

05/25 IL014073EN

Instruction Leaflet
Montageanweisung
Notice d'installation
Instrucciones de montaje
Istruzioni per il
montaggio
安装说明
Инструкция по монтажу

Montagehandleiding
Montagevejledning
Οδηγίες εγκατάστασης
Instruccões de
montagem
Monteringsanvisning
Asennusohje
Návod k montáži

Paigaldusjuhend
Szerelési utasítás
Montázs instrukcija
Montavimo
instrukcija Instrukcja
montažu Navodila za
montažo Návod na
montáž

Монтажни
инструкции
Instrucţiuni de montaj
Upute za montažu
Montaj Talimati
Упутство за употребу
Monteringsanvisning
Інструкція з монтажу

منشور التعليمات



en Electric current! Danger to life!
Installation, commissioning and maintenance work must be carried out by qualified personnel only.



de Lebensgefahr durch elektrischen Strom!
Arbeiten bzw. Montage an diesem Produkt dürfen nur von Elektrofachkräften und elektrotechnisch unterwiesenen Personen ausgeführt werden.



fr Tension électrique dangereuse !
L'installation de l'appareil, ainsi que tous les travaux effectués sur celui-ci, doivent être réalisés par un électricien qualifié ou par un personnel spécialement formé.



es iCorriente eléctrica! iPeligro de muerte!
La instalación del dispositivo, así como todos los trabajos en él, deben ser realizados por un electricista calificado o por personal especialmente capacitado.



it Tensione elettrica: Pericolo di morte!
L'installazione e il lavoro sul dispositivo devono essere effettuati da un elettricista qualificato o da personale specializzato.



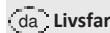
zh 触电危险!
設備的安裝,以及所有工作,必須由合格的電工或經過專門培訓的人員完成。



ru Электрический ток! Опасно для жизни!
Установка и эксплуатация устройства должны выполняться квалифицированным электриком или специально обученным персоналом.



nl Levensgevaar door elektrische stroom!
Installatie van het apparaat en alle werkzaamheden eraan, mogen uitsluitend door een gekwalificeerd elektricien of speciaal opgeleid vakpersoneel worden uitgevoerd.



da Livsfare på grund af elektrisk strøm!
Arbejde i forbindelse med installation, opstart og vedligehold må kun udføres af kvalificeret personale.



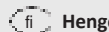
el Προσοχή, κίνδυνος ηλεκτροπληξίας!
Η εγκατάσταση, εκκίνηση και συντήρηση θα πρέπει να πραγματοποιείται μόνο από εξειδικευμένο προσωπικό.



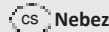
pt Perigo de vida devido a corrente eléctrica!
A instalação do dispositivo, bem como todos os trabalhos devem ser realizados por um electricista qualificado ou por pessoal especialmente formado.



sv Livsfara genom elektrisk ström!
Installation, idrifttagande och underhållsarbete får endast utföras av behörig personal.



fi Hengenvaarallinen jännite!
Laitteen asennus ja käyttö ainoastaan sähköasentajan tai siihen perehdytetyn henkilön toimesta.



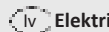
cs Nebezpečí úrazu elektrickým proudem!
Instalace zařízení a veškeré práce na něm musí být provedeny kvalifikovaným elektrikářem nebo speciálně vyškoleným personálem.



et Eluohutus! Elektrilöögihoht!
Paigaldus-, kasutus- ja hooldustööd peab läbi viima ainult kvalifitseeritud personal.



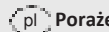
hu Életveszély az elektromos áram révén!
Az eszköz felszerelését, valamint az ehhez kapcsolódó összes munkát szakképzett villanszerelővel vagy szakképzett személyzetnek kell elvégeznie.



lv Elektriskā strāva apdraud dzīvību!
Uzstādīšana, nodošana ekspluatācijā un apkopes darbi jāveic tikai kvalificētam personālam.



lt Pavojus gyvybei dėl elektros srovės!
Įrengimo, paleidimo ir techninės priežiūros darbus turi atlikti tik kvalifikuotas personalas.



pl Porażenie prądem elektrycznym stanowi zagrożenie dla życia!
Instalacja urządzenia, jak również prace nad nim, muszą być wykonywane przez wykwalifikowanego elektryka lub specjalnie wyszkolony personel.



sl Življenjska nevarnost zaradi električnega toka!
Dela montaže, zagona in vzdrževanja morajo izvajati samo usposobljeno osebe.



sk Nebezpečnost ohrozenia života elektrickým prúdom!
Inštalácia prístroja, ako aj všetky práce na ňom musia byť vykonané kvalifikovaným elektrotechnikom alebo špeciálne vyškoleným personálom.



bg Опасност за живота от електрически ток!
Инсталирането на устройството, както и всяка работа по него, трябва да бъде извършвано от квалифициран електротехник или от специално обучен персонал.



ro Atenție! Pericol electric!
Montajul și lucrul cu acest aparat trebuie făcute numai de un electrician calificat sau de personal tehnic specializat.



hr Opasnost po život uslijed električne struje!
Radove ugradnje, puštanja u pogon i održavanja mora vršiti samo kvalificirano osoblje.



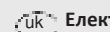
tr Elektrik akımı! Hayati tehlike!
Bu ürünün çalıştırılması veya kurulumu sadece elektroteknik eğitimleri almış olan ehliyetli elektrikçiler ve kişiler tarafından yapılmalıdır.



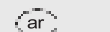
sr Електрична струја! Опасност по живот!
Инсталацију, пуштање у рад и одржавање сме да обавља искључиво квалификовано особље.



no Elektrisk ström! Livsfare!
Installasjon av enheten, samt arbeid på den, skal kun utføres av kvalifisert personell, eller av de som er spesielt opplært til dette arbeidet.



uk Електричний струм! Небезпечно для життя!
Встановлення пристрою, так само, як і робота з ним, повинні виконуватись кваліфікованим електриком або персоналом, що пройшов спеціальну підготовку.



ar تحذیر! تيار كهربائي! خطر موت!
التثبيت والتكليف و أعمال الصيانة يجب أن تقام فقط من طرف الموظفين المؤهلين

Important Notes

1. This product should be installed, commissioned and maintained by or under the supervision of a competent electrician in accordance with current electrical engineering Codes of Practice, Regulations for the Electrical equipment of Buildings (BS7671), CDM2007 -Construction (Design and Management) Regulations 2007, HSG150 -Health and Safety in Construction, Statutory requirements and any Specific instruction issued by the Company.
2. After completing the installation and testing of this product it is essential that this leaflet is drawn to the attention of the person responsible for its future operation and maintenance, and is at all times available for ready reference.
3. These notes assume throughout that the product is disconnected from the supply. It is essential that this is done before any work is carried out.
4. These Panelboards are only designed for use with Eaton MCCBs. Failure to comply will result in invalid warranty and certification.
5. Operation of the incoming and outgoing devices should only be carried out by an instructed or skilled person.
6. Torques for electrical fixings (unless otherwise stated): M8 Neutral and Earth grub screws 12Nm, M8 hex bolts 15Nm, M10 hex bolt (Earth) 30Nm, M12 hex bolt (Neutral) 45Nm. Refer to device instructions for NZM terminal cable torques.

Please read the entire IL carefully before starting to assemble and /or using this product. Keep it for further reference.

Memshield 4 Installation Instructions for 800A Panelboards and Pan Assemblies

800A Panelboards

800A Board - EM4PB680PDE, EM4PB1280PDE, EM4PB1680PDE

Pan Assemblies

800A Pan Assy - EM4PBP680PDE, EM4PBP1280PDE, EM4PBP1680PDE

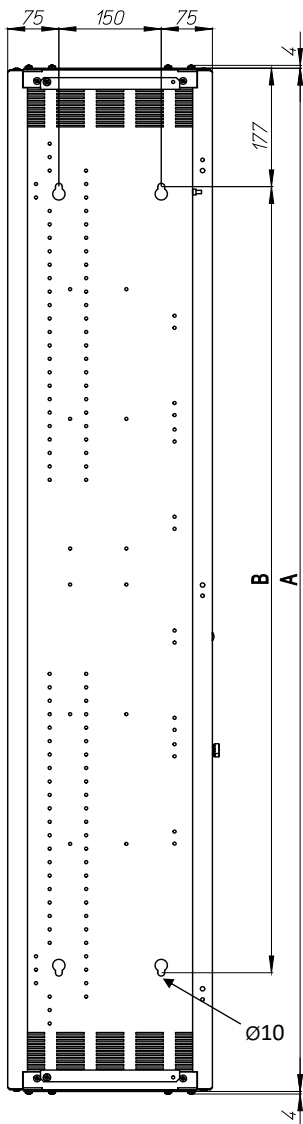
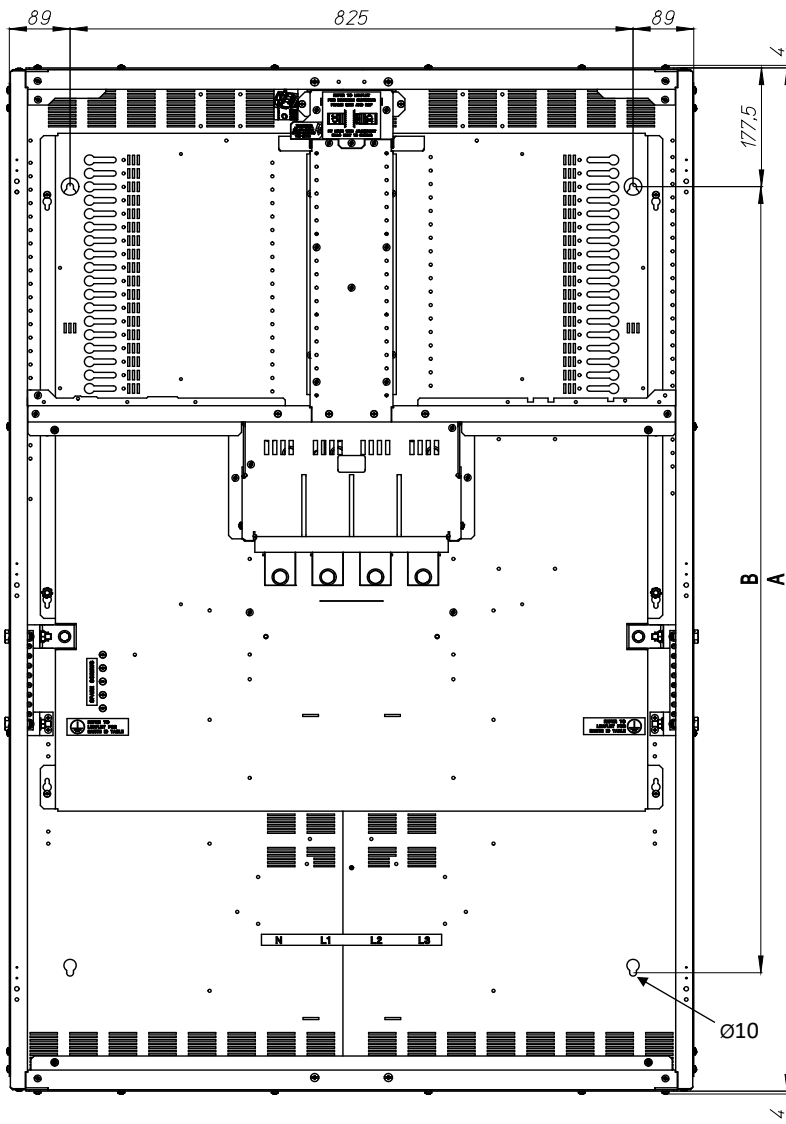
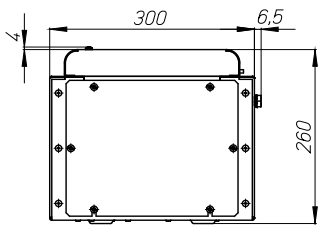
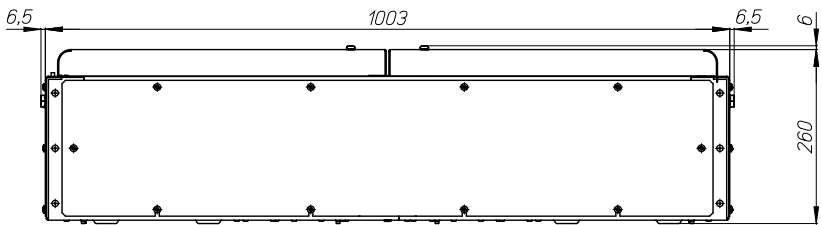
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I. Panelboard Mounting & Sizes

			A (mm)	B (mm)
Panelboards	EM4PB680PDE	6 Way	1530	1175
	EM4PB1280PDE	12 Way	1892	1537
	EM4PB1680PDE	16 Way	2133	1778
Cable Extension / Meter boxes	EM4PB680PDESXB/SXM	6 Way	1530	1175
	EM4PB1280PDESXB/SXM	12 Way	1892	1537
	EM4PB1680PDESXB/SXM	16 Way	2133	1778

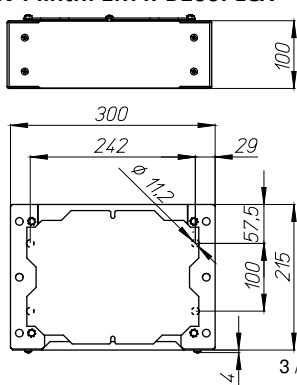
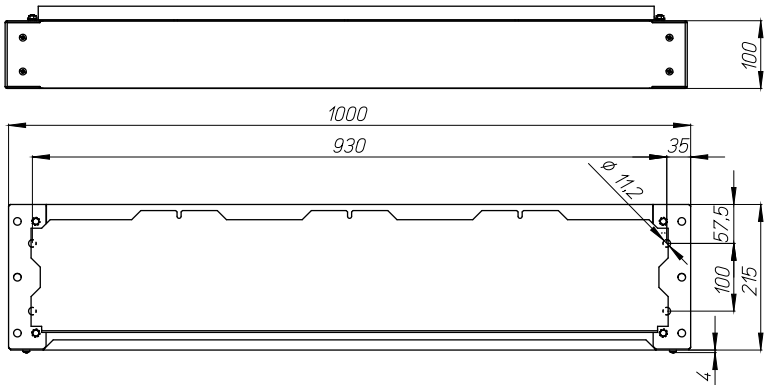
800A Panelboards:
EM4PB680PDE, EM4PB1280PDE, EM4PB1680PDE

Cable Extension / Meter Boxes: EM4PB680PDESXB/SXM,
EM4PB1280PDESXB/SXM, EM4PB1680PDESXB/SXM



Panelboard Plinth : EM4PB100PL

Side CW Plinth: EM4PB100PLCX



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II. Cableways, Extension, Corner, DIN Boxes and Plinths

Extension/DIN Box- 1000 x 300 x 260

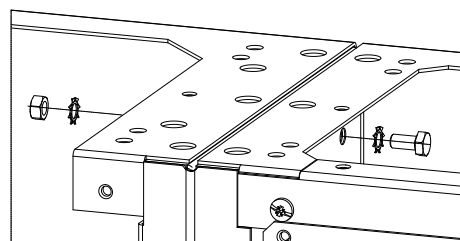
EM4PB250EXDIN, EM4PB250EX

Fits Top / Bottom

Corner Box- 300 x 300 x 260

EM4PB300CX

Fits any corner



M6 Enclosure fixings; ensure scratch washers are fitted both sides

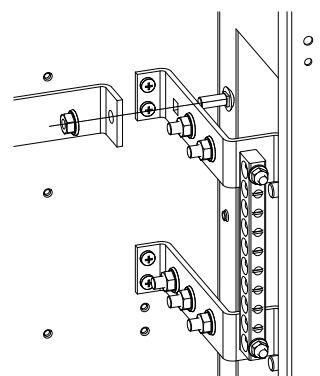
Cable / Meter Extension boxes

EM4PB680PDESXB/SXM

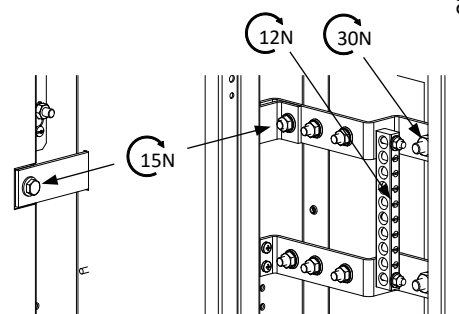
EM4PB1280PDESXB/SXM

EM4PB1680PDESXB/SXM

12-16 Way Cableway – Remove x 1 cut-out feature in cableway to align with outgoing chamber.



Earth Bar Position - Provision to move earth bar into cableway, utilising earth strap

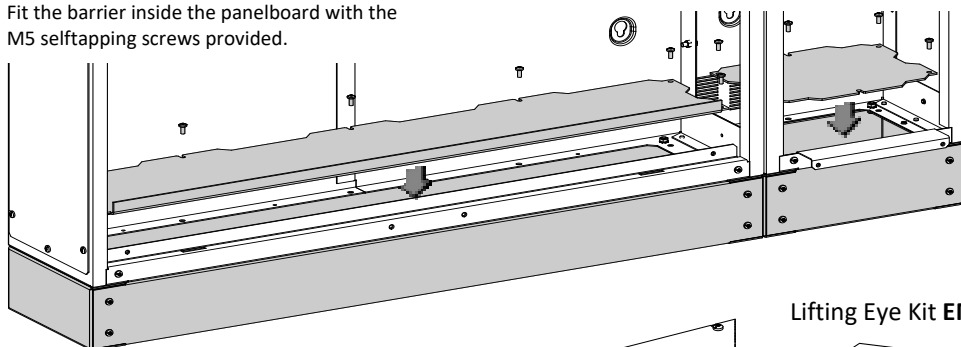


Plinth - EM4PB100PL / EM4PB100PLCX

Remove gland plates from the bottom of the panel board before fitting the plinth with the M6 fixings provided.

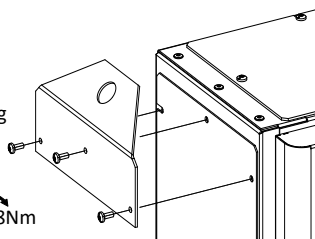
Fit the barrier inside the panelboard with the

M5 selftapping screws provided.

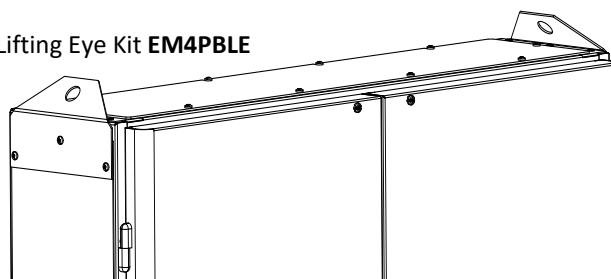


Utilising existing M5 screws

3.8Nm



Lifting Eye Kit **EM4PBLE**



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III. Pan Assembly Mounting & Sizes

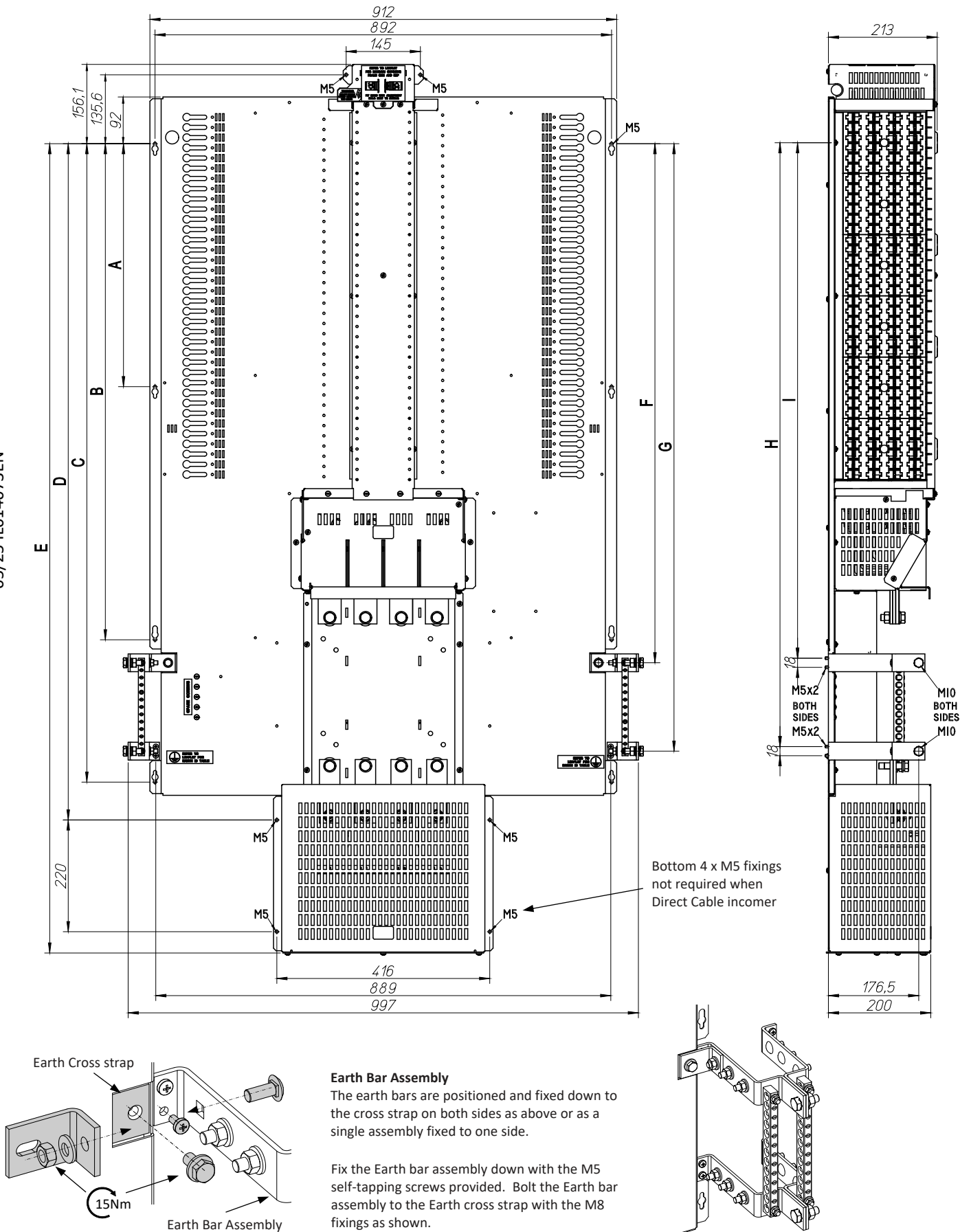
The Pan assembly offers a high degree of flexibility, suitable for inclusion in other factory build assemblies.

		A	B	C	D	E	F	G	H	I
EM4BPB680PDE	6 Way	337.5	615	837	1057	1099	660	791	651	782
EM4BPB1280PDE	12 Way	478.5	977	1199	1419	1461	1022	1196	1013	1187
EM4BPB1680PDE	16 Way	639	1218	1440	1660	1702	1263	1524	1254	1515

Measurements in mm

Pan Assembly M5 fixing positions (Shown as EM4BPB1280PDE with MCCB incomer kit).
Torque all M5 fixings to 3.8Nm Max.

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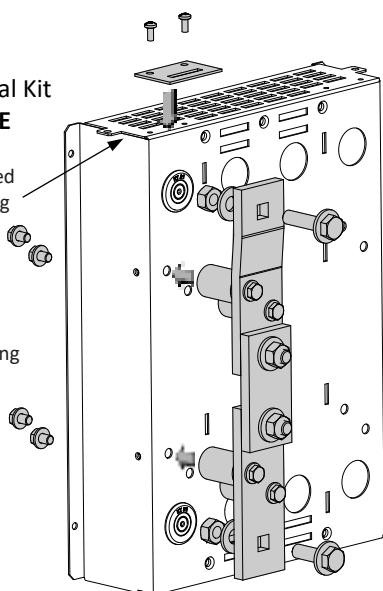
IV. Incomer Kits – 3P & Neutral

800A MCCB/Switch Incomer Module 3P&N (same kit for 4P)
EM4PBK804PDE

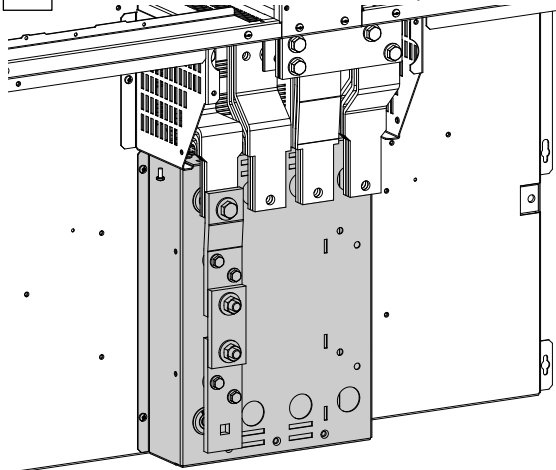
2 Incoming Neutral Kit EM4PBNK80PDE

Ensure that the vented closed side is at the top when fitting the Neutral kit on the lefthand side.

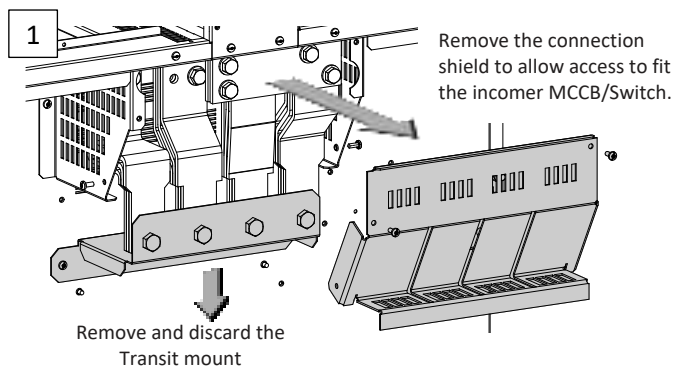
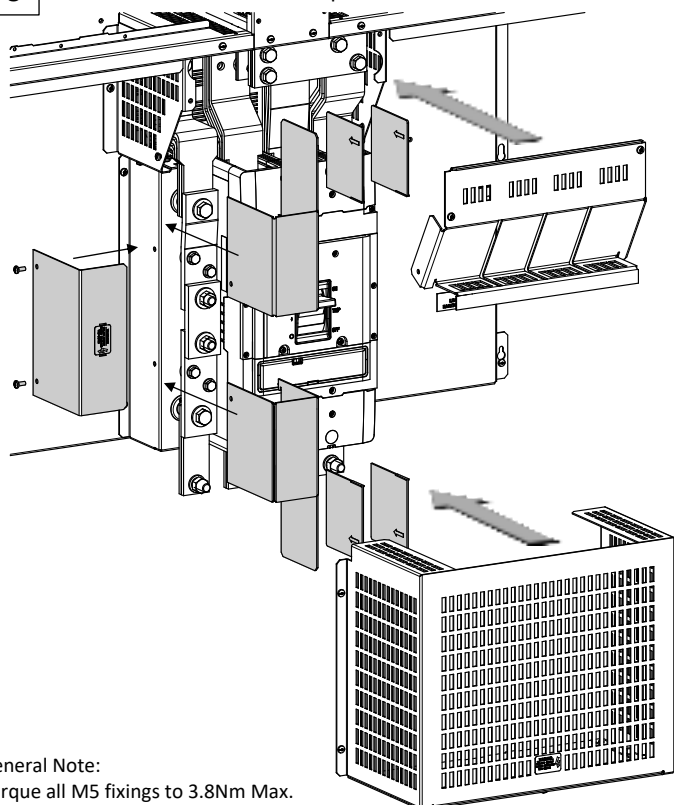
Fit the Neutral kit to the incomer mount (supplied in EM4PBK804PDE) before fitting into the panel board.



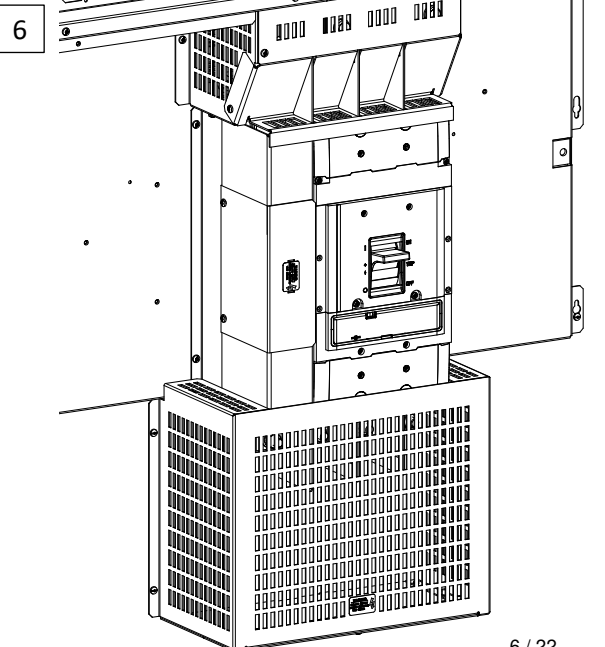
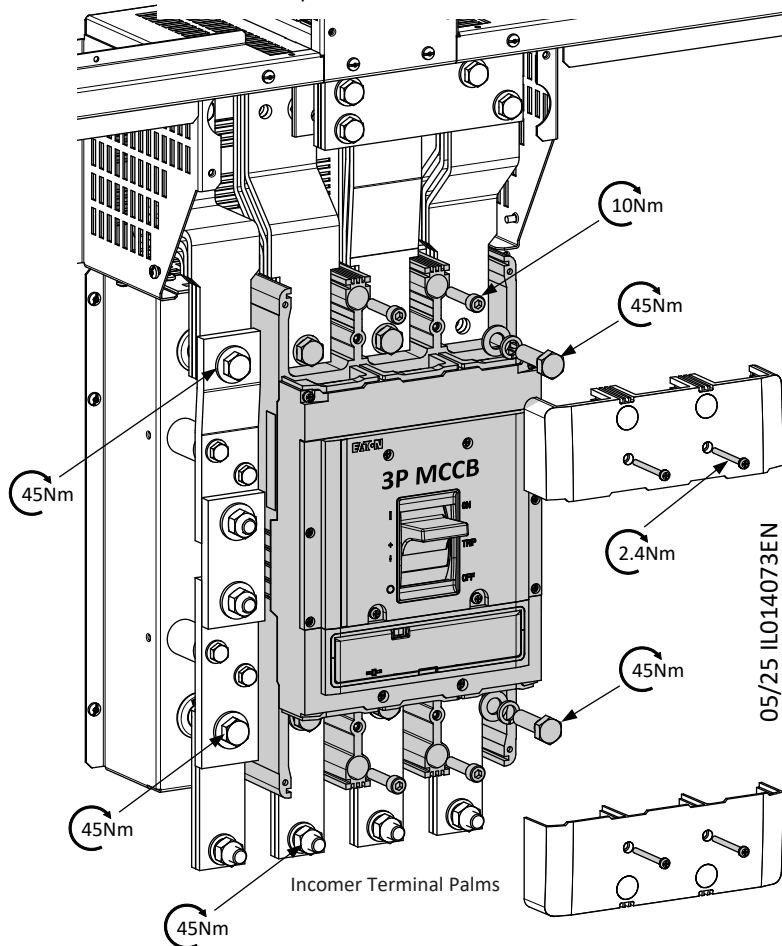
3 Fit Incomer mount and Neutral into panel board



5 Fit Neutral Shields and interphase barriers



4 Fit MCCB/Switch to the Incomer mount Fit Terminal palms to incomer and Neutral



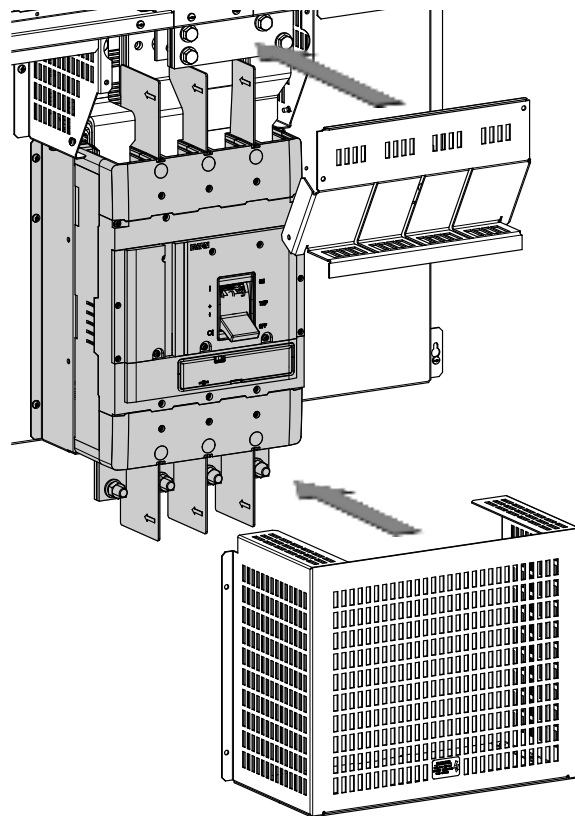
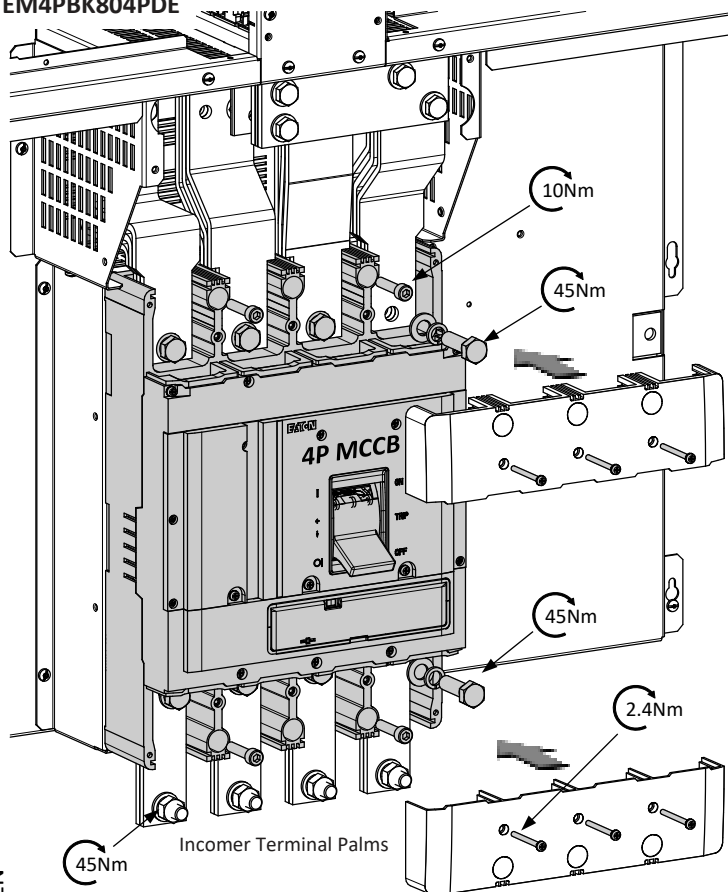
General Note:
Torque all M5 fixings to 3.8Nm Max.

V. Incomer Kit – 4P MCCB/Switch

800A Incomer Module 4P (same kit for 3P&N)

EM4PBK804PDE

Remove and discard the Transit mount. Remove the connection shield to allow access to fit the incomer as shown in the 3P&N version. Fit the incomer mount into the panel, with the vented closed side at the top, before fitting the MCCB/Switch.

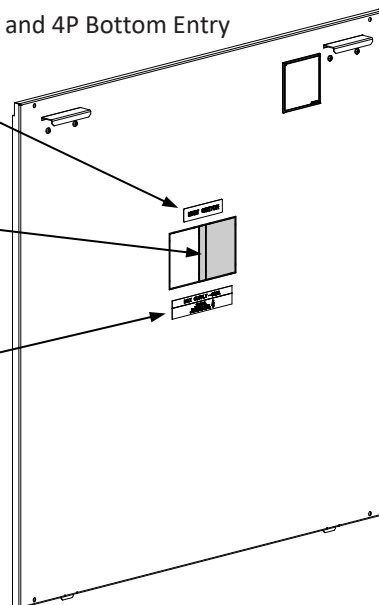


Inner Cover – 3P&N and 4P Bottom Entry

Main Switch Label
Position above the
Incomer toggle.

Cut out shaded area for
incomer toggle.
(do not cut out for Direct
Cable incomer kits)

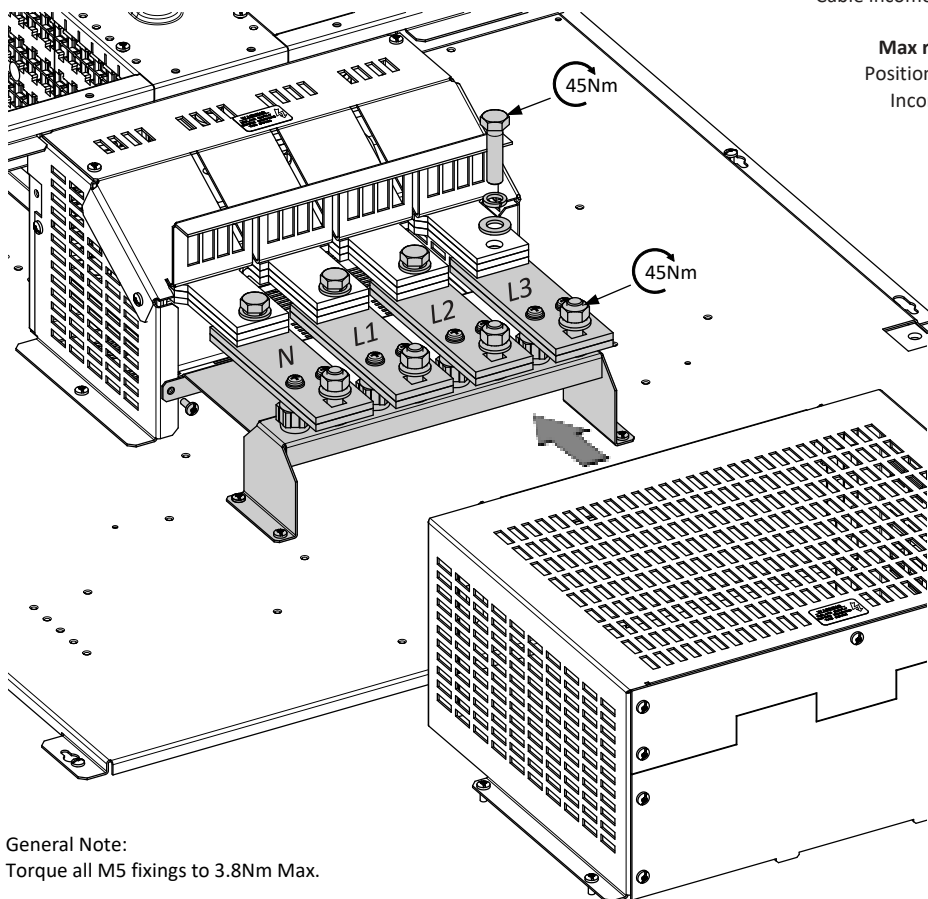
Max rating Label
Position below the
Incomer toggle.



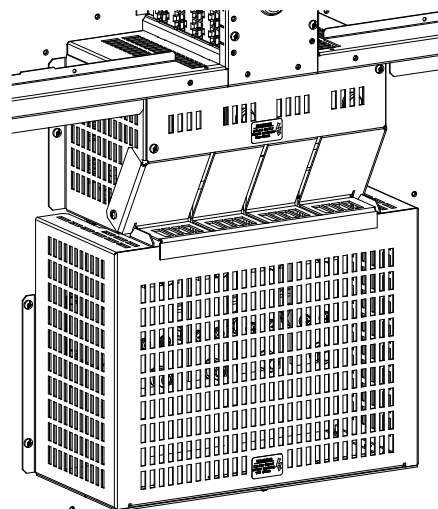
VI. Incomer Kit – Direct Cable Connection

EM4PBK804PDEL

Remove and discard the Transit mount before fitting the Direct cable kit.

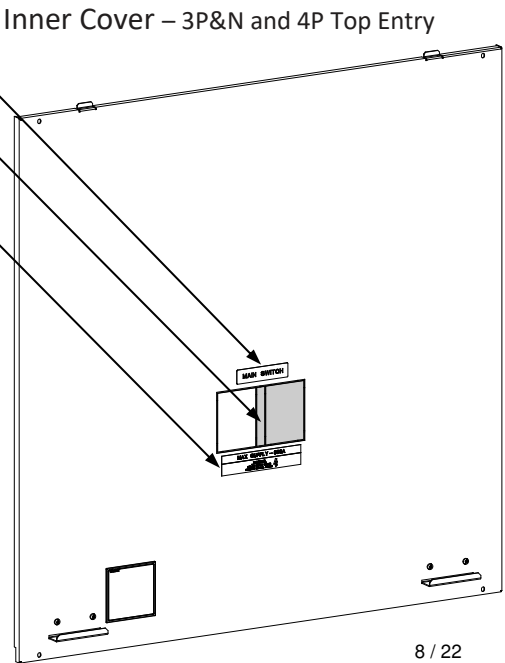
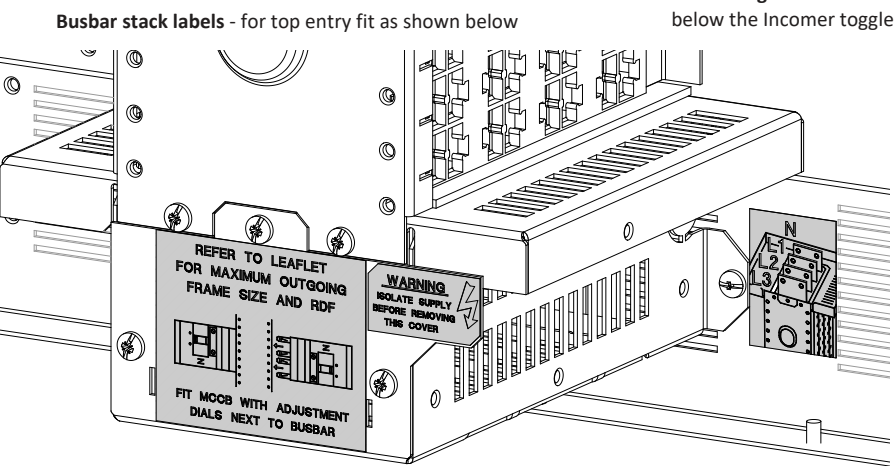
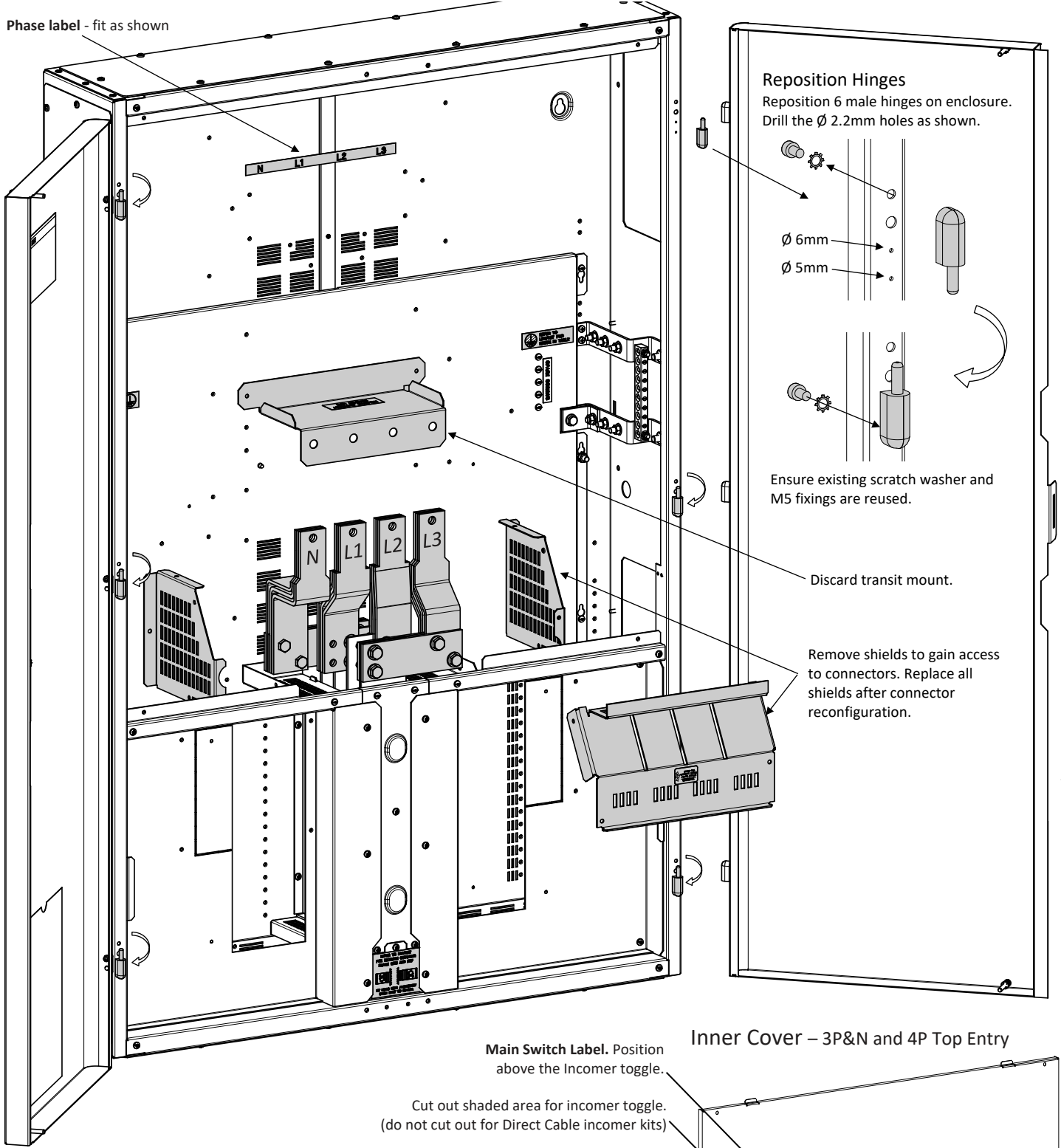


General Note:
Torque all M5 fixings to 3.8Nm Max.



VII. Top Entry Arrangement

Panelboards are setup for bottom entry supply. For top entry, lift off the front doors and rotate the whole enclosure 180°. Reposition the door hinges and reconfigure the Incomer connectors.



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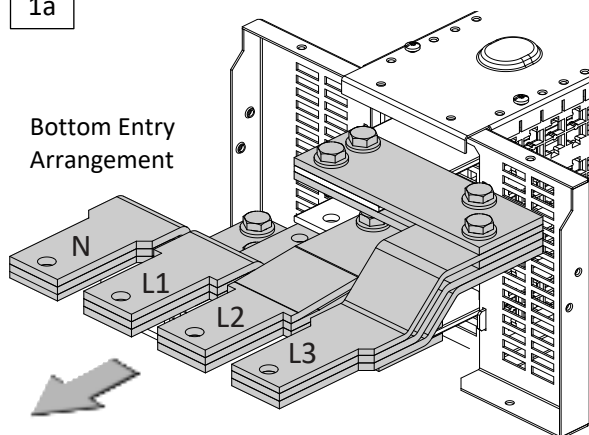
VIII. Top Entry Connections Build Sequence

Reconfigure the busbar connections from Bottom Entry, as supplied, to Top Entry. Utilise the same connectors, screws and washers,

1a

Remove the connectors ensuring they are kept in their phase sets.

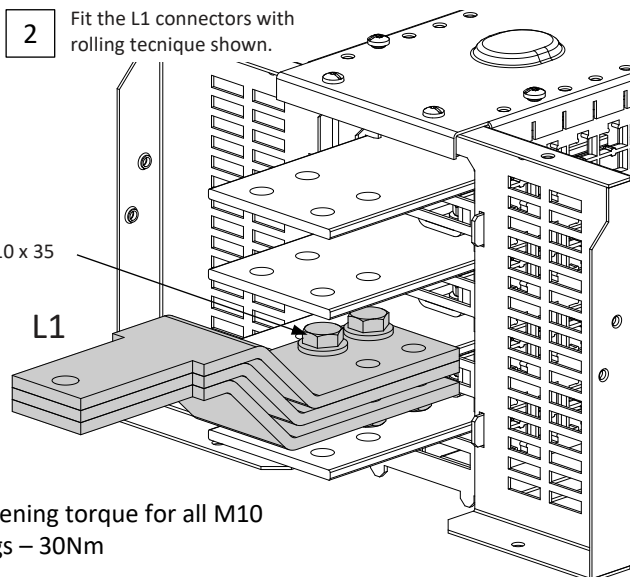
Bottom Entry Arrangement



2

Fit the L1 connectors with rolling technique shown.

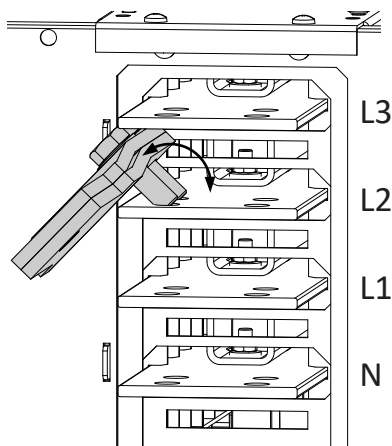
M10 x 35
L1



Tightening torque for all M10 fixings – 30Nm

1b

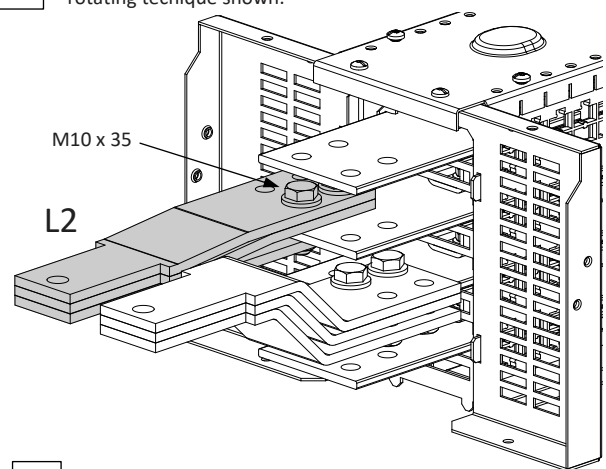
A rolling technique needs to be used when removing / fitting the L1 and L2 connectors. Position the M10 bolts into the busbar holes at an angle with the connectors. Rotate the connectors pushing the bolts in / out of the holes.



3

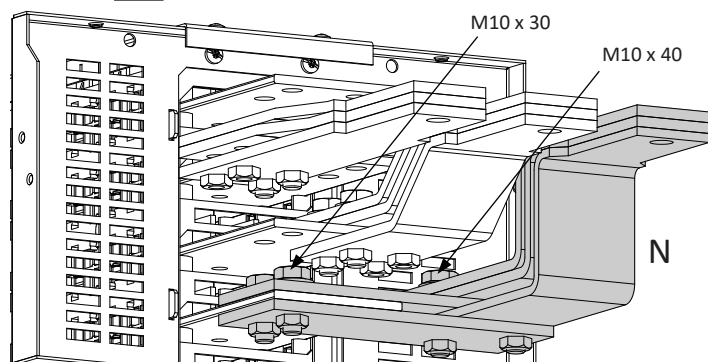
Fit the L2 connector with rotating technique shown.

M10 x 35
L2



4

Fit the Neutral connector.

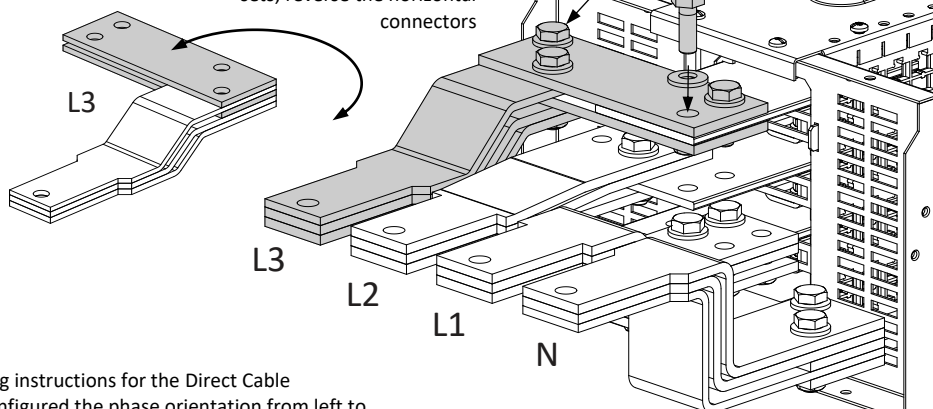


5

Fit the L3 connector.

Before fitting L3 and Neutral phase sets; reverse the horizontal connectors

M10 x 40 M10 x 30

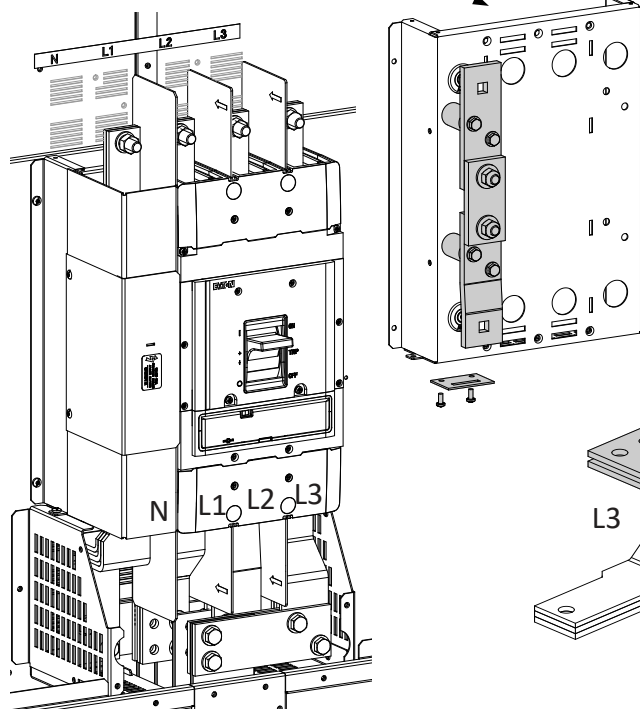


Incomer - 3P&N / 4P

For general Incomer fitting instructions see p.6, 7.

3P&N / 4P – With the mount open side at the top fit the MCCB/Switch with the trip settings dials below the toggle.

3P&N – With the mount open side at the top fit the Neutral kit on the lefthand side.



Incomer – Direct Cable Connection.

After reconfiguring the Busbar connections, use the fitting instructions for the Direct Cable Connection on p.7. If the Busbar connectors are not reconfigured the phase orientation from left to right will be L3, L2, L1, N. The phase label will need to be cut and repositioned to suit.

IX. Outgoing NZM1 Adaptors 4P / 3P & Neutral Modules

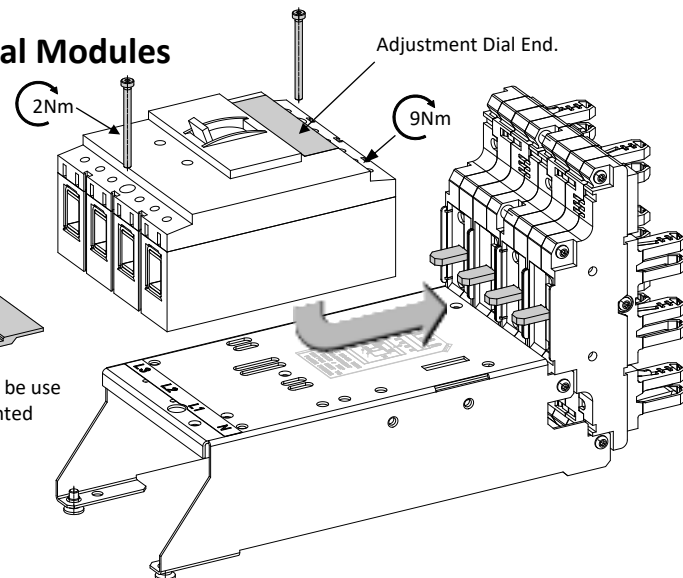
EM4PBFAN14 - NZM1 4P / 3P&N Adaptor

Important all Adaptors:

Fit MCCB with the adjustment dial end towards the adaptor stabs.

Ensure that the NZM1 box terminals are open before fitting.
Fix in position with 2 x M4 x 50 long screws and tighten to 2 Nm.
Tighten the NZM1 box terminals to adaptor stabs to 9Nm.

Keep adaptors to be use with Group mounted Inner cover.

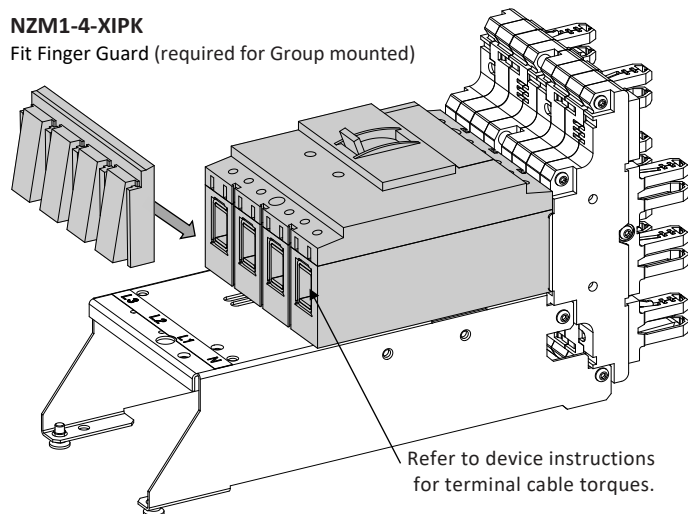


NZM1 4P –

Group Mounted / Compartmentalised Form 4 type 2

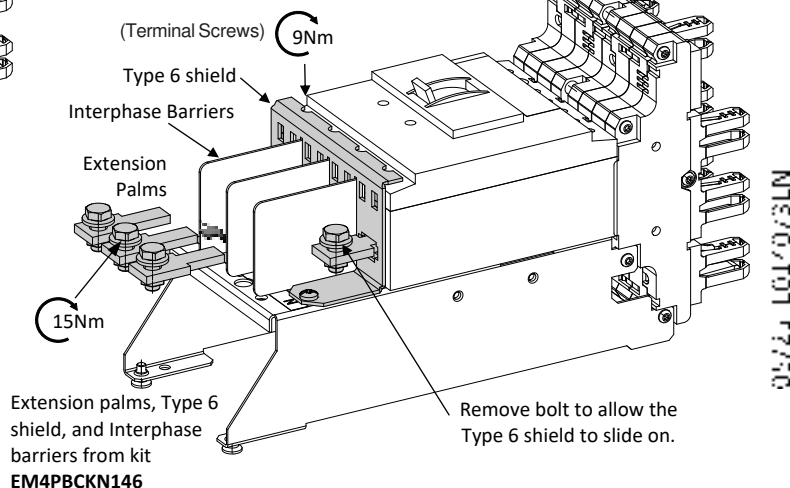
NZM1-4-XIPK

Fit Finger Guard (required for Group mounted)



NZM1 4P - Compartmentalised Form 4 type 6 Adaptor + parts from EM4PBCKN146

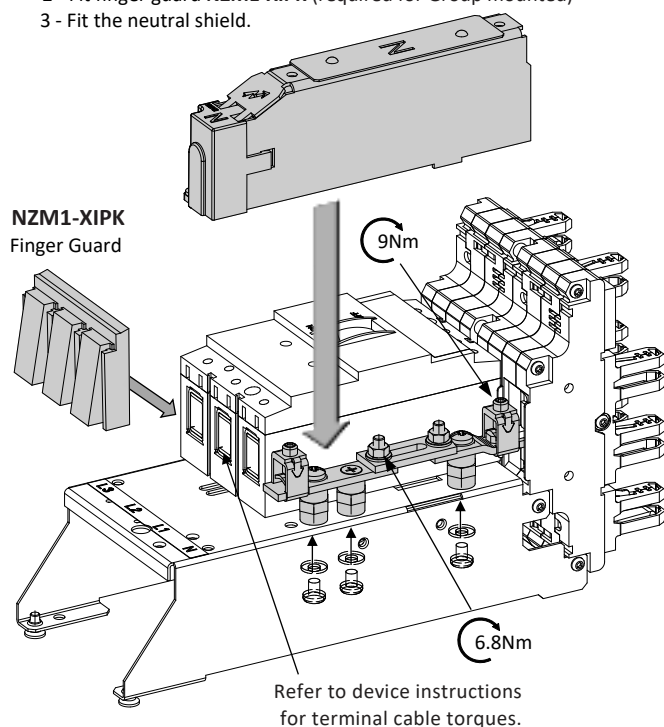
- 1 - Fit Interphase barriers.
- 2 - Fit type 6 shield over interphase barriers and screw down.
- 3 - Fit Extension Palms into the terminal box clamps and torque to 9Nm.



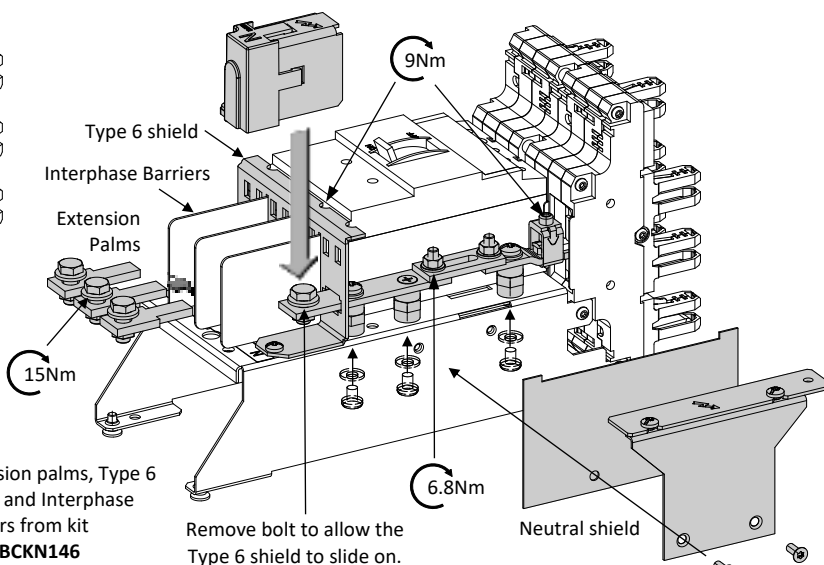
NZM1 3P&N - Compartmentalised Form 4 type 6 Adaptor + Neutral kit EM4PBCKN1N

- 1 - Fit the neutral assembly to the adaptor with the M8 fixings.
- 2 - Fit Interphase barriers.
- 3 - Fit type 6 shield over interphase barriers and screw down.
- 4 - Fit Extension Palms into the terminal box clamps and torque to 9Nm.
- 5 - Fit the neutral shields.

NZM1-XIPK Finger Guard



Extension palms, Type 6 shield and Interphase barriers from kit EM4PBCKN146



X. Outgoing NZM1 Adaptors SP & Neutral Modules

NZM1 SP&N - L1+N - **EM4PBFAN1L1N**, L2+N - **EM4PBFAN1L2N**, L3+N - **EM4PBFAN1L3N**

Compartmentalised Form 4 type 6

Adaptor + Neutral kit **EM4PBCKN1N**

+ parts from **EM4PBCKN126**

Group Mounted /Compartmentalised Form 4 type 2

Adaptor + Neutral kit - **EM4PBGMN1N**

1 - Fit NZM1 SP to adaptor. Ensure that the NZM1 box terminal is open before fitting. Fix in position with the M4 screw. Tighten the box terminal to adaptor stab to 9Nm.

2 - Fit the neutral assembly to the adaptor with the M8 fixings.

3 - Fit finger guard **NZM1-1-XIPK** (required for Group mounted)

4 - Fit the neutral shield.

1 - Fit NZM1 SP to adaptor. Ensure that the NZM1 box terminal is open before fitting. Fix in position with the M4 screw. Tighten the box terminal to adaptor stab to 9Nm.

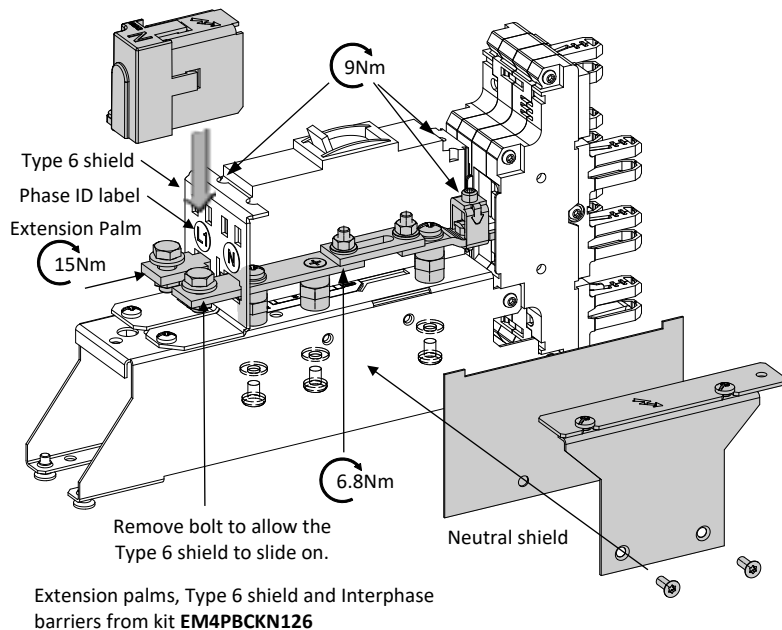
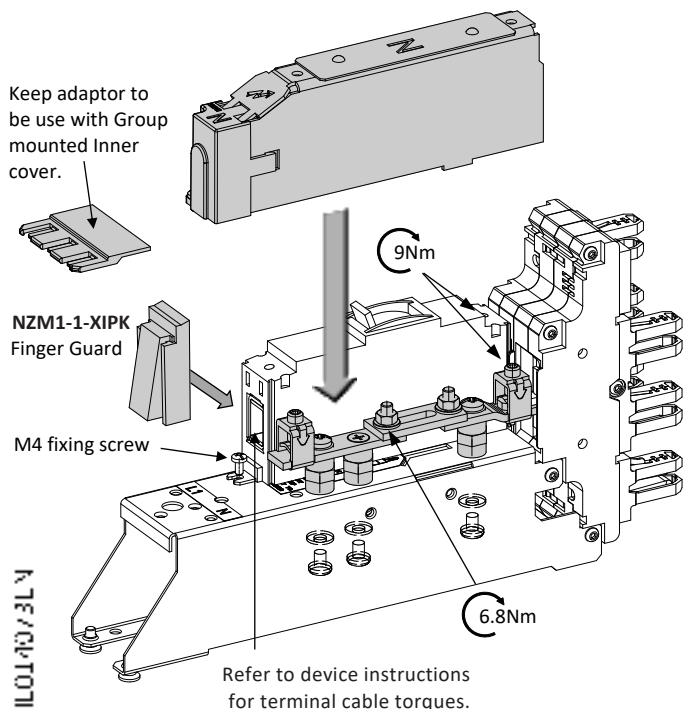
2 - Fit the neutral assembly to the adaptor with the M8 fixings.

3 - Fit appropriate phase Identification label to type 6 shield.

4 - Slide type 6 shield over neutral terminal and screw down.

5 - Fit Extension Palm into the terminal box clamp and torque to 9Nm.

6 - Fit the neutral shields.



XI. Outgoing NZM2 Adaptors 4P / 3P & Neutral Modules

EM4PBFAN24 - NZM2 4P / 3P&N Adaptor

Ensure that the NZM2 box terminals are open before fitting.

Fix in position with 4 x M4 x 85 long screws and tighten to 2 Nm.

Tighten the NZM2 box terminals to adaptor stabs to 14Nm.

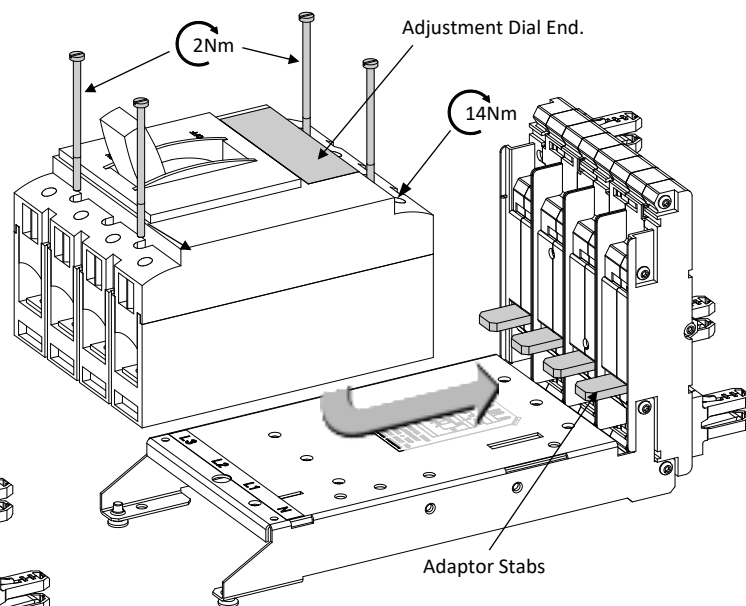
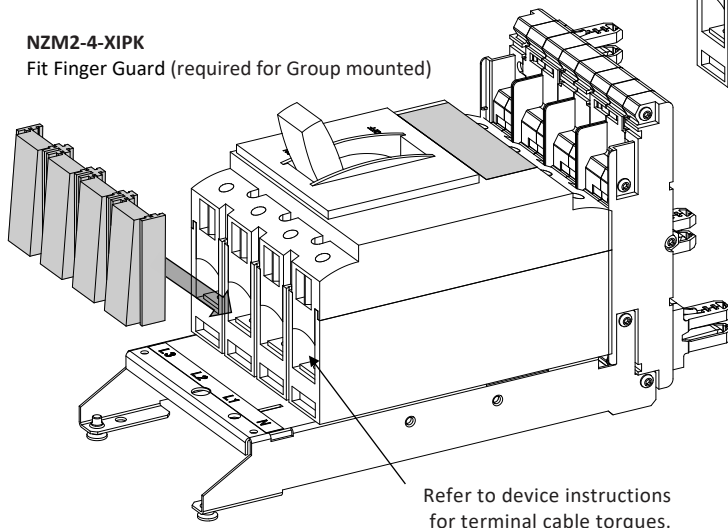
Important all Adaptors:

Fit MCCB with the adjustment dial end towards the adaptor stabs.

NZM2 4P – Group Mounted /
Compartmentalised Form 4 type 2

NZM2-4-XIPK

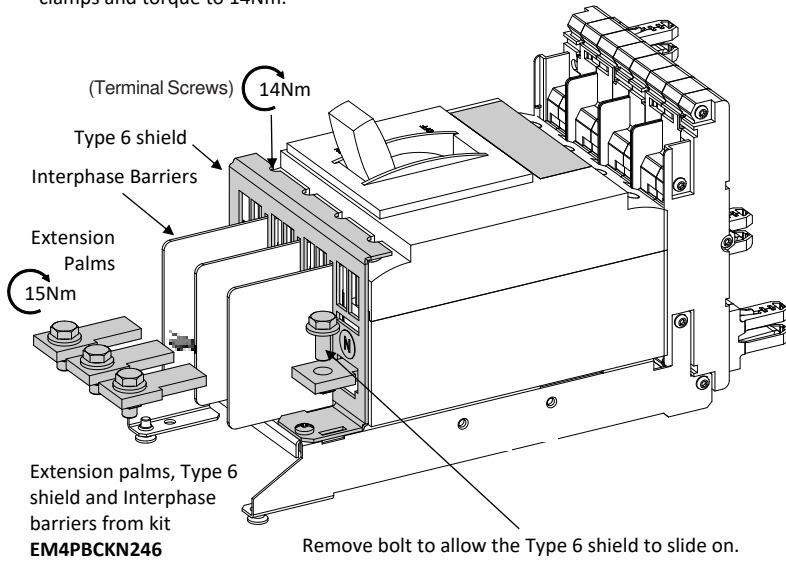
Fit Finger Guard (required for Group mounted)



NZM2 4P - Compartmentalised Form 4 type 6

Adaptor + parts from **EM4PBCKN246**

- 1 - Fit Interphase barriers to the MCCB.
- 2 - Fit type 6 shield over interphase barriers & screw down.
- 3 - Fit Extension Palms into the terminal box clamps and torque to 14Nm.

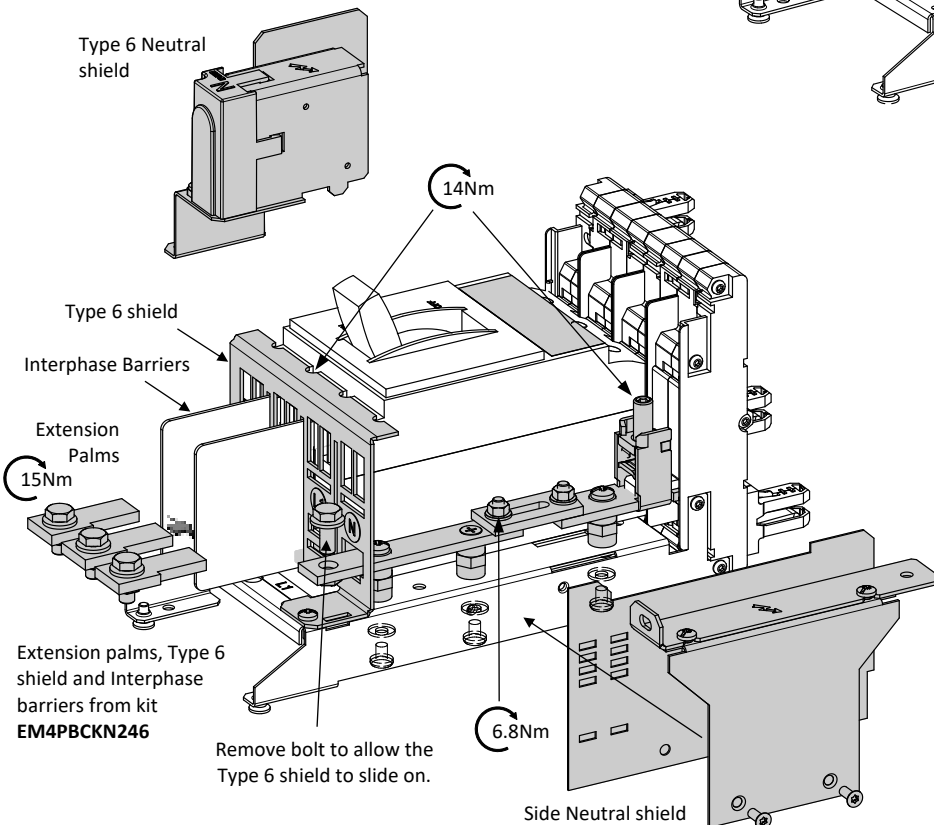


NZM2 3P&N - Compartmentalised Form 4 type 6

Adaptor + Neutral kit **EM4PBCKN2N**

+ parts from **EM4PBCKN246**

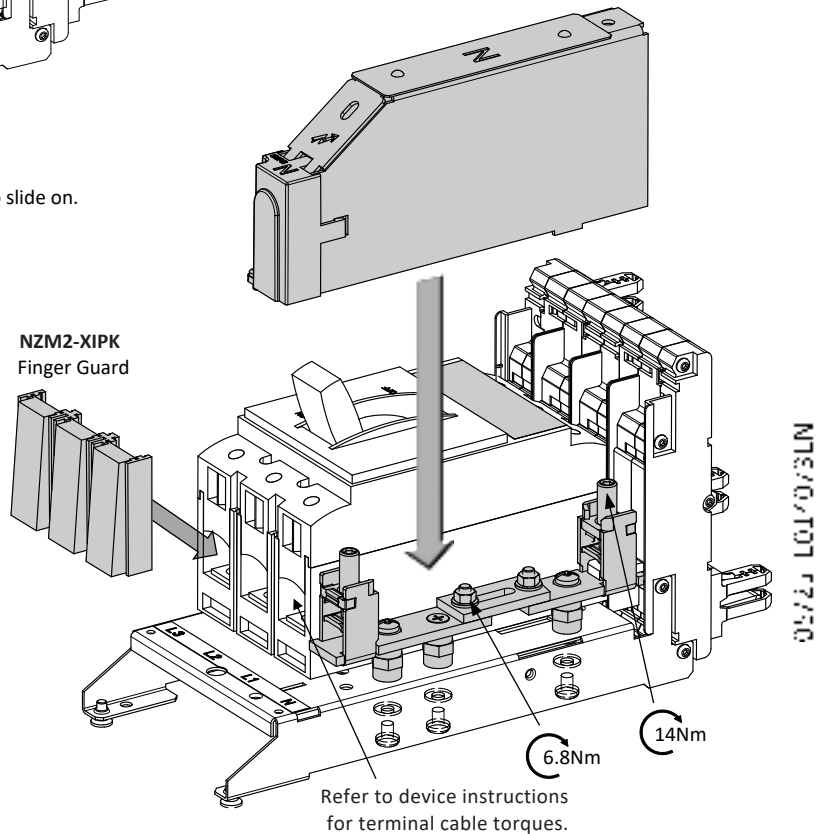
- 1 - Fit the neutral assembly to the adaptor with the M8 fixings.
- 2 - Fit Interphase barriers to the MCCB.
- 3 - Fit type 6 shield over interphase barriers & screw down.
- 4 - Fit Extension Palms into the terminal box clamps and torque to 14Nm.
- 5 - Fit the side neutral shields.
- 6 - The Type 6 Neutral shield is fitted after the adaptor assembly is mounted into the board.



NZM2 3P&N - Group Mounted / Compartmentalised Form 4 type 2

Adaptor + Neutral kit **EM4PBGMN2N**

- 1 - Fit the neutral assembly to the adaptor with the M8 fixings.
- 2 - Fit finger guard **NZM2-XIPK** (required for Group mounted)
- 3 - Fit the neutral shield.



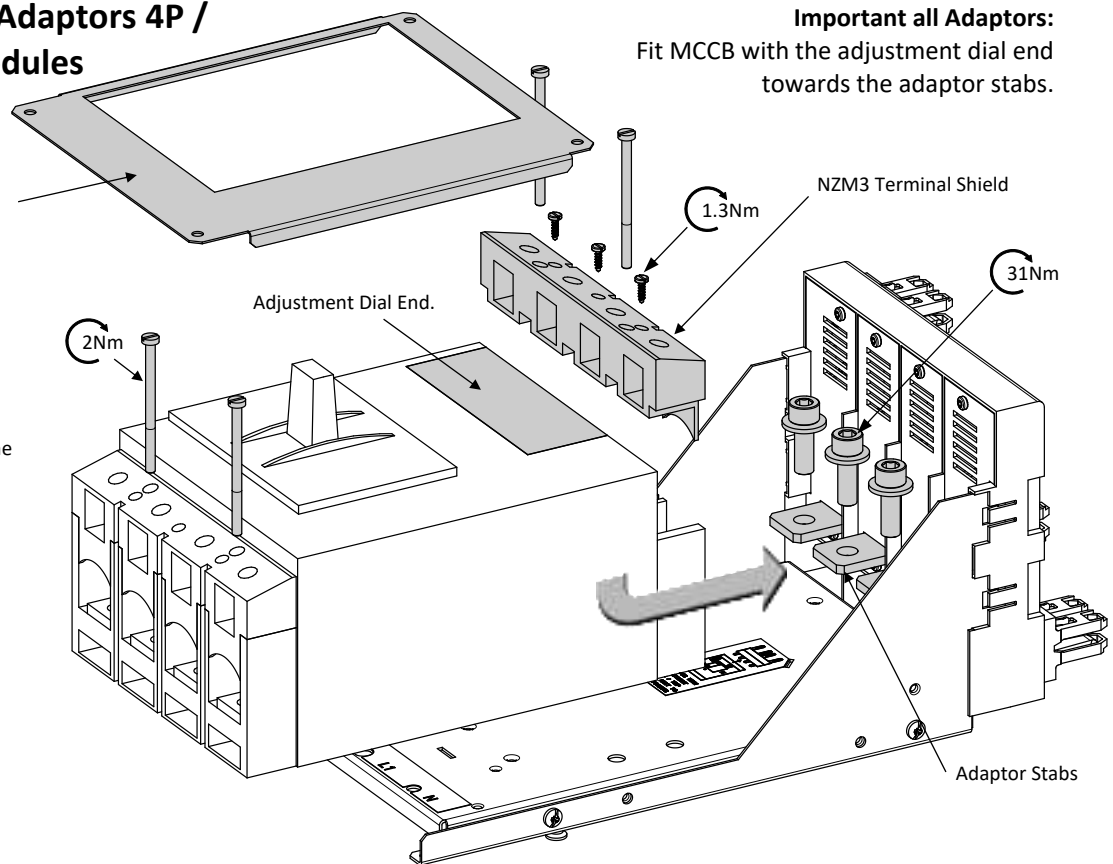
XII. Outgoing NZM3 Adaptors 4P / 3P & Neutral Modules

EM4PBFAN34

NZM3 4P / 3P&N Adaptor

Keep adaptor shield for use with Group mounted Inner cover.

1. Remove the Terminal shield on the supply side of the NZM3.
2. Fix the NZM3 in position with 4 x M5 x 75 long screws and tighten to 2 Nm.
3. Bolt the NZM terminals to the adaptor stabs with the M10 x 30 fixings supplied with the NZM. Tighten to 31Nm.
4. Refit the terminal shield and tighten the screws to 1.3Nm.

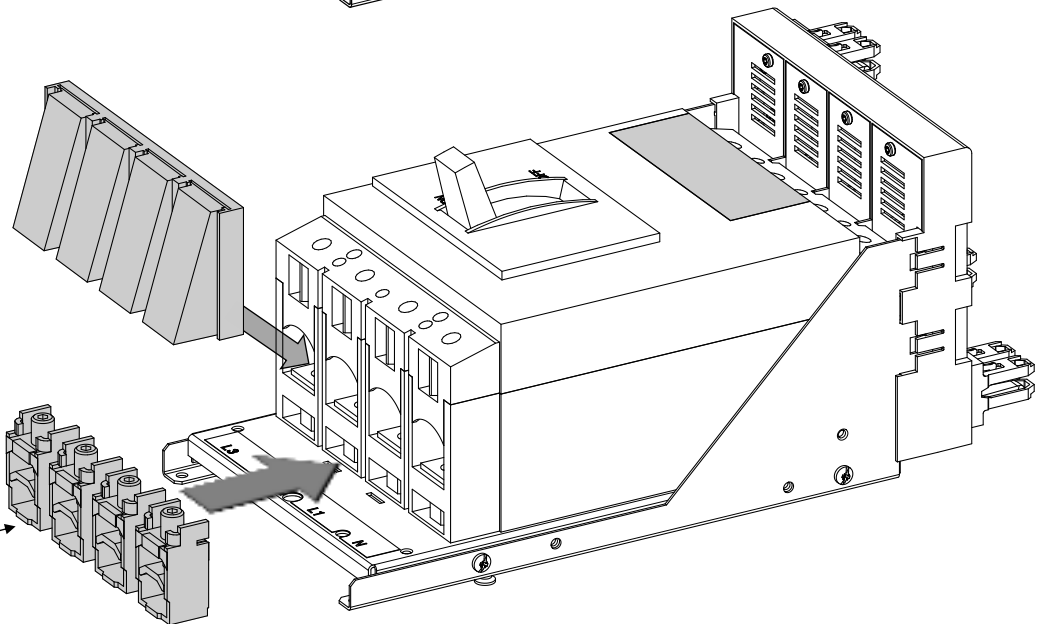


NZM3 4P – Group Mounted / Compartmentalised Form 4 type 2

NZM3-4-XIPK
Fit Finger Guard
(required for Group mounted)

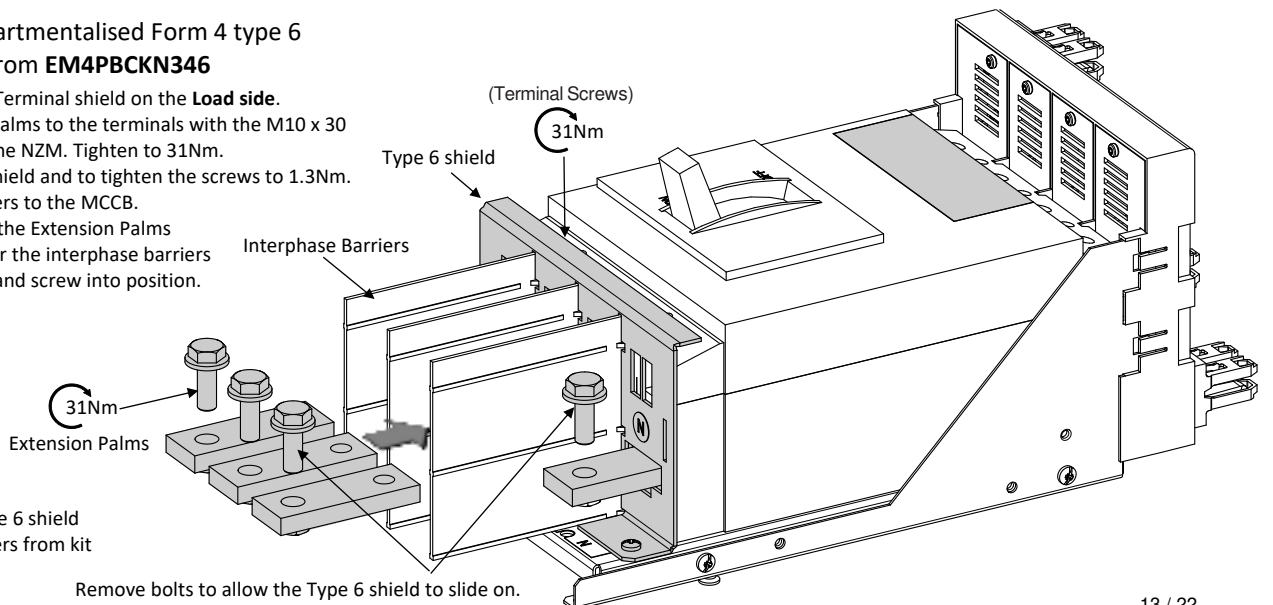
NZM3-4-XKC
Fit Box Terminals.
(required for Group mounted).

Refer to leaflet supplied with kit for Installation instructions and terminal cable torques.



NZM3 4P - Compartmentalised Form 4 type 6 Adaptor + parts from EM4PBCKN346

1. Remove the NZM3 Terminal shield on the Load side.
2. Bolt the Extension palms to the terminals with the M10 x 30 fixings supplied with the NZM. Tighten to 31Nm.
3. Refit the terminal shield and to tighten the screws to 1.3Nm.
4. Fit Interphase barriers to the MCCB.
5. Remove bolts from the Extension Palms
6. Fit type 6 shield over the interphase barriers and extension palms and screw into position.



Extension palms, Type 6 shield and Interphase barriers from kit **EM4PBCKN346**

Remove bolts to allow the Type 6 shield to slide on.

NZM3 3P&N - Group Mounted / Compartmentalised Form 4 type 2 Adaptor + Neutral kit **EM4PBGMN3N**

- 1 - Fit the neutral assembly to the adaptor with the M8 fixings.
- 2 - Fit finger guard **NZM3-XIPK** (mandatory for Group mounted)
- 3 - Fit the neutral shield.

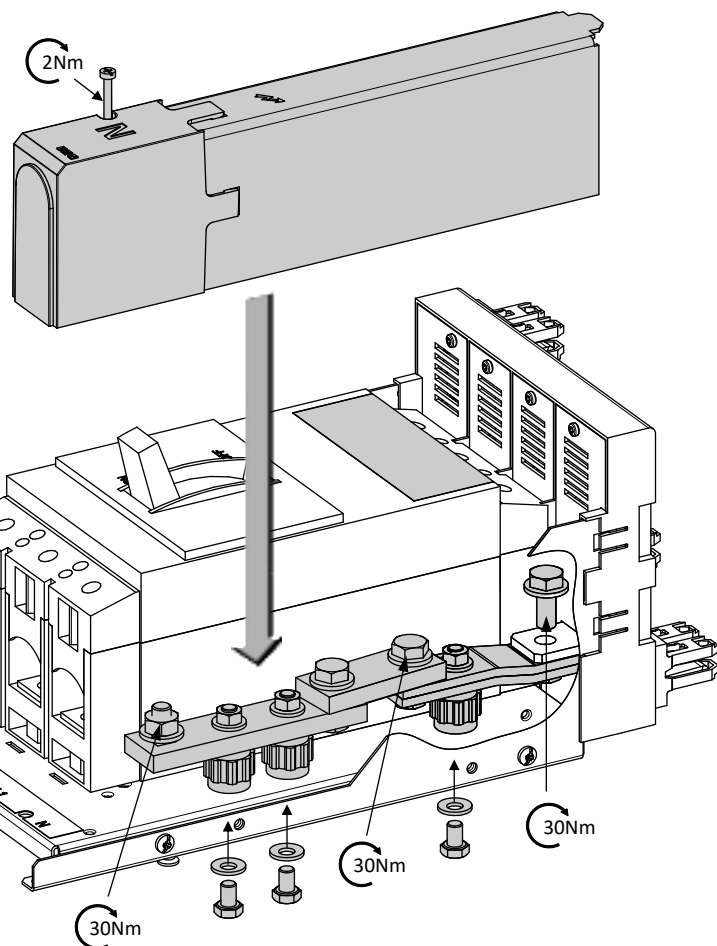
NZM3-4-XIPK

Fit Finger Guard
(required for Group mounted)

NZM3-XKC

Fit Box Terminals.
(required for Group mounted).

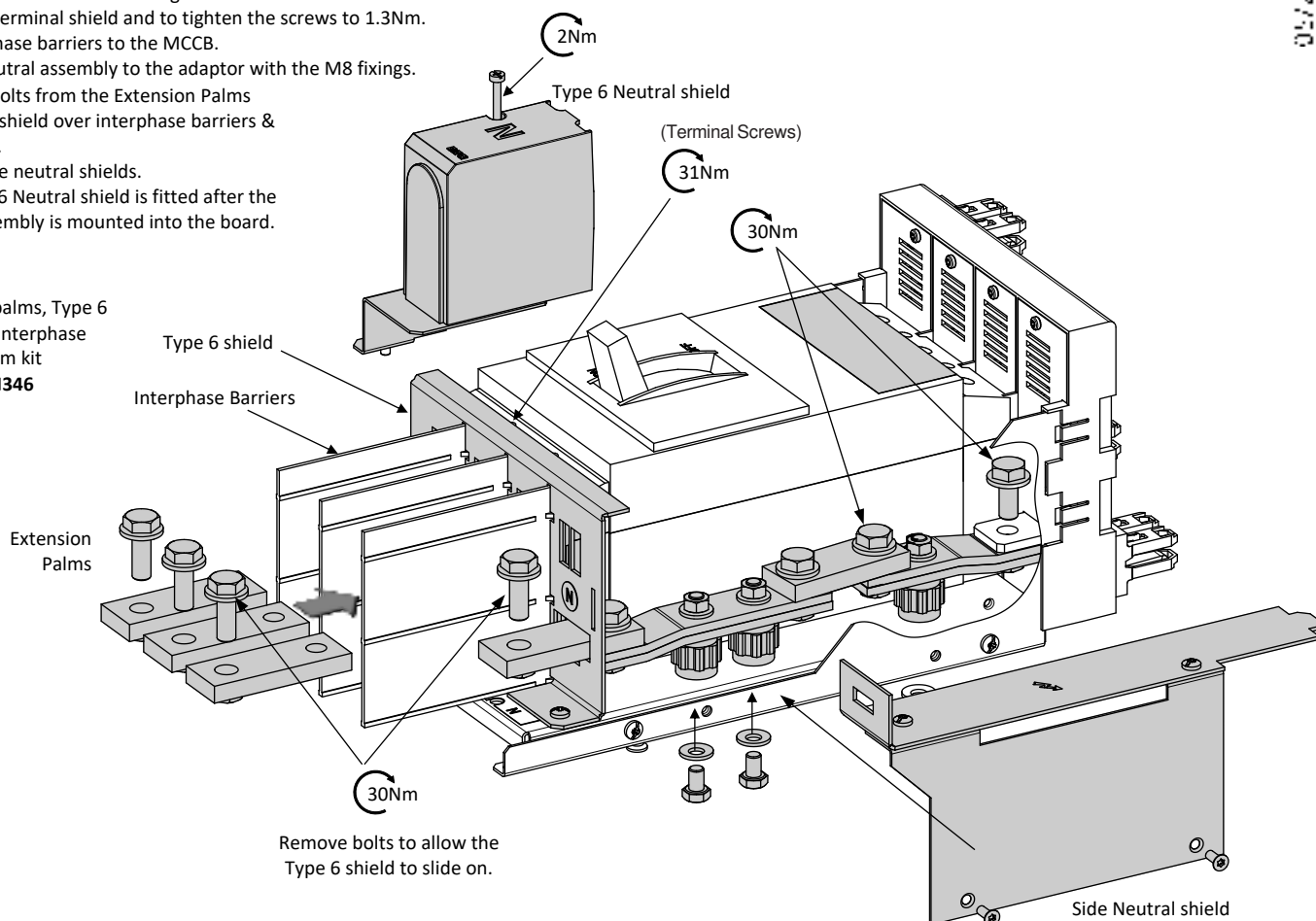
Refer to leaflet supplied with
kit for Installation instructions
and terminal cable torques.



NZM3 3P&N - Compartmentalised Form 4 type 6 Adaptor + Neutral kit **EM4PBCKN3N** + parts from **EM4PBCKN346**

1. Remove the NZM3 Terminal shield on the **Load side**.
2. Bolt the Extension palms to the terminals with the M10 x 30 fixings supplied with the NZM. Tighten to 31Nm.
3. Refit the terminal shield and to tighten the screws to 1.3Nm.
4. Fit Interphase barriers to the MCCB.
5. Fit the neutral assembly to the adaptor with the M8 fixings.
6. Remove bolts from the Extension Palms
7. Fit type 6 shield over interphase barriers & screw down.
8. Fit the side neutral shields.
9. The Type 6 Neutral shield is fitted after the adaptor assembly is mounted into the board.

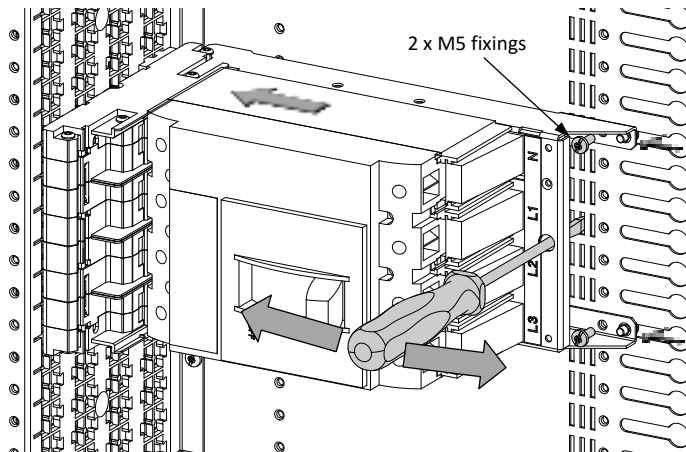
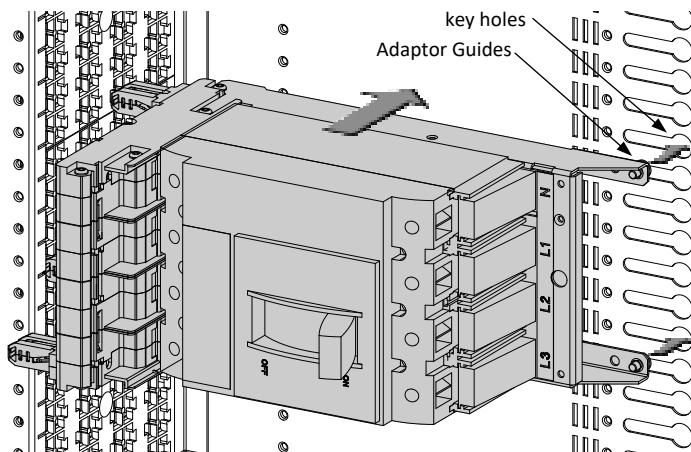
Extension palms, Type 6
shield and Interphase
barriers from kit
EM4PBCKN346



N3C/O/T01 7/50

XIII. Adaptor Modules – Racking In / Out procedure - for both Group and Compartmentalised.

Select the appropriate position on the busbar stack for the adaptor. Align the adaptor guides in the key holes and the adaptor contacts in the busbar stack shield ensuring the adaptor is horizontal. Placing a appropriate screwdriver through the hole in the adaptor into one of the slots in the back plate and rack the adaptor in or out. Secure with M5 fixings.



XIV. Group mounted – Form 4 Type 6

Space required for each device:

NZM1 SPN - 60mm (3 slots)

NZM1 TPN - 120mm (6 slots)

NZM2 TPN - 140mm (7 slots)

NZM3 TPN - 200mm (10 slots)

Space available on each side of the Busbar stack:

EM4PB680PDE - 360 (18 slots)

EM4PB1280PDE - 720 (36 slots)

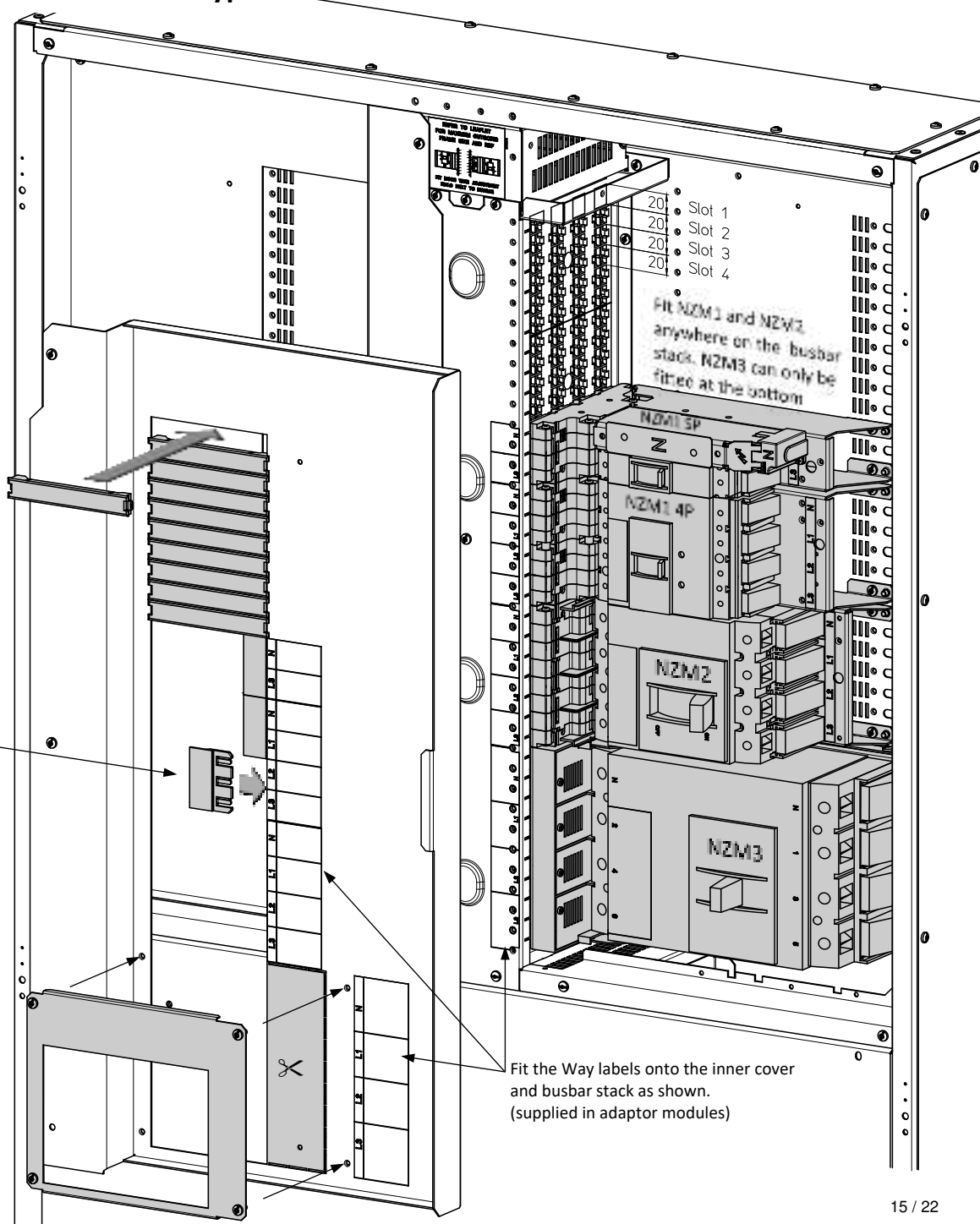
EM4PB1680PDE - 960 (48 slots)

M13/0/101 77/0

Group Mounted Unused
Way Cover Blank
EM4PBGMBP
(Quantity 8 in a bag,
covers 160mm space)

Clip the NZM1 Adaptor Shields
into the inner cover in line
with the appropriate NZM1
(supplied in adaptor module)

The NZM3 can only be fitted in
the bottom most position on
either side of the busbar stack.
The cover cut-out for the NZM3
needs to be removed and the
frame plate fitted.
A cable/meter extension box is
required if a NZM3 is fitted.



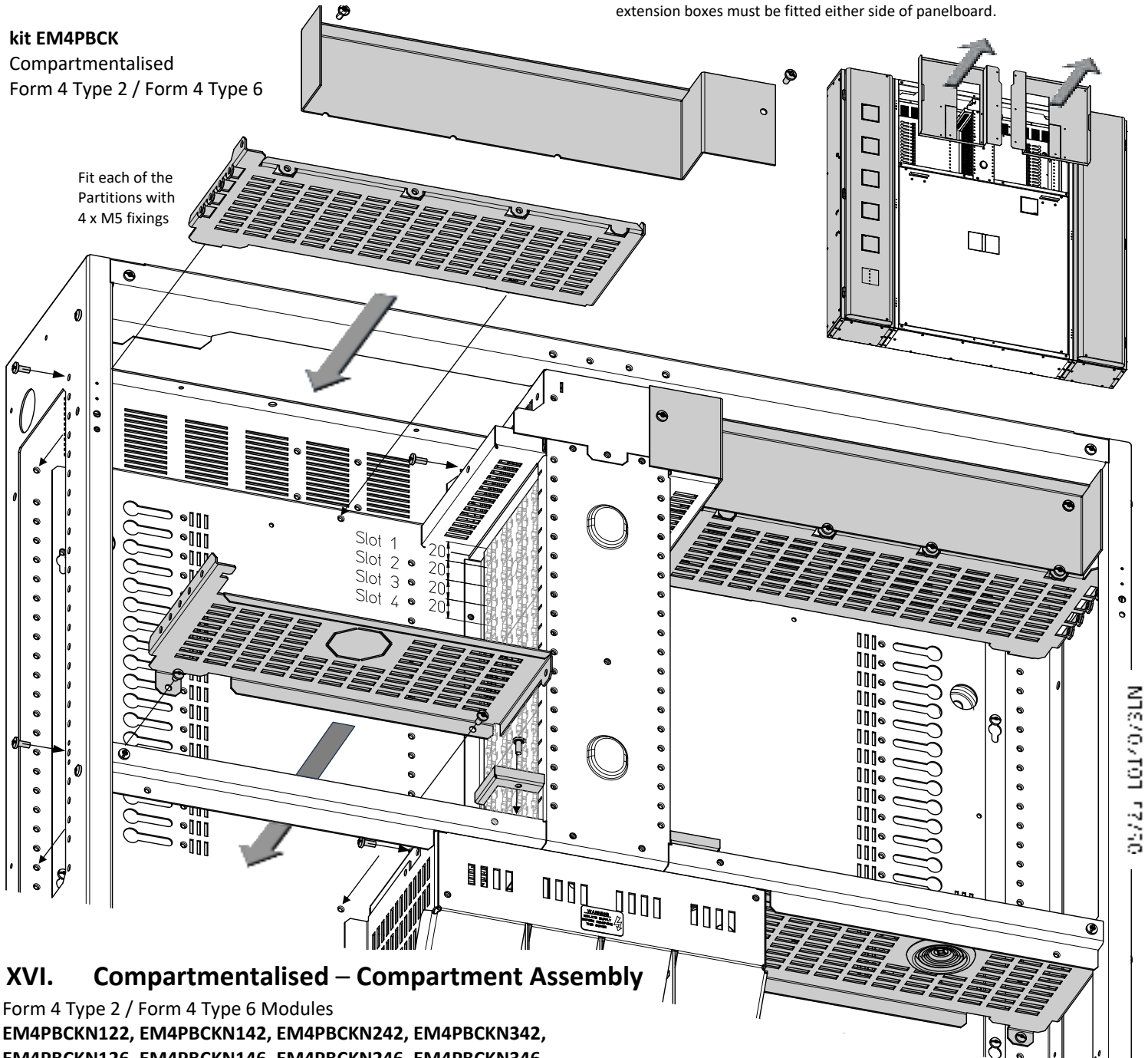
XV. Compartmentalised - Conversion Kit

kit EM4PBCK

Compartmentalised

Form 4 Type 2 / Form 4 Type 6

To convert the board to Compartmentalised, discard the two inner covers before fitting the kit **EM4PBCK**. When Compartmentalised a cable/metering extension boxes must be fitted either side of panelboard.



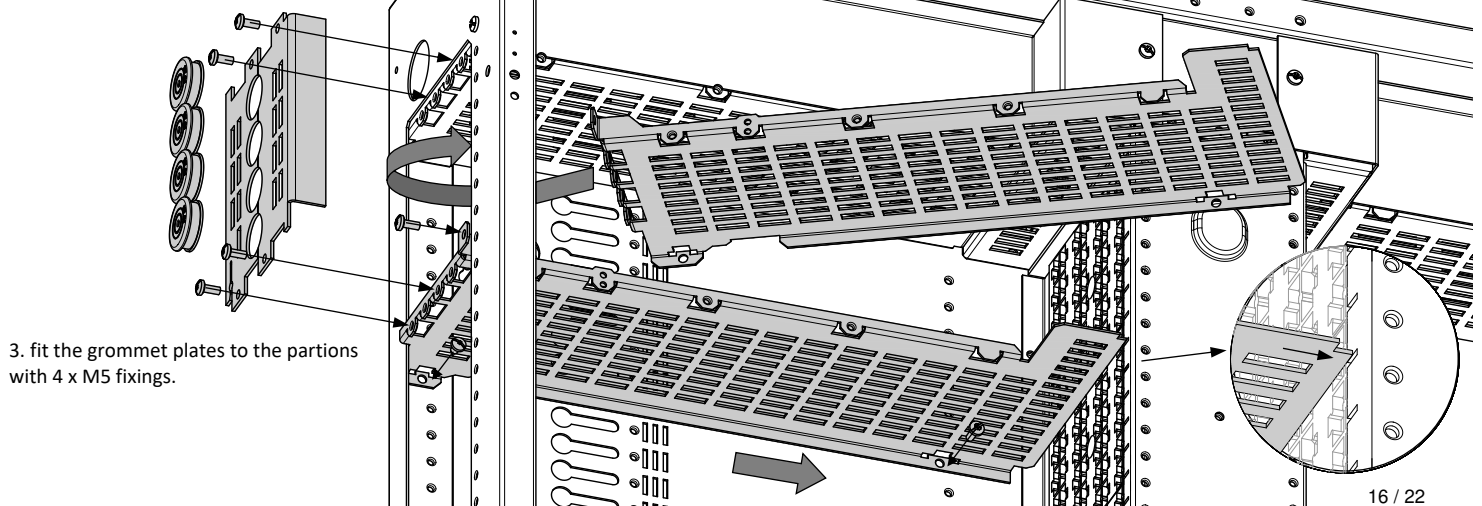
XVI. Compartmentalised – Compartment Assembly

Form 4 Type 2 / Form 4 Type 6 Modules

EM4PBCKN122, EM4PBCKN142, EM4PBCKN242, EM4PBCKN342, EM4PBCKN126, EM4PBCKN146, EM4PBCKN246, EM4PBCKN346

1. Rotate the partition through the side wall.
2. Position the partition in line with the cable grommet plate fixings and slot into busbar stack. Fix in position with 3 x M5 fixings.

EM4PBCKN242 shown as an example for fitting partitions and cable grommet plates.



XVII. Compartmentalised - Form 4 Type 2 Modules

EM4PBCKN122, EM4PBCKN142, EM4PBCKN242, EM4PBCKN342, EM4PBCKUW

NZM1, NZM2 & NZM3 Can be fitted anywhere on the busbar stack. Fit the partitions in the appropriate places for each of the devices before fitting the adaptors with the racking In / out procedure. Next fit the cable gland plates and covers.

Space required for compartmentalise devices:

EM4PBCKN122 NZM1 SPN – 80mm (4 slots)

EM4PBCKN142 NZM1 TPN – 140mm (7 slots)

EM4PBCKN242 NZM2 TPN – 160mm (8 slots)

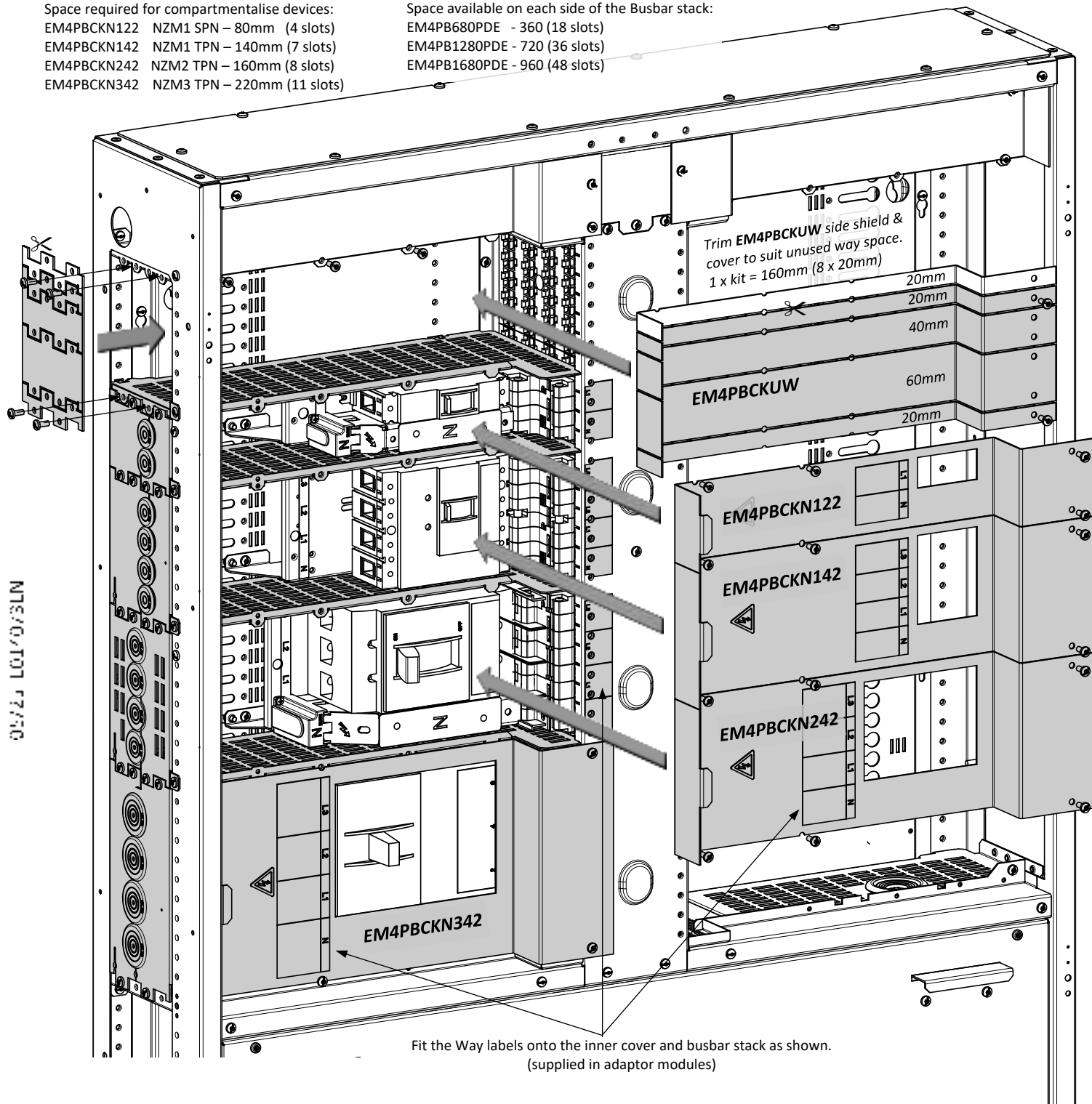
EM4PBCKN342 NZM3 TPN – 220mm (11 slots)

Space available on each side of the Busbar stack:

EM4PB680PDE - 360 (18 slots)

EM4PB1280PDE - 720 (36 slots)

EM4PB1680PDE - 960 (48 slots)



XVIII. Blanking Way - Compartmentalised Form 4 Type 2 / 6

EM4PBCKN12BK – NZM1 SPN

EM4PBCKN14BK – NZM1

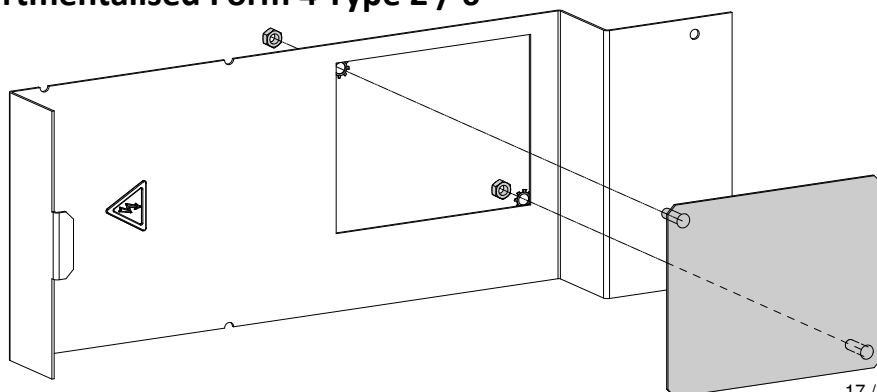
EM4PBCKN24BK – NZM2

EM4PBCKN34BK – NZM3

If a compartment doesn't have a MCCB then a blanking way is required to fill the cover aperture.

Fit Blanking way with the M6 fixings supplied.

EM4PBCKN24BK shown as an example.



XIX. Compartmentalised - Form 4 Type 6 Modules

EM4PBCKN126, EM4PBCKN146, EM4PBCKN246, EM4PBCKN346, EM4PBCKUW

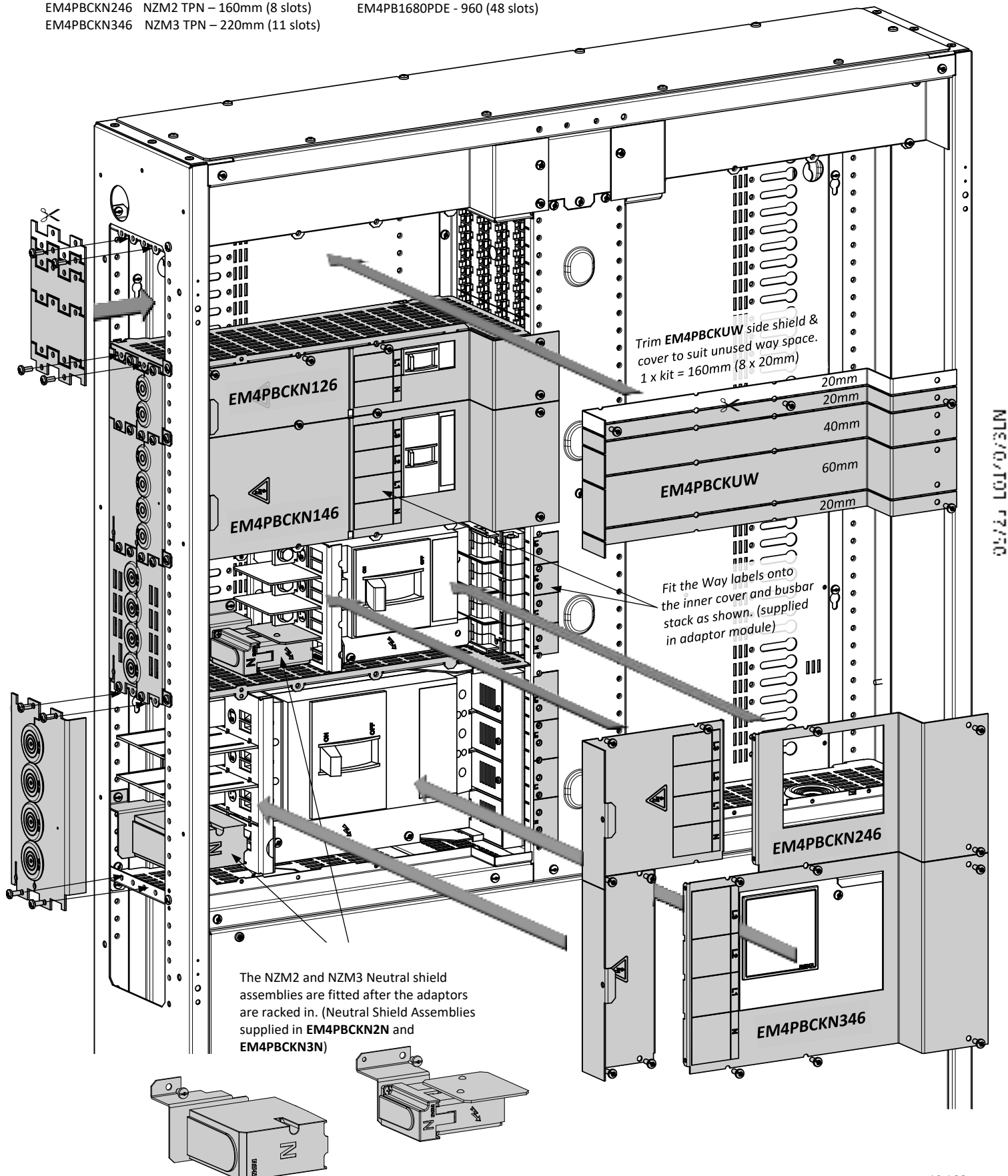
NZM1, NZM2 & NZM3 Can be fit anywhere on the busbar stack. Fit the partitions in the appropriate places for each of the devices before fitting the adaptors with the racking In / out procedure. Next fit the cable gland plates and covers.

Space required for compartmentalise devices:

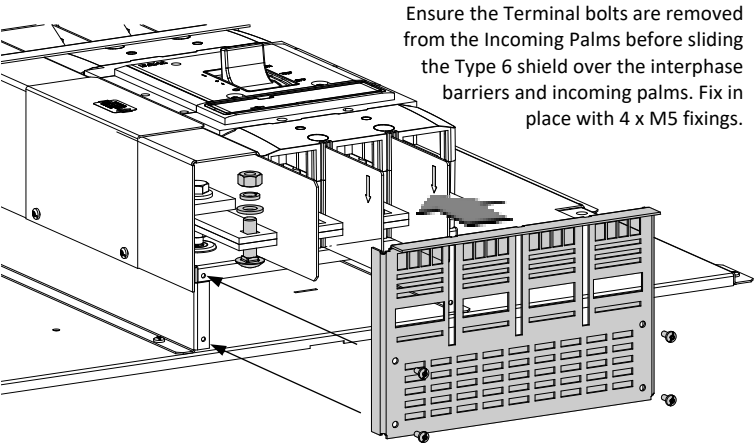
EM4PBCKN126 NZM1 SPN – 80mm (4 slots)
 EM4PBCKN146 NZM1 TPN – 140mm (7 slots)
 EM4PBCKN246 NZM2 TPN – 160mm (8 slots)
 EM4PBCKN346 NZM3 TPN – 220mm (11 slots)

Space available on each side of the Busbar stack:

EM4PB680PDE - 360 (18 slots)
 EM4PB1280PDE - 720 (36 slots)
 EM4PB1680PDE - 960 (48 slots)



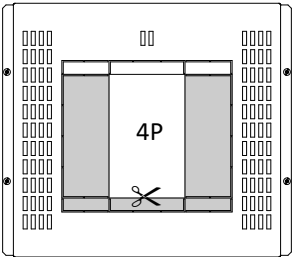
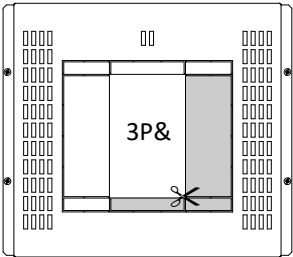
XX. Compartmentalised - Form 4 Type 6 Incomer Compartment
EM4PB80PDECKINC



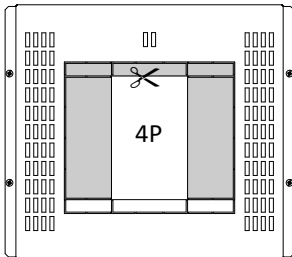
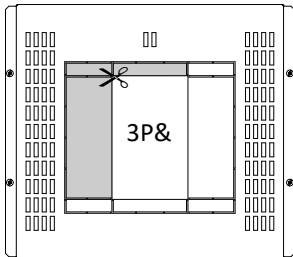
Ensure the Terminal bolts are removed from the Incoming Palms before sliding the Type 6 shield over the interphase barriers and incoming palms. Fix in place with 4 x M5 fixings.

Incomer Shield Cutouts - Cutout the shaded areas below for the specific Incomer type and Cable Entry.

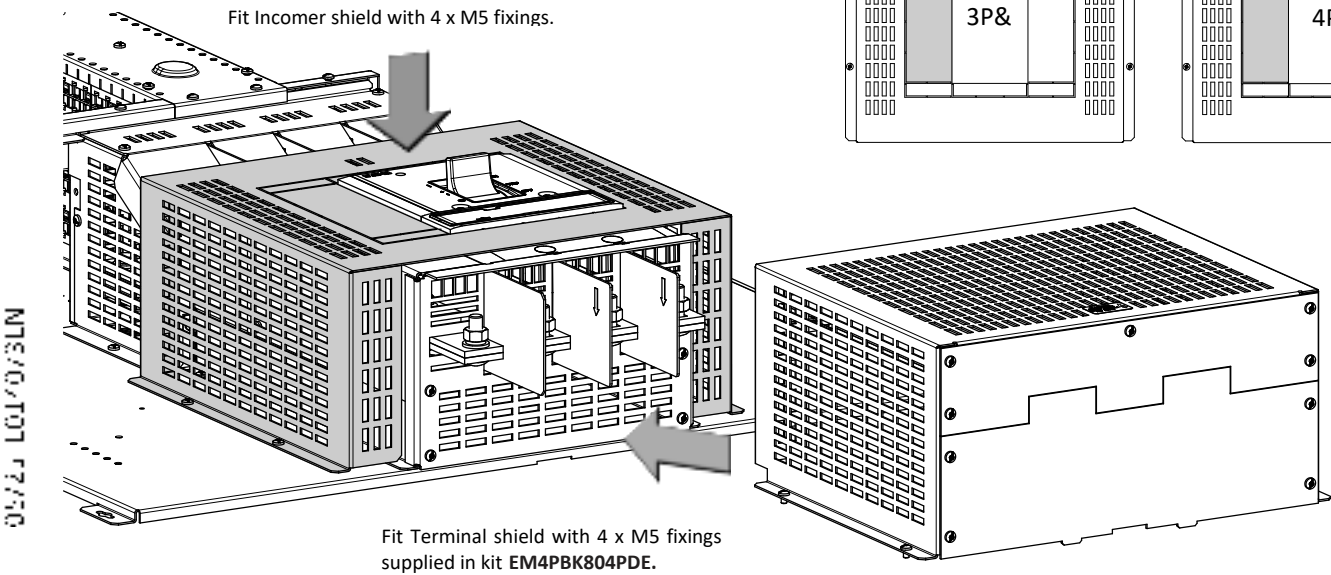
Bottom Entry Supply



Top Entry Supply



Fit Incomer shield with 4 x M5 fixings.

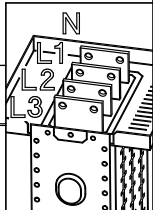


Fit Terminal shield with 4 x M5 fixings supplied in kit EM4PBK804PDE.

XXI. Label Positions

Label Sheet

The labels supplied are pre-cut ready for peeling off and supplied loose with the panel board.

REFER TO LEAFLET FOR MAXIMUM OUTGOING FRAME SIZE AND RDF	 REFER TO LEAFLET FOR EARTH ID TABLE		 WARNING ISOLATE SUPPLY BEFORE REMOVING THIS COVER	
	 REFER TO LEAFLET FOR EARTH ID TABLE			
	MAX SUPPLY – 800A			
	 WARNING ISOLATE SUPPLY BEFORE REMOVING INTERNAL COVERS			
N	L1	L2	L3	

Label Positions

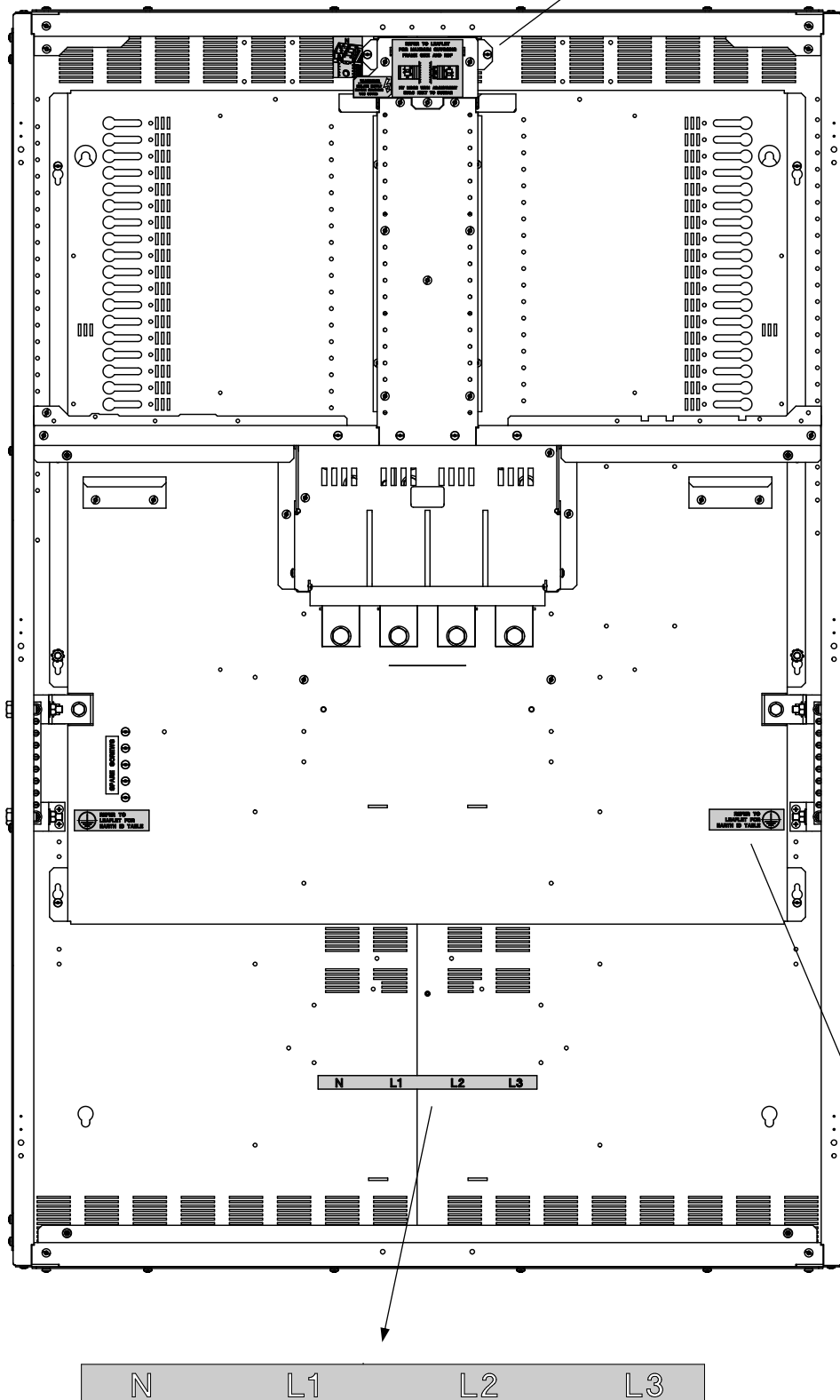
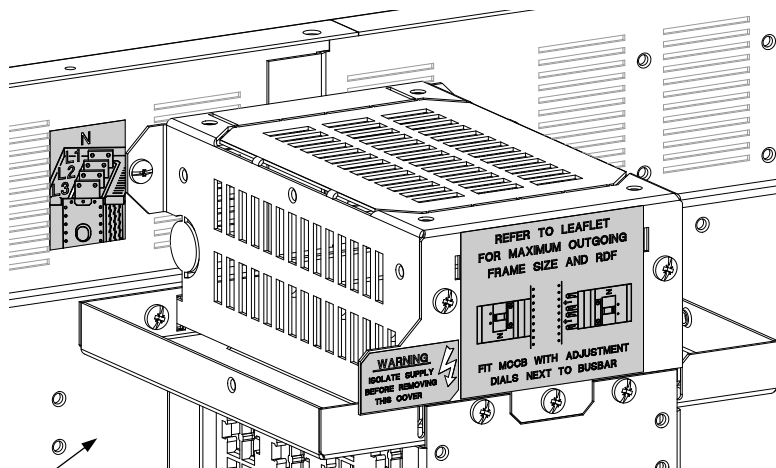
Ensure labels supplied with the panelboard are fitted as shown in the bottom entry example below.

For Top Entry, the labels are in the same positions but rotated through 180°.

See top entry instructions for more details – p.8

Outgoing ways

The labels for the outgoing ways are supplied in the adaptor modules. See the different Panel board forms of separation instructions for outgoing label positions – p.15, 17,18

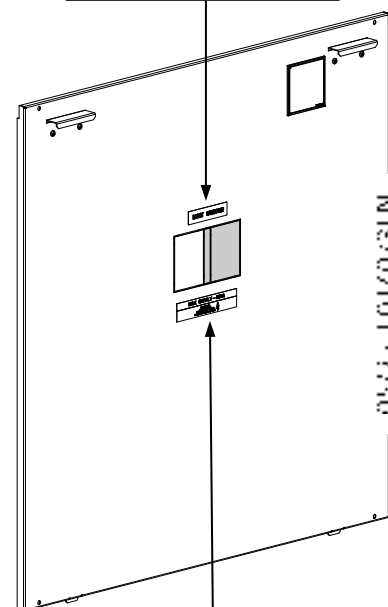


Incomer Inner Cover

Main Switch Label

Position above the Incomer toggle.

MAIN SWITCH

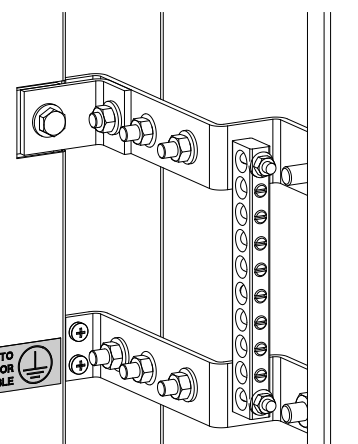


Max rating Label

Position below the Incomer toggle.

MAX SUPPLY – 800A

WARNING
ISOLATE SUPPLY BEFORE
REMOVING INTERNAL COVERS



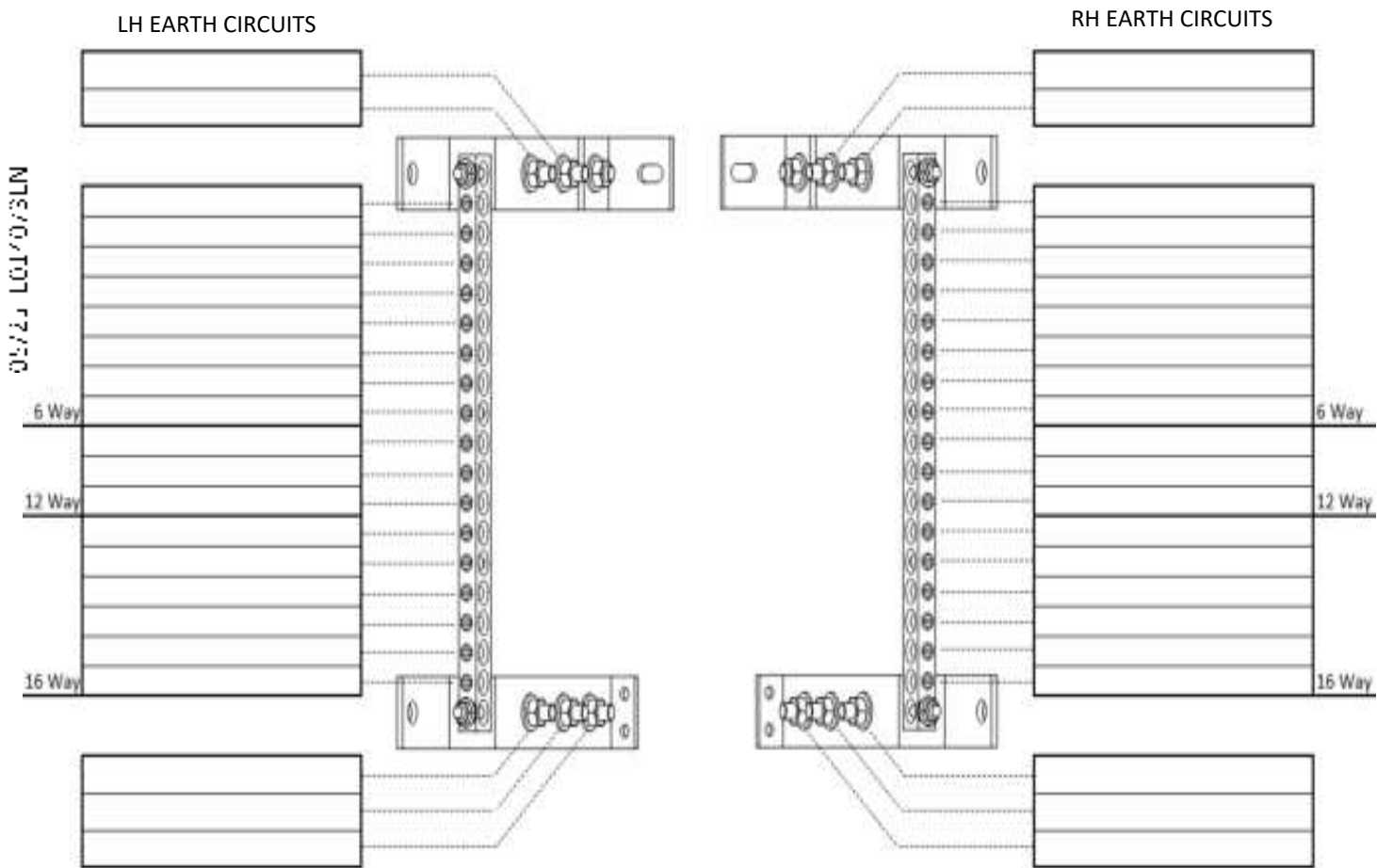
XXII. Maximum Thermal Ratings for Devices

The ratings shown below cover all group mounted and compartmentalised configurations.

Maximum Incomer	Bottom Entry	Top Entry
800A MCCB/Switch	= 800A	770A
800A Direct Cable	= 800A	800A

Maximum Outgoer	<i>Inc</i>	RDF
NZM1 Single Pole 125A	= 125A	0.7
NZM1 3-4 Pole 125A	= 125A	0.7
NZM1 3-4 Pole 160A	= 160A	0.7
NZM2 3-4 Pole 250A	= 235A	0.7
NZM3 3-4 Pole 400A	= 380A	0.7

XXIII. Outgoing Earth Circuits Identification Table



Warning!
Intellectual Property Rights!
Eaton wishes to make it clear that it owns intellectual property rights in the product which it manufactures (whether or not listed in this leaflet) and that it will take legal action against any party found to be manufacturing, using, or selling any article which infringes the company's intellectual property. All marks in this document identified with an R symbol or a TM symbol adjacent to the mark are trademarks of Eaton.

The use to which this product is put and its place of installation is outside our control. Particular care should therefore be taken to follow the instructions given here and to ensure their continued availability in conjunction with the use of the product. No responsibility can be accepted by us if these instructions are disregarded.

Further copies of these instructions and information concerning the installation and proper use of this product can be obtained by contacting the: Technical Services Department

Tel: +44(0)8700 545 333,
email: techsupportemea@eaton.com

XXIV. Outgoing Circuits Identification Table

Lefthand	Slots	Righthand
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	6 Way
	18	BusBar
	19	
	20	
	21	
	22	
	23	
	24	
	25	
	26	
	27	
	28	
	29	
	30	
	31	
	32	
	33	
	34	
	35	12 Way
	36	BusBar
	37	
	38	
	39	
	40	
	41	
	42	
	43	
	44	
	45	
	46	
	47	16 Way
	48	BusBar

INCOMING CABLE SIZE _____ INSTALLATION DATE _____

FED FROM _____ CONTRACTOR _____