

Retrofitting tra interruptori Emax2 e Masterpact versione estraibile. Retrofitting between Emax2 and Masterpact draw-out circuit-breakers. Nachrüstung zwischen Emax2 und Masterpact in herausfahrbarer Version. Reconfiguration entre disjoncteurs Emax2 et Masterpact version débrochable. Retrofitting entre interruptores Emax2 y Masterpact versión extraíble. Emax2替换Masterpact断路器。

Il presente kit di retrofitting, è costruito per la sostituzione totale di interruptori aperti in esecuzione estraibile Masterpact M, da 800A a 6300A con interruptori aperti in esecuzione estraibile di più moderna fattura tipo Emax2 di medesima taglia, senza dover eseguire alcuna modifica alle parti attive de 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 ABB relativi ai prodotti di retrofitting.
- 2.L'interruttore Masterpact M da sostituire sia stato 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.
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 Emax2.

Verificare la possibilità di cablare i circuiti ausiliari del vecchio interruttore con il nuovo e confrontarne la compatibilità secondo lo schema elettrico di equivalenza n°1SDM000106R0001 allegato al kit.

MESSA IN CONDIZIONI DI 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 Masterpact M alla barratura del quadro.

C) Verificare che l'interruttore da sostituire sia installato rispettando le minime distanze di isolamento verso le pareti, indicate sul manuale Masterpact M e riportate per comodità nella fig. 76 di questo manuale (estratto del manuale d'uso e manutenzione dell'interruttore Masterpact M).

This retrofitting kit allows 800A to 6300A Masterpact M drawout version air circuit-breakers to be fully replaced with the more modern Emax2 drawout 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 ABB technical catalogues dedicated to the retrofitting products.
2. The Masterpact M 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. 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 Emax2 circuit-breaker. Make sure that the auxiliary circuits of the old circuit-breaker can be wired to the new one and that the components are compatible, by checking the equivalent wiring diagram N°1SDM000106R0001 enclosed with the kit.

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 Masterpact M circuit-breaker to the switchboard bars.

C) As indicated in the Masterpact M instruction manual and shown in fig.76 of this manual for the sake of convenience (Refer to installation manual and catalogue of the Masterpact M circuit-breaker), comply with the minimum insulating clearance towards the walls when the new circuit-breaker is installed.

Dieser Nachrüstsatz ist dazu bestimmt, die offenen Leistungsschalter in der ausfahrbaren Ausführung Masterpact M von 800A bis 6300A ganz durch die offenen Leistungsschalter in der ausfahrbaren Ausführung mit moderner Bauart vom Typ Emax2 der gleichen Baugröße auszutauschen, ohne irgendeine Änderung an den aktiven Teilen der Schaltanlage vornehmen zu müssen. Die vollständige Übereinstimmung der elektrischen Eigenschaften (Bemessungs-Str om und Ausschaltvermögen) ist unter der Voraussetzung gewährleistet,

1.Dass die Wahl in Konformität mit dem erfolgt, was in den ABB technischen Katalogen zu den Nachrüstopdukten angegeben ist.

2.Dass der zu ersetzende Leistungsschalter Masterpact M 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 höher e Typenschildwerte aufweisen, sind die Nachrüstsätze auf die Leistungen der alten Einrichtung auszulegen. 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 Emax2 ersetzen. Prüfen, ob die Möglichkeit besteht, die Hilfsstromkreise des alten Leistungsschalters mit dem neuen zu verdrahten und die Kompatibilität nach dem Gleichwertigkeits-Schaltbild Nr. 1SDM000106R0001 prüfen, das dem Nachrüstsatz beiliegt.

SICHERHEITSTECHISCHE 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, erneuert sicherstellen, dass der Stromverbraucher außer Betrieb genommen ist.

B) Den alten Leistungsschalter ganz ausbauen und die Schrauben zum Anschluss der Pole des alten Leistungsschalters Masterpact M an der Sammelschienen der Schaltanlage aufbewahren.

C) Sicherstellen, dass der auszutauschende Leistungsschalter unter Beachtung der Mindestisolerabstände zu den Wänden installiert worden ist, die im Handbuch von Masterpact M stehen und die der Bequemlichkeit halber auch in der Abb. 76 dieses Handbuchs wiedergegeben sind (Auszug aus der Betriebs- und Wartungsanleitung des Leistungsschalters Masterpact M).

Le présent kit de « retrofitting », est conçu pour la reconfiguration totale de disjoncteurs ouverts dans la version débrochable Masterpact M, de 800A à 6300A par des disjoncteurs ouverts dans la version débrochable sur chariot de conception plus moderne type Emax2 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 ABB catalogues techniques relatifs aux produits de « retrofitting ».
2. Le disjoncteur Masterpact M 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 du 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. 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 Emax2. Vérifier la possibilité de câbler les circuits auxiliaires de l'ancien disjoncteur avec le nouveau et comparer la compatibilité d'après le schéma électrique d'équivalence n°1SDM000106R0001 annexé au kit.

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 Masterpact M au jeu de barres du tableau.
- C) Vérifier que le disjoncteur à remplacer soit mis en place en respectant les distances minimum d'isolement vers les parois, indiquées sur le manuel Masterpact M et reportées par commodité sur les fig. 76 de ce manuel (extrait du manuel d'utilisation et d'entretien du disjoncteur Masterpact M).

El presente kit de retrofitting, ha sido realizado para la sustitución total de interruptores abiertos en ejecución extraíble Masterpact M, de 800A a 6300A, con interruptor es abiertos en ejecución extraíble de realización más moderna, tipo Emax2, 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 ABB catálogos técnicos relativos a los productos de retrofitting.
2. El interruptor Masterpact M 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. Para ulteriores aclaraciones contactar ABB.

¡ATENCIÓN! Instrucciones relativas exclusivamente al ensamblado del kit di retrofitting. Estas instrucciones no sustituyen aquellas presentes en el manual de instalación, uso y mantenimiento del nuevo interruptor Emax2. Verificar la posibilidad de cablear los circuitos auxiliares del viejo interruptor con el nuevo y verificar su compatibilidad según el esquema eléctrico n°1SDM000106R0001 anexo al kit.

PUESTA EN SEGURIDAD DE LA INSTALACIÓN

- A) Para garantizar la incolumidad 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 abierto 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 Masterpact M en las barras del cuadro.
- C) Verificar que la instalación del interruptor respete las distancias mínimas de aislamiento hacia las paredes, indicadas en el manual Masterpact M y expuestas también en las fig. 76 de este manual (extracto del manual de uso y mantenimiento del interruptor Masterpact M).

该替换套件适用于采用更先进的Emax2 空气断路器替换 Masterpact M 断路器, 断路器的额定电流为800至6300A。替换保持开关柜的带电部件不变。并能完全保证开关柜的电气性能(如额定电流和分断能力), 但需满足如下条件:

1. 该套件是根据ABB替换套件产品的技术样本选型。
2. Masterpact M 断路器是根据其手册进行安装的, 符合规定的对地绝缘间隙, 连接铜排大小以及铜排第一支撑位置。

重要提示!

替换套件允许替换旧有的控制和保护设备, 但不允许改变原有开关柜的技术参数, 若新断路器铭牌性能参数比较高, 转换套件也只能标称旧设备的性能参数。详情请联系ABB咨询。

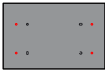
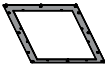
警告!该说明书只关注替换套件安装过程, 不能取代 Emax2断路器安装说明书及其操作和维护手册。通过检查附件套件包含的接线图1SDM000106R0001 确认旧断路器辅助电路部件是否能被新断路器兼容替代。

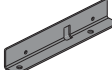
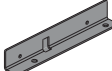
安装设置安全条件

- A) 在更换断路器之前, 为确保安装过程工作人员安全, 必须满足如下安装条件。
- 断开旧断路器所在开关柜。
 - 旧断路器分闸, 弹簧释能。
 - 断开辅助电路。
 - 检查并确保用户拆卸断路器前已断开设备。
- B) 拆下旧断路器, 保留 Masterpact M 断路器和开关柜母排连接处螺栓。
- C) 为了安装的简便性, 如 Masterpact M 说明书和本说明书图76所示(参照 Masterpact M 说明书和样本), 当安装新断路器时, 需要满足对柜壁的最小绝缘间隙的要求。

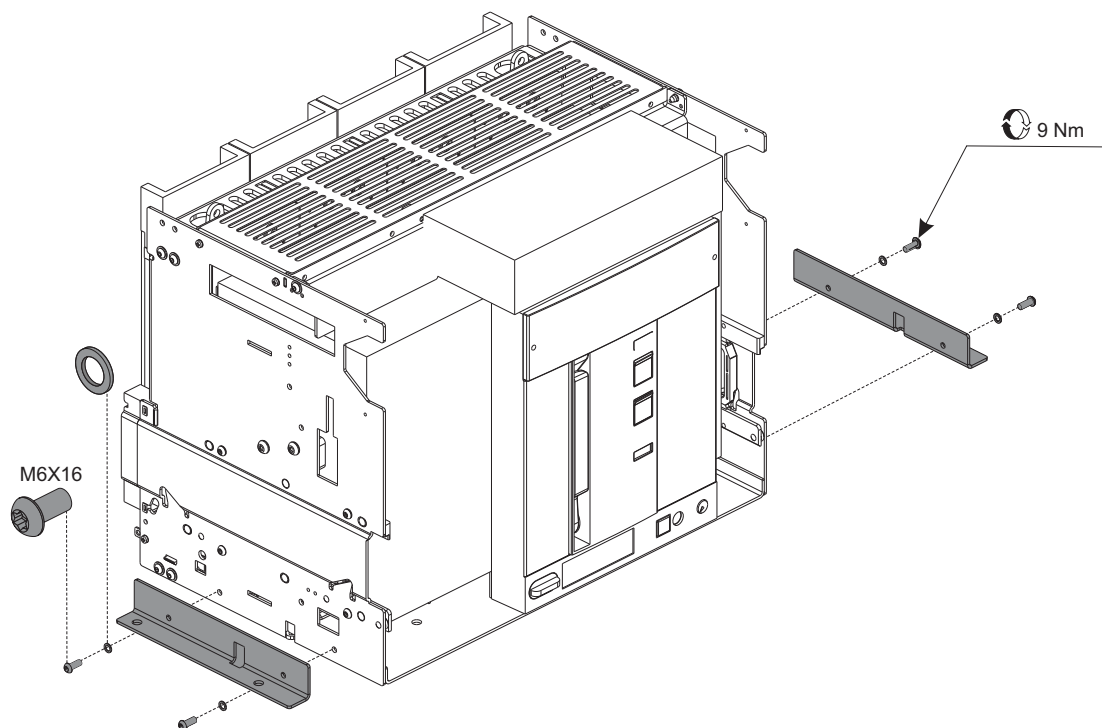


E4.2 HR-M08N_M12N HR 800~1250A

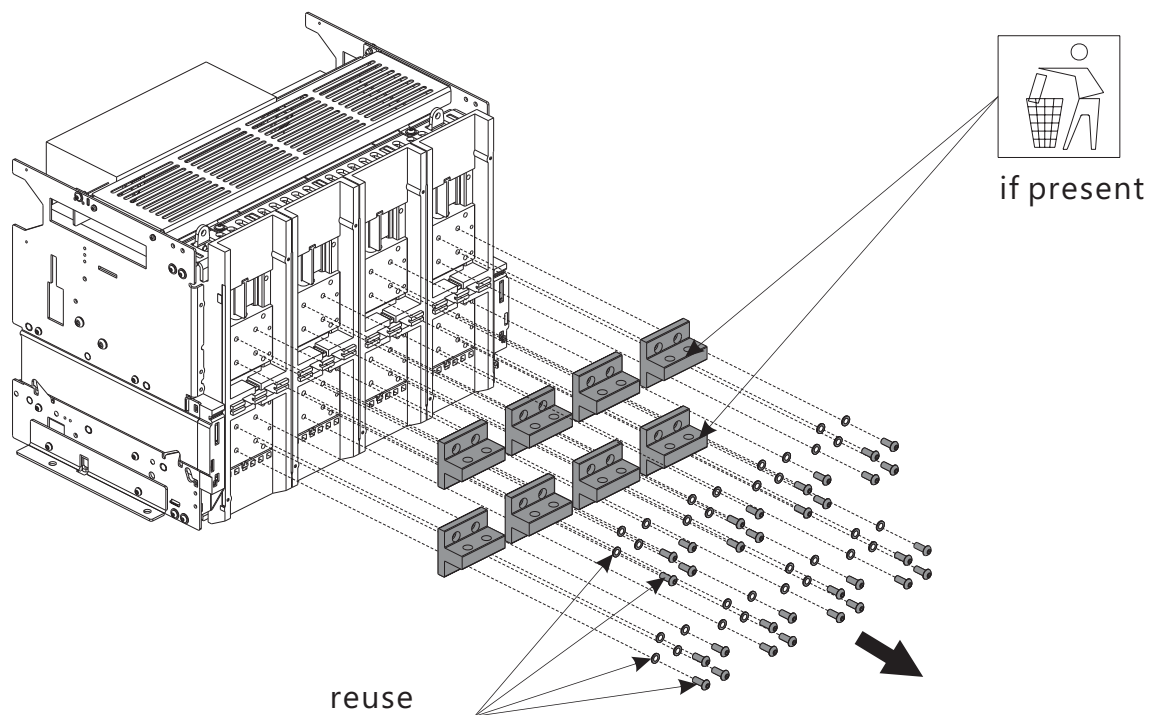
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	107	0	1
	108	0	1

		3p	4p
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	106	1	1
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	M6	4	4
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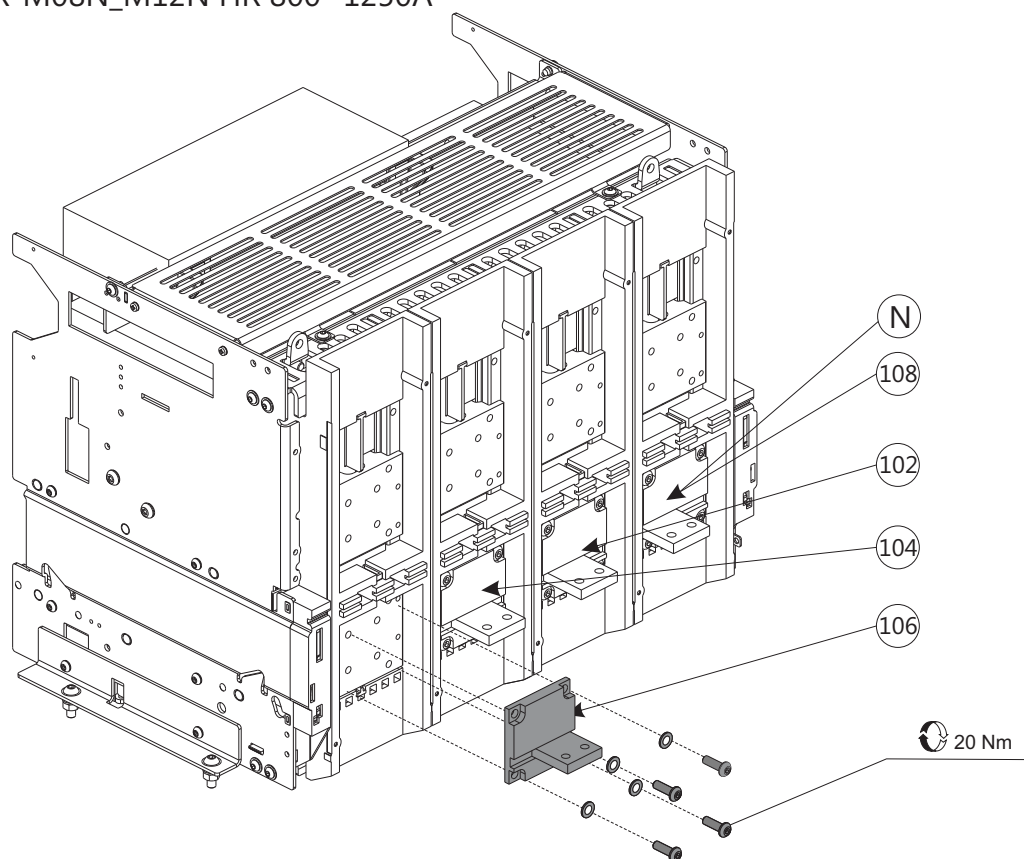
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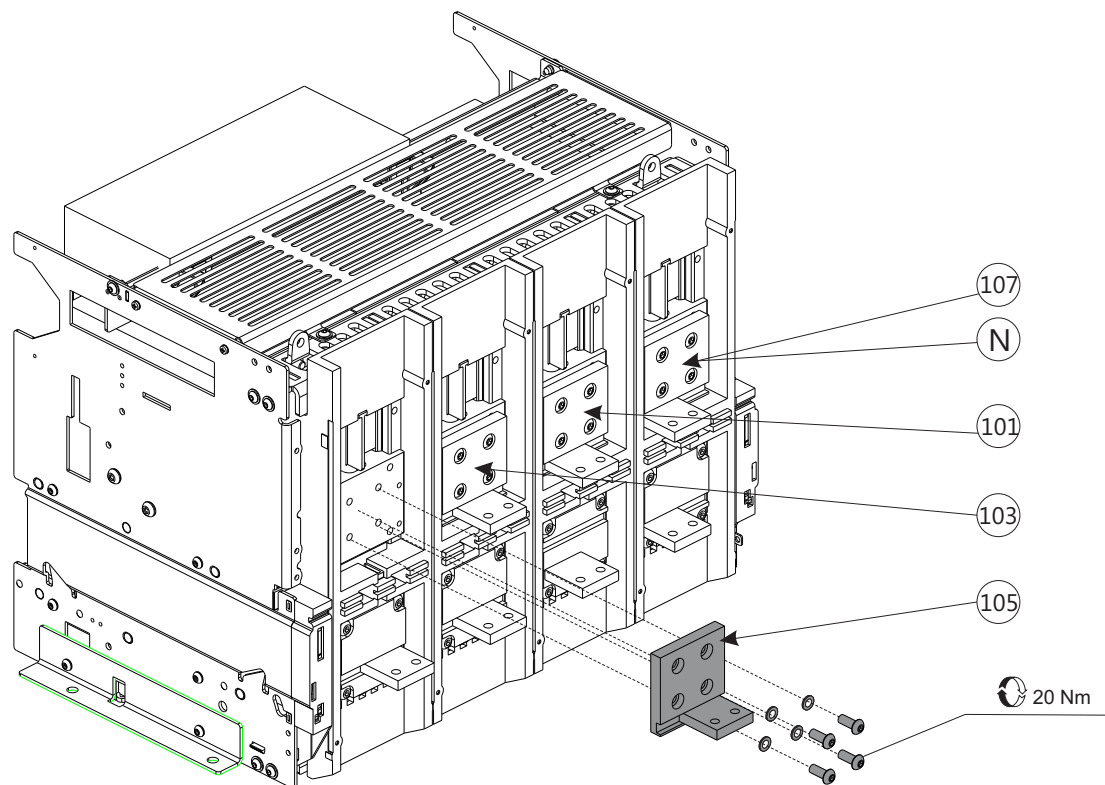
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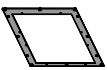
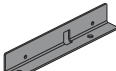
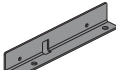
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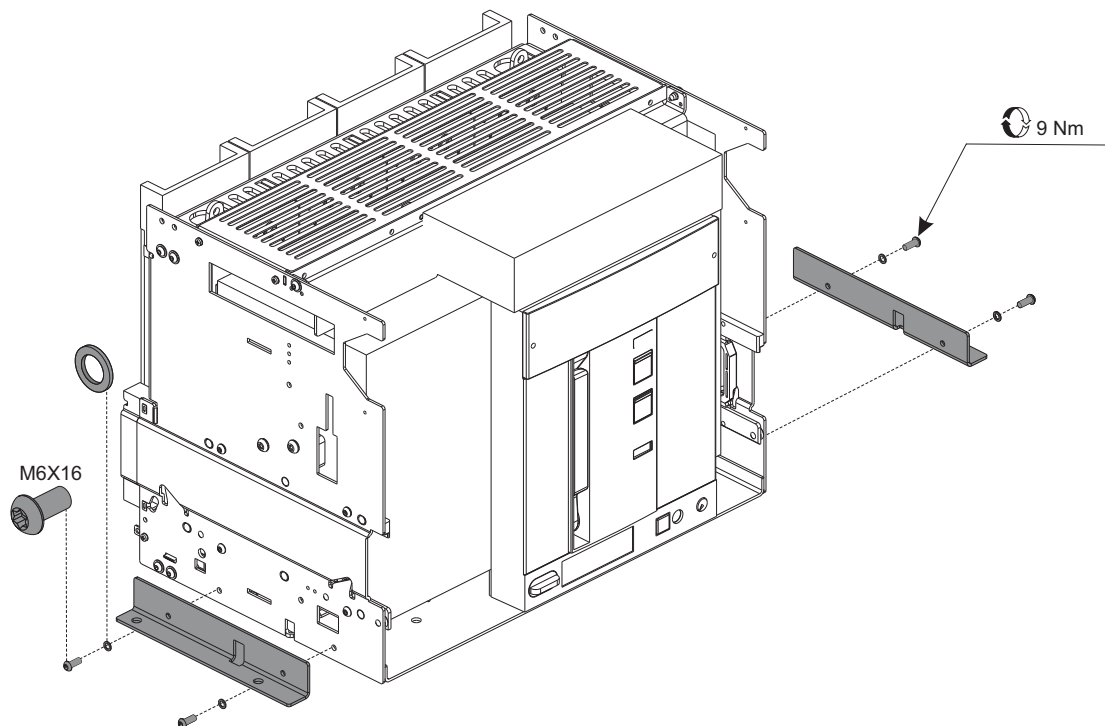


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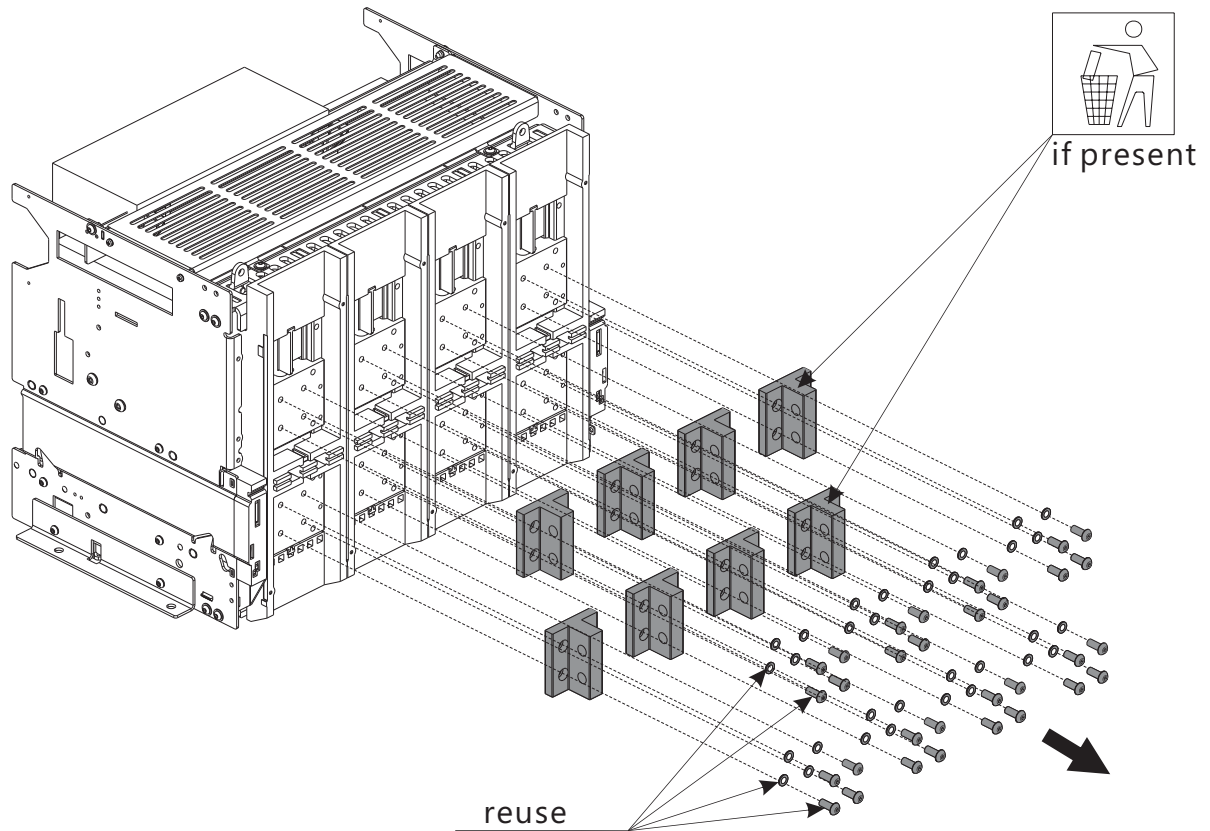
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 M6X16	4	4
 M6	4	4

	3p	4p
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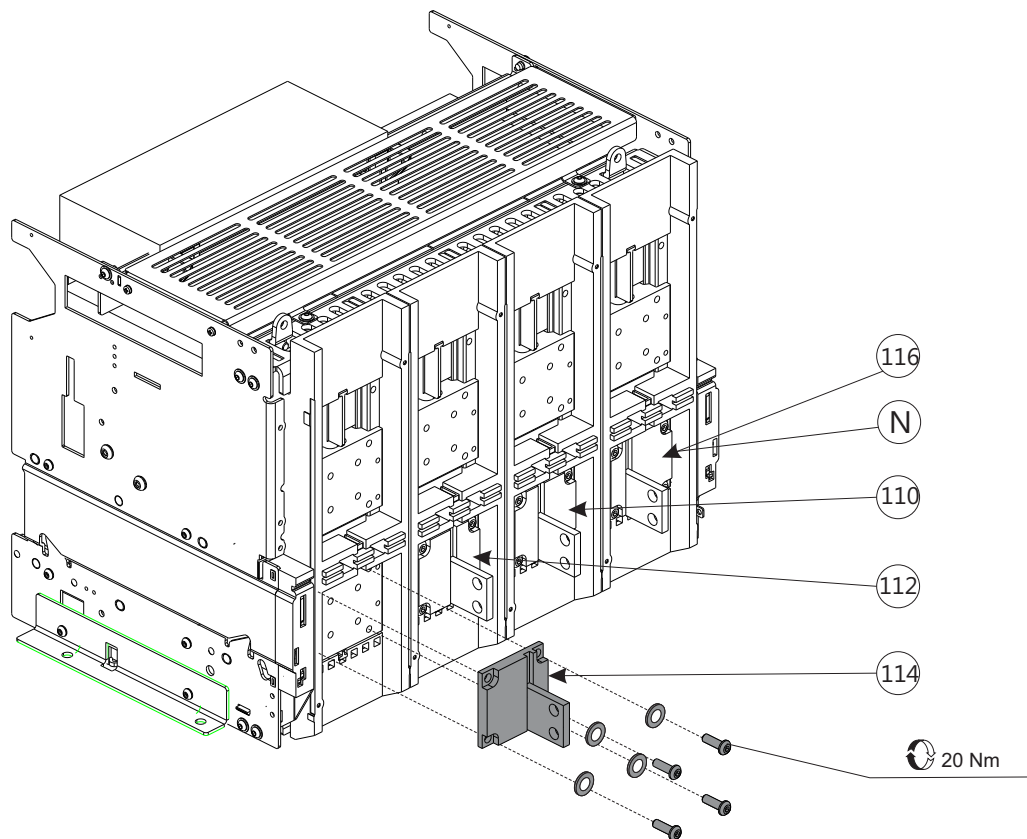
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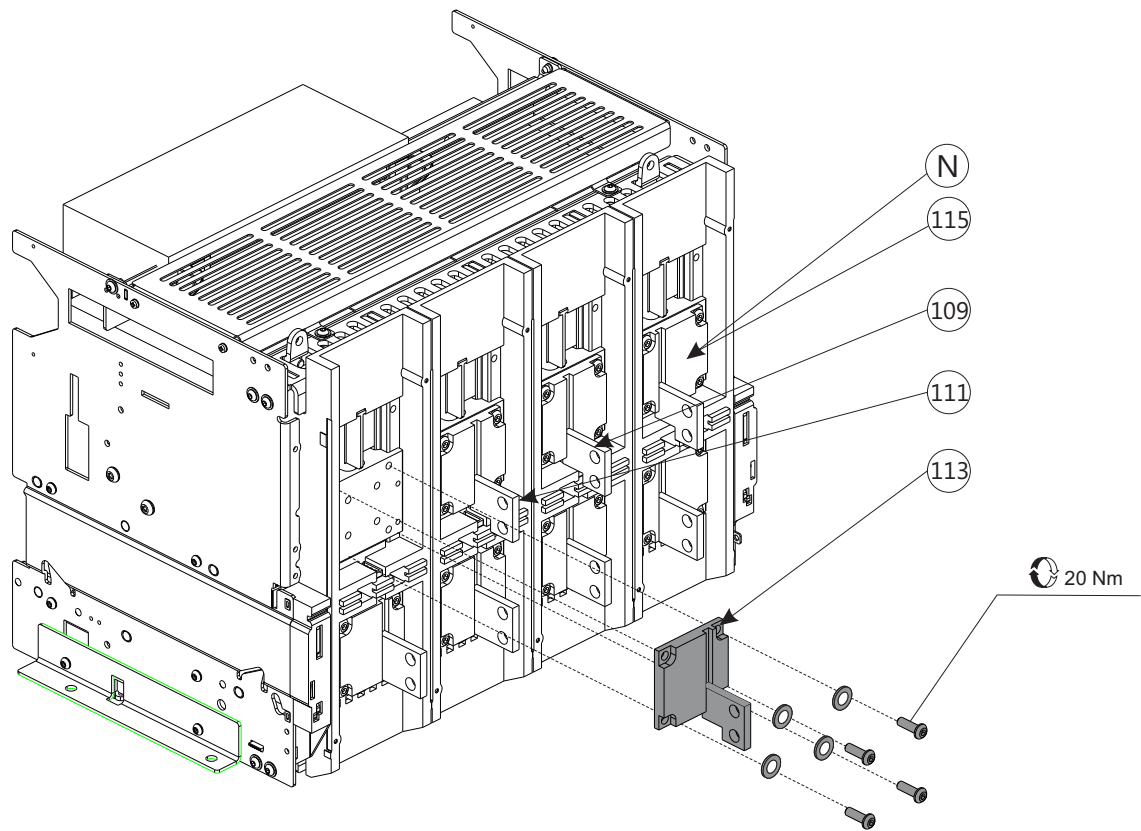


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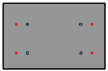
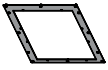


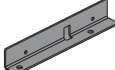
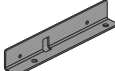
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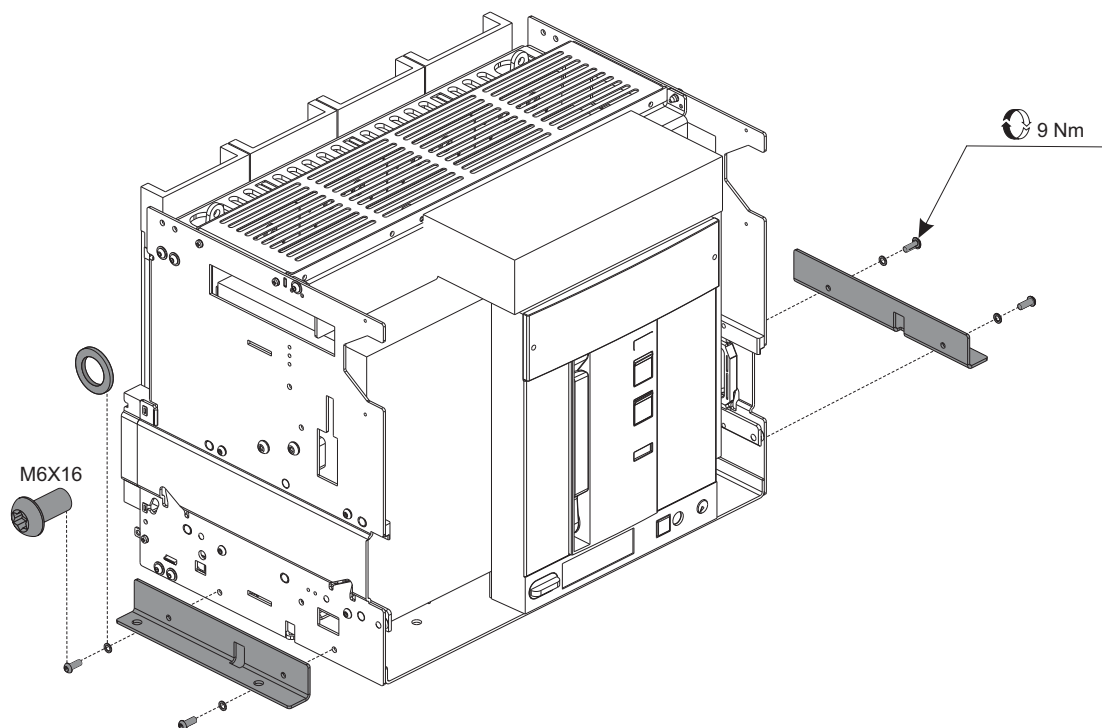


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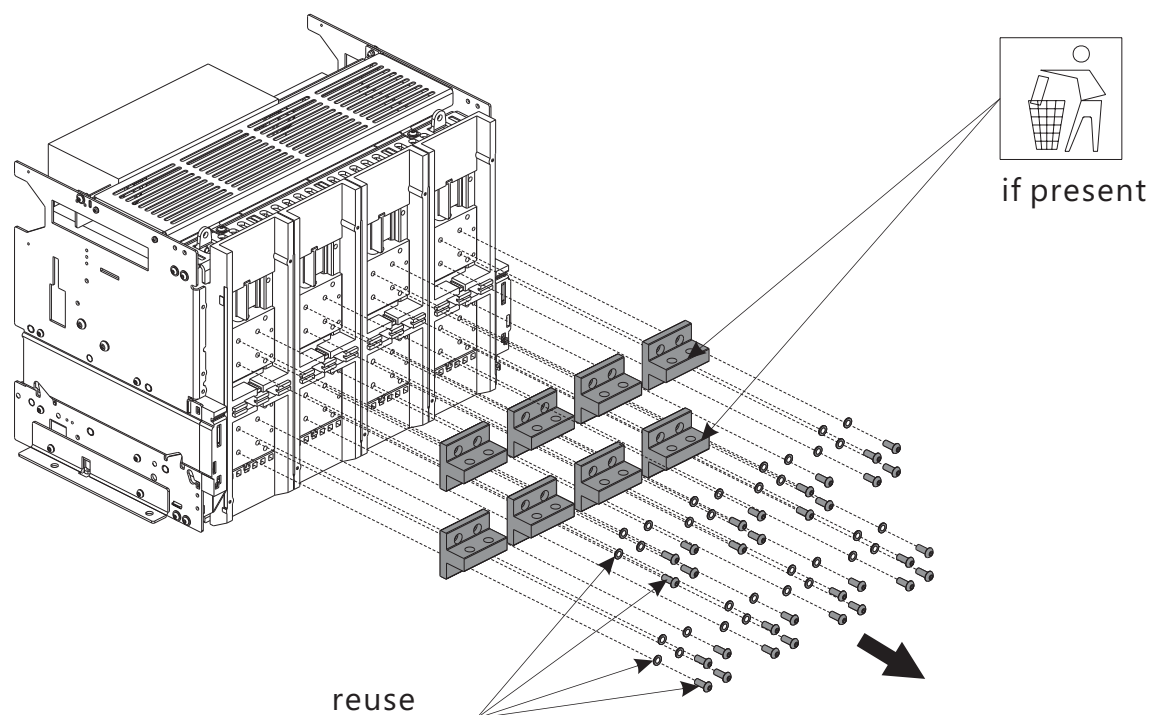
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	08	0	1

		3p	4p
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	M6X16	4	4
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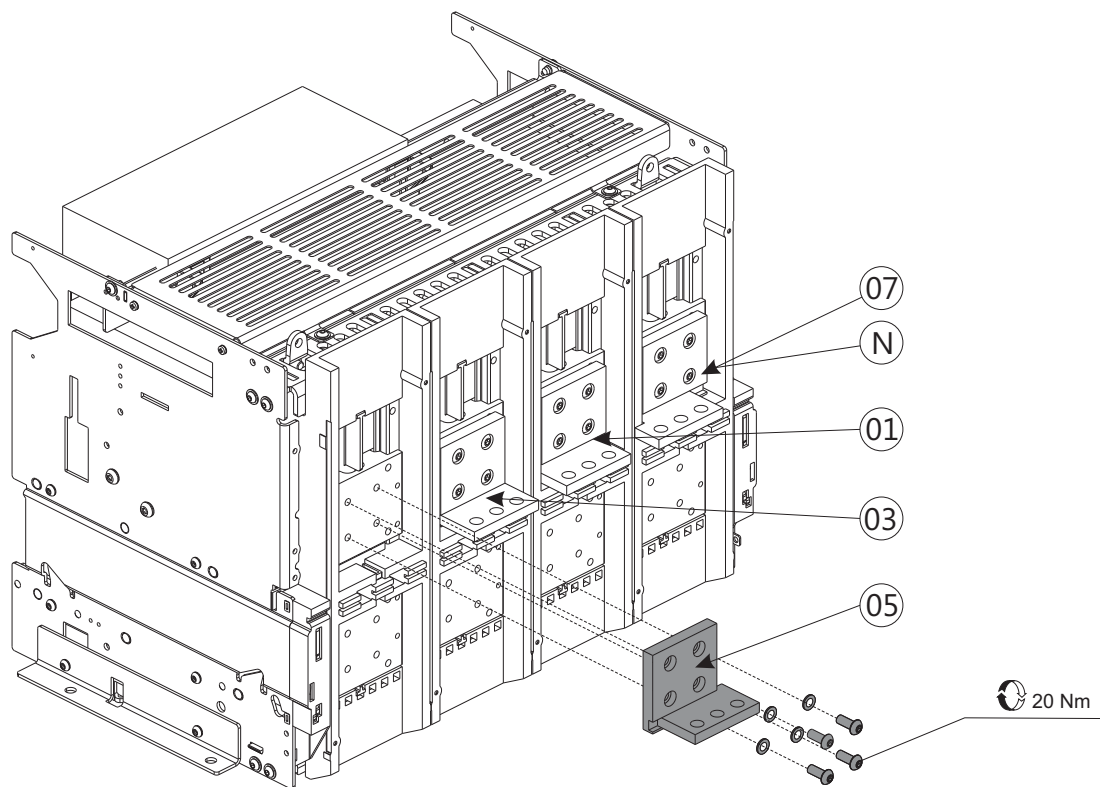
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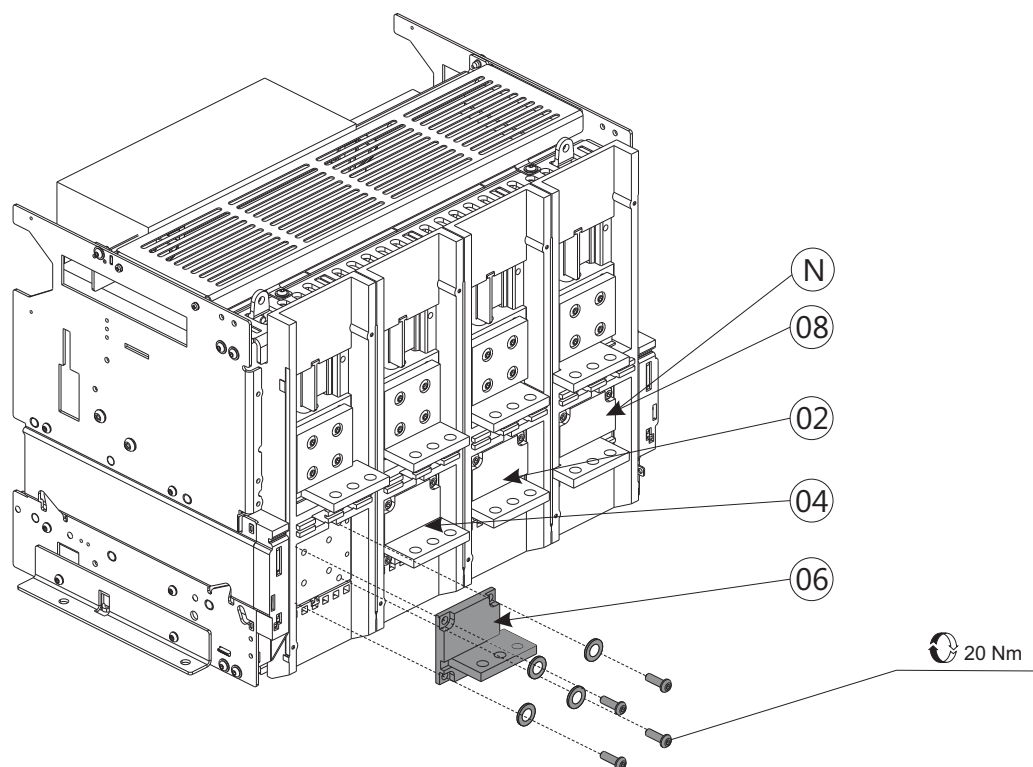
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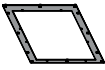
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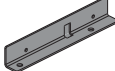
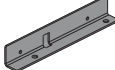


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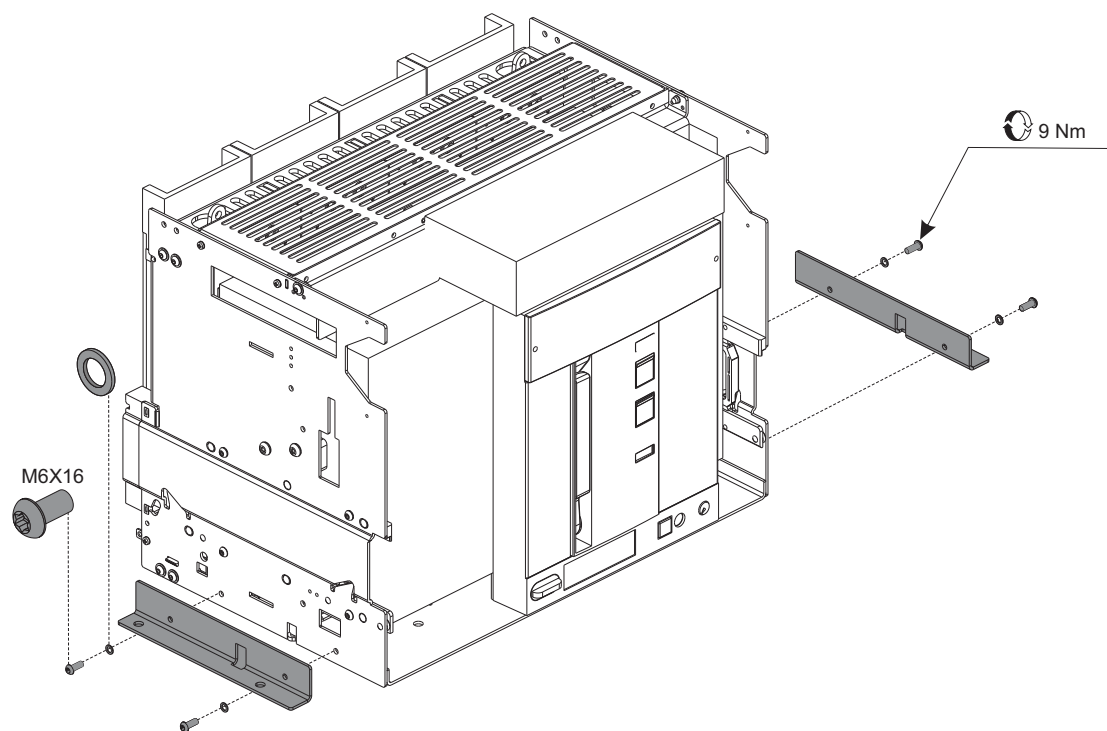


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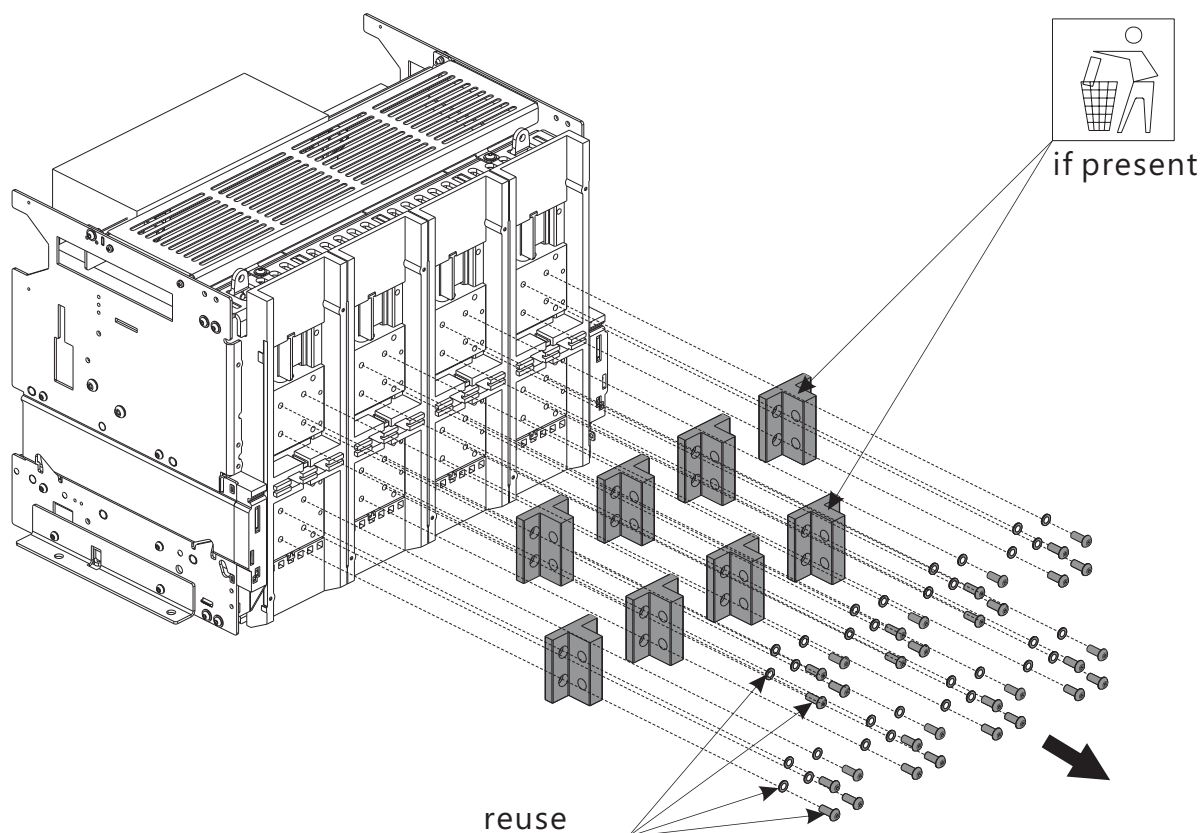
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	1	1
	1	0
	0	1
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	1	1
 M6X12	8	8
 M6	8	8
 M6X16	4	4
 M6	4	4

	3p	4p
 21	1	1
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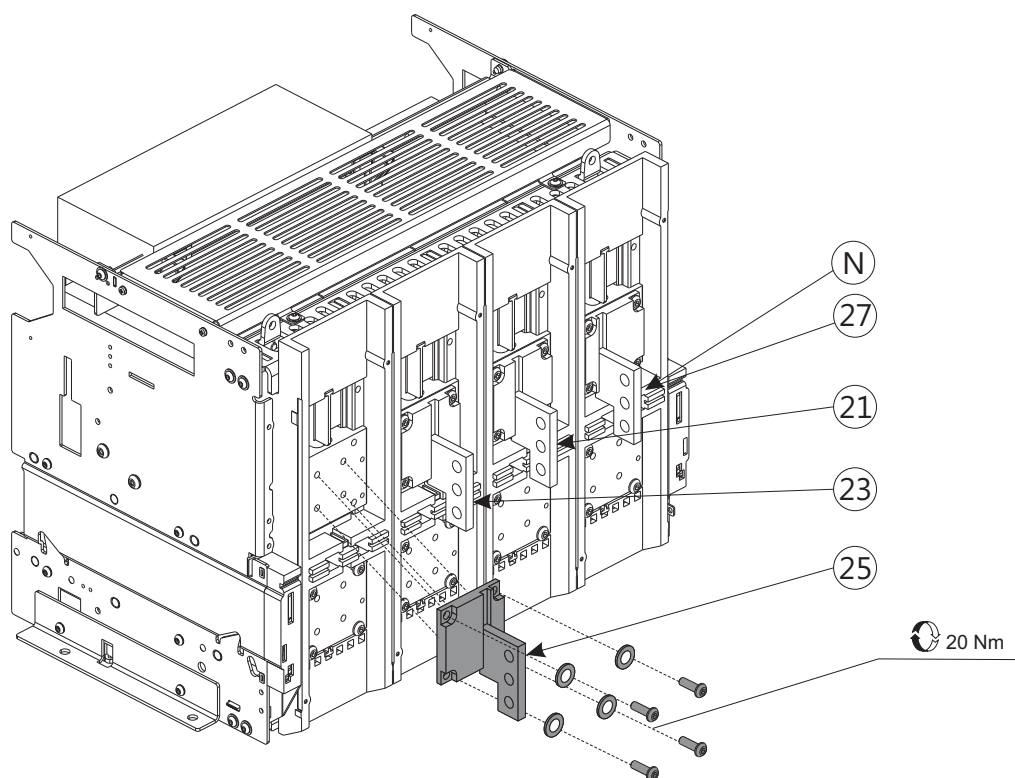
13 For E4.2 VR-M08H_M16H VR 800~1600A



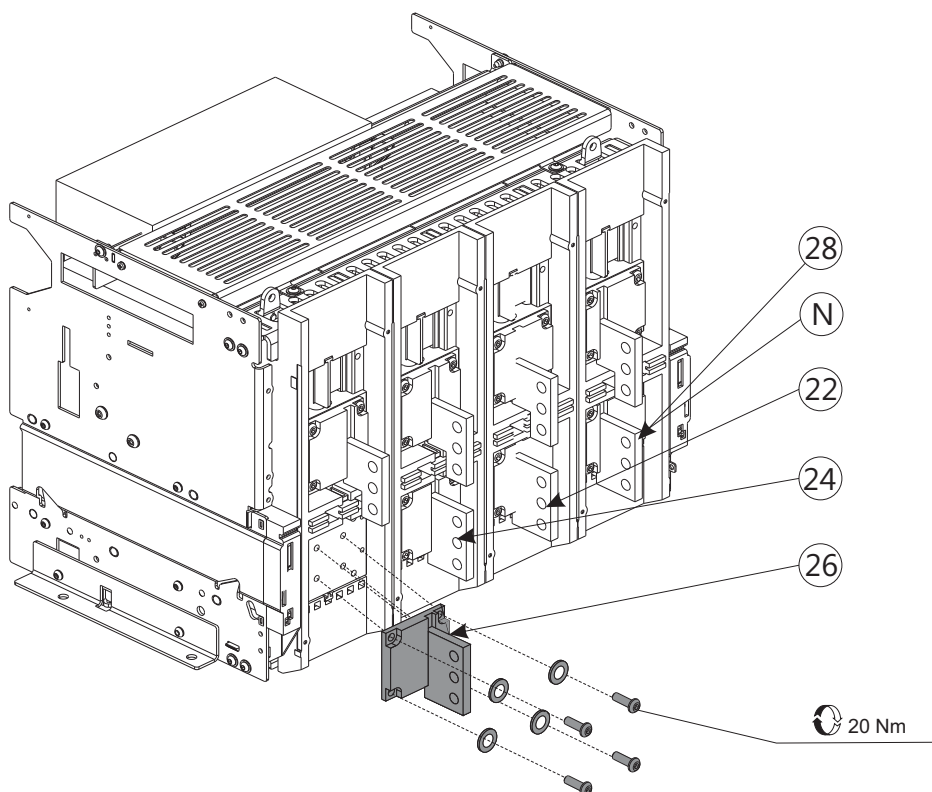
14 For E4.2 VR-M08H_M16H VR 800~1600A



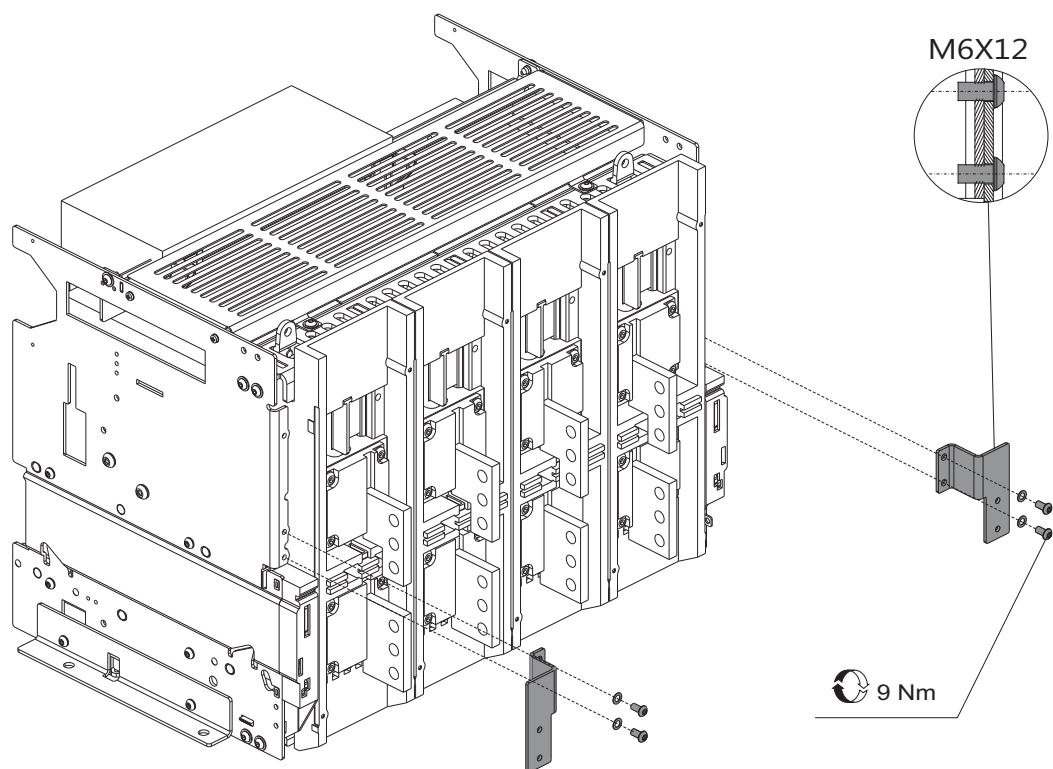
15 For E4.2 VR-M08H_M16H VR 800~1600A



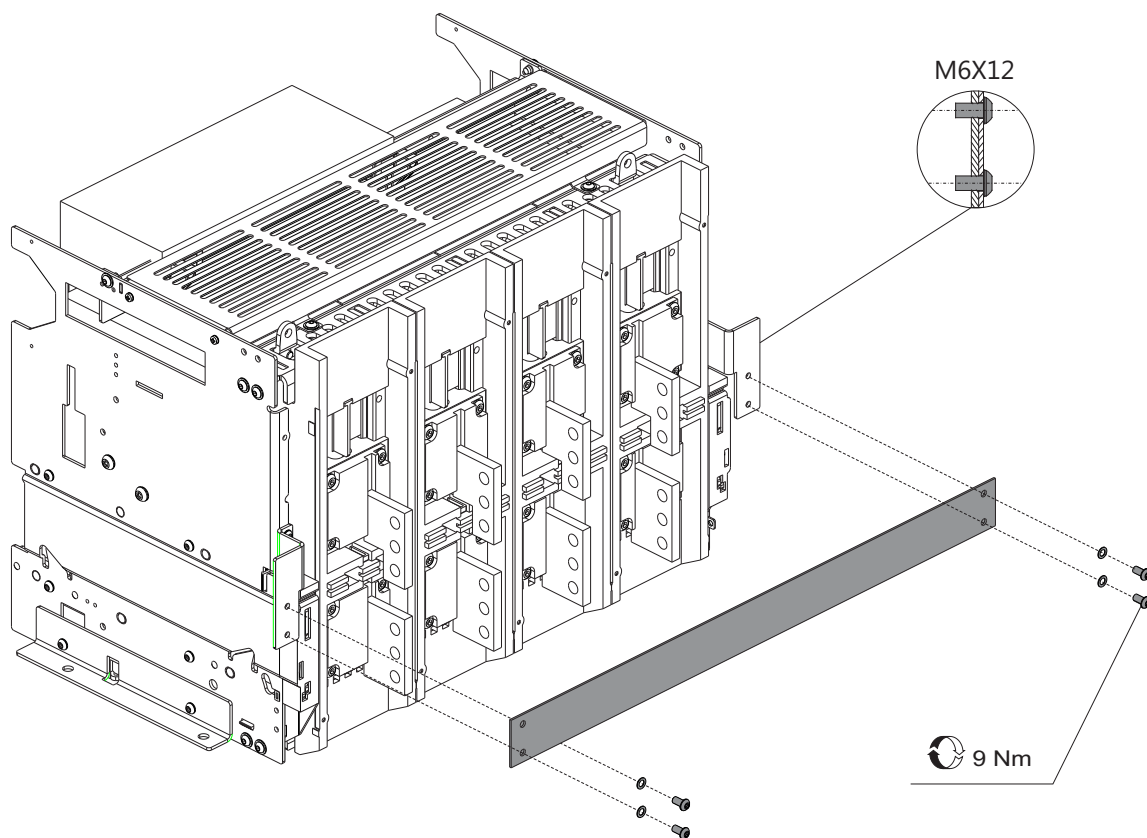
16 For E4.2 VR-M08H_M16H VR 800~1600A



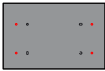
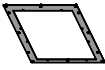
17 For E4.2 VR-M08H_M16H VR 800~1600A

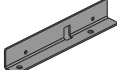
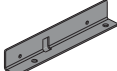


18 For E4.2 VR-M08H_M16H VR 800~1600A

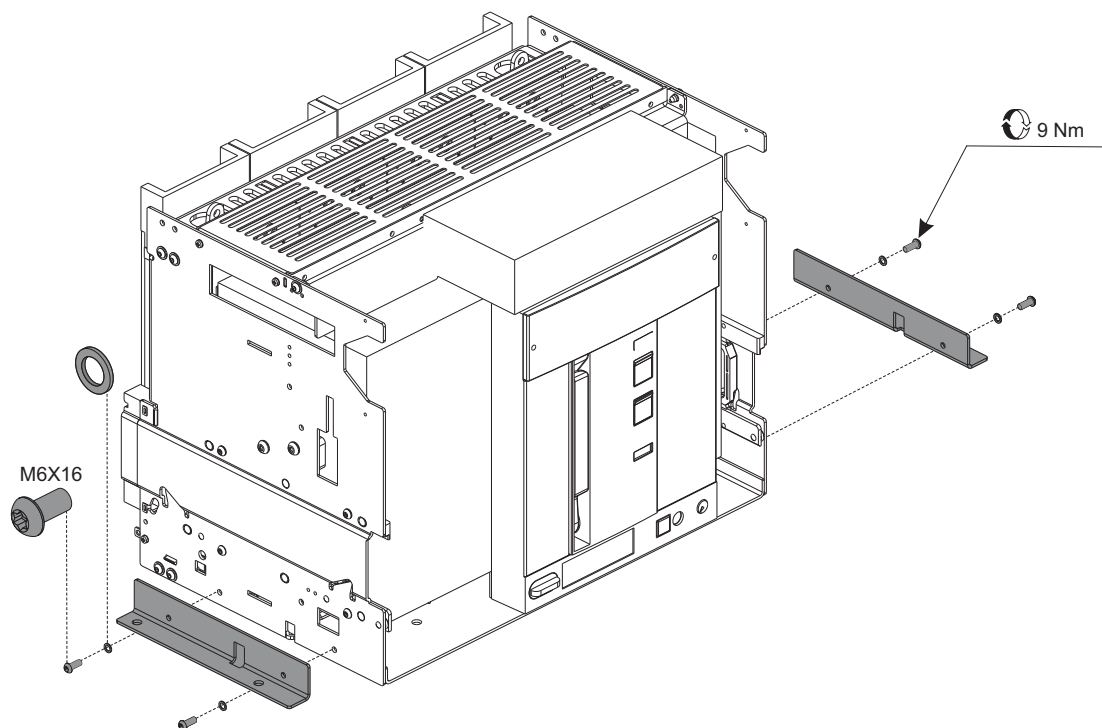


E4.2 HR-M20H_M25H HR 2000~2500A

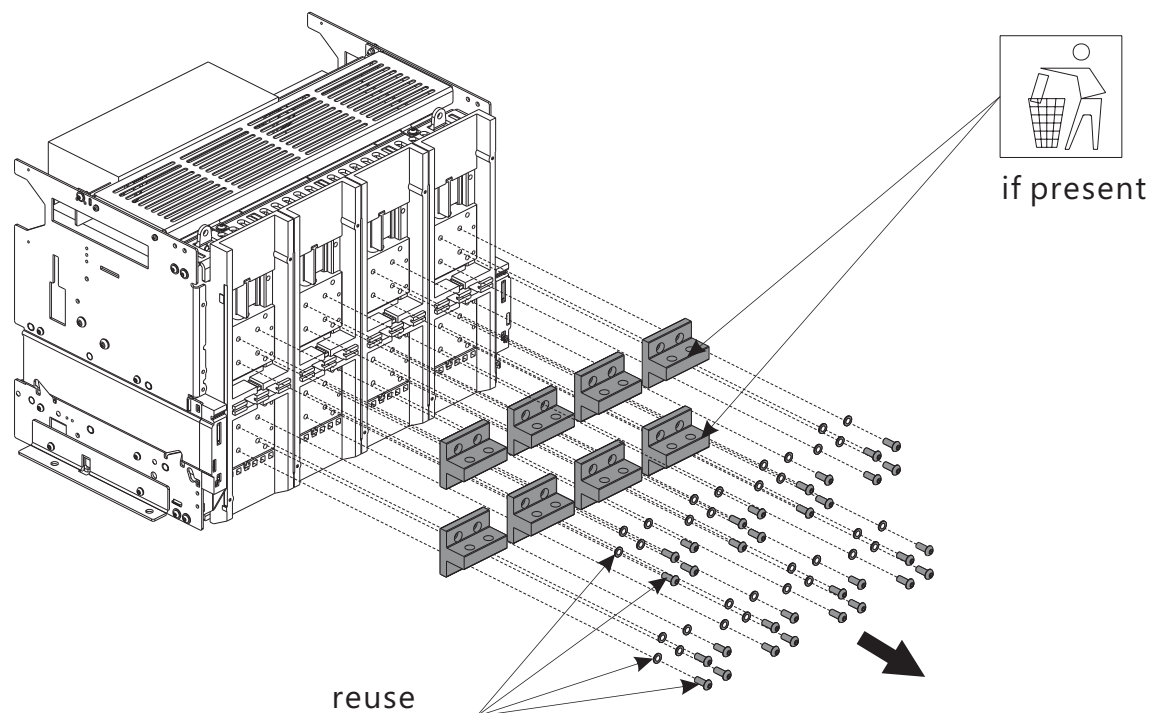
	3p	4p
	1	0
	0	1
	1	1
	1	1
	1	1
	1	1
	1	1
	1	1
	0	1
	0	1

	3p	4p
 10	1	1
 12	1	1
 14	1	1
 M6X16	4	4
 M6	4	4
	1	1
	1	1
	3	4

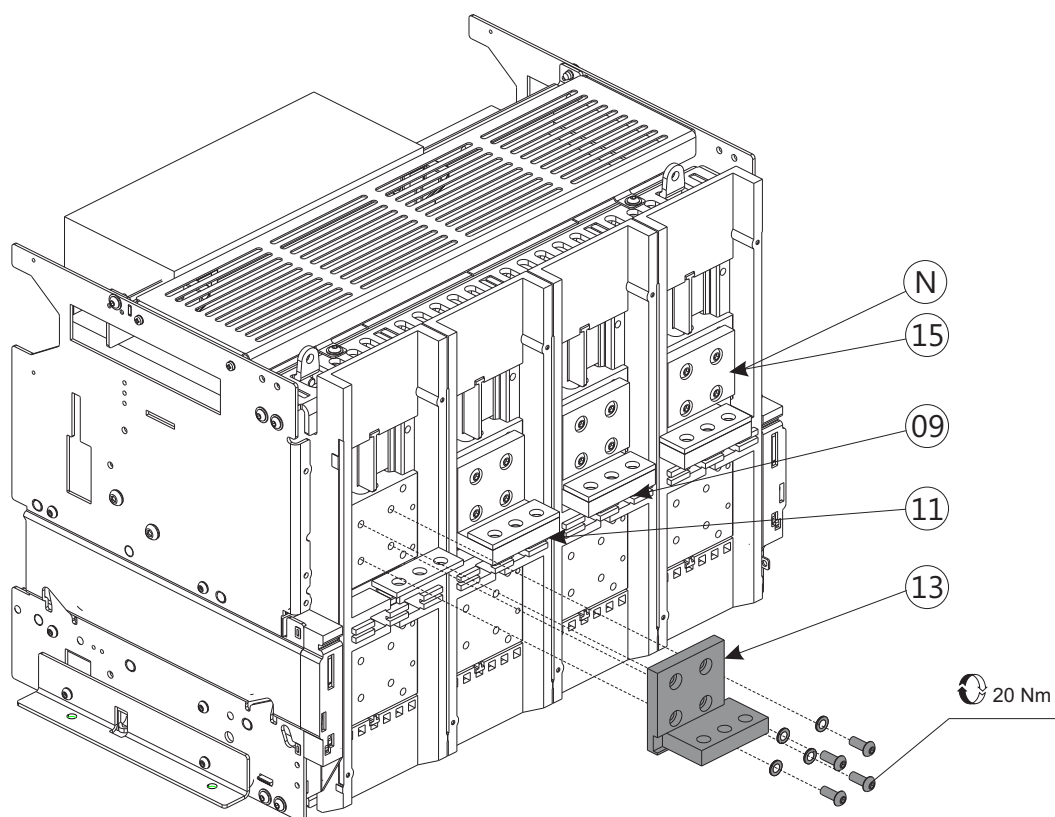
19 For E4.2 HR-M20H_M25H HR 2000~2500A



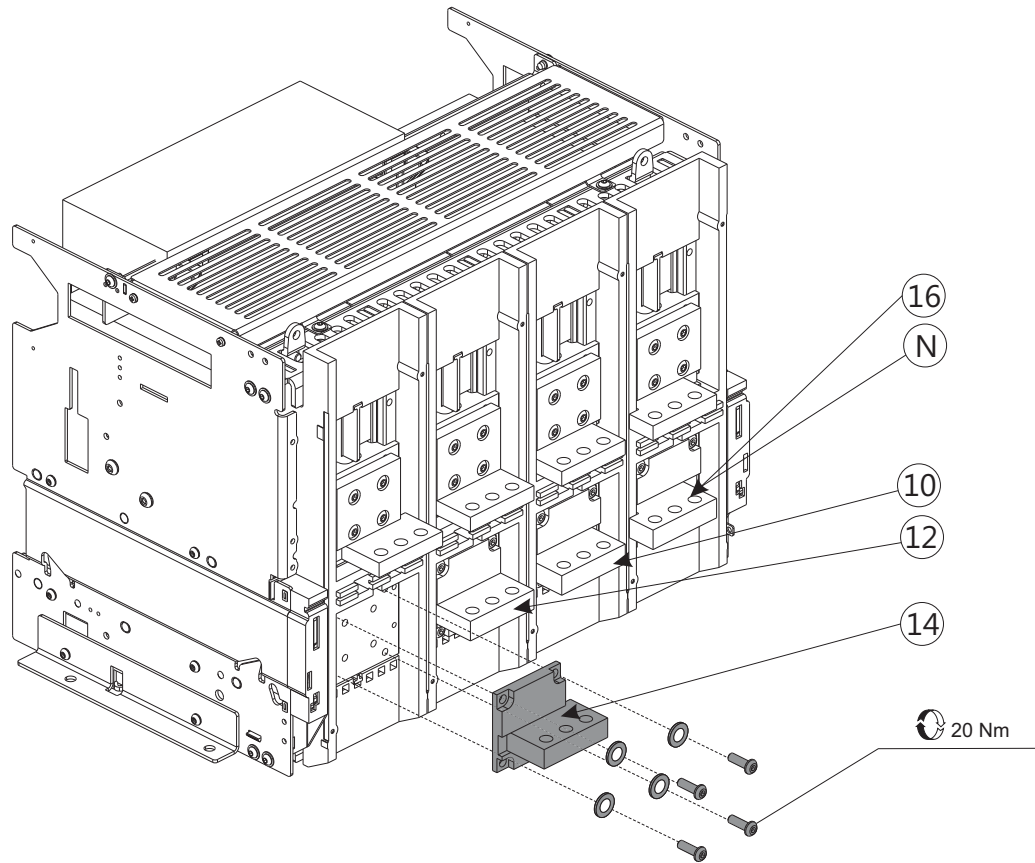
20 For E4.2 HR-M20H_M25H HR 2000~2500A



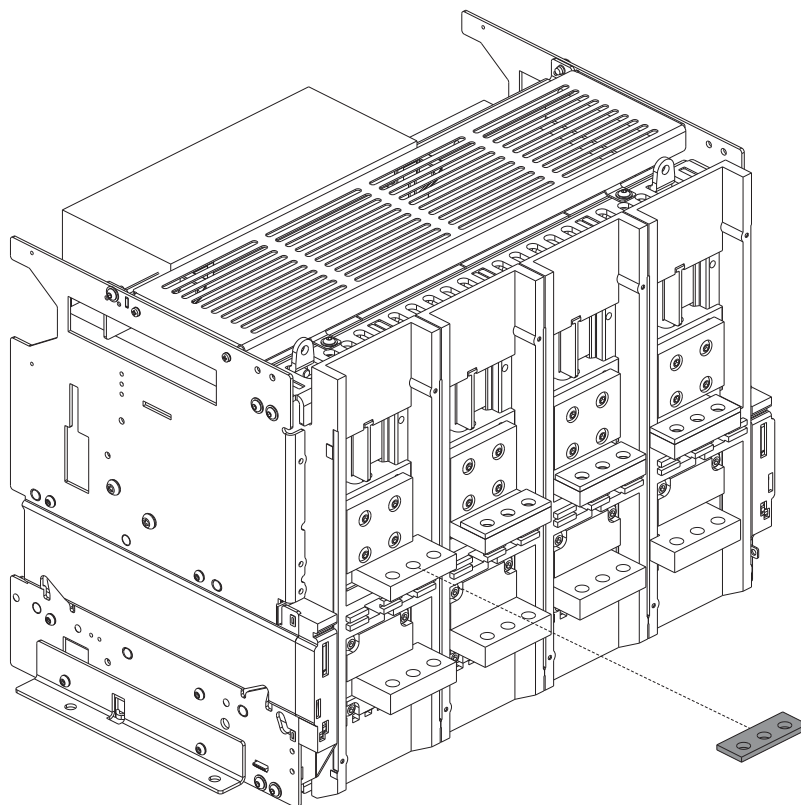
21 For E4.2 HR-M20H_M25H HR 2000~2500A



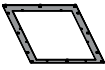
22 For E4.2 HR-M20H_M25H HR 2000~2500A

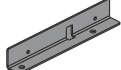
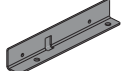


23 For E4.2 HR-M20H_M25H HR 2000~2500A

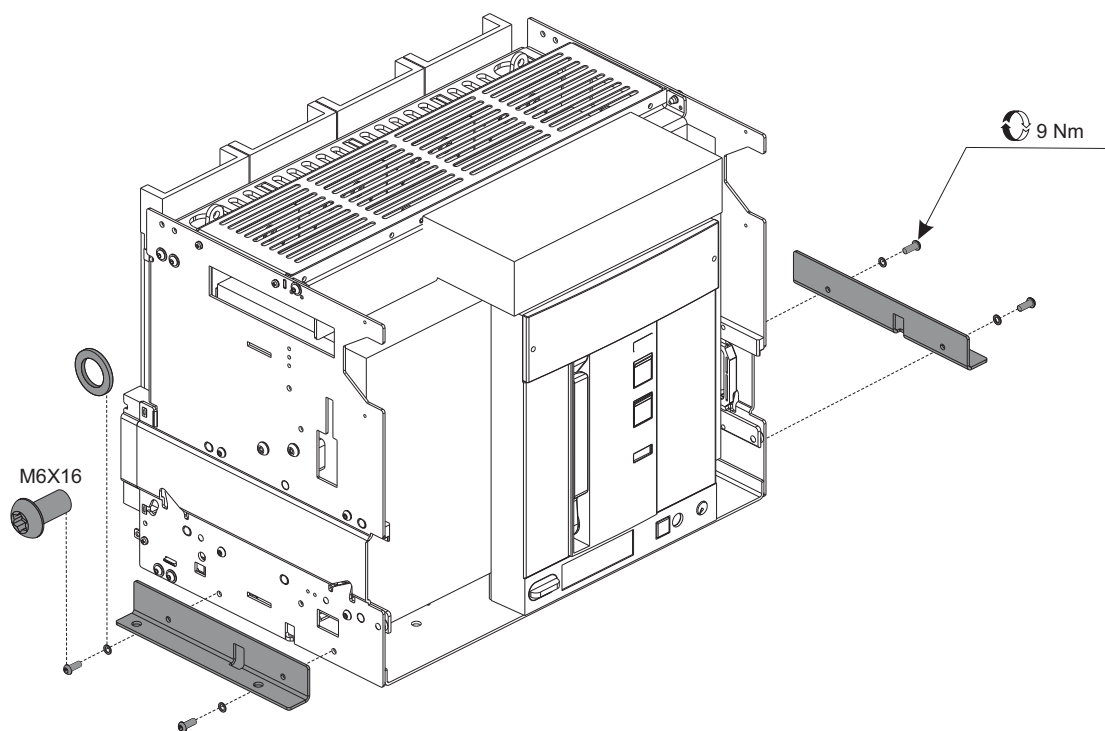


E4.2 VR-M20H_M25H VR 2000~2500A

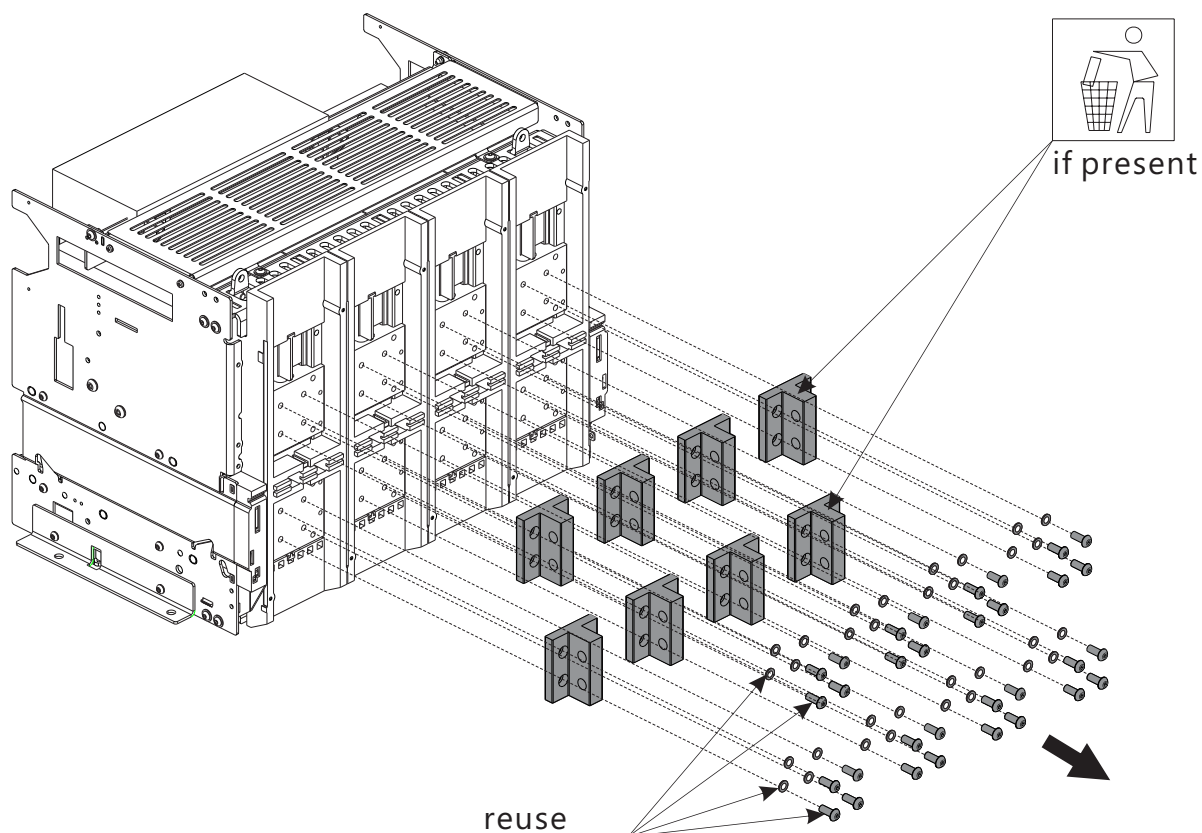
	3p	4p
	1	0
	0	1
	1	1
	1	1
	1	0
	0	1
	1	1
	1	1
 M6X12	8	8
 M6	8	8
 M6X16	4	4
 M6	4	4

	3p	4p
 29	1	1
 31	1	1
 33	1	1
 35	0	1
 36	0	1
 30	1	1
 32	1	1
 34	1	1
	1	1
	1	1

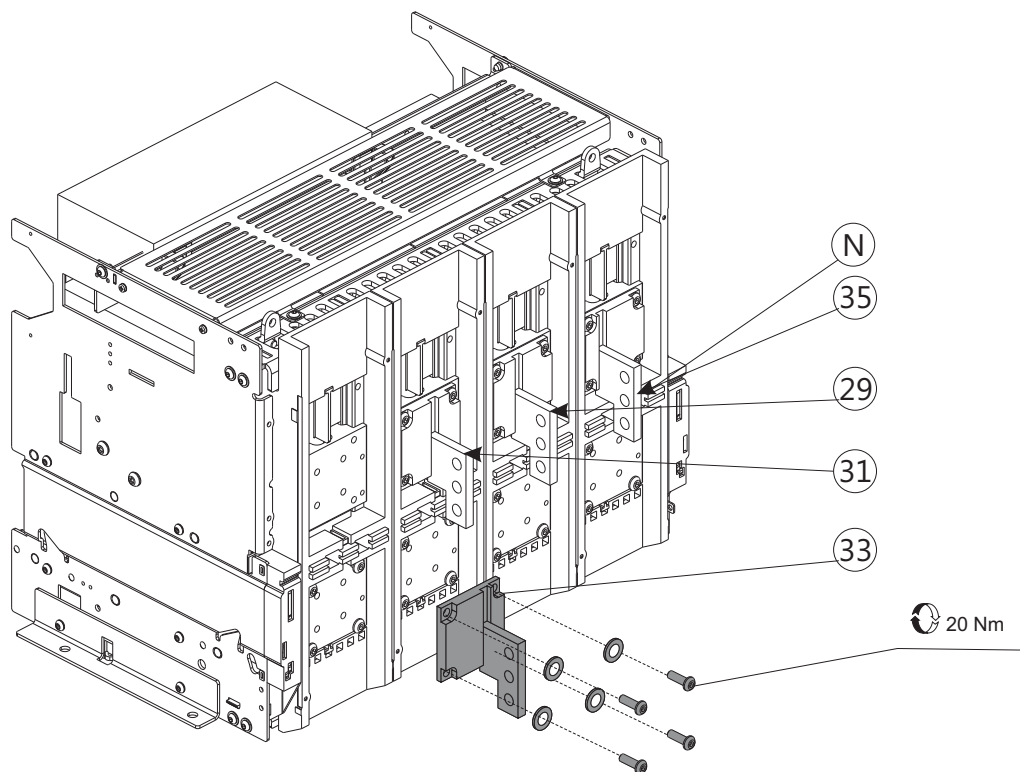
24 For E4.2 VR-M20H_M25H VR 2000~2500A



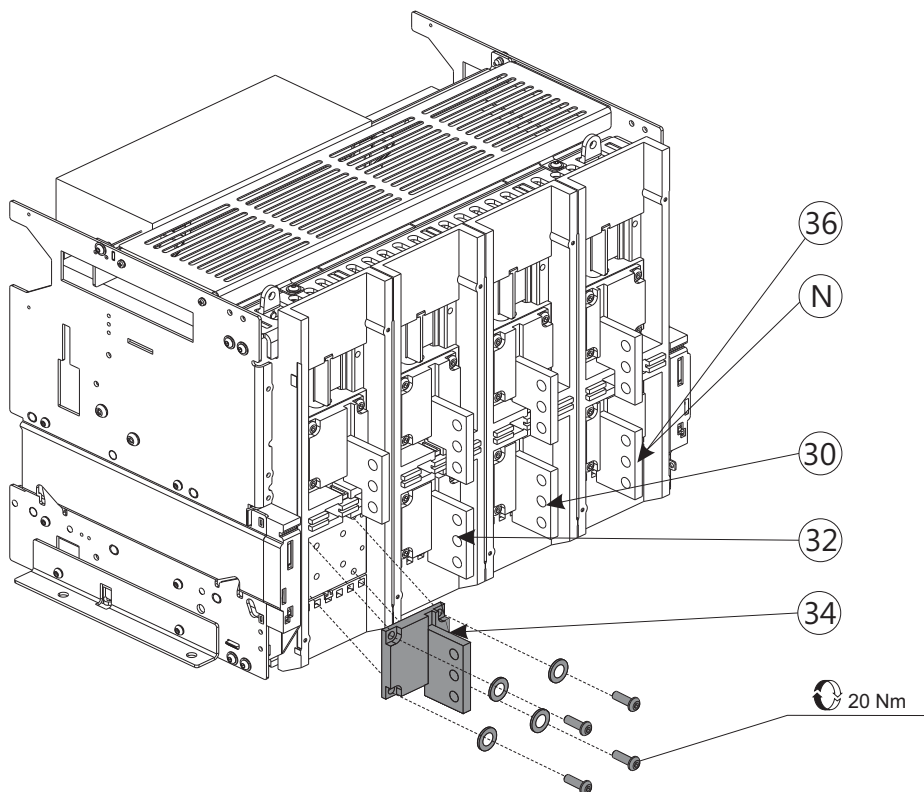
25 For E4.2 VR-M20H_M25H VR 2000~2500A



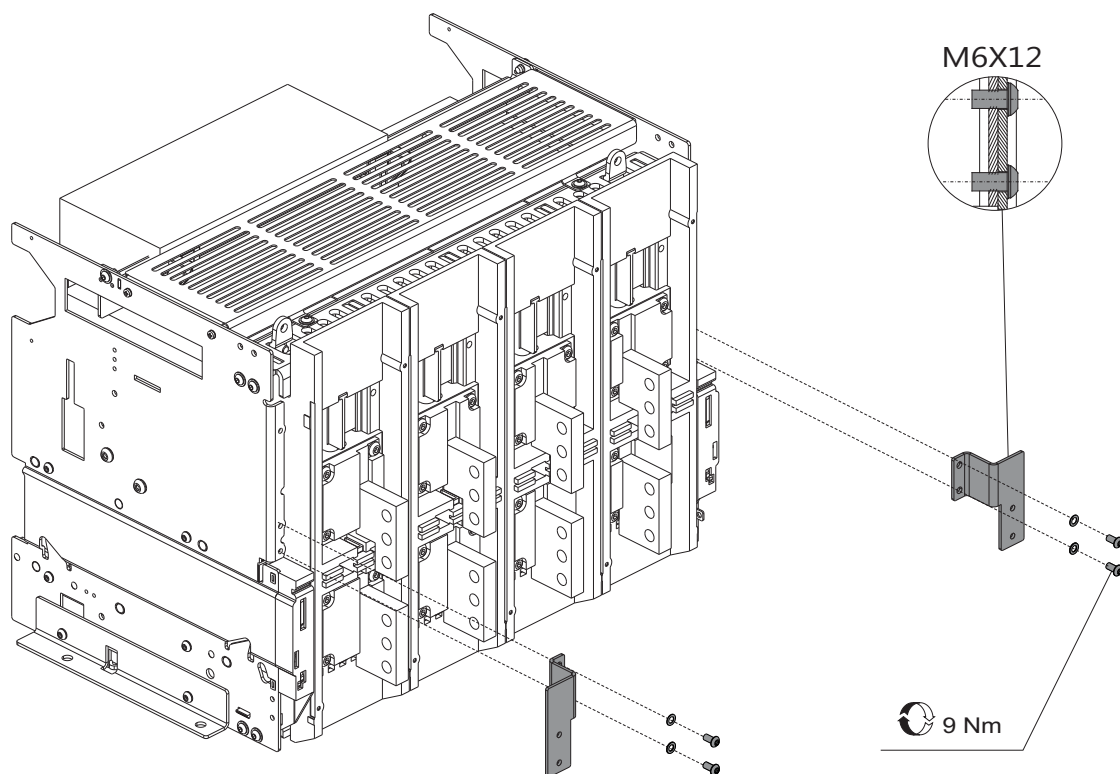
26 For E4.2 VR-M2H_M25H VR 2000~2500A



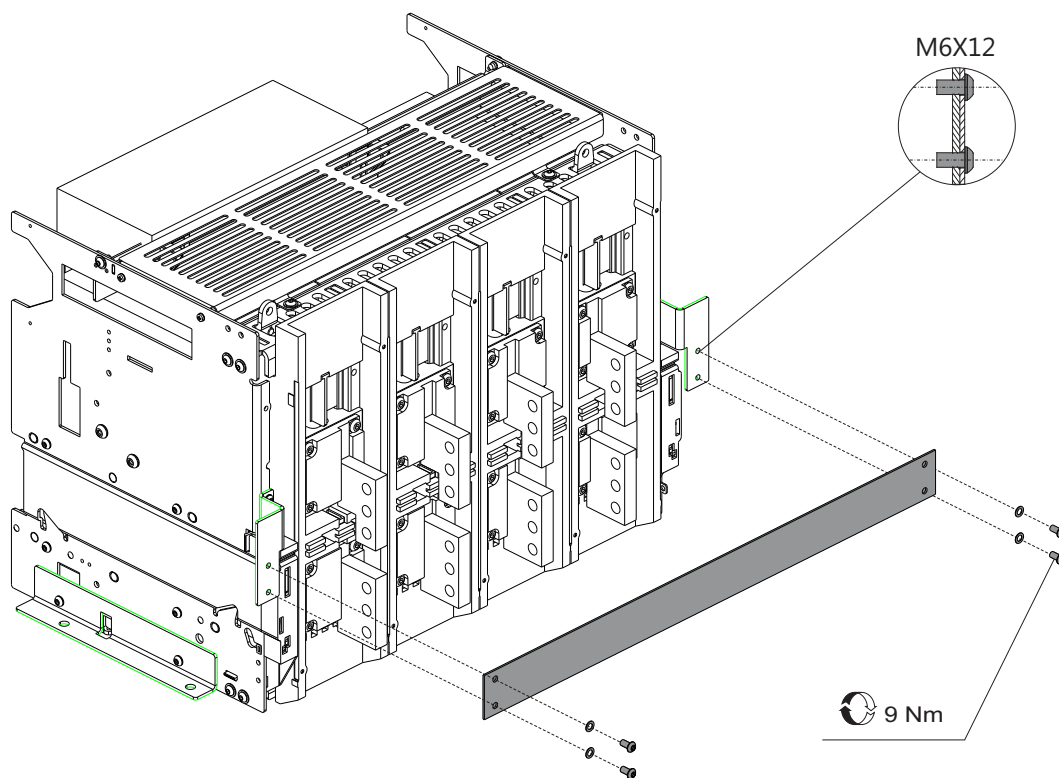
27 For E4.2 VR-M20H_M25H VR 2000~2500A



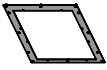
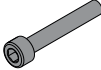
28 For E4.2 VR-M20H_M25H VR 2000~2500A

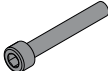
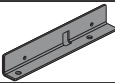
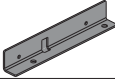


29 For E4.2 VR-M20H_M25H VR 2000~2500A

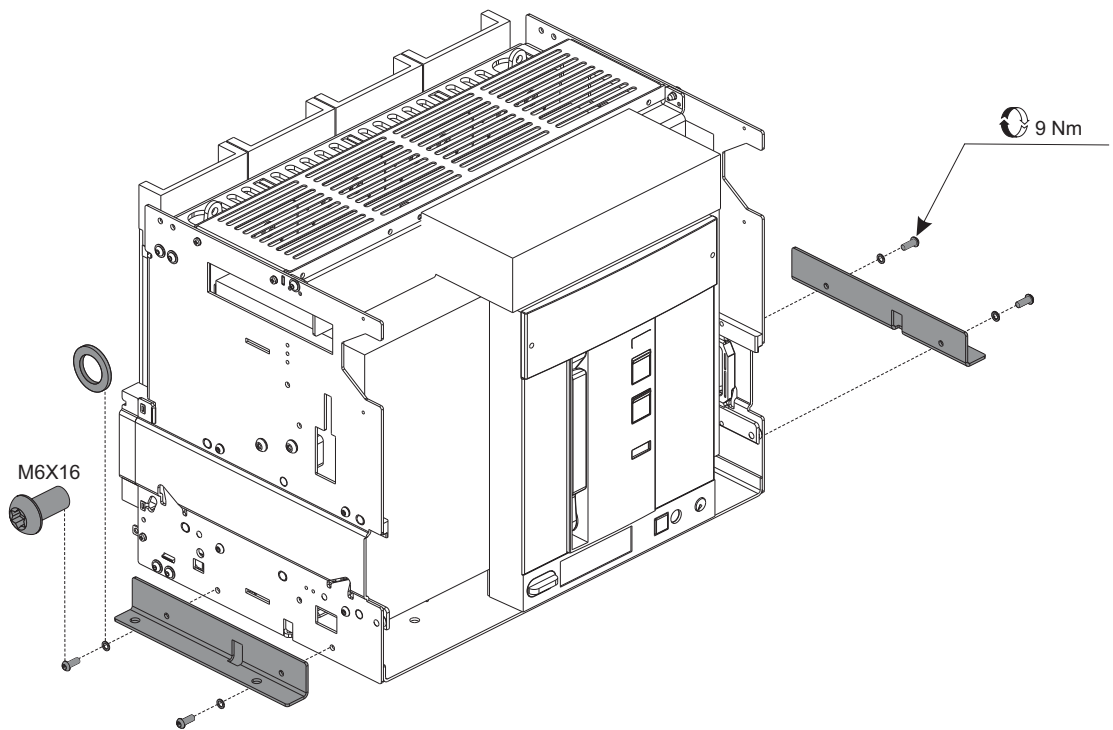


E4.2 HR-M32H HR 3200A

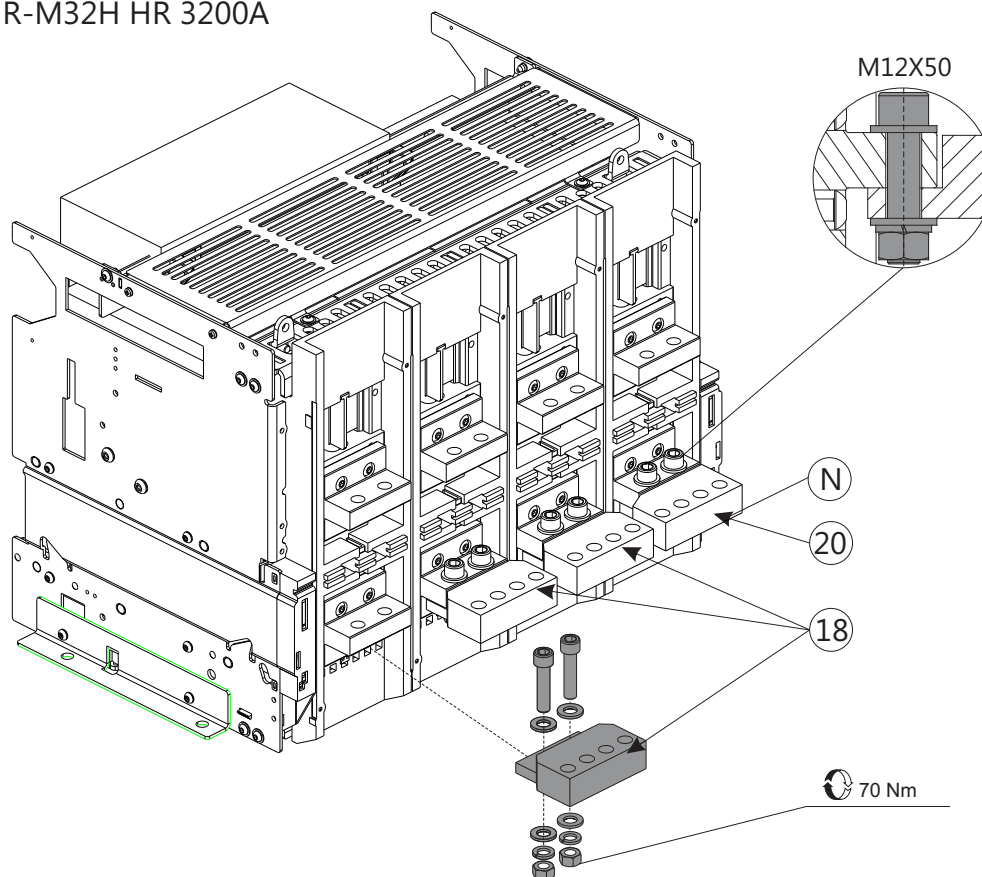
		3p	4p
		1	0
		0	1
		1	1
		1	1
	17	3	3
	18	3	3
	19	0	1
	20	0	1
 M12X50		6	8

		3p	4p
 M12X70		6	8
 M12		24	32
 M12		12	16
 M12		12	16
 M6X16		4	4
 M6		4	4
		1	1
		1	1

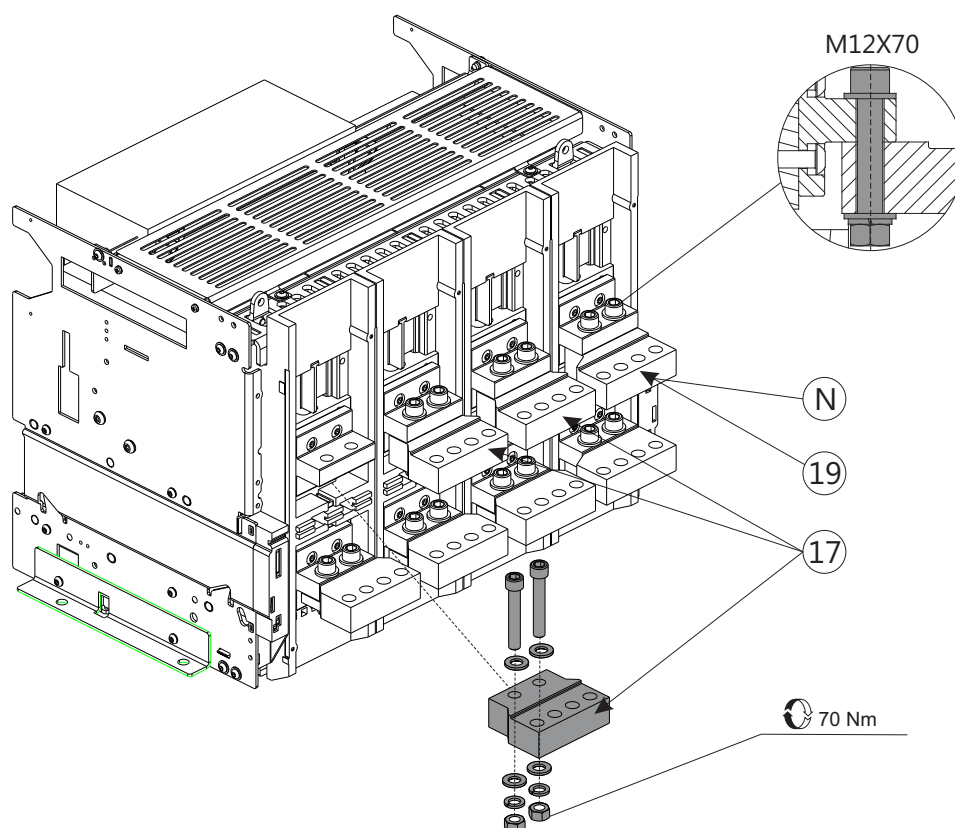
30 For E4.2 HR-M32H HR 3200A



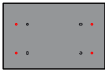
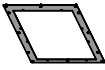
31 For E4.2 HR-M32H HR 3200A

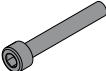
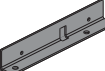
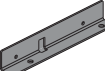


32 For E4.2 HR-M32H HR 3200A

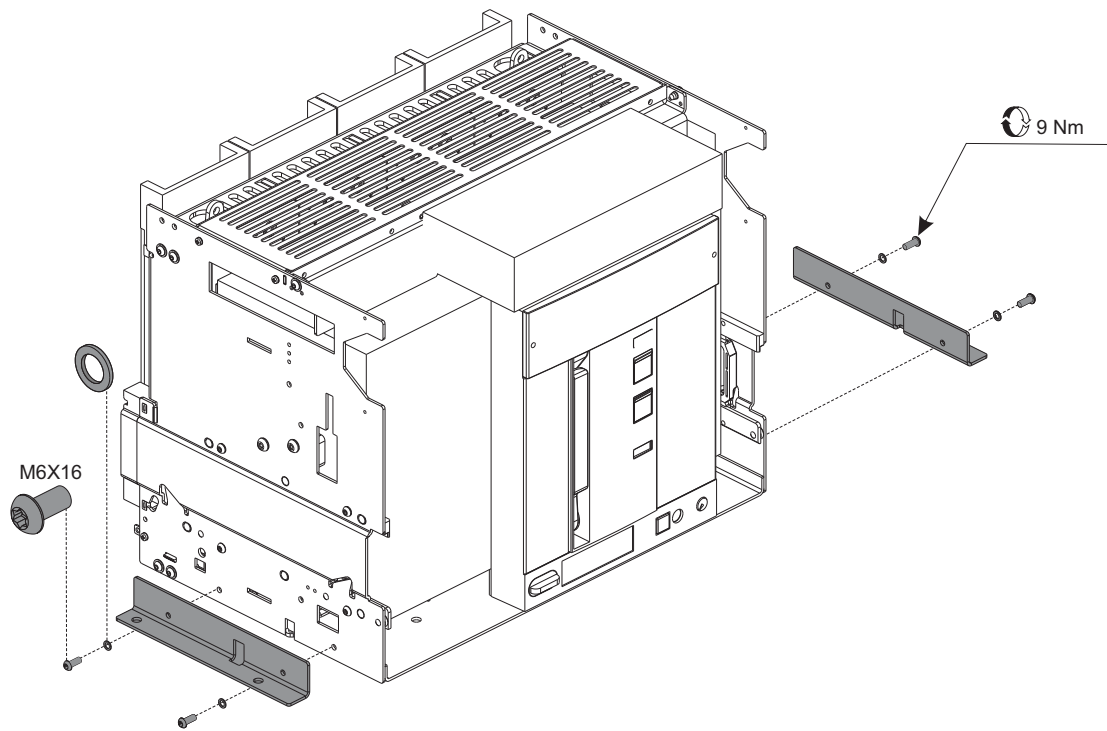


E4.2 VR-M32H VR 3200A

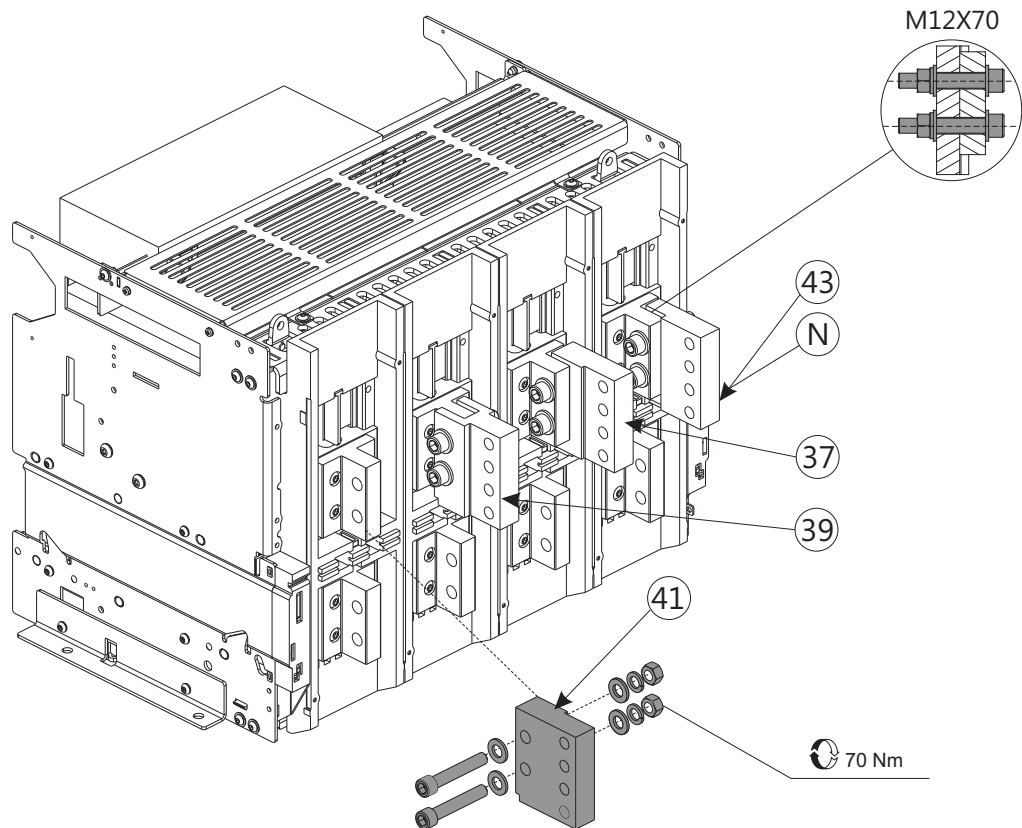
		3p	4p
		1	0
		0	1
		1	1
		1	1
 37		1	1
 38		1	1
 39		1	1
 40		1	1
 41		1	1
 42		1	1
 43		0	1
 44		0	1

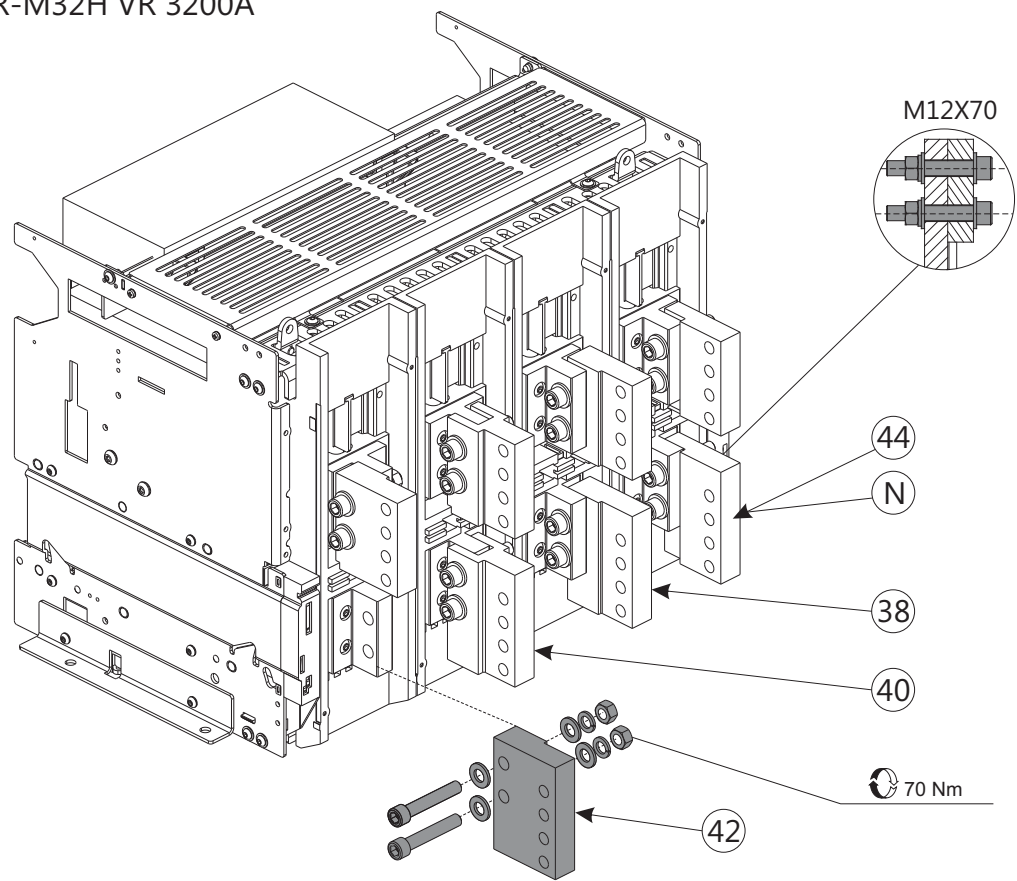
		3p	4p
 M12X70		12	16
 M12		24	32
 M12		12	16
 M12		12	16
 M6X16		4	4
 M6		4	4
		1	1
		1	1

33 For E4.2 VR-M32H VR 3200A

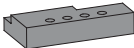
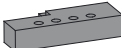
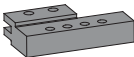
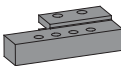
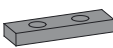


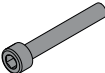
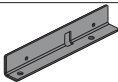
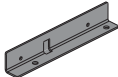
34 For E4.2 VR-M32H VR 3200A



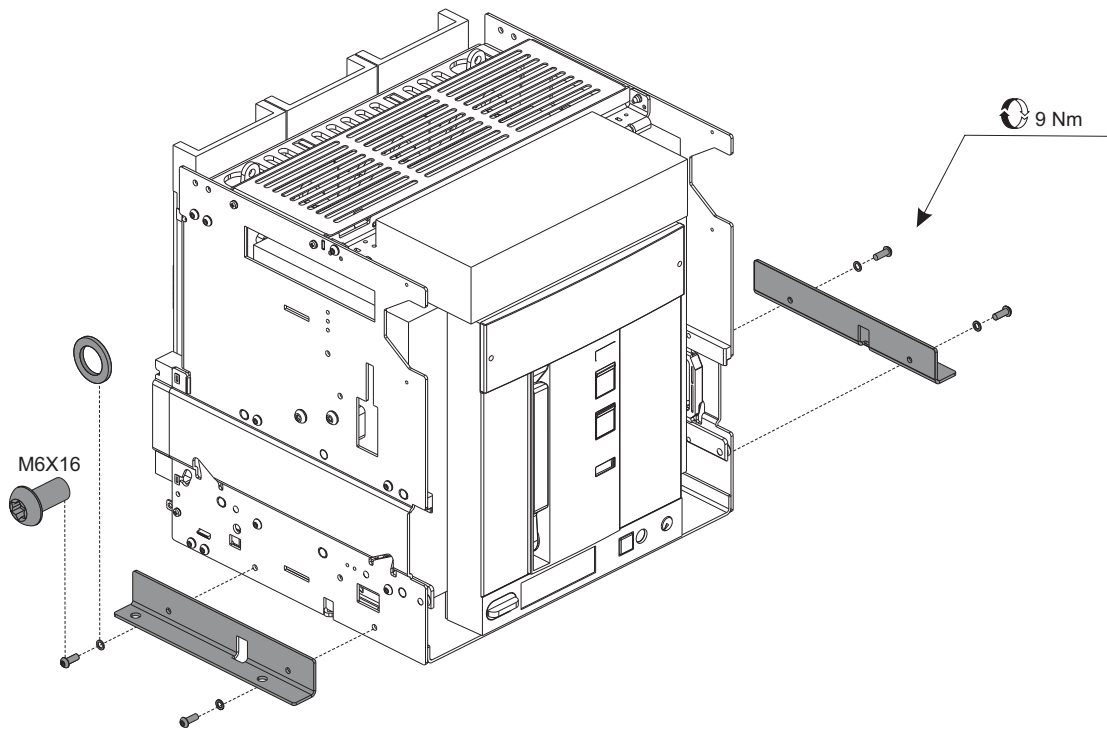


E4.2 HR-M40H HR 4000A

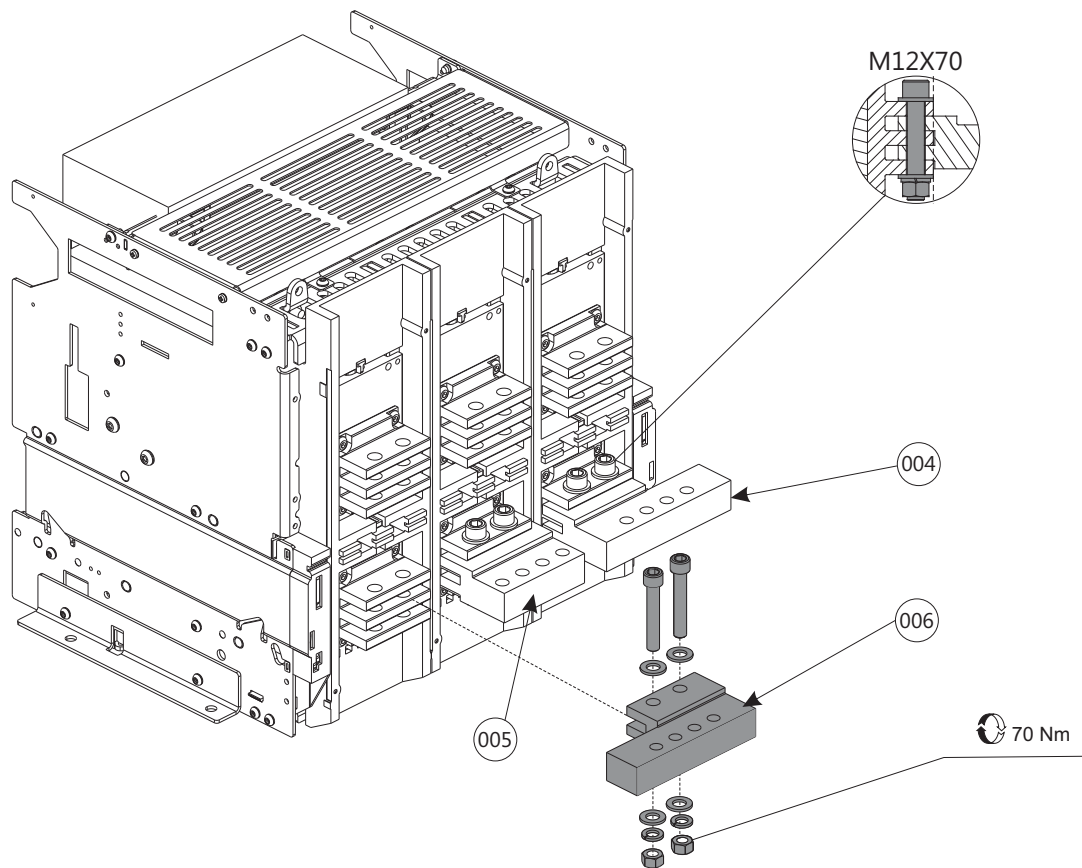
		3p
		1
		1
		1
	001	1
	002	1
	003	1
	004	1
	005	1
	006	1
		6

		3p
	M12X70	6
	M12X90	6
	M12	24
	M12	12
	M12	12
	M6X16	4
	M6	4
		1
		1

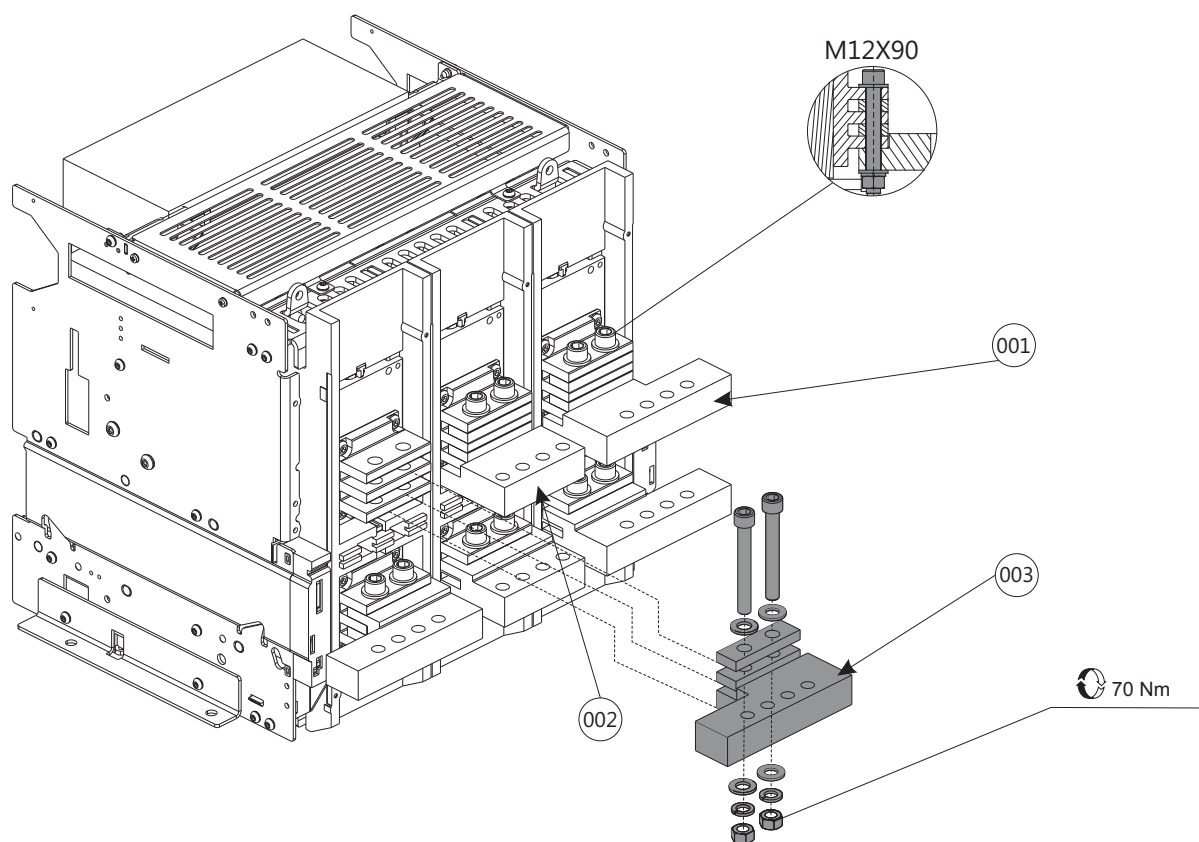
36 For E4.2 HR-M40H HR 4000A



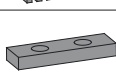
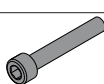
37 For E4.2 HR-M40H HR 4000A

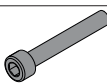
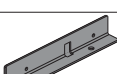
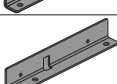


38 For E4.2 HR-M40H HR 4000A

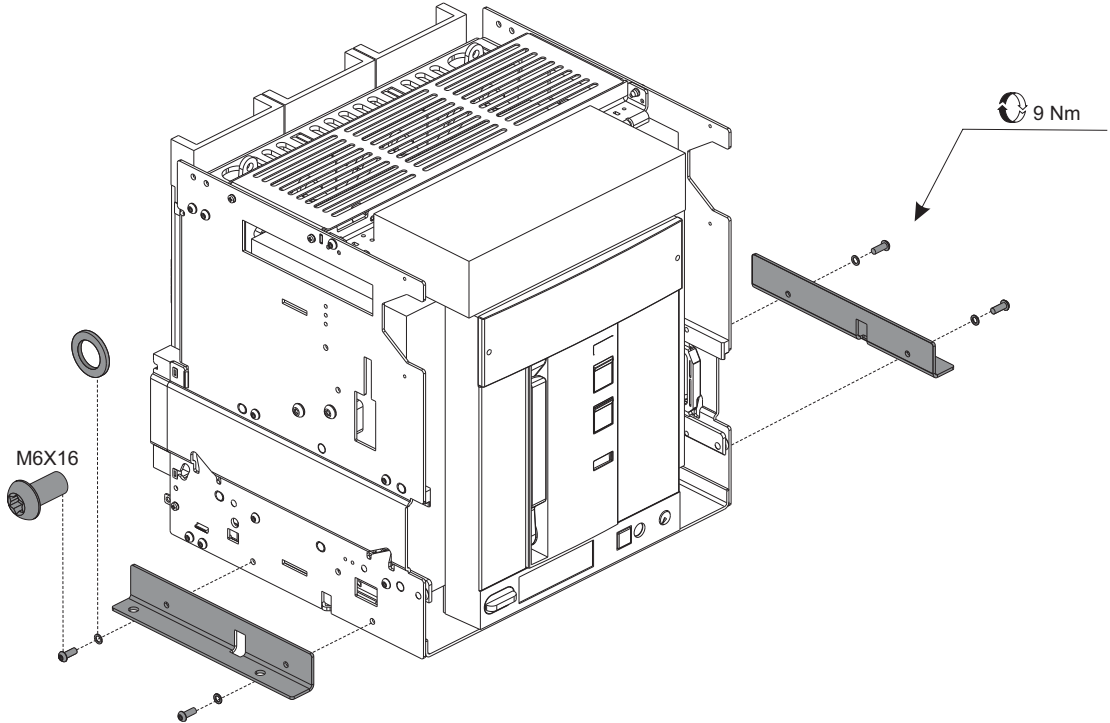


E4.2 HR-M40H VR 4000A

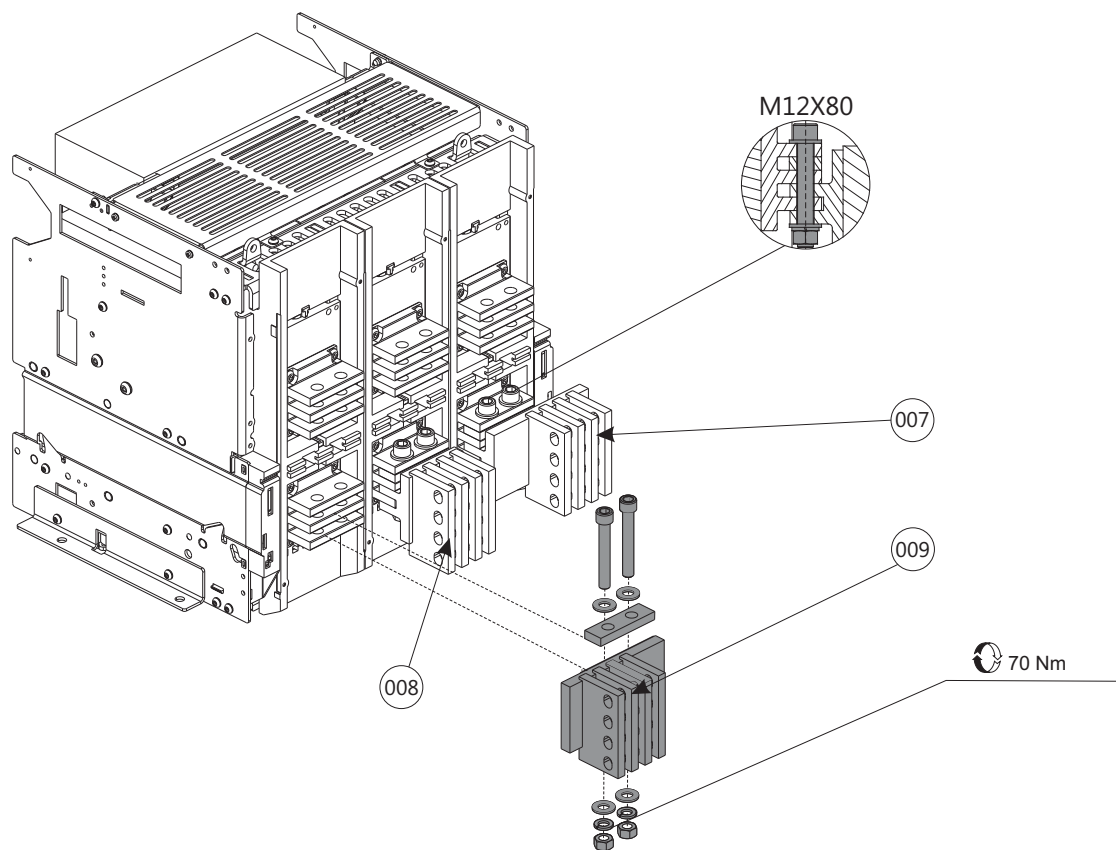
		3p
		1
		1
		1
	007	2
	008	2
	009	2
		3
	M12X70	6

		3p
	M12X80	6
	M12	24
	M12	12
	M12	12
	M6X16	4
	M6	4
		1
		1

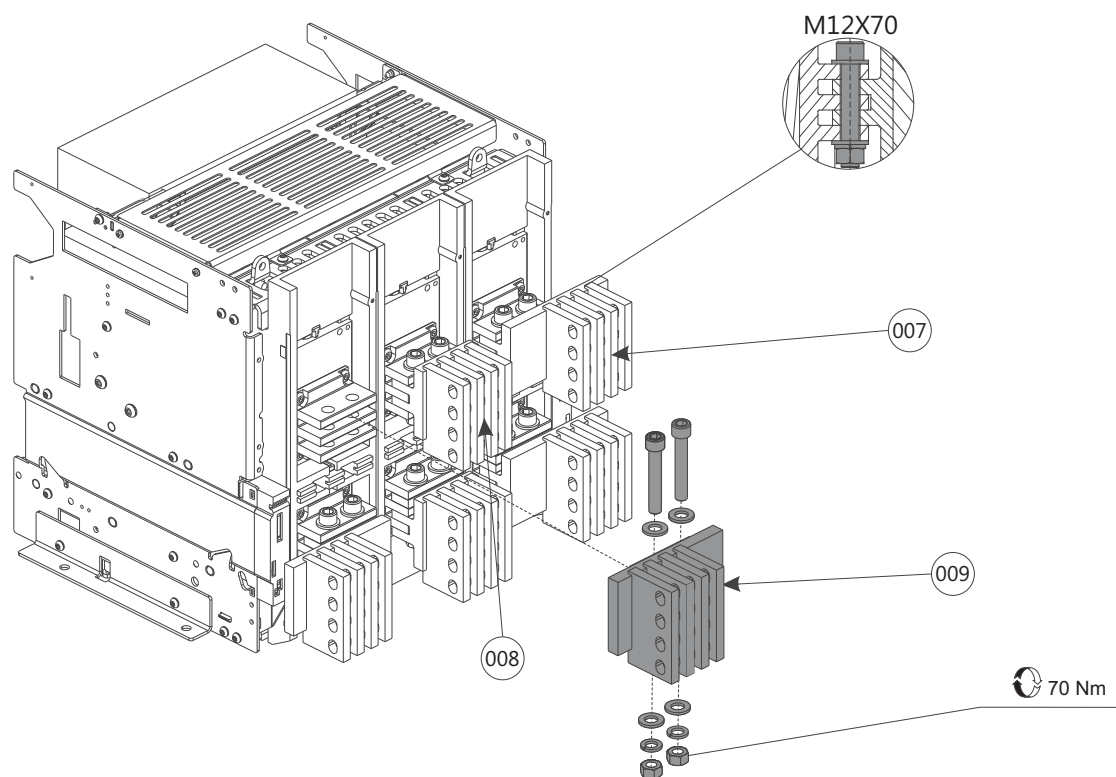
39 For E4.2 HR-M40H VR 4000A



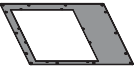
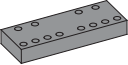
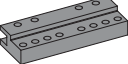
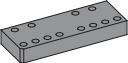
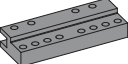
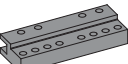
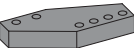
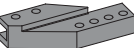
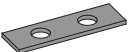
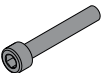
40 For E4.2 HR-M40H VR 4000A

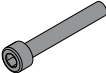
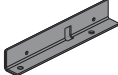
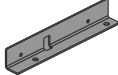


41 For E4.2 HR-M40H VR 4000A

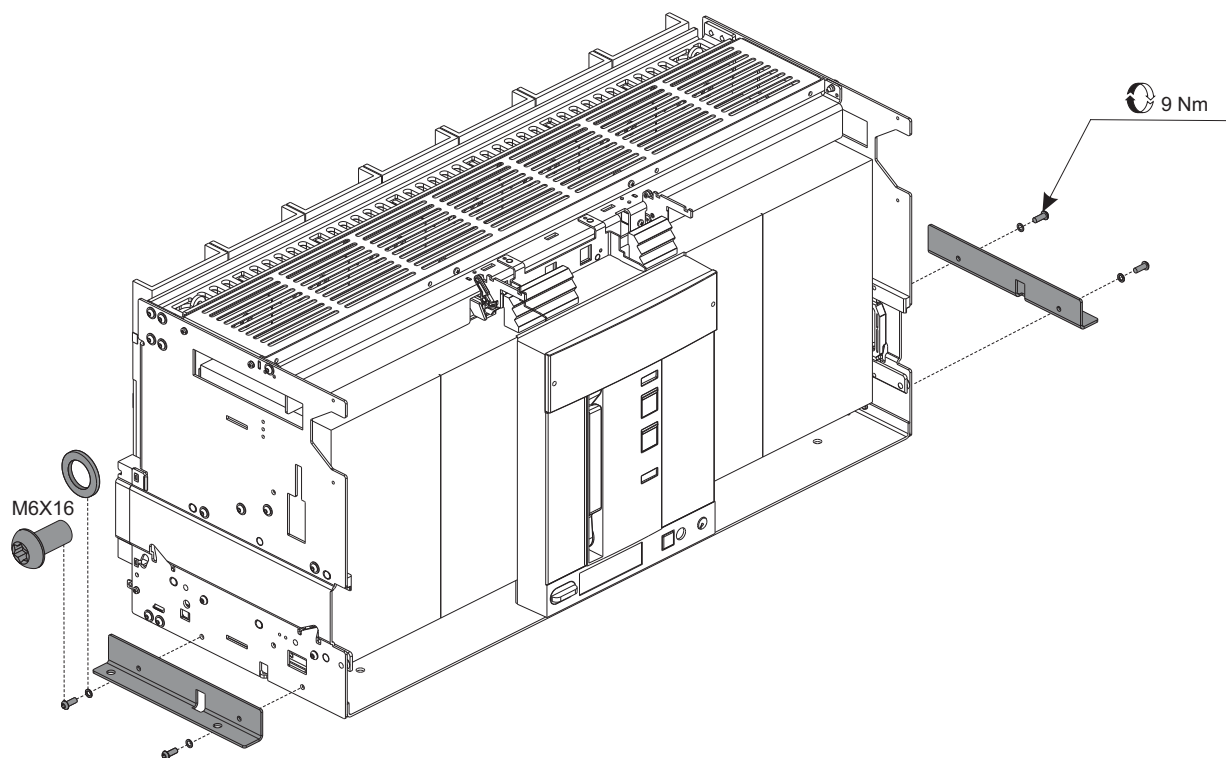


E6.2 HR-M50H HR 5000A

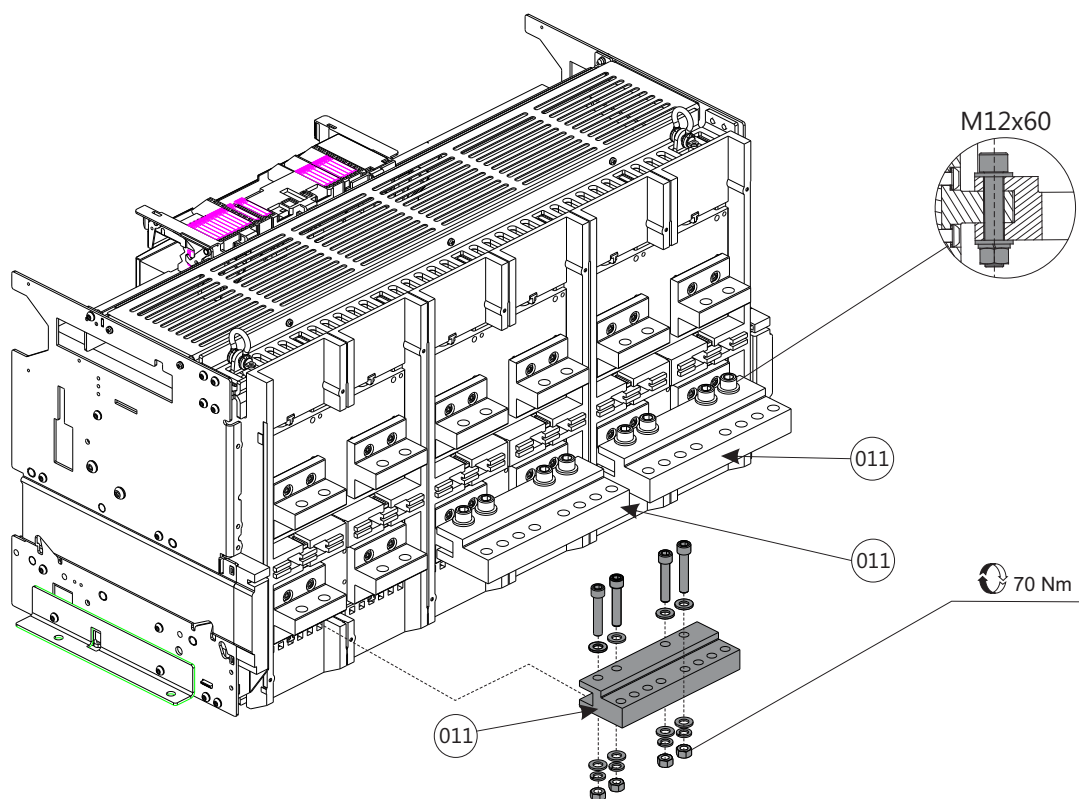
		3p	4p
		1	0
		0	1
		1	0
		0	1
		1	0
		0	1
	010	3	1
	011	3	1
	012	0	2
	013	0	1
	014	0	1
	015	0	1
	016	0	1
		6	7
	M12X60	12	14

		3p	4p
	M12X70	12	14
	M12	48	56
	M12	24	28
	M12	24	28
	M6X16	4	4
	M6	4	4
		1	1
		1	1

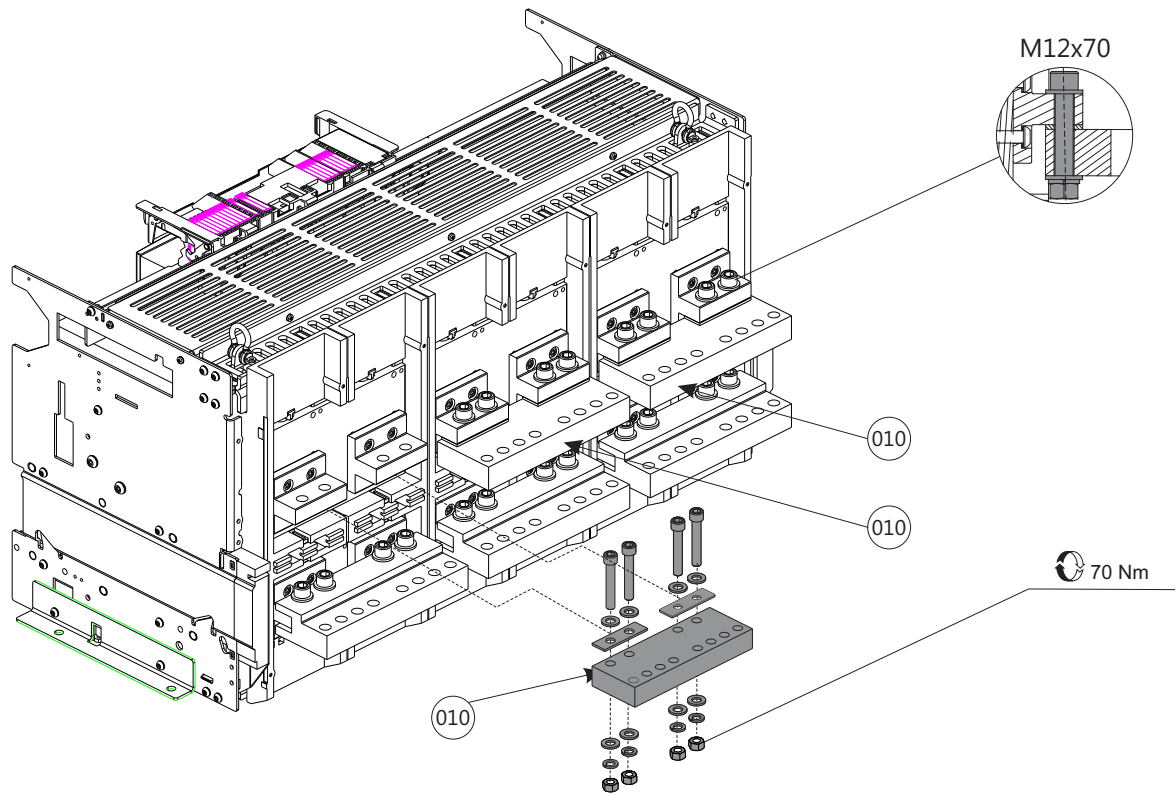
42 For E6.2 HR-M50H HR 5000A



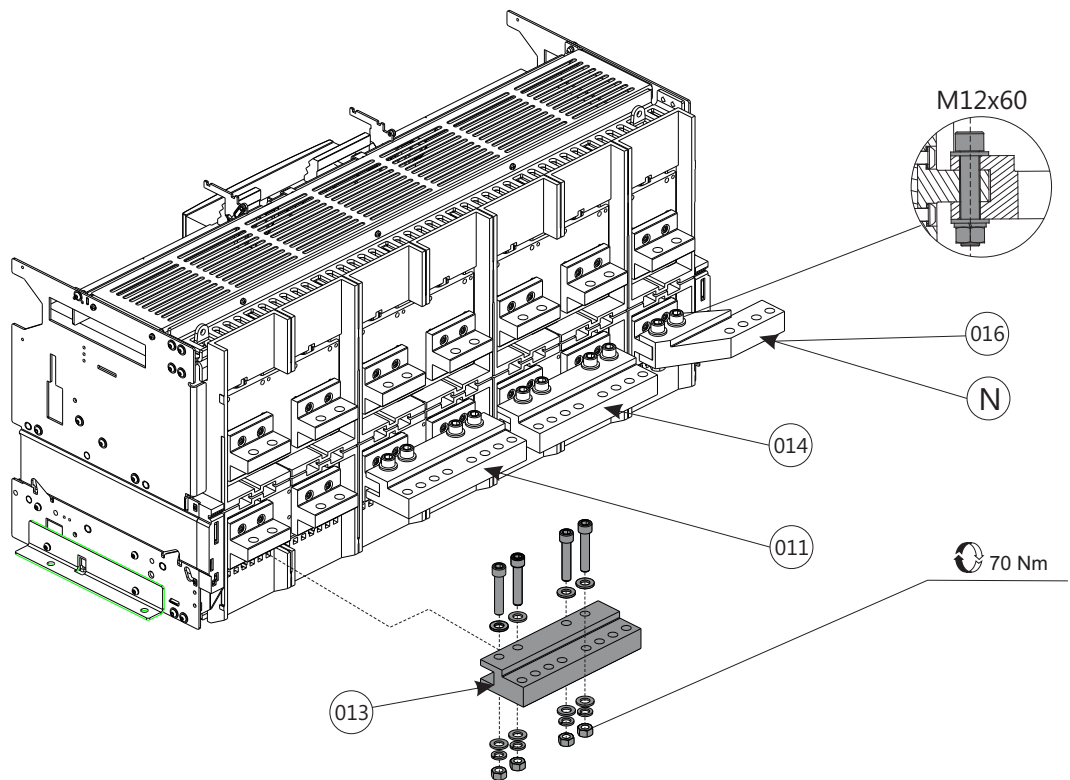
43 For E6.2 HR 3P-M50H HR 3P 5000A



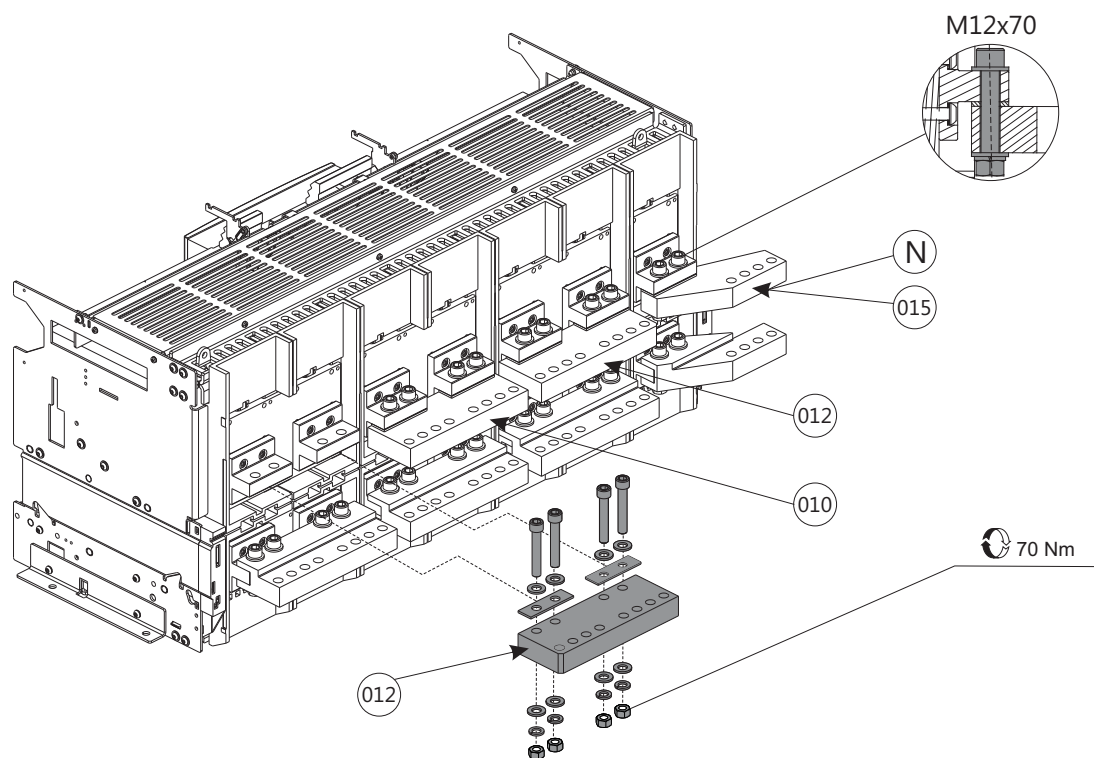
44 For E6.2 HR 3P-M50H HR 3P 5000A



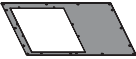
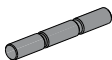
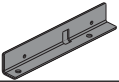
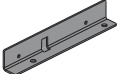
45 For E6.2 HR 4P-M50H HR 4P 5000A

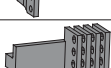


46 For E6.2 HR 4P-M50H HR 4P 5000A

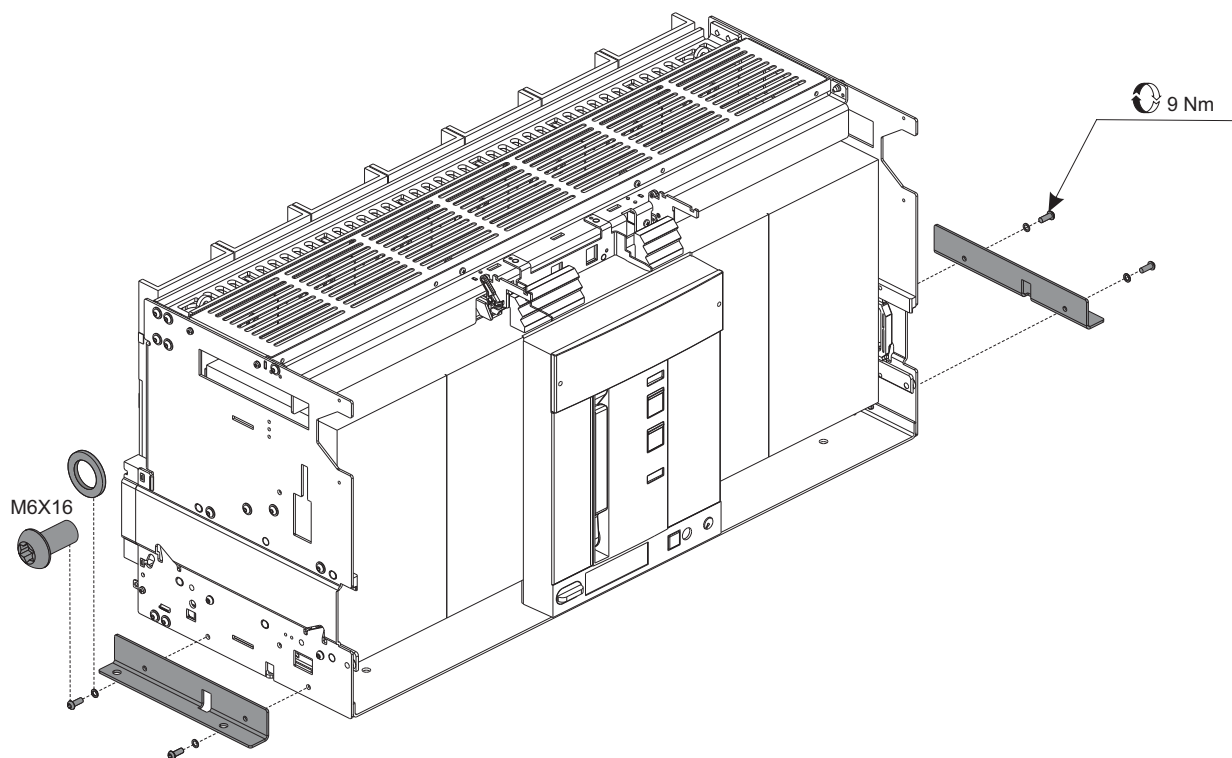


E6.2 VR-M50H VR 5000A

	3p	4p
	1	0
	0	1
	1	0
	0	1
	1	0
	0	1
 M12X85	24	24
 M12	48	48
 M12X65	0	4
 M12	0	8
 M12	0	4
 M12	48	52
 M6X16	4	4
 M6	4	4
	1	1
	1	1

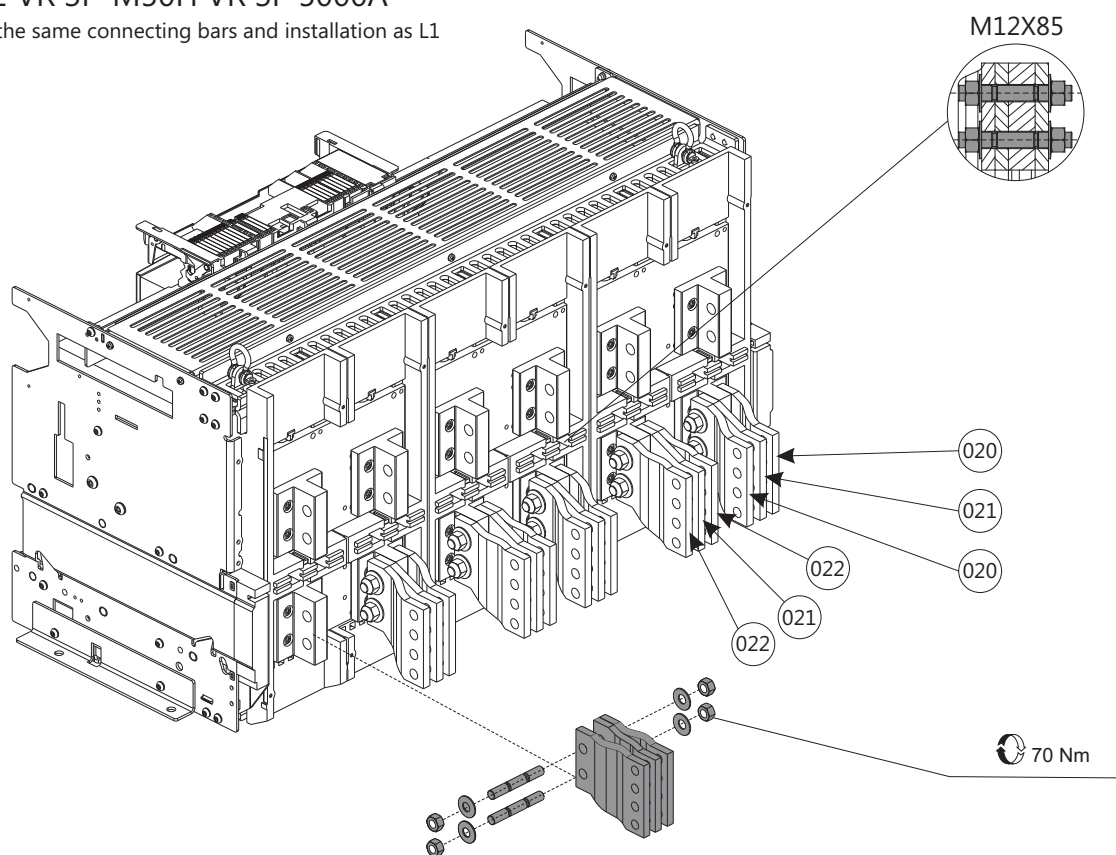
	3p	4p
 017	6	2
 018	6	2
 019	6	2
 020	6	2
 021	6	2
 022	6	2
 023	0	2
 024	0	2
 025	0	2
 026	0	2
 027	0	2
 028	0	2
 029	0	2
 030	0	2
 031	0	2
 032	0	2
 033	0	2
 034	0	2
 035	0	2
 036	0	2

47 For E6.2 VR-M50H VR 5000A



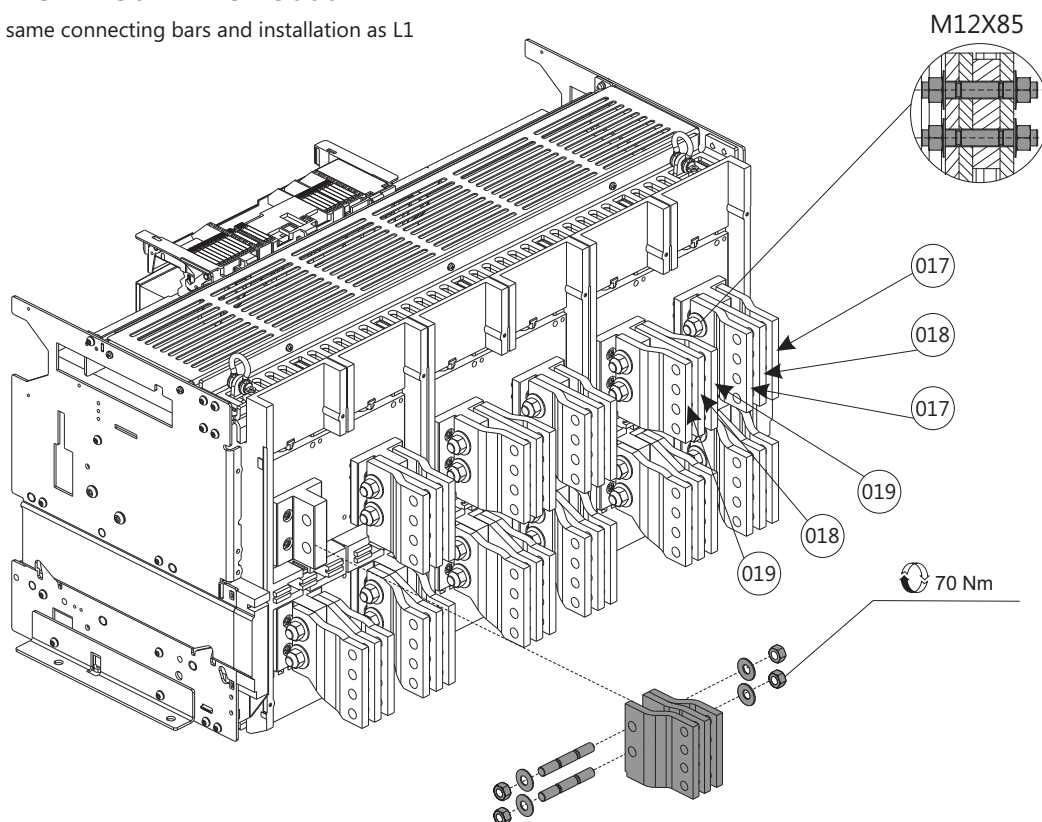
48 For E6.2 VR 3P-M50H VR 3P 5000A

L2/L3 Use the same connecting bars and installation as L1

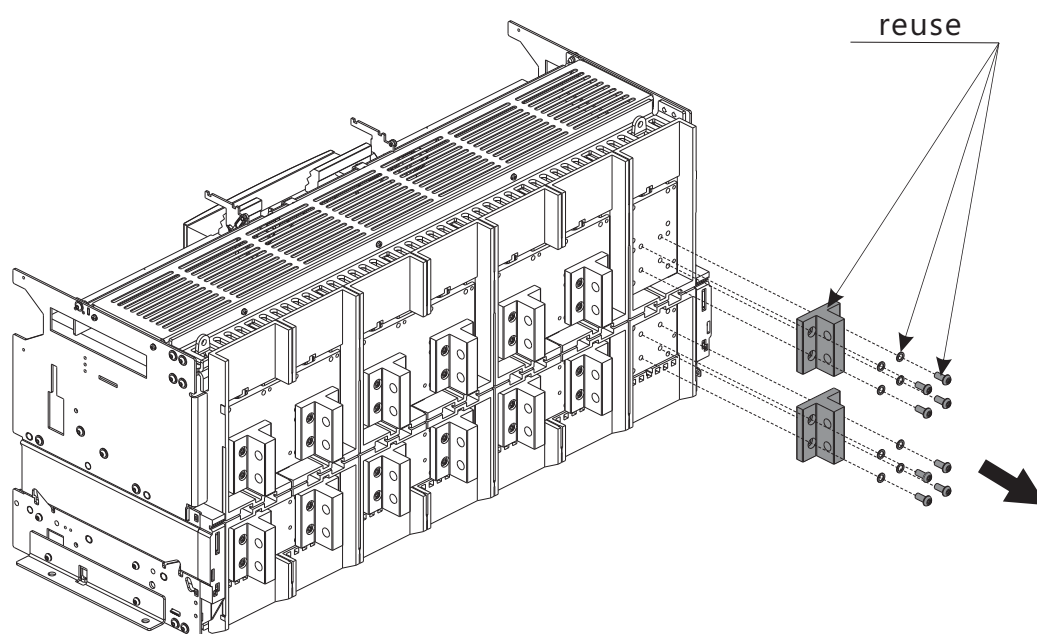


49 For E6.2 VR 3P-M50H VR 3P 5000A

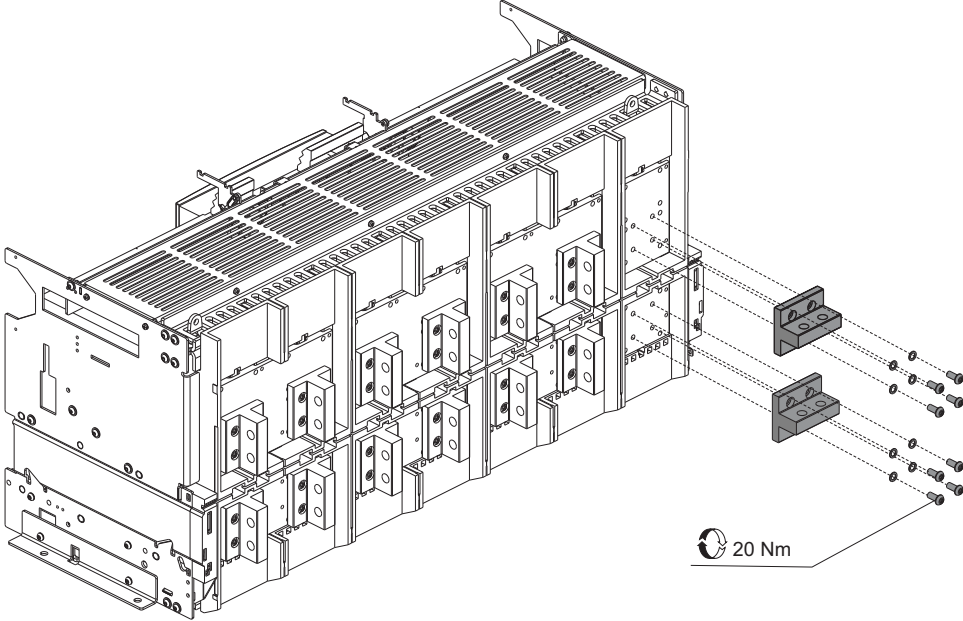
L2/L3 Use the same connecting bars and installation as L1



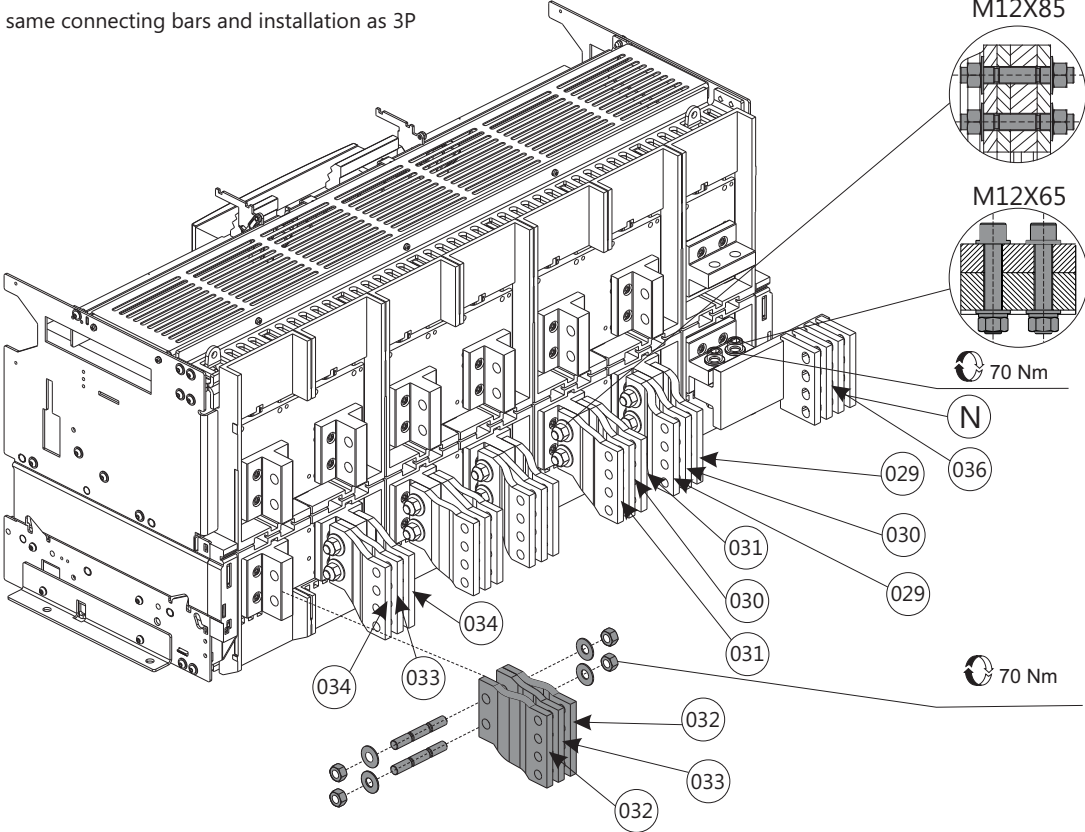
50 For E6.2 VR-M50H VR 5000A (4 poles only)



51 For E6.2 VR-M50H VR 5000A (4 poles only)

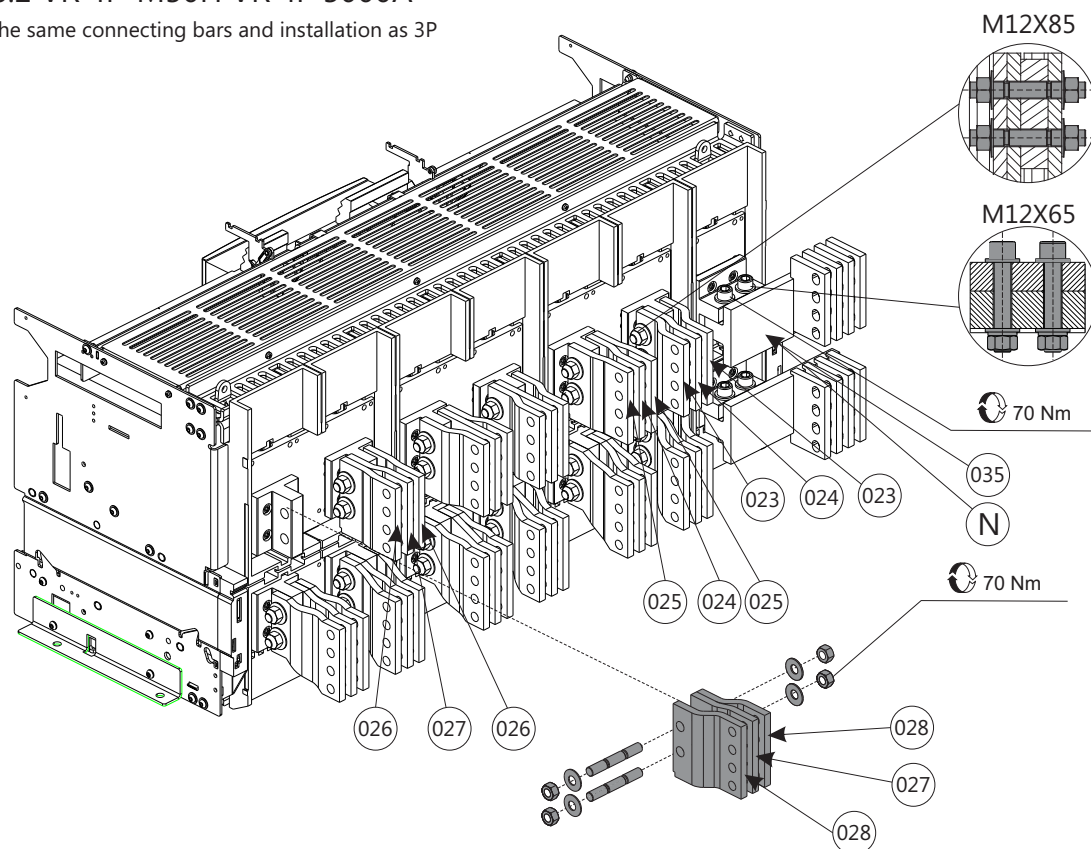


52 For E6.2 VR 4P-M50H VR 4P 5000A
L2 Use the same connecting bars and installation as 3P

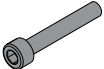
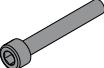
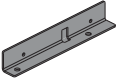
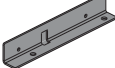


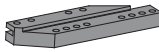
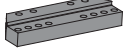
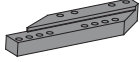
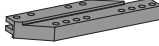
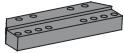
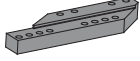
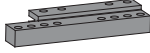
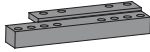
53 For E6.2 VR 4P-M50H VR 4P 5000A

L2 Use the same connecting bars and installation as 3P

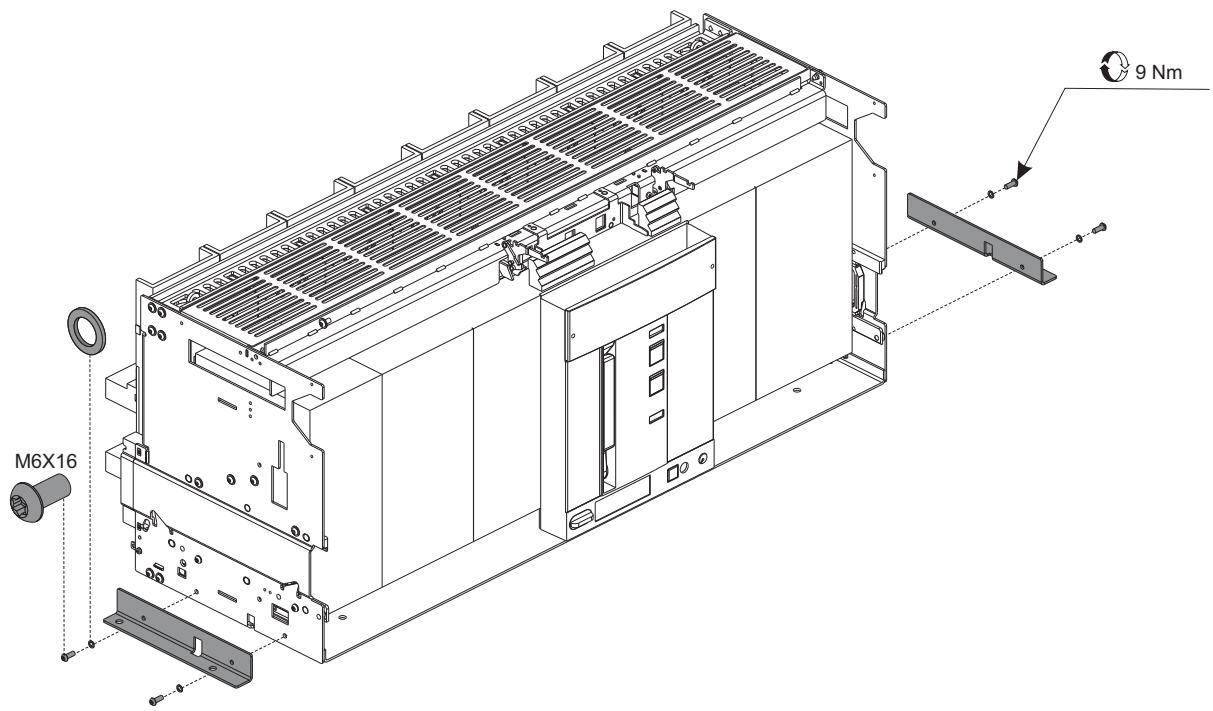


E6.2 HR-M63H HR 6300A

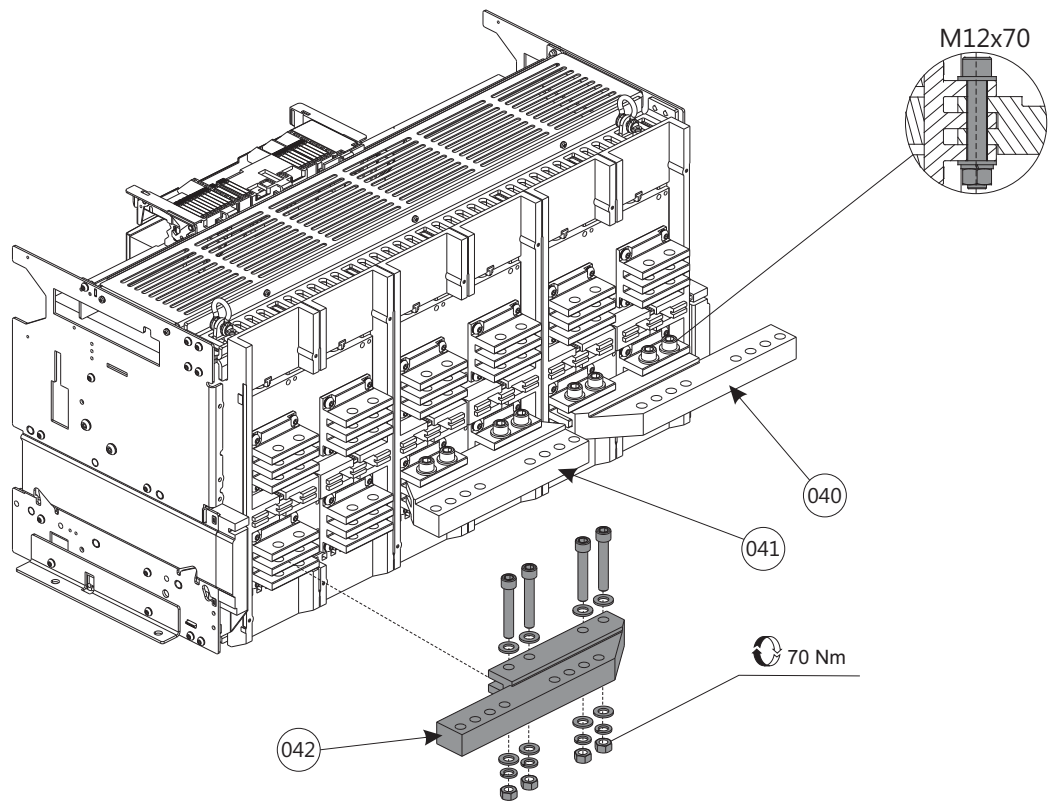
	3p	4p
	1	0
	0	1
	1	0
	0	1
	1	0
	0	1
 M12X70	12	14
 M12X90	12	14
 M12	48	56
 M12	24	28
 M12	24	28
 M6X16	4	4
 M6	4	4
	1	1
	1	1

	3p	4p
 037	1	0
 038	1	1
 039	1	0
 040	1	0
 041	1	1
 042	1	0
 043	0	1
 044	0	1
 045	0	1
 046	0	1
 047	0	1
 048	0	1
	6	7

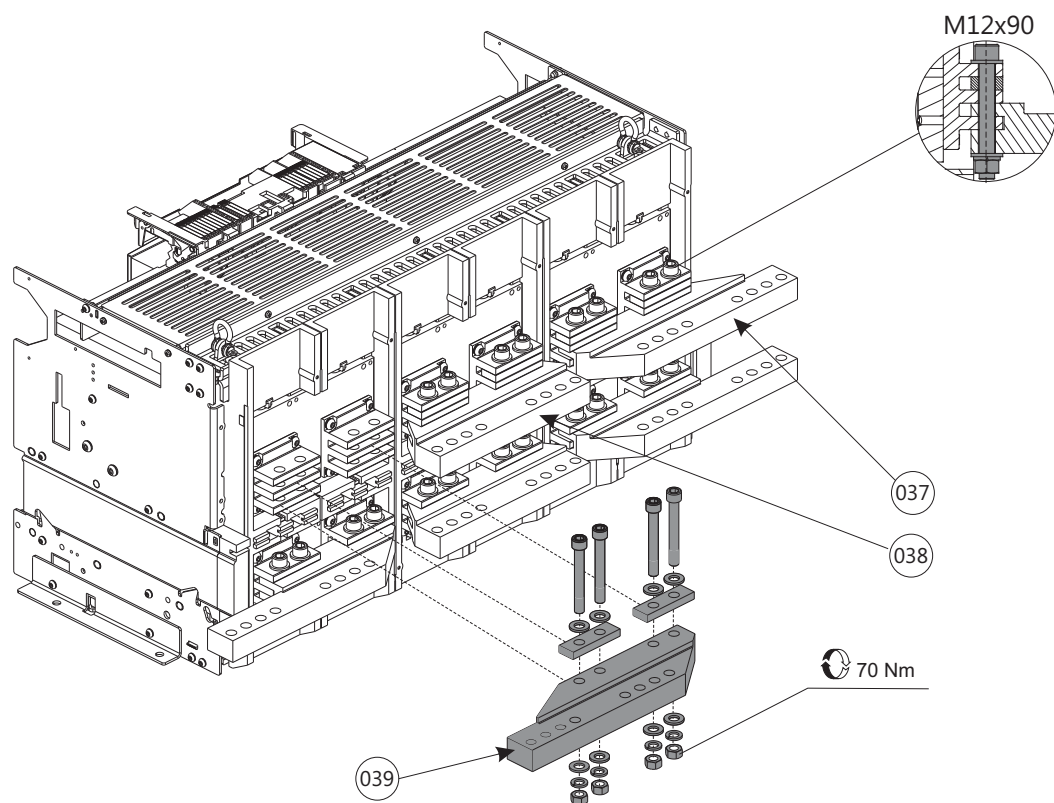
54 For E6.2 HR-M63H HR 6300A



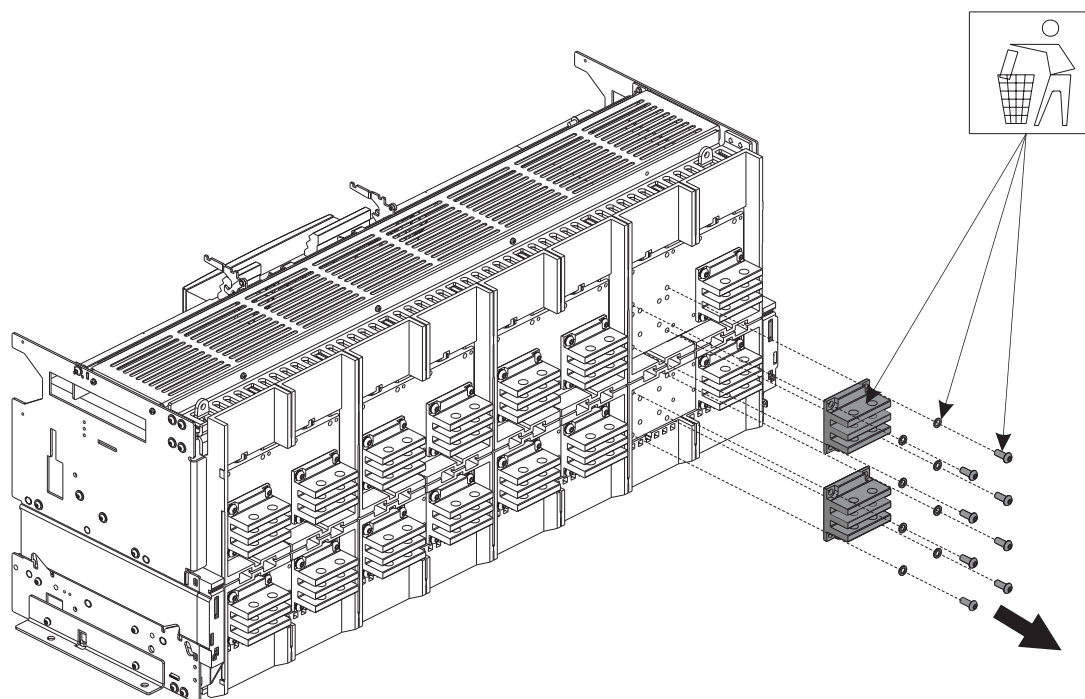
55 For E6.2 HR 3P-M63H HR 3P 6300A



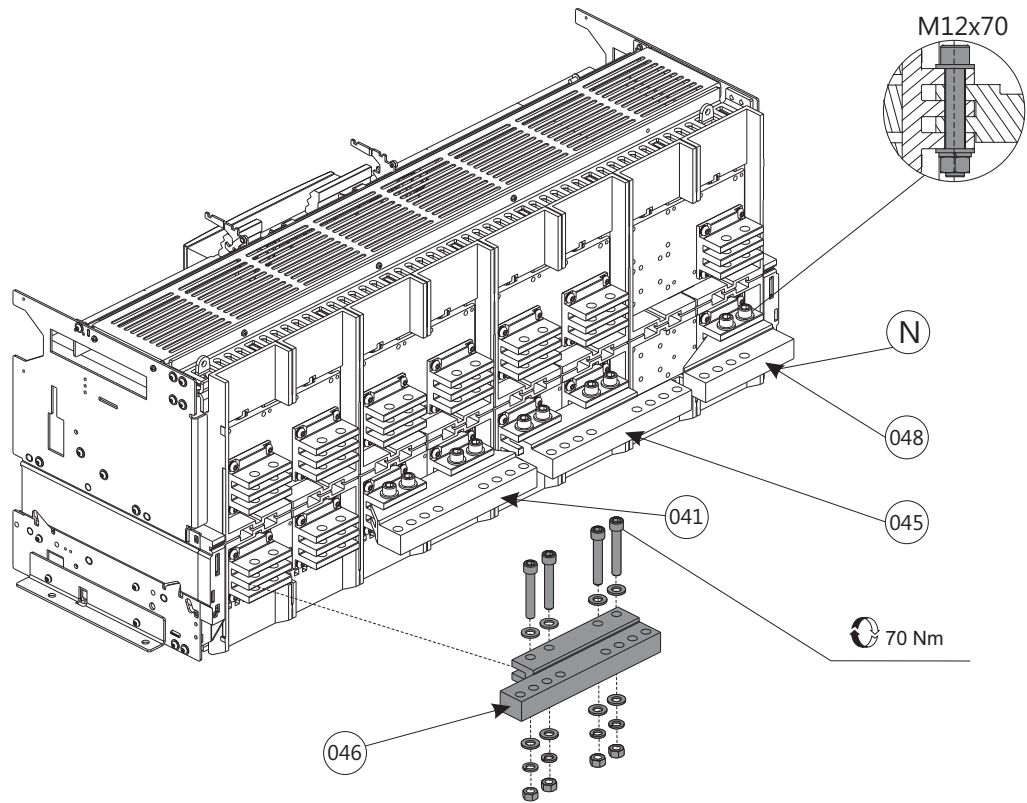
56 For E6.2 HR 3P-M63H HR 3P 6300A



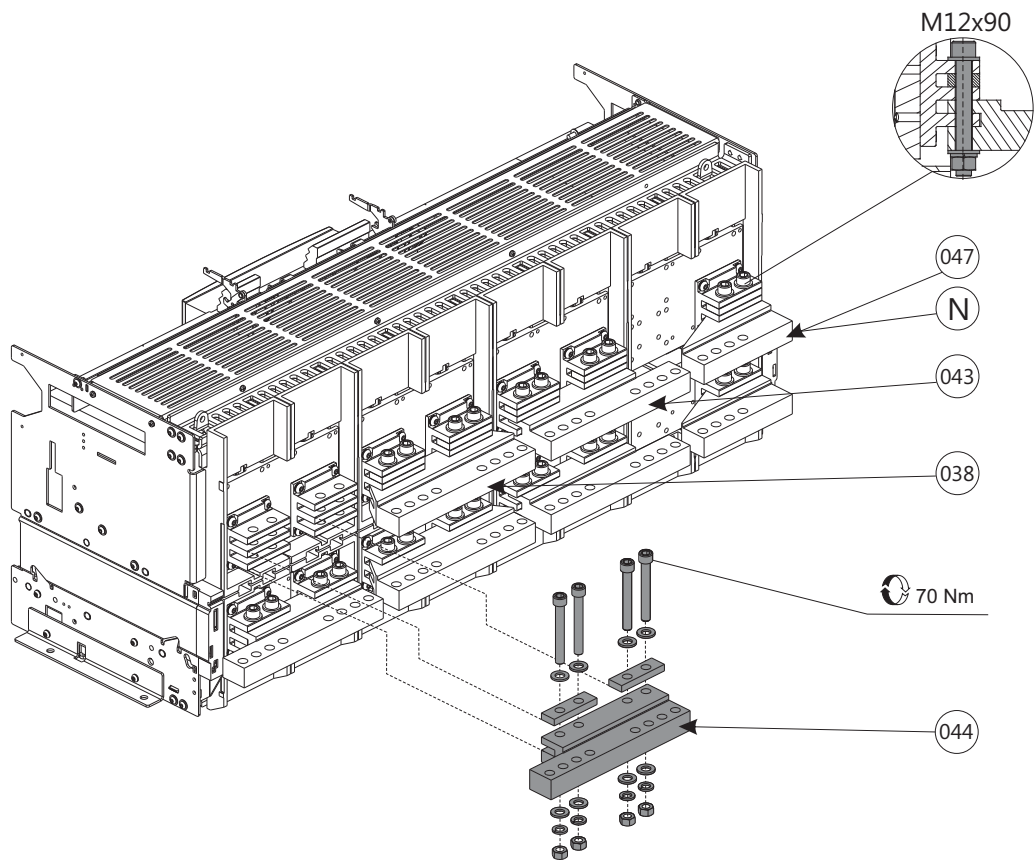
57 For E6.2 HR-M63H HR 6300A (4 poles only)



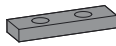
58 For E6.2 f HR-M63H HR 4P 6300A

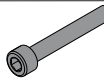
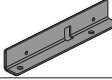
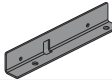


59 For E6.2 f HR-M63H HR 4P 6300A

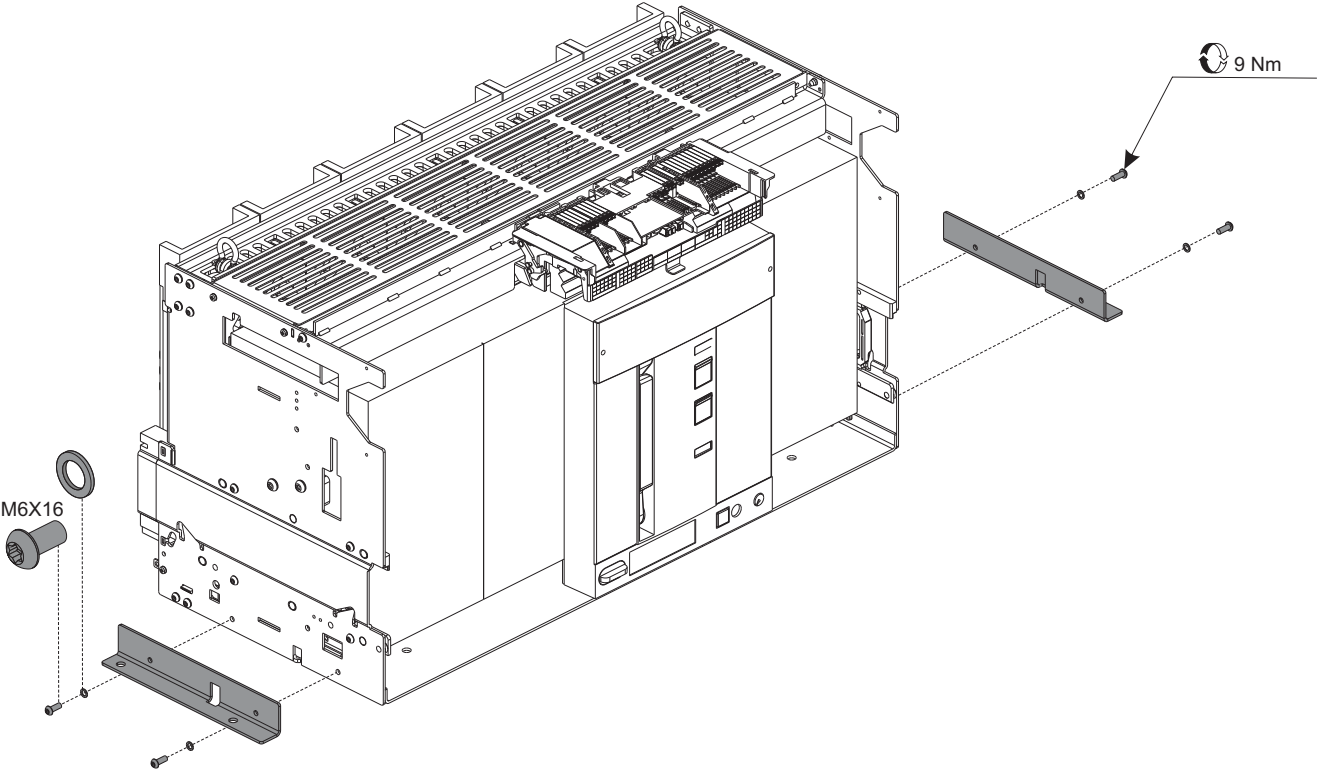


E6.2 HR 3P-M63H VR 3P 6300A

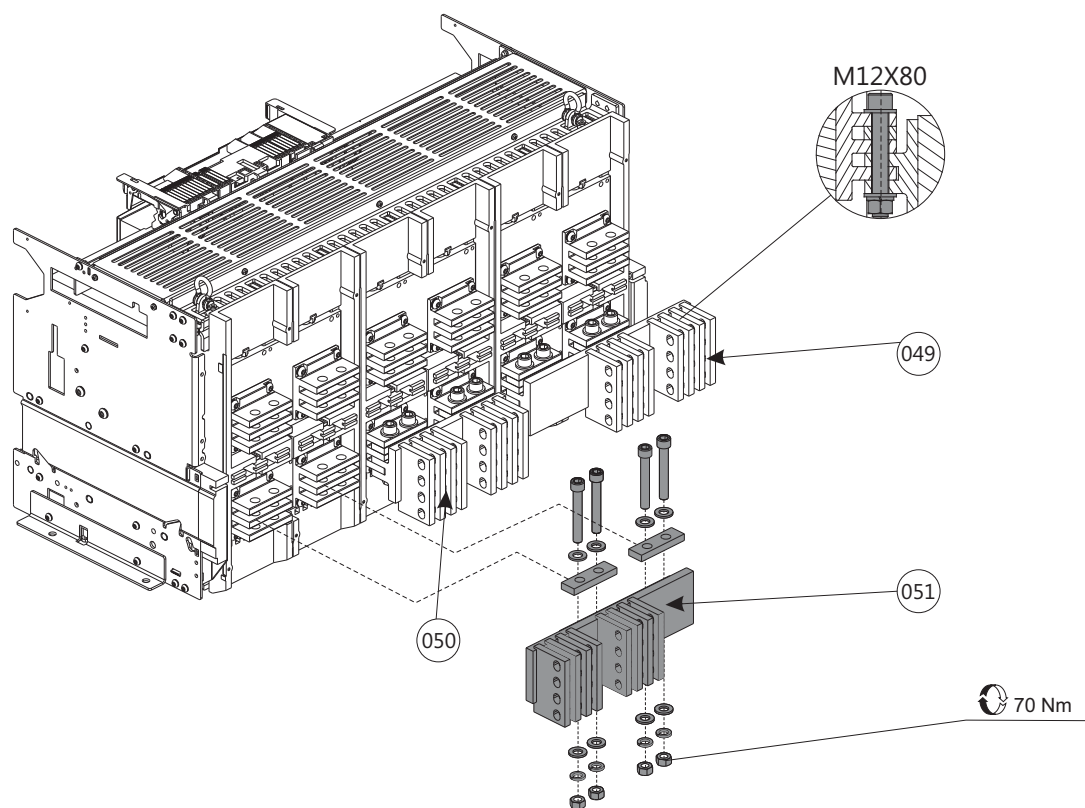
	3p
	1
	1
	1
 049	2
 050	2
 051	2
	6
 M12X70	12

	3p
 M12X80	12
 M12	48
 M12	24
 M12	24
 M6X16	4
 M6	4
	1
	1

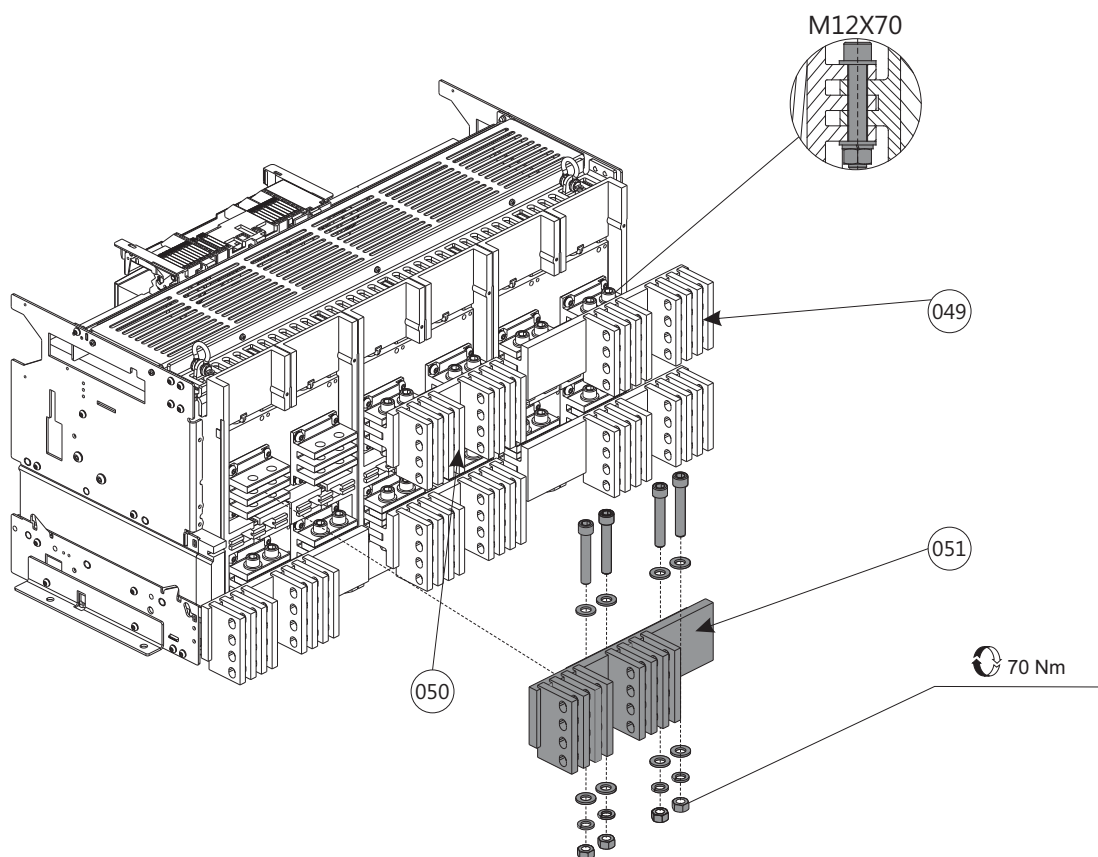
60 For E6.2 HR 3P-M63H VR 3P 6300A



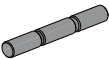
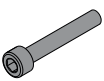
61 For E6.2 HR 3P-M63H VR 3P 6300A

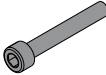
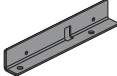
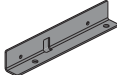


62 For E6.2 HR 3P-M63H VR 3P 6300A

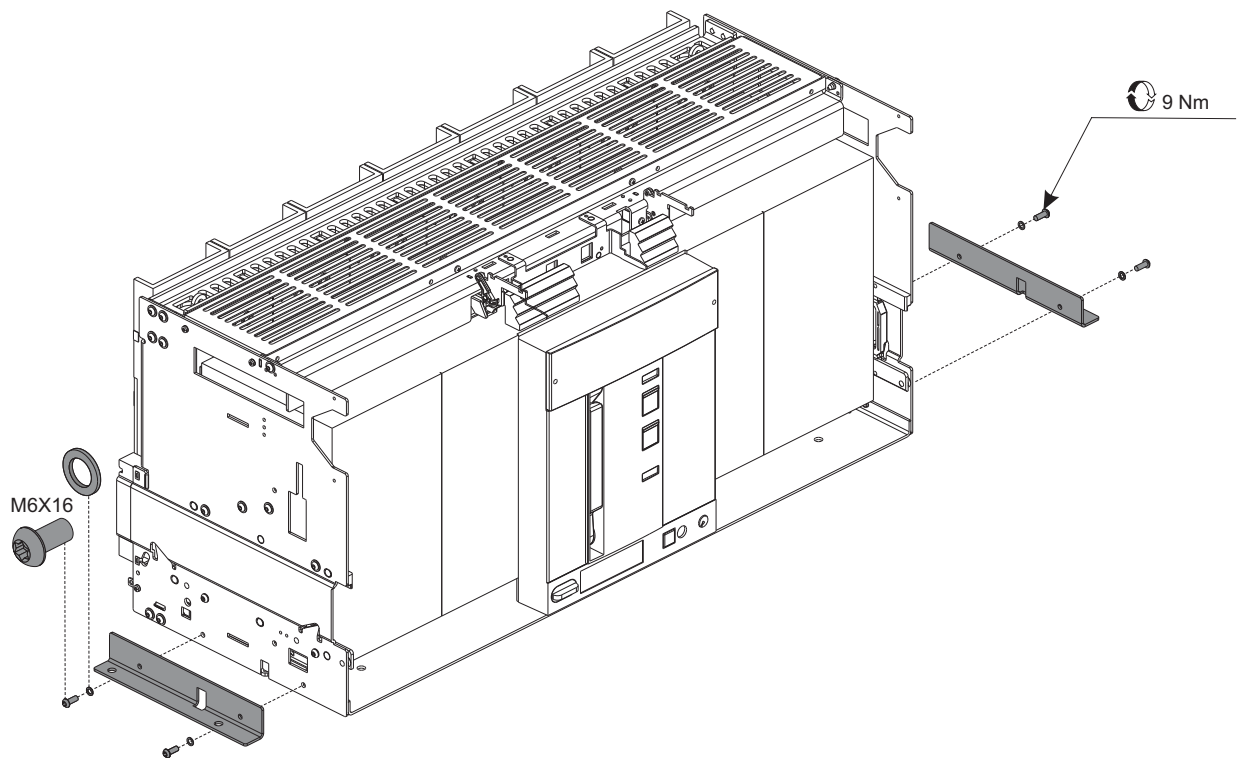


E6.2 VR 4P-M63H VR 4P 6300A

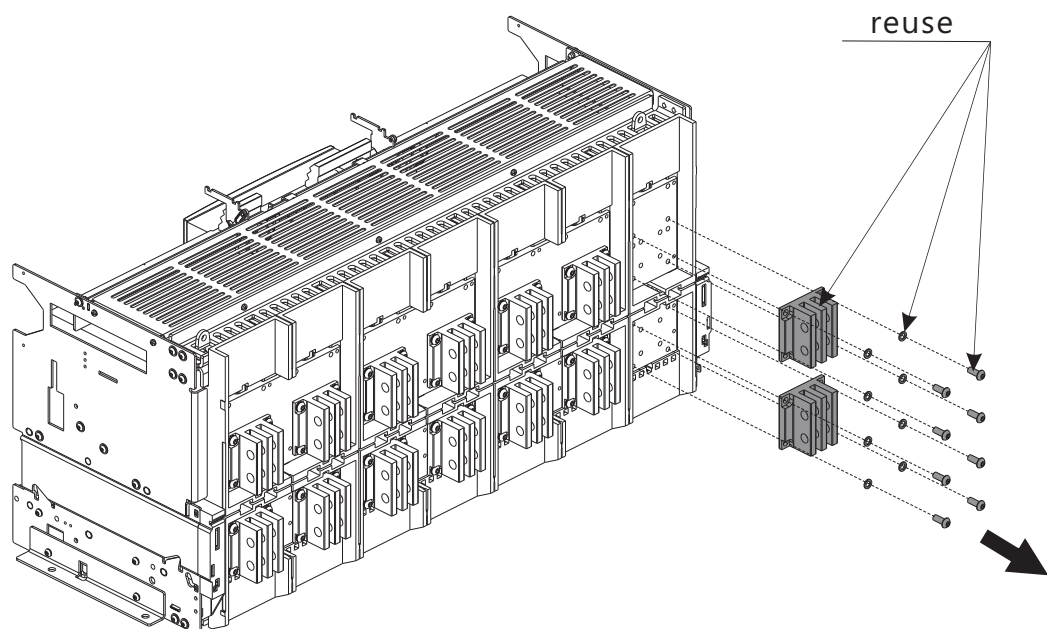
		4p
		1
		1
	052	5
	053	3
	054	4
	055	4
	056	3
	057	5
	058	5
	059	3
	060	4
	061	4
	062	3
	063	5
	064	2
		1
	M12	24
	M12	48
	M12X70	2

		4p
	M12X80	2
	M12	8
	M12	4
	M12	52
	M6X16	4
	M6	4
		1
		1

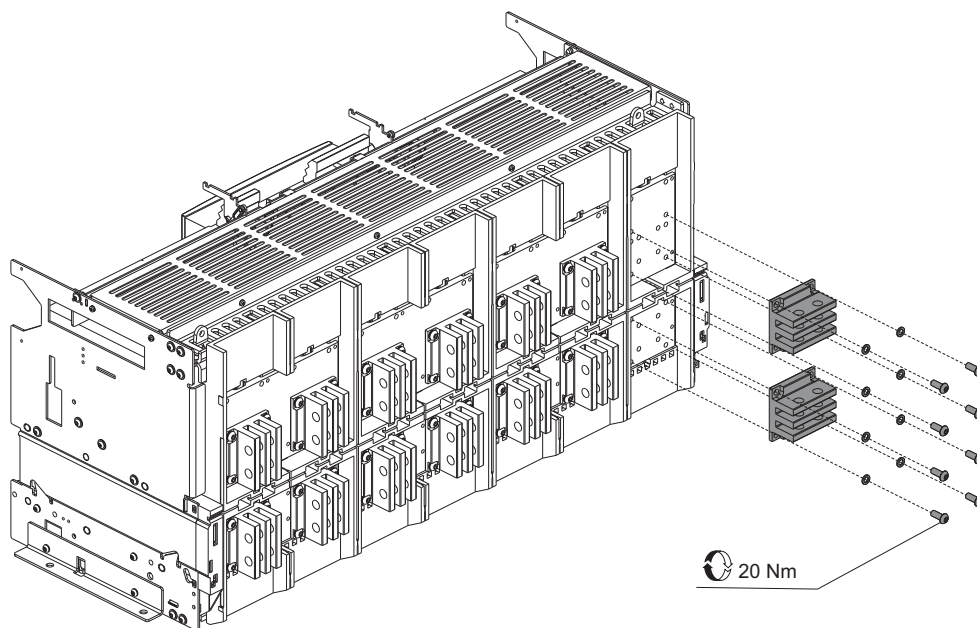
63 For E6.2 VR 4P-M63H VR 4P 6300A



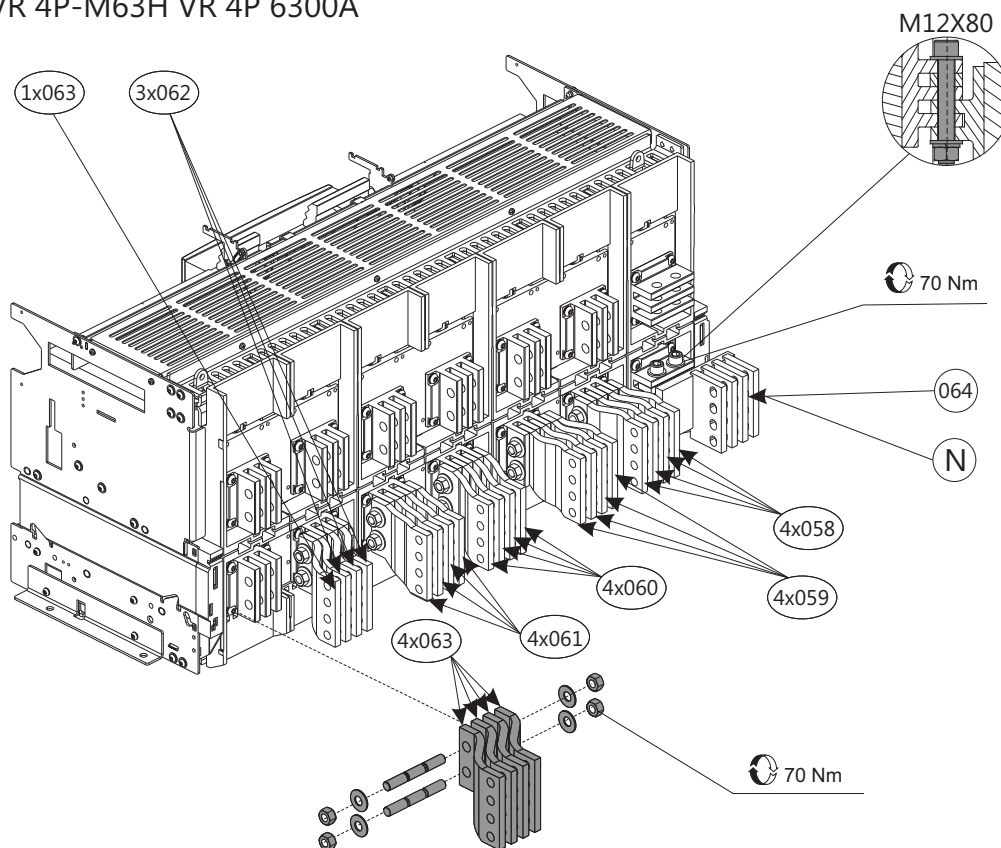
64 For E6.2 VR 4P-M63H VR 4P 6300A



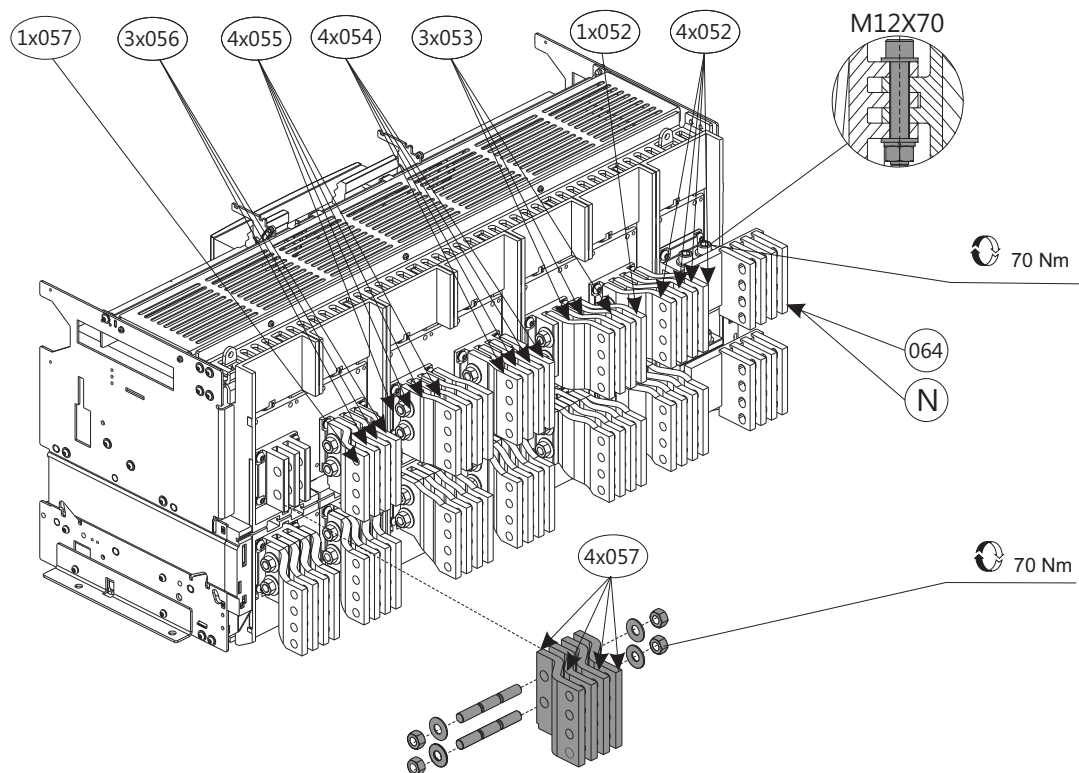
65 For E6.2 VR 4P-M63H VR 4P 6300A



66 For E6.2 VR 4P-M63H VR 4P 6300A

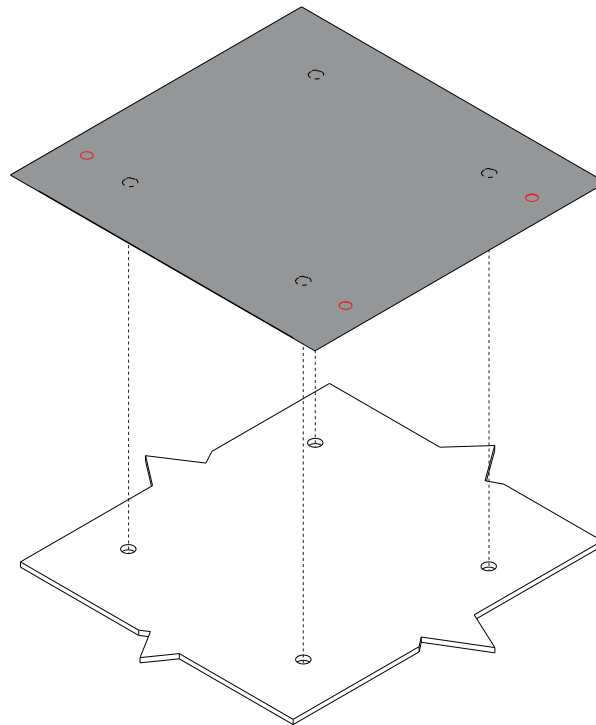


67 For E6.2 VR 4P-M63H VR 4P 6300A



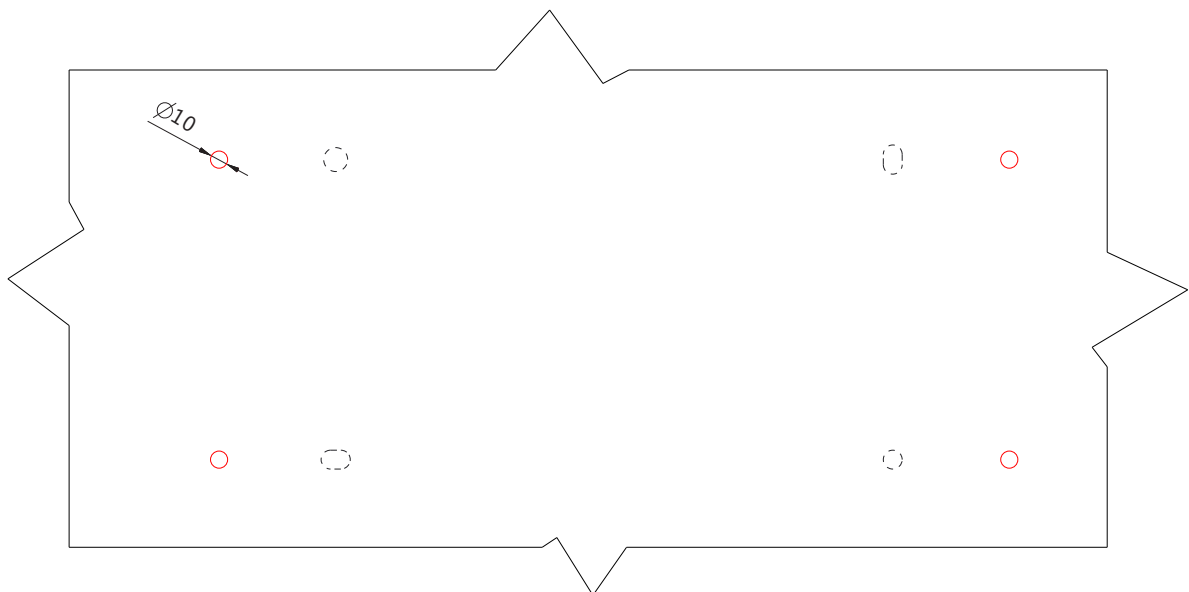
68

- Posizionare la mascherina adesiva sul fondo e accertarsi che la linea punteggiata combaci perfettamente con l'fori sul fondo stesso.
- Position the adhesive template on the bottom and make sure that the dotted line perfectly matches the aperture on the bottom itself.
- Die selbstklebende Schablone am Boden anordnen und sicherstellen, dass die gestrichelte Linie genau über die Öffnung im Boden liegt.
- Mettre en place le gabarit adhésif sur le fond et vérifier que la ligne hachurée coïncide parfaitement avec l'ouverture sur le fond.
- Colocar la plantilla adhesiva en el fondo y cerciorarse que la línea punteada coincida perfectamente con la apertura en el fondo mismo.
- 将黏贴纸固定于底板上,并确保虚线与底板上的开孔相重合。

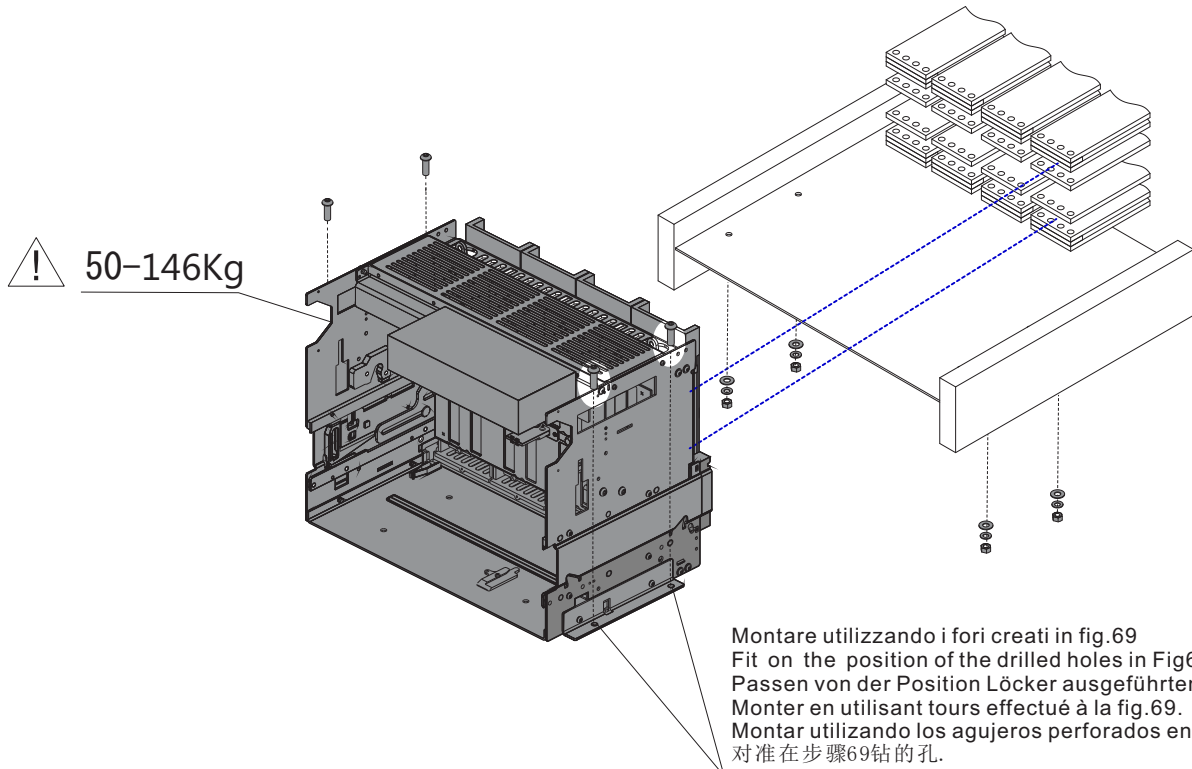


69

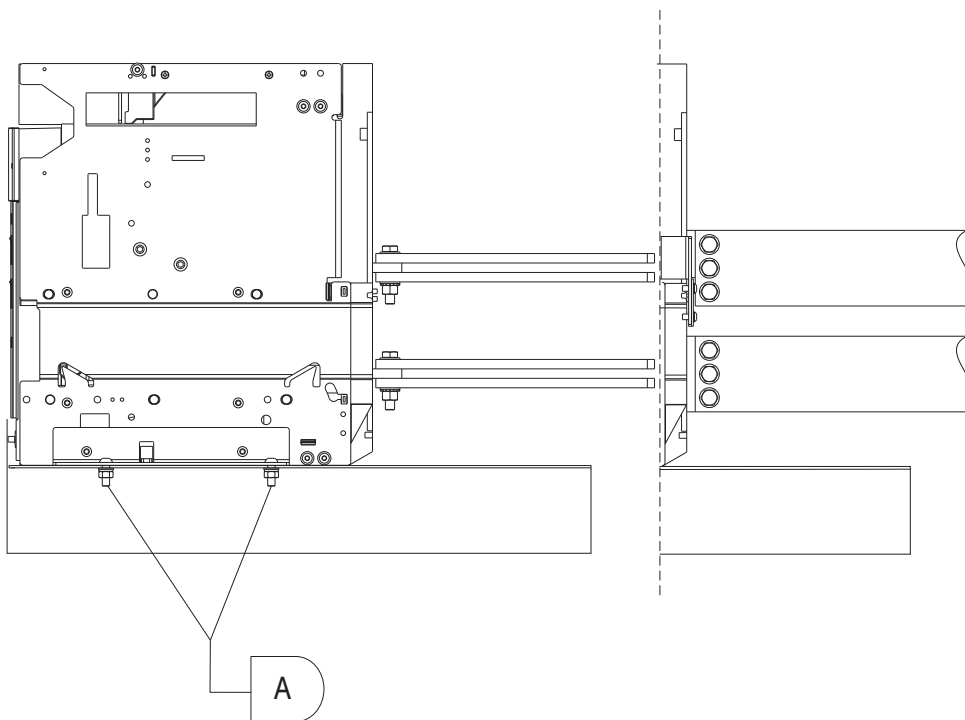
- Forare nelle posizioni contrassegnate dai fori rossi.
- Drill in the positions marked by the red holes.
- Die Stellen anbohren, die durch die roten Löcher gekennzeichnet sind.
- Percer dans les positions marquées par les trous rouges.
- Perforar en las posiciones identificadas con los agujeros rojos.
- 沿着红色实线对底板开孔。



- Inserire la parte fissa del nuovo interruttore Emax2 nel quadro.
- Fit the fixed part of Emax2 circuit-breaker into the switchboard.
- Den festen Teil neuen Leistungsschalters Emax2 in die Schaltanlage einführen.
- Introduire la partie fixe de nouveau disjoncteur Emax2 dans le tableau.
- Introducir la parte fija del nuevo interruptor Emax2 en el cuadro.
- 将Emax2断路器固定部分装进开关柜。



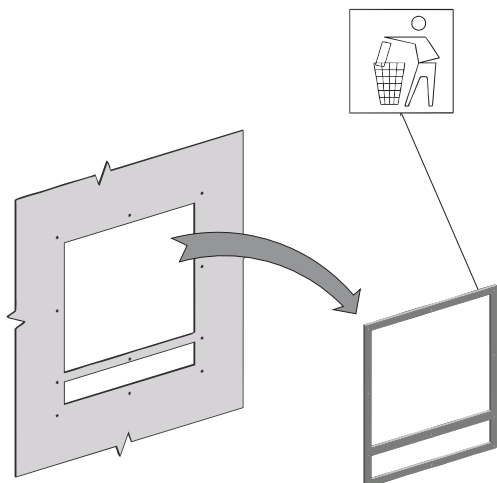
- Avvitare le barre.
- Riutilizzare le viti per fissare la parte fissa Emax 2 al quadro, oppure utilizzare le viti di fissaggio standard fornite con Emax2 o altre viti idonee.
- Riutilizzare le viti per collegare i terminali dell'Emax2 alle sbarre del quadro.
- Tighten the bars.
- Use the provided standard Emax 2 fixing screws or other suitable screws to fix Emax 2 fixed part to switchboard.
- Reuse the screws to connect the poles of Emax2 to the switchgear busbars.
- Die Sammelschienen anschrauben.
- Die Schrauben wiederbenutzen, um den festen Teil von Emax 2 an der Schaltanlage zu befestigen, oder die zusammen mit Emax2 gelieferten Standardbefestigungsschrauben oder andere geeignete Schrauben benutzen.
- Erneut die Schrauben benutzen, um die Anschlüsse von Emax2 an den Sammelschienen der Schaltanlage anzuschließen.
- Visser les barres.
- Réutiliser les vis pour fixer la partie fixe Emax 2 au tableau, ou utiliser les vis de fixation standard fournies avec Emax2 ou d'autres vis appropriées.
- Réutiliser les vis pour connecter les bornes de l'Emax2 aux barres du tableau.
- Enroscar las barras.
- Reutilizar los tornillos para fijar la parte fija Emax 2 en el cuadro o bien utilizar los tornillos de fijación estándar suministrados con Emax2 u otros tornillos idóneos.
- Reutilizar los tornillos para conectar los terminales del Emax2 con las barras del cuadro.
- 紧固铜排
- 用旧有螺栓紧固Emax2底板,也可以用提供的 Emax2标准螺栓或其它合适的螺栓.
- 用旧有螺栓连接Emax2和开关柜铜排



Torque		
A	M8	25Nm

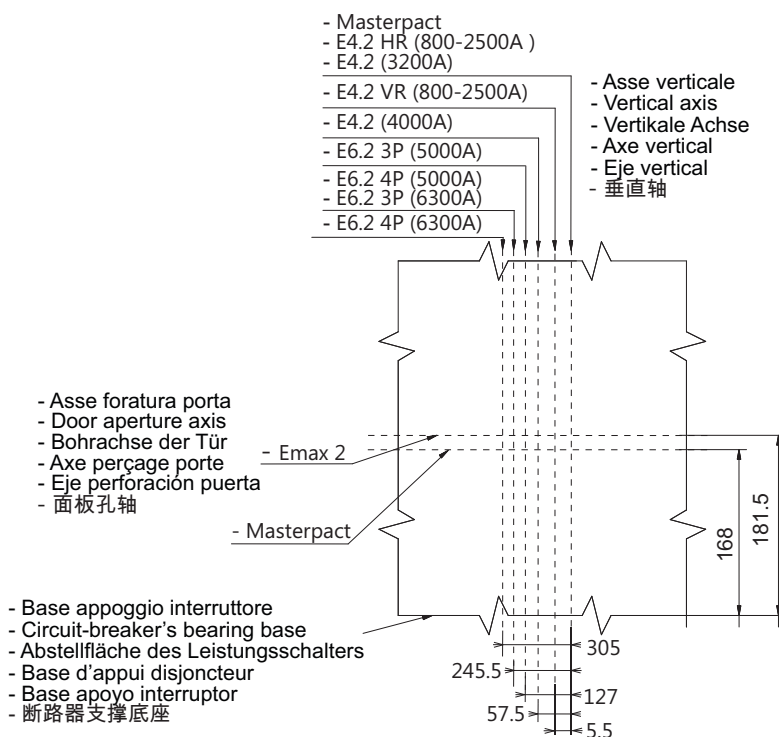
72

- Smontare la mascherina del vecchio interruttore.
- Disassemble the flange of the old circuit-breaker.
- Den Abdeckrahmen des alten Leistungsschalters entfernen.
- Démonter la garniture de l'ancien disjoncteur.
- Desmontar la cubierta de protección del viejo interruptor.
- 拆卸旧断路器法兰。



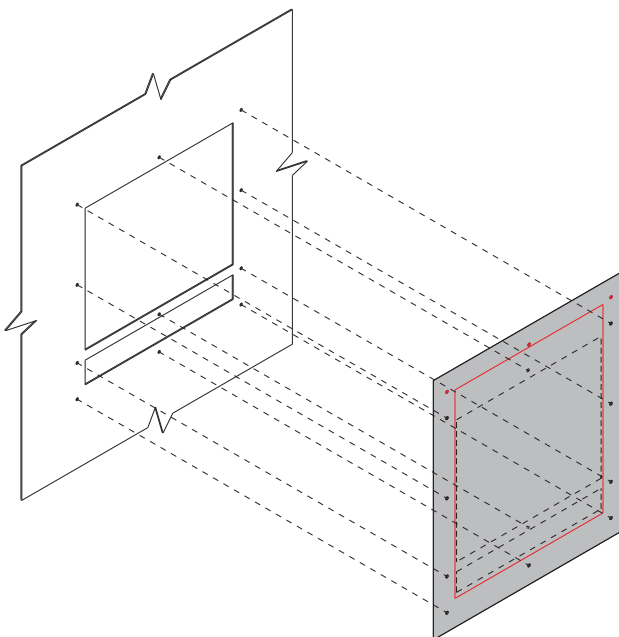
73

- Forare portella quadro secondo necessità del nuovo interruttore.
- Controllare il posizionamento degli assi.
- Make a hole in the switchboard door to suit the new circuit-breaker.
- Check the positions of the axes.
- Die Schaltanlagentür je nach den Erfordernissen des neuen Leistungsschalters bohren.
- Die genaue Lage der Achsen prüfen.
- Percer la porte du tableau d'après les exigences du nouveau disjoncteur.
- Contrôler le positionnement des axes.
- Perforar la puerta del cuadro según las exigencias impuestas por el nuevo interruptor.
- Controlar la posición de los ejes.
- 开关柜面板开孔，检查轴线位置。

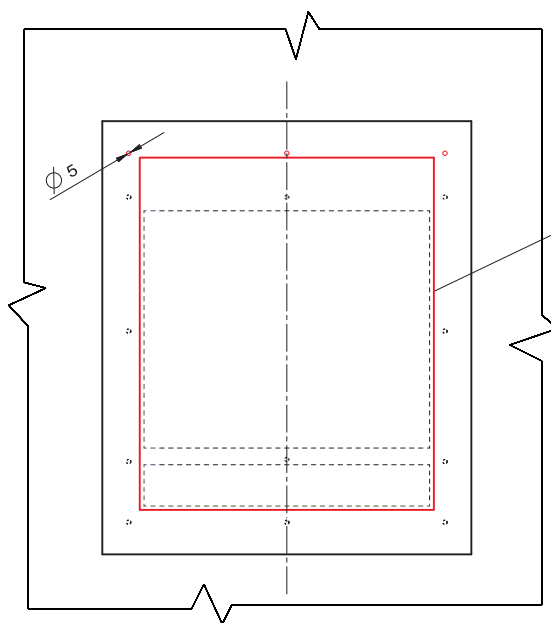


74

- 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.
- 面板粘貼黏貼紙，確保虛線和面板開孔邊緣重合。



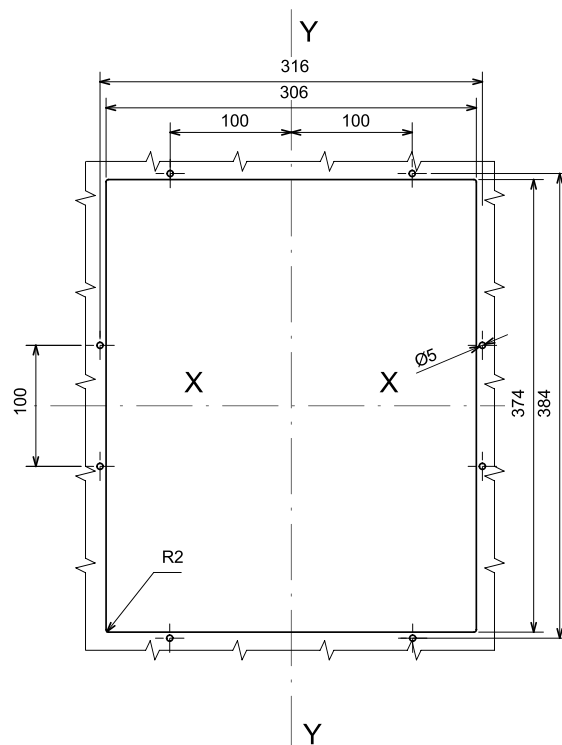
- Tagliare la portella seguendo la linea continua rossa e forare secondo i fori rossi.
- Cut the door along the unbroken red line and drill in the positions marked by the red holes.
- Die Tür nach der durchgehenden roten Linie schneiden und die roten Löcher bohren.
- Découper la porte en suivant la ligne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



- Tagliare secondo l'adesivo rosso.
- Cut as shown by the red adhesive material.
- Nach dem roten Aufkleber schneiden.
- Découper suivant l'adhésif rouge.
- Cortar siguiendo el adhesivo rojo.
- 沿着红色实线切割。

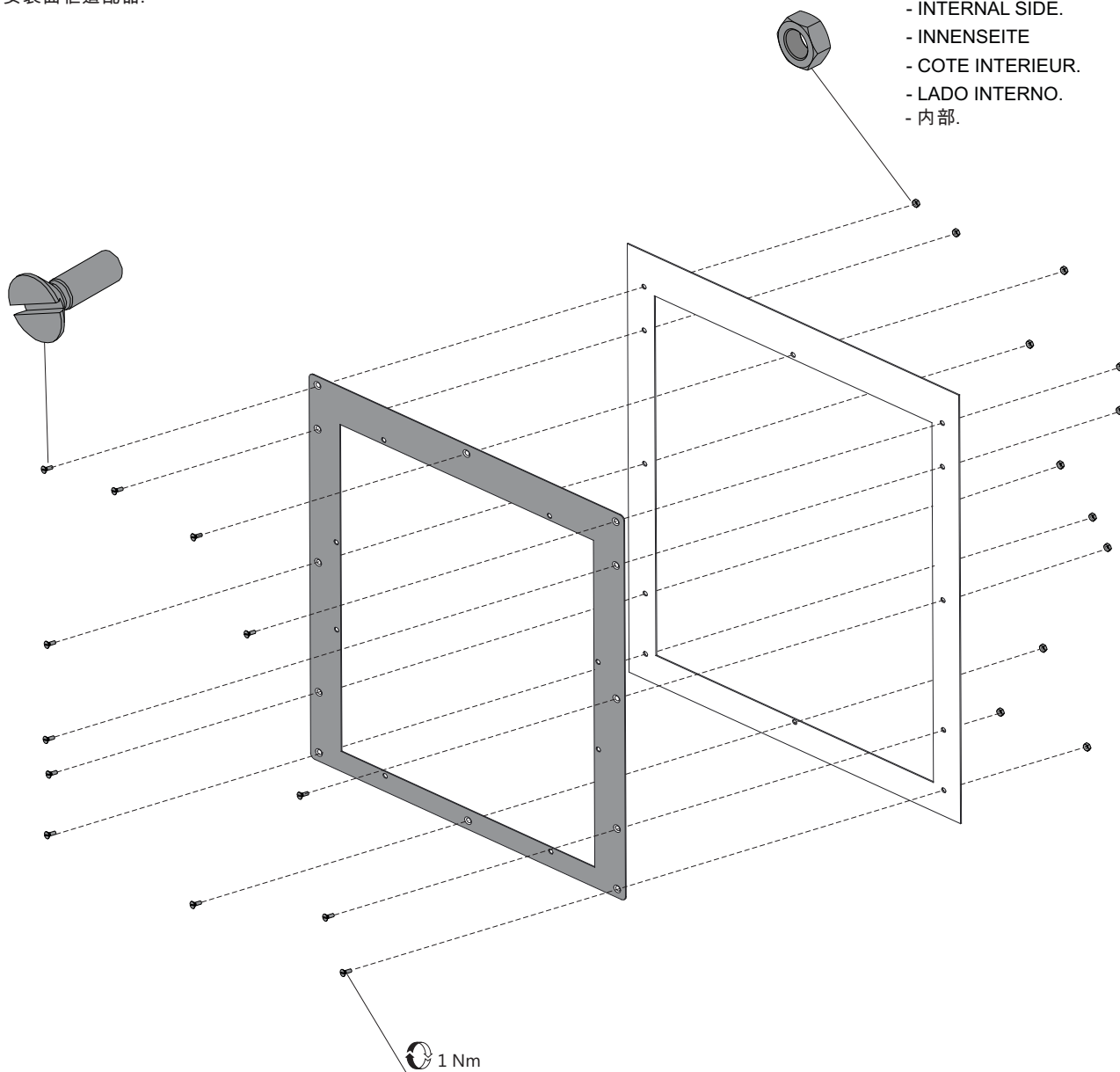
- Foratura della porta della cella.
- Drilling the compartment door.
- Lochbild der Schaltsfeldtür
- Perçage de la porte du compartiment.
- Perforación de la puerta de la celda.
- 安装面板开孔

- Se la linea tratteggiata non è perfettamente combaciante con la foratura già presente nella portella, effettuare il nuovo taglio come indicato a lato secondo il posizionamento degli assi mascherina interruttori (figura 73).
- If the dotted line fails to perfectly match the aperture in the door, cut again as indicated alongside, according to the positions of the circuit-breaker flange axes (figure 73).
- Wenn die gestrichelte Linie nicht perfekt mit der auf der Schaltsfeldtür vorhandenen Öffnung übereinstimmt, den neuen Schnitt wie in der seitlichen Abbildung gezeigt gemäß der Lage der Achsen auf des Abdeckrahmens der Leistungsschalter ausführen (Abbildung 73).
- Si la ligne hachurée ne coïncide pas parfaitement avec le perçage présent sur la porte, effectuer la nouvelle découpe, comme indiqué ci-contre, suivant le positionnement des axes de la garniture des disjoncteurs (figure 73).
- Si la línea punteada no coincide perfectamente con la perforación ya presente en la puerta, efectuar el nuevo corte como se indica aquí al lado, respetando la posición de los ejes de la cubierta de protección de los interruptores (figura 73).
- 若虚线不能完全覆盖面板开孔，请参照图73核对断路器法兰中心轴位置。



- Montare adattatore portella.
- Assemble the door adapter .
- Den Türadapter monter en.
- Monter l'adaptateur de la porte.
- Montar el adaptador de la puerta.
- 安装面框适配器.

- LATO INTERNO.
- INTERNAL SIDE.
- INNENSEITE
- COTE INTERIEUR.
- LADO INTERNO.
- 内部.



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- Cablare i circuiti ausiliari secondo schema elettrico n° "1SDM000106R0001".
- Wire the auxiliary circuits as shown in wiring diagram N° "1SDM000106R0001".
- Die Hilfsstromkreise gemäß des Schaltbilds Nr. "1SDM000106R0001" verdrahten.
- Câbler les circuits auxiliaires d'après le schéma électrique n° "1SDM000106R0001".
- Cablear los circuitos auxiliares siguiendo el esquema eléctrico n° "1SDM000106R0001".
- 辅助电路接线图参照 N° "1SDM000106R0001".

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- Verificare che all'interno della cella sia garantito il grado di protezione precedente, in caso negativo provvedere al suo ripristino.
- Make sure that the previous 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 Schutzart gewährleistet ist. Andernfalls ist für die Wiederherstellung derselben zu sorgen.
- Vérifier qu'à l'intérieur du compartiment le degré de protection précédent soit garanti ; dans le cas contraire le rétablir.
- Verificar que dentro de la celda esté garantizado el grado de protección precedente, si no es así restablecerlo.
- 确保柜体内防护等级要求，若不满足请重新恢复安全防护。

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- 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.
- 移除所有安装使用工具并清理残屑。

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- Verificare, tramite prova di isolamento, che l'interruttore così installato non abbia alterato il grado di isolamento 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 insulation class initially envisaged in the original switchboard project.
- Mittels Isolationsprüfung sicherstellen, dass der so installierte Leistungsschalter noch die Isolationsaufweist, 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 d'isolement prévu initialement dans le projet du tableau.
- Verificar, mediante prueba de aislamiento, que el interruptor instalado no haya alterado el grado de aislamiento inicialmente previsto en el proyecto del cuadro.
- 进行绝缘耐压测试，以确保断路器的安装没有改变原开关柜绝缘等级。

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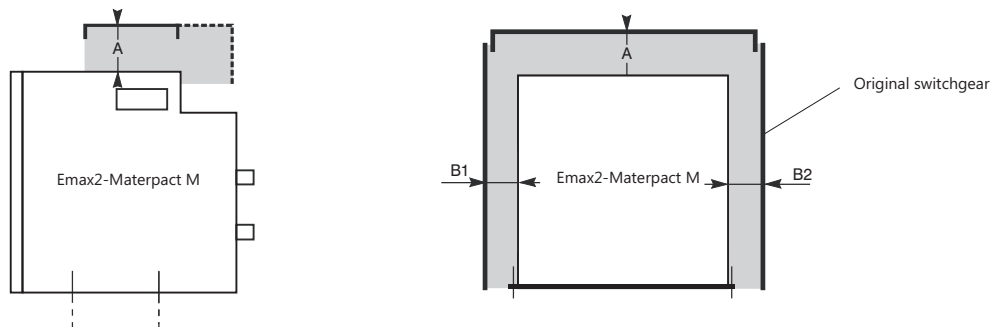
- Eseguire prove in bianco per la verifica dei circuiti ausiliari.
- Conduct blank tests to check the auxiliary circuits.
- Blindproben ausführen, um die Hilfsstromkreise zu prüfen.
- Effectuer des essais à vide pour la vérification des circuits auxiliaires.
- Efectuar pruebas sin carga para verificar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

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- Seguire le istruzioni di messa in servizio del nuovo interruttore secondo il manuale di installazione uso e manutenzione 1SDH001000R0001.
- Comply with the instructions for commissioning the new circuit-breaker as described in installation, operation and maintenance manual 1SDH001000R0002.
- Die Anweisungen zur Inbetriebnahme des neuen Leistungsschalters gemäß der Installations-, Betriebs- und Wartungsanleitung 1SDH001000R0003 befolgen.
- Suivre les instructions de mise en service du nouveau disjoncteur d'après le manuel d'installation et d'entretien 1SDH001000R0004.
- Seguir las instrucciones de puesta en servicio del nuevo interruptor según el manual de instalación uso y mantenimiento 1SDH001000R0005.
- 新断路器安装、使用和保养说明书参照1SDH001000R0006.

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Distanze di isolamento normali per gli interruttori Emax2.
Standard clearance for Emax2 air circuit-breaker.
Normale Isolierstrecken für die Leistungsschalter Emax2.
Distances normales d'isolement pour les disjoncteurs Emax2.
Distancias de aislamiento normales para los interruptores Emax2.
空气断路器间隙标准。



Tipo di retrofitting Type of retrofitting Nachrüstungstyp Type de reconfiguration Tipo de retrofitting 替换型号	Per le parti metalliche To metal parts Für die Metallteile Pour les parties métalliques Para las partes metálicas 到金属柜壁空间尺寸		
	A	B1/B2	B1=B2 required
E4.2 - Masterpact M08_16 1600A 3P	164	55/55	37.5
E4.2 - Masterpact M08_16 1600A 4P	164	44/55	24.5
E4.2 - Masterpact M20_25 2500A 3P	164	55/55	37.5
E4.2 - Masterpact M20_25 2500A 4P	164	44/55	24.5
E4.2 - Masterpact M32 3200A 3P	164	55/55	37.5
E4.2 - Masterpact M32 3200A 4P	164	44/55	24.5
E4.2 - Masterpact M40 4000A 3P	164	112.5/112.5	37.5
E6.2 - Masterpact M50 5000A 3P	164	56/56	48.5
E6.2 - Masterpact M50 5000A 4P	164	167.5/48.5	35.5
E6.2 - Masterpact M63 6300A 3P	164	171/171	48.5
E6.2 - Masterpact M63 6300A 4P	164	108/108	35.5
E6.2f - Masterpact M63 6300A 4P	164	-18/108*	72.5

* La dimensione del cubicolo E6.2f rispetto a M63 HR deve essere verificata
 * The cubicle size of E6.2f vs M63 HR should be verified.
 * Die Abmessung des Einbauraums E6.2f in Bezug zu M63 HR muss geprüft werden
 * La dimension du compartiment E6.2f par rapport à M63 HR doit être vérifiée
 * La dimensione del cubicolo E6.2f rispetto a M63 HR deve essere verificata
 * 应确认E6. 2f和M63的安装空间尺寸。

Nota: gli interruttori Emax2 devono essere installati solo in posizione verticale su un piano o su binari.
 Note: Emax2 circuit-breakers must be installed in the vertical position on a base plate or on rails.
 Hinweis: Die Leistungsschalter Emax2 dürfen nur in der vertikalen Position auf einer Platte oder Schienen installiert werden.
 Remarque: les disjoncteurs Emax2 doivent être installés uniquement dans la position verticale sur un plan ou sur des rails.
 Nota: los interruptores Emax2 se deberán siempre instalar en posición vertical sobre un plano o sobre rieles.