlüsse des festen Teils installieren.
  Die Schrauben nicht anziehen.
- Installer les barres sur les prises de la partie fixe.
  Ne pas serrer les vis.
- Instalar las barras sobre los terminales de la parte fija.
  No ajustar los tornillos.

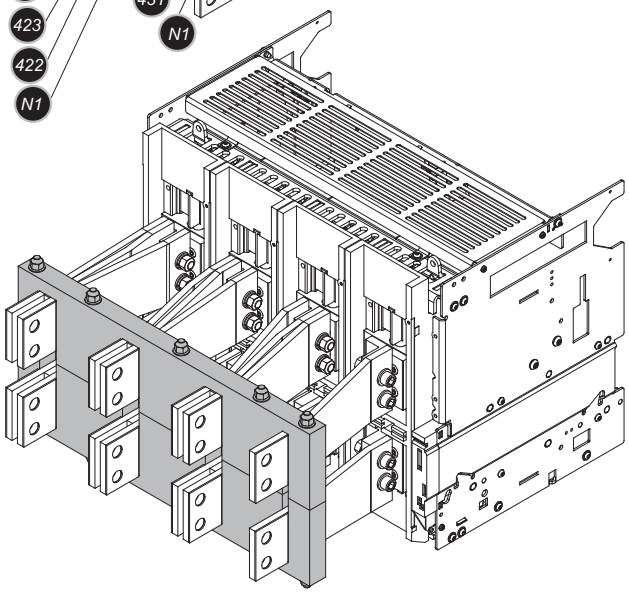


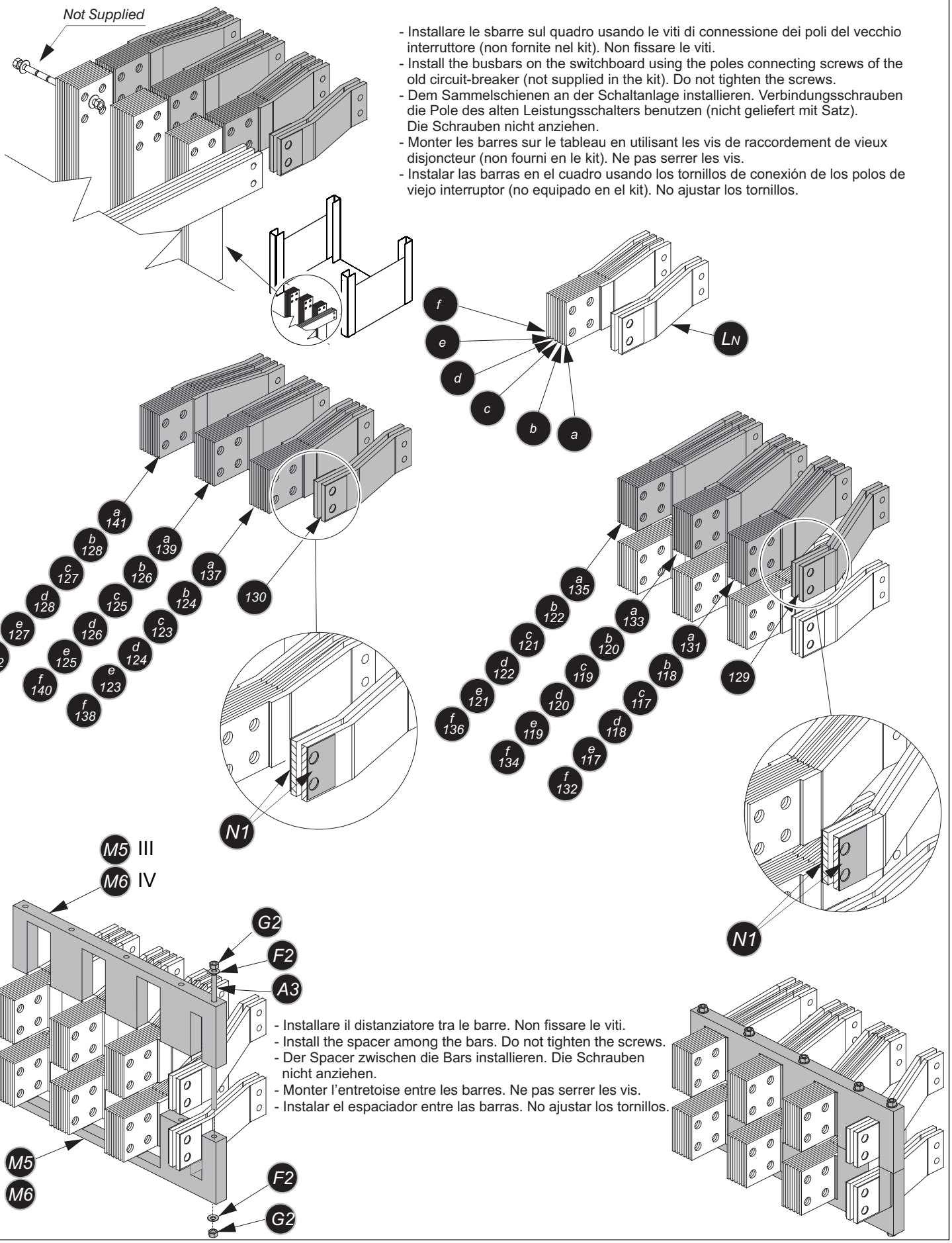


- Installare il distanziatore tra le barre. Non fissare le viti.
- Install the spacer among the bars. Do not tighten the screws.
- Der Spacer zwischen die Bars installieren. Die Schrauben nicht anziehen.
- Monter l'entretoise entre les barres. Ne pas serrer les vis.
- Instalar el espaciador entre las barras. No ajustar los tornillos.









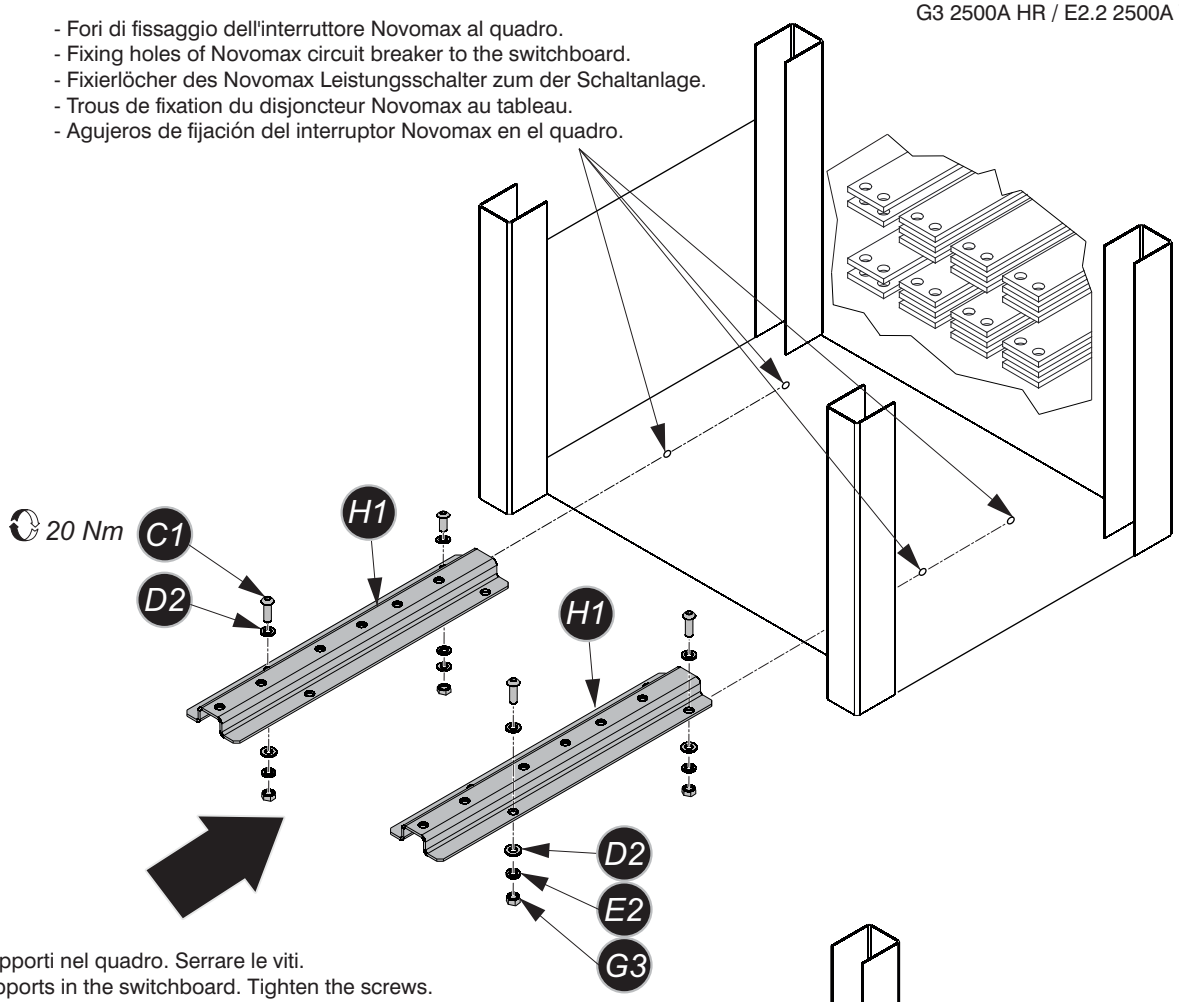
- Installare le sbarre sul quadro usando le viti di connessione dei poli del vecchio interruttore (non fornite nel kit). Non fissare le viti.
- Install the busbars on the switchboard using the poles connecting screws of the old circuit-breaker (not supplied in the kit). Do not tighten the screws.
- Dem Sammelschienen an der Schaltanlage installieren. Verbindungsschrauben die Pole des alten Leistungsschalters benutzen (nicht geliefert mit Satz). Die Schrauben nicht anziehen.
- Monter les barres sur le tableau en utilisant les vis de raccordement de vieux disjoncteur (non fourni en le kit). Ne pas serrer les vis.
- Instalar las barras en el cuadro usando los tornillos de conexión de los polos de viejo interruptor (no equipado en el kit). No ajustar los tornillos.

- Installare il distanziatore tra le barre. Non fissare le viti.
- Install the spacer among the bars. Do not tighten the screws.
- Der Spacer zwischen die Bars installieren. Die Schrauben nicht anziehen.
- Monter l'entretoise entre les barres. Ne pas serrer les vis.
- Instalar el espaciador entre las barras. No ajustar los tornillos.

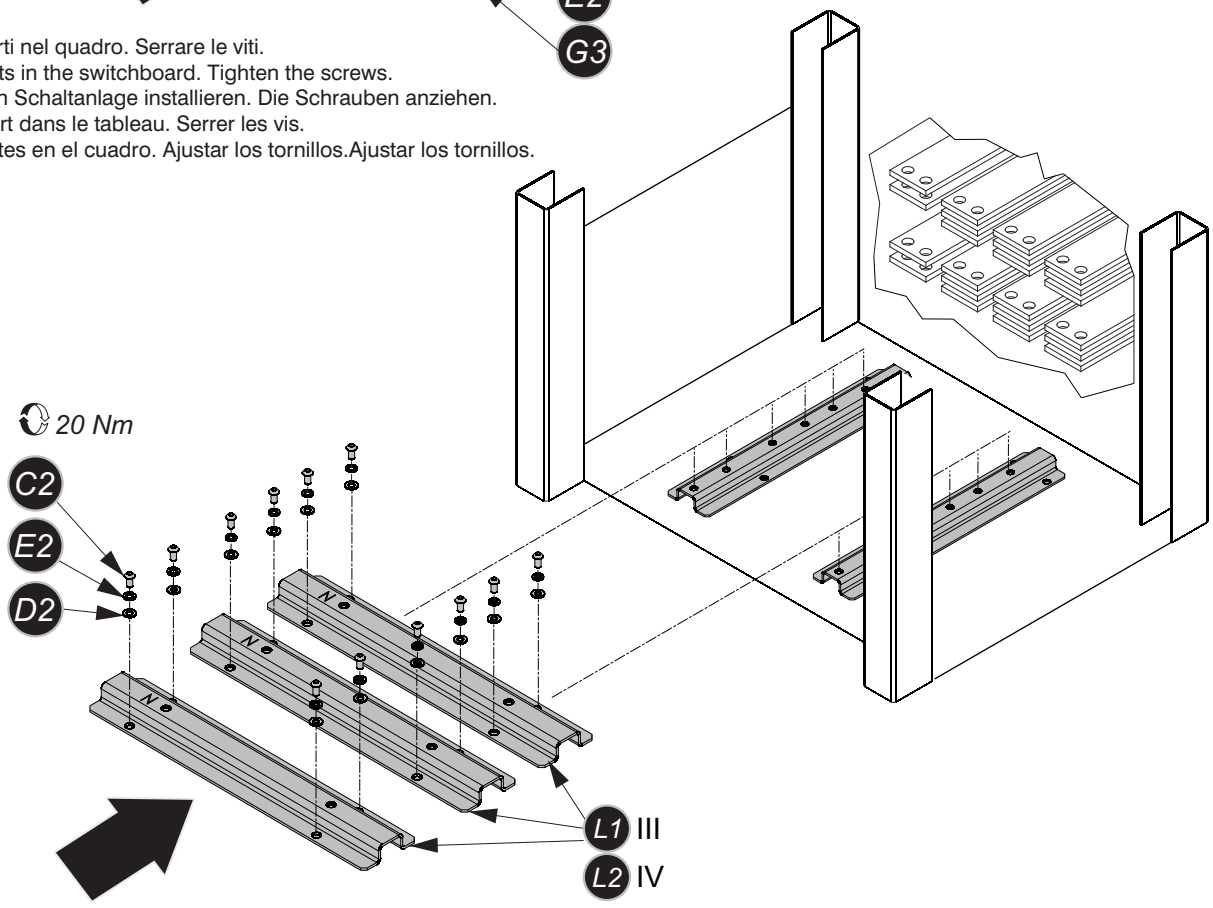
Example

G3 2500A HR / E2.2 2500A W

- Fori di fissaggio dell'interruttore Novomax al quadro.
- Fixing holes of Novomax circuit breaker to the switchboard.
- Fixierlöcher des Novomax Leistungsschalter zum der Schaltanlage.
- Trous de fixation du disjoncteur Novomax au tableau.
- Agujeros de fijación del interruptor Novomax en el quadro.



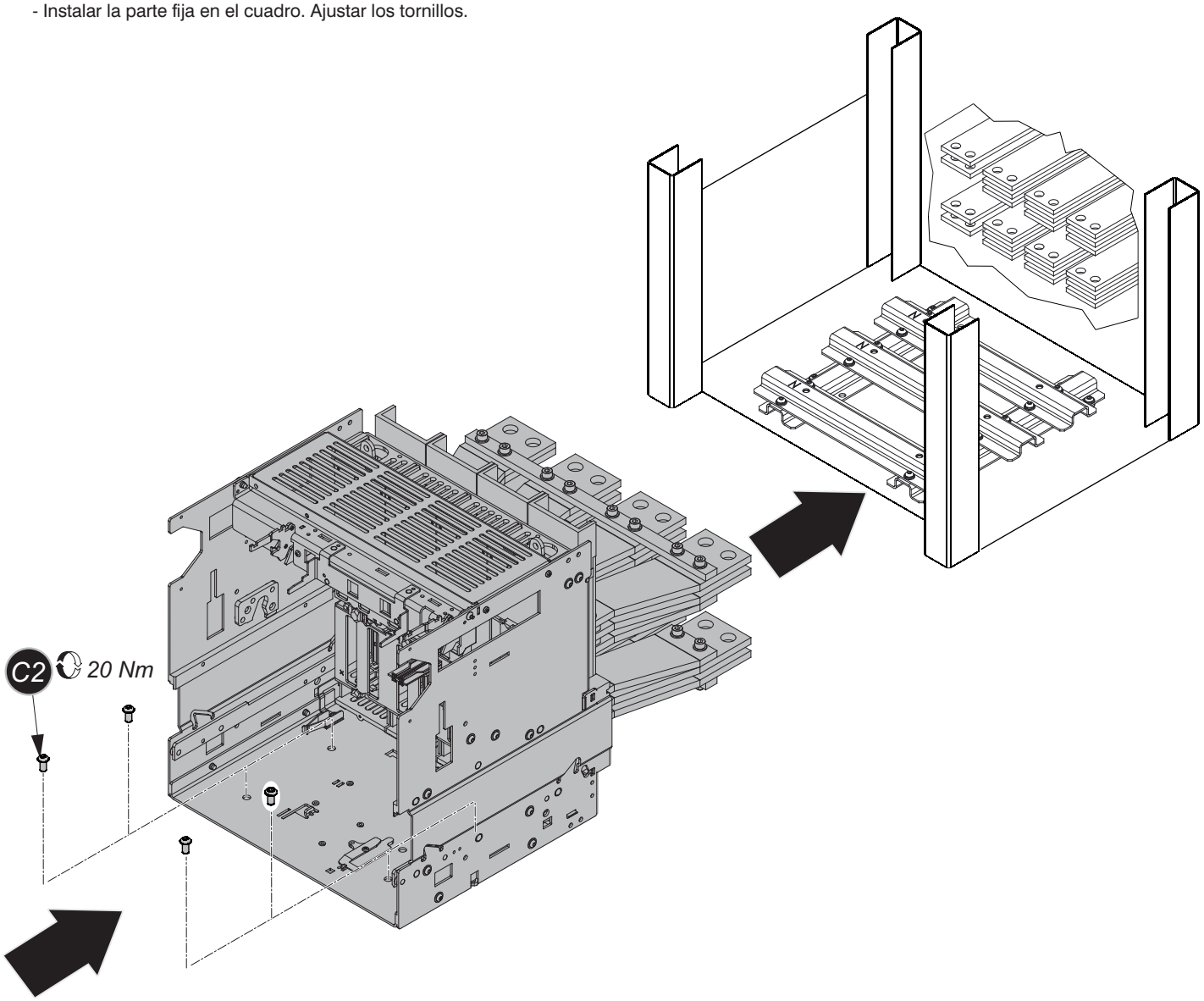
- Installare i supporti nel quadro. Serrare le viti.
- Install the supports in the switchboard. Tighten the screws.
- Die Stützen in den Schaltanlage installieren. Die Schrauben anziehen.
- Monter les support dans le tableau. Serrer les vis.
- Instalar los soportes en el cuadro. Ajustar los tornillos.Ajustar los tornillos.



- Installare la parte fissa nel quadro. Serrare le viti.
- Install the fixed part in the switchboard. Tighten the screws.
- Die festen Teile in Gestell Schaltschrank einbauen. Die Schrauben anziehen.
- Monter la partie fixe dans le tableau. Serrer les vis.
- Instalar la parte fija en el cuadro. Ajustar los tornillos.

Example

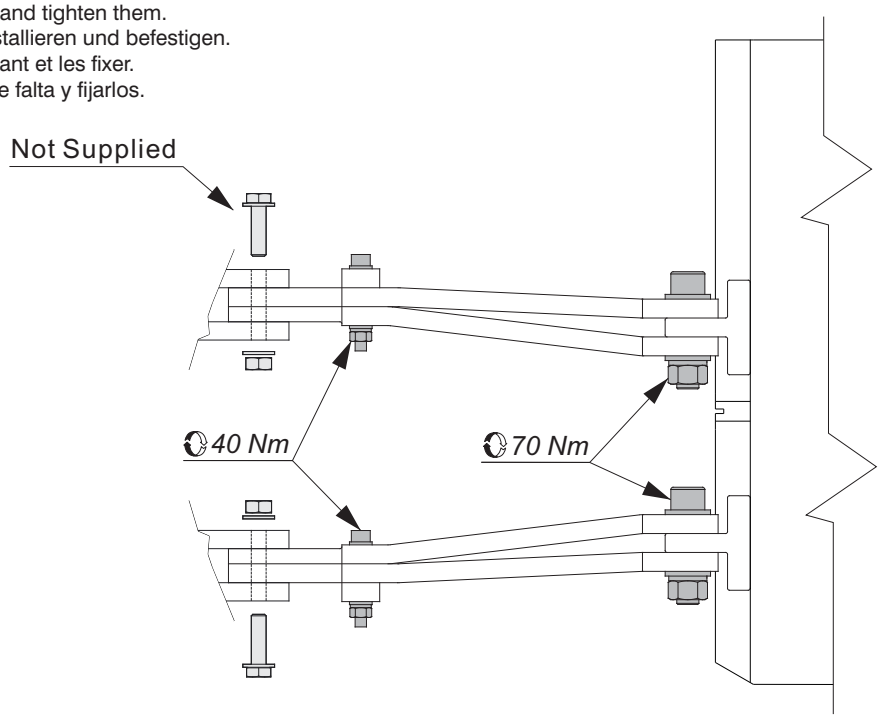
G3 2500A HR / E2.2 2500A W



11

Novomax G3 1600A HR W => E2.2 1600A W

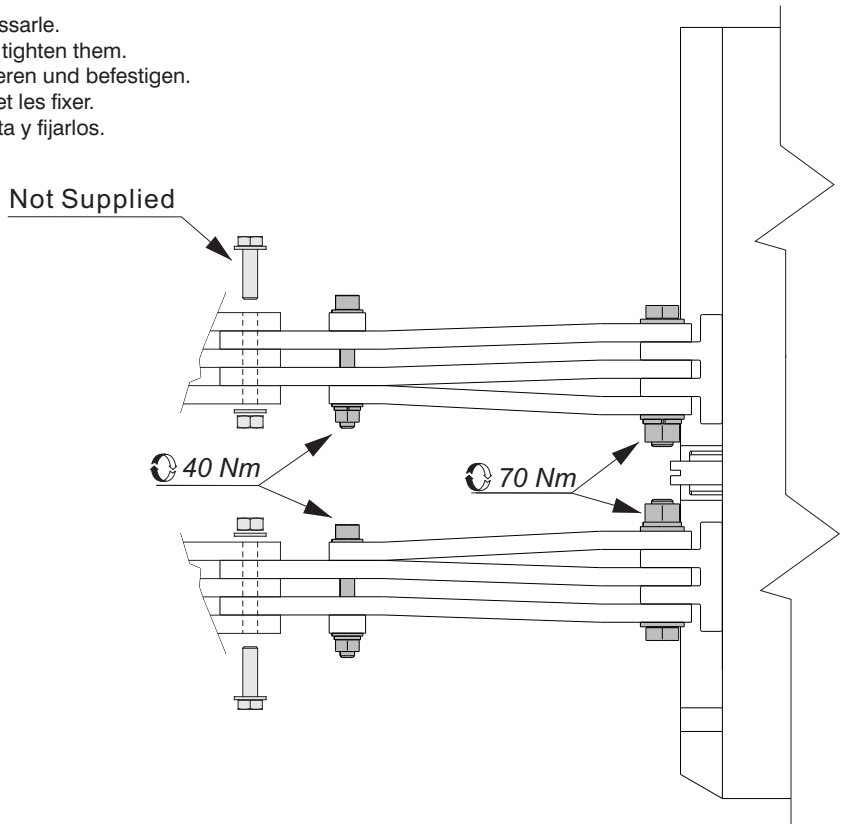
- Installare tutte le viti mancanti e fissarle.
- Install all the missing screws and tighten them.
- Alle Schrauben fehlenden installieren und befestigen.
- Installer toutes les vis manquant et les fixer.
- Instalar todos los tornillos que falta y fijarlos.



12

Novomax G3 2500A HR W => E2.2 2500A W

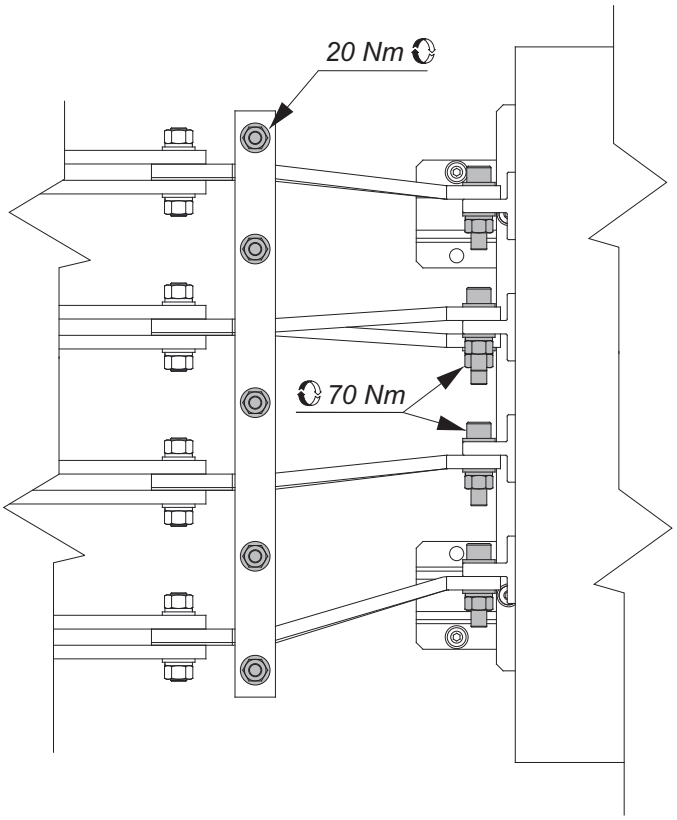
- Installare tutte le viti mancanti e fissarle.
- Install all the missing screws and tighten them.
- Alle Schrauben fehlenden installieren und befestigen.
- Installer toutes les vis manquant et les fixer.
- Instalar todos los tornillos que falta y fijarlos.



13

Novomax G3 1600A VR W => E2.2 1600A W

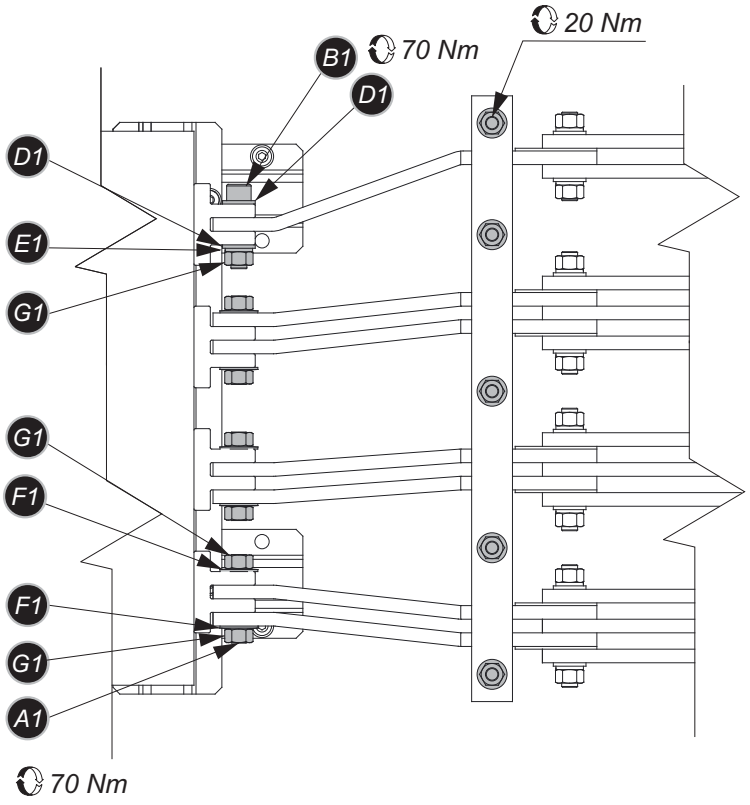
- Installare tutte le viti mancanti e fissarle.
- Install all the missing screws and tighten them.
- Alle Schrauben fehlenden installieren und befestigen.
- Installer toutes les vis manquant et les fixer.
- Instalar todos los tornillos que falta y fijarlos.



14

Novomax G3 2000/2500A VR W => E2.2 2500A W

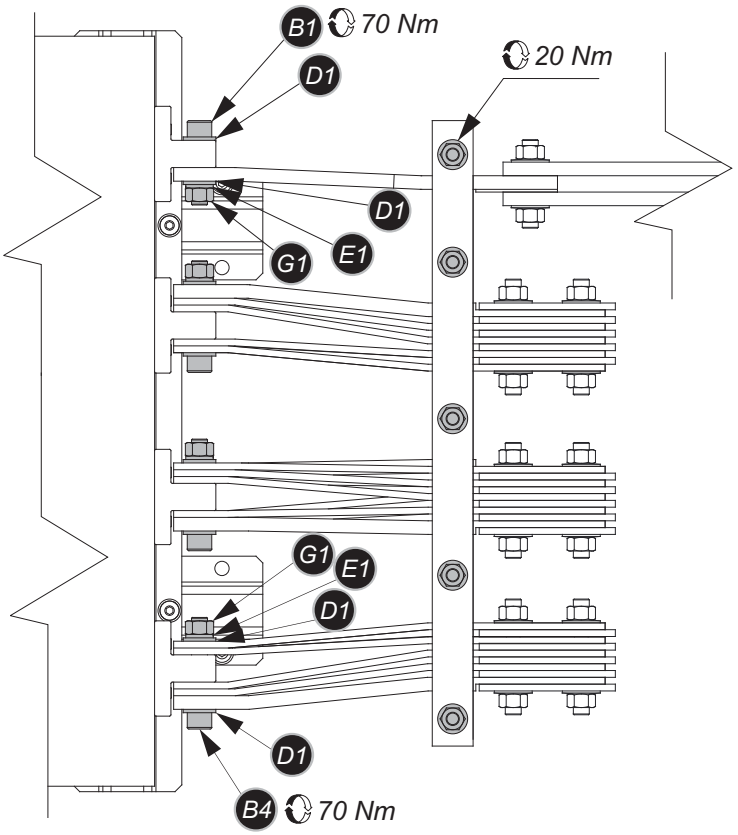
- Installare tutte le viti mancanti e fissarle.
- Install all the missing screws and tighten them.
- Alle Schrauben fehlenden installieren und befestigen.
- Installer toutes les vis manquant et les fixer.
- Instalar todos los tornillos que falta y fijarlos.



15

Novomax G3 3000A VR W => E4.2 3000A W

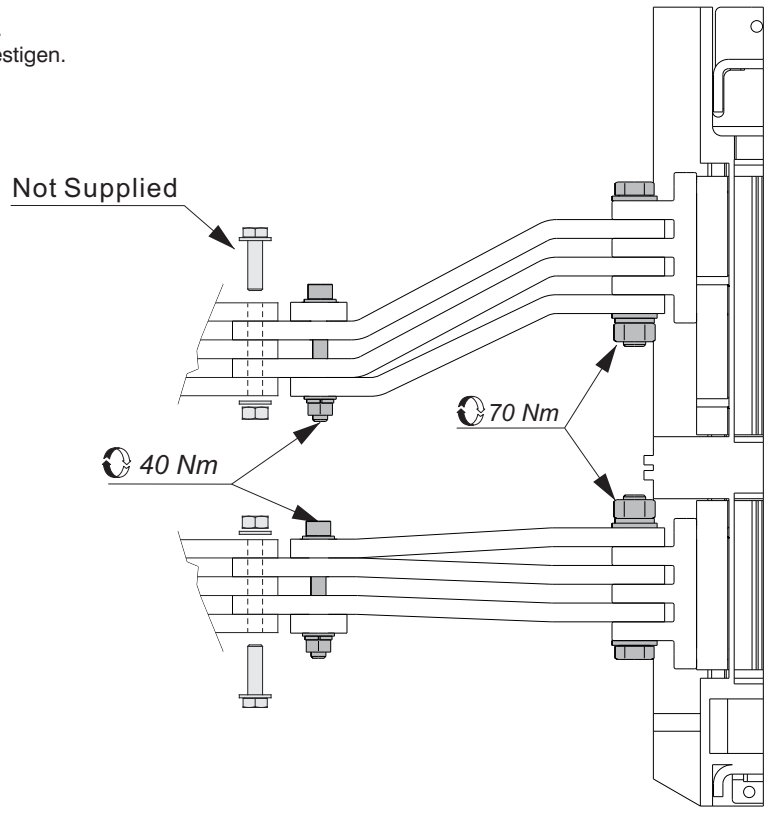
- Installare tutte le viti mancanti e fissarle.
- Install all the missing screws and tighten them.
- Alle Schrauben fehlenden installieren und befestigen.
- Installer toutes les vis manquant et les fixer.
- Instalar todos los tornillos que falta y fijarlos.



16

Novomax G4 3200A HR W => E4.2 4000A W

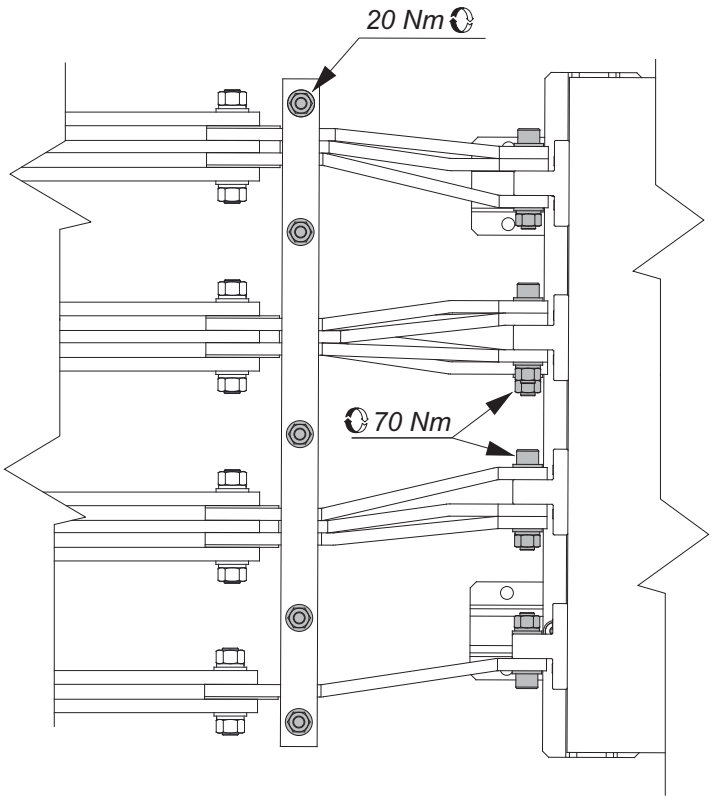
- Installare tutte le viti mancanti e fissarle.
- Install all the missing screws and tighten them.
- Alle Schrauben fehlenden installieren und befestigen.
- Installer toutes les vis manquant et les fixer.
- Instalar todos los tornillos que falta y fijarlos.



17

Novomax G4 3200A VR W => E4.2 3200A W

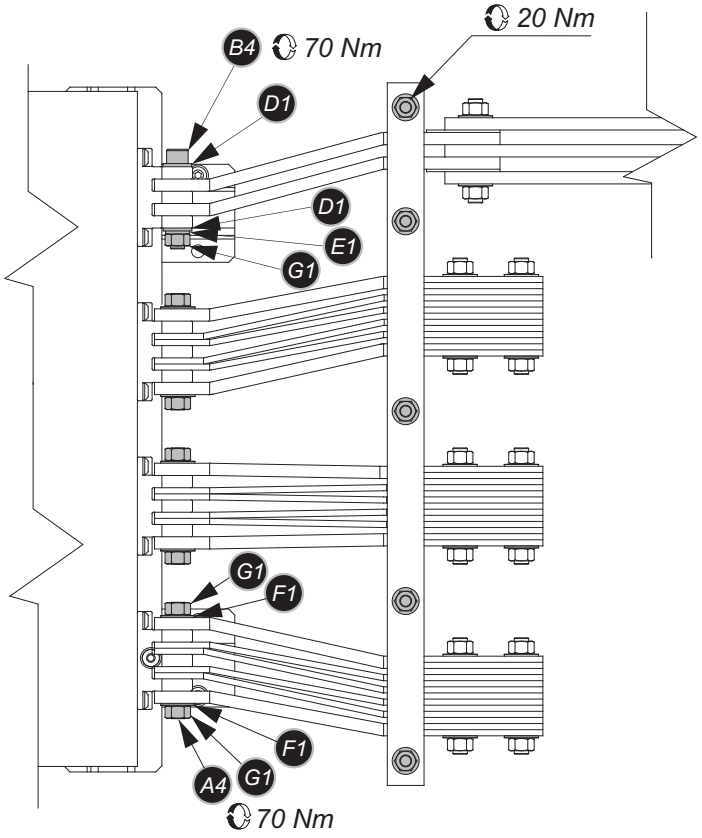
- Installare tutte le viti mancanti e fissarle.
- Install all the missing screws and tighten them.
- Alle Schrauben fehlenden installieren und befestigen.
- Installer toutes les vis manquant et les fixer.
- Instalar todos los tornillos que falta y fijarlos.



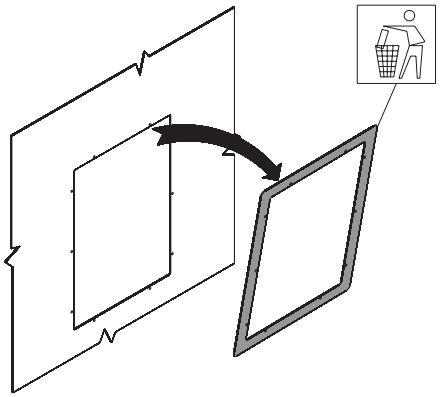
18

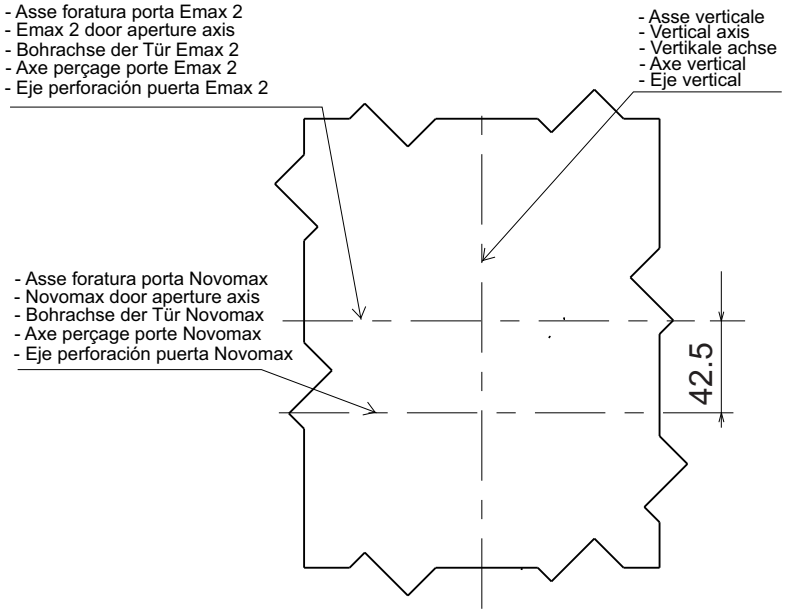
Novomax G4 3600A VR W => E4.2 4000A W

- Installare tutte le viti mancanti e fissarle.
- Install all the missing screws and tighten them.
- Alle Schrauben fehlenden installieren und befestigen.
- Installer toutes les vis manquant et les fixer.
- Instalar todos los tornillos que falta y fijarlos.

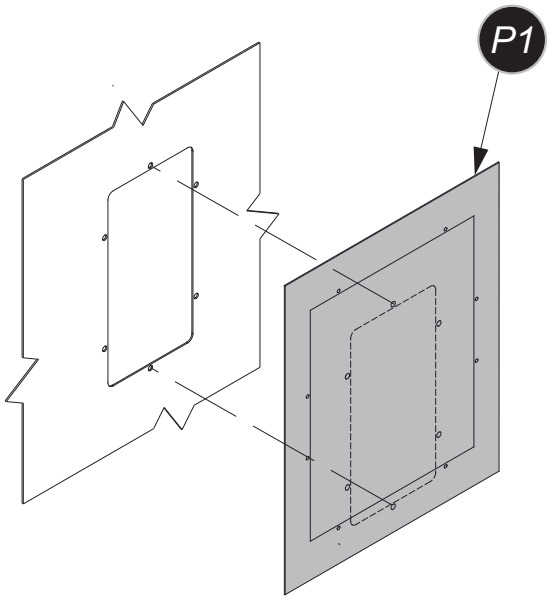


- Smontare la mostrina del vecchio interruttore.
- Disassemble the flange of the old circuit-breaker.
- Den Abdeckahmen des alten Leistungsschalters entfernen.
- Démonter la garniture de l'ancien disjoncteur.
- Desmontar la cubierta de protección del viejo interruptor.

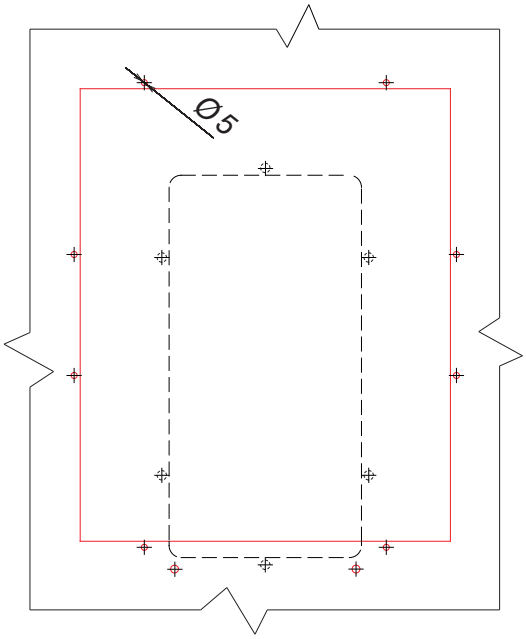




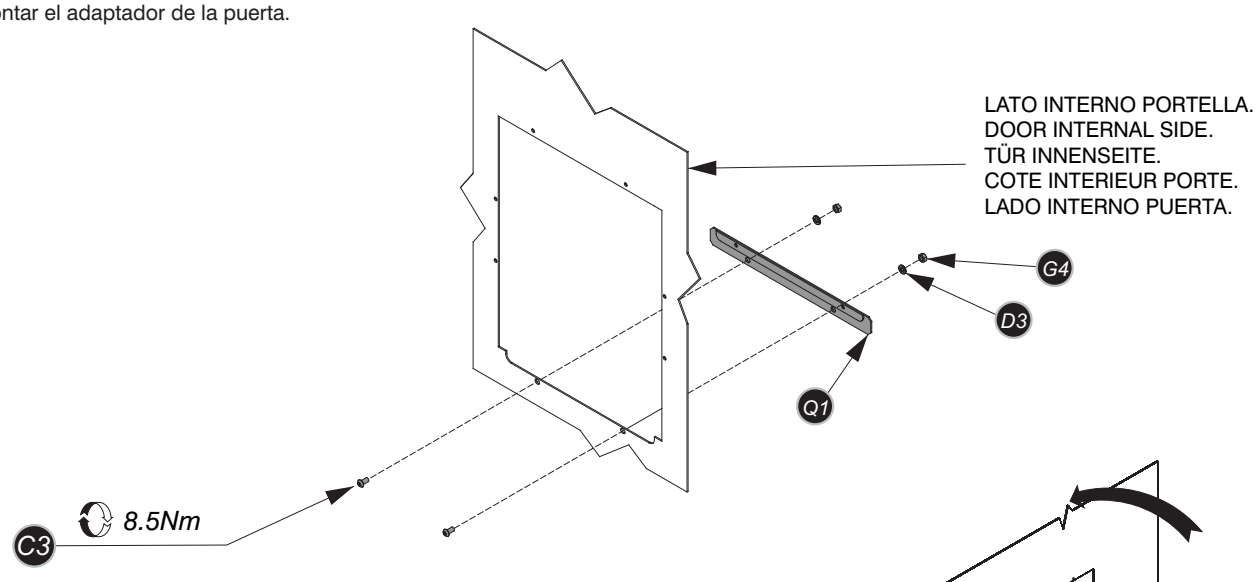
- Collocare la dima adesiva alla portella e controllare che la linea tratteggiata sia perfettamente combaciante con il foro già presente sulla portella.
- Position the adhesive template on the door and make sure that the dotted line perfectly matches the aperture on the door itself.
- Die selbstklebende Schablone auf der Tür anbringen und sicherstellen, dass die gestrichelte Linie perfekt über dem Loch liegt, das schon auf der Tür vorhanden ist.
- Placer le gabarit adhésif à la porte et vérifier que la ligne hachurée coïncide parfaitement avec l'ouverture présente sur la porte.
- Colocar la plantilla adhesiva en la puerta y controlar que la línea punteada coincida perfectamente con el orificio ya presente en la puerta.



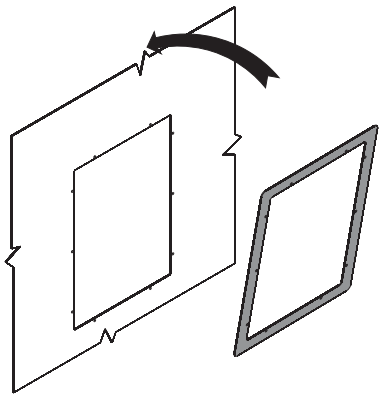
- Tagliare la portella seguendo la linea continua rossa e forare secondo i fori rossi.
- Cut the door along the unbroken red line and drill in the positions marked by the red holes.
- Die Tür nach der durchgehenden roten Linie schneiden und die roten Löcher bohren.
- Découper la porte en suivant la ligne continue rouge et percer suivant les trous rouges.
- Cortar la puerta siguiendo la línea continua roja y perforar teniendo en cuenta los orificios rojos.



- Montare adattatore portella.
- Assemble the door adapter.
- Den Türadapter montieren.
- Monter l'adaptateur de la porte.
- Montar el adaptador de la puerta.



- Montare la mostrina del nuovo interruttore.
- Assemble the flange of the new circuit-breaker.
- Den Abdeckahmen des neu Leistungsschalters montieren.
- Monter la garniture de le nouveau disjoncteur.
- Montar la cubierta de protección del nuevo interruptor.



21

- Cablare i circuiti ausiliari secondo schema elettrico n° “1SDM000110R0001/1SDM000110R0002”.
- Wire the auxiliary circuits as shown in wiring diagram N° “1SDM000110R0001/1SDM000110R0002”.
- Die Hilfsstromkreise gemäß des Schaltbilds Nr. “1SDM000110R0001/1SDM000110R0002” verdrahten.
- Câbler les circuits auxiliaires d’après le schéma électrique n° “1SDM000110R0001/1SDM000110R0002”.
- Cablear los circuitos auxiliares siguiendo el esquema eléctrico n° “1SDM000110R0001/1SDM000110R0002”.

22

- Verificare che all’interno della cella sia garantito il grado di protezione IP precedente, in caso negativo provvedere al suo ripristino.
- Make sure that previous IP protection class is guaranteed inside the compartment. Restore the required protection class if this is not the case.
- Sicherstellen, dass innerhalb des Schaltfeldes die vorherige IP Schutz gewährleistet ist. Andernfalls ist für die Wiederherstellung derselben zu sorgen.
- Vérifier qu’à l’intérieur du compartiment le degré de protection IP précédent soit garanti ; dans le cas contraire le rétablir.
- Verificar que dentro de la celda esté garantizado el grado de protecciòn precedente, si no es así restablecerlo.

23

- Rimuovere tutte le attrezzature utilizzate durante i lavori, ed asportare i residui delle lavorazioni e dei materiali utilizzati.
- Remove all the tools used for the work and eliminate any waste and scraps of the materials used.
- Alle während der Arbeiten benutzten Werkzeuge wegräumen und die Verarbeitungsrückstände und die Reste der verwendeten Werkstoffe entfernen.
- Enlever tous les outillages utilisés pour les opérations et éliminer les résidus des travaux et de matériaux utilisés.
- Quitar todas las herramientas utilizadas durante los trabajos y quitar también los residuos de elaboración y de los materiales utilizados.

24

- Verificare, tramite prova di isolamento, che l 'interruttore così installato non abbia alterato il grado di protezione inizialmente previsto a progetto del quadro.
- Conduct an insulation test to make sure that the way the circuit-breaker has been installed has not altered the protection class initially envisaged in the original switchboard project.
- Mittels Isolationsprüfung sicherstellen, dass der so installierte Leistungsschalter noch die Schutzart aufweist, die ursprünglich bei der Planung der Schaltanlage vorgesehen war.
- Vérifier, au moyen d’un essai d’isolement, que le disjoncteur monté de la sorte n’a pas modifié le degré de protection prévu initialement dans le projet du tableau.
- Verificar, mediante prueba de aislamiento, que el interruptor instalado no haya alterado el grado de protección inicialmente previsto en el proyecto del cuadro.

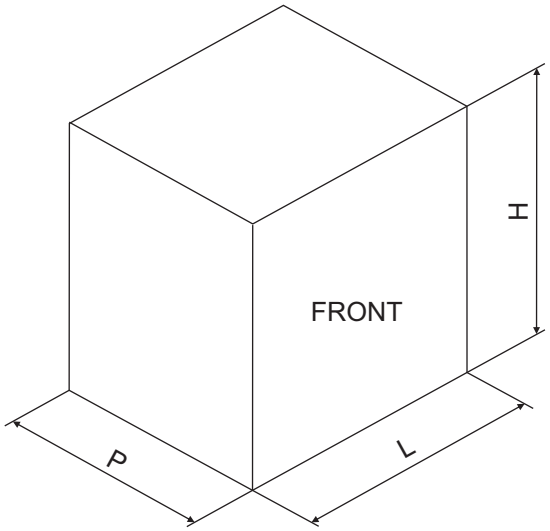
25

- Eseguire prove in bianco per la verifica dei circuiti ausiliari.
- Conduct blank tests to check the auxiliary circuits.
- Blindproben ausführen, um die Hilfsstromkreise zu prüfen.
- Effectuer des essais à vide pour la vérification des circuits auxiliaires.
- Efectuar pruebas sin carga para verificar los circuitos auxiliares.

26

- Seguire le istruzioni di messa in servizio del nuovo interruttore secondo il manuale di installazione uso e manutenzione Emax 2 1SDH001000R0001.
- Comply with the instructions for commissioning the new circuit-breaker as described in Emax 2 installation, operation and maintenance manual 1SDH001000R0002.
- Die Anweisungen zur Inbetriebnahme des neuen Leistungsschalters gemäß der Installations-, Betriebs- und Wartungsanleitung Emax 2 1SDH001000R0003 befolgen.
- Suivre les instructions de mise en service du nouveau disjoncteur d’après le manuel d’installation et d’entretien Emax 2 1SDH001000R0004.
- Seguir las instrucciones de puesta en servicio del nuevo interruptor según el manual de instalación uso y mantenimiento Emax 2 1SDH001000R0005.

- Distanze di rispetto per interruttori in cella.
  Verificare la dimensione effettiva della cella prima di procedere all'acquisto.
- Clearance for circuit-breakers within compatment.
  Verify the actual size of the cell before purchasing.
- Verbindliche Abstandmasse für Leistungsschalter in Zelle.
  Überprüfen Sie die tatsächliche Größe der Zelle vor dem Kauf.
- Distances à respecter pour les disjoncteurs en compartiment.
  Vérifiez la taille réelle du compartiment avant l'achat.
- Distancias a respetar para interruptores en la celda.
  Verificar el tamaño real de la celda antes de la compra.



TYPE	L (III)		L (IV)		H		P		NOTE
	Emax2	Novomax	Emax2	Novomax	Emax2	Novomax	Emax2	Novomax	
E2.2-G3	400	466	490	581	545	625	355	576	P, L, H verified
E4.2-G3	500	466	600	581	545	625	355	576	P, H verified; L quote by verify E4.2 is wider than G3
E4.2-G4	500	586	600	701	545	625	355	576	P, L, H verified

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