

B2.4

CONVERT MODULE ASSEMBLY

KYT-070
11/2021

 Update Notes

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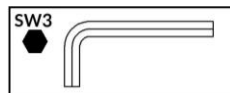
Tools Symbol Guide



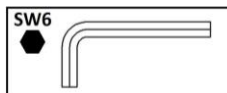
Cross



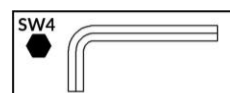
Slot



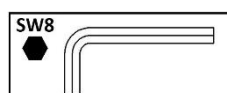
M4 Allen Key



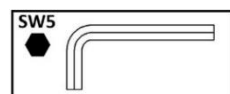
M8 Allen Key



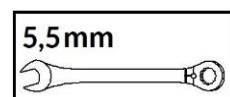
M5 Allen Key



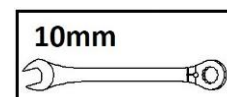
M10 Allen Key



M6 Allen Key



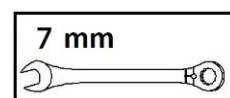
M3 Spanner



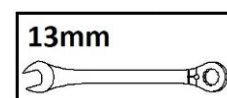
M6 Spanner



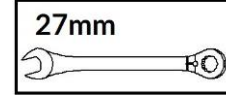
M12 Spanner



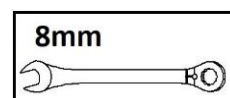
M4 Spanner



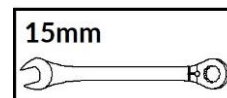
M8 Spanner



M18 Spanner



M5 Spanner



M10 Spanner

Caution: For safety precaution ; Protective gloves and equipments must be used while assembly.

As additional tools for assembly;

- Torque wrench features:
 - ✓ Tightening torque : 75 N.m
 - ✓ It has a reduced thickness, can be easily used to access non accessible joints/fishplates and between busbars.
- Torque wrench an accessories:
 - ✓ Wrench shaft - mandatory
 - ✓ Extra-thin pawl adapter - mandatory
 - ✓ Pawl for ordinary sockets
- Extra-thin sockets for pawl + shaft:
 - ✓ 13 mm extra-thin low socket
 - ✓ 13 mm extra-thin high socket
 - ✓ 15 mm extra-thin low socket
 - ✓ 15 mm extra-thin high socket
 - ✓ 18 mm extra-thin low socket
 - ✓ 18 mm extra-thin high socket

Torque Table for Screw/Bolt

Recommended tightening torque for mechanical and electrical links 8.8-class screws (with nut + washers)	
Diameter of Screw	Tightening Torque (N.m)
M3	1.5
M4	3.5
M5	7
M6	13
M8	28
M10	50
M12	75

Tightening torque for electrical links on the devices and for their fixing:

Marking varnish:

After tightening each electrical connection to the appropriate torque, apply some varnish:

- ✓ Between the nut and the screw or
- ✓ Between the screw head and the copper bar or
- ✓ Between the device for tightening on a threaded part

Varnish should not block the screw:

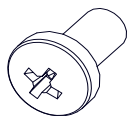
- ✓ It allows operator inspection, to verify if the bolts/ nut are tightened or not.
- ✓ It facilitates the identification of any loose nuts during the switchboard's lifetime.

Varnish features:

- ✓ Coloured acrylic varnish, indelible and able to resist a 150° C temperature.
- ✓ PDS recommends a red varnish as a standard to identify the panelbuilder's work.
- ✓ Other colours can be used by the contractor or any operators entitled to work on the switchboard after its commissioning.

■ Screw/Bolt/Special Parts for Assembly

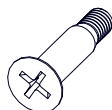
Philips Pan
Head Screw



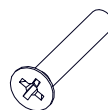
M6x23 Philips Flat
Head Screw (Teos)



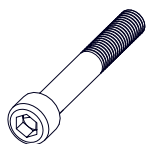
M5x20 Philips Flat
Head Screw (Teos)



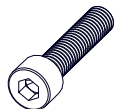
Philips Flat Head
Screw



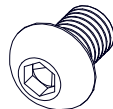
Hexagon Socket Head
Bolt (Half Thread)



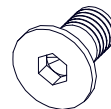
Hexagon Socket
Head Bolt



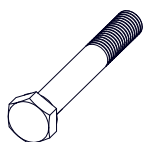
Hexagon Socket
Button Head Bolt



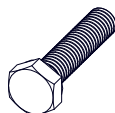
Hexagon Socket
Flat Head Bolt



Hexagon Head Bolt
(Half Tread)



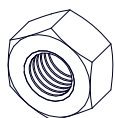
Hexagon Head
Bolt



Internal Door
Knob Bolt



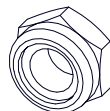
Regular Nut



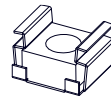
Flange Nut



Previling Torque
Nut



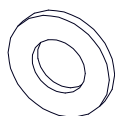
Cage Nut



Plastic Cage
Nut



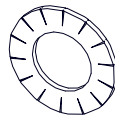
Flat Washer



Spring Lock
Washer



Toothed Lock
Washer

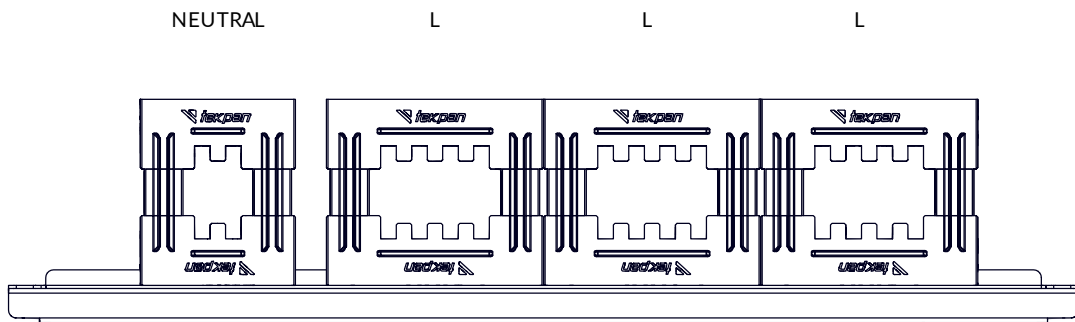
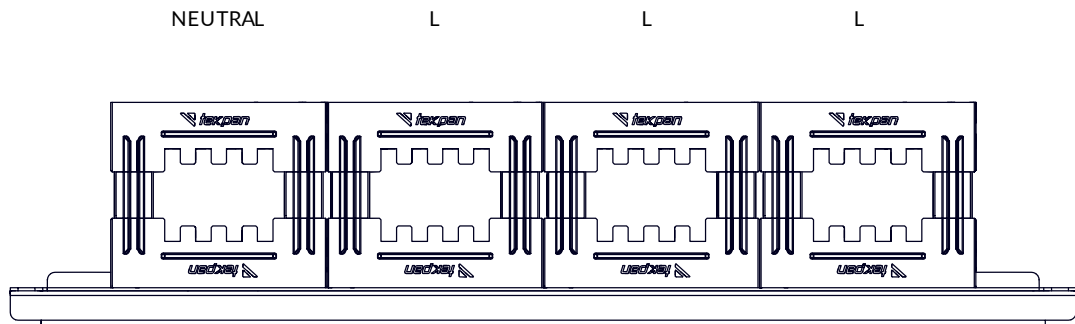
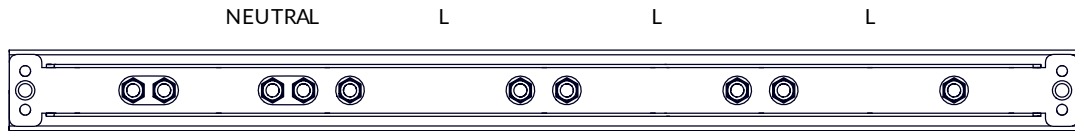
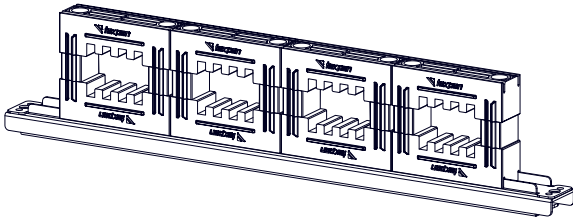


Wedge Lock
Washer



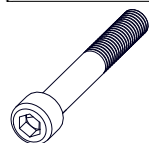
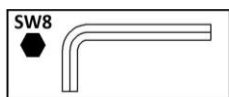
1. BUSBAR ASSEMBLY

1.1 FOUR (4) FLAT BAR ASSEMBLY (TOP)



Neutral Section	Rated Current (In)	Flat Copper Size (mm) xQty	
		L1/L2/L3	Neutral(N)
1/2 N	2500A	40/10x4	40/10x2
1/1 N	2500A	40/10x4	40/10x4
1/2 N	3000A	50/10x4	50/10x2
1/1 N	3000A	50/10x4	50/10x4
1/2 N	3400A	60/10x4	60/10x2
1/1 N	3400A	60/10x4	60/10x4
1/2 N	4000A	80/10x4	80/10x2
1/1 N	4000A	80/10x4	80/10x4

1.1 FOUR (4) FLAT BAR ASSEMBLY (TOP)



M10x H
8 pcs.

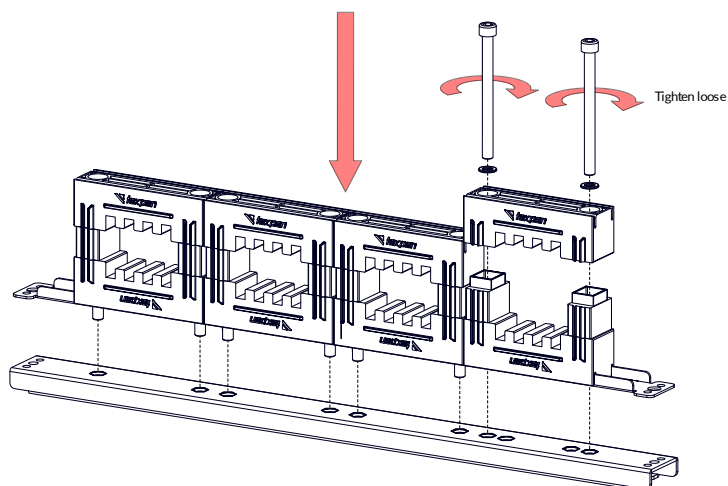
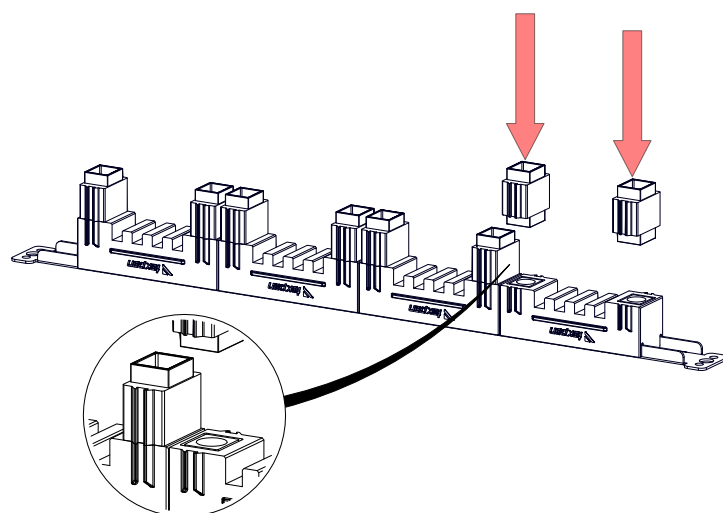
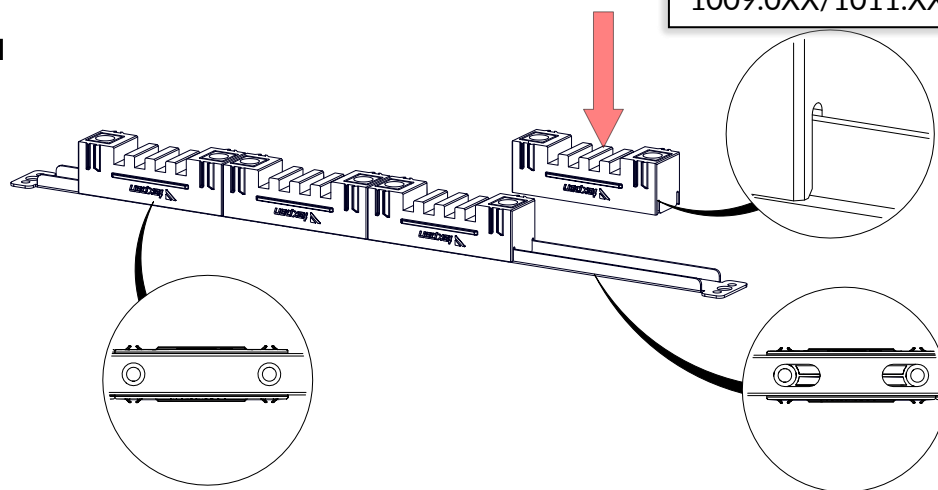


M10
8 pcs.

Required Packages:

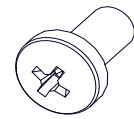
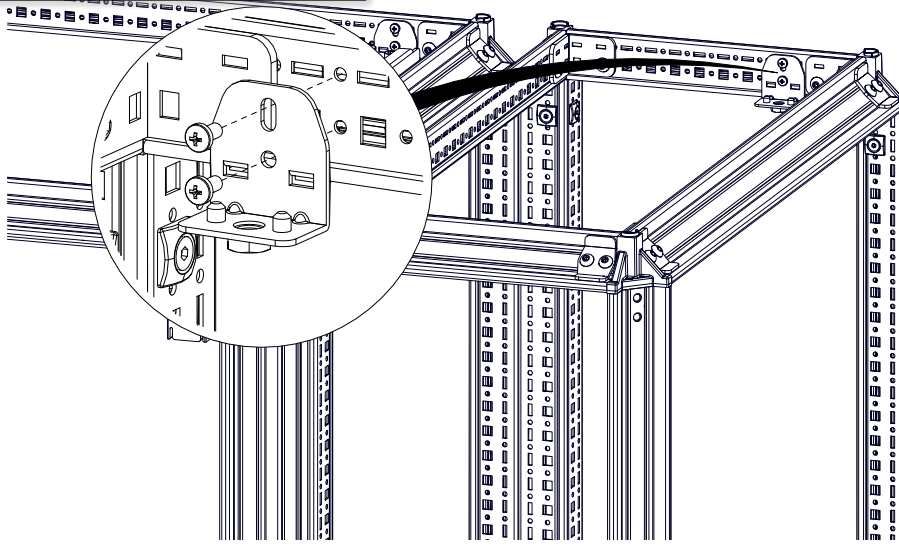
1010.18X

1009.0XX/1011.XXX

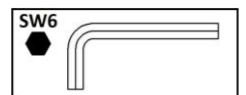
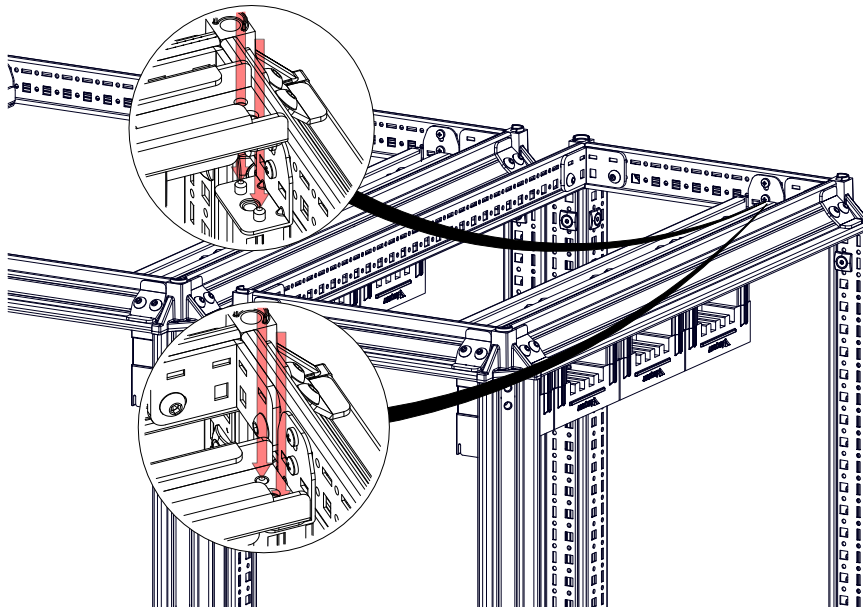


1.1 FOUR (4) FLAT BAR ASSEMBLY (TOP)

Required Packages:
1010.18X
1009.0XX/1011.XXX



M5X10



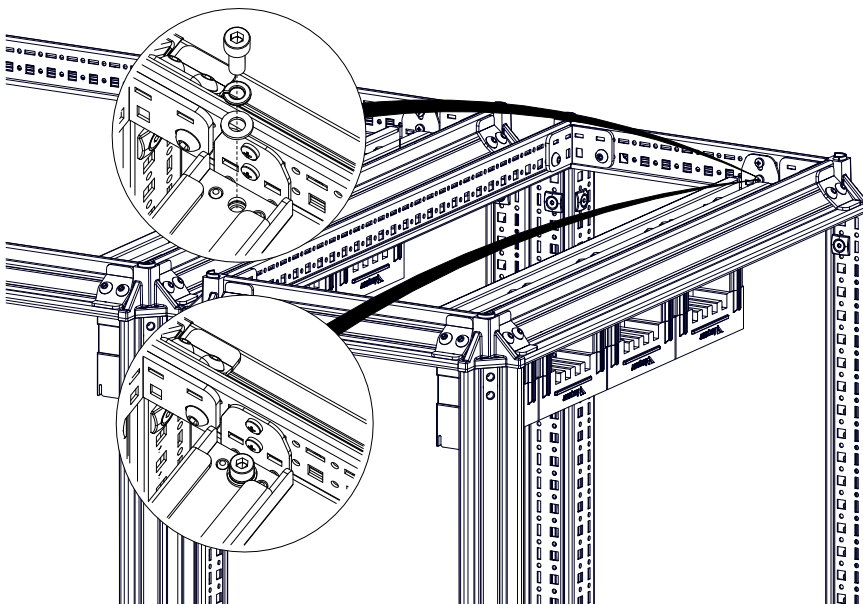
M8x20
1 pcs.



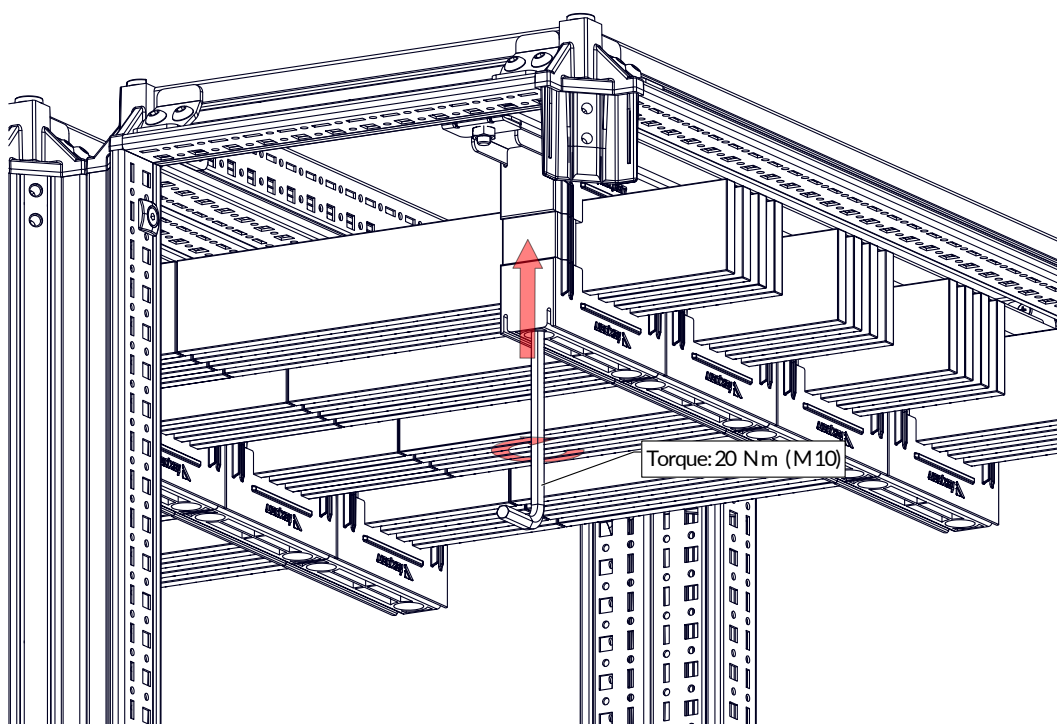
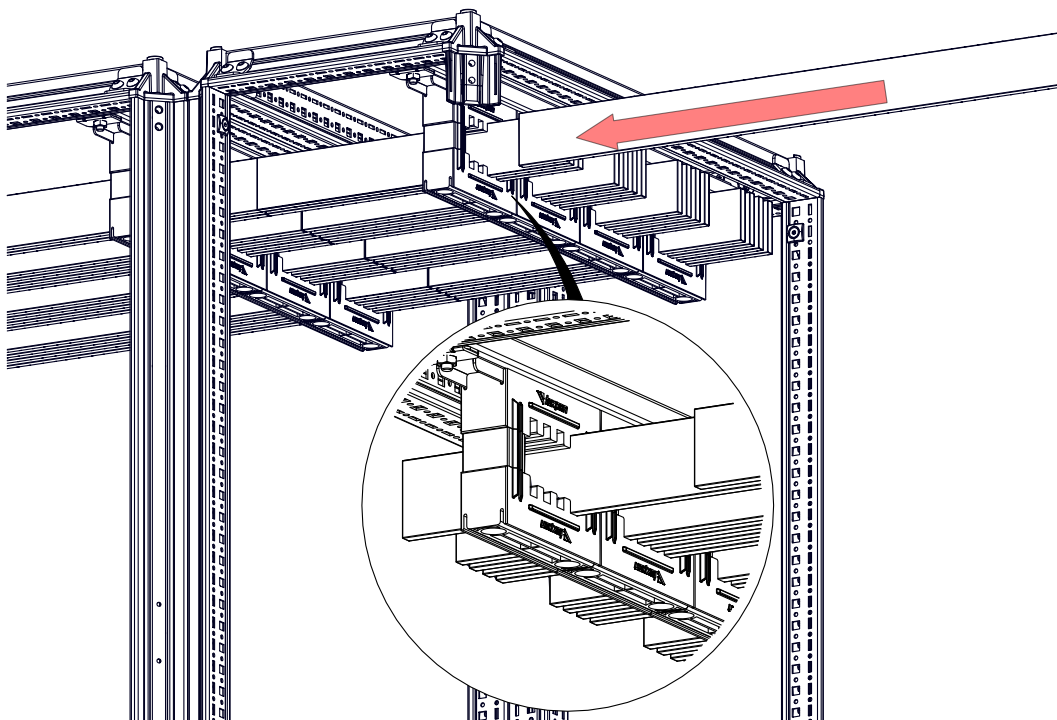
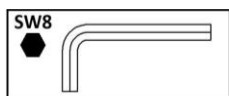
M8
1 pcs.



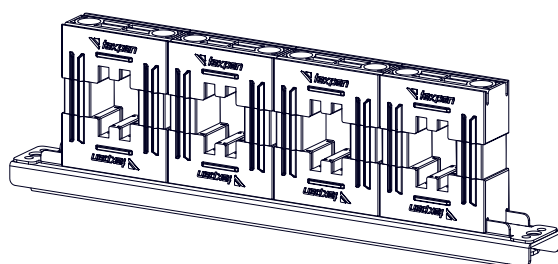
M8
1 pcs.



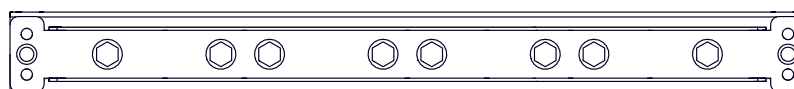
■ 1.1 FOUR (4) FLAT BAR ASSEMBLY (TOP)



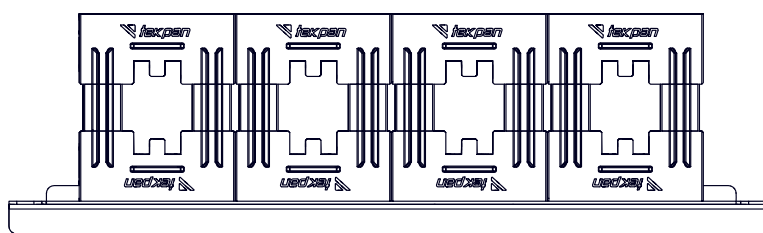
1.2 TWO (2) FLAT BAR ASSEMBLY (TOP)



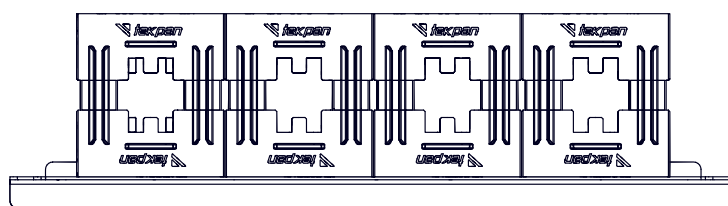
NEUTRAL L L L



NEUTRAL L L L

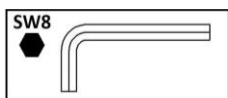


NEUTRAL L L L

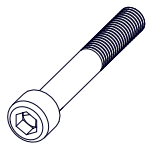


Neutral Section	Rated Current (In)	Flat Copper Size (mm) xQty	
		L1/L2/L3	Neutral(N)
1/2 N	1350A	40/10x2	40/5x2
1/1 N	1350A	40/10x2	40/10x2
1/2 N	1620A	50/10x2	50/5x2
1/1 N	1620A	50/10x2	50/10x2
1/2 N	1860A	60/10x2	60/5x2
1/1 N	1860A	60/10x2	60/10x2
1/2 N	2300A	80/10x2	40/10x2
1/1 N	2300A	80/10x2	80/10x2

1.2 TWO (2) FLAT BAR ASSEMBLY (TOP)



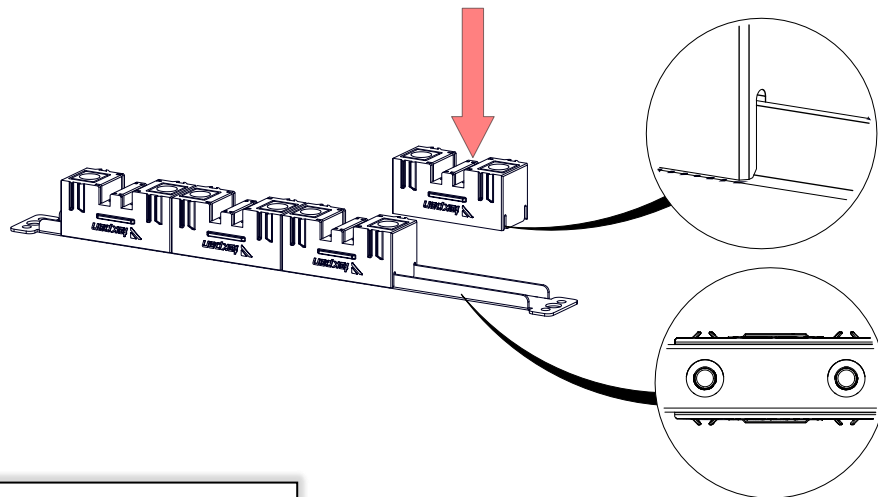
Required Packages:
1010.16X
1009.0XX/1011.XXX/1019.0XX



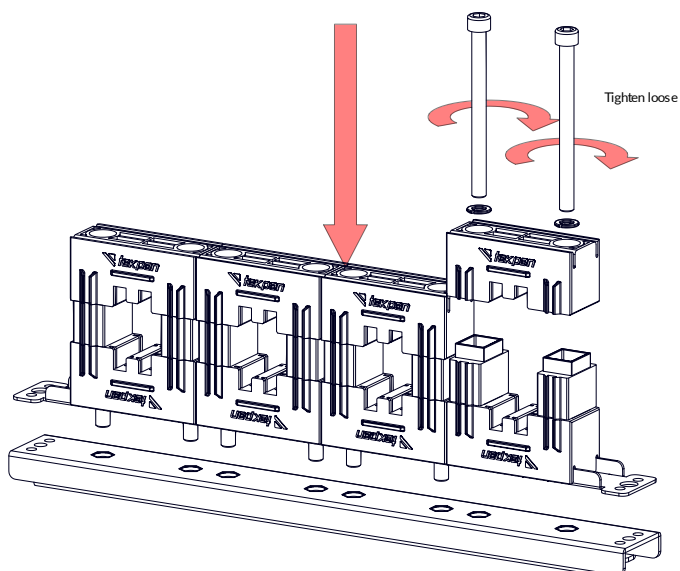
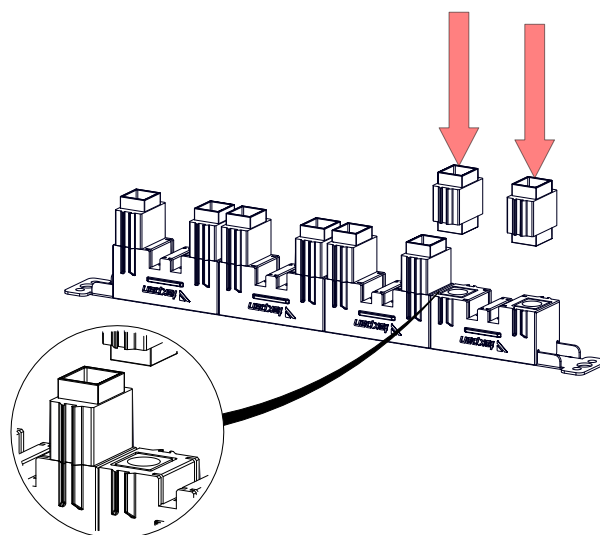
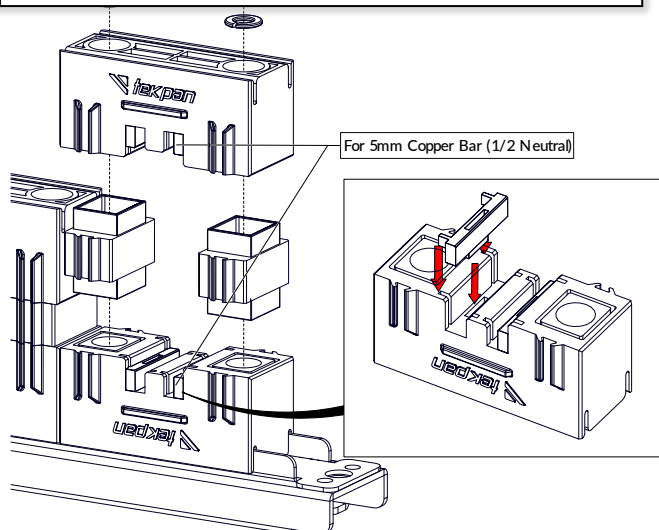
M10x H
8 pcs.



M10
8 pcs.



If 1/2 Section Neutral Copper Bar thickness is 5mm, Adapter must be used.

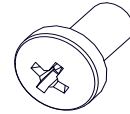


1.2 TWO (2) FLAT BAR ASSEMBLY (TOP)

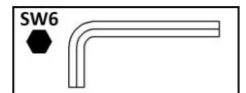
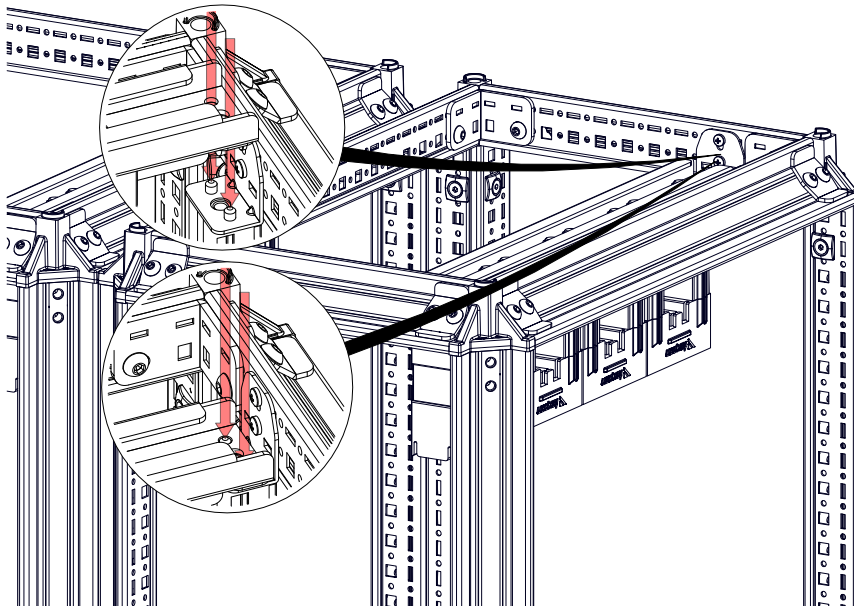
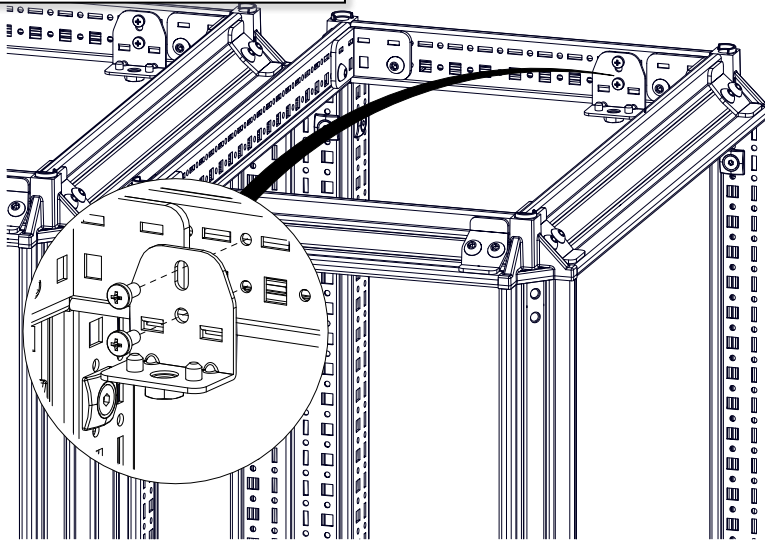
Required Packages:

1010.16X

1009.0XX/1011.XXX/1019.0XX



M5X10



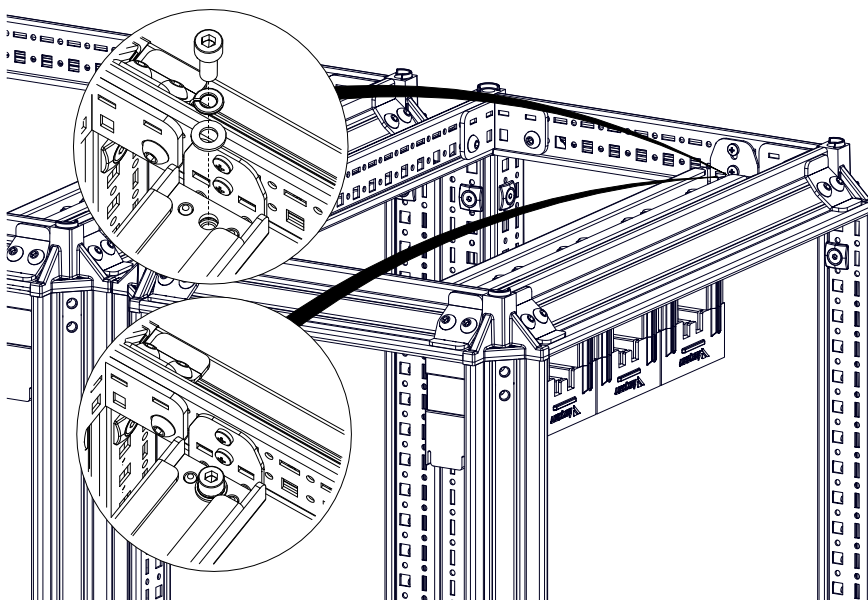
M8x20
1 pcs.



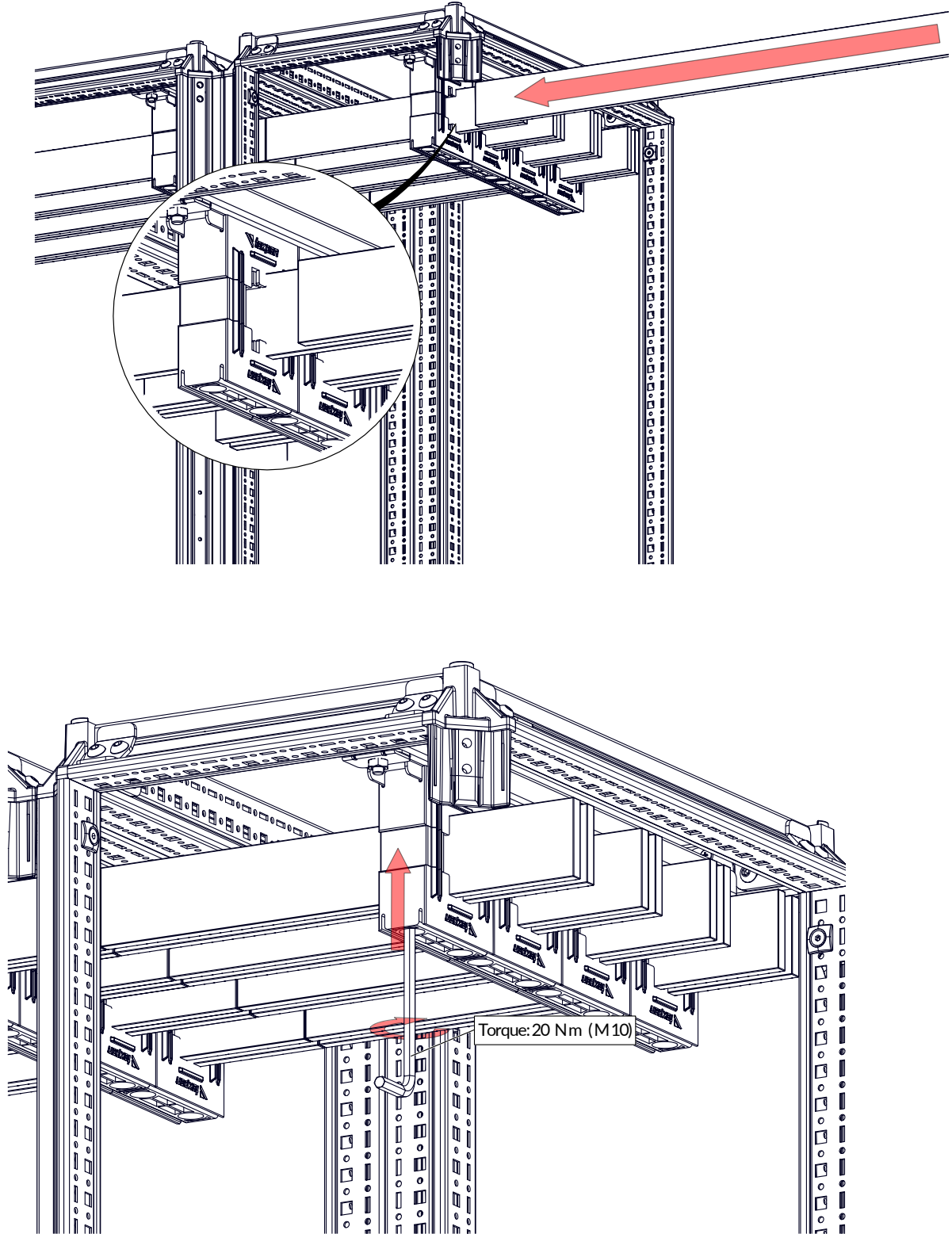
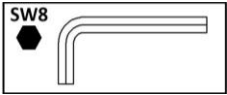
M8
1 pcs.



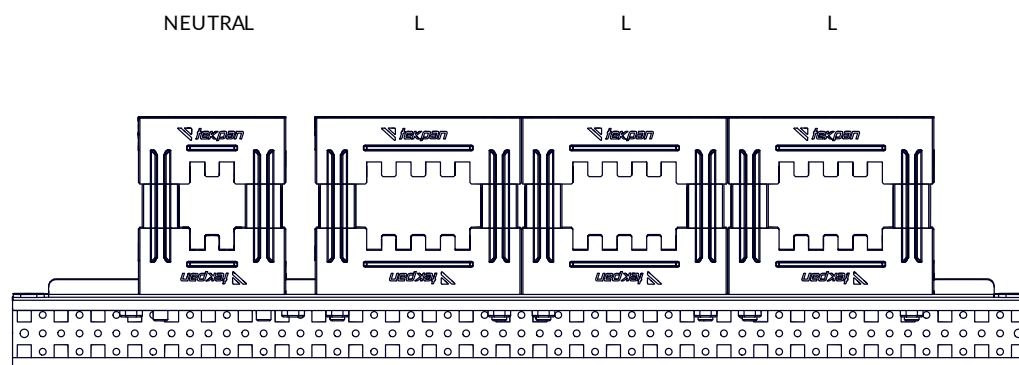
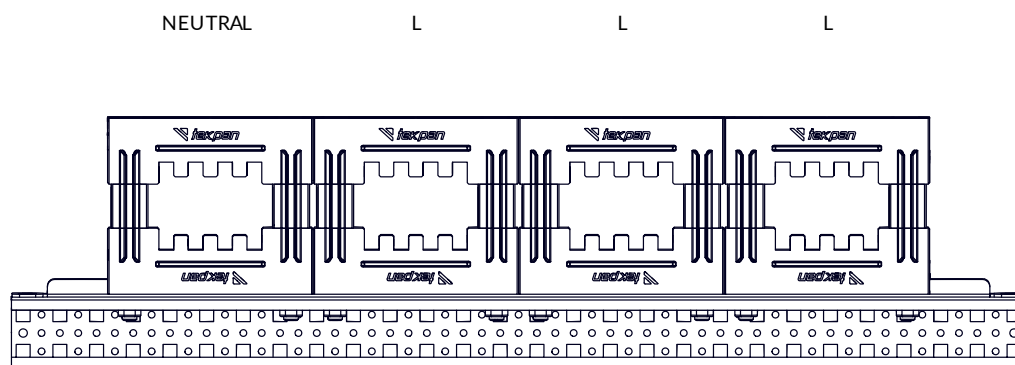
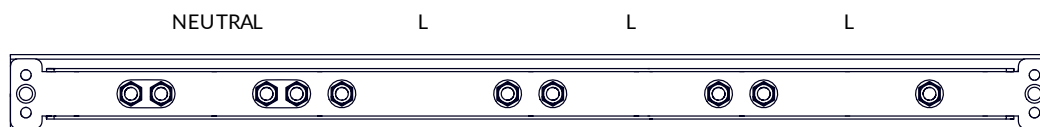
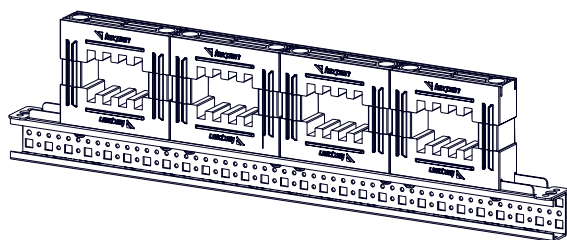
M8
1 pcs.



■ 1.2 TWO (2) FLAT BAR ASSEMBLY (TOP)

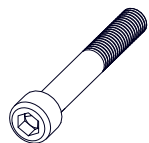
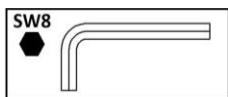


1.3 FOUR (4) FLAT BAR ASSEMBLY (MID)



Neutral Section	Rated Current (In)	Flat Copper Size (mm) xQty	
		L1/L2/L3	Neutral(N)
1/2 N	2500A	40/10x4	40/10x2
1/1 N	2500A	40/10x4	40/10x4
1/2 N	3000A	50/10x4	50/10x2
1/1 N	3000A	50/10x4	50/10x4
1/2 N	3400A	60/10x4	60/10x2
1/1 N	3400A	60/10x4	60/10x4
1/2 N	4000A	80/10x4	80/10x2
1/1 N	4000A	80/10x4	80/10x4

1.3 FOUR (4) FLAT BAR ASSEMBLY (MID)



M10x H
8 pcs.

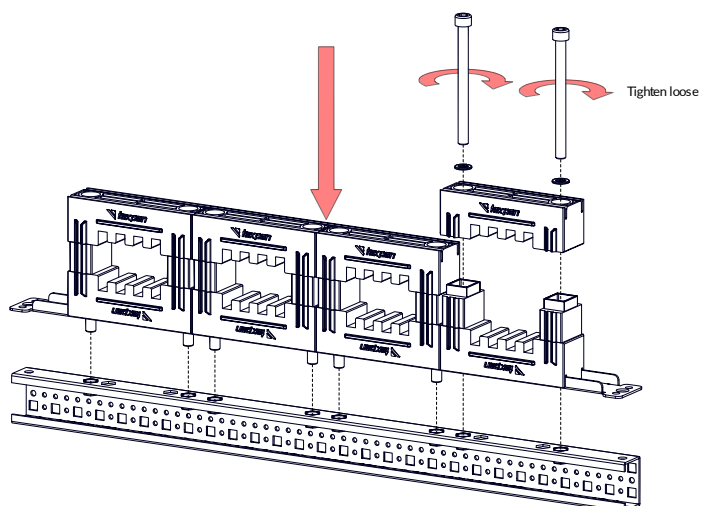
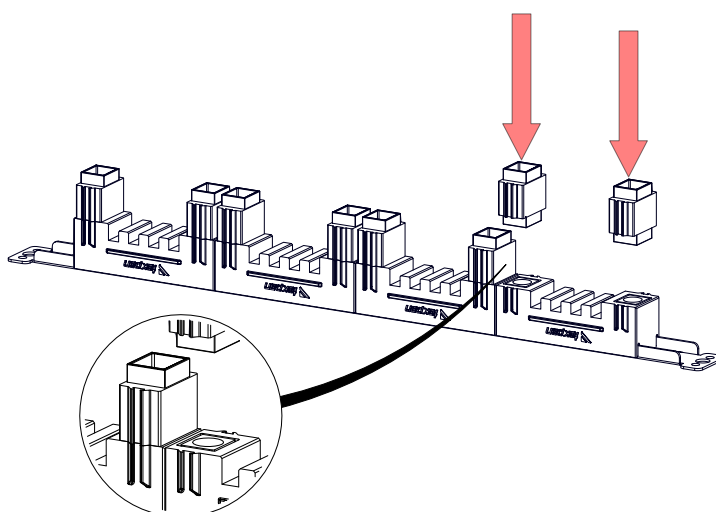
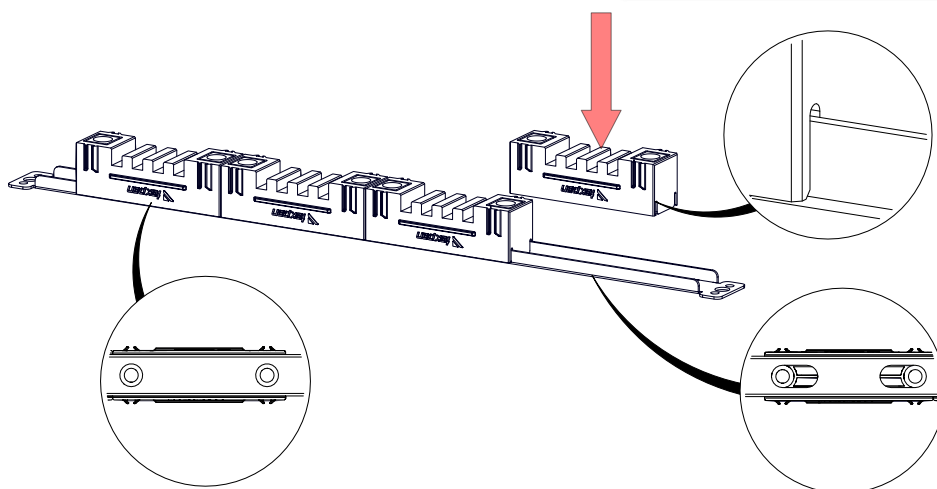


M10
8 pcs.

Required Packages:

1010.28X

1009.0XX/1011.XXX

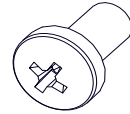


1.3 FOUR (4) FLAT BAR ASSEMBLY (MID)

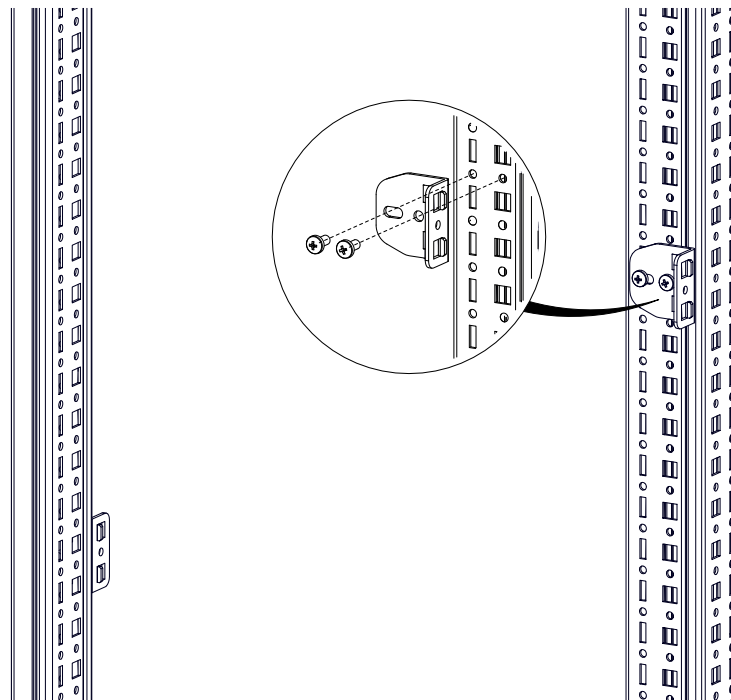
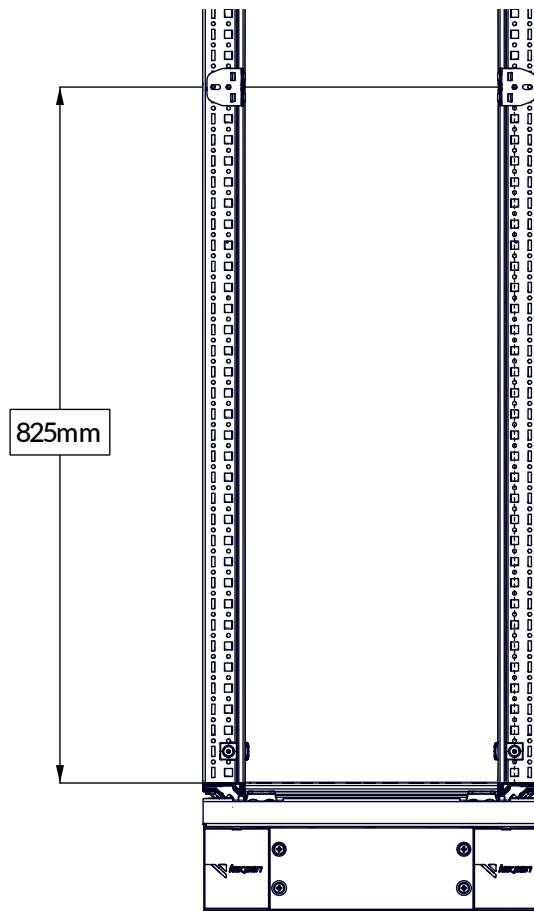
Required Packages:

1010.28X

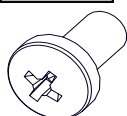
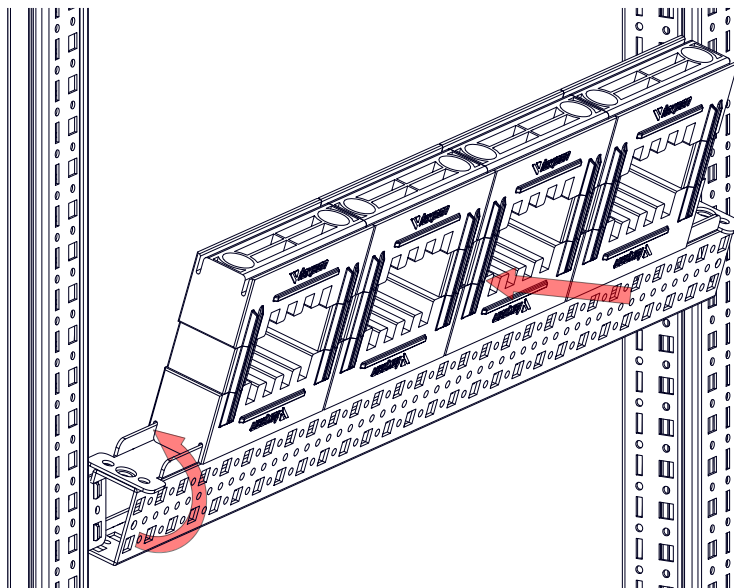
1009.0XX/1011.XXX/1019.0XX



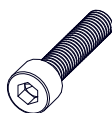
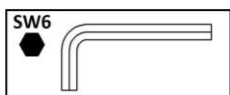
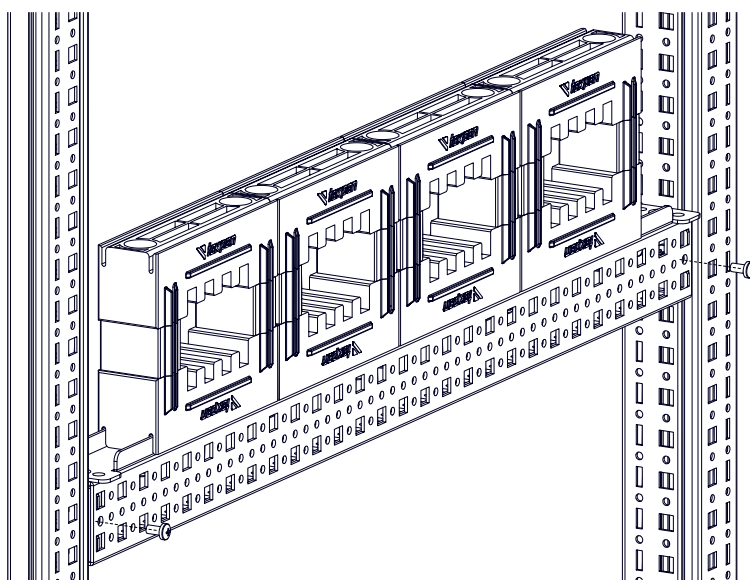
M5X10



1.3 FOUR (4) FLAT BAR ASSEMBLY (MID)



M5X10
2 pcs.



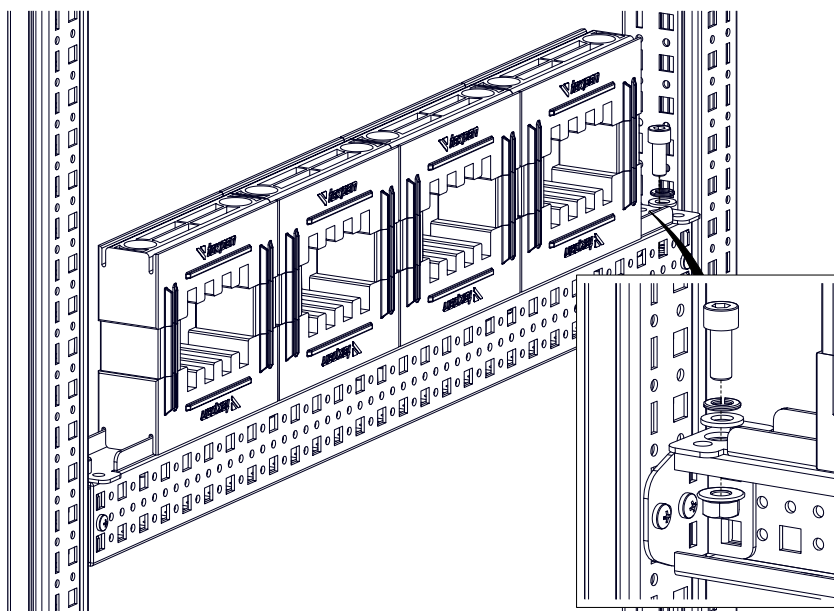
M8x20
1 pcs.



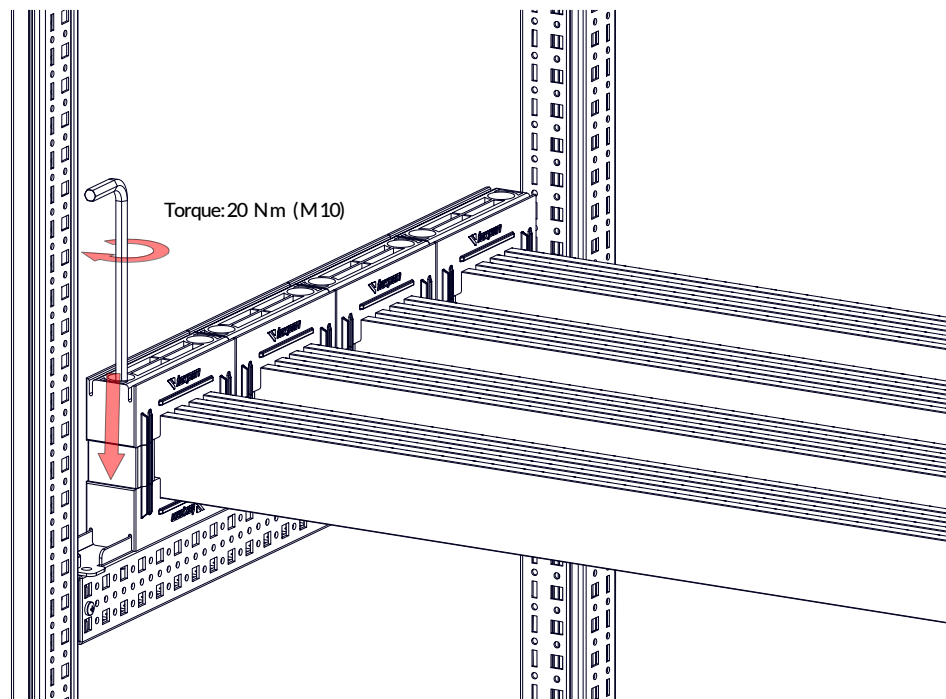
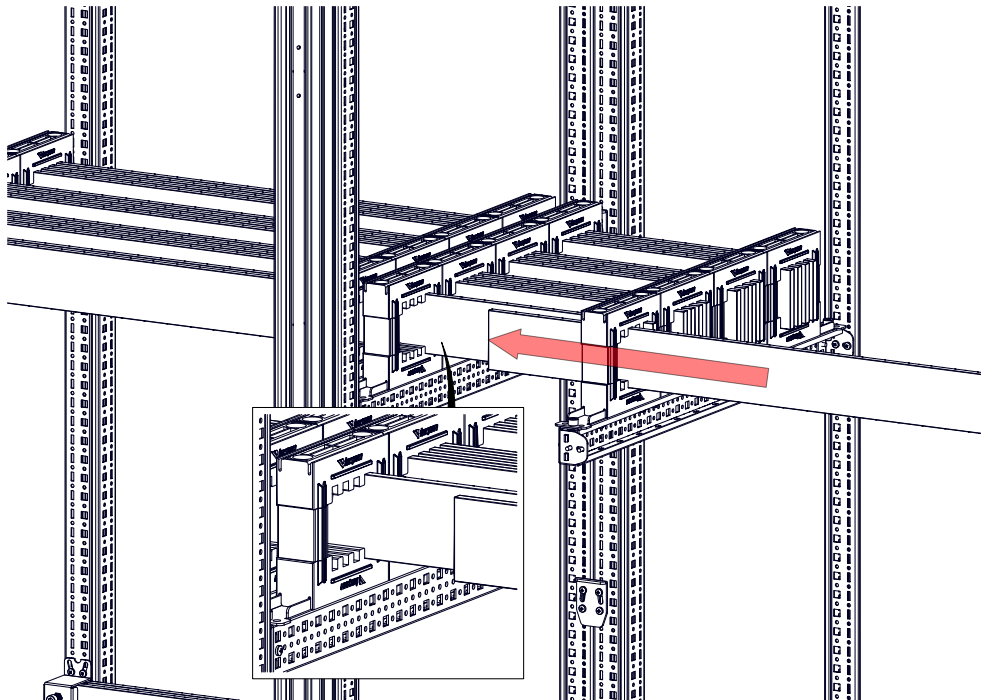
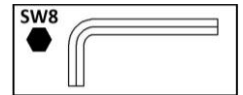
M8
1 pcs.



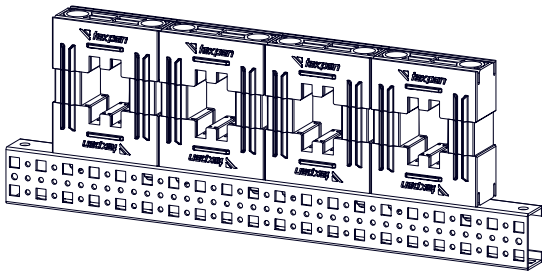
M8
1 pcs.



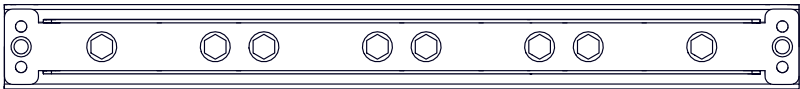
1.3 FOUR (4) FLAT BAR ASSEMBLY (MID)



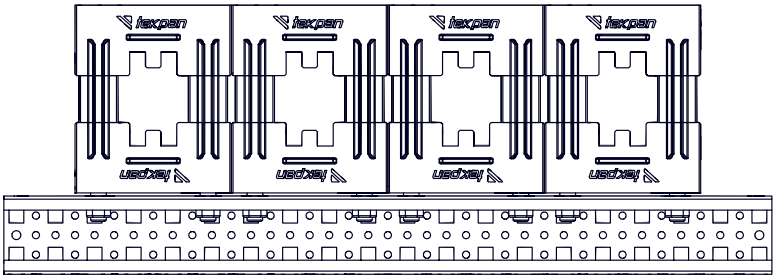
1.4 TWO (2) FLAT BAR ASSEMBLY (MID)



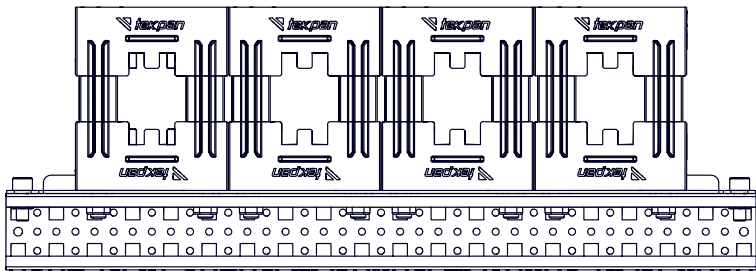
NEUTRAL L L L



NEUTRAL L L L



NEUTRAL L L L



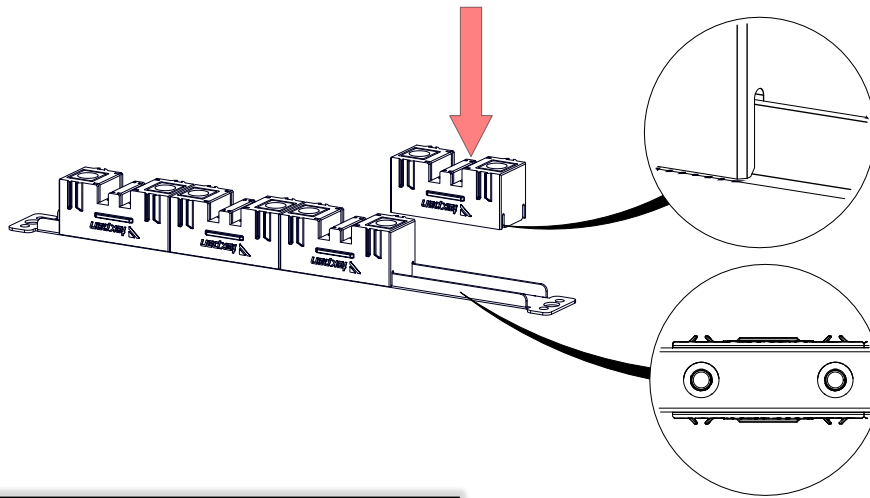
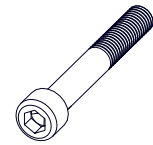
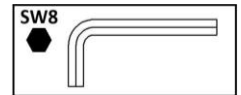
Neutral Section	Rated Current (In)	Flat Copper Size (mm) xQty	
		L1/L2/L3	Neutral(N)
1/2 N	1350A	40/10x2	40/5x2
1/1 N	1350A	40/10x2	40/10x2
1/2 N	1620A	50/10x2	50/5x2
1/1 N	1620A	50/10x2	50/10x2
1/2 N	1860A	60/10x2	60/5x2
1/1 N	1860A	60/10x2	60/10x2
1/2 N	2300A	80/10x2	40/10x2
1/1 N	2300A	80/10x2	80/10x2

1.4 TWO (2) FLAT BAR ASSEMBLY (MID)

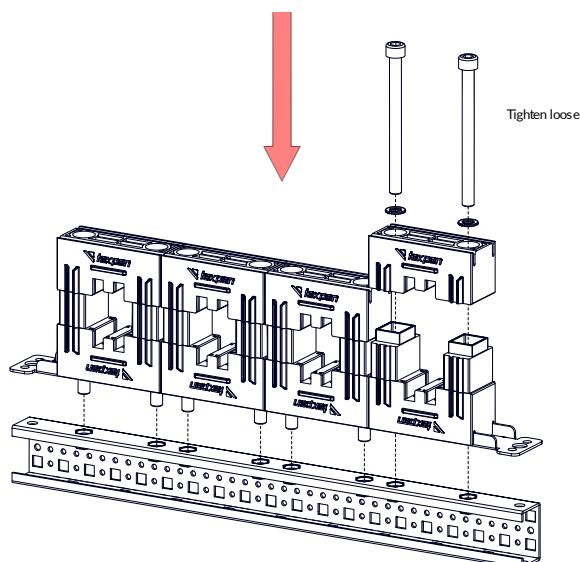
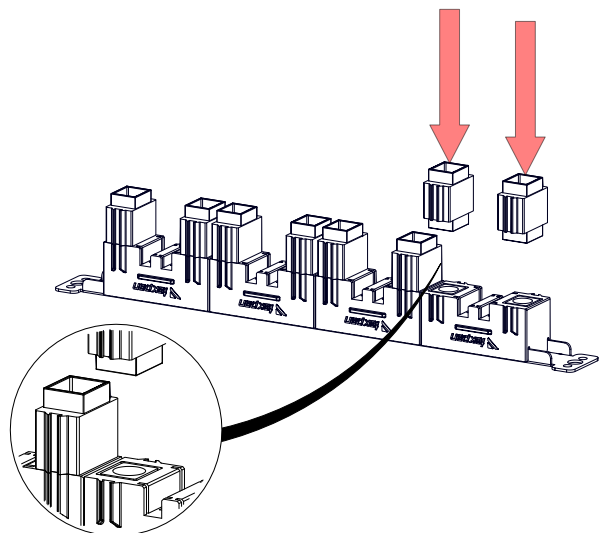
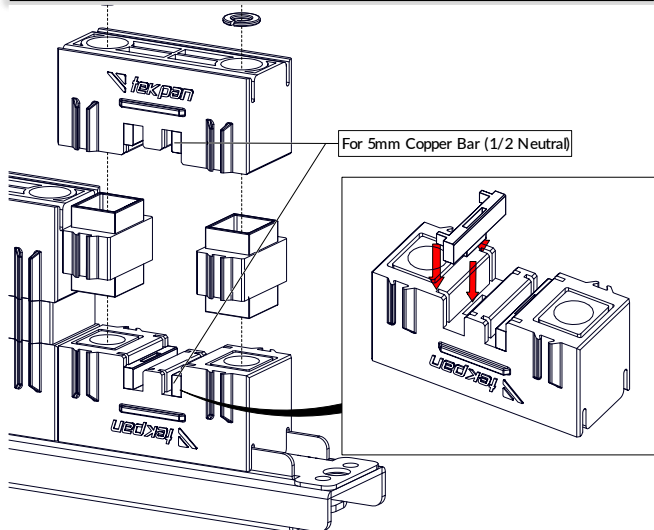
Required Packages:

1010.26X

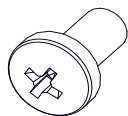
1009.0XX/1011.XXX/1019.0XX



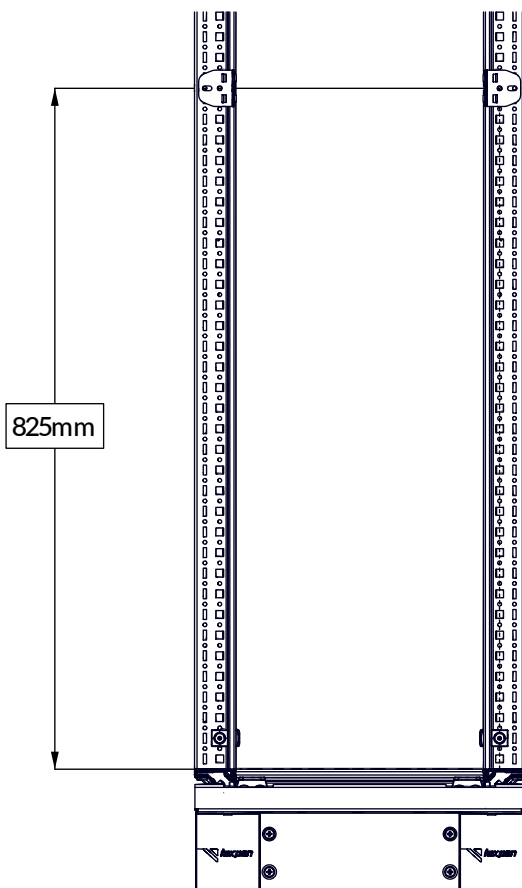
If 1/2 Section Neutral Copper Bar thickness is 5mm, Adapter must be used.



1.4 TWO (2) FLAT BAR ASSEMBLY (MID)



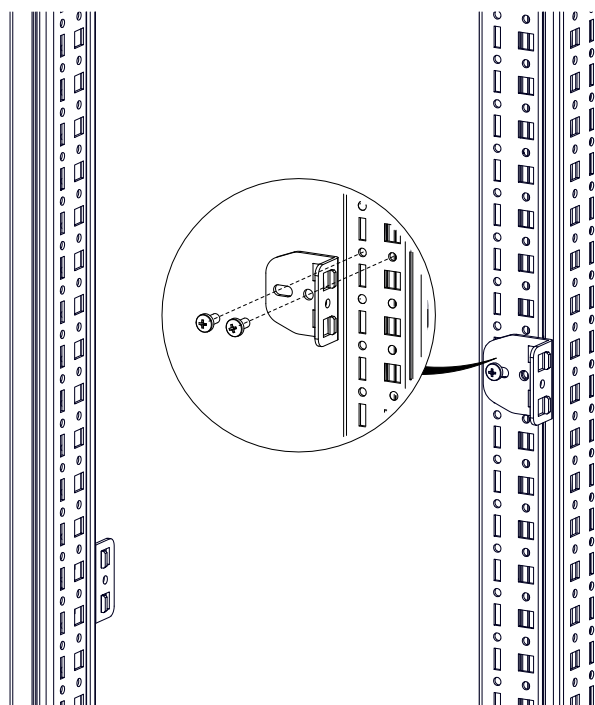
M5X10



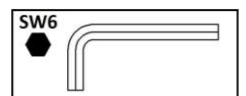
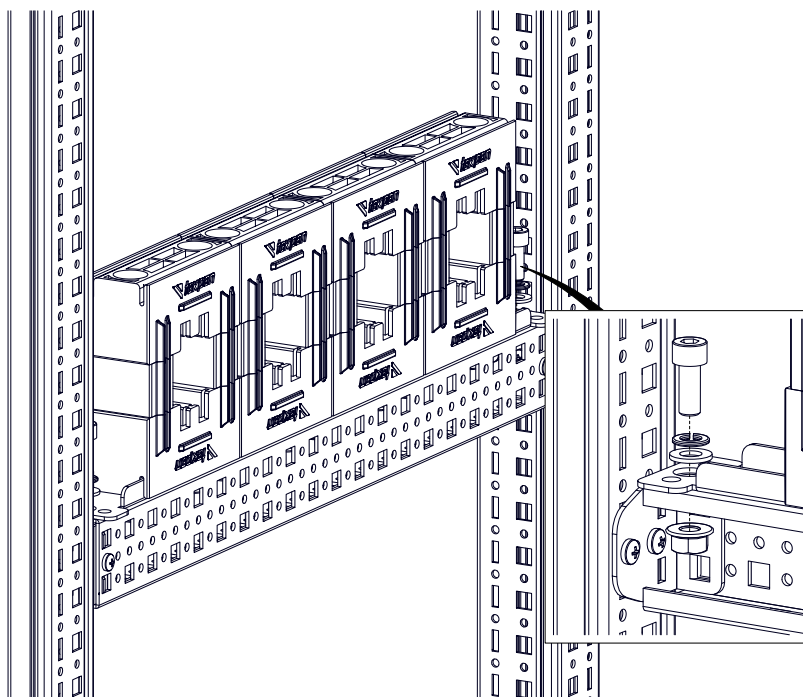
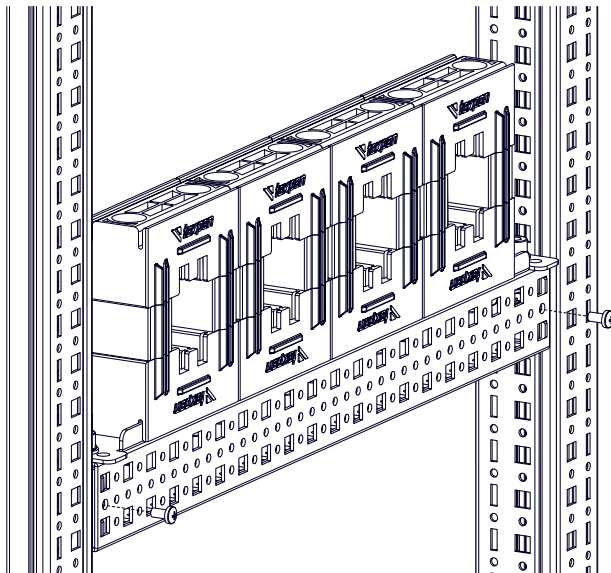
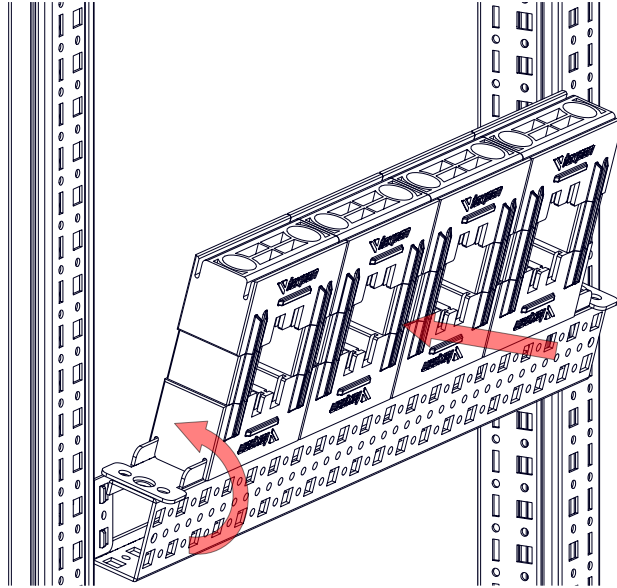
Required Packages:

1010.26X

1009.0XX/1011.XXX/1019.0XX



1.4 TWO (2) FLAT BAR ASSEMBLY (MID)



M8x20
1 pcs.

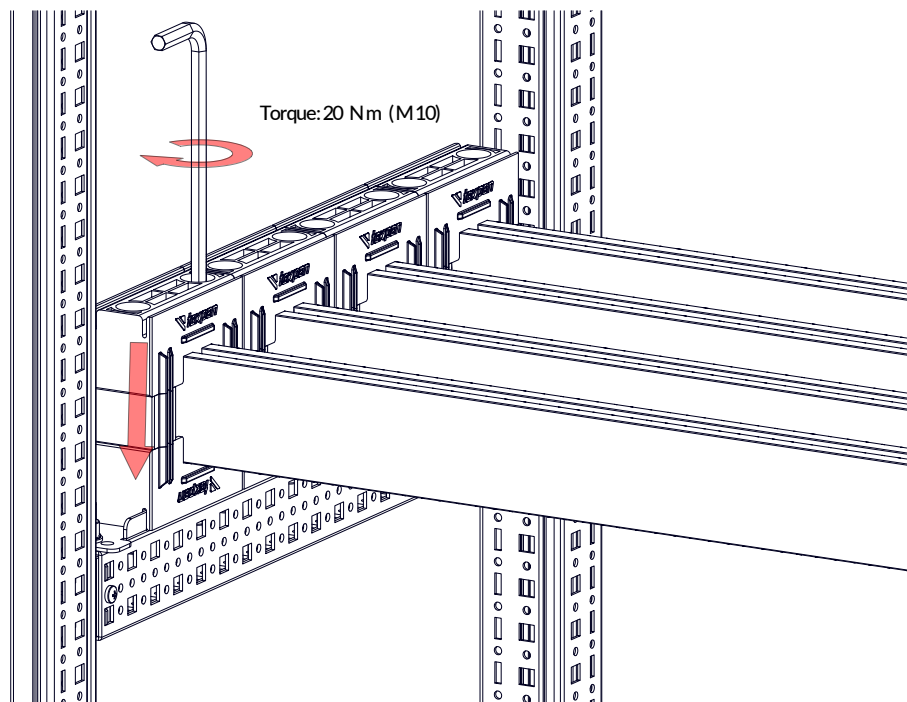
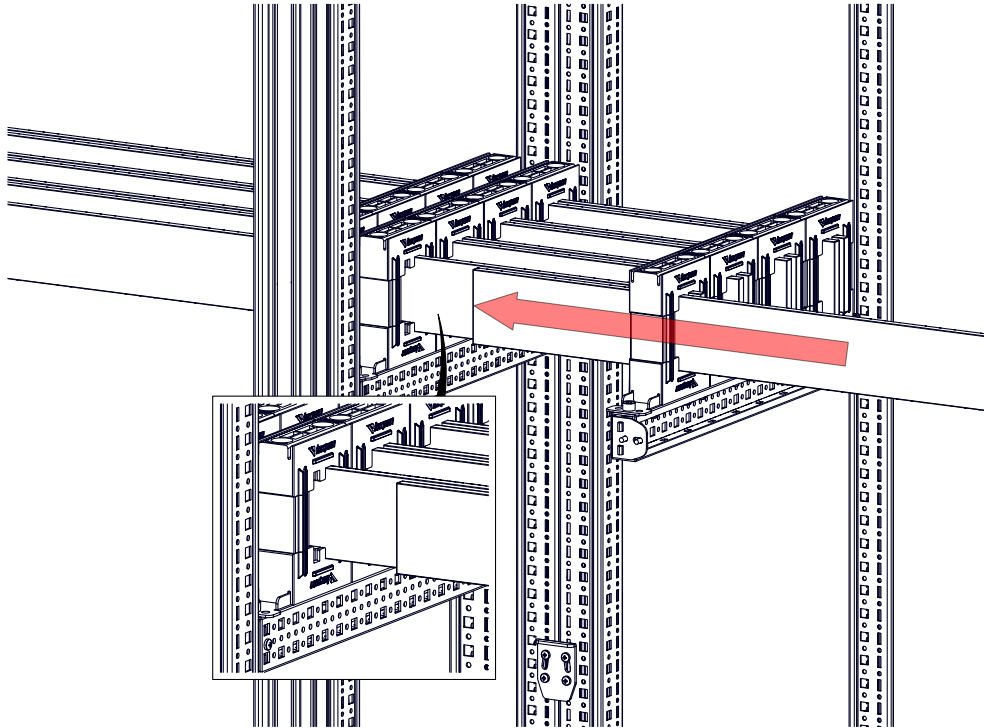
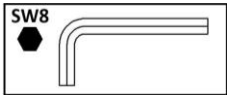


M8
1 pcs.



M8
1 pcs.

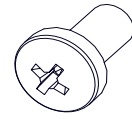
■ 1.4 TWO (2) FLAT BAR ASSEMBLY (MID)



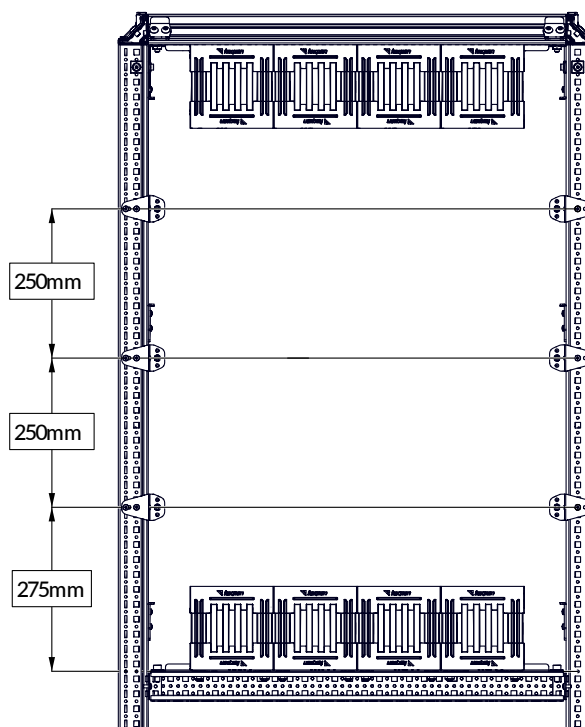
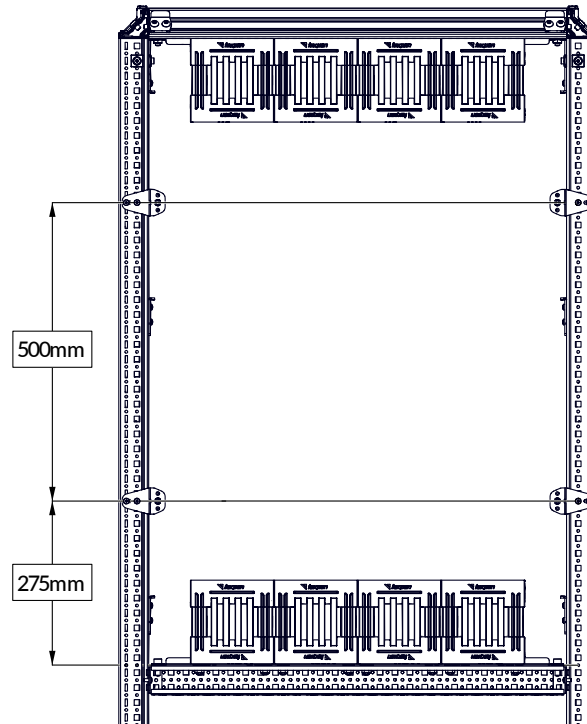
2. VERTICAL BUSBAR ASSEMBLY

2.1 FOUR (4) FLAT VERTICAL BAR ASSEMBLY

Required Packages:
1010.38X



M5X10



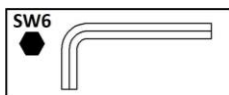
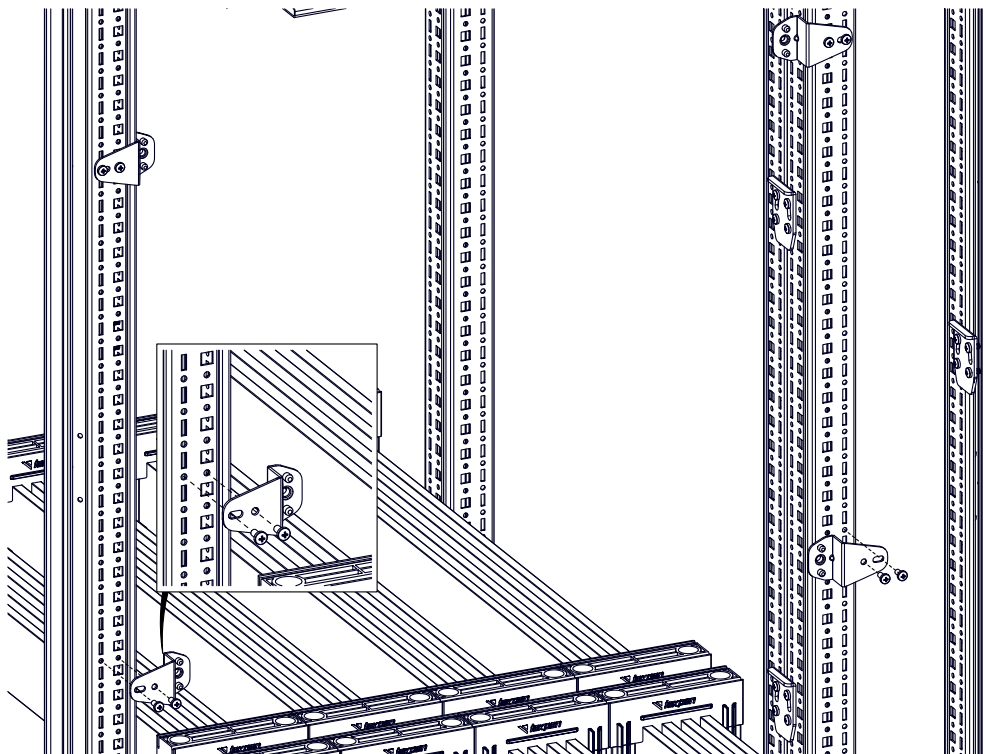
2.1 FOUR (4) FLAT VERTICAL BAR ASSEMBLY



Required Packages:
1010.38X
1009.0XX/1011.XXX/1019.0XX



M5X10



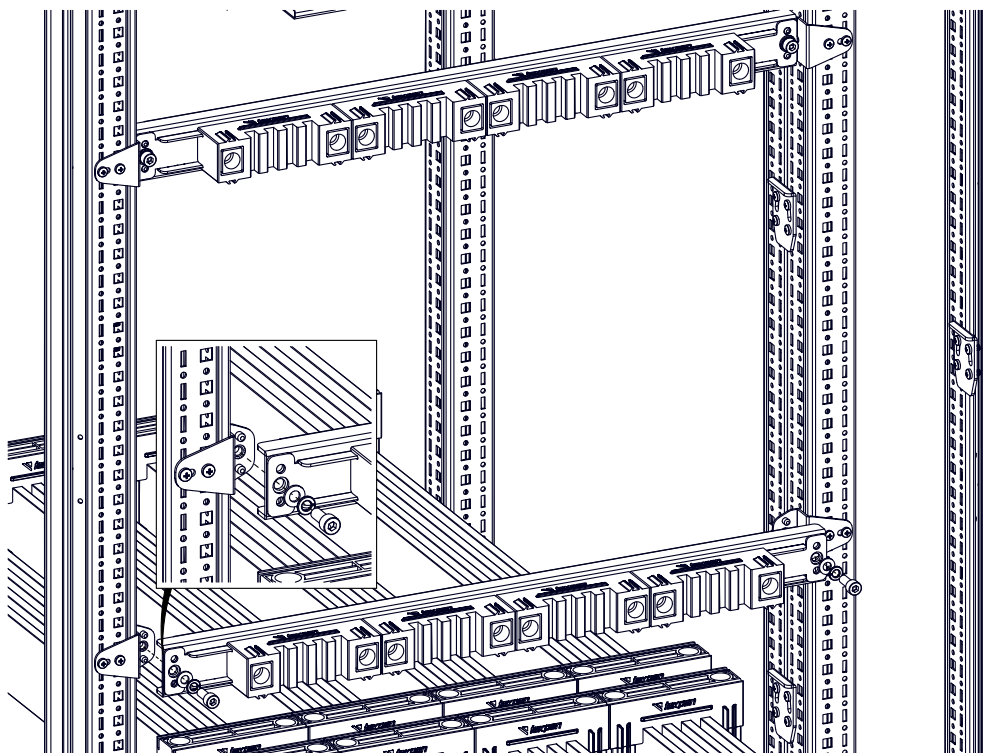
M8x20
1 pcs.



M8
1 pcs.

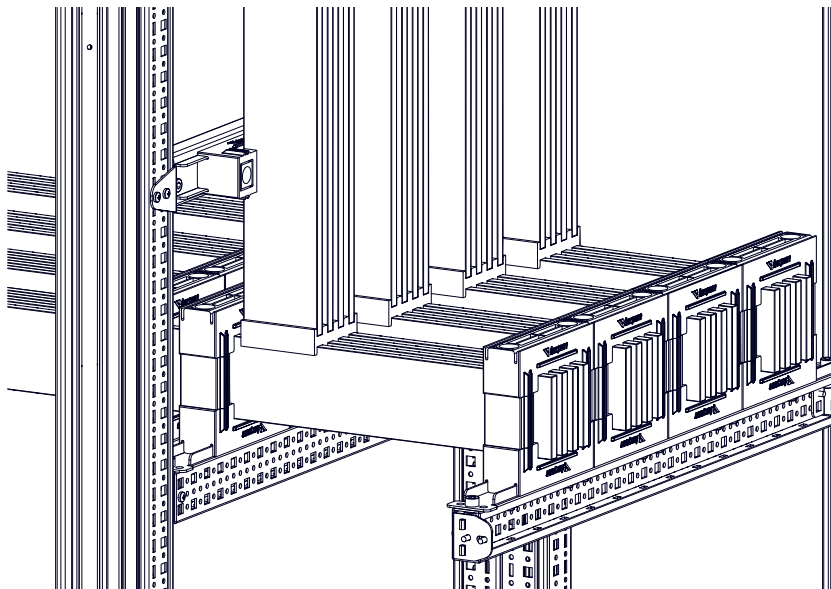
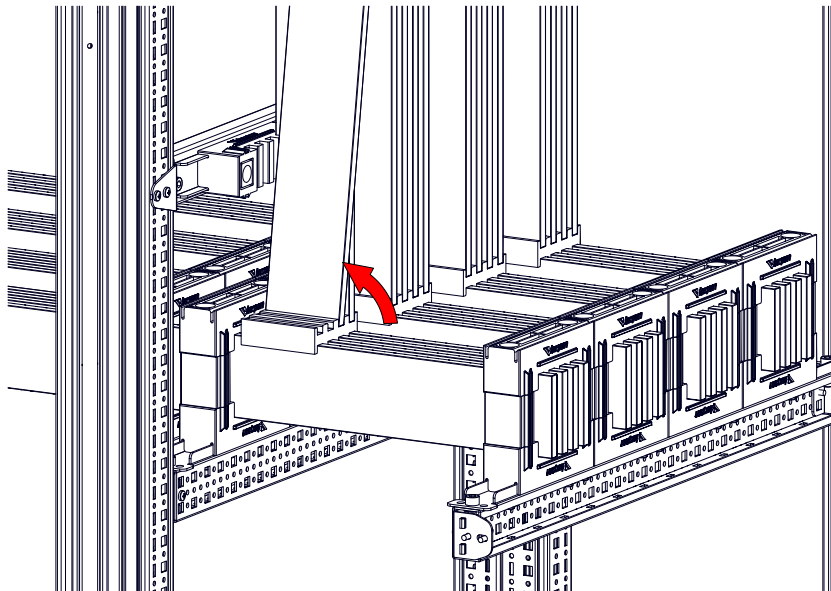
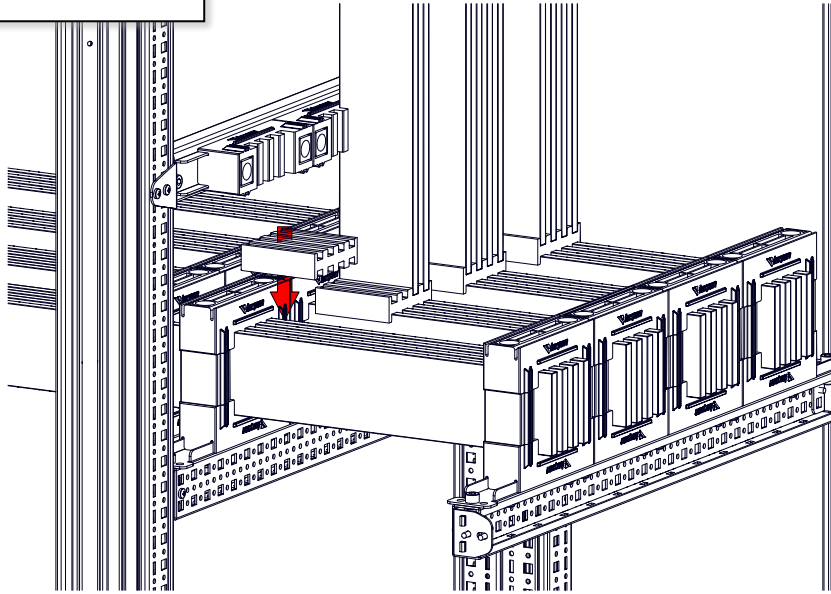


M8
1 pcs.

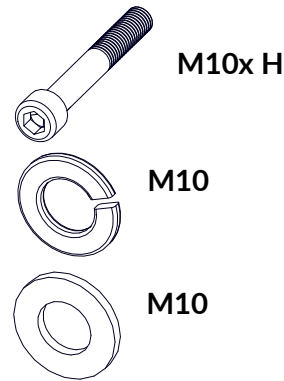
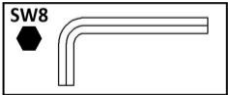


2.1 FOUR (4) FLAT VERTICAL BAR ASSEMBLY

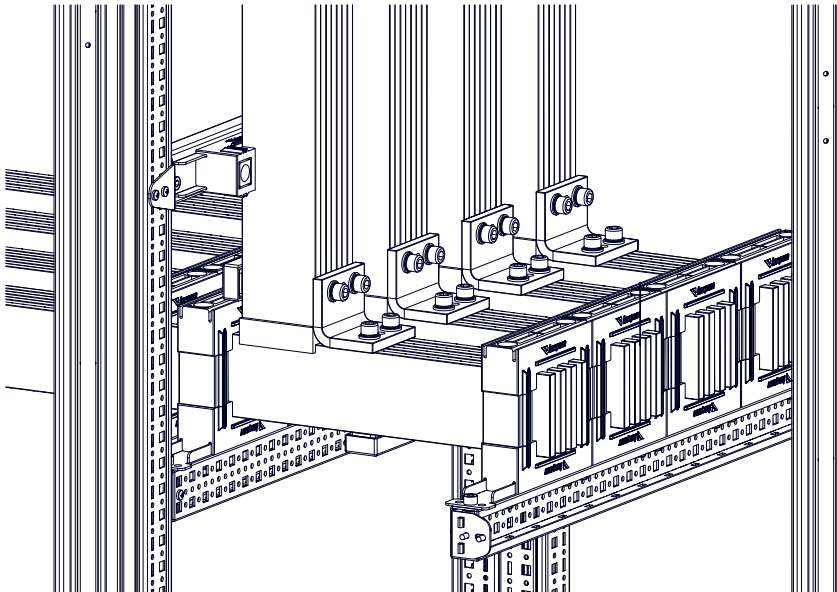
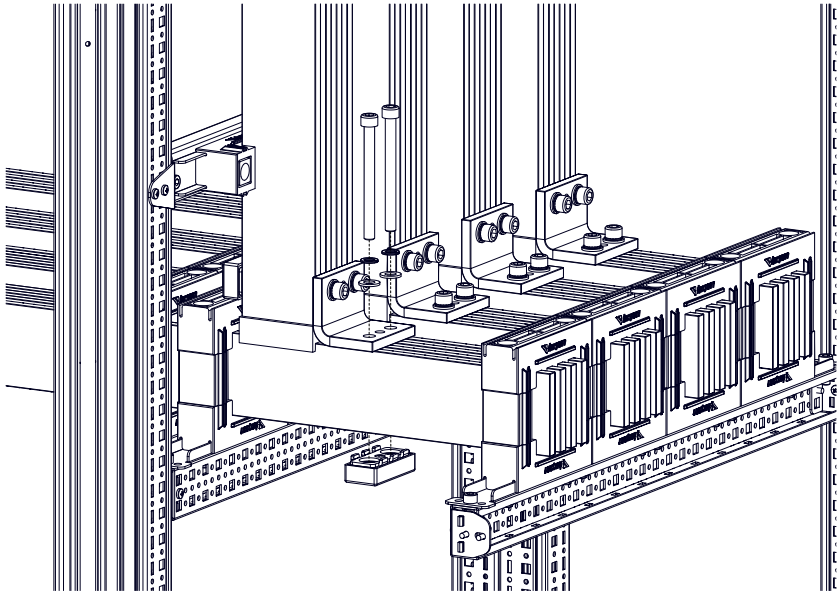
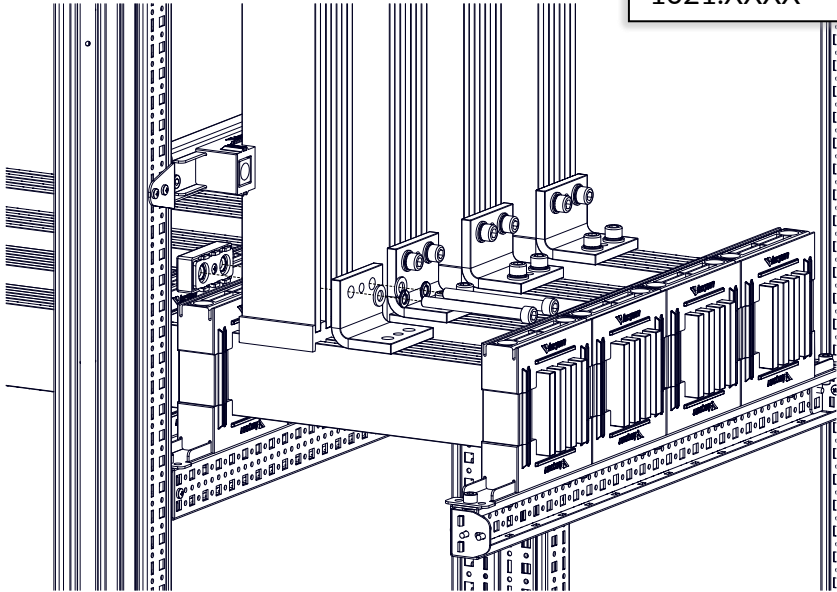
Required Packages:
 1021.XXXX



2.1 FOUR (4) FLAT VERTICAL BAR ASSEMBLY

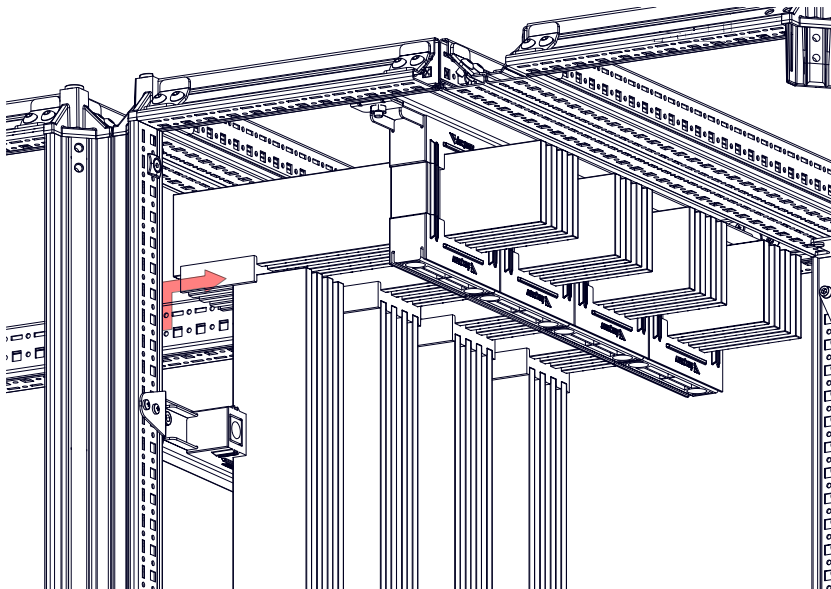
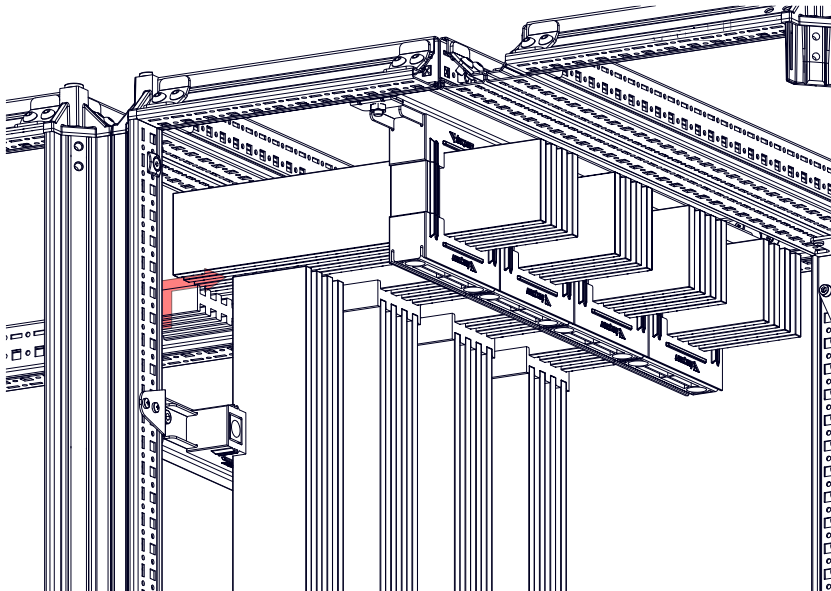
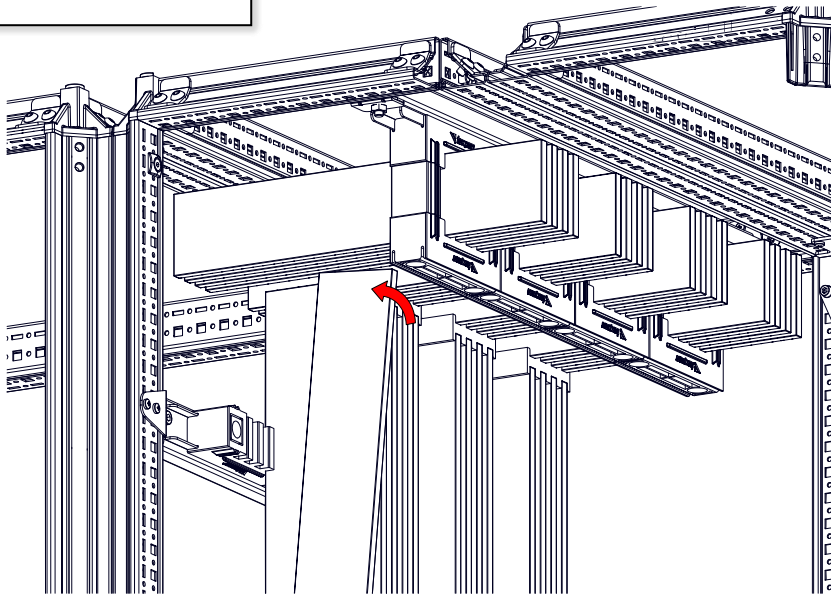


Required Packages:
1021.XXXX

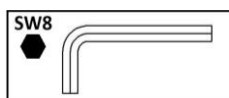


2.1 FOUR (4) FLAT VERTICAL BAR ASSEMBLY

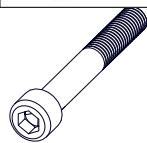
Required Packages:
1021.XXXX



2.1 FOUR (4) FLAT VERTICAL BAR ASSEMBLY



Required Packages:
1021.XXXX



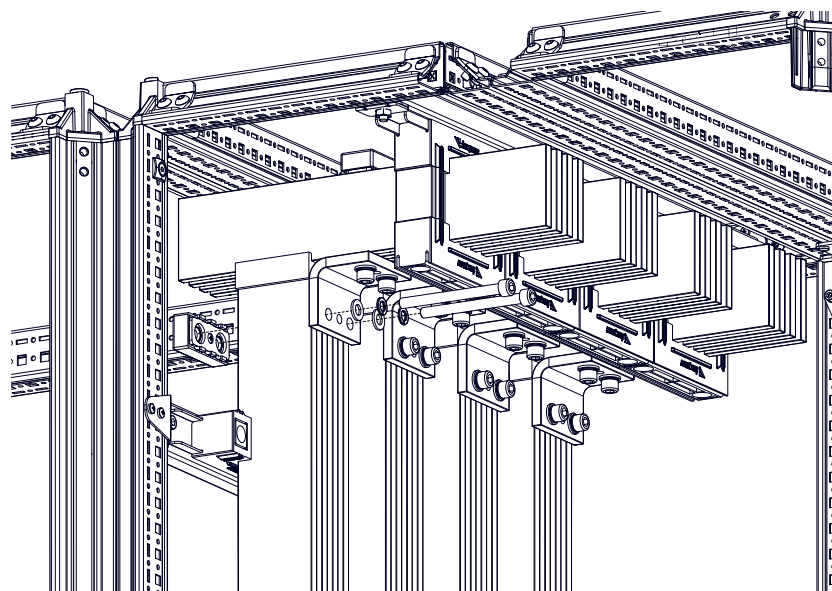
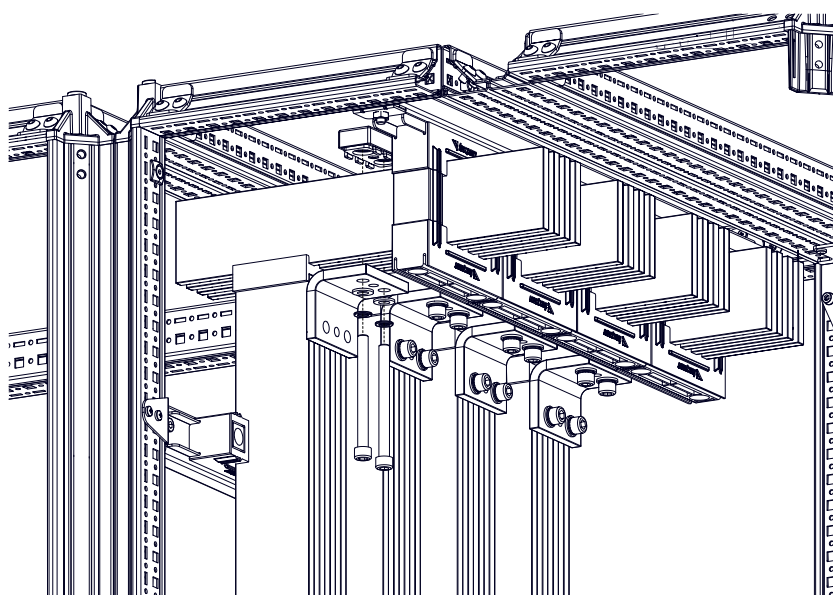
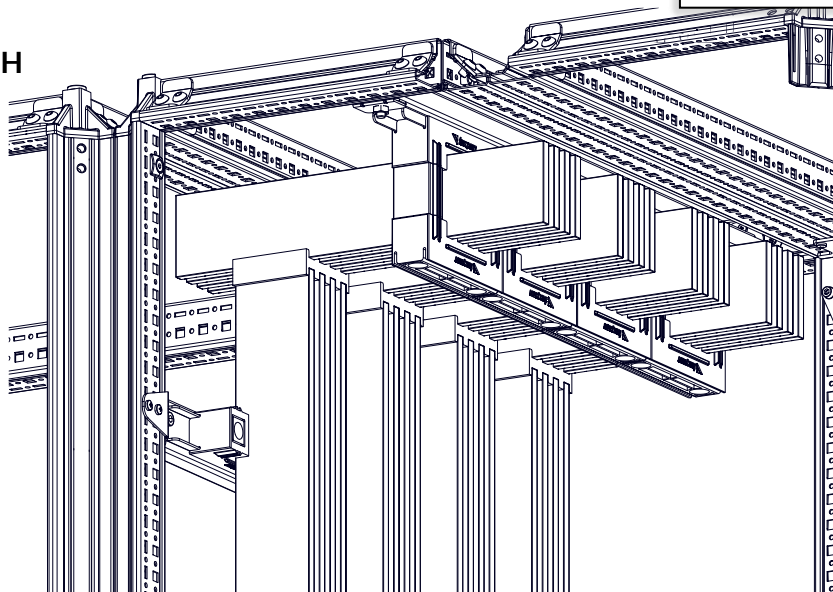
M10x H



M10

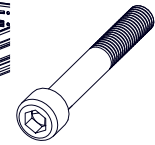
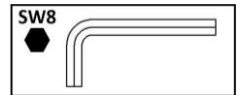


M10



2.1 FOUR (4) FLAT VERTICAL BAR ASSEMBLY

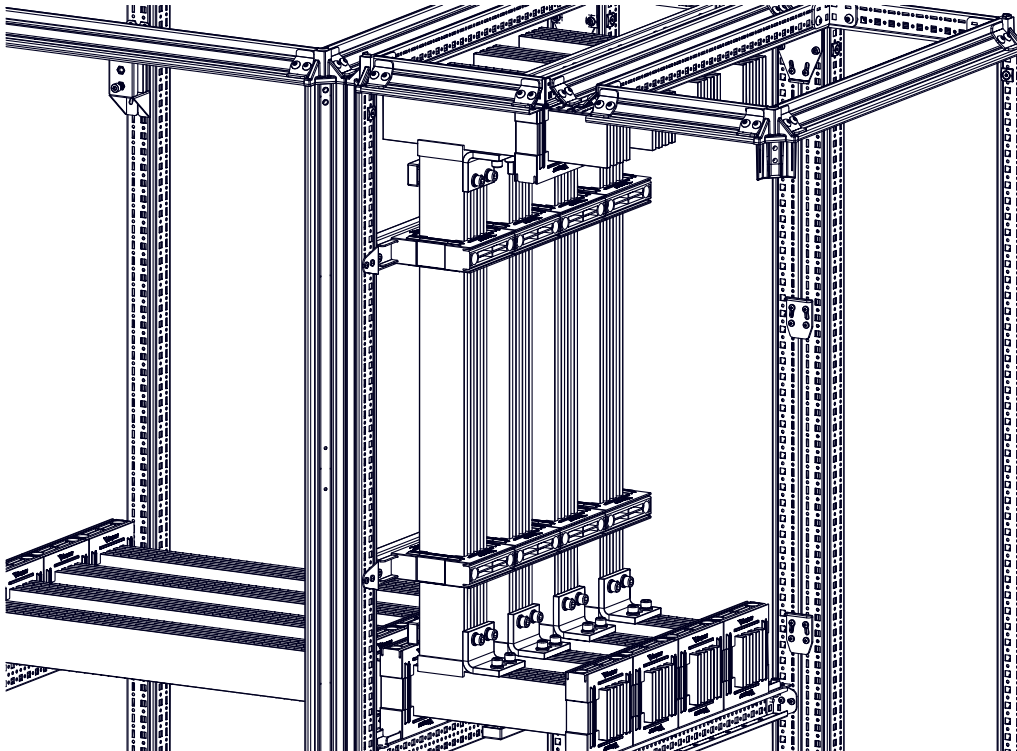
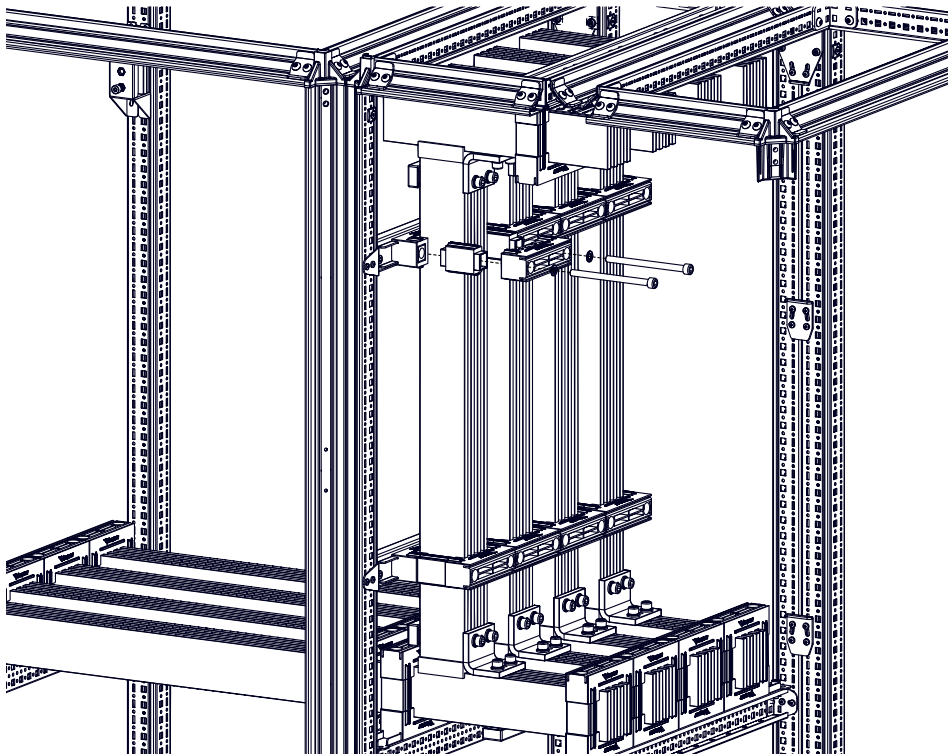
Required Packages:
1009.OXX/1011.XXX/1019.OXX



M10x H



M10

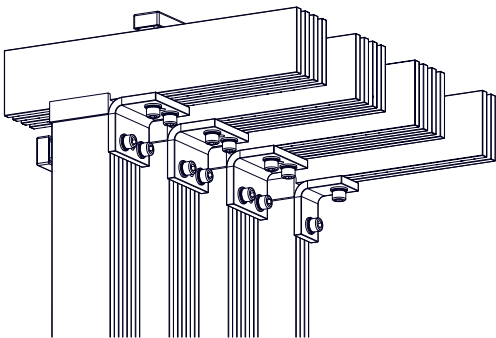
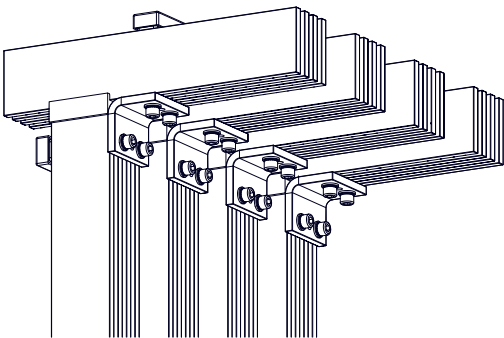
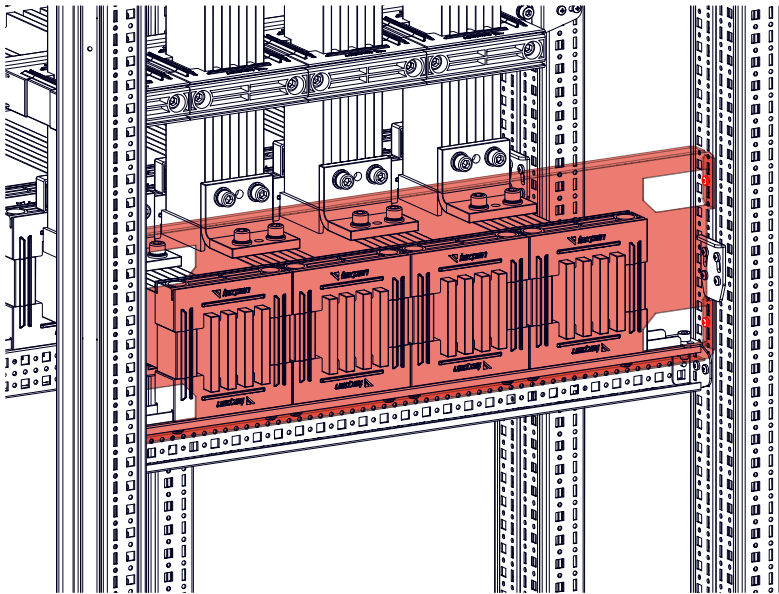
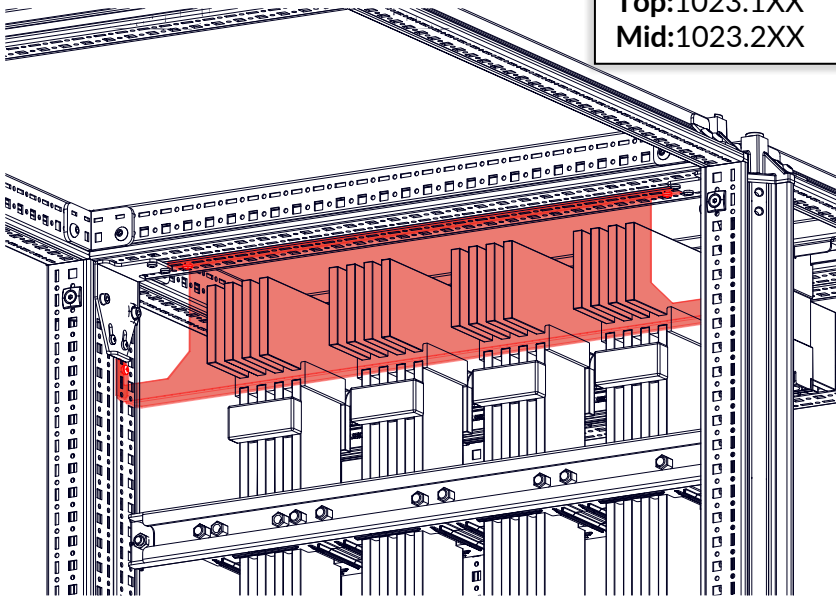


2.1 FOUR (4) FLAT VERTICAL BAR ASSEMBLY



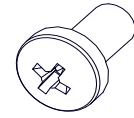
M5X10

Required Packages:
Top:1023.1XX
Mid:1023.2XX

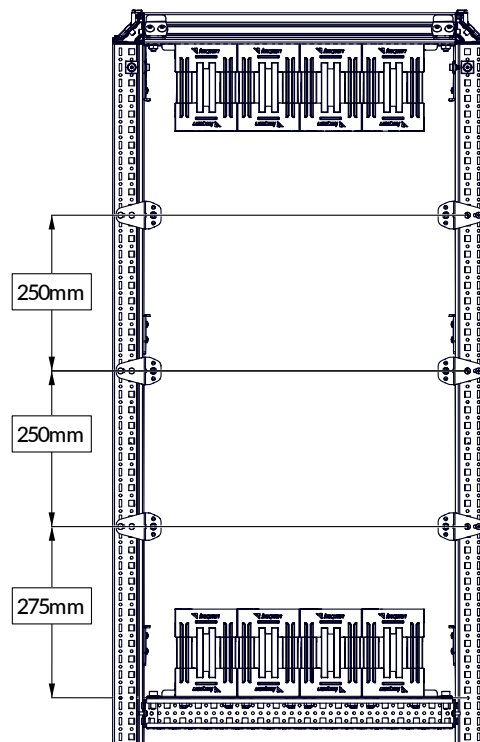
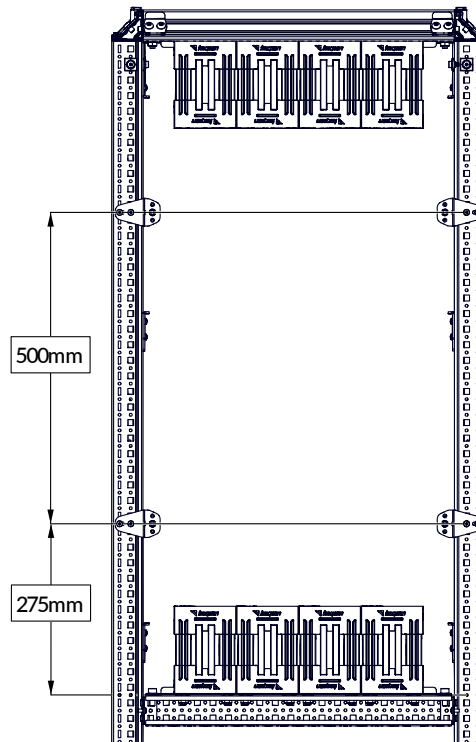


2.2 TWO (2) FLAT VERTICAL BAR ASSEMBLY

Required Packages:
1010.36X



M5X10



2.2 TWO (2) FLAT VERTICAL BAR ASSEMBLY



Required Packages:

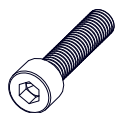
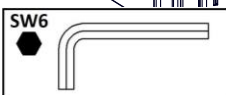
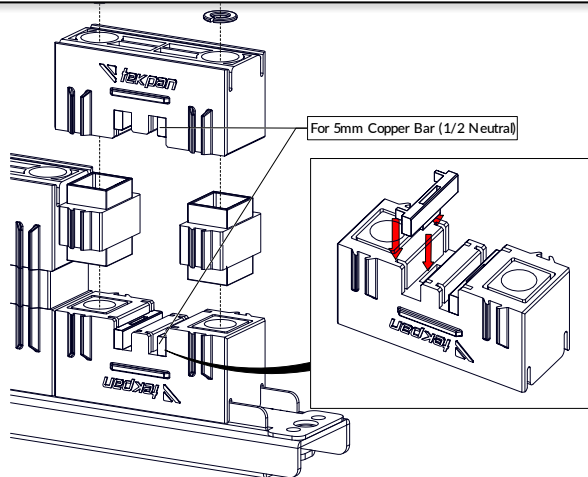
1010.36X

1009.0XX/1011.XXX/1019.0XX

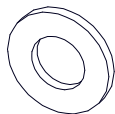


M5X10

If 1/2 Section Neutral Coper Bar thickness is 5mm, Adapter must be used.



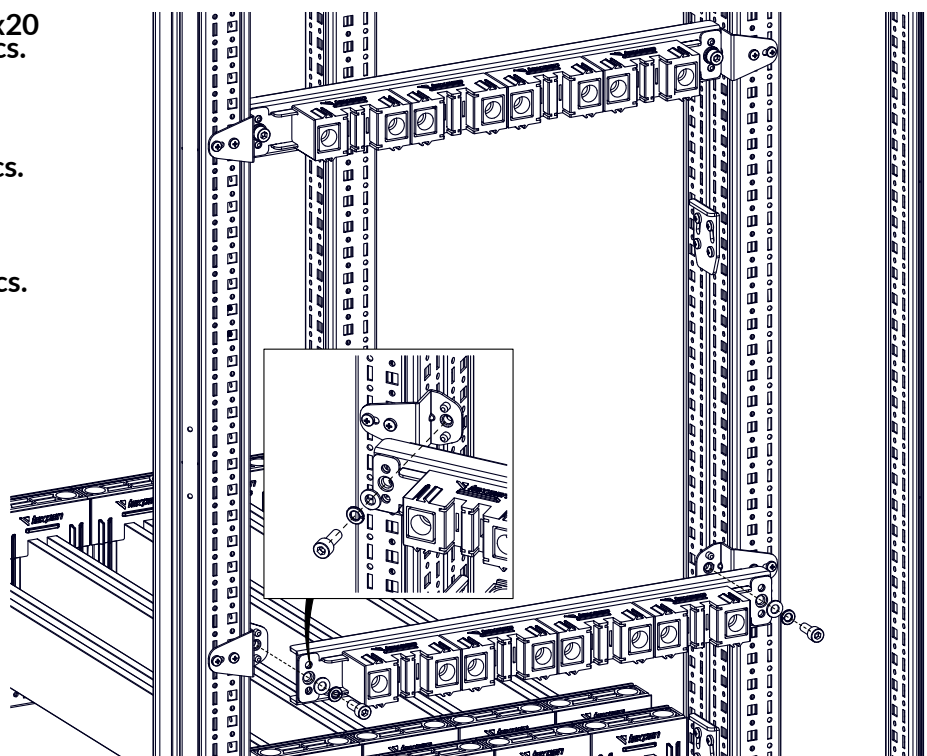
M8x20
1 pcs.



M8
1 pcs.

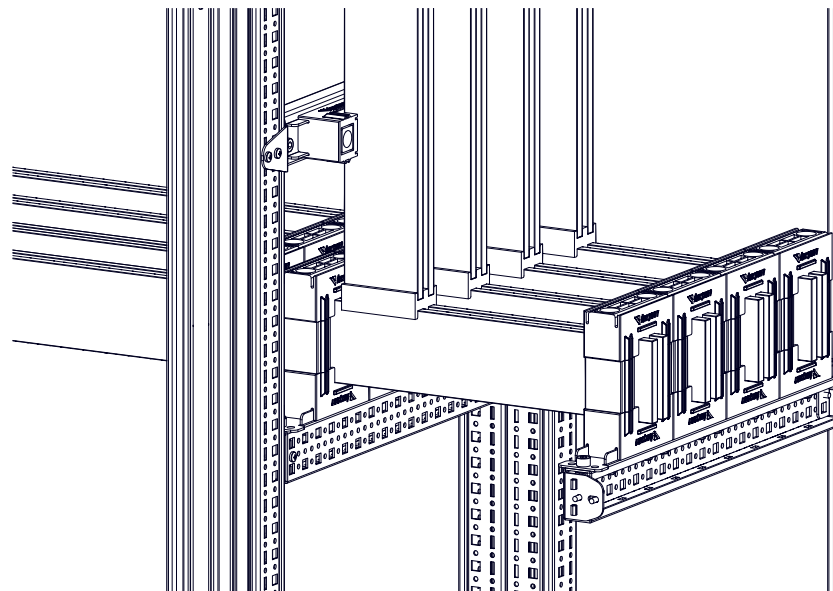
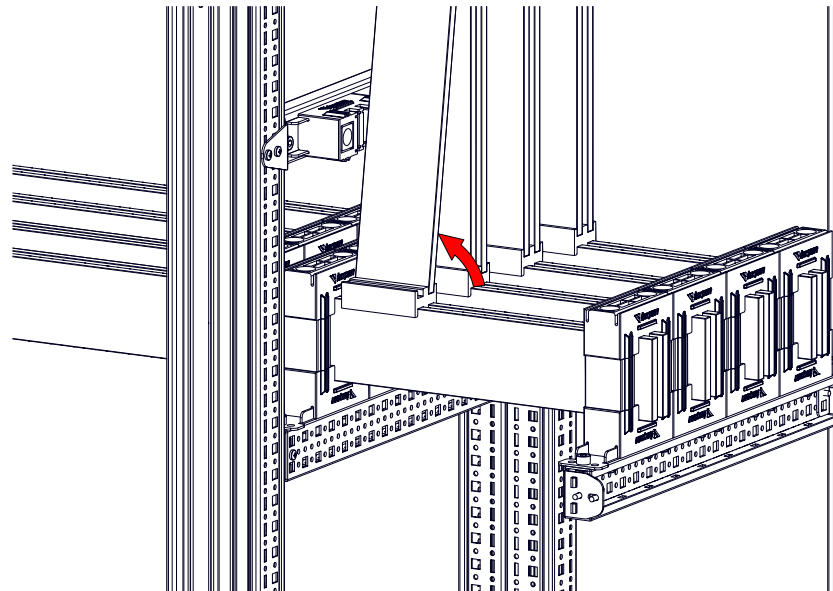
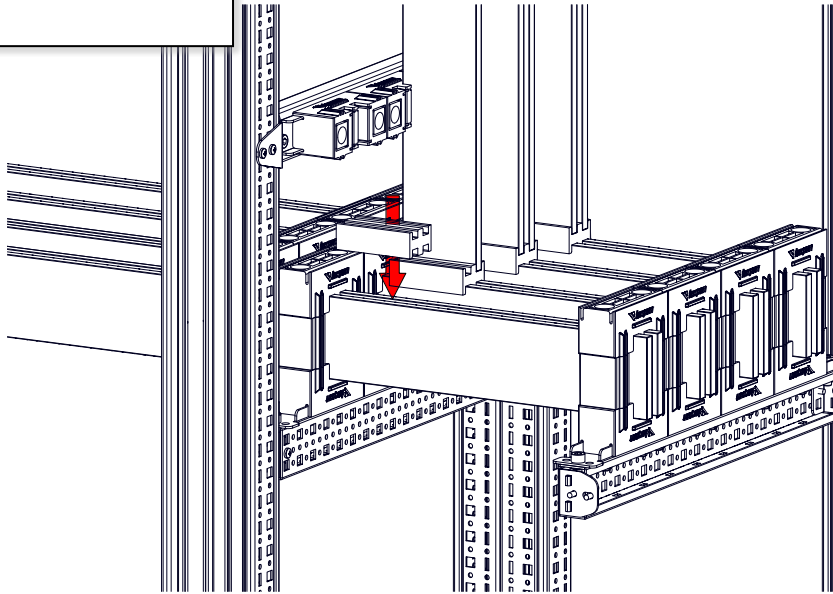


M8
1 pcs.

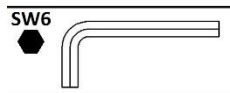


2.2 TWO (2) FLAT VERTICAL BAR ASSEMBLY

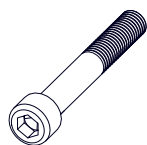
Required Packages:
1021.XXXX



2.2 TWO (2) FLAT VERTICAL BAR ASSEMBLY



Required Packages:
1021.XXXX



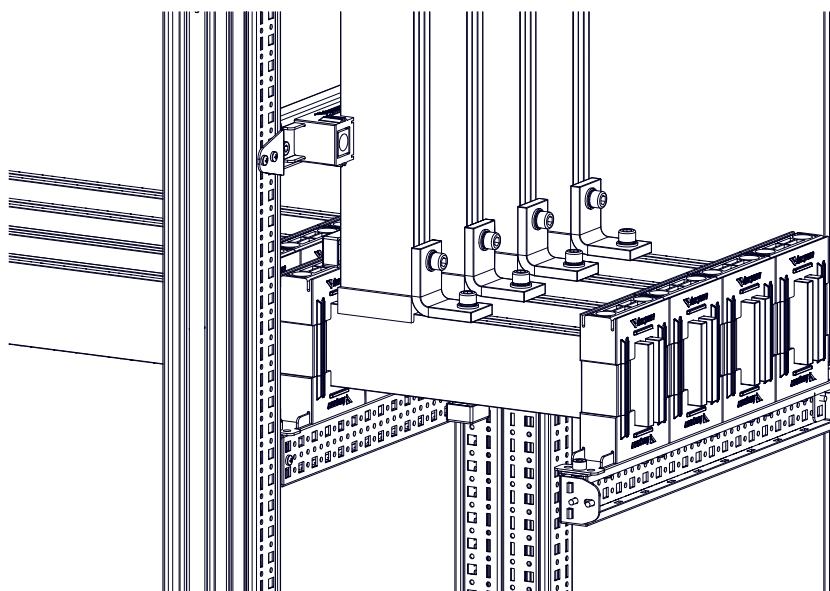
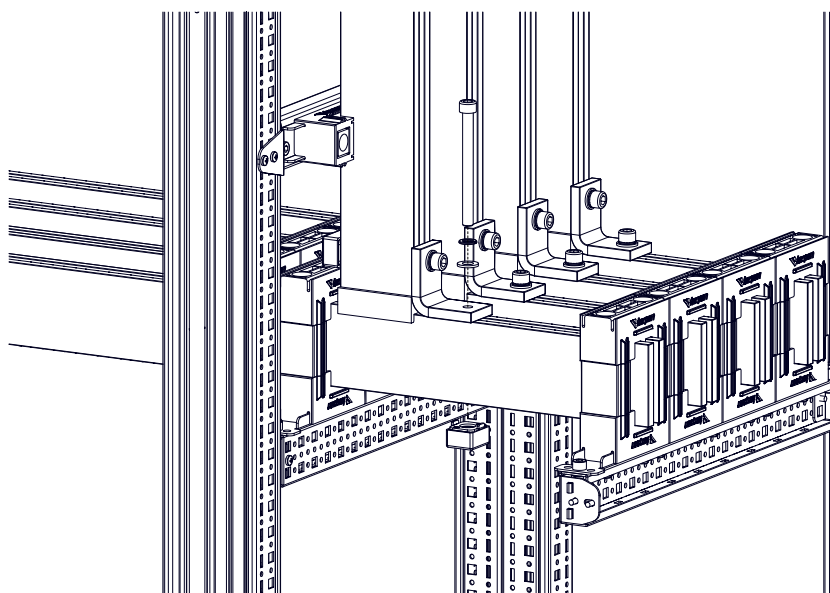
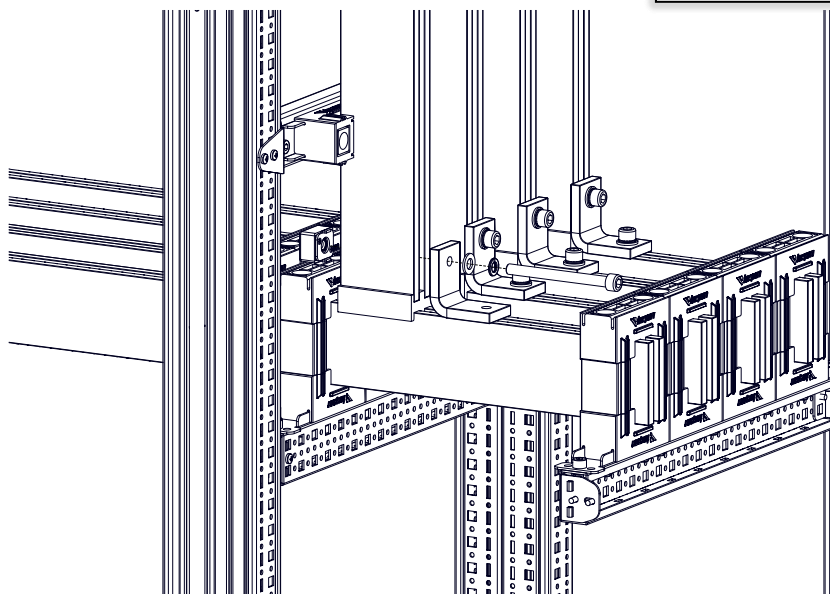
M8x H



M8

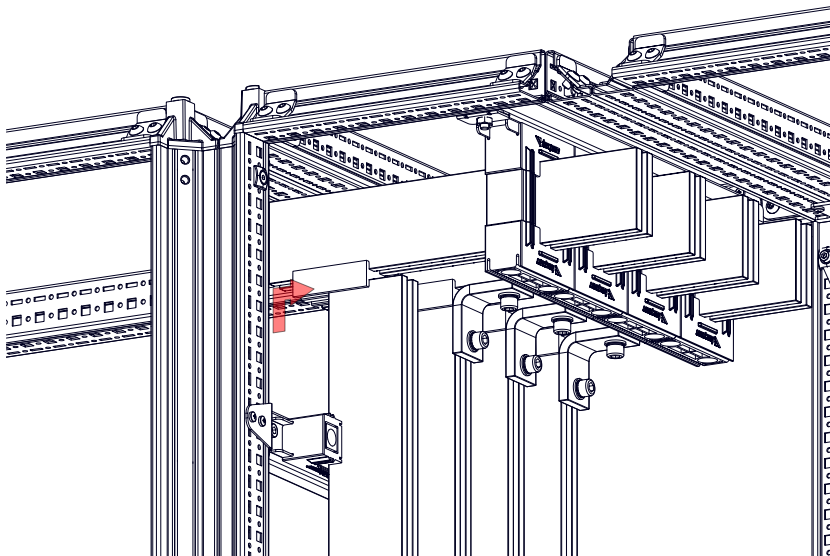
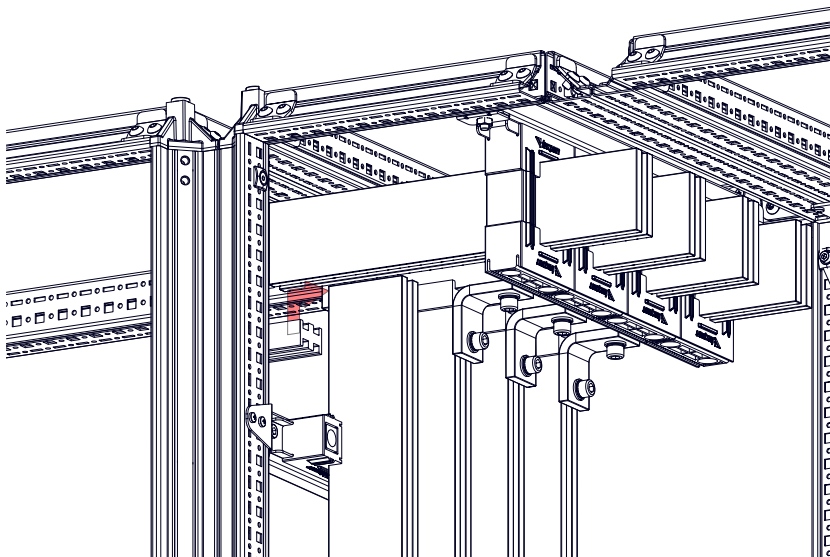
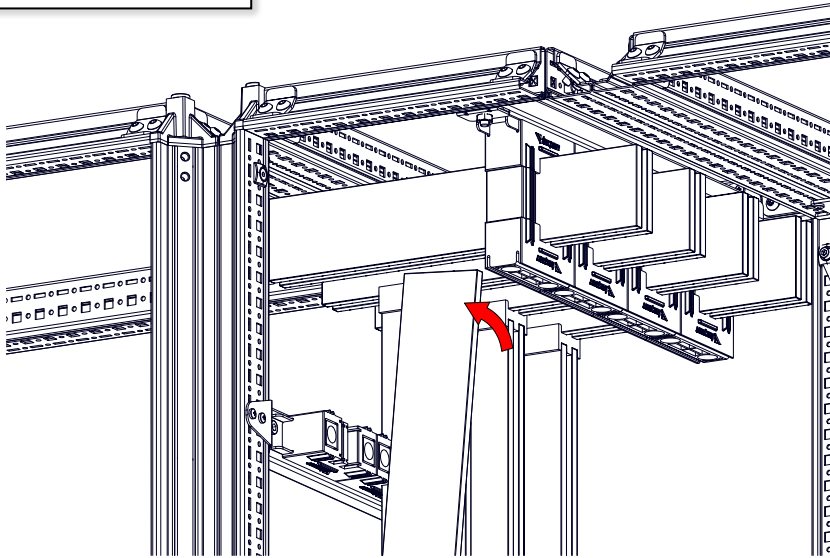


M8

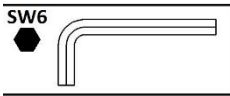


2.2 TWO (2) FLAT VERTICAL BAR ASSEMBLY

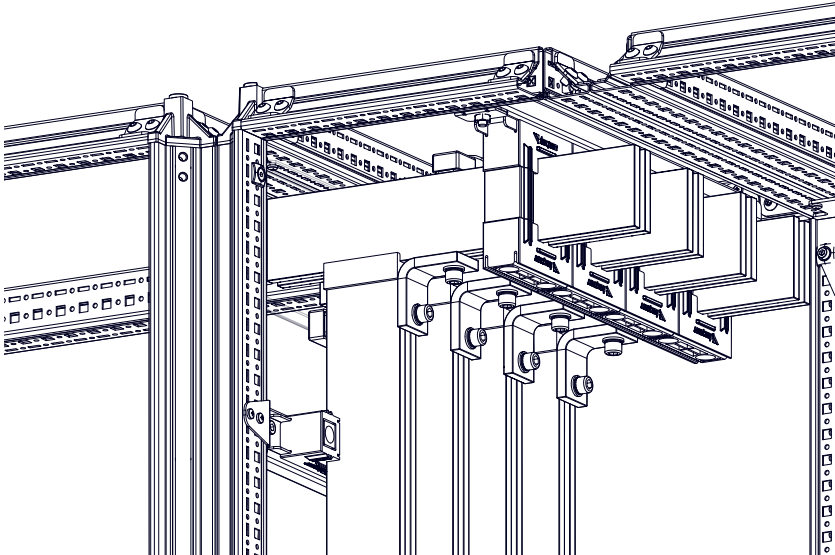
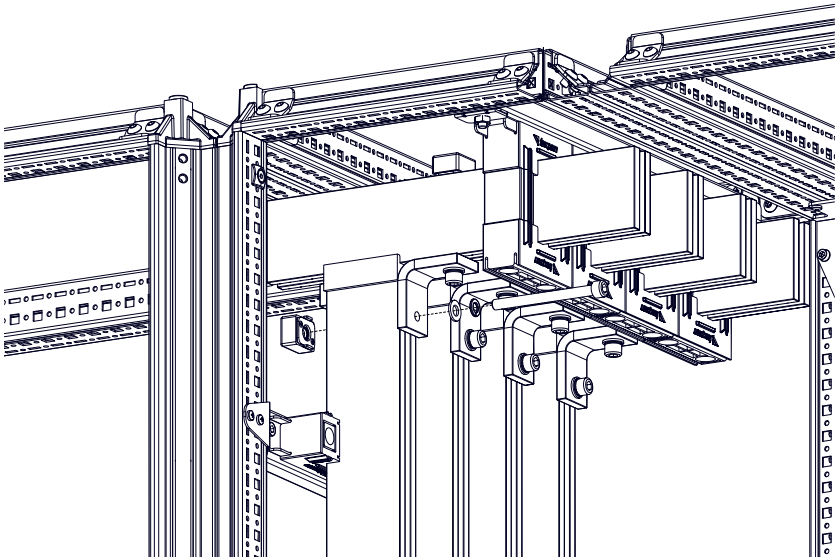
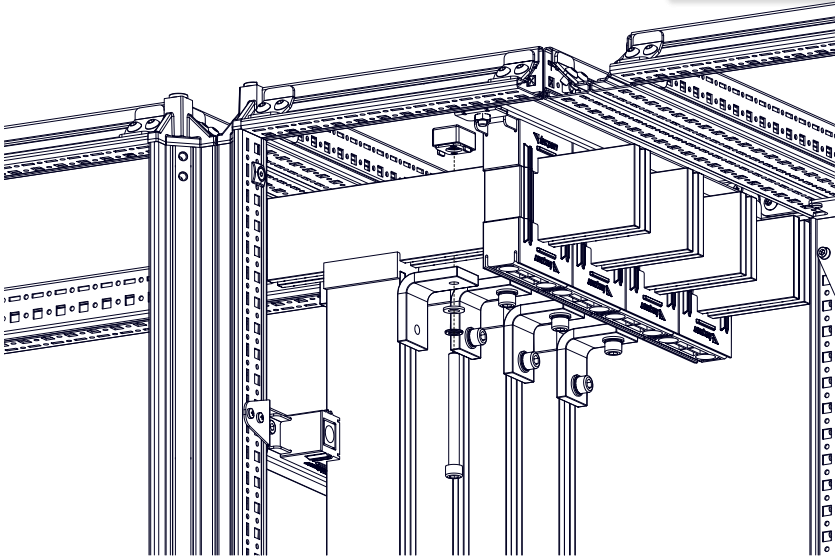
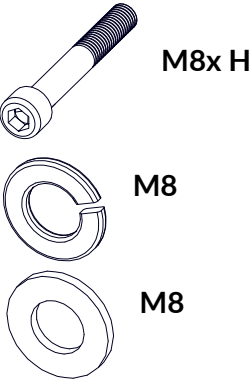
Required Packages:
1021.XXXX



2.2 TWO (2) FLAT VERTICAL BAR ASSEMBLY



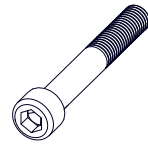
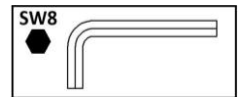
Required Packages:
1021.XXXX



2.2 TWO (2) FLAT VERTICAL BAR ASSEMBLY

Required Packages:

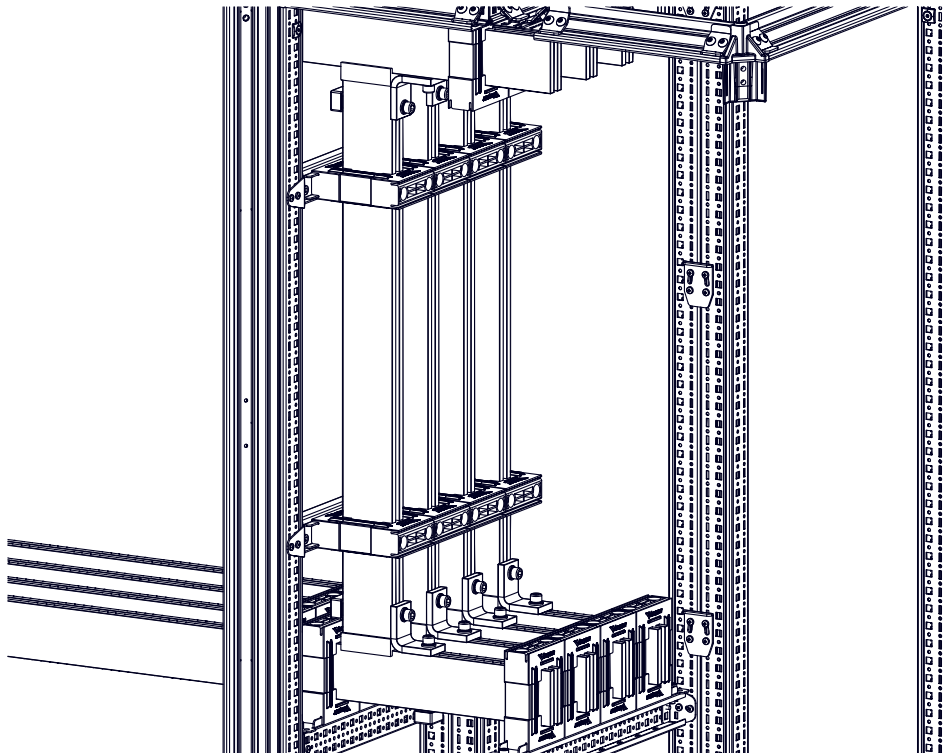
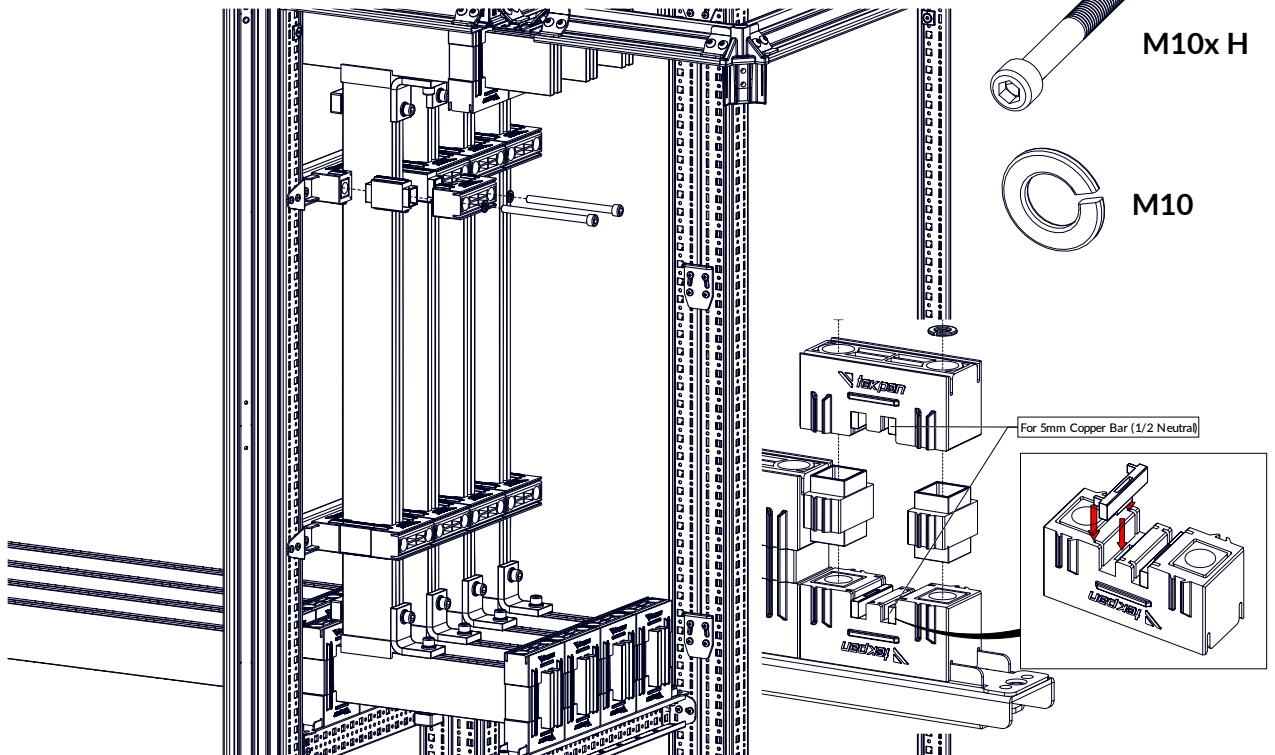
1009.OXX/1011.XXX/1019.OXX



M10x H



M10



2.2 TWO (2) FLAT VERTICAL BAR ASSEMBLY

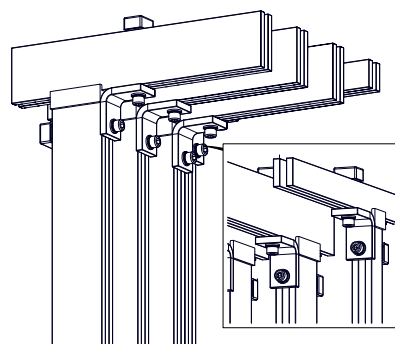
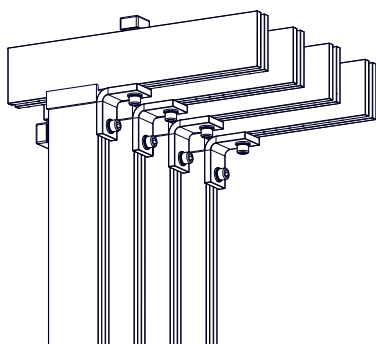
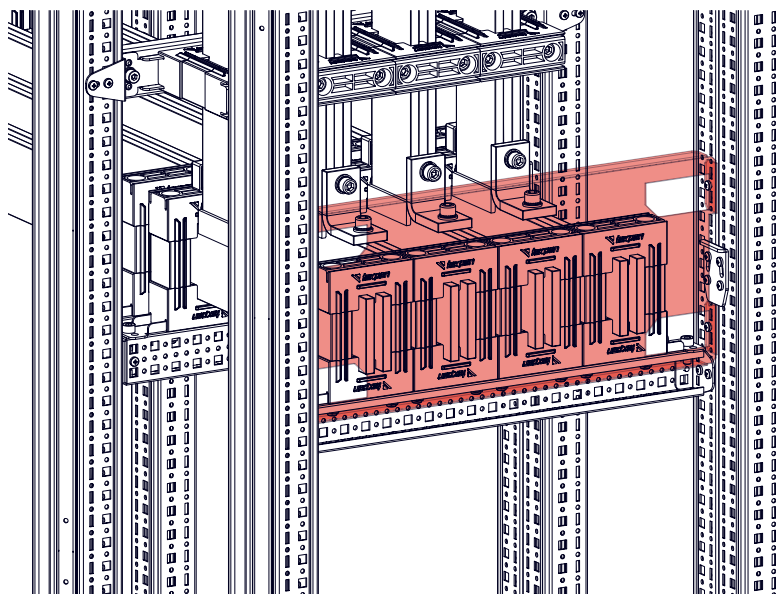
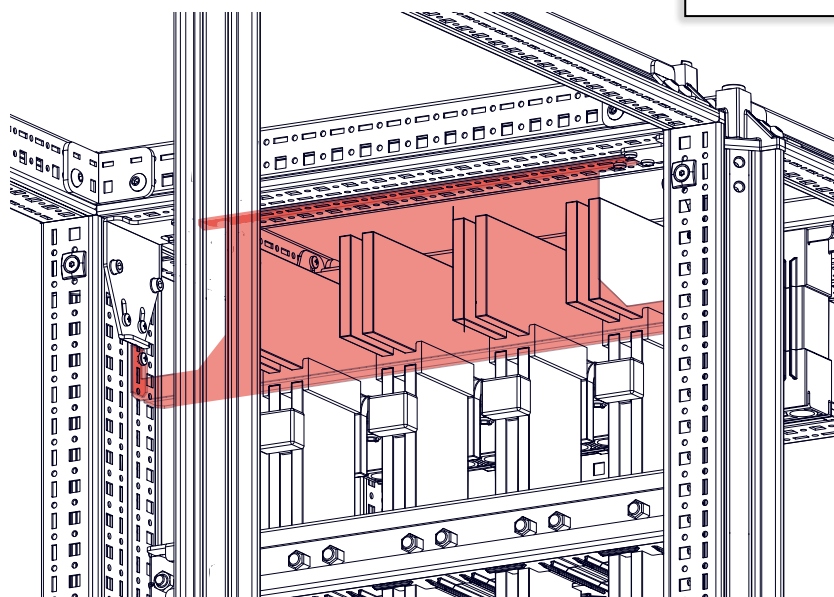


M5X10

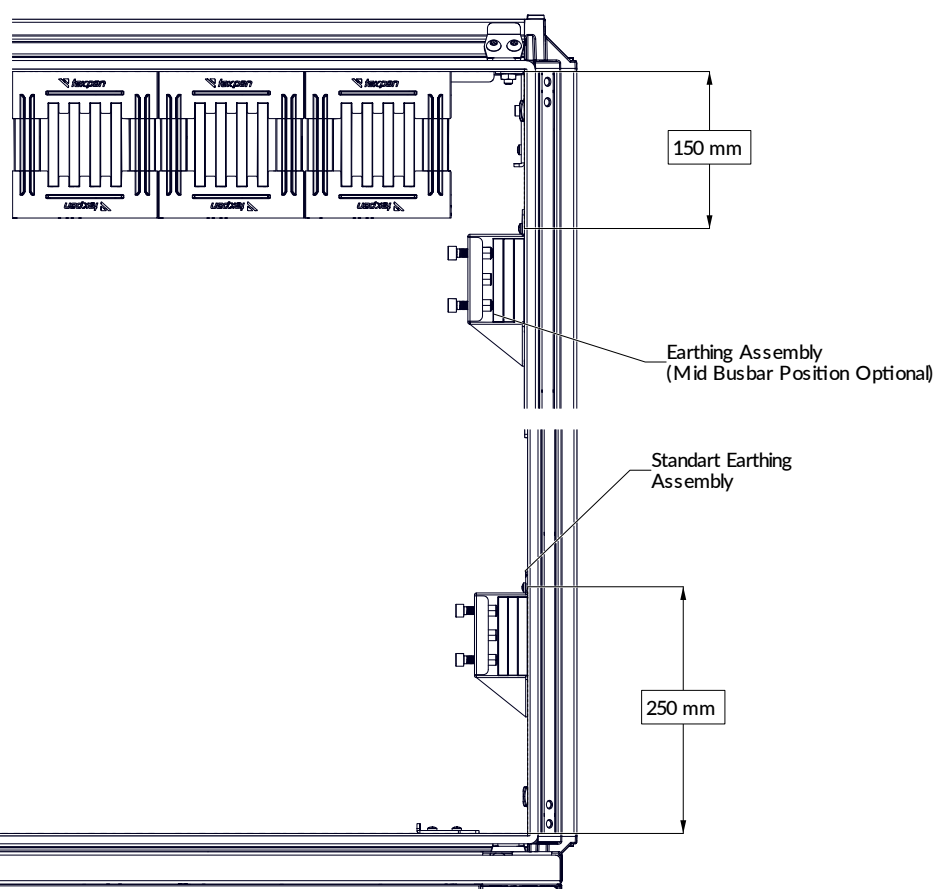
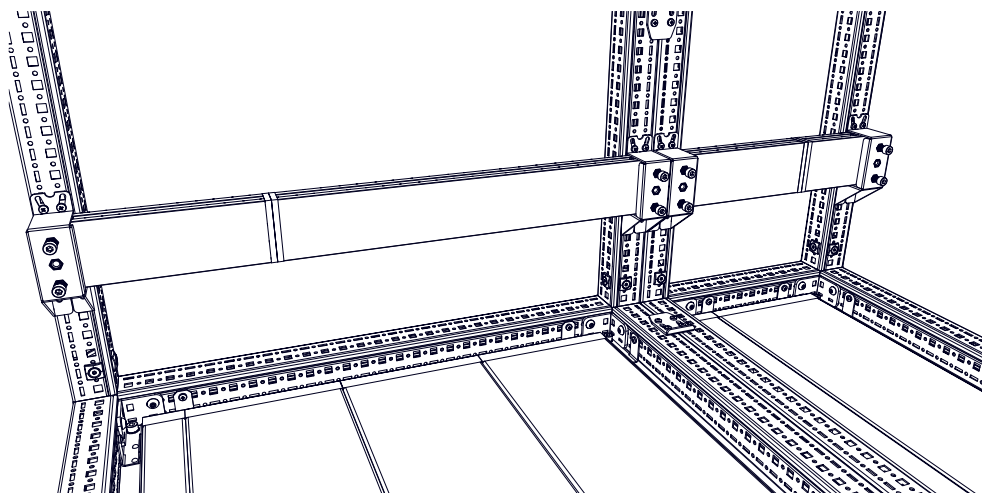
Required Packages:

Top:1023.1XX

Mid:1023.2XX



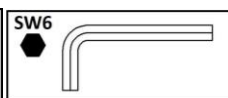
3. EARTHING BAR ASSEMBLY



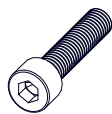
Neutral Section	Rated Current (In)	Flat Copper Size (mm) xQty
		PE
1/2 N	1350A	20/5x2
1/1 N	1350A	40/5x2
1/2 N	1620A	25/5x2
1/1 N	1620A	50/5x2
1/2 N	1860A	30/5x2
1/1 N	1860A	60/5x2
1/2 N	2300A	40/5x2
1/1 N	2300A	40/10x2

Neutral Section	Rated Current (In)	Flat Copper Size (mm) xQty
		PE
1/2 N	2500A	40/5x2
1/1 N	2500A	40/10x2
1/2 N	3000A	50/5x2
1/1 N	3000A	50/10x2
1/2 N	3400A	60/5x2
1/1 N	3400A	60/10x2
1/2 N	4000A	40/10x2
1/1 N	4000A	80/10x2

3. EARTHING BAR ASSEMBLY



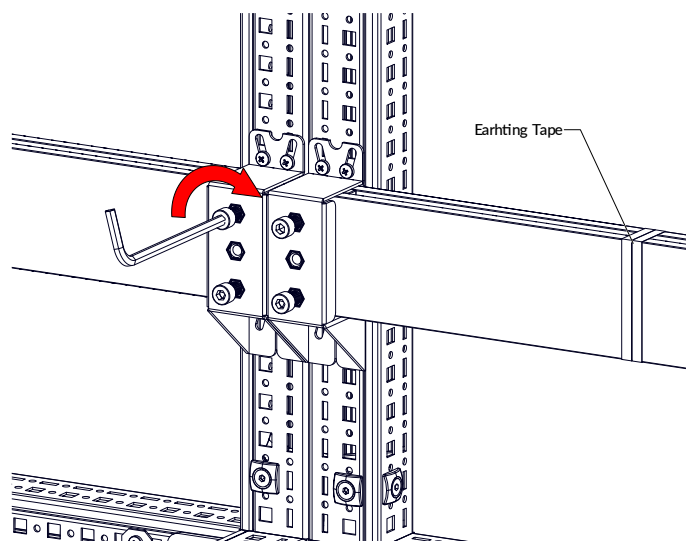
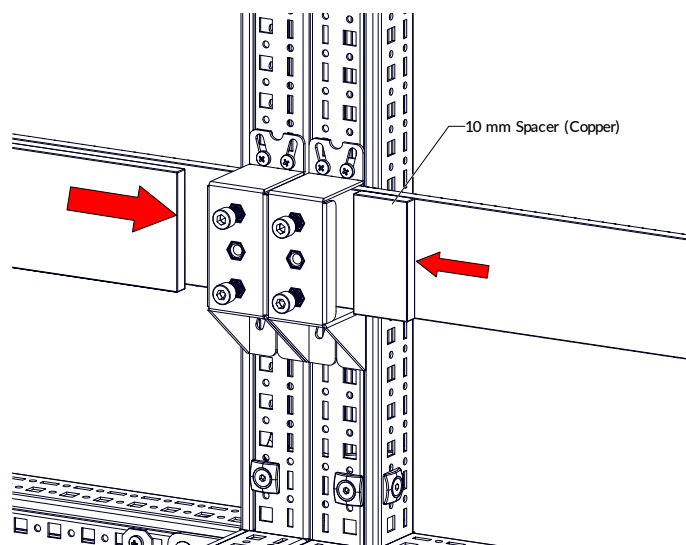
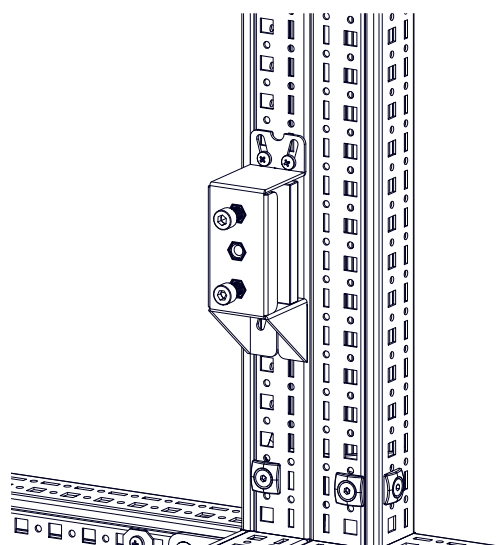
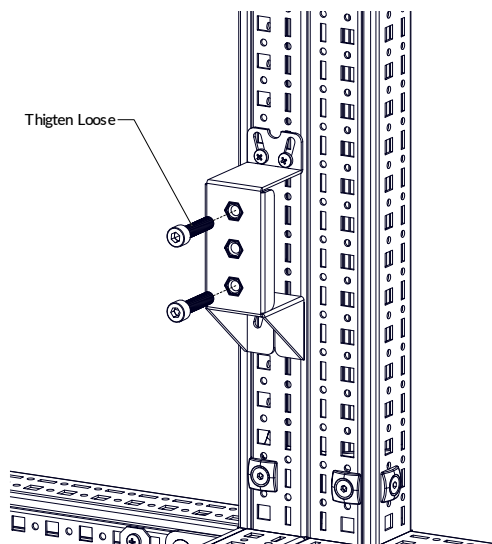
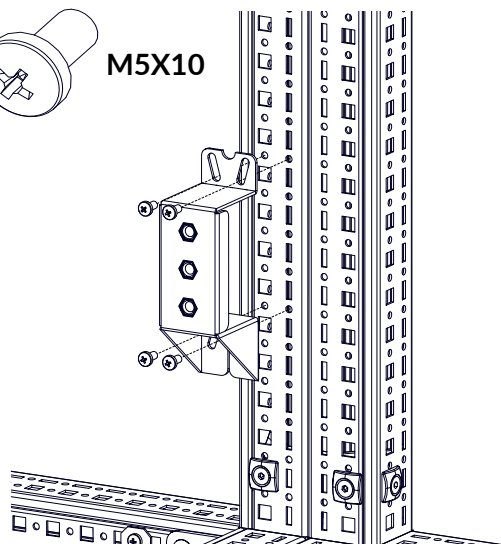
Required Packages:
1012.0XX



M8x25/35

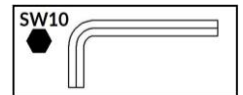


M5X10



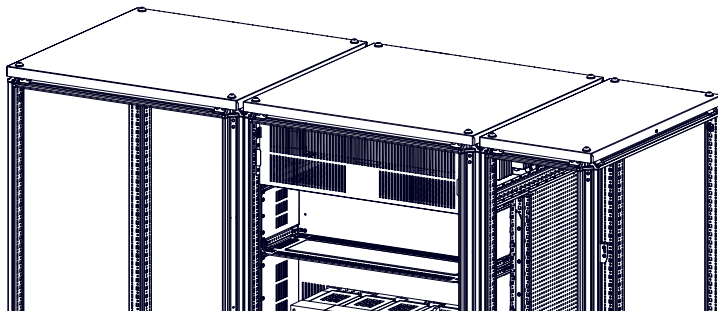
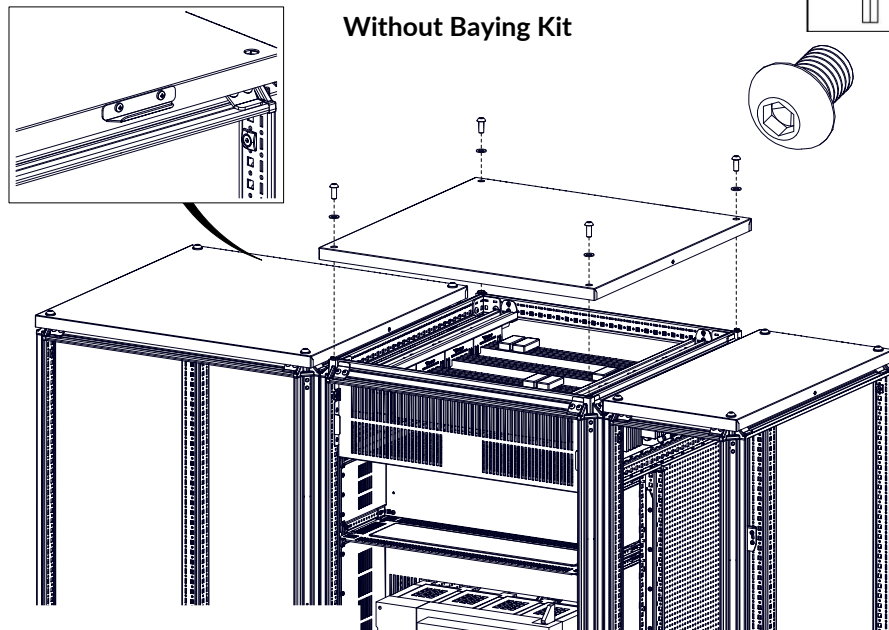
4. TOP COVER ASSEMBLY

Warning: This assembly step must be applied after cassette assembly (internal part assembly).

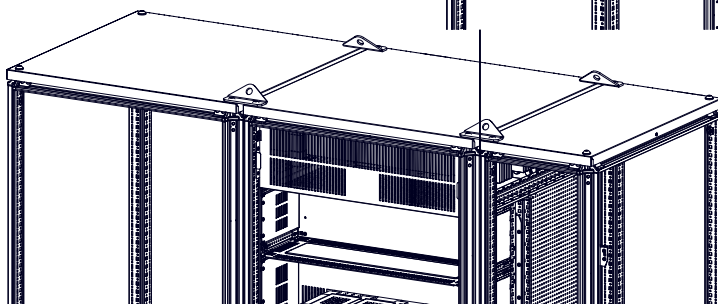
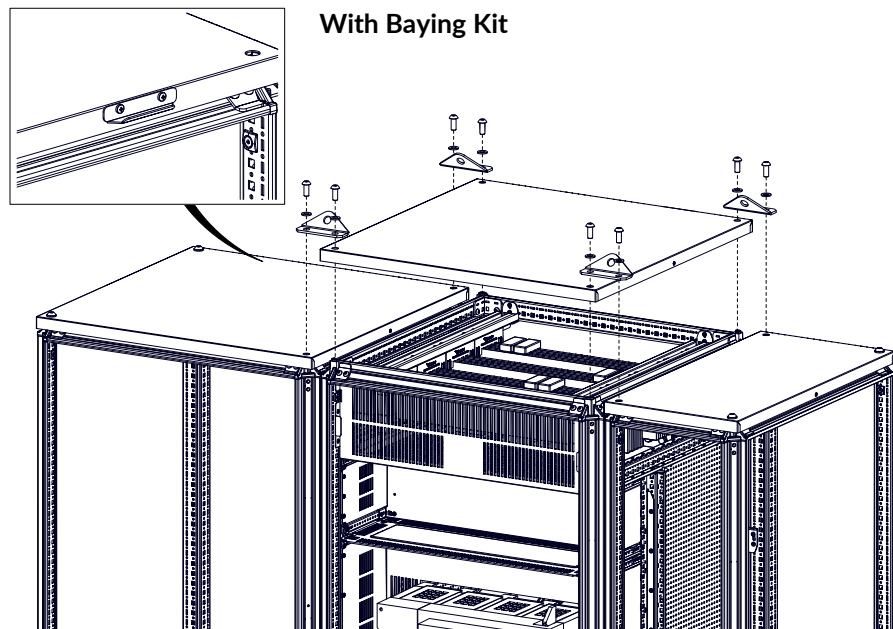


M12x30
4 pcs.

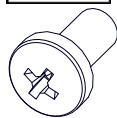
Without Baying Kit



With Baying Kit



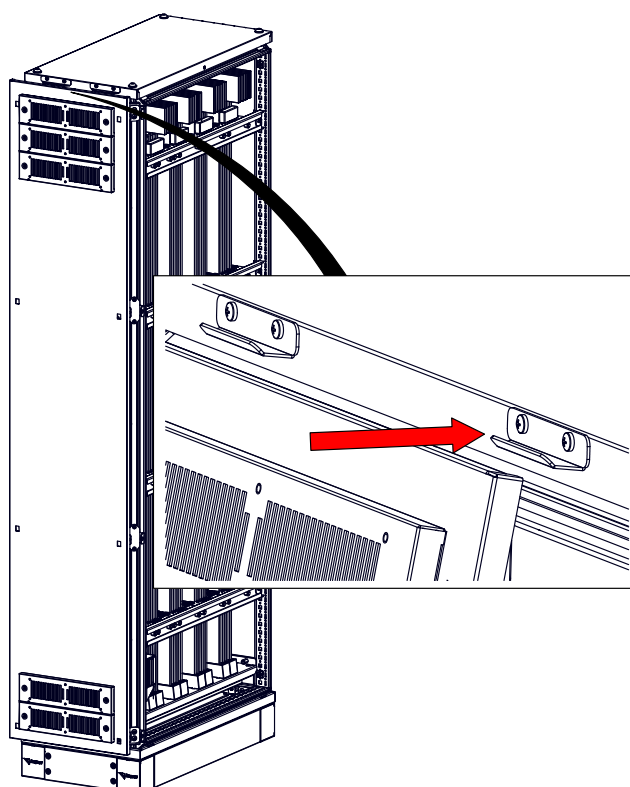
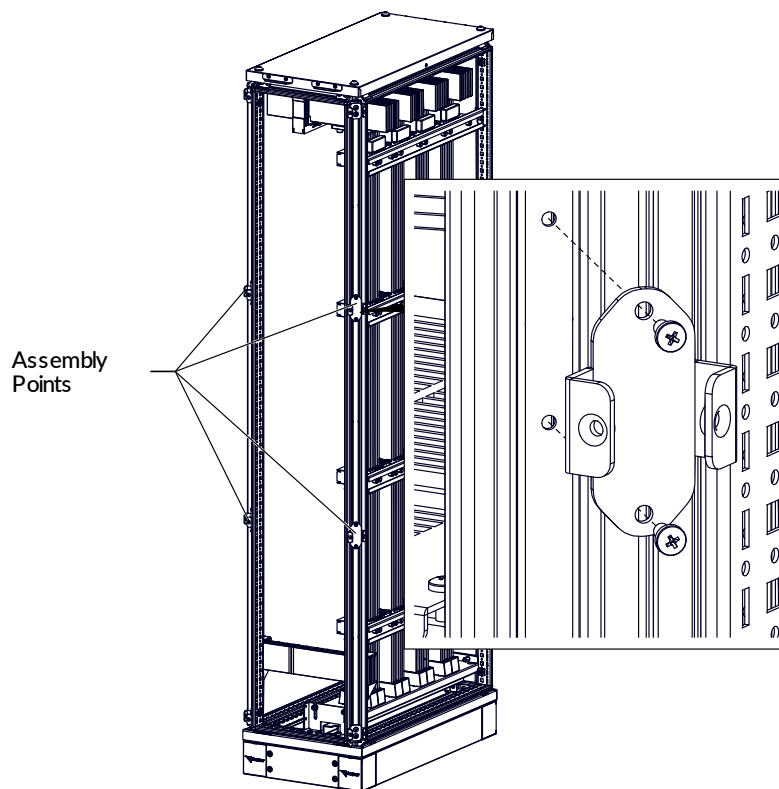
5. REAR PANEL ASSEMBLY



M5X10

Warning: This assembly step must be apply after cassette assembly (internal part assembly).

Required Packages:
1003.420

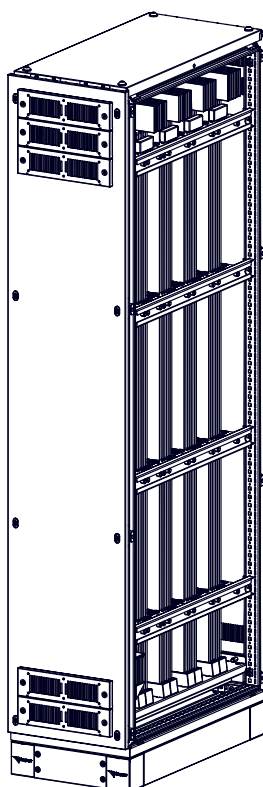
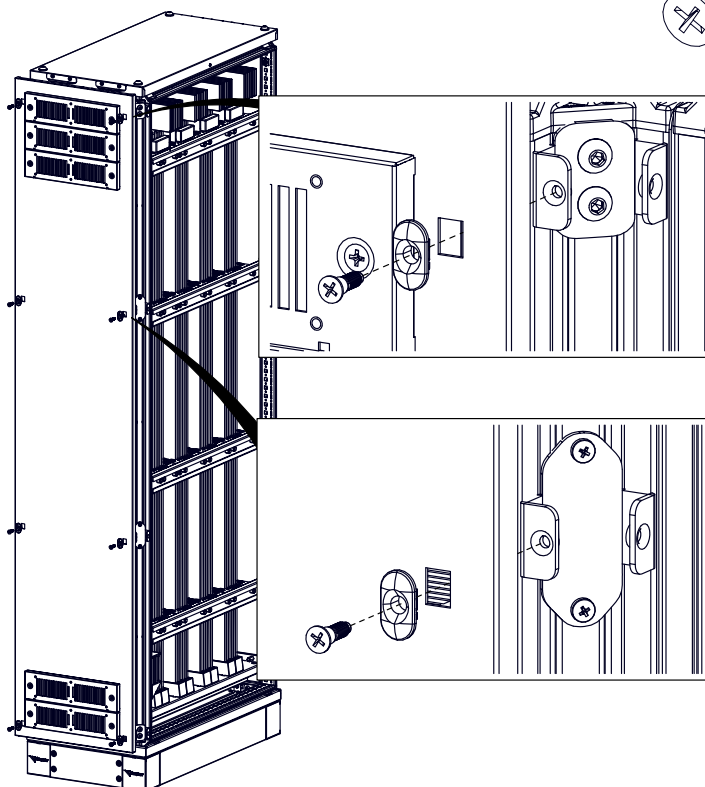
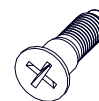


5. REAR PANEL ASSEMBLY

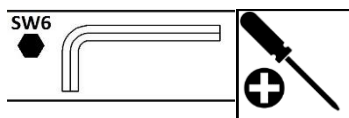
Required Packages:
1003.420



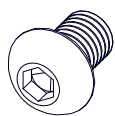
M6x23
8 pcs.



6. FIXED FRONT COVER ASSEMBLY



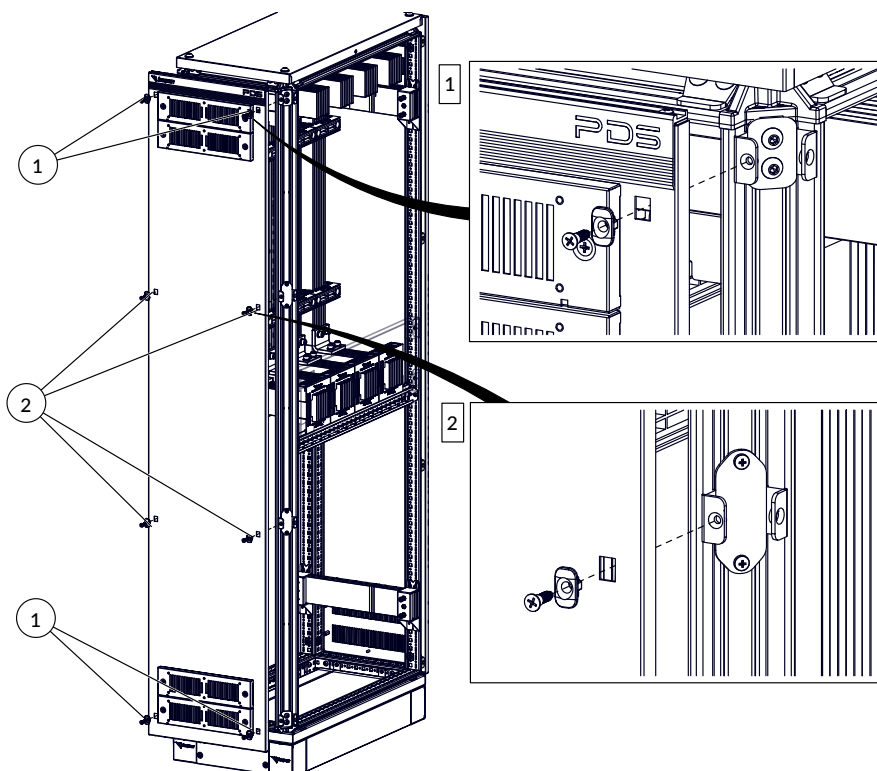
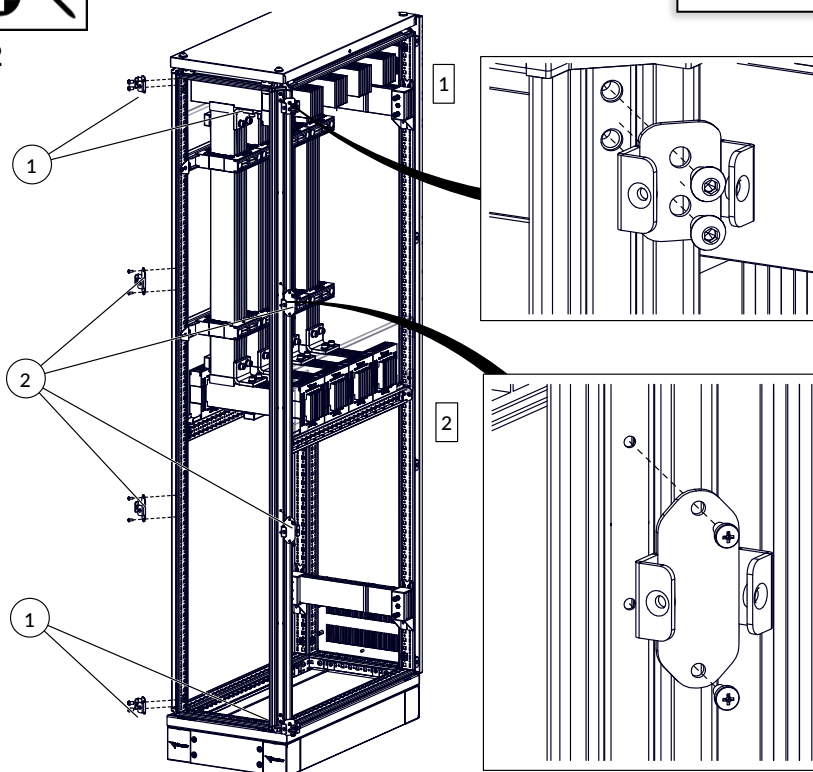
Required Packages:
1020.420



M8x12
8 pcs.



M5X10
8 pcs.

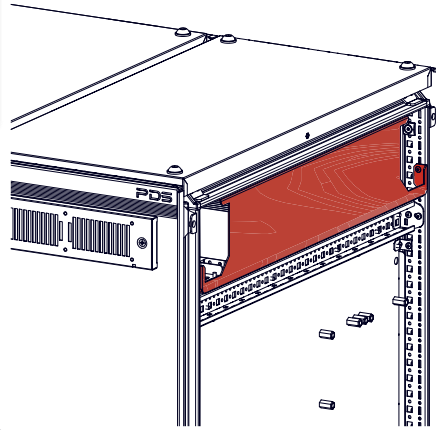


7. SIDE PANEL ASSEMBLY

Required Packages:

Side Panel:706.2XX

Busbar Protection:1023.1XX



M6x23
8 pcs.



M5x25
1 pcs.

M5x25 Only for 800 depth !!!

