

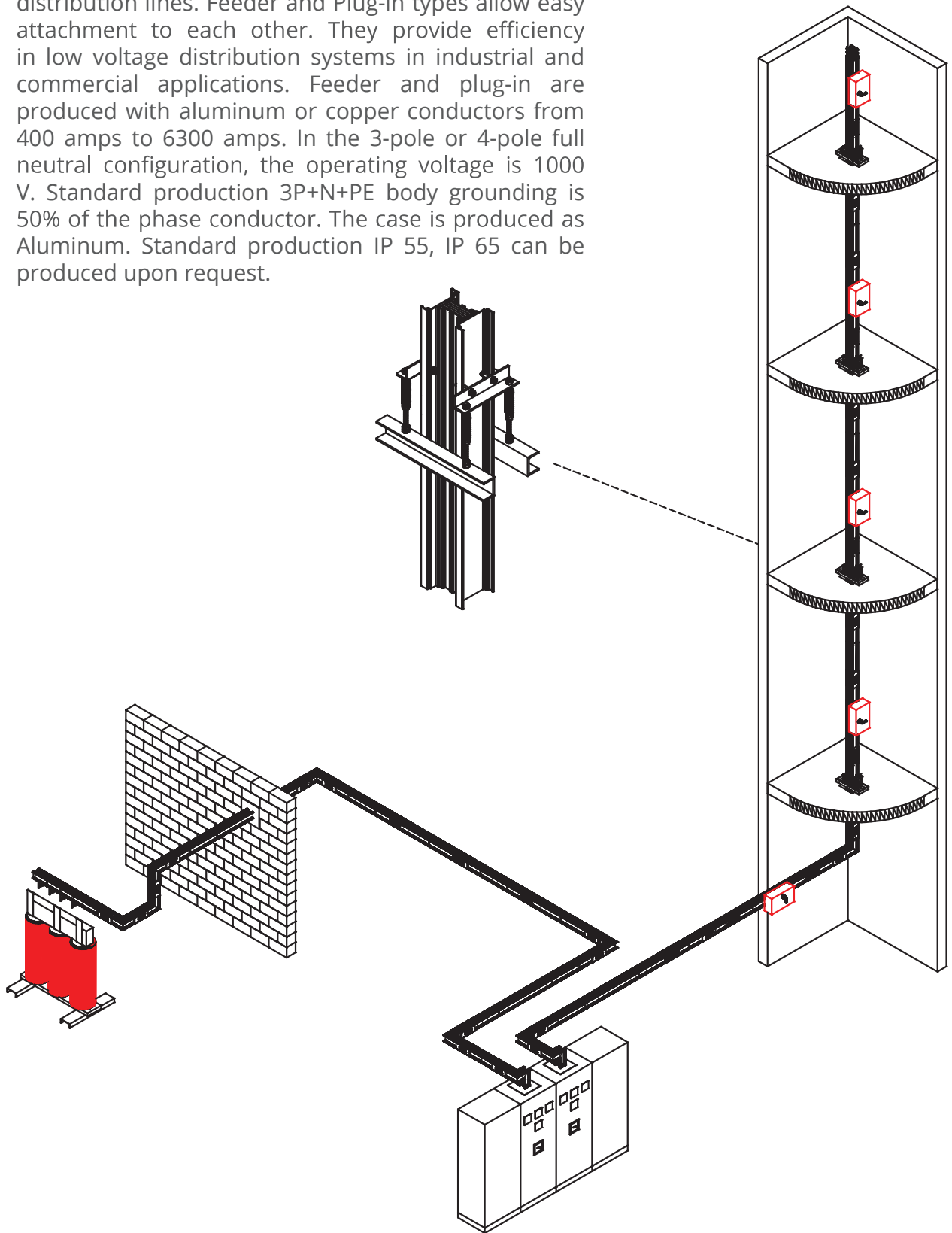
The background is a vibrant red color with a complex geometric pattern. It features overlapping, semi-transparent white and light red shapes, including squares and rectangles, some of which are rotated. A grid of small white dots is scattered across the background, particularly concentrated in the lower right quadrant. The overall effect is modern and technical.

**HP-K
SERIES
400A-6300A**

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GENERAL FEATURES

Busbar trunking systems are sandwich systems compatible with complex low voltage energy distribution lines. Feeder and Plug-in types allow easy attachment to each other. They provide efficiency in low voltage distribution systems in industrial and commercial applications. Feeder and plug-in are produced with aluminum or copper conductors from 400 amps to 6300 amps. In the 3-pole or 4-pole full neutral configuration, the operating voltage is 1000 V. Standard production 3P+N+PE body grounding is 50% of the phase conductor. The case is produced as Aluminum. Standard production IP 55, IP 65 can be produced upon request.



General

It is used in places with high current requirements such as between transformer and panel, high service buildings, commercial centers, industrial facilities, military facilities, public buildings.

Sandwich Construction

Feeder and Plug-in busbars are sandwich type systems that are easy to assemble. Due to its structure, the voltage drop characteristics are at minimum and it provides a regular low reactive power factor. Construction channels are designed as aluminum profile and upper and lower covers are aluminum. Hysteresis currents and Eddy currents are minimized by spreading them in the aluminum channel. In cases where 2 or 3 conductors are used per phase in Feeder and Plug-in lengths, parallelization is made at the end of each phase. (In the change of phases). The body of the plug-in lengths has windows with lids that allow flat mounting and exit of tap-offs. Additional accessories used for the feeder can also be used in Plug-in types. Plug-in and Feeder types can be mounted together.

Full Enclosed Construction

Busbar systems have a fully closed design. This duct design does not reduce the electrical values and since there are no ventilation holes, the contact of the conductors with a foreign material is prevented. The heat dissipation spreads directly with the body close to the conductors.

Finish

RAL 7038

Electrostatic paint is applied in busbar duct systems.

Insulation and Product Features

All busbars are applied epoxy resin. The joints are tin plated to minimize contact resistance and surface corrosion on the surface. Splice block conductors can be silver plated as an option.

Economic

Busbar trunking systems take up less space than cable trunking systems and have low installation costs.

BUSBAR FEATURES

Voltage Drop

Due to its compact structure, it provides the most efficient transmission of power by minimizing the voltage drop due to its very low reactance.

Joints

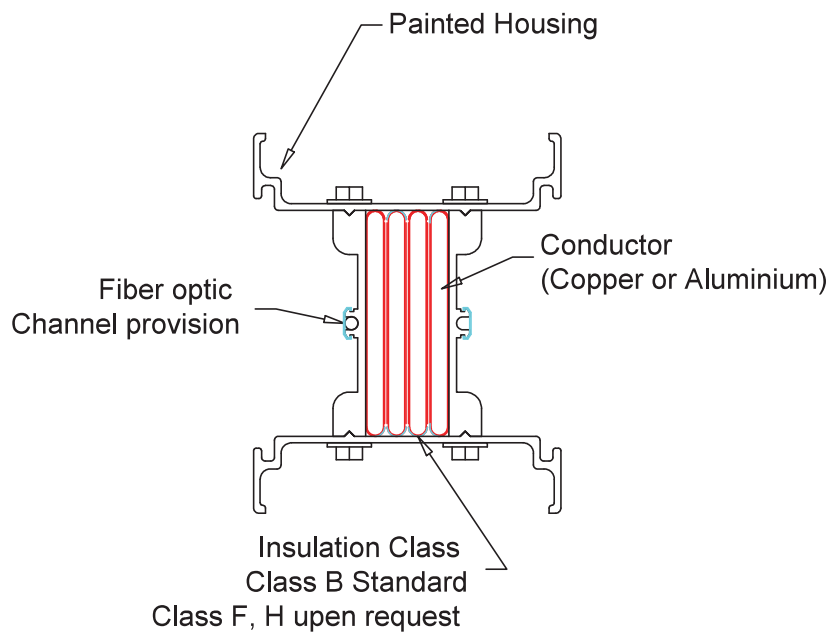
In external feeder busbars, the joints applied with a special gasket to prevent rain water from entering into it provide protection and smoothness in all conditions.

Fitting

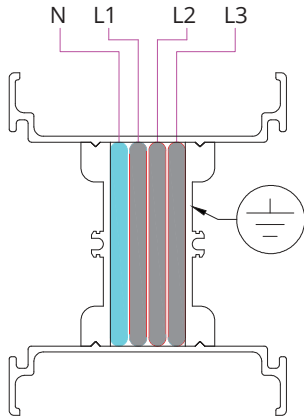
Elbows can be easily added with an additional block.

Plug-In Points

Plug-ins are V2 (non-flammable), resistant to harsh environmental conditions and resistant to high temperatures. Sealed protection cover made of flame retardant certified material is IP 55. Jaws contact surfaces provide permeability thanks to the compression spring on the conductors.

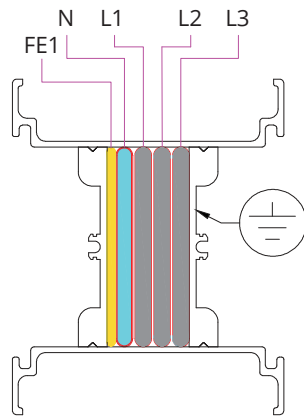


Ratings		
	AL	CU
400A	✓	✓
500A	✓	✓
630A	✓	✓
800A	✓	✓
1000A	✓	✓
1250A	✓	✓
1350A	✓	✓
1600A	✓	✓
2000A	✓	✓
2250A	✓	✓
2500A	✓	✓
2000A	✓	✓
2500A	✓	✓
3000A	✓	✓
3200A	✓	✓
3300A	✓	✓
3600A	✓	✓
4000A	✓	✓
4250A	✓	✓
5000A	✓	✓
6300A	✓	✓
✓	Standard Production	



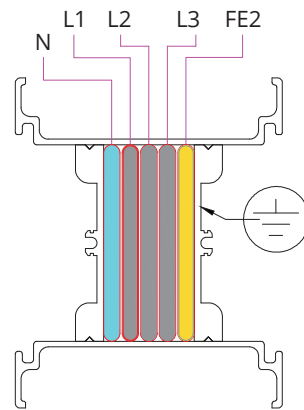
3P+N+PE (Housing) (4P) (T2)

The neutral conductor cross-section is the same as the phase conductor, and the case cross-section used for grounding is larger than the phase conductor cross-section.



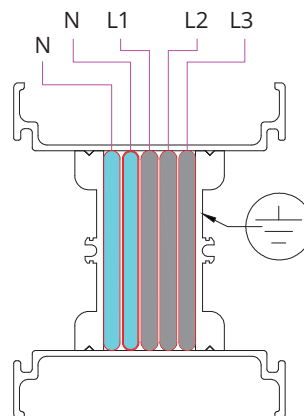
3P+N+FE1+PE (Housing) (5P) (T3)

Neutral conductor cross-section is placed in the same housing as the phase conductor with the same grounding cross-section as 1/2.



3P+N+FE2+PE (Housing) (5P) (T4)

Neutral conductor cross-section is the same as phase conductor and 100% grounding cross-section is placed in the housing as the same.



3P+2N+PE (Housing) (5P) (T5)

The neutral conductor cross-section is the same as the phase conductor, and the neutral conductor cross-section is twice that of the phase conductor.

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Project Details

- Indoors Installation.....
- Outdoors Installation
- Roof Roofless
- Minimum Temperature Internal..... °C
External..... °C
- Maximum Temperature Internal..... °C
External..... °C
- Temperature 24 Hour Average Internal..... °C
External..... °C
- Humidity Min..... °C
Max..... °C
- Country of Installation

Electrical Data

- Nominal Current A
- Inrush Current A
- Phase Poles 3P+Pe
3P+N+Pe
3P+Pen
3P+2N+Pe
3P+N+Fe/2+Pe
3P+N+Fe+Pe
- Operating Voltage V
AC DC
- Phase Short Circuit kA (1s)
- Max Voltage Drop ΔV..... %
- Minimum Protection Degree IP.....
- Conductor Metal AL COPPER

Busbar Types

- Feeder Busbar Transformer to Board
- Feeder Busbar Panel to Panel
- Feeder Busbar Generator to Panel
- Plug-in Busbar Tapoff Units
- Busbar Total Length
Feeder m
Plug-in m
Elbows ad

Connection Type

- Between Busbar and Panel Yes No
- Between Busbar and Transformer Yes No
- Transformer Resin Yes No
- Transformer Specification Dry Oil

Tap-Off Boxes

- Empty Fuse with Base Load Breaker with Fuse Base
- Empty Automatic Switch Automatic Switch

Suspension Sets

- Ceiling Susp. Wall Susp.

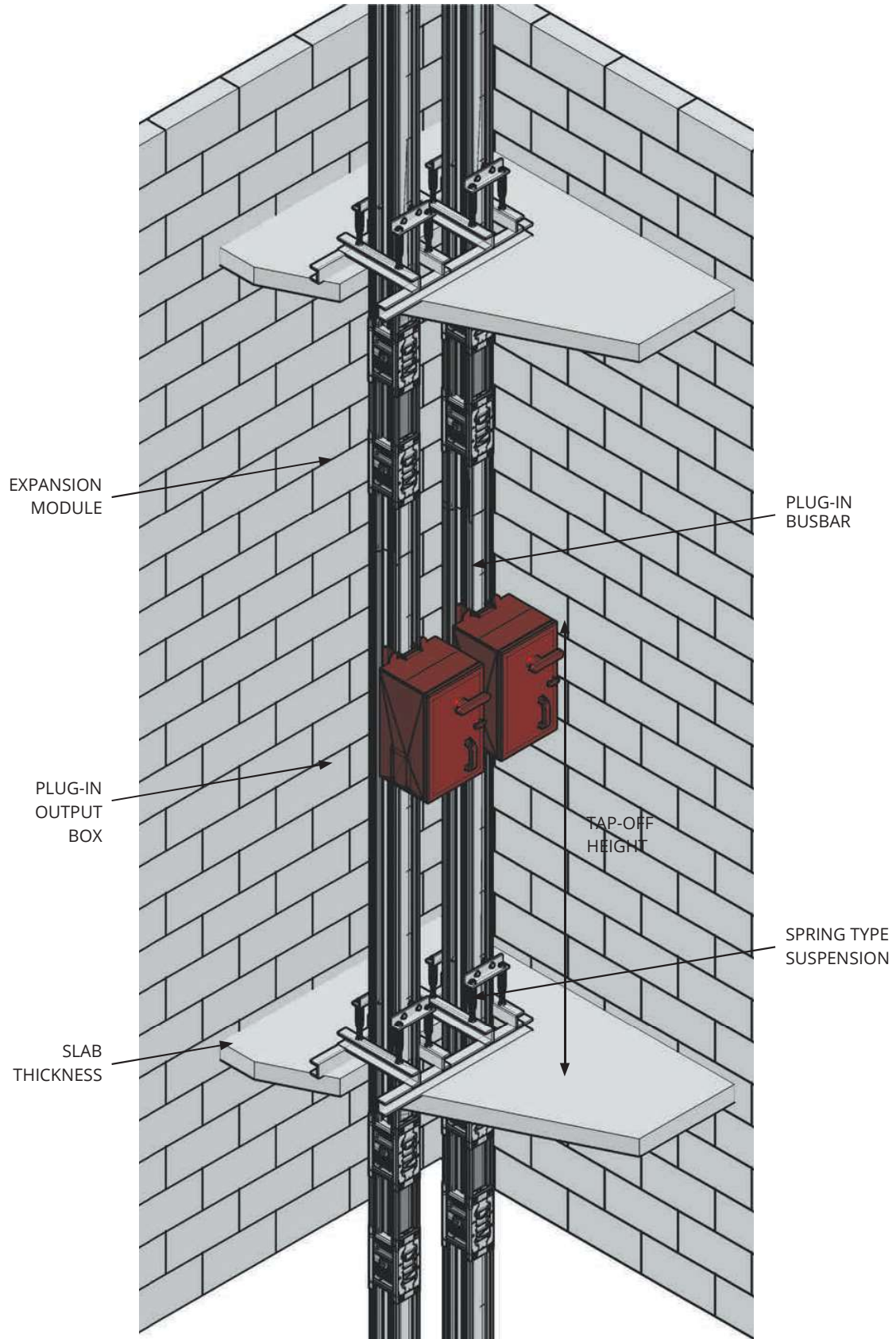
Fire Barrier Unit

- Fire Barrier Unit min.
- Turn drafts isometric documents for fittings.

LAYOUT DETAILS

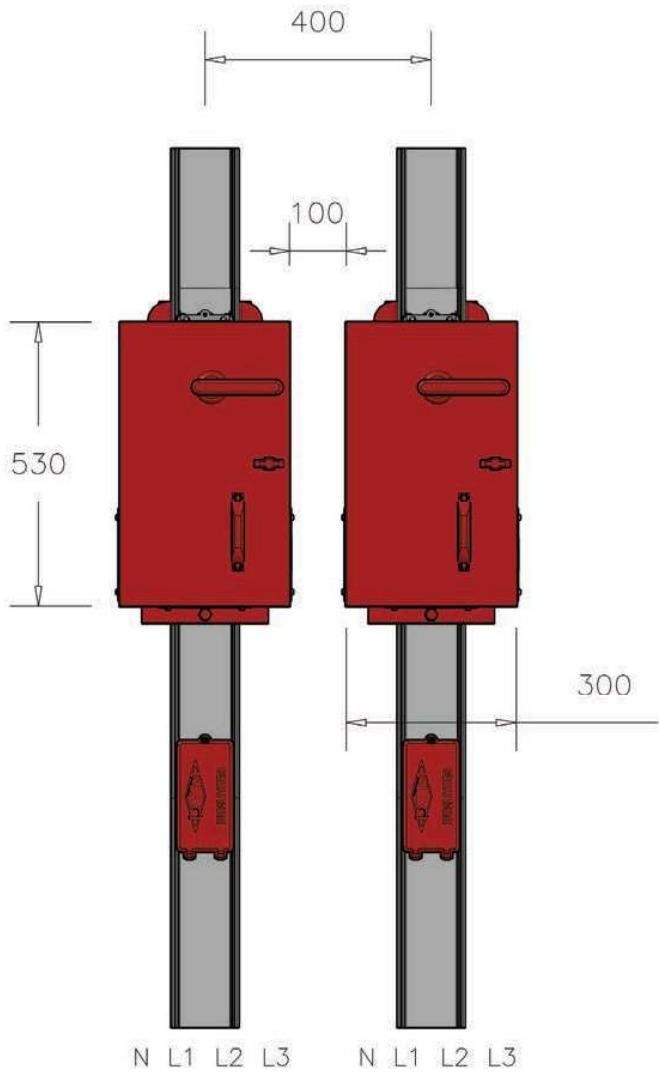
CUSTOMER APPROVAL

VERTICAL DISTRIBUTION PROJECT

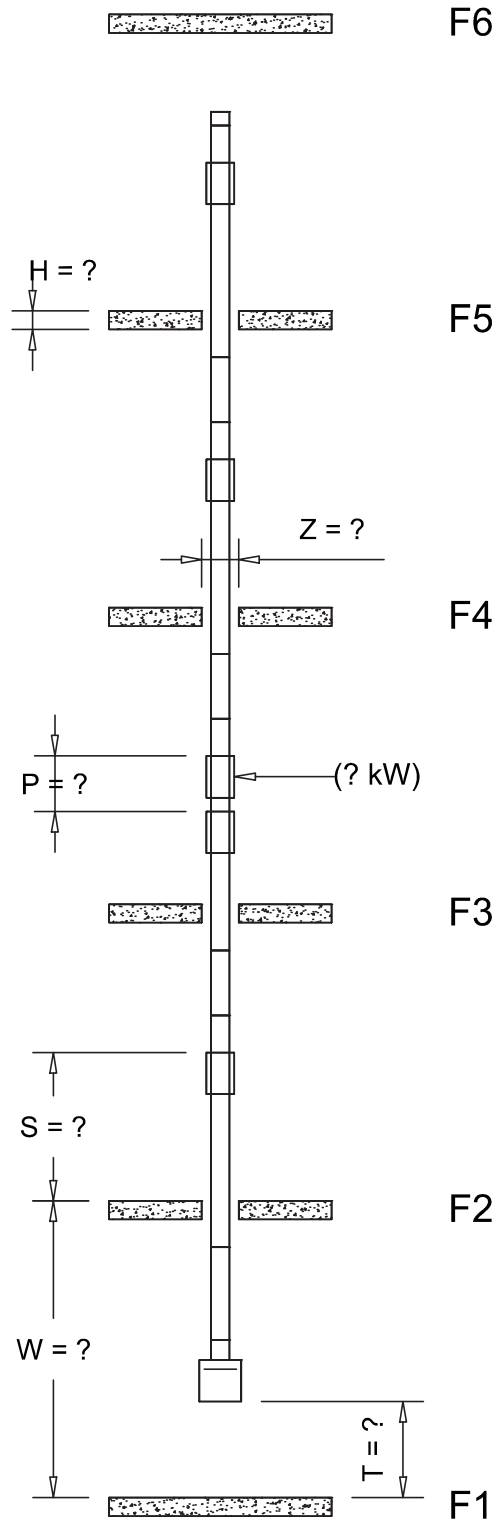


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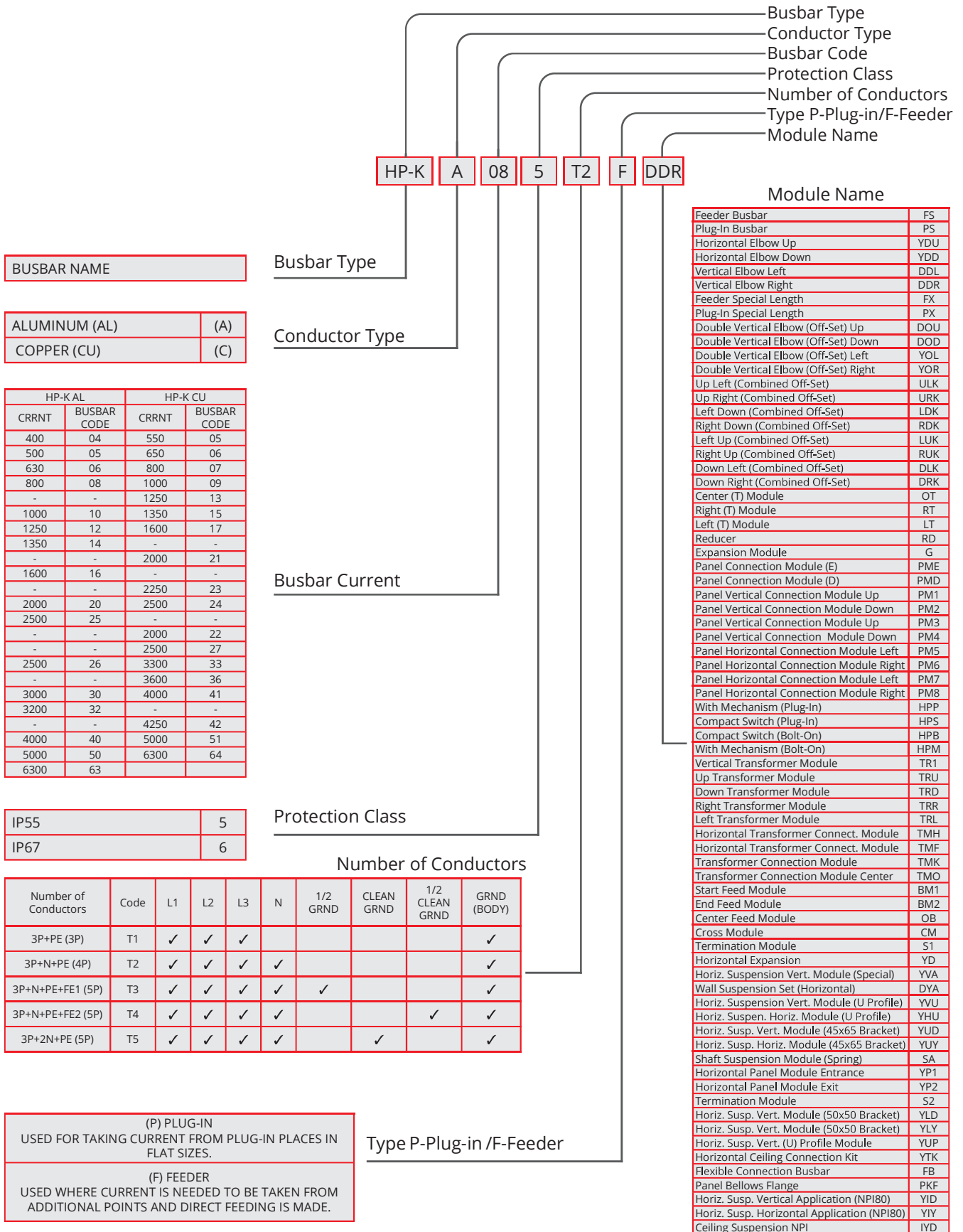
VERTICAL DISTRIBUTION PROJECT



H = Slab Thickness (cm ?)
 W = Floor Height (cm ?)

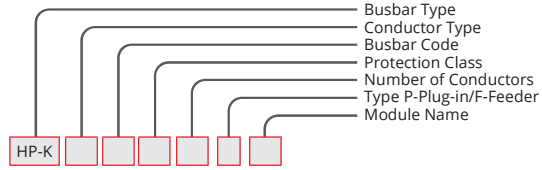


ORDER CODE SYSTEM



HP-K

Standard Size



Feeder Busbar	FS
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SAMPLE ORDER
 1600 A Aluminum,
 Feeder IP 55 4 Conductors
HP-KA165T2FS

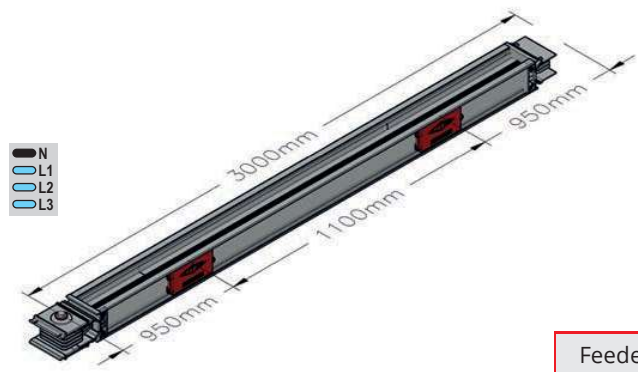
FEEDER BUSBAR
 It provides direct feeding in power transmission. Energy can be received via Bolt-on. Standard production is 3000 mm, upon request, it can be manufactured in different sizes starting from minimum 500 mm.



Plug-in Busbar	PS
----------------	----

SAMPLE ORDER
 1250 A Aluminum,
 Plug-in IP 55 4 Conductors
HP-KA125T2PS

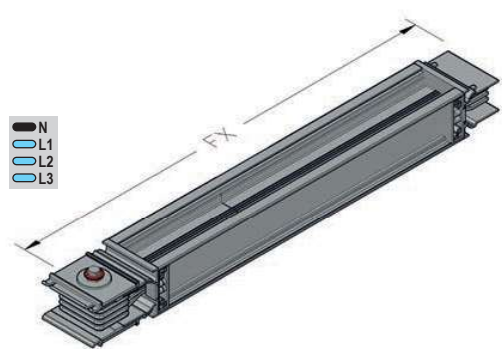
PLUG-IN BUSBAR
Standard production in Plug-in sizes with 2 outlets, the number of outlets can be changed upon request.
 Plug-in busbars; With bolt-on output boxes up to 1000A from its additional points and Plug-in output boxes up to 630 A from its sockets, current can be taken.
Info: Please specify the number of correct receiving windows and whether they are single or double sided in your Plug-in orders.



Feeder Busbar Special Length	FX
---------------------------------	----

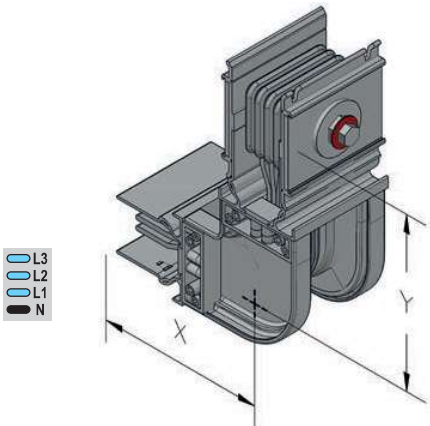
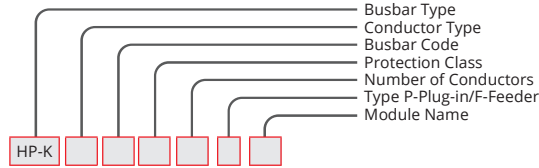
SAMPLE ORDER
 2000 A Aluminum,
 Feeder IP 55 4 Conductors
HP-KA205T2FX

Info:
 Feeder Min. Special Length = 50 cm
 Plug-in Min. Special Length = 100 cm



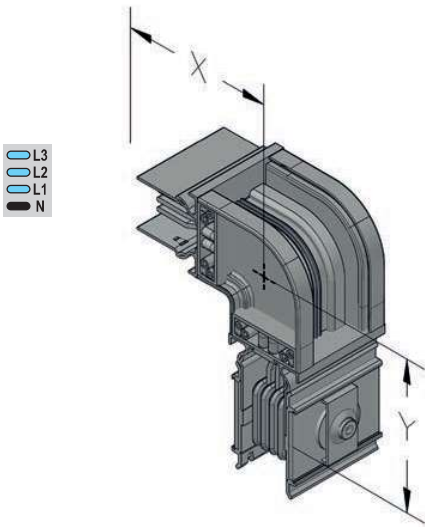
Please call our company for special size modules.

Elbow Modules



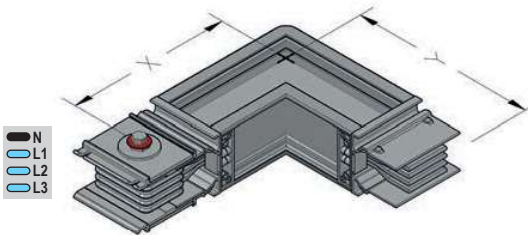
Vertical Elbow Upwards DDU

SAMPLE ORDER
800 A Aluminum,
Elbow IP 55 4 Conductors
HP-KA085T2FDDU



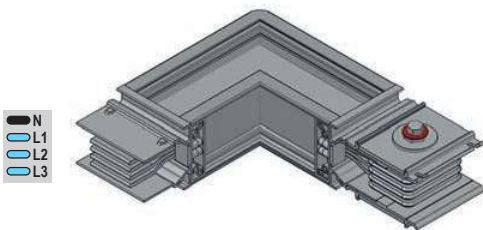
Vertical Elbow Downwards DDD

SAMPLE ORDER
3200 A Aluminum,
Elbow IP 55 4 Conductors
HP-KA325T2FDDD



Horizontal Elbow Left YDL

SAMPLE ORDER
4000 A Aluminum,
Elbow IP 55 4 Conductors
HP-KA405T2FYDL



Horizontal Elbow Right YDR

SAMPLE ORDER
800 A Aluminum,
Elbow IP 55 4 Conductors
HP-KA085T2FYDR

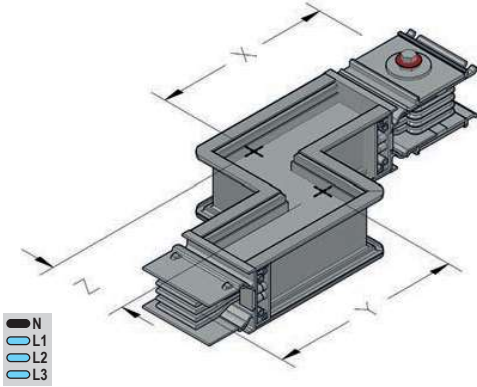
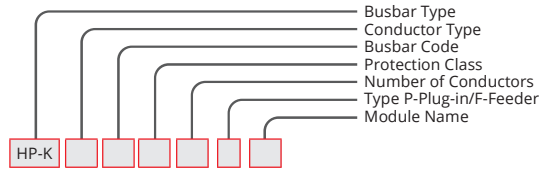
VERTICAL ELBOW					
Used in vertical mounting of busbar lengths in up and down turns.					
(AL)			(CU)		
AMR.	X mm	Y mm	AMR.	X mm	Y mm
400A	230	230	550A	230	230
500A	230	230	650A	230	230
630A	230	230	800A	230	230
800A	230	230	1000A	230	230
1000A	230	230	1250A	230	230
1250A	230	230	1350A	230	230
1350A	230	230	1600A	230	230
1600A	230	230	2000A	230	230
2000A	230	230	2250A	230	230
2500A	230	230	2500A	230	230
2500A	230	230	2000A	230	230
3000A	230	230	2500A	230	230
3200A	230	230	3300A	230	230
4000A	230	230	3600A	230	230
5000A	230	230	4000A	230	230
6300A	230	230	4250A	230	230
			5000A	230	230
			6300A	230	230

HORIZONTAL ELBOW					
Used for horizontal mounting of busbar lengths in right and left turns.					
(AL)			(CU)		
AMR.	X mm	Y mm	AMR.	X mm	Y mm
400A	250	250	550A	250	250
500A	250	250	650A	250	250
630A	250	250	800A	250	250
800A	257	257	1000A	257	257
1000A	270	270	1250A	265	265
1250A	285	285	1350A	270	270
1350A	292	292	1600A	277	277
1600A	310	310	2000A	292	292
2000A	330	330	2250A	310	310
2500A	355	355	2500A	330	330
2500A	363	363	2000A	308	308
3000A	393	393	2500A	323	323
3200A	413	413	3300A	363	363
4000A	453	453	3600A	378	378
5000A	503	503	4000A	393	393
6300A	578	578	4250A	413	413
			5000A	453	453
			6300A	516	516

HP-K

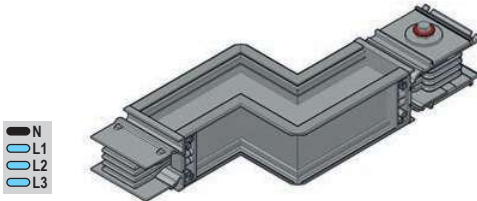
Please call our company for special size modules.

Elbow Modules



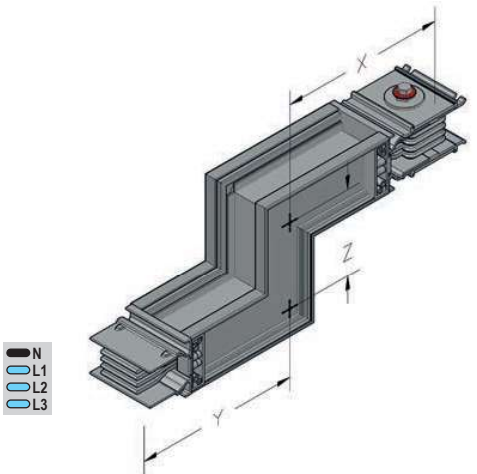
Double Elbow Horizontal Left (Combined Off-set) YOL

SAMPLE ORDER
1000 A Aluminum,
Offset IP 55 4 Conductors
HP-KA105T2FYOL



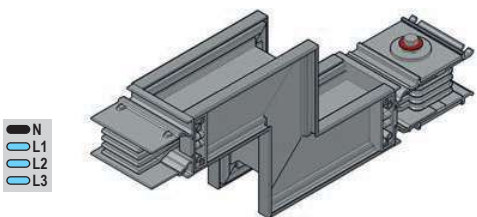
Double Elbow Horizontal Right (Combined Off-set) YOR

SAMPLE ORDER
1600 A Aluminum,
Offset IP 55 4 Conductors
HP-KA165T2FYOR



Double Vertical Elbow Up (Combined Off-set) DOU

SAMPLE ORDER
2500 A Aluminum,
Offset IP 55 4 Conductors
HP-KA255T2FDOU



Double Vertical Elbow Down (Combined Off-set) DOD

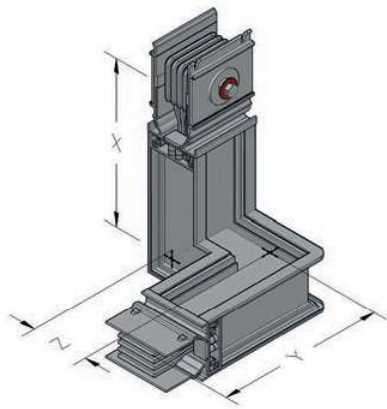
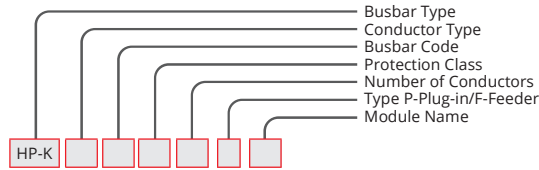
SAMPLE ORDER
3000 A Aluminum,
Offset IP 55 4 Conductors
HP-KA305T2FDOD

DOUBLE HORIZONTAL ELBOW (OFF-SET)							
Used in horizontal mounting of busbar lengths, on right and left protruding turns.							
(AL)				(CU)			
AMR.	X mm	Y mm	Z mm	AMR.	X mm	Y mm	Z mm
400A	250	250	202	550A	250	250	202
500A	250	250	202	650A	250	250	202
630A	250	250	202	800A	250	250	202
800A	257	257	217	1000A	257	257	217
1000A	270	270	242	1250A	265	265	232
1250A	285	285	272	1350A	270	270	242
1350A	292	292	287	1600A	277	277	257
1600A	310	310	322	2000A	292	292	287
2000A	330	330	362	2250A	310	310	322
2500A	355	355	412	2500A	330	330	362
2500A	363	363	429	2000A	308	308	318
3000A	393	393	489	2500A	323	323	348
3200A	413	413	529	3300A	363	363	428
4000A	453	453	609	3600A	378	378	458
5000A	503	503	706	4000A	393	393	488
6300A	578	578	857	4250A	413	413	528
				5000A	453	453	608
				6300A	516	516	735

DOUBLE VERTICAL ELBOW (OFF-SET)							
Used in vertical mounting of busbar lengths, more or less protruding turns.							
(AL)				(CU)			
AMR.	X mm	Y mm	Z mm	AMR.	X mm	Y mm	Z mm
400A	230	230	230	550A	230	230	230
500A	230	230	230	650A	230	230	230
630A	230	230	230	800A	230	230	230
800A	230	230	230	1000A	230	230	230
1000A	230	230	230	1250A	230	230	230
1250A	230	230	230	1350A	230	230	230
1350A	230	230	230	1600A	230	230	230
1600A	230	230	230	2000A	230	230	230
2000A	230	230	230	2250A	230	230	230
2500A	230	230	230	2500A	230	230	230
2500A	230	230	230	2000A	230	230	230
3000A	230	230	230	2500A	230	230	230
3200A	230	230	230	3300A	230	230	230
4000A	230	230	230	3600A	230	230	230
5000A	230	230	230	4000A	230	230	230
6300A	230	230	230	4250A	230	230	230
				5000A	230	230	230
				6300A	230	230	230

Please call our company for special size modules.

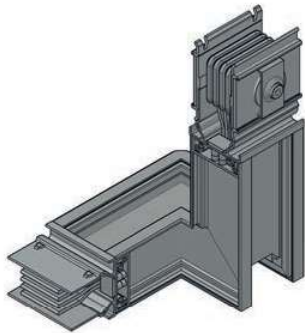
Elbow Modules



- N
- L1
- L2
- L3

Left Up
(Combined Off-set) LUK

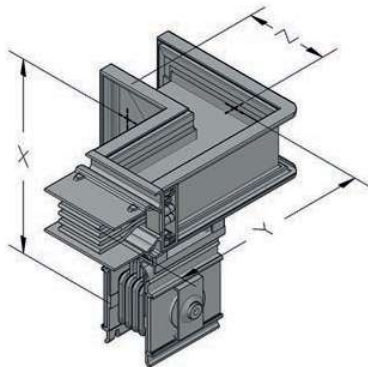
SAMPLE ORDER
1250 A Aluminum,
Combined Offset IP 55
4 Conductors
HP-KA125T2FLUK



- N
- L1
- L2
- L3

Right Up
(Combined Off-set) RUK

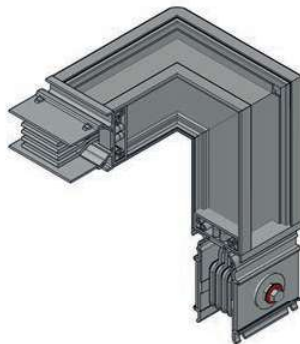
SAMPLE ORDER
1000 A Aluminum,
Combined Offset IP 55
4 Conductors
HP-KA105T2FRUK



- N
- L1
- L2
- L3

Left Down
(Combined Off-set) LDK

SAMPLE ORDER
1600 A Aluminum,
Combined Offset IP 55
4 Conductors
HP-KA165T2FLDK



- N
- L1
- L2
- L3

Right Down
(Combined Off-set) RDK

SAMPLE ORDER
1350 A Aluminum,
Combined Offset IP 55
4 Conductors
HP-KA145T2FRDK

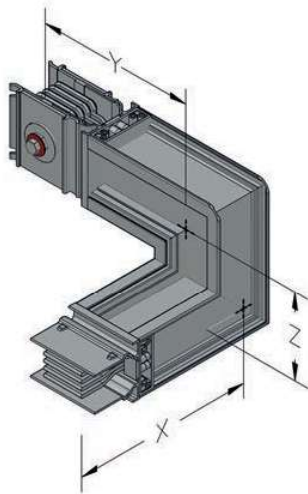
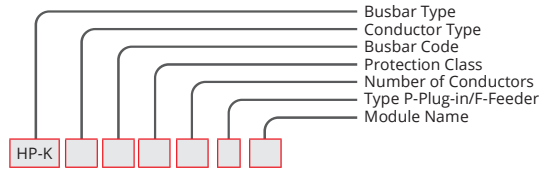
RIGHT/LEFT UP COMBINED (OFF-SET)							
Used in horizontal mounting of busbar lengths, on right and left protruding turns.							
(AL)				(CU)			
AMR.	X mm	Y mm	Z mm	AMR.	X mm	Y mm	Z mm
400A	230	250	250	550A	230	250	250
500A	230	250	250	650A	230	250	250
630A	230	250	250	800A	230	250	250
800A	230	257	257	1000A	230	257	257
1000A	230	270	270	1250A	230	265	265
1250A	230	285	285	1350A	230	270	270
1350A	230	292	292	1600A	230	277	277
1600A	230	310	310	2000A	230	292	292
2000A	230	330	330	2250A	230	310	310
2500A	230	355	355	2500A	230	330	330
2500A	230	363	363	2000A	230	308	308
3000A	230	393	393	2500A	230	323	323
3200A	230	413	413	3300A	230	363	363
4000A	230	453	453	3600A	230	378	378
5000A	230	503	503	4000A	230	393	393
6300A	230	578	578	4250A	230	413	413
				5000A	230	453	453
				6300A	230	516	516

RIGHT/LEFT DOWN COMBINED (OFF-SET)							
Used as right and left in the transformation of busbar lengths from horizontal to vertical.							
(AL)				(CU)			
AMR.	X mm	Y mm	Z mm	AMR.	X mm	Y mm	Z mm
400A	230	250	250	550A	230	250	250
500A	230	250	250	650A	230	250	250
630A	230	250	250	800A	230	250	250
800A	230	257	257	1000A	230	257	257
1000A	230	270	270	1250A	230	265	265
1250A	230	285	285	1350A	230	270	270
1350A	230	292	292	1600A	230	277	277
1600A	230	310	310	2000A	230	292	292
2000A	230	330	330	2250A	230	310	310
2500A	230	355	355	2500A	230	330	330
2500A	230	363	363	2000A	230	308	308
3000A	230	393	393	2500A	230	323	323
3200A	230	413	413	3300A	230	363	363
4000A	230	453	453	3600A	230	378	378
5000A	230	503	503	4000A	230	393	393
6300A	230	578	578	4250A	230	413	413
				5000A	230	453	453
				6300A	230	516	516

HP-K

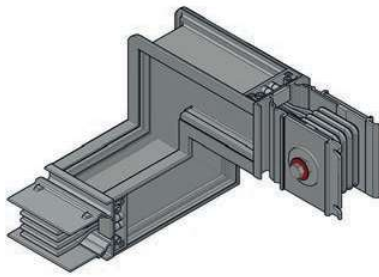
Please call our company for special size modules.

Elbow Modules



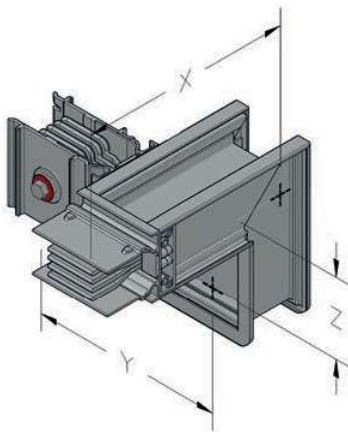
Up Left (Combined Off-set)	ULK
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SAMPLE ORDER
2000 A Copper
Combined Offset IP 55
4 Conductors
HP-KC215T2FULK



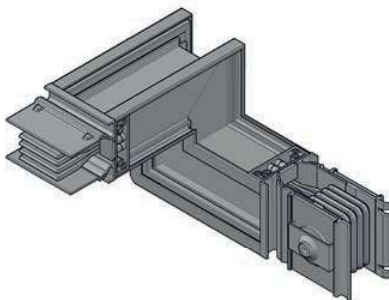
Up Right (Combined Off-set)	URK
-----------------------------------	-----

SAMPLE ORDER
1250 A Copper
Combined Offset IP 55
4 Conductors
HP-KC135T2FURK



Down Left (Combined Off-set)	DLK
------------------------------------	-----

SAMPLE ORDER
1600 A Copper
Combined Offset IP 55
4 Conductors
HP-KC175T2FDLK



Down Right (Combined Off-set)	DRK
-------------------------------------	-----

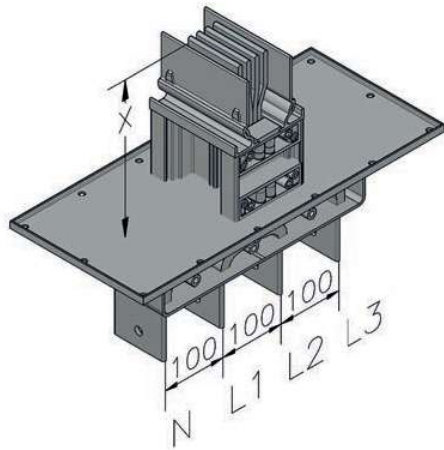
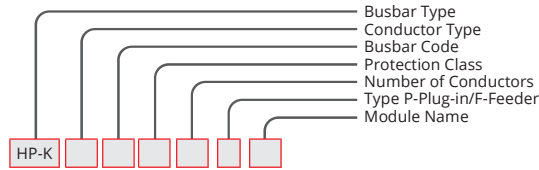
SAMPLE ORDER
1250 A Aluminum,
Combined Offset IP 55
4 Conductors
HP-KA125T2FDRK

UP RIGHT/LEFT COMBINED (OFF-SET)							
Used as right and left in the transformation of busbar lengths from horizontal to vertical.							
(AL)				(CU)			
AMR.	X mm	Y mm	Z mm	AMR.	X mm	Y mm	Z mm
400A	230	250	250	550A	230	250	250
500A	230	250	250	650A	230	250	250
630A	230	250	250	800A	230	250	250
800A	230	257	257	1000A	230	257	257
1000A	230	270	270	1250A	230	265	265
1250A	230	285	285	1350A	230	270	270
1350A	230	292	292	1600A	230	277	277
1600A	230	310	310	2000A	230	292	292
2000A	230	330	330	2250A	230	310	310
2500A	230	355	355	2500A	230	330	330
2500A	230	363	363	2000A	230	308	308
3000A	230	393	393	2500A	230	323	323
3200A	230	413	413	3300A	230	363	363
4000A	230	453	453	3600A	230	378	378
5000A	230	503	503	4000A	230	393	393
6300A	230	578	578	4250A	230	413	413
				5000A	230	453	453
				6300A	230	516	516

DOWN RIGHT/LEFT COMBINED (OFF-SET)							
Used as right and left in the transformation of busbar lengths from horizontal to vertical.							
(AL)				(CU)			
AMR.	X mm	Y mm	Z mm	AMR.	X mm	Y mm	Z mm
400A	230	250	250	550A	230	250	250
500A	230	250	250	650A	230	250	250
630A	230	250	250	800A	230	250	250
800A	230	257	257	1000A	230	257	257
1000A	230	270	270	1250A	230	265	265
1250A	230	285	285	1350A	230	270	270
1350A	230	292	292	1600A	230	277	277
1600A	230	310	310	2000A	230	292	292
2000A	230	330	330	2250A	230	310	310
2500A	230	355	355	2500A	230	330	330
2500A	230	363	363	2000A	230	308	308
3000A	230	393	393	2500A	230	323	323
3200A	230	413	413	3300A	230	363	363
4000A	230	453	453	3600A	230	378	378
5000A	230	503	503	4000A	230	393	393
6300A	230	578	578	4250A	230	413	413
				5000A	230	453	453
				6300A	230	516	516

Please call our company for special size modules.

Panel Modules



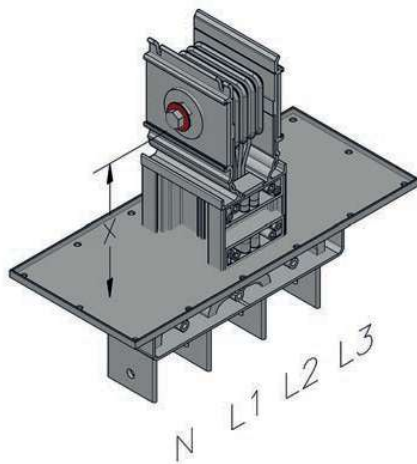
Vertical Panel Module Panel Input	PME
-----------------------------------	-----

SAMPLE ORDER

1000 A Aluminum,
Panel Module IP 55
4 Conductors

HP-KA105T2FPM

VERTICAL PANEL MODULE			
Used to connect flat lengths to the panel.			
(AL)		(CU)	
AMR.	X mm	AMR.	X mm
400A	220	550A	220
500A	220	650A	220
630A	220	800A	220
800A	220	1000A	220
1000A	220	1250A	220
1250A	220	1350A	220
1350A	220	1600A	220
1600A	220	2000A	220
2000A	220	2250A	220
2500A	220	2500A	220
2500A	220	2000A	220
3000A	220	2500A	220
3200A	220	3300A	220
4000A	220	3600A	220
5000A	220	4000A	220
6300A	220	4250A	220
		5000A	220
		6300A	220



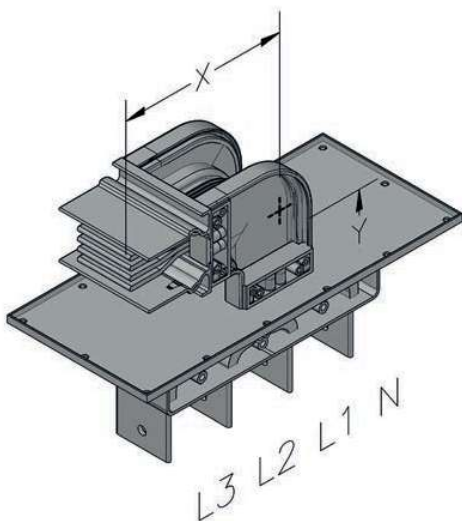
Vertical Panel Module Panel Output	PMD
------------------------------------	-----

SAMPLE ORDER

1250 A Aluminum,
Panel Module IP 55
4 Conductors

HP-KA125T2FPM

UP PANEL MODULE					
Used to connect flat lengths to the panel.					
(AL)			(CU)		
AMR.	X mm	Y mm	AMR.	X mm	Y mm
400A	230	230	550A	230	230
500A	230	230	650A	230	230
630A	230	230	800A	230	230
800A	230	230	1000A	230	230
1000A	230	230	1250A	230	230
1250A	230	230	1350A	230	230
1350A	230	230	1600A	230	230
1600A	230	230	2000A	230	230
2000A	230	230	2250A	230	230
2500A	230	230	2500A	230	230
2500A	230	230	2000A	230	230
3000A	230	230	2500A	230	230
3200A	230	230	3300A	230	230
4000A	230	230	3600A	230	230
5000A	230	230	4000A	230	230
6300A	230	230	4250A	230	230
			5000A	230	230
			6300A	230	230



Vertical Panel Module Up Panel Input	PM1
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SAMPLE ORDER

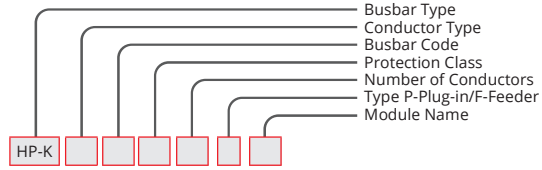
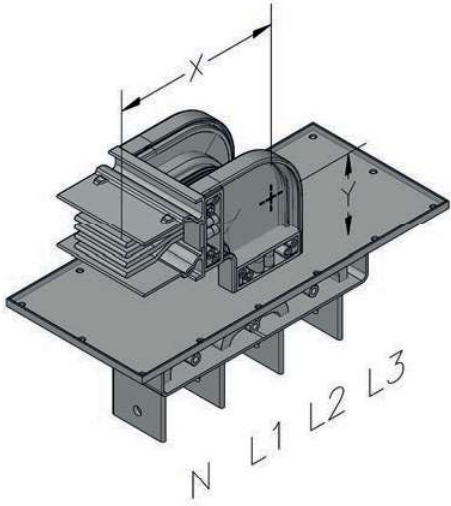
800 A Copper
Panel Module IP 55
4 Conductors

HP-KC075T2FPM1

HP-K

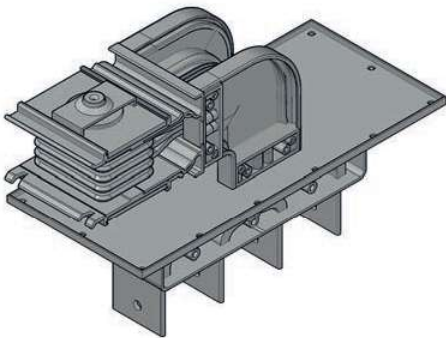
Please call our company for special size modules.

Panel Modules



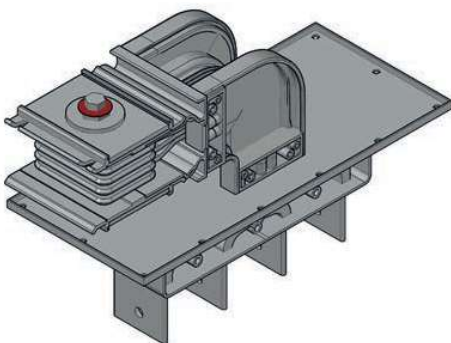
Vertical Panel Module Down Panel	PM2
--	-----

SAMPLE ORDER
 3200 A Aluminum,
 Panel Module IP 55
 4 Conductors
HP-KA325T2FPM2



Vertical Panel Module Up Panel	PM3
--------------------------------------	-----

SAMPLE ORDER
 4000 A Aluminum,
 Panel Module IP 55
 4 Conductors
HP-KA405T2FPM3



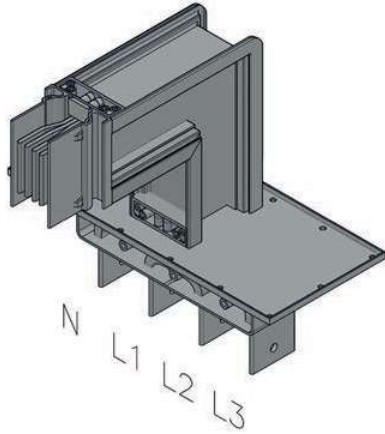
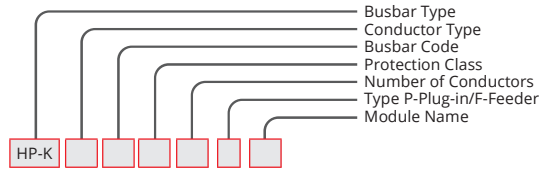
Vertical Panel Module Down Panel	PM4
--	-----

SAMPLE ORDER
 1000 A Aluminum,
 Panel Module IP 55
 4 Conductors
HP-KA105T2FPM4

DOWN PANEL MODULE					
Used to connect flat lengths to the panel.					
(AL)			(CU)		
AMR.	X mm	Y mm	AMR.	X mm	Y mm
400A	230	230	550A	230	230
500A	230	230	650A	230	230
630A	230	230	800A	230	230
800A	230	230	1000A	230	230
1000A	230	230	1250A	230	230
1250A	230	230	1350A	230	230
1350A	230	230	1600A	230	230
1600A	230	230	2000A	230	230
2000A	230	230	2250A	230	230
2500A	230	230	2500A	230	230
2500A	230	230	2000A	230	230
3000A	230	230	2500A	230	230
3200A	230	230	3300A	230	230
4000A	230	230	3600A	230	230
5000A	230	230	4000A	230	230
6300A	230	230	4250A	230	230
			5000A	230	230
			6300A	230	230

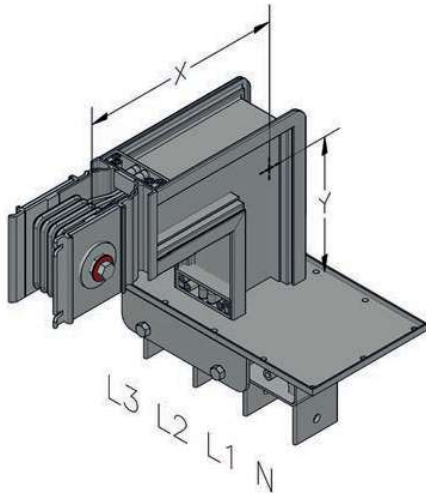
Please call our company for special size modules.

Panel Modules



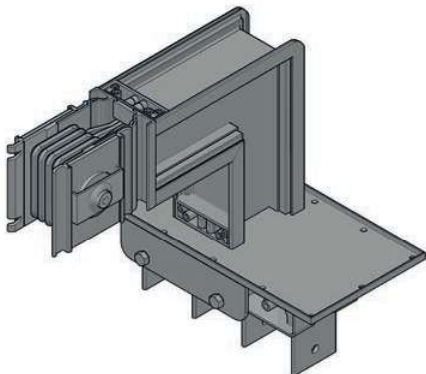
Horizontal Panel Module Right Panel	PM5
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SAMPLE ORDER
 2500 A Copper
 Panel Module IP 55
 4 Conductors
HP-KA275T2FPM5



Horizontal Panel Module Left Panel	PM6
------------------------------------	-----

SAMPLE ORDER
 1600 A Copper
 Panel Module IP 55
 4 Conductors
HP-KC175T2FPM6



Horizontal Panel Module Right Panel	PM7
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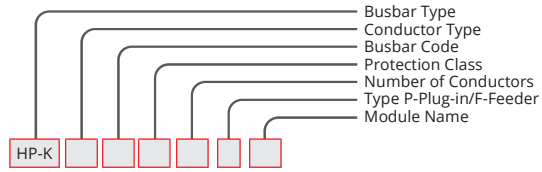
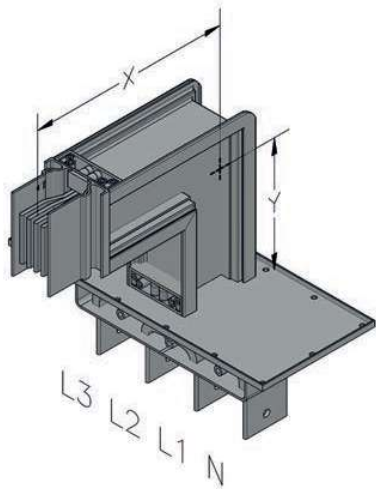
SAMPLE ORDER
 800 A Copper
 Panel Module IP 55
 4 Conductors
HP-KC075T2FPM7

HORIZONTAL PANEL MODULE (RIGHT/LEFT)					
Used to connect flat lengths to the Panel.					
	(AL)		(CU)		
AMR.	X mm	Y mm	AMR.	X mm	Y mm
400A	250	250	550A	250	250
500A	250	250	650A	250	250
630A	250	250	800A	250	250
800A	257	257	1000A	257	257
1000A	270	270	1250A	265	265
1250A	285	285	1350A	270	270
1350A	292	292	1600A	277	277
1600A	310	310	2000A	292	292
2000A	330	330	2250A	310	310
2500A	355	355	2500A	330	330
2500A	363	363	2000A	308	308
3000A	393	393	2500A	323	323
3200A	413	413	3300A	363	363
4000A	453	453	3600A	378	378
5000A	503	503	4000A	393	393
6300A	578	578	4250A	413	413
			5000A	453	453
			6300A	516	516

HP-K

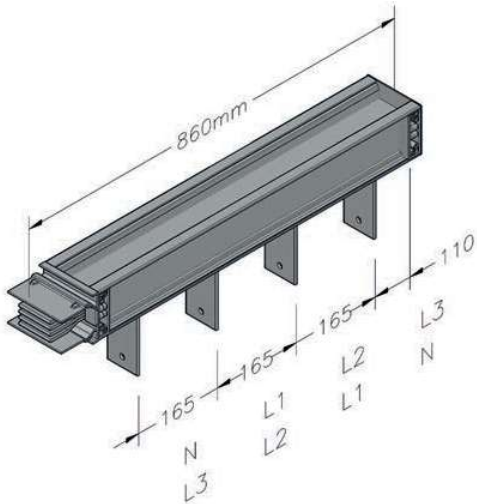
Please call our company for special size modules.

Panel Modules



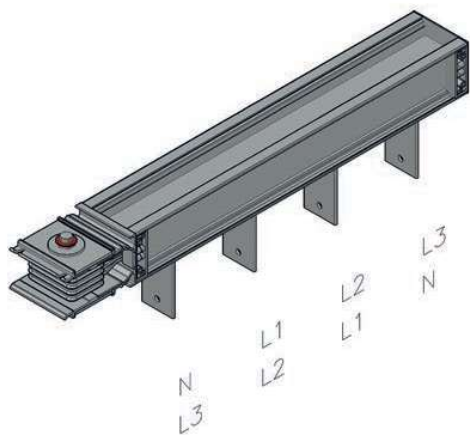
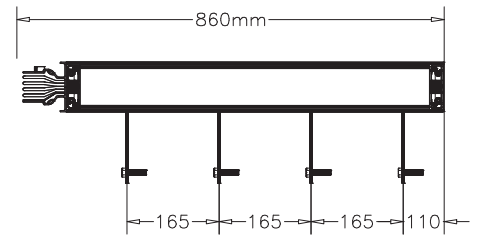
Horizontal Panel Module Left Panel	PM8
------------------------------------	-----

SAMPLE ORDER
 2000 A Aluminum
 Panel Module IP 55
 4 Conductors
HP-KA205T2FPM8



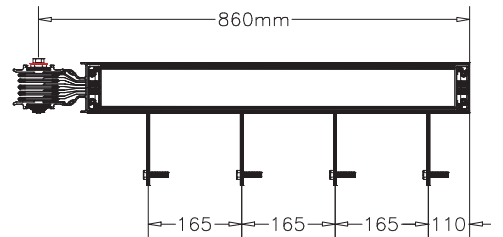
Horizontal Panel Module	YP1
-------------------------	-----

SAMPLE ORDER
 3300 A Copper
 Panel Module IP 55
 4 Conductors
HP-KC335T2FYP1



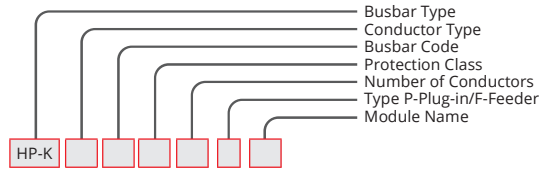
Horizontal Panel Module	YP2
-------------------------	-----

SAMPLE ORDER
 4000 A Copper
 Panel Module IP 55
 4 Conductors
HP-KC415T2FYP2

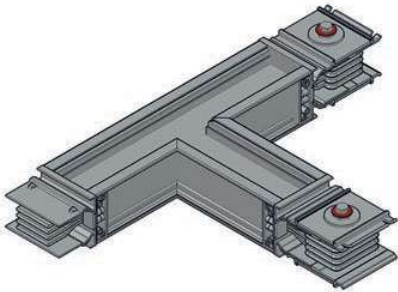


Please call our company for special size modules.

TEE Units



- N
- L1
- L2
- L3



Right (T) Module	RT
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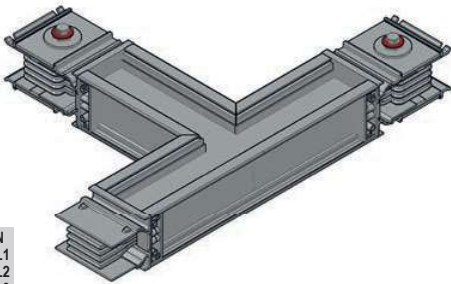
SAMPLE ORDER
 1350 A Copper
 Te Module IP 55
 4 Conductors
HP-KC155T2FRT

HORIZONTAL (TE) RIGHT/LEFT

Used to take the horizontal right and left line (TE) of the busbar lengths.

(AL)				(CU)			
AMR.	X mm	Y mm	Z mm	AMR.	X mm	Y mm	Z mm
400A	250	250	250	550A	250	250	250
500A	250	250	250	650A	250	250	250
630A	250	250	250	800A	250	250	250
800A	257	257	257	1000A	257	257	257
1000A	270	270	270	1250A	265	265	265
1250A	285	285	285	1350A	270	270	270
1350A	292	292	292	1600A	277	277	277
1600A	310	310	310	2000A	292	292	292
2000A	330	330	330	2250A	310	310	310
2500A	355	355	355	2500A	330	330	330
2500A	363	363	363	2000A	308	308	308
3000A	393	393	393	2500A	323	323	323
3200A	413	413	413	3300A	363	363	363
4000A	453	453	453	3600A	378	378	378
5000A	503	503	503	4000A	393	393	393
6300A	578	578	578	4250A	413	413	413
				5000A	453	453	453
				6300A	516	516	516

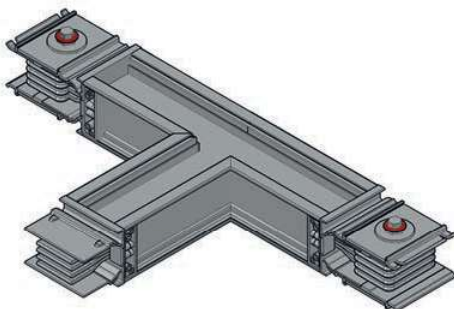
- N
- L1
- L2
- L3



Left (T) Module	LT
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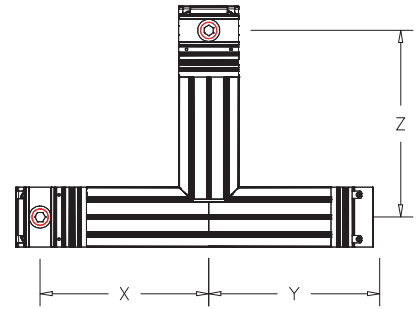
SAMPLE ORDER
 1000 A Aluminum
 Te Module IP 55
 4 Conductors
HP-KA105T2FLT

- N
- L1
- L2
- L3



Center (T) Module	OT
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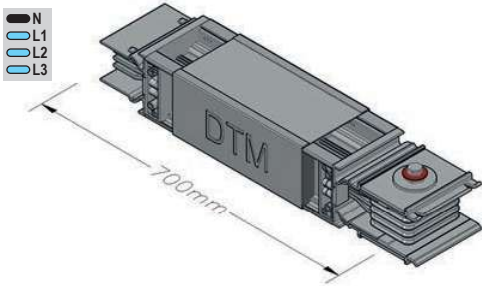
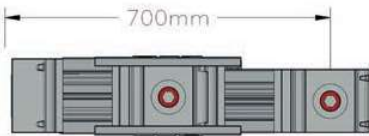
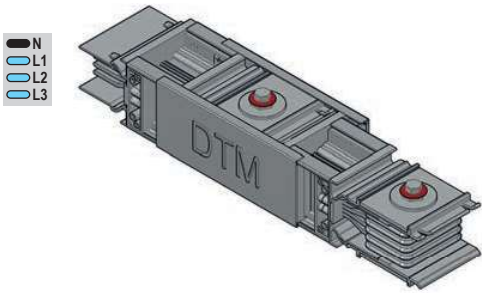
SAMPLE ORDER
 1250 A Aluminum
 Te Module IP 55
 4 Conductors
HP-KA125T2FOT



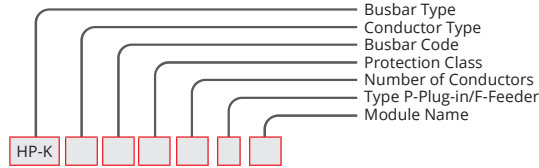
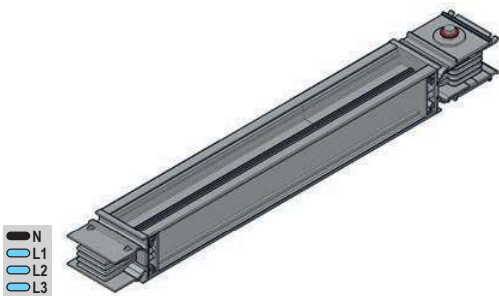
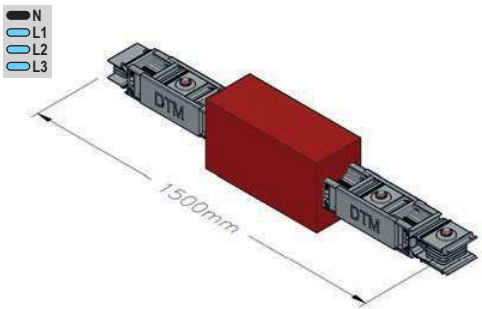
HP-K

Please call our company for special size modules.

Fitting Units



Horizontal Expansion Info:
Used every 40 meters in long horizontal lines.



Reduction Module 700 mm	RD
----------------------------	----

SAMPLE ORDER
800 A Aluminum,
Reducer IP 55
4 Conductors
HP-KA085T2FRD

Expansion Module 700 mm	G
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SAMPLE ORDER
800 A Aluminum,
Expansion IP 55 4 Conductors
HP-KA085T2FG

Horizontal Expansion Module 1500 mm	YD
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SAMPLE ORDER
1600 A Aluminum,
Expansion IP 55 4 Conductors
HP-KA165T2FYD

Phase Transposition Module 1500 mm	CM
---------------------------------------	----

SAMPLE ORDER
1000 A Aluminum,
Cross IP 55 4 Conductors
HP-KA105T2FCM

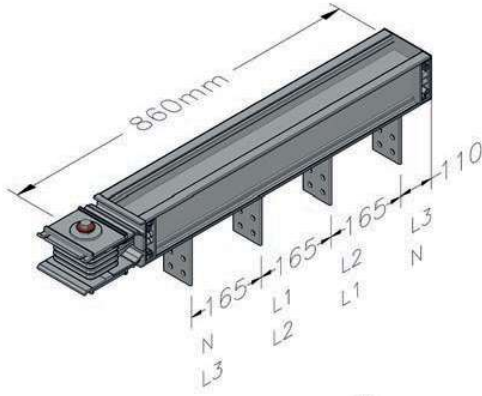
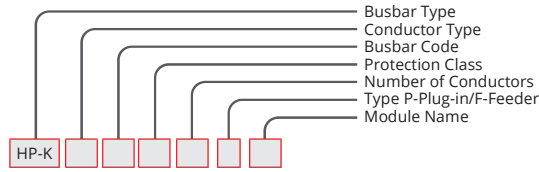
HP-K AL CONDUCTOR																
CRNT	Reduced Current Busbar Code															
	04	05	06	08	10	12	14	16	20	25	26	30	32	40		
500	✓	-	-	-	-	-	-	-	-	-	-	-	-	-		
630	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-		
800	-	✓	✓	-	-	-	-	-	-	-	-	-	-	-		
1000	-	-	✓	✓	-	-	-	-	-	-	-	-	-	-		
1250	-	-	-	✓	✓	-	-	-	-	-	-	-	-	-		
1350	-	-	-	-	✓	✓	-	-	-	-	-	-	-	-		
1600	-	-	-	-	-	✓	✓	-	-	-	-	-	-	-		
2000	-	-	-	-	-	-	✓	✓	-	-	-	-	-	-		
2500	-	-	-	-	-	-	-	✓	✓	-	-	-	-	-		
2500	-	-	-	-	-	-	-	-	✓	✓	-	-	-	-		
3000	-	-	-	-	-	-	-	-	-	✓	✓	✓	-	-		
3200	-	-	-	-	-	-	-	-	-	✓	✓	✓	-	-		
4000	-	-	-	-	-	-	-	-	-	-	✓	✓	✓	-		
5000	-	-	-	-	-	-	-	-	-	-	-	✓	✓	✓		
6300	-	-	-	-	-	-	-	-	-	-	-	-	✓	✓		

HP-K CU CONDUCTOR																	
CRNT	Reduced Current Busbar Code																
	05	06	07	09	13	15	17	21	23	24	22	27	33	36	41	42	51
650	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1000	-	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1250	-	-	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-	-
1350	-	-	-	✓	✓	-	-	-	-	-	-	-	-	-	-	-	-
1600	-	-	-	-	✓	✓	-	-	-	-	-	-	-	-	-	-	-
2000	-	-	-	-	-	✓	✓	-	-	-	-	-	-	-	-	-	-
2000	-	-	-	-	-	-	✓	✓	-	-	-	-	-	-	-	-	-
2250	-	-	-	-	-	-	-	✓	✓	-	-	-	-	-	-	-	-
2500	-	-	-	-	-	-	-	-	✓	✓	-	-	-	-	-	-	-
2500	-	-	-	-	-	-	-	-	-	✓	✓	-	-	-	-	-	-
3300	-	-	-	-	-	-	-	-	-	-	✓	✓	-	-	-	-	-
3600	-	-	-	-	-	-	-	-	-	-	-	✓	✓	-	-	-	-
4000	-	-	-	-	-	-	-	-	-	-	-	-	-	✓	✓	-	-
4250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	✓	✓	-
5000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	✓	✓
6300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	✓



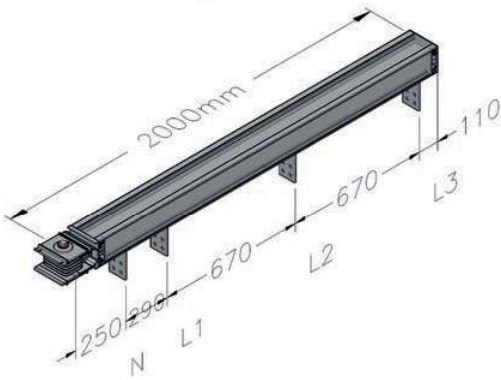
Please call our company for special size modules.

Transformer Modules



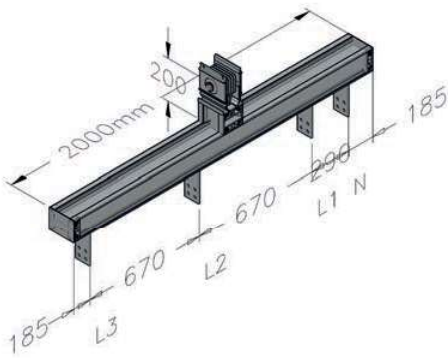
Horizontal Transformer Module **TMH**

SAMPLE ORDER
 4000 A Aluminum,
 Transformer Module IP 55
 4 Conductors
HP-KA405T2FTMH



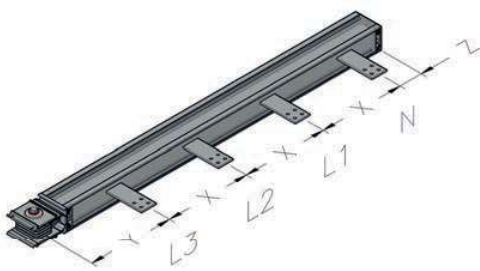
Horizontal Transformer Module **TMF**

SAMPLE ORDER
 2000 A Aluminum,
 Transformer Module IP 55
 4 Conductors
HP-KA205T2FTMF



Center Transformer Module **TMO**

SAMPLE ORDER
 1600 A Aluminum,
 Transformer Module IP 55
 4 Conductors
HP-KA165T2FTMO



Vertical Transformer Module **TMK**

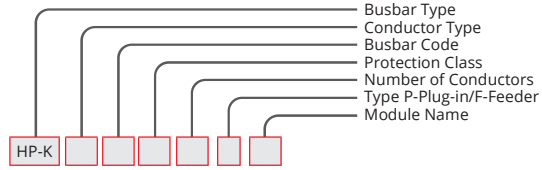
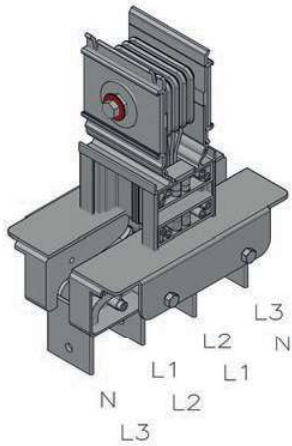
SAMPLE ORDER
 1000 A Aluminum,
 Transformer Module IP 55
 4 Conductors
HP-KA105T2FTMK

HP-K

VERTICAL TRANSFORMER MODULE							
(AL)				(CU)			
AMR.	Y mm	X mm	Z mm	AMR.	Y mm	X mm	Z mm
400A	264	86	124	550A	264	86	124
500A	266	91	126	650A	266	91	126
630A	271	101	131	800A	271	101	131
800A	279	116	139	1000A	279	116	139
1000A	291	141	151	1250A	286	131	146
1250A	306	171	166	1350A	291	141	151
1350A	314	186	174	1600A	299	156	159
1600A	331	221	191	2000A	314	186	174
2000A	351	261	211	2250A	331	221	191
2500A	376	311	236	2500A	351	261	211
2500A	306	171	166	2000A	279	116	139
3000A	321	201	181	2500A	286	131	146
3200A	331	221	191	3300A	306	171	166
4000A	351	261	211	3600A	314	186	174
5000A	376	311	236	4000A	321	201	181
				5000A	351	261	211

Please call our company for special size modules.

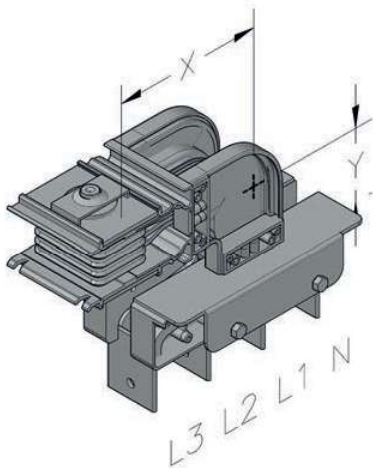
Transformer Modules



Vertical Transformer Module	TR1
-----------------------------	-----

SAMPLE ORDER
 1000 A Aluminum,
 Transformer Module IP 55
 4 Conductors
HP-KA105T2FTR1

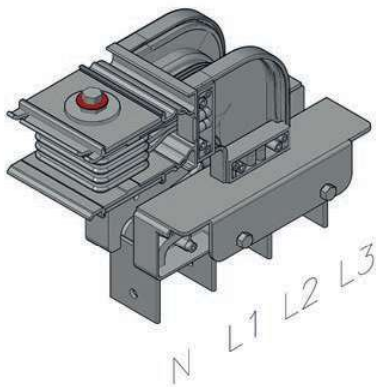
VERTICAL TRANSFORMER MODULE			
Used to connect flat lengths to the panel.			
(AL)		(CU)	
AMR.	X mm	AMR.	X mm
400A	220	550A	220
500A	220	650A	220
630A	220	800A	220
800A	220	1000A	220
1000A	220	1250A	220
1250A	220	1350A	220
1350A	220	1600A	220
1600A	220	2000A	220
2000A	220	2250A	220
2500A	220	2500A	220
2500A	220	2000A	220
3000A	220	2500A	220
3200A	220	3300A	220
4000A	220	3600A	220
5000A	220	4000A	220
6300A	220	4250A	220
		5000A	220
		6300A	220



Up Transformer Module	TRU
-----------------------	-----

SAMPLE ORDER
 2500 A Aluminum,
 Transformer Module IP 55
 4 Conductors
HP-KA265T2FTRU

UP/DOWN TRANSFORMER MODULE					
Used to connect flat lengths to the transformer.					
(AL)			(CU)		
AMR.	X mm	Y mm	AMR.	X mm	Y mm
400A	230	230	550A	230	230
500A	230	230	650A	230	230
630A	230	230	800A	230	230
800A	230	230	1000A	230	230
1000A	230	230	1250A	230	230
1250A	230	230	1350A	230	230
1350A	230	230	1600A	230	230
1600A	230	230	2000A	230	230
2000A	230	230	2250A	230	230
2500A	230	230	2500A	230	230
2500A	230	230	2000A	230	230
3000A	230	230	2500A	230	230
3200A	230	230	3300A	230	230
4000A	230	230	3600A	230	230
5000A	230	230	4000A	230	230
6300A	230	230	4250A	230	230
			5000A	230	230
			6300A	230	230

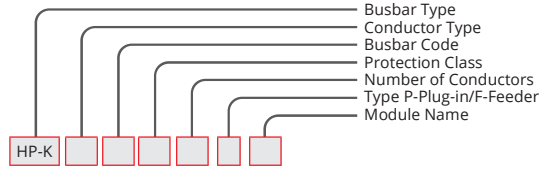
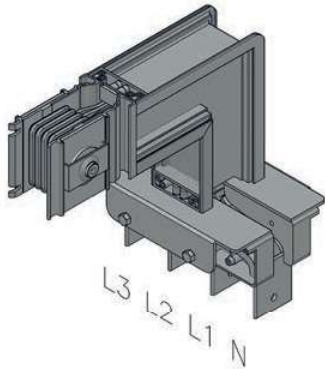


Down Transformer Module	TRD
-------------------------	-----

SAMPLE ORDER
 2000 A Aluminum,
 Transformer Module IP 55
 4 Conductors
HP-KA205T2FTRD

Please call our company for special size modules.

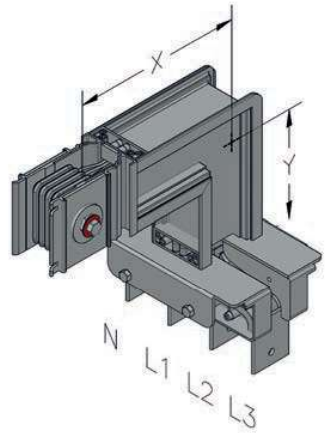
Transformer Modules



Right Transformer Module	TRR
--------------------------	-----

SAMPLE ORDER

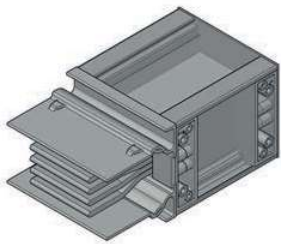
3300 A Copper
Transformer Module IP 55
4 Conductors
HP-KC335T2FTRR



Left Transformer Module	TRL
-------------------------	-----

SAMPLE ORDER

1350 A Aluminum,
Transformer Module IP 55
4 Conductors
HP-KA145T2FTRL

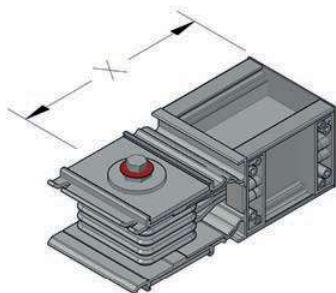


- N
- L1
- L2
- L3

Termination	S1
-------------	----

SAMPLE ORDER

800 A Aluminum,
Termination Module 55 4 Conductors
HP-KA085T2FS1



- N
- L1
- L2
- L3

Termination	S2
-------------	----

SAMPLE ORDER

1000 A Aluminum,
Termination Module IP 55
4 Conductors
HP-KA105T2FS2

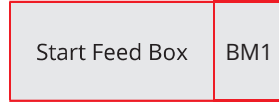
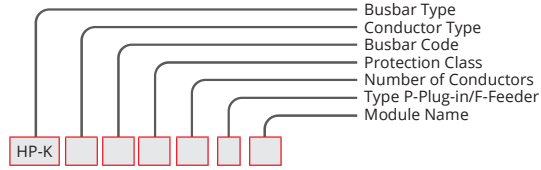
RIGHT/LEFT TRANSFORMER MODULE					
Used to connect flat lengths to the transformer.					
(AL)			(CU)		
AMR.	X mm	Y mm	AMR.	X mm	Y mm
400A	250	250	550A	250	250
500A	250	250	650A	250	250
630A	250	250	800A	250	250
800A	257	257	1000A	257	257
1000A	270	270	1250A	265	265
1250A	285	285	1350A	270	270
1350A	292	292	1600A	277	277
1600A	310	310	2000A	292	292
2000A	330	330	2250A	310	310
2500A	355	355	2500A	330	330
2500A	363	363	2000A	308	308
3000A	393	393	2500A	323	323
3200A	413	413	3300A	363	363
4000A	453	453	3600A	378	378
5000A	503	503	4000A	393	393
6300A	578	578	4250A	413	413
			5000A	453	453
			6300A	516	516

TERMINATION			
Used to close the line endings.			
(AL)		(CU)	
AMR.	X mm	AMR.	X mm
400A	215	550A	215
500A	215	650A	215
630A	215	800A	215
800A	215	1000A	215
1000A	215	1250A	215
1250A	215	1350A	215
1350A	215	1600A	215
1600A	215	2000A	215
2000A	215	2250A	215
2500A	215	2500A	215
2500A	215	2000A	215
3000A	215	2500A	215
3200A	215	3300A	215
4000A	215	3600A	215
5000A	215	4000A	215
6300A	215	4250A	215
		5000A	215
		6300A	215

HP-K

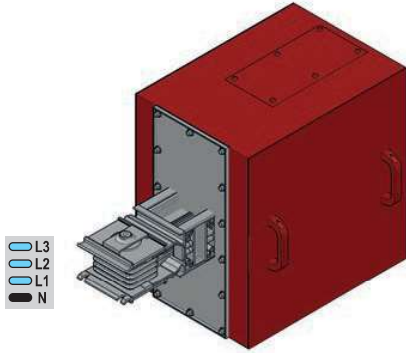
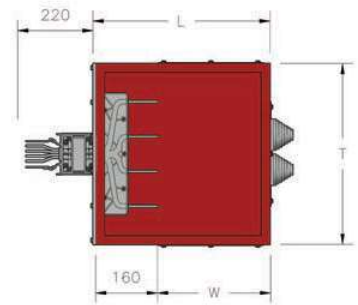
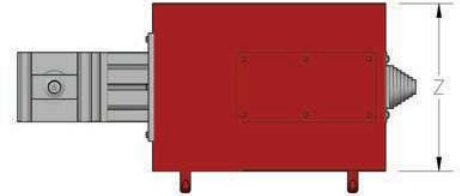
Please call our company for special size modules.

Feed Boxes



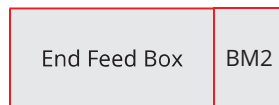
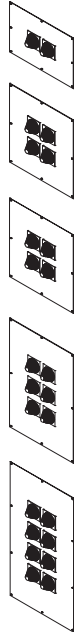
SAMPLE ORDER

1350 A Aluminum,
Feeder IP 55 4 Conductors
HP-KA145T2R1BM1



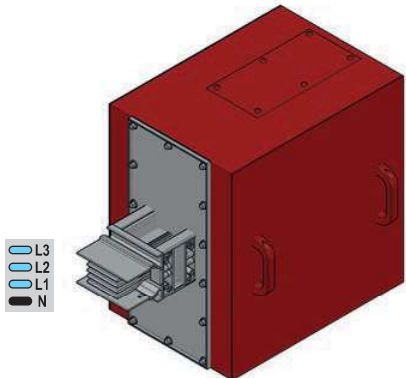
FITTING PLATES			
(AL)		(CU)	
AMR.	Type	AMR.	Type
400A	R1	550A	R1
500A	R1	650A	R1
630A	R1	800A	R1
800A	R1	1000A	R1
1000A	R1	1250A	R1
1250A	R1	1350A	R1
1350A	R2	1600A	R2
1600A	R2	2000A	R2
2000A	R2	2250A	R2
2500A	R3	2500A	R2
2500A	R3	2000A	R2
3000A	R3	2500A	R3
3200A	R3	3300A	R3
4000A	R3	3600A	R3
5000A	R3	4000A	R3
6300A	R4	4250A	R3
		5000A	R3
		6300A	R4

Type



SAMPLE ORDER

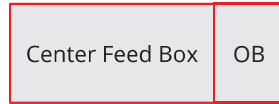
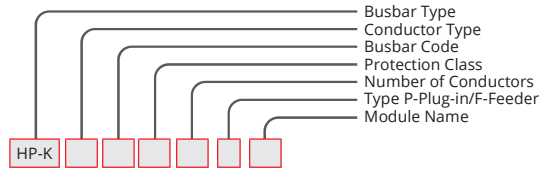
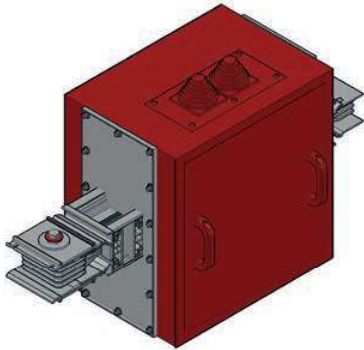
800 A Aluminum,
Feeder IP 55 4 Conductors
HP-KA085T2R1BM2



UP/DOWN FEED MODULE									
(AL)					(CU)				
AMR.	L mm	T mm	Z mm	W mm	AMR.	L mm	T mm	Z mm	W mm
400A	520	540	360	360	550A	520	540	360	360
500A	520	540	360	360	650A	520	540	360	360
630A	520	540	360	360	800A	520	540	360	360
800A	520	540	360	360	1000A	520	540	360	360
1000A	520	540	360	360	1250A	520	540	360	360
1250A	520	540	360	360	1350A	520	540	360	360
1350A	520	540	560	360	1600A	520	540	360	360
1600A	520	540	560	360	2000A	520	540	560	360
2000A	520	540	560	360	2250A	520	540	560	360
2500A	520	540	560	360	2500A	520	540	560	360
2500A	520	540	560	360	2000A	520	540	560	360
3000A	520	540	560	360	2500A	520	540	560	360
3200A	720	540	780	560	3300A	520	540	560	360
4000A	720	540	780	560	3600A	720	540	560	360
5000A	720	540	780	560	4000A	720	540	780	560
6300A	720	540	1110	560	4250A	720	540	780	560
					5000A	720	540	780	560
					6300A	720	540	960	560

Please call our company for special sizes.

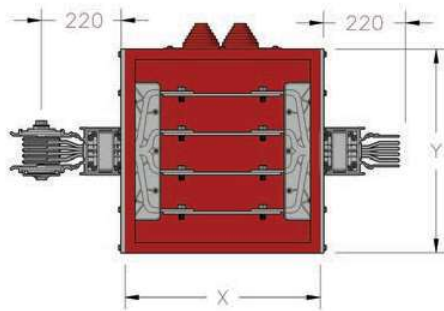
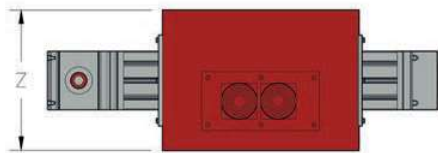
Center Feed Units



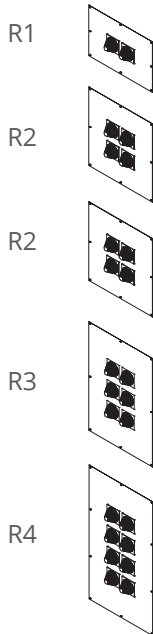
SAMPLE ORDER

800 A Aluminum,
Feeder IP 55 4 Conductors

HP-KA085T2R1OB



Type



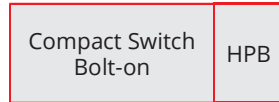
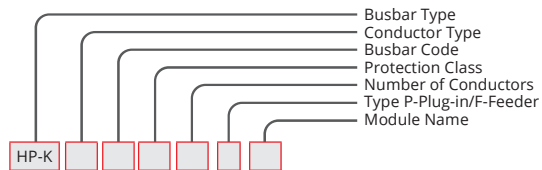
FITTING PLATES			
(AL)		(CU)	
AMR.	Type	AMR.	Type
400A	R1	550A	R1
500A	R1	650A	R1
630A	R1	800A	R1
800A	R1	1000A	R1
1000A	R1	1250A	R1
1250A	R1	1350A	R1
1350A	R2	1600A	R1
1600A	R2	2000A	R2
2000A	R2	2250A	R2
2500A	R3	2500A	R2
2500A	R3	2000A	R2
3000A	R3	2500A	R2
3200A	R3	3300A	R3
4000A	R3	3600A	R3
5000A	R3	4000A	R3
6300A	R4	4250A	R3
		5000A	R3
		6300A	R4

CENTER FEEDER							
(AL)				(CU)			
AMR.	X mm	Y mm	Z mm	AMR.	X mm	Y mm	Z mm
400A	520	540	360	550A	520	540	360
500A	520	540	360	650A	520	540	360
630A	520	540	360	800A	520	540	360
800A	520	540	360	1000A	520	540	360
1000A	520	540	360	1250A	520	540	360
1250A	520	540	360	1350A	520	540	360
1350A	520	540	560	1600A	520	540	360
1600A	520	540	560	2000A	520	540	560
2000A	520	540	560	2250A	520	540	560
2500A	520	540	560	2500A	520	540	560
2500A	520	540	560	2000A	520	540	560
3000A	520	540	560	2500A	520	540	560
3200A	720	540	780	3300A	520	540	560
4000A	720	540	780	3600A	720	540	560
5000A	720	540	780	4000A	720	540	780
6300A	720	540	1110	4250A	720	540	780
				5000A	720	540	780
				6300A	720	540	960

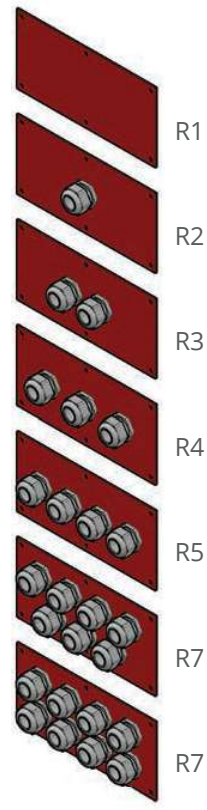
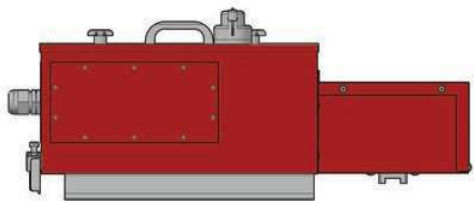
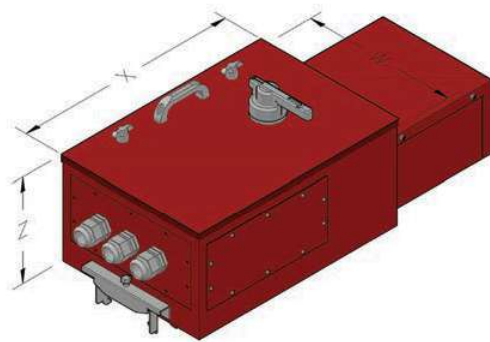
HP-K

Please call our company for special size modules.

Tap-Off Box Compact Switch Bolt-On Type



SAMPLE ORDER
250 A Output Box Empty
IP 55 4 Conductors
HPB255T2R3B

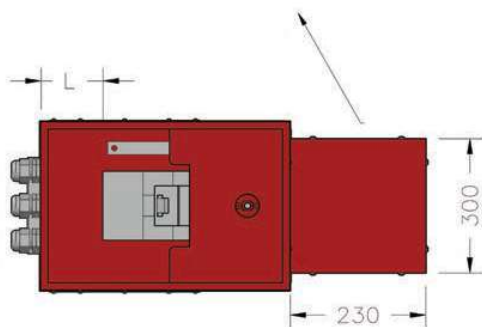


SWITCH TYPE CODE	
SWITCH	EMPTY
S	B

FITTING PLATES	
Type	CODE
-	R1
RG36X1	R2
RG29X2	R3
RG21X4	R4
RG29X8	R5
RG48X3	R6
RG36X4	R7

Info:

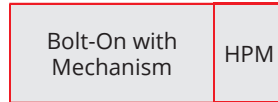
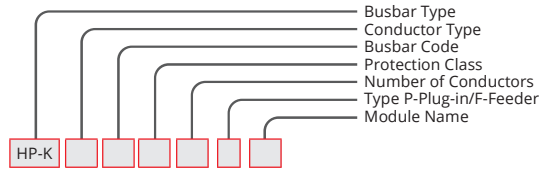
In addition to the DTM Bolt-On Tap off box on the additional block, the box assembly should be done on site according to the technical diagram.



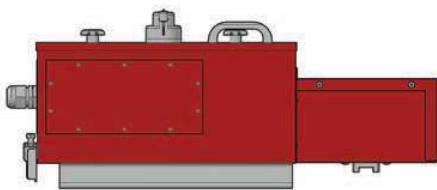
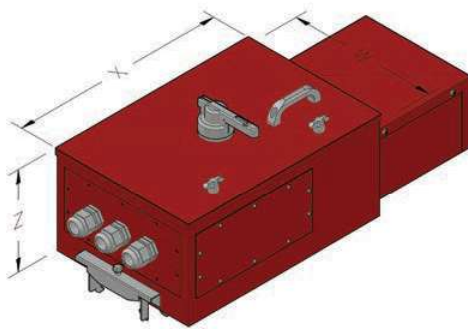
Amp.	Box Code	X mm	W mm	Z mm	L mm
160	HPB16	560	385	260	150
250	HPB25	560	385	260	150
400	HPB40	560	385	260	200
630	HPB63	560	385	260	200
800	HPB80	710	425	260	250
1000	HPB10	710	425	260	250

Please contact our company for non-standard boxes.

Tap-Off Box
Bolt-On with DTM
Mechanism



SAMPLE ORDER
400 A Tap-Off Box Empty
IP 55 4 Conductors
HPM405T2R4B



Info:

In addition to the DTM Bolt-on Tap-Off box on the additional block, the box assembly must be done on site according to the technical diagram.

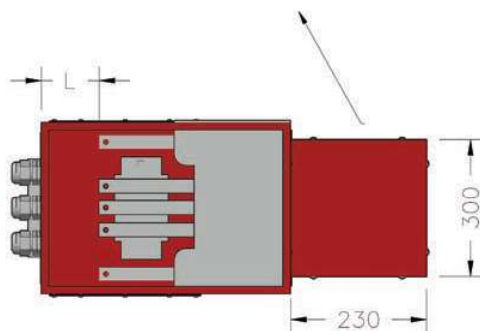


SWITCH TYPE CODE	
SWITCH	EMPTY
S	B

FITTING PLATES	
Type	CODE
-	R1
RG36X1	R2
RG29X2	R3
RG21X4	R4
RG29X8	R5
RG48X3	R6
RG36X4	R7

Amp.	Box Code	X mm	W mm	Z mm	L mm
160	HPMB16	560	385	260	150
250	HPMB25	560	385	260	150
400	HPMB40	560	385	260	200
630	HPMB63	560	385	260	200

HP-K



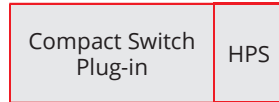
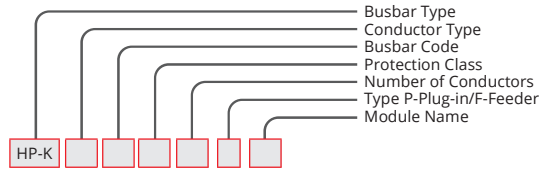
Info:

DTM Bolt-on tap off boxes cannot be mechanically attached to and removed from the busbar in the "ON" position. When the boxes are in the "OFF" position, the energy of the box is cut by a special mechanism, the same mechanism energizes the box in the "ON" position.

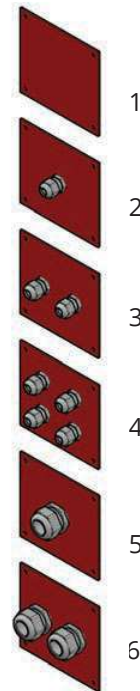
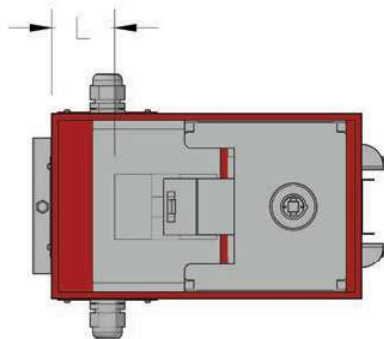
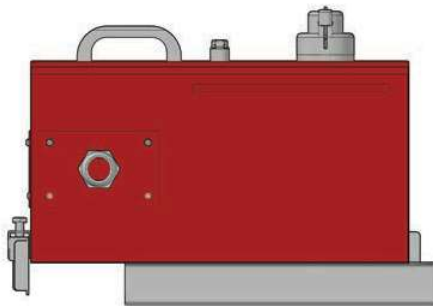
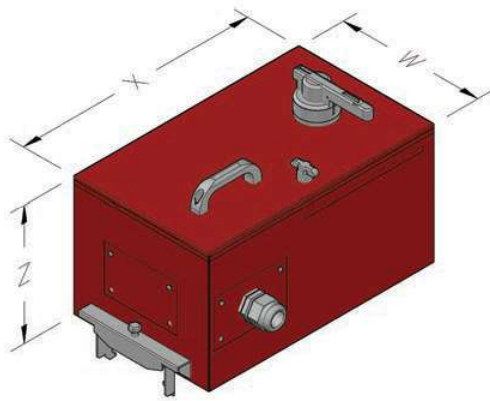
Boxes with standard mechanism are delivered empty. Before the boxes are attached to the busbar, a fused load breaker, fuse group or similar protection unit must be placed inside the boxes.

Please contact our company for non-standard boxes.

Tap-Off Box Compact Switch Plug-In



SAMPLE ORDER
630 A Tap-Off Box Switch
IP 55 4 Conductors
HPS635T2R5S



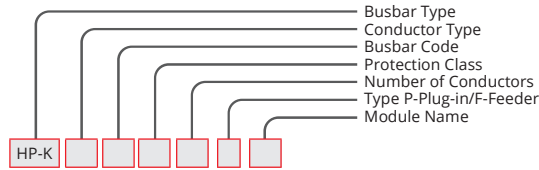
SWITCH TYPE CODE	
SWITCH	EMPTY
S	B

FITTING PLATES	
Type	CODE
-	R1
RG36X1	R2
RG29X2	R3
RG21X4	R4
RG29X1	R5
RG48X2	R6

Amp.	Box Code	X mm	W mm	Z mm	L mm
160	HPS16	530	300	220	155
250	HPS25	530	300	220	155
400	HPS40	710	300	220	260
630	HPS63	710	300	220	260

Please contact our company for non-standard boxes.

Tap-Off Box with DTM Mechanism Plug-In

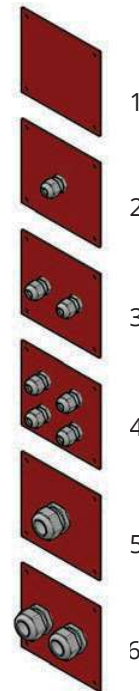
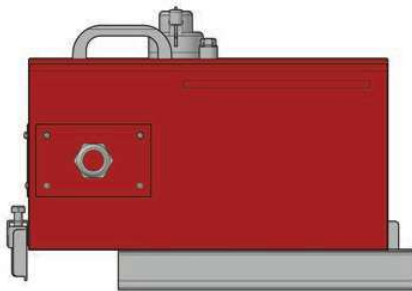
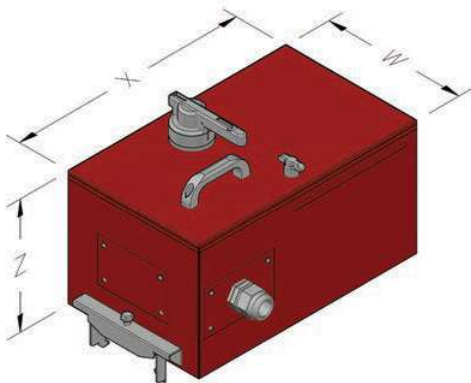


Plug-in with Mechanism	HPP
------------------------	-----

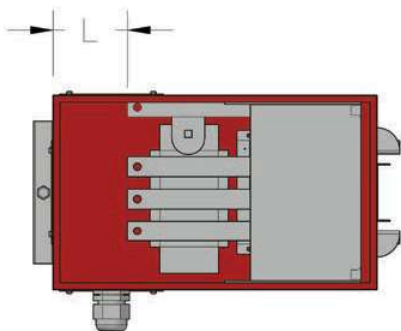
SAMPLE ORDER

160 A Tap off Box Empty
IP 55 4 Conductor
HPP165T2R2B

SWITCH TYPE CODE	
SWITCH	EMPTY
S	B



FITTING PLATES	
Type	CODE
-	R1
RG36X1	R2
RG29X2	R3
RG21X4	R4
RG29X1	R5
RG48X2	R6



Amp.	Box Code	X mm	W mm	Z mm	L mm
160	HPP16	530	300	220	155
250	HPP25	530	300	220	155
400	HPP40	710	300	220	260
500	HPP50	710	300	220	260

HP-K

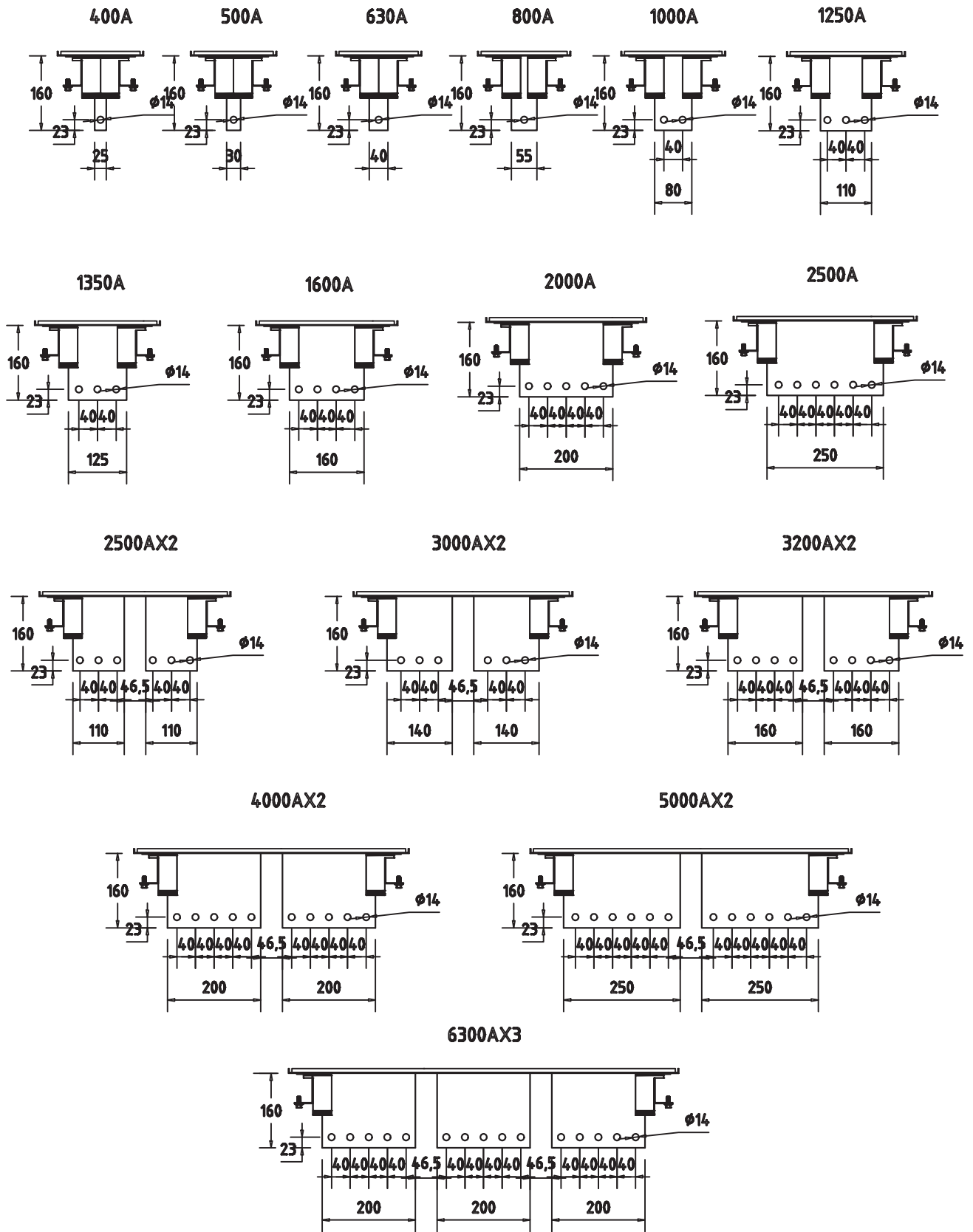
Info:

DTM Bolt-on tap off boxes cannot be mechanically attached to and removed from the busbar in the "ON" position. When the boxes are in the "OFF" position, the energy of the box is cut by a special mechanism, the same mechanism energizes the box in the "ON" position.

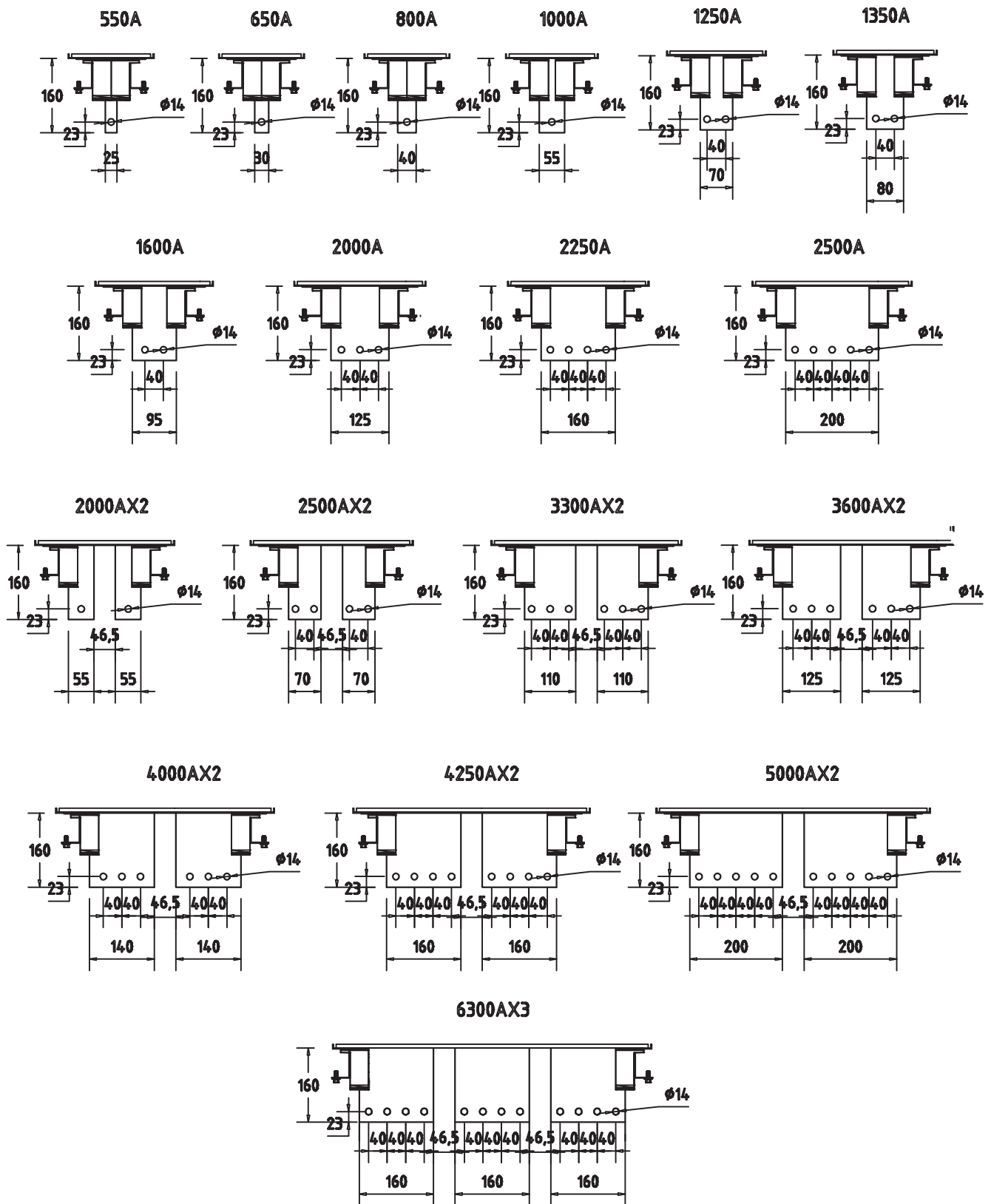
Boxes with standard mechanism are delivered empty. Before the boxes are attached to the busbar, a fused load breaker, fuse group or similar protection unit must be placed inside the boxes.

Please contact our company for non-standard boxes.

Panel Module Dimensions / Aluminium

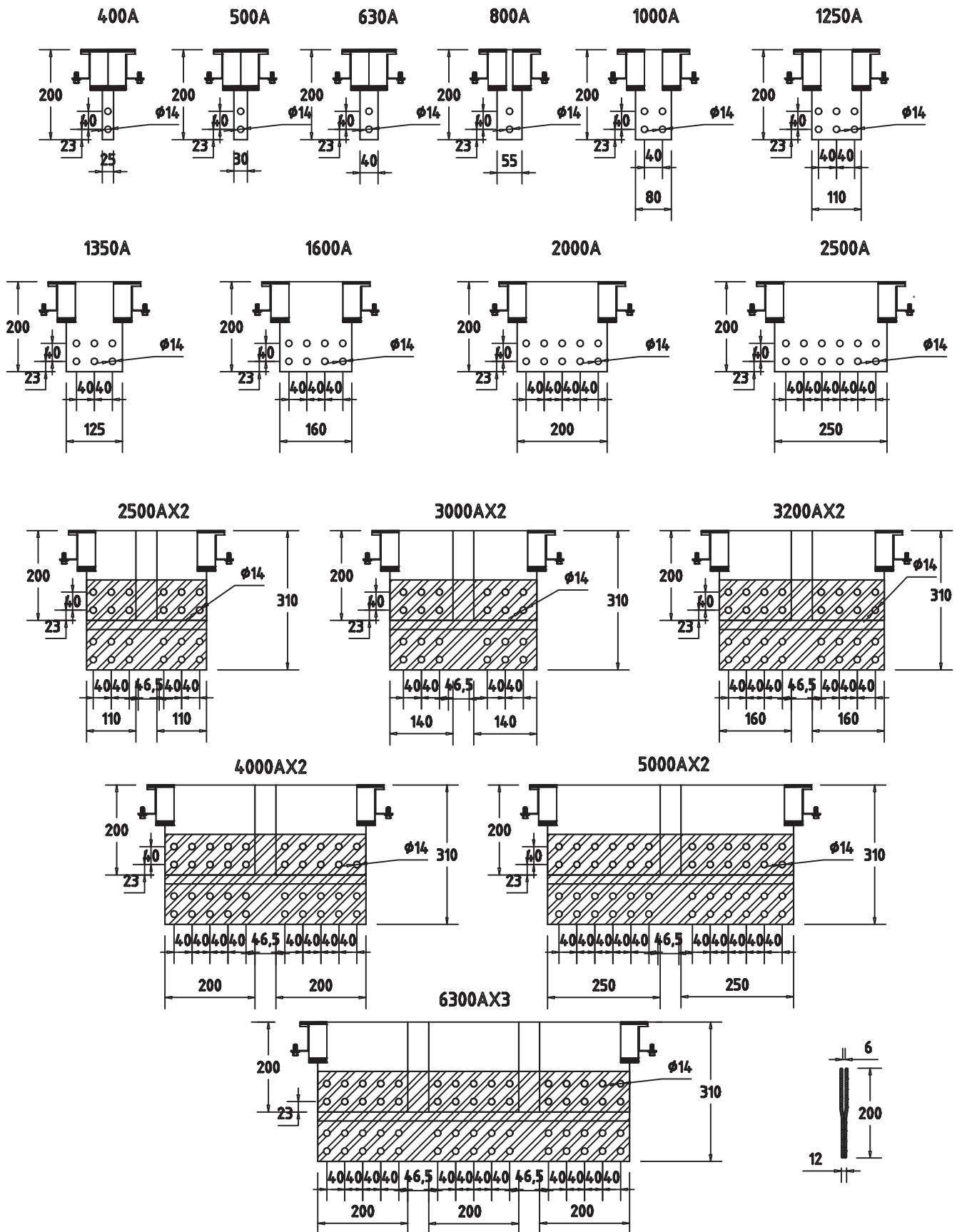


Panel Module Dimensions / Copper

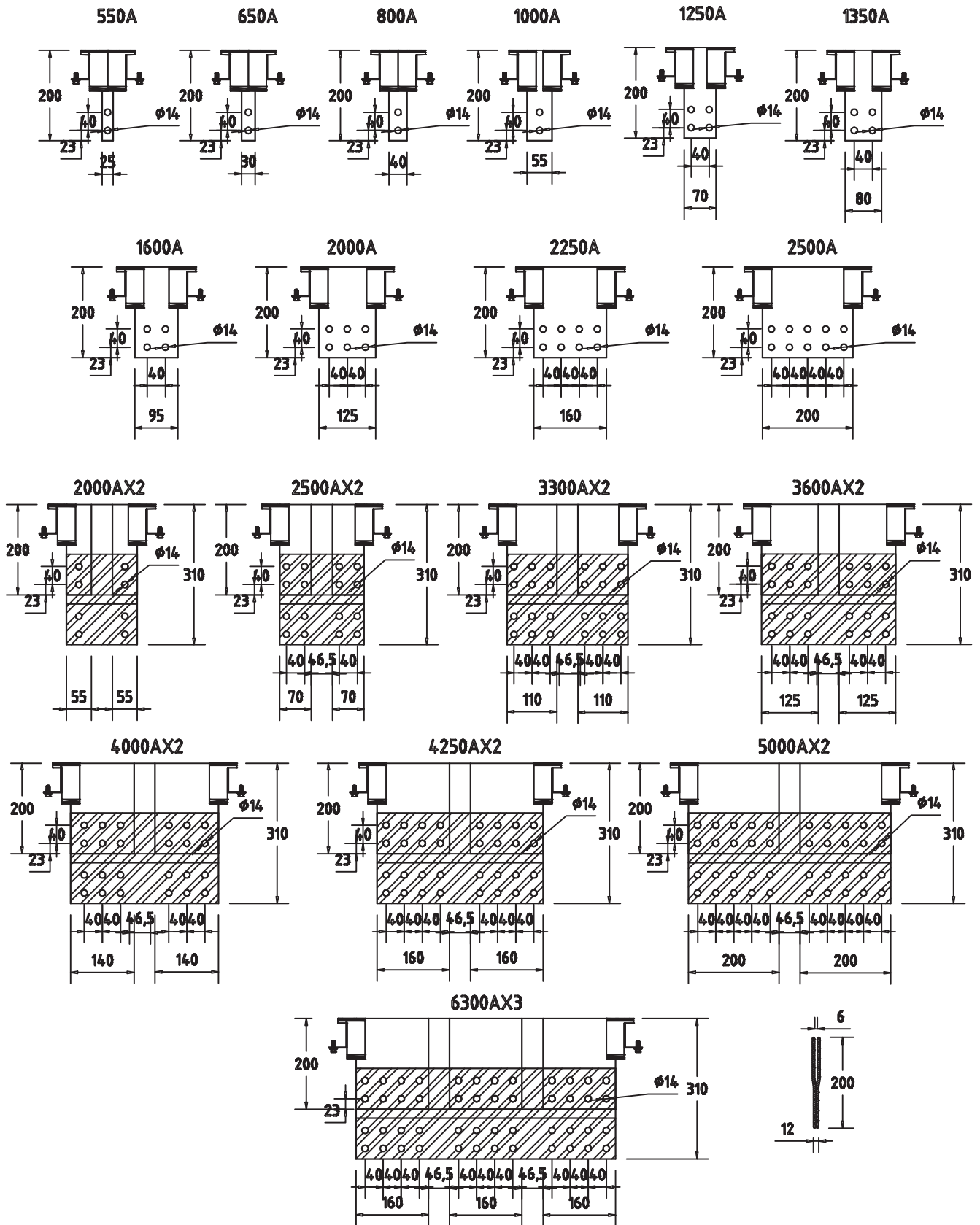


HP-K

Transformer Module Dimensions / Aluminium

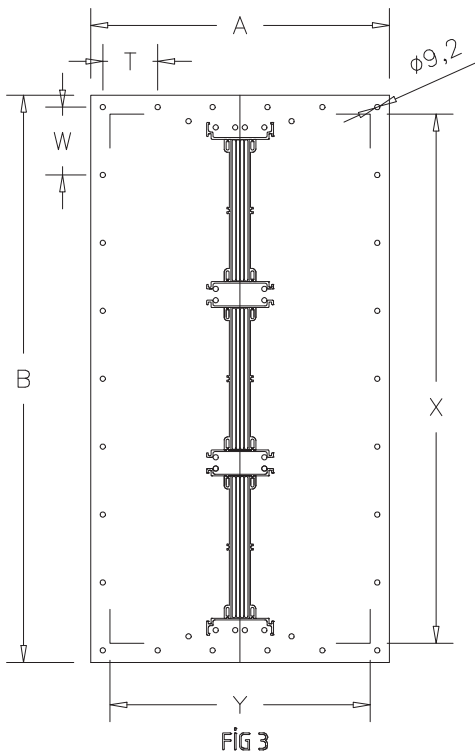
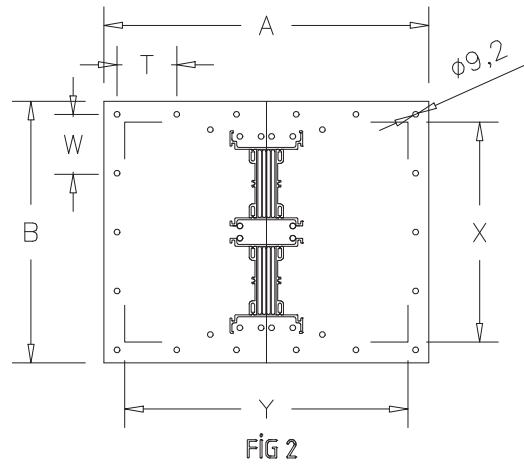
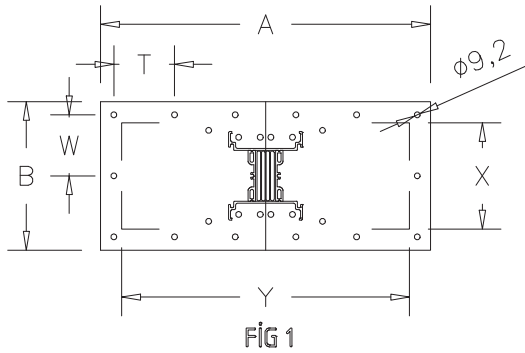


Transformer Module Dimensions / Copper



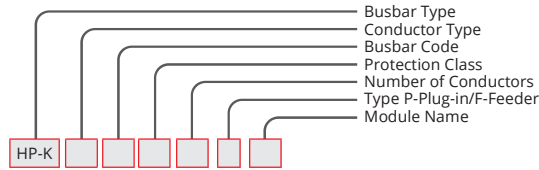
HP-K

Panel Flange Dimensions



CONNECTION TOP FLANGE DIMENSIONS (AL)									
AMR.	A (mm)	B (mm)	Y (mm)	X (mm)	T (mm)	R	W (mm)	Ø9 MM R	FIG
400A	520	198	460	130	97	6	77.5	3	1
500A	520	198	460	130	97	6	77.5	3	1
630A	520	198	460	130	97	6	77.5	3	1
800A	520	212	460	145	97	6	85	3	1
1000A	520	237	460	170	97	6	97.5	3	1
1250A	520	267	460	200	97	6	112.5	3	1
1350A	520	282	460	215	97	6	120	3	1
1600A	520	317	460	250	97	6	91.65	4	1
2000A	520	357	460	290	97	6	78.75	5	1
2500A	520	407	460	340	97	6	91.25	5	1
2500A	520	424	460	357	97	6	95.6	5	2
3000A	520	485	460	418	97	6	88.5	6	2
3200A	520	524	460	457	97	6	96.5	6	2
4000A	520	604	460	537	97	6	112.5	6	2
5000A	520	704	460	637	97	6	132.5	6	2
6300A	520	852	460	785	97	6	101.25	9	3
CONNECTION TOP FLANGE DIMENSIONS (CU)									
AMR.	A (mm)	B (mm)	Y (mm)	X (mm)	T (mm)	R	W (mm)	Ø9 MM R	FIG
550A	520	198	460	130	97	6	77.5	3	1
650A	520	198	460	130	97	6	77.5	3	1
800A	520	198	460	130	97	6	77.5	3	1
1000A	520	217	460	150	97	6	85	3	1
1250A	520	227	460	160	97	6	92.5	3	1
1350A	520	237	460	170	97	6	97.5	3	1
1600A	520	252	460	185	97	6	105	3	1
2000A	520	282	460	215	97	6	120	3	1
2250A	520	317	460	250	97	6	91.6	4	1
2500A	520	357	460	290	97	6	105	4	1
2000A	520	315	460	248	97	6	90.8	4	2
2500A	520	345	460	298	97	6	100.83	4	2
3300A	520	425	460	358	97	6	95.6	5	2
3600A	520	455	460	388	97	6	82.5	6	2
4000A	520	484	460	417	97	6	88.5	6	2
4250A	520	524	460	457	97	6	96.6	6	2
5000A	520	604	460	537	97	6	93.75	7	2
6300A	520	732	460	665	97	6	86.25	9	3

Flexible Connections



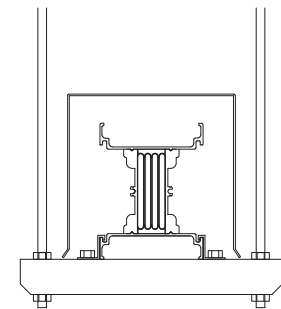
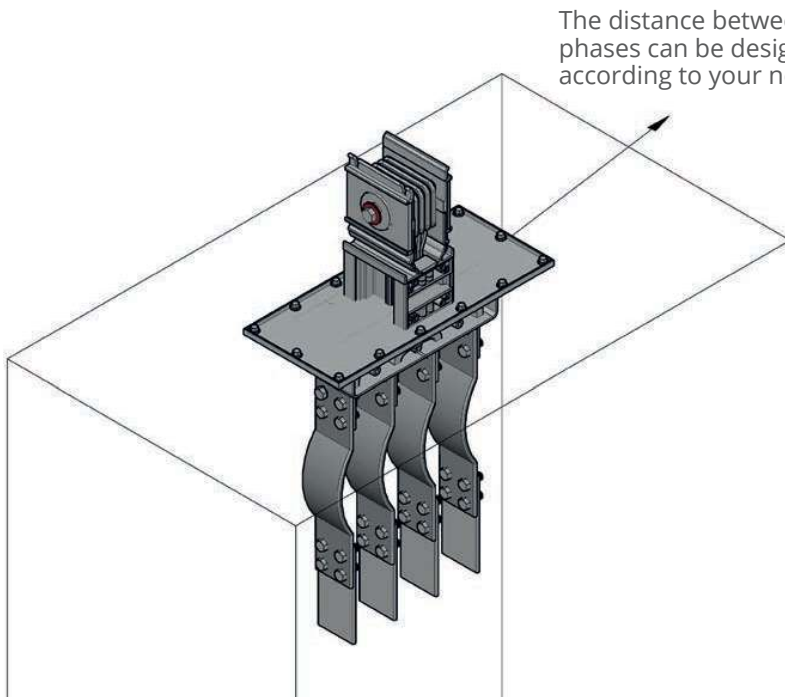
Flexible Connection Busbar	FB
----------------------------	----

SAMPLE ORDER
 1250 A Aluminum
 Flexible Busbar
 IP 55 4 Conductors
HP-KA125T2FB

FLEXIBLE BARASI CU			
AL		CU	
AMR	W	AMR	W
400A	300-450	550A	300-450
500A	300-450	650A	300-450
630A	300-450	800A	300-450
800A	300-450	1000A	300-450
1000A	300-450	1250A	300-450
1250A	300-450	1350A	300-450
1350A	300-450	1600A	300-450
1600A	300-450	2000A	300-450
2000A	300-450	2250A	300-450
2500A	300-450	2500A	300-450
2500A	300-450	2000A	300-450
3000A	300-450	2500A	300-450
3200A	300-450	3300A	300-450
4000A	300-450	3600A	300-450
5000A	300-450	4000A	300-450
6300A	300-450	4250A	300-450
		5000A	300-450
		6300A	300-450

Flexible

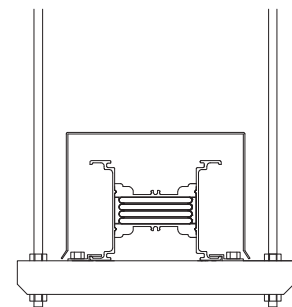
Flexible braided connections are used where it is necessary to mechanically separate the transformer to the connection interface of the busbar to prevent vibration transmission.



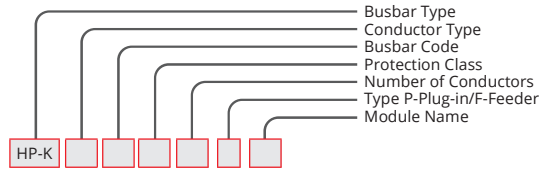
HP-K

Canopy

It is necessary to use a canopy system outdoors where the IP55 protection degree is not sufficient. The application of the canopy system does not change the protection degree of the busbar.



Panel Adapter Box Flange

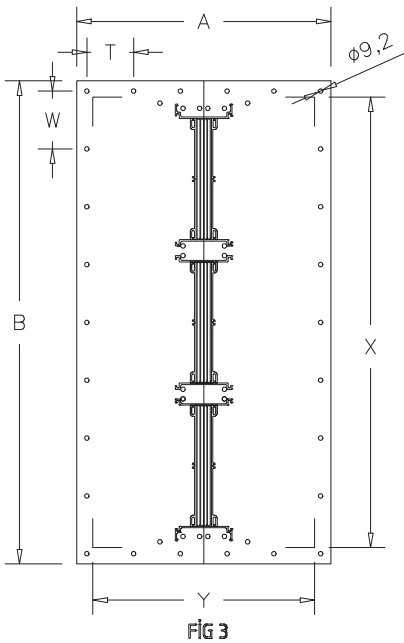
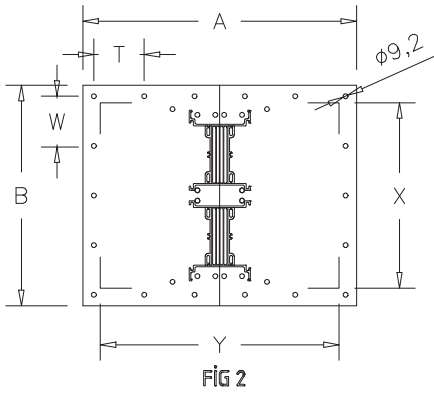
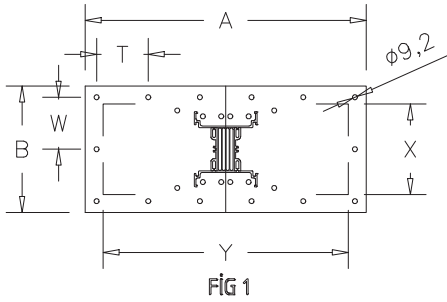
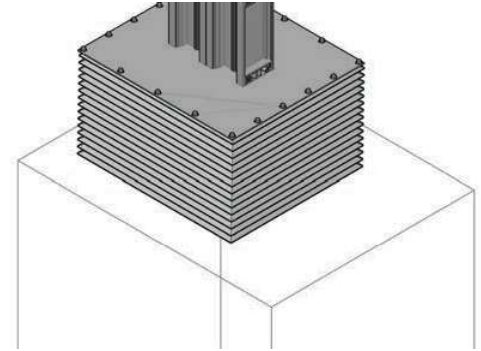


Panel Bellows Flange	PKF
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SAMPLE ORDER

2500 A Aluminum
Panel Adapter Box
IP 55 4 Conductors

HP-HA255T2R1PKF



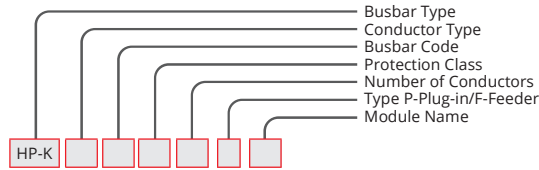
CONNECTION TOP FLANGE DIMENSIONS (AL)

AMR.	A (mm)	B (mm)	Y (mm)	X (mm)	T (mm)	R	W (mm)	Ø9 MM R	FIG
400A	520	198	460	130	97	6	77.5	3	1
500A	520	198	460	130	97	6	77.5	3	1
630A	520	198	460	130	97	6	77.5	3	1
800A	520	212	460	145	97	6	85	3	1
1000A	520	237	460	170	97	6	97.5	3	1
1250A	520	267	460	200	97	6	112.5	3	1
1350A	520	282	460	215	97	6	120	3	1
1600A	520	317	460	250	97	6	91.65	4	1
2000A	520	357	460	290	97	6	78.75	5	1
2500A	520	407	460	340	97	6	91.25	5	1
2500A	520	424	460	357	97	6	95.6	5	2
3000A	520	485	460	418	97	6	88.5	6	2
3200A	520	524	460	457	97	6	96.5	6	2
4000A	520	604	460	537	97	6	112.5	6	2
5000A	520	704	460	637	97	6	132.5	6	2
6300A	520	852	460	785	97	6	101.25	9	3

CONNECTION TOP FLANGE DIMENSIONS (CU)

AMR.	A (mm)	B (mm)	Y (mm)	X (mm)	T (mm)	R	W (mm)	Ø9 MM R	FIG
550A	520	198	460	130	97	6	77.5	3	1
650A	520	198	460	130	97	6	77.5	3	1
800A	520	198	460	130	97	6	77.5	3	1
1000A	520	217	460	150	97	6	85	3	1
1250A	520	227	460	160	97	6	92.5	3	1
1350A	520	237	460	170	97	6	97.5	3	1
1600A	520	252	460	185	97	6	105	3	1
2000A	520	282	460	215	97	6	120	3	1
2250A	520	317	460	250	97	6	91.6	4	1
2500A	520	357	460	290	97	6	105	4	1
2000A	520	315	460	248	97	6	90.8	4	2
2500A	520	345	460	298	97	6	100.83	4	2
3300A	520	425	460	358	97	6	95.6	5	2
3600A	520	455	460	388	97	6	82.5	6	2
4000A	520	484	460	417	97	6	88.5	6	2
4250A	520	524	460	457	97	6	96.6	6	2
5000A	520	604	460	537	97	6	93.75	7	2
6300A	520	732	460	665	97	6	86.25	9	3

Horizontal Suspension Set (U)

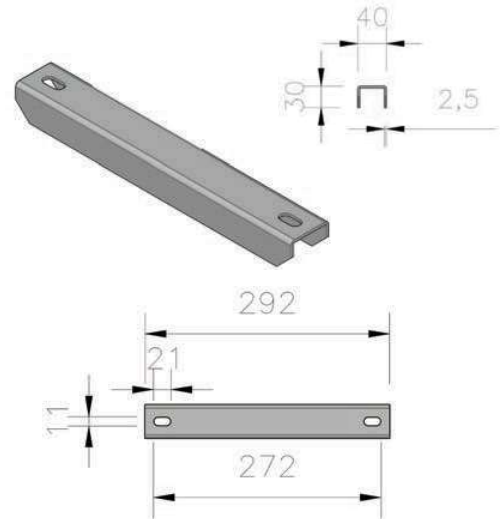
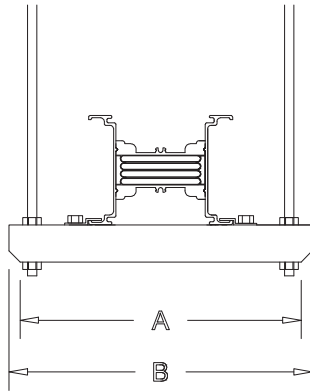


Special Horizontal Suspension Set Horizontal Application	YUP
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SAMPLE ORDER

5000 A Aluminum Horizontal Suspension IP 55 4 Conductors

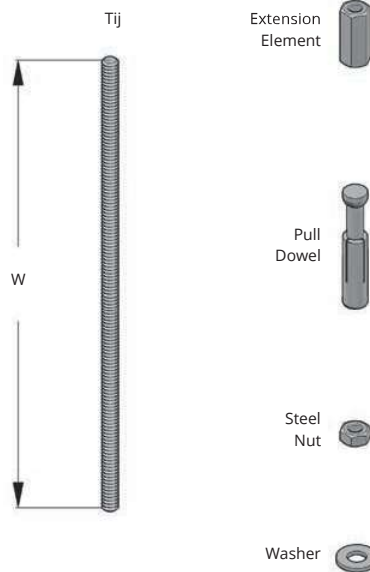
HP-KA505T2YUP



SPECIAL HORIZONTAL SUSPENSION SET HORIZONTAL APPLICATION

AMR	(AL)		(CU)		AMR	A	B
	A	B	A	B			
400A	252	292	550A	252	292		
500A	252	292	650A	252	292		
630A	252	292	800A	252	292		
800A	268	308	1000A	268	308		
1000A	292	332	1250A	282	322		
1250A	322	362	1350A	292	332		
1350A	337	377	1600A	322	362		
1600A	372	412	2000A	352	392		
2000A	412	452	2250A	372	412		
2500A	462	502	2500A	412	452		
2500A	497	519	2000A	369	409		
3000A	539	579	2500A	419	459		
3200A	579	619	3300A	479	519		
4000A	659	699	3600A	509	549		
5000A	759	799	4000A	539	579		
6300A	1056	1096	4250A	579	619		
			5000A	659	699		
			6300A	905	945		

CONNECTION ELEMENTS		
Name	W(mm)	Code
B-E 12 Tij Hanger(M10)	500	BE101
B-E 12 Tij Hanger(M10)	1000	BE102
B-E 14 Tij Hanger(M12)	500	BE103
B-E 14 Tij Hanger(M12)	1000	BE104
(M10) Extension Element	-	BE105
(M12) Extension Element	-	BE106
M 10 Pull Dowel	-	BE107
M 12 Pull Dowel	-	BE108
M 10 Steel Nut	-	BE109
M 12 Steel Nut	-	BE110
M 10 Washer	-	BE111
M 12 Washer	-	BE112

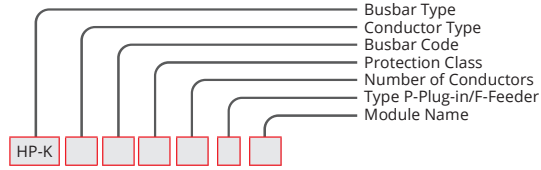


HP-K

Drill Bit Diameter:

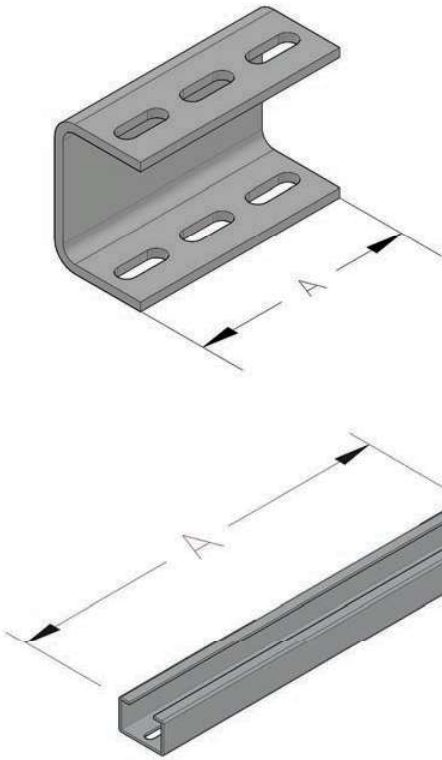
M10.....Ø14
M12.....Ø16

Special Horizontal Suspension (U)



Horizontal Ceiling Kit	YTK
------------------------	-----

SAMPLE ORDER
 1000 A Aluminum
 Horizontal Ceiling Kit
 IP 55 4 Conductors
HP-KA105T2YTK

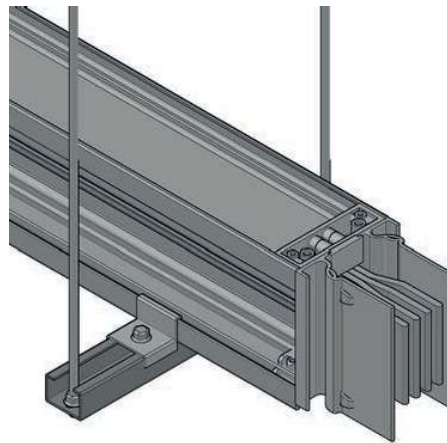


Horizontal Suspension Set Special	YVA
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SAMPLE ORDER
 1000 A Aluminum
 Horizontal Suspension
 IP 55 4 Conductors
HP-KA105T2YVA

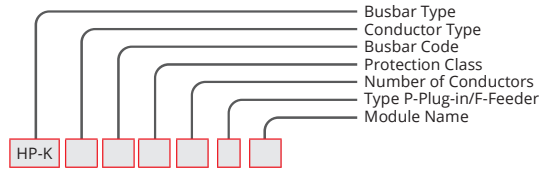
HORIZONTAL CEILING CONNECTION KIT (U PROFILE)			
AL		CU	
AMR	A	AMR	A
400A	100	550A	100
500A	100	650A	100
630A	100	800A	100
800A	100	1000A	100
1000A	100	1250A	100
1250A	100	1350A	100
1350A	100	1600A	100
1600A	100	2000A	100
2000A	100	2250A	100
2500A	100	2500A	100
2500A	100	2000A	100
3000A	100	2500A	100
3200A	100	3300A	100
4000A	100	3600A	100
5000A	100	4000A	100
6300A	100	4250A	100
		5000A	100
		6300A	100

HORIZONTAL SUSPENSION SET HORIZONTAL SPECIAL (U PROFILE)			
AL		CU	
AMR	A	AMR	A
400A	252	550A	252
500A	252	650A	252
630A	252	800A	252
800A	267	1000A	267
1000A	292	1250A	282
1250A	322	1350A	292
1350A	337	1600A	307
1600A	372	2000A	337
2000A	412	2250A	372
2500A	462	2500A	412
2500A	479	2000A	369
3000A	539	2500A	419
3200A	579	3300A	479
4000A	659	3600A	509
5000A	759	4000A	539
6300A	907	4250A	579
		5000A	659
		6300A	907



HORIZONTAL SUSPENSION SET VERTICAL SPECIAL (U PROFILE)			
AL		CU	
AMR	A	AMR	A
400A	355	550A	355
500A	355	650A	355
630A	355	800A	355
800A	355	1000A	355
1000A	355	1250A	355
1250A	355	1350A	355
1350A	355	1600A	355
1600A	355	2000A	355
2000A	355	2250A	355
2500A	355	2500A	355
2500A	355	2000A	355
3000A	355	2500A	355
3200A	355	3300A	355
4000A	355	3600A	355
5000A	355	4000A	355
6300A	355	4250A	355
		5000A	355
		6300A	355

Spring Type Suspension Set

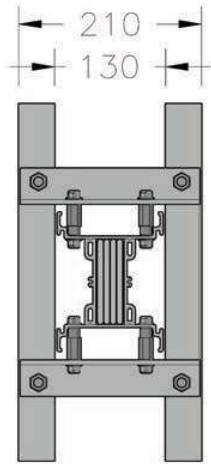


Shaft Suspension Set	HPS
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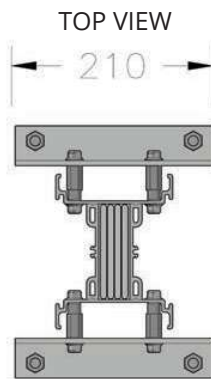
SAMPLE ORDER

1250 A Aluminum Shaft Suspension
IP 55 4 Conductors

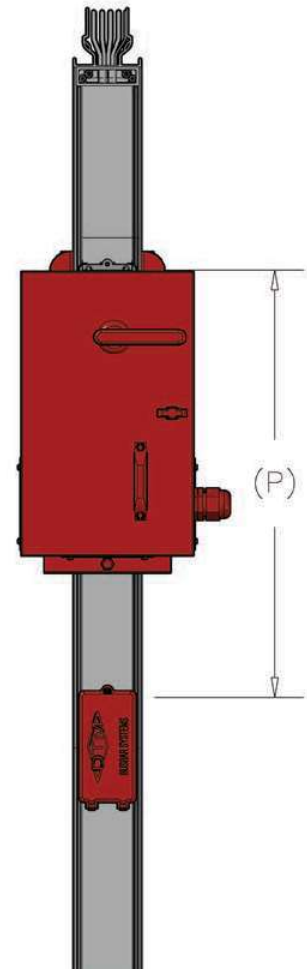
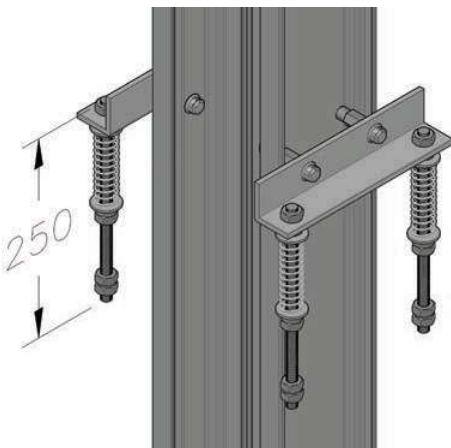
HP-KA125T2HPS



CUSTOMER SIDE
60x40 U PROFILE



SIDE VIEW

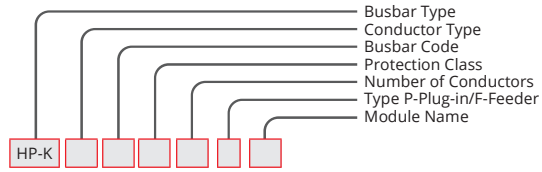


SHAFT SUSPENSION KIT	
AMR	AMR
HPS04	HPS05
HPS05	HPS06
HPS06	HPS07
HPS08	HPS09
HPS10	HPS13
HPS12	HPS15
HPS14	HPS17
HPS16	HPS21
HPS20	HPS23
HPS25	HPS24
HPS26	HPS22
HPS30	HPS27
HPS32	HPS33
HPS40	HPS36
HPS50	HPS41
HPS63	HPS42
	HPS51
	HPS63

OUTPUT UNIT	MINIMUM HOLE PITCH
AMR	P (mm)
50A-200A	650
400A	900
600A	1000
800A	1000
1000A	1300
1200A	1300

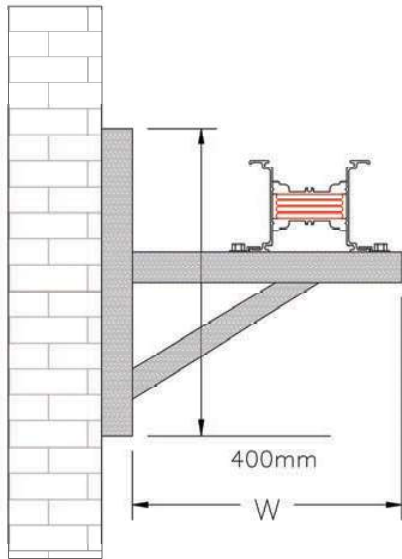
HP-K

Wall Type Suspension Set



Wall Suspension Set Horizontal Application	DYA
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Wall Suspension Standard (HORIZONTAL)



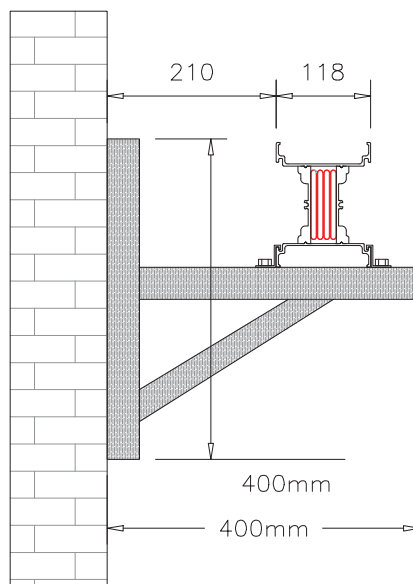
SAMPLE ORDER

1600 A Aluminum
Wall Suspension
IP 55 4 Conductors

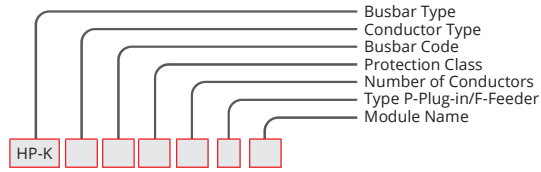
HP-KA165T2DYA

WALL SUSPENSION SET (HORIZONTAL)			
AL		CU	
AMR	W	AMR	W
400A	372	550A	372
500A	372	650A	372
630A	372	800A	372
800A	387	1000A	387
1000A	412	1250A	402
1250A	442	1350A	412
1350A	457	1600A	427
1600A	492	2000A	457
2000A	532	2250A	492
2500A	582	2500A	532
2500A	599	2000A	489
3000A	659	2500A	539
3200A	699	3300A	599
4000A	779	3600A	629
5000A	879	4000A	659
6300A	1027	4250A	699
		5000A	779
		6300A	879

Wall Type Suspension Standard (VERTICAL)



Spring Type Shaft Suspension Set



Spring Type Hanger	SA
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SAMPLE ORDER

1000 A Aluminum
Spring Hanger
IP 55 4 Conductors

HP-KA105T2SA

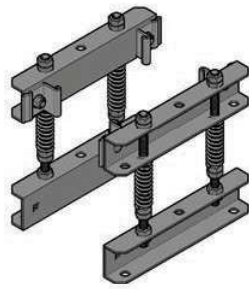


FIG 2

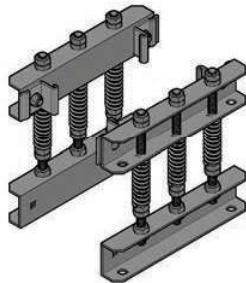


FIG 3

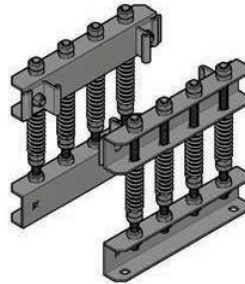
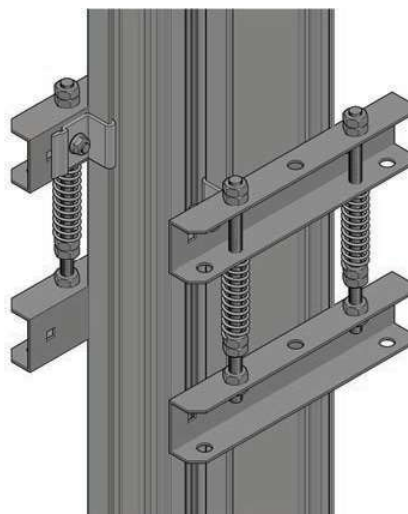


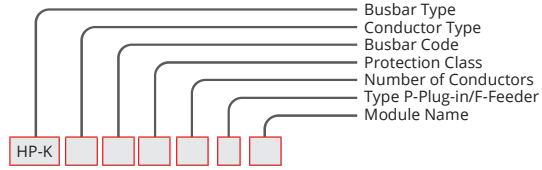
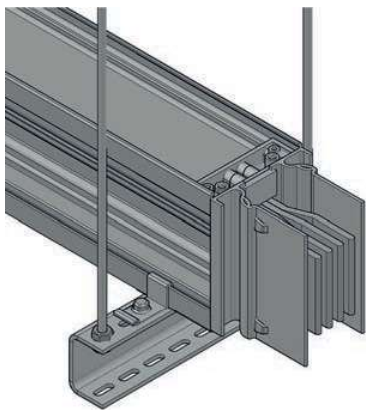
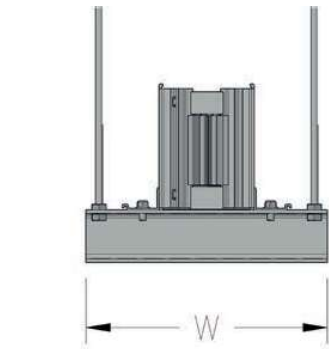
FIG 4



SPRING TYPE SHAFT HANGER CONNECTION FIGURES			
AL		CU	
400A	FIG2	550A	FIG2
500A	FIG2	650A	FIG2
630A	FIG2	800A	FIG2
800A	FIG2	1000A	FIG2
1000A	FIG2	1250A	FIG3
1250A	FIG2	1350A	FIG3
1350A	FIG2	1600A	FIG3
1600A	FIG2	2000A	FIG3
2000A	FIG3	2250A	FIG3
2500A	FIG3	2500A	FIG3
2500A	FIG3	2000A	FIG4
3000A	FIG4	2500A	FIG4
3200A	FIG4	3300A	FIG4
4000A	FIG4	3600A	FIG4
5000A	FIG4	4000A	FIG4
6300A	FIG4	4250A	FIG4
		5000A	FIG4
		6300A	FIG4

HP-K

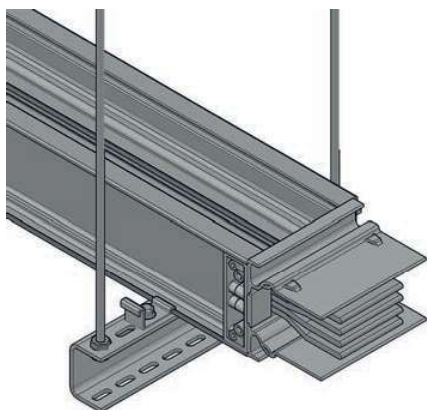
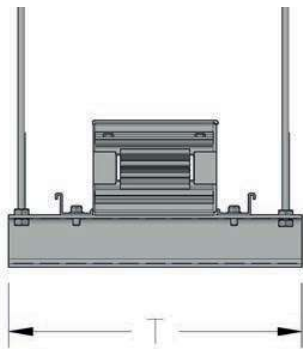
Horizontal Suspension Set



Horizontal Suspension Set Vertical Application	YUD
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SAMPLE ORDER
 800 A Aluminum
 Horizontal Suspension
 IP 55 4 Conductors
HP-KA085T2YUD

HORIZONTAL SUSPENSION SET VERTICAL APPLICATION			
AL		CU	
AMR	W	AMR	W
400A	300	550A	300
500A	300	650A	300
630A	300	800A	300
800A	300	1000A	300
1000A	300	1250A	300
1250A	300	1350A	300
1350A	300	1600A	300
1600A	300	2000A	300
2000A	300	2250A	300
2500A	300	2500A	300
2500A	300	2000A	300
3000A	300	2500A	300
3200A	300	3300A	300
4000A	300	3600A	300
5000A	300	4000A	300
6300A	300	4250A	300
		5000A	300
		6300A	300

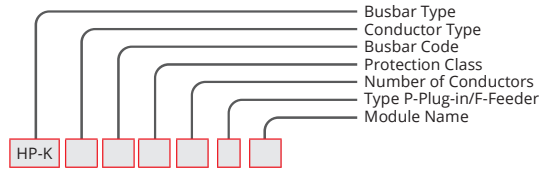
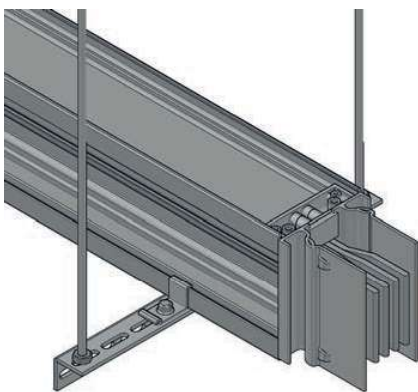
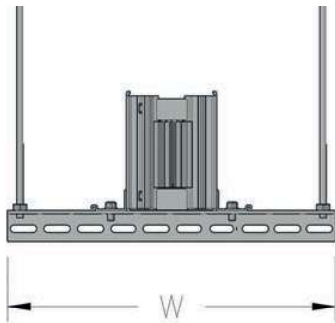


Horizontal Suspension Set Horizontal Application	YUY
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SAMPLE ORDER
 1000 A Aluminum
 Horizontal Suspension
 IP 55 4 Conductors
HP-KA105T2YUY

HORIZONTAL SUSPENSION SET HORIZONTAL APPLICATION			
AL		CU	
AMR	T	AMR	T
400A	252	550A	252
500A	252	650A	252
630A	252	800A	252
800A	267	1000A	267
1000A	292	1250A	282
1250A	322	1350A	292
1350A	337	1600A	307
1600A	372	2000A	337
2000A	412	2250A	372
2500A	462	2500A	412
2500A	479	2000A	369
3000A	539	2500A	419
3200A	579	3300A	479
4000A	659	3600A	509
5000A	759	4000A	539
6300A	907	4250A	579
		5000A	659
		6300A	907

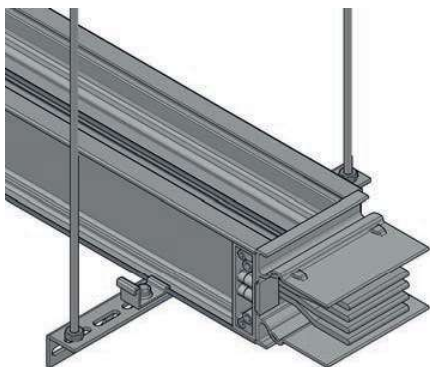
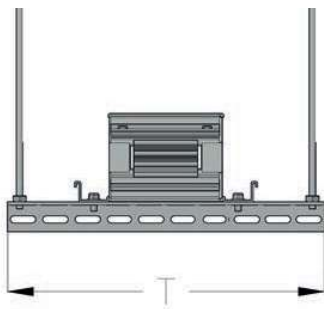
Horizontal Suspension Set (L)



Horizontal Suspension Set Vertical Application	YLD
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SAMPLE ORDER
 1350 A Aluminum
 Horizontal Bracket Suspension
 IP 55 4 Conductors
HP-KA135T2YLD

HORIZONTAL SUSPENSION SET VERTICAL APPLICATION (L Bracket) 50X50			
AL		CU	
AMR	W	AMR	W
400A	300	550A	300
500A	300	650A	300
630A	300	800A	300
800A	300	1000A	300
1000A	300	1250A	300
1250A	300	1350A	300
1350A	300	1600A	300
1600A	300	2000A	300
2000A	300	2250A	300
2500A	300	2500A	300
2500A	300	2000A	300
3000A	300	2500A	300
3200A	300	3300A	300
4000A	300	3600A	300
5000A	300	4000A	300
6300A	300	4250A	300
		5000A	300
		6300A	300



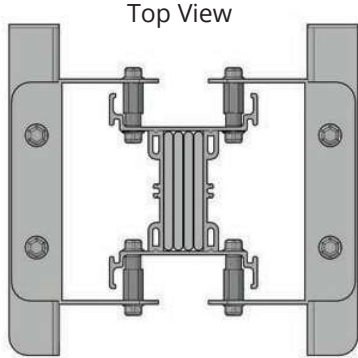
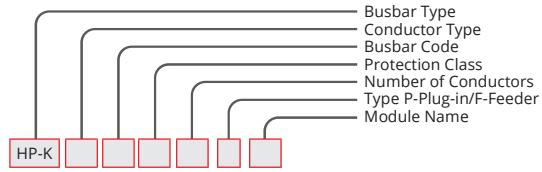
Horizontal Suspension Set Horizontal Application	YLY
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SAMPLE ORDER
 1600 A Aluminum
 Horizontal Bracket Suspension
 IP 55 4 Conductors
HP-HA165T2YLY

HORIZONTAL SUSPENSION SET HORIZONTAL APPLICATION (L Bracket) 50X50			
AL		CU	
AMR	T	AMR	T
400A	252	550A	252
500A	252	650A	252
630A	252	800A	252
800A	267	1000A	267
1000A	292	1250A	282
1250A	322	1350A	292
1350A	337	1600A	307
1600A	372	2000A	337
2000A	412	2250A	372
2500A	462	2500A	412
2500A	479	2000A	369
3000A	539	2500A	419
3200A	579	3300A	479
4000A	659	3600A	509
5000A	759	4000A	539
6300A	907	4250A	579
		5000A	659
		6300A	907

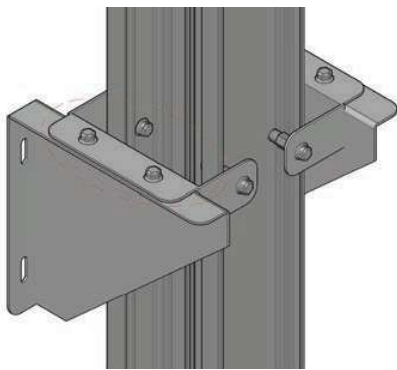
HP-K

Shaft Wall Suspension Set

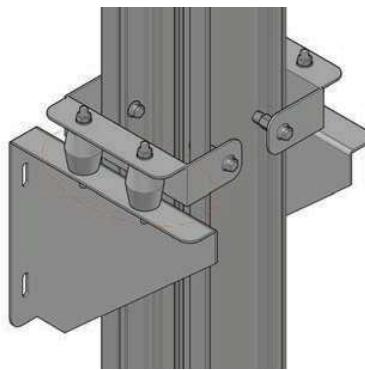


Shaft Wall Suspension Kit	SD
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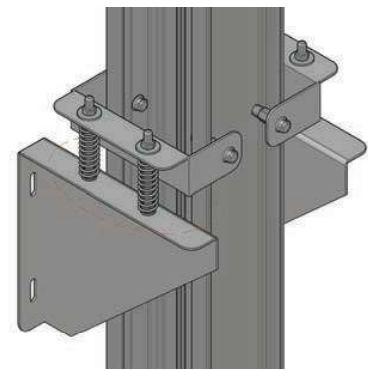
SAMPLE ORDER
 800 A Aluminum
 Horizontal Suspension
 IP 55 4 Conductors
HP-KA085T2SD3



(1)
Still



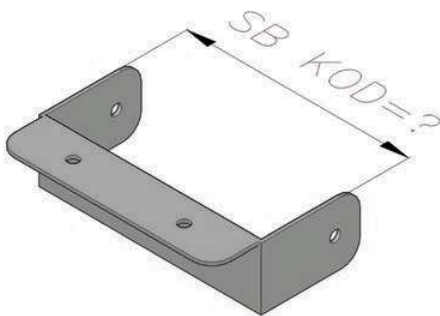
(2)
Rubberized



(3)
Spring

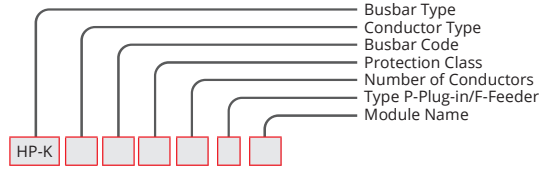
Shaft Busbar Connection Element	SB
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SAMPLE ORDER
 1000 A Aluminum
 Shaft Connection Element
 IP 55 4 Conductors
HP-KA105T2SBA5

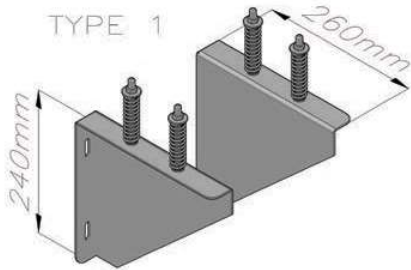


SHAFT CONNECTION ELEMENT (SPECIAL)			
AL		CU	
AMR	CODE	AMR	CODE
400A	SBA1	550A	SBC1
500A	SBA2	650A	SBC2
630A	SBA3	800A	SBC3
800A	SBA4	1000A	SBC4
1000A	SBA5	1250A	SBC5
1250A	SBA6	1350A	SBC6
1350A	SBA7	1600A	SBC7
1600A	SBA8	2000A	SBC8
2000A	SBA9	2250A	SBC9
2500A	SBA10	2500A	SBC10
2500A	SBA11	2000A	SBC11
3000A	SBA12	2500A	SBC12
3200A	SBA13	3300A	SBC13
4000A	SBA14	3600A	SBC14
5000A	SBA15	4000A	SBC15
6300A	SBA16	4250A	SBC16
		5000A	SBC17
		6300A	SBC18

Shaft Wall Suspension Set



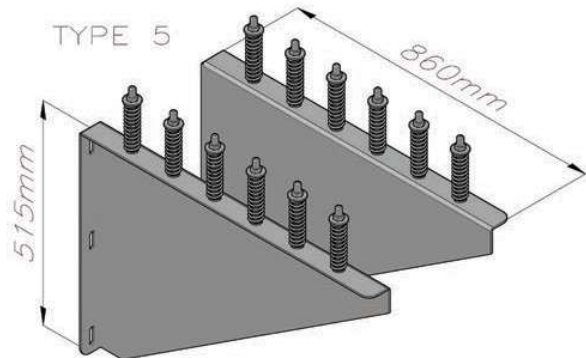
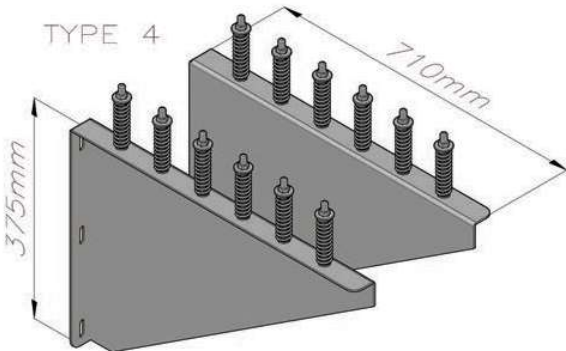
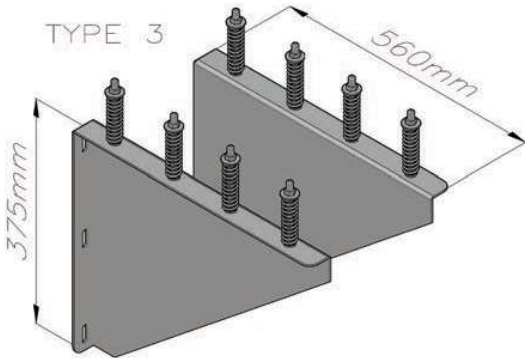
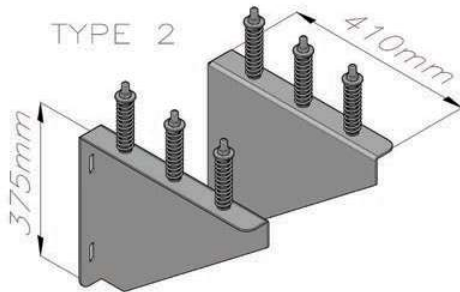
Shaft Wall Suspension Kit	TYPE
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SAMPLE ORDER

1000 A Aluminum
Shaft Wall Suspension Set
IP 55 4 Conductors

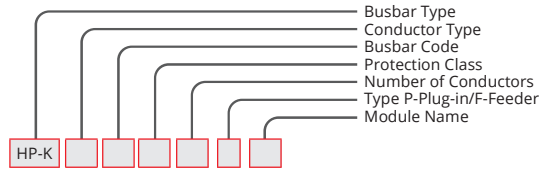
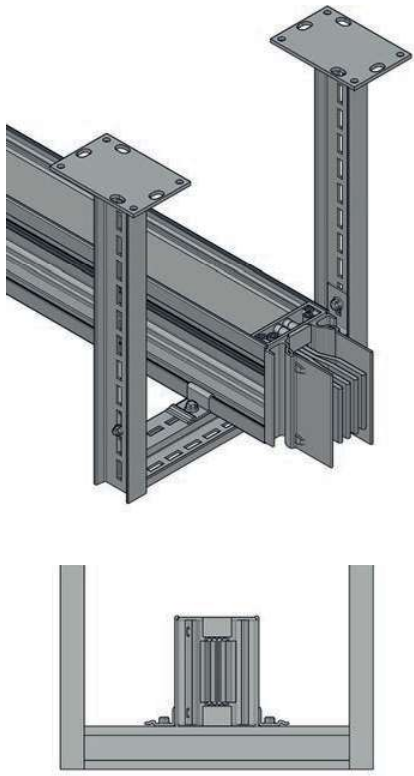
HP-KA105T2TYPE1



SHAFT WALL SUSPENSION SET TABLOSU			
AL		CU	
AMR	TPYE	AMR	TPYE
400A	TYPE1	550A	TYPE1
500A	TYPE1	650A	TYPE1
630A	TYPE1	800A	TYPE1
800A	TYPE1	1000A	TYPE1
1000A	TYPE1	1250A	TYPE1
1250A	TYPE2	1350A	TYPE2
1350A	TYPE2	1600A	TYPE2
1600A	TYPE2	2000A	TYPE2
2000A	TYPE2	2250A	TYPE2
2500A	TYPE2	2500A	TYPE2
2500A	TYPE4	2000A	TYPE2
3000A	TYPE3	2500A	TYPE3
3200A	TYPE3	3300A	TYPE3
4000A	TYPE4	3600A	TYPE3
5000A	TYPE5	4000A	TYPE4
6300A	TYPE5	4250A	TYPE4
		5000A	TYPE5
		6300A	TYPE5

HP-K

Horizontal NPI Suspension Set

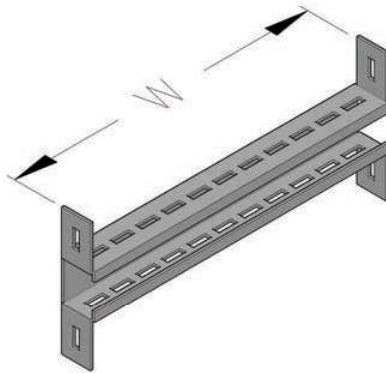


Horizontal Suspension Set Vertical Application	YID
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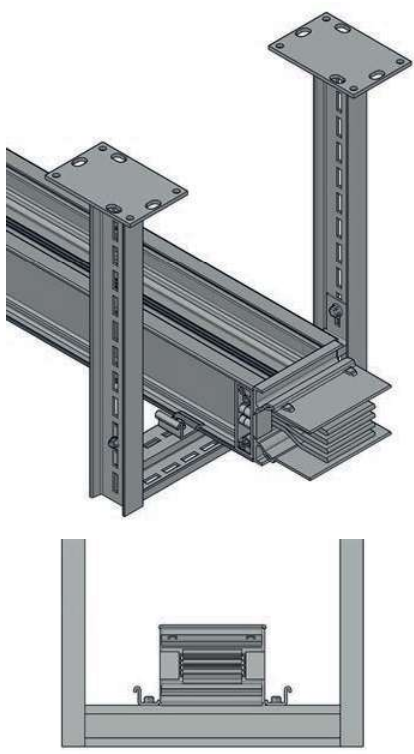
SAMPLE ORDER

800 A Aluminum Suspension
IP 55 4 Conductor

HP-KA085T2YID



HORIZONTAL SUSPENSION SET VERTICAL APPLICATION			
AL		CU	
AMR	W	AMR	W
400A	300	550A	300
500A	300	650A	300
630A	300	800A	300
800A	300	1000A	300
1000A	300	1250A	300
1250A	300	1350A	300
1350A	300	1600A	300
1600A	300	2000A	300
2000A	300	2250A	300
2500A	300	2500A	300
2500A	300	2000A	300
3000A	300	2500A	300
3200A	300	3300A	300
4000A	300	3600A	300
5000A	300	4000A	300
6300A	300	4250A	300
		5000A	300
		6300A	300

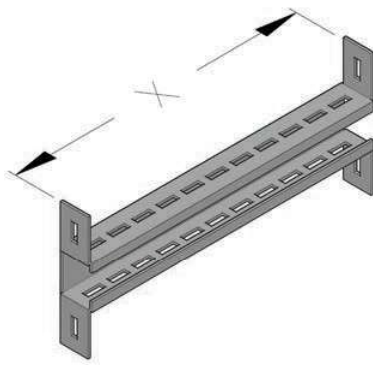


Horizontal Suspension Set Horizontal Application	YIY
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SAMPLE ORDER

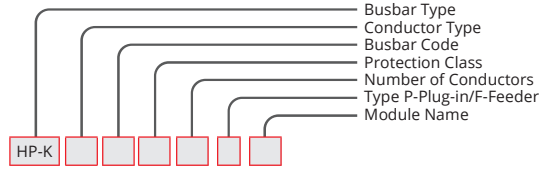
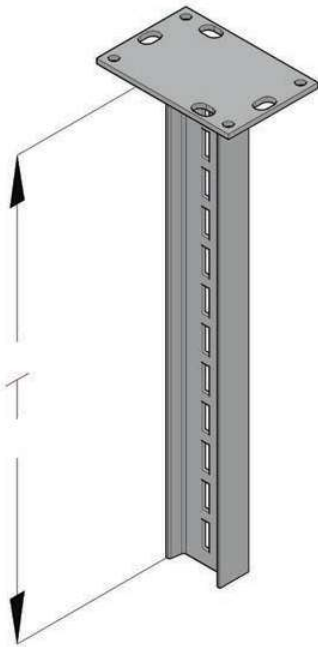
1000 A Aluminum Horizontal Suspension
IP 55 4 Conductors

HP-KA105T2YIY



HORIZONTAL SUSPENSION SET HORIZONTAL APPLICATION			
AL		CU	
AMR	W	AMR	W
400A	252	550A	252
500A	252	650A	252
630A	252	800A	252
800A	267	1000A	267
1000A	292	1250A	282
1250A	322	1350A	292
1350A	337	1600A	307
1600A	372	2000A	337
2000A	412	2250A	372
2500A	462	2500A	412
2500A	479	2000A	369
3000A	539	2500A	419
3200A	579	3300A	479
4000A	659	3600A	509
5000A	759	4000A	539
6300A	907	4250A	579
		5000A	659
		6300A	907

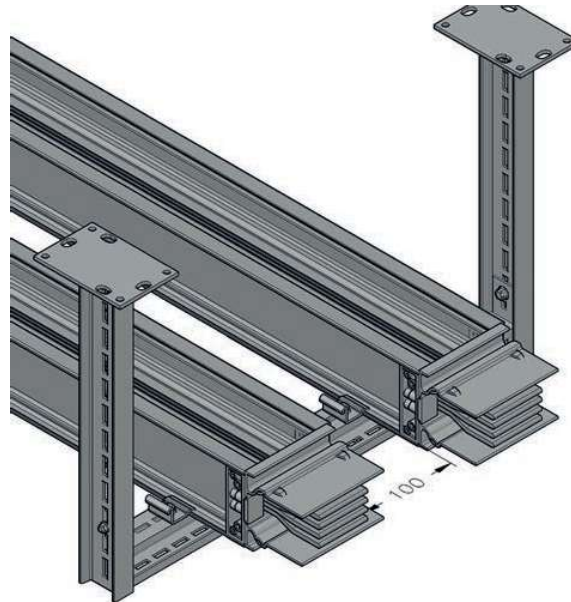
Ceiling NPI Suspension



Ceiling Suspension NPI	IYD
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SAMPLE ORDER
 1600 A Aluminum
 Ceiling NPI Suspension
 IP 55 4 Conductors
HP-KA165T2IYD

NPI CEILING CONNECTION ELEMENT		
Name	T (mm)	Code
NPI ASKI (5)	500	NPI5
NPI ASKI (10)	1000	NPI10
NPI ASKI (15)	1500	NPI15
NPI ASKI (20)	2000	NPI20



HP-K

TECHNICAL TABLE (HP-K AL)

ALUMINUM CONDUCTOR (AL)

Rated Current	In	A	400	500	630	800	1000	
Busbar Code			HP-KA04	HP-KA05	HP-KA06	HP-KA08	HP-KA10	
Protection Class	IP55							
Standards	IEC 61439-6 TS EN 61439-6 IEC 61439-1 TS EN 61439-1							
Max. Rated Operating Voltage	Ue	Vac	1000					
Rated Impact Withstand Voltage	Uimp	kV	8					
Frequency	f	Hz	50					
Rated Insulation Voltage	Ui	V	1000	Category IV				
Mechanical Impact Resistance (IK Code)	Plug-in Busbar IK10							
Measures for the Protection of People	Basic Protection (TS HD 60364-4-41, item A1)							
Short Term Current (1s)	Icw	kA	15	18	25	35	60	
Peak Withstand Current	Ipk	kA	32	36	52,6	73,6	105,5	
Rated Short Time Current for Neutral Conductor (1s)	Icw	kA	9,8	9,8	14	20	30,2	
Rated Peak Withstand Current for Neutral Conductor	Ipk	kA	17	17	30,5	44	64	
Rated Short Time Current For Protection Circuit (1s)	Icw	kA	9,8	9,8	14	20	30,2	
Rated Peak Withstand Current for Protection Circuit	Ipk	kA	17	17	30,5	44	64	
Resistance at 20 °C Conductor Temperature	R ₂₀	mΩ/m	0.280	0.236	0.155	0.110	0.080	
Resistance at 35 °C Ambient Air Temperature	R	mΩ/m	0.310	0.264	0.174	0.140	0.090	
Temperature Independent Reactance	X	mΩ/m	0.032	0.022	0.026	0.025	0.016	
Impedance at 20 °C Conductor Temperature	Z ₂₀	mΩ/m	1.023	0.854	0.616	0.478	0.366	
Impedance at 35 °C Ambient Air Temperature	Z ₃₅	mΩ/m	1.396	1.186	0.829	0.631	0.366	

TECHNICAL TABLE (HP-K CU)

COPPER CONDUCTOR (CU)

Rated Current	In	A	550	650	800	1000	1250	1350	1600
Busbar Code			HP-KC05	HP-KC06	HP-KC07	HP-KC09	HP-KC13	HP-KC15	HP-KC17
Protection Class	IP55								
Standards	IEC 61439-6 TS EN 61439-6 IEC 61439-1 TS EN 61439-1								
Max. Rated Operating Voltage	Ue	Vac	1000						
Rated Impact Withstand Voltage	Uimp	kV	8						
Frequency	f	Hz	50						
Rated Insulation Voltage	Ui	V	1000	Category IV					
Mechanical Impact Resistance (IK Code)	Plug-in Busbar IK10								
Measures for the Protection of People	Basic Protection (TS HD 60364-4-41, item A1)								
Short Term Current (1s)	Icw	kA	25	25	40	50	60	60	80
Peak Withstand Current	Ipk	kA	50,5	50,5	85	104	132	132	175,5
Rated Short Time Current for Neutral Conductor (1s)	Icw	kA	15,8	15,8	25	32	34	36	50
Rated Peak Withstand Current for Neutral Conductor	Ipk	kA	30	30	50,5	63,2	75,5	75,5	101
Rated Short Time Current For Protection Circuit (1s)	Icw	kA	15,8	15,8	25	32	34	36	50
Rated Peak Withstand Current for Protection Circuit	Ipk	kA	30	30	50,5	63,2	75,5	75,5	101
Resistance at 20 °C Conductor Temperature	R ₂₀	mΩ/m	0,125	0,102	0,077	0,058	0,046	0,040	0,035
Resistance at 35 °C Ambient Air Temperature	R	mΩ/m	0,165	0,140	0,100	0,074	0,059	0,051	0,045
Temperature Independent Reactance	X	mΩ/m	0,044	0,034	0,028	0,023	0,019	0,016	0,015
Impedance at 20 °C Conductor Temperature	Z ₂₀	mΩ/m	0.587	0.491	0.395	0.297	0.252	0.200	0.170
Impedance at 35 °C Ambient Air Temperature	Z ₃₅	mΩ/m	0.752	0.647	0.500	0.373	0.311	0.253	0.223

HP-H SERIES High Power Busbar Trunking Systems

	1250	1350	1600	2000	2500	2500	3000	3200	4000	5000	6300
	HP-KA12	HP-KA13	HP-KA16	HP-KA20	HP-KA25	HP-KA252	HP-KA30	HP-KA32	HP-KA40	HP-KA50	HP-KA63

	60	60	80	80	80	100	120	120	120	120	120
	132	132	176	176	180	220	264	264	264	264	264
	37	37	47,6	47,6	61	47,6	61	73	73	73	73
	75,5	75,5	101	101	132,2	101	132,2	159	159	159	159
	37	37	47,6	47,6	61	47,6	61	73	73	73	72
	75,5	75,5	101	101	132,2	101	132,2	159	159	159	159
	0.054	0.050	0.039	0.032	0.027	0.029	0.024	0.022	0.017	0.015	0.012
	0.064	0.056	0.044	0.037	0.029	0.032	0.027	0.025	0.018	0.016	0.013
	0.017	0.015	0.011	0.011	0.008	0.010	0.007	0.005	0.004	0.003	0.002
	0.236	0.224	0.181	0.140	0.112	0.120	0.105	0.096	0.081	0.059	0.044
	0.304	0.281	0.226	0.181	0.152	0.155	0.135	0.121	0.102	0.090	0.080

	2000	2250	2500	2000	2500	3300	3600	4000	4250	5000	6300
	HP-KC21	HP-KC23	HP-KC24	HP-KC22	HP-KC27	HP-KC33	HP-KC36	HP-KC41	HP-KC42	HP-KC51	HP-KC64

	80	80	100	80	100	120	120	120	120	120	120
	175,5	175,5	220,5	175	222	264	264	264	264	264	264
	50	50	50	44	58	70	70	70	70	70	70
	101	101	101	88	132,2	158,5	158,5	158,5	158,5	158,5	158,5
	50	50	50	44	58	70	70	70	70	70	70
	101	101	101	88	132,2	158,5	158,5	158,5	158,5	158,5	158,5
	0,026	0,022	0,018	0,030	0,023	0,015	0,013	0,012	0,010	0,008	0,005
	0,035	0,030	0,022	0,038	0,032	0,020	0,016	0,015	0,012	0,010	0,006
	0,010	0,009	0,008	0,012	0,009	0,007	0,006	0,005	0,005	0,004	0,003
	0.132	0.101	0.088	0.150	0.109	0.075	0.068	0.062	0.052	0.040	0.031
	0.169	0.132	0.109	0.191	0.138	0.095	0.085	0.079	0.062	0.048	0.036

HP-K

The operating current I_b calculation is made according to the formula below.		
$I_b = \frac{P \times F}{\sqrt{3} \times U_e \times \cos \varphi}$		
Parameters to consider		
P: Total power of the feeder load F: Feeder load coefficient		
Feeder load coefficient varies according to the place where the power is used. It may need to be calculated for each use. Some usage purposes and floor numbers are given in the table below.		
Usage Areas:	Number of Users:	Coefficient:
Industrial	1 to 10	0,8-0,9
Industrial	10 to 20	0,7-0,8
Industrial	20 to 40	0,6-0,7
Service	Large Offices	0,7-0,8
Service	Shopping Malls	0,8-0,9
U _e : Operating voltage (V)		
Example: The area of use is industrial		
Number of Users 15		
Uniform power unit 125kw		
Max. Operating voltage 400V		
cosφ 0,95		
$I_b = \frac{P \times F}{\sqrt{3} \times U_e \times \cos \varphi}$		
Total power 15x125=1875kw 1875000 (W) P		
Coefficient: 0,8		
$I_b = \frac{1875000 \times 0,8}{1,73 \times 400 \times 0,95} = 2281 \text{ A}$		
As a manufacturer, it should be taken into account when increasing power in the future. Therefore, getting a 20% margin surplus makes your busbar safe.		
2281 A X 20% =2737 A		
Available currents 3200 A AL 3200 A CU		
It is necessary to control the temperature level of the place of use. Busbar conductors are designed for an average daily temperature of 40 °C. According to the temperature increase, the busbar should be pulled to a higher level. Let's look at the application below.		
K : Reduction coefficient according to ambient temperature		
40°	1	
45°	0,95	
50°	0,90	
55°	0,85	
60°	0,80	
65°	0,74	
70°	0,67	

Example: Average (daily) temperature 60 °C Busbar	
The operating current is 2737 A. According to 60°C temperature	
2737 A /0,80=3421 A	
If the ambient temperature is 60 °C, 4000 A conductors should be selected.	
Calculate the voltage drop ΔV% according to the formula below.	
$\Delta V\% = D \times t \times I_b \times L / U_e \times 100$	
And the following parameters are taken into account.	
D: Load distribution factor, A line that changes according to the feeder direction and point is counted. This multiplier allows you to calculate quickly.	
D=1 Receive Feeder from one side and supply at the end point. D=0.5 Receive Feeder from one side and supply in equal proportion. T : Unit voltage drop value is in the table (Page 115) { t= $\sqrt{3} \times 1000 \times (R \times \cos \varphi + X \times \sin \varphi)$ } R : Resistance (mohm/m) X : Reactance (mohm/m) According to the Cos φ values (μV), the values are given in 1 ampere /m t.	
I _b : Sum of all extra effective charges	
L: Total length of busbar line	
U _e : Feeder voltage	
Example: The calculation of 4000 A Busbar is as follows. (tap off at the Feeder endpoint from one side)	
(L) Line Length	100 mt
(I _b) Effective load	2400 A
U _e : Feeder voltage	400 V
Cos φ	0,80
(D) Load distribution factor	1
(t) The unit voltage drop value can be obtained from the table. 29,06 (V) %10 ⁻⁶	
(ΔV) Maximum allowable voltage drop 3%	
$\Delta V\% = D \times t \times I_b \times L / U_e \times 100$	
$\Delta V\% = \frac{1 \times 29,06 \times 10^{-6} \times 2400 \times 100 \times 100}{400} = 1,74\%$	
The value found is less than 3%. 4000 A Busbar selection is suitable according to voltage drop calculation.	

ALUMINUM	400A	500A	630A	800A	1000A	1250A	1350A	1600A	2000A	2500A	2500A	3000A	3200A	4000A	5000A	6300A		
cosφ=0,70	414,72	346,73	242,65	200,25	128,64	98,39	86,24	66,80	58,32	51,04	44,95	40,07	36,42	26,71	23,06	18,20		
cosφ=0,75	438,76	367,66	255,45	210,20	135,04	102,45	89,79	69,95	60,57	52,94	46,76	41,88	38,15	27,92	24,19	19,15		
cosφ=0,80	462,26	388,21	267,80	219,71	141,17	106,22	93,07	72,31	62,63	54,67	48,44	43,60	39,79	29,06	25,26	20,07		
cosφ=0,85	485,20	408,38	279,71	228,79	147,02	109,70	96,10	74,79	64,49	56,23	49,98	45,20	41,35	30,14	26,28	20,95		
cosφ=0,90	507,03	427,79	290,71	237,01	152,31	112,59	98,61	76,88	65,98	57,44	51,24	46,61	42,73	31,07	27,20	21,76		
cosφ=0,95	526,65	445,68	299,91	243,50	156,50	114,30	100,08	78,21	66,71	57,96	51,95	47,59	43,77	31,73	27,90	22,44		
cosφ=1	536,30	456,72	301,02	242,20	155,70	110,72	96,88	76,12	64,01	55,36	50,17	46,71	43,25	31,14	27,68	22,49		
COPPER	550A	650A	800A	1000A	1250A	1350A	1600A	2000A	2250A	2500A	2000A	2500A	3300A	3600A	4000A	4250A	5000A	6300A
cosφ=0,70	253,86	211,30	155,49	117,86	94,79	81,41	72,92	54,67	47,38	36,47	60,76	49,81	32,82	26,75	24,31	20,67	17,02	10,95
cosφ=0,75	264,33	220,47	161,72	122,28	98,25	84,44	75,51	56,83	49,20	37,68	63,01	51,80	33,94	27,61	25,17	21,28	17,54	11,21
cosφ=0,80	274,03	229,05	167,46	126,29	101,38	87,19	77,85	58,82	50,86	38,75	65,05	53,63	34,95	28,37	25,95	21,80	17,99	11,42
cosφ=0,85	282,98	237,04	172,72	129,91	104,18	89,67	79,93	60,64	52,37	39,69	66,88	55,31	35,83	29,03	26,64	22,23	18,37	11,57
cosφ=0,90	290,40	243,86	177,01	132,73	106,33	91,59	81,48	62,11	53,56	40,34	68,30	56,67	36,47	29,48	27,16	22,49	18,61	11,63
cosφ=0,95	294,77	248,32	179,37	133,95	107,16	92,40	82	62,89	54,13	40,45	68,89	57,42	36,62	29,51	27,33	22,40	18,58	11,47
cosφ=1	285,45	242,20	173,00	128,02	102,07	88,23	77,85	60,55	51,90	38,06	65,74	55,36	34,60	27,68	25,95	20,76	17,30	10,38

HP-K TECHNICAL SPECIFICATIONS

- 1) Related Standard: IEC 61439-6, IEC 61439-1
- 2) All current ratings have been performed as type tests in accredited laboratories.
- 3) DTM Busbar systems have CE Mark and ISO 9001, ISO 14001 quality system.
- 4) As the insulation and operating voltage is 1000V, the ambient temperature is max 40°, the max temperature rise should be 95 K.
- 5) Busbar housings are manufactured from 2.7 mm extruded Aluminum profile and finished with color RAL 7038 powder paint.
- 6) The conductors are wrapped with Class B Mylar film after double layer epoxy paint.
- 7) The conductors are EC-Grade and 34 m/mm² for Aluminum and 56 m/mm² ohm for Copper.
- 8) Protection Class IP 55/ IP 67 can be produced upon request.
- 9) Bolt-On type tap off box at points are up to 1000A.
- 10) Conductor surfaces are tin plated and tap off box contact elements are silver plated.

HP-K

Technical Data

ELECTRICAL CHARACTERISTIC VALUES

For 60hz the result is multiplied by 0.83.

$$DV\% = \frac{D \times t \times I_b \times L}{U_e} \times 100$$

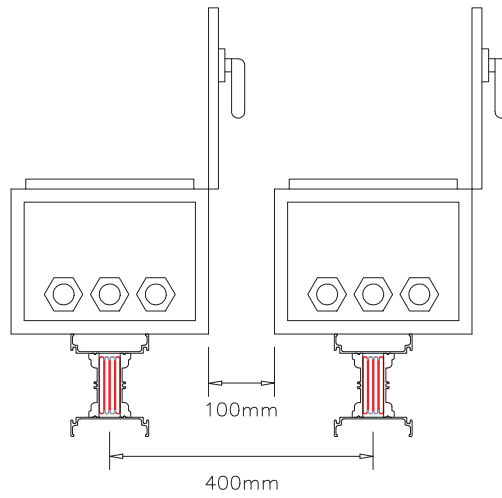
ALUMINUM

Nominal	Impedance x 10-3 Ω/m phase to neutral			Power Factor %								
	R	X	Z	1	0,9	0,8	0,7	0,6	0,5	0,4	0,3	
Current												
400A	6,99	3,9	8,01	9,67	11,1	11	10,6	10,1	9,51	8,81	8,05	
500A	6,99	3,9	8,01	9,67	11,1	11	10,6	10,1	9,51	8,81	8,05	
630A	6,99	3,9	8,01	9,67	11,1	11	10,6	10,1	9,51	8,81	8,05	
800A	6,5	2,31	6,9	11,2	11,2	11,4	10,7	9,94	9,08	8,16	7,18	
1000A	5,2	2,07	5,6	10,7	11,5	11,2	10,6	9,91	9,11	8,25	7,33	
1250A	3,5	1,72	3,9	8,17	11,3	12	12,2	12,2	12	11,6	11,1	
1350A	3,1	1,62	3,5	8,58	11,9	12,7	12,9	12,9	12,7	12,3	11,8	
1600A	2,5	1,28	2,9	8,65	9,71	9,57	9,21	8,73	8,16	7,51	6,81	
2000A	1,9	0,43	1,95	8,21	8,2	7,68	7,08	6,41	5,71	4,99	4,23	
2500A	1,5	0,68	1,65	7,78	8,54	8,34	7,96	7,49	6,94	6,34	5,7	
2500A	1,4	0,14	1,45	9,68	9,14	8,33	7,47	6,58	5,68	4,76	3,83	
3000A	1,15	0,37	1,21	6,03	6,90	7,74	8,52	9,24	9,87	10,34	9,94	
3200A	1,02	0,33	1,08	6,49	7,43	8,32	9,15	9,92	10,58	11,08	10,63	
4000A	5,2	2,07	5,6	10,7	11,5	7,68	7,08	6,41	5,71	4,99	4,23	
5000A	2,5	1,28	2,9	8,65	9,71	11,4	10,7	9,94	9,08	8,16	7,18	
6300A	3,5	1,8	3,5	8,65	9,71	11,4	10,7	9,94	9,08	8,16	7,18	

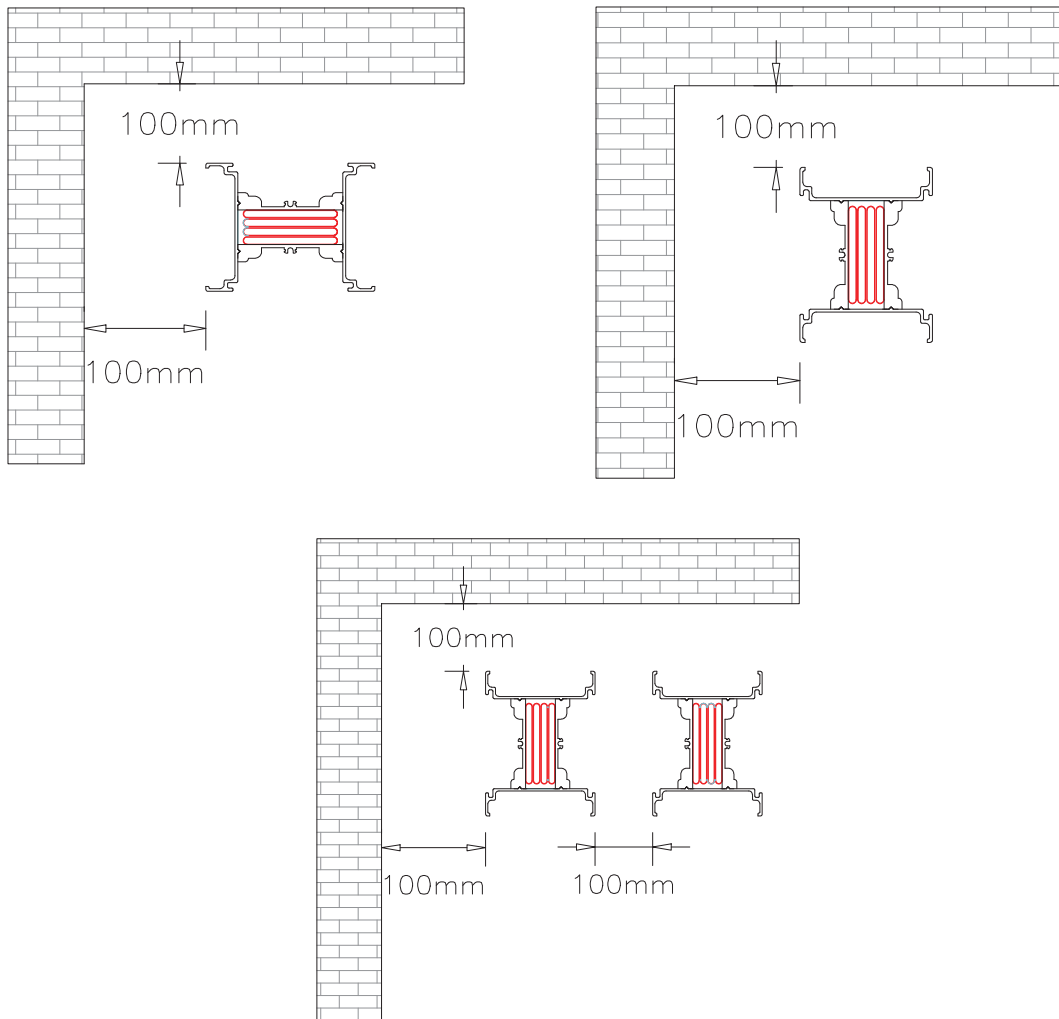
COPPER

Nominal	Impedance x 10-5 Ω/m phase to neutral			Power Factor %								
	R	X	Z	1	0,9	0,8	0,7	0,6	0,5	0,4	0,3	
Current												
550A	8,91	4,12	9,01	11,1	12,4	12,4	12,7	12,6	12,3	12,9	12,2	
650A	8,91	4,12	9,01	11,1	12,4	12,4	12,7	12,6	12,3	12,9	12,2	
800A	8,91	4,12	9,01	11,1	12,4	12,4	12,7	12,6	12,3	12,9	12,2	
1000A	6,1	2,24	6,5	8,44	8,15	7,68	7,51	7,92	8,01	8,12	7,98	
1250A	4,5	2,98	5,4	7,47	8,21	7,41	7,31	7,81	8,13	8,1	7,82	
1350A	4,1	1,85	4,5	6,22	8,29	7,12	7,12	7,51	8,53	10,1	8,9	
1600A	3,3	1,88	3,8	5,25	8,31	7,01	6,91	7,35	8,51	9,25	9,12	
2000A	2,5	1,61	3,01	4,16	8,01	6,98	6,15	7,12	7,03	8,63	10,1	
2250A	2	1,13	2,3	3,18	8,11	7,11	6,03	7,09	6,9	7,61	5,72	
2500A	1,5	1,08	1,85	2,56	8,61	7,05	6,19	7,38	7,12	6,98	4,02	
2000A	1,3	0,74	1,5	2,07	8,55	7,81	6,25	7,49	6,01	5,91	5,51	
2500A	1	0,45	1,1	1,52	8,38	7,03	6,12	7,01	5,15	4,51	3,41	
3300A	0,80	0,45	0,91	6,92	7,57	8,17	8,69	9,11	9,41	9,48	8,02	
3600A	0,62	0,35	0,71	6,71	7,34	7,91	8,42	8,83	9,12	9,18	8,02	
4000A	5,2	2,07	5,6	10,7	11,5	8,33	7,47	6,58	5,68	4,76	3,83	
4250A	2,5	1,28	2,9	8,65	9,71	7,68	7,08	6,41	5,71	4,99	4,23	
5000A	1,4	0,14	1,45	9,68	9,14	9,57	9,21	8,73	8,16	7,51	6,81	
6300A	6,5	2,31	6,9	11,2	11,2	11,4	10,7	9,94	9,08	8,16	7,18	

Recommended Spaces Between Two Lines



Sample Layout in Busbar High- Rise Buildings



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ALUMINUM BUSBAR SIZES AND WEIGHTS

AMPER CLASS	BUSBAR MM			CONDUCTOR/SECTION				FEEDER KG/MT		
	W		H	MM			FIG.	3p3w+pe	3p4w+pe	
400A	118	X	102	1	6	X	25	1	5.87	6.22
500A	118		102				30	1	6.18	6.61
630A	118		102				40	1	6.82	7.49
800A	118		118				55	1	8.13	8.93
1000A	118		142				80	1	10.25	11.25
1250A	118		172				110	1	12.66	13.84
1350A	118		187				125	1	13.86	15.06
1600A	118		222				160	1	16.67	19.17
2000A	118		262				200	1	19.90	23
2500A	118		312				250	1	23.89	27.81
2500A	118		329				110	2	24.73	28.16
3000A	118		389				140	2	29.58	33.95
3200A	118		429				160	2	32.76	37.76
4000A	118		509				200	2	39.21	45.47
5000A	118		609				250	2	40.90	47.8
6300A	118	757	200	3	61.05	70.2				

COPPER BUSBAR SIZES AND WEIGHTS

AMPER CLASS	BUSBAR MM			CONDUCTOR/SECTION				FEEDER KG/MT		
	W		H	MM			FIG.	3p3w+pe	3p4w+pe	
550A	118	X	102	1	6	X	25	1	9.3	10.55
650A	118		102				30	1	10.35	11.84
800A	118		102				40	1	12.34	14.32
1000A	118		118				55	1	15.44	15.7
1250A	118		132				70	1	20.5	23.62
1350A	118		142				80	1	21.68	25.78
1600A	118		157				95	1	25	29
2000A	118		187				125	1	31.83	38.27
2250A	118		222				160	1	39.72	48
2500A	118		262				200	1	48.76	59.15
2000A	118		219				55	1	31.65	35.34
2500A	118		249				70	2	38.71	45.87
3300A	118		329				110	2	56.4	67.73
3600A	118		359				125	2	63.1	76.1
4000A	118		389				140	2	69.87	84.33
4250A	118	429	160	2	78.95	95.5				
5000A	118	509	200	2	97.03	117.75				
6300A	118	636	160	3	145.3	176.35				

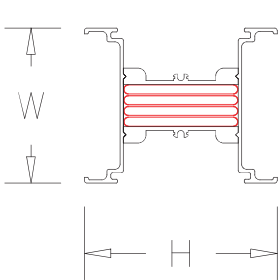


FIG 1

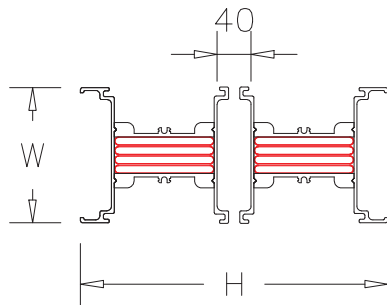


FIG 2

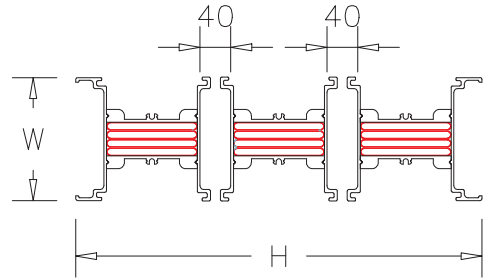


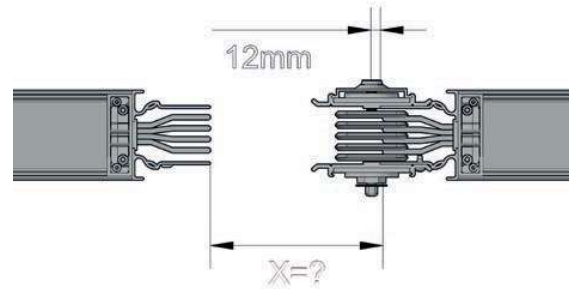
FIG 3

Special Length Measures

SPECIAL LENGTH DIMENSIONS OF THE TWO BUSBAR

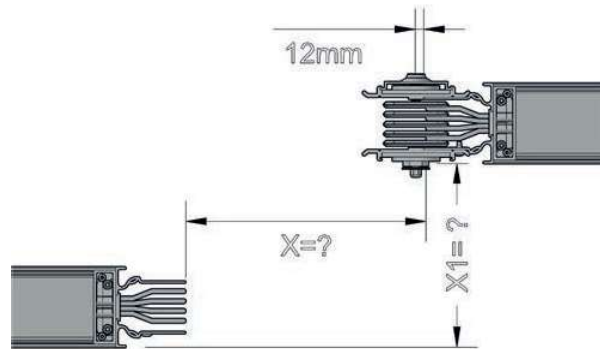
X: measured length

Example
 X=1000 mm Additional block spacing is 24 mm.
 1000-24=976 mm
 Order size: 976mm



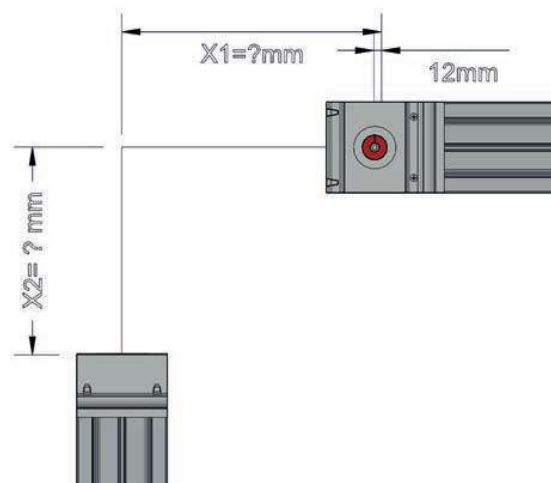
DOUBLE VERTICAL ELBOW MEASUREMENT

X dimensions joint block = 24 mm
 The X1 dimension should be taken from the busbar body edge to the other busbar housing edge.



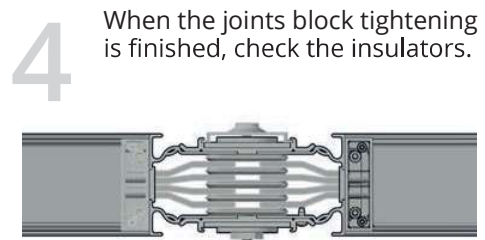
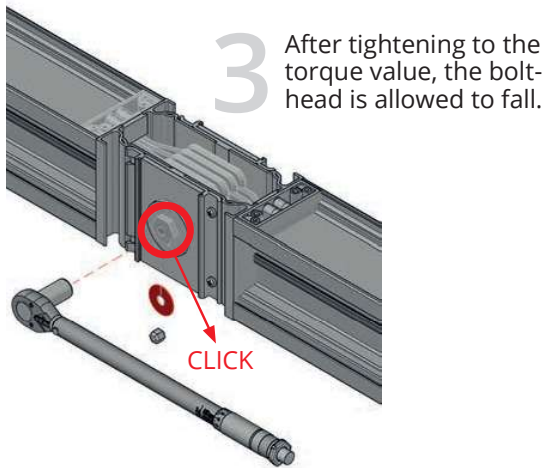
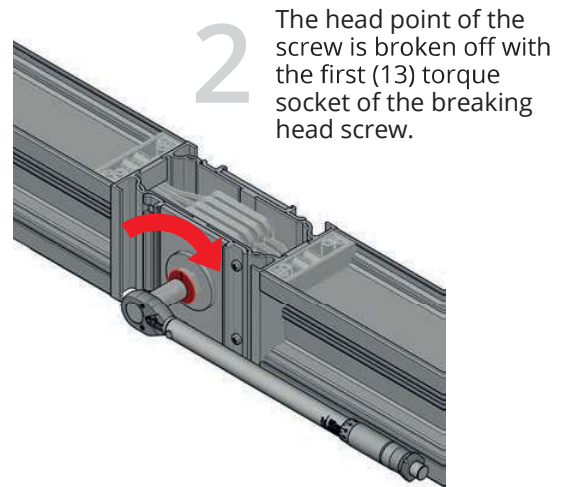
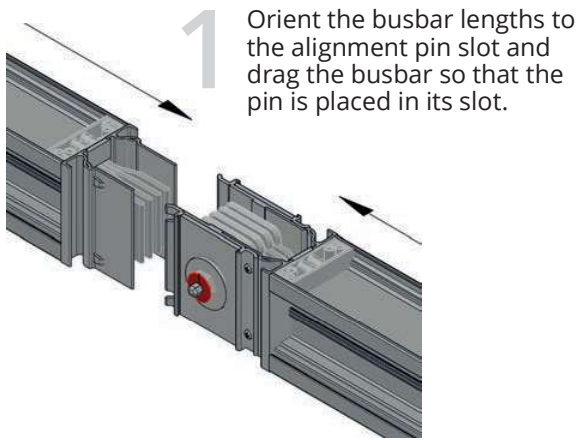
HORIZONTAL ELBOW MEASUREMENT

X dimensions additional block = 24 mm
 The X1 dimension should be taken from the busbar body edge to the other busbar body edge.

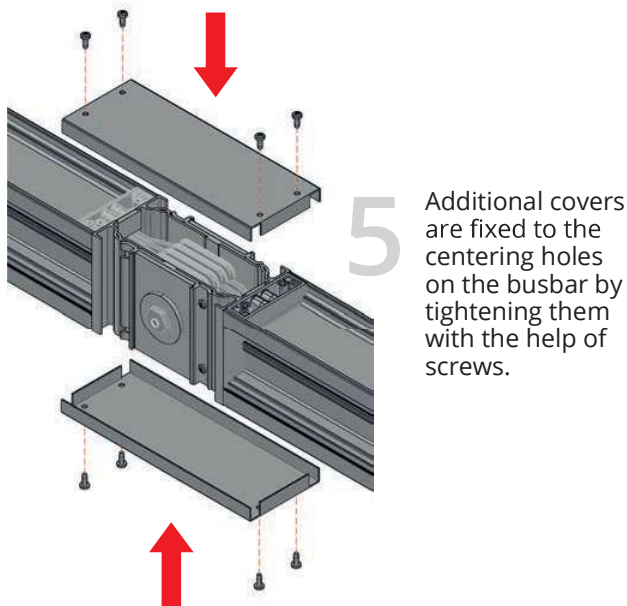


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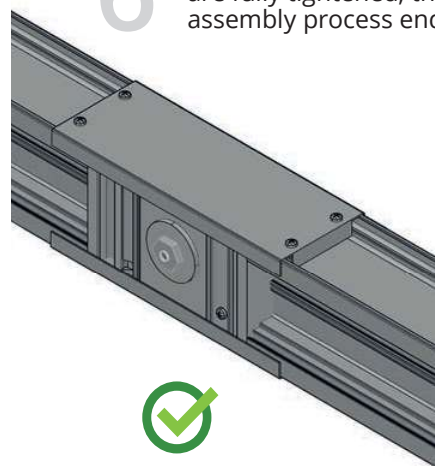
Installation



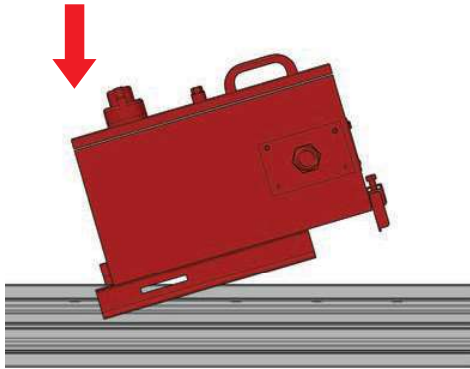
Joint block tightening value is around 60 lbft (80 Nm).



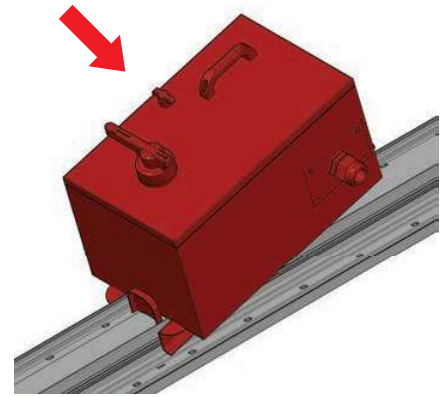
6 If the joint block caps are fully tightened, the assembly process ends.



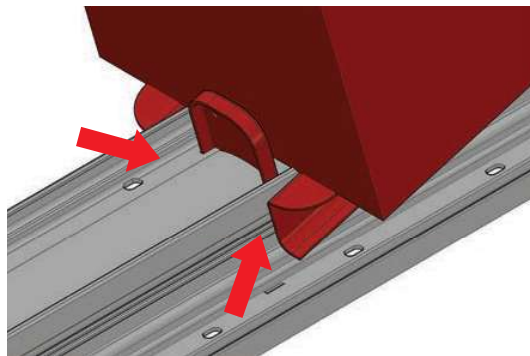
Tap-Off Box Installation



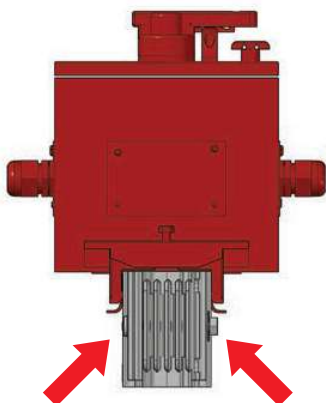
1 While mounting the box, pay attention to the hook at the bottom input part of the output box and mount it to the body.



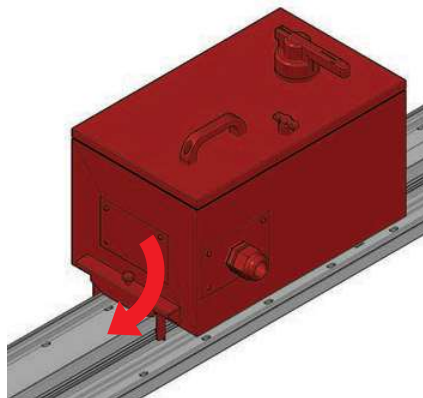
2 The tap-off box is pressed from the top to fit the busbar.



3 Check that the output box is attached to the busbar body with the help of hook system.

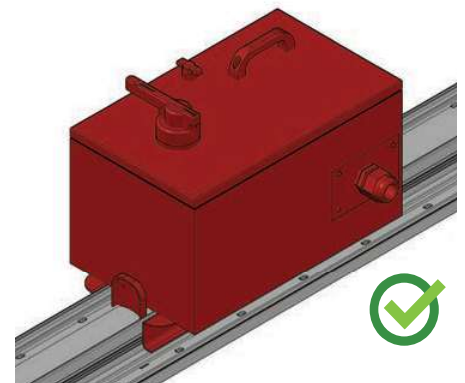


4 It is mounted by screwing the box to the busbar body with the help of a clamp system.



5 It is fixed to the body by tightening the clamp.

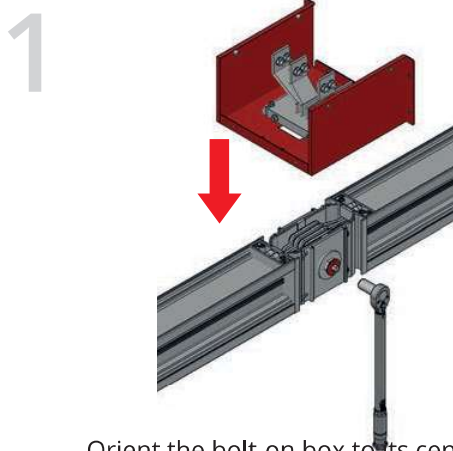
6 Activate the tap-off box by means of a special mechanism. When the mechanism is in (OFF), it is energized when the cover is in the "ON" position.



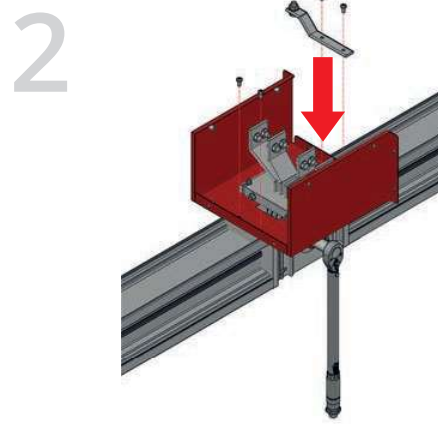
NOTE: In the (ON) position for safety reasons, the box cover is prevented from being opened by the mechanism.

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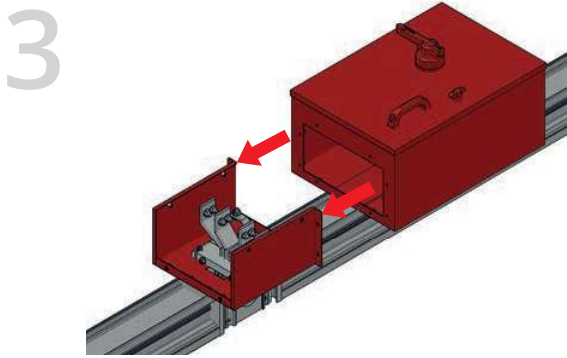
Bolt-On Installation



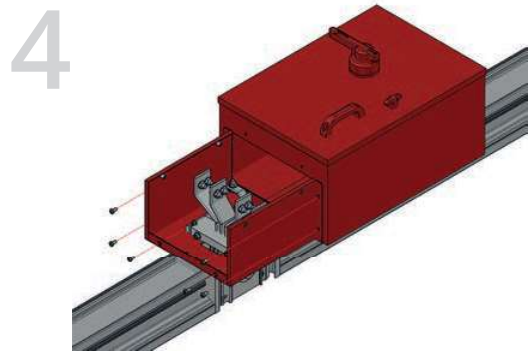
1 Orient the bolt-on box to its center without tightening the busbar joint point, then place the box and tighten the joint block.



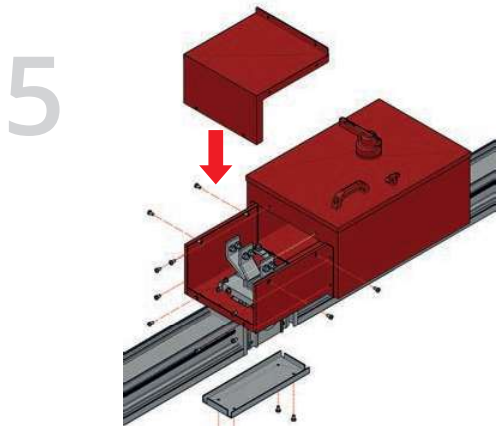
2 After tightening the bolt-on box to the joint, mount the grounding conductor as shown in the figure.



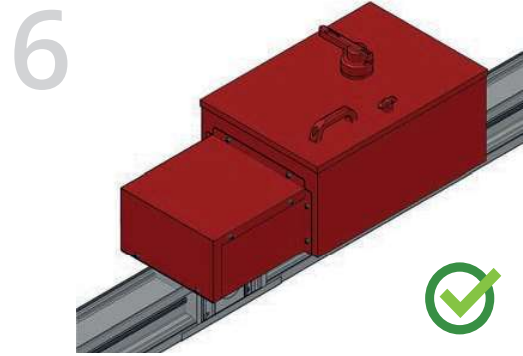
3 To complete the bolt-on assembly, place the joint box on the busbar and slide it towards the joint point.



4 Tighten the joint box and bolt-on with M6x12 screws.



5 Fix the bolt-on cover. Then connect the busbar additional cover. Tighten with M6x12 screw.



6 After the bolt-on cover is installed, the assembly process ends.