



BUSBAR TRUNKING SYSTEMS

**SP-H SERIES
100A-160A**

The smartest way of power distribution



Elektrotechnik A.Ş

SP-H SERIES

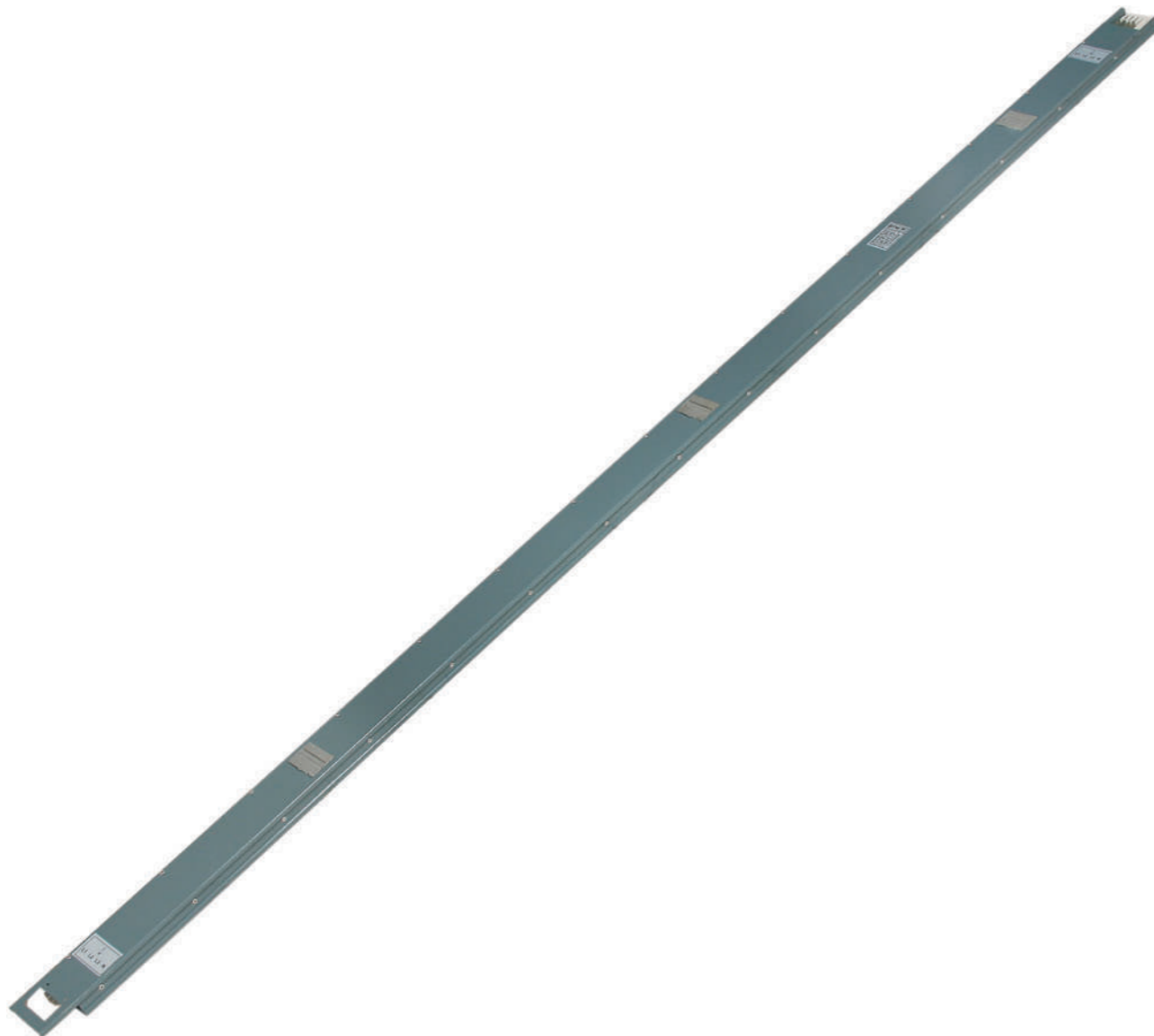
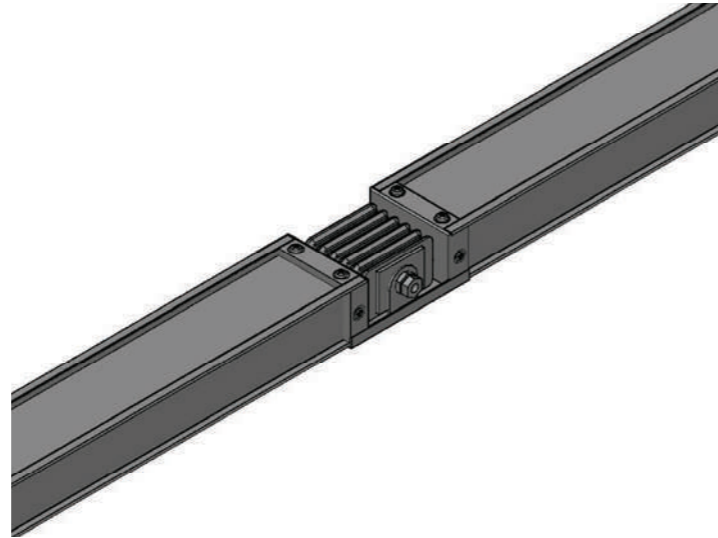


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General Features

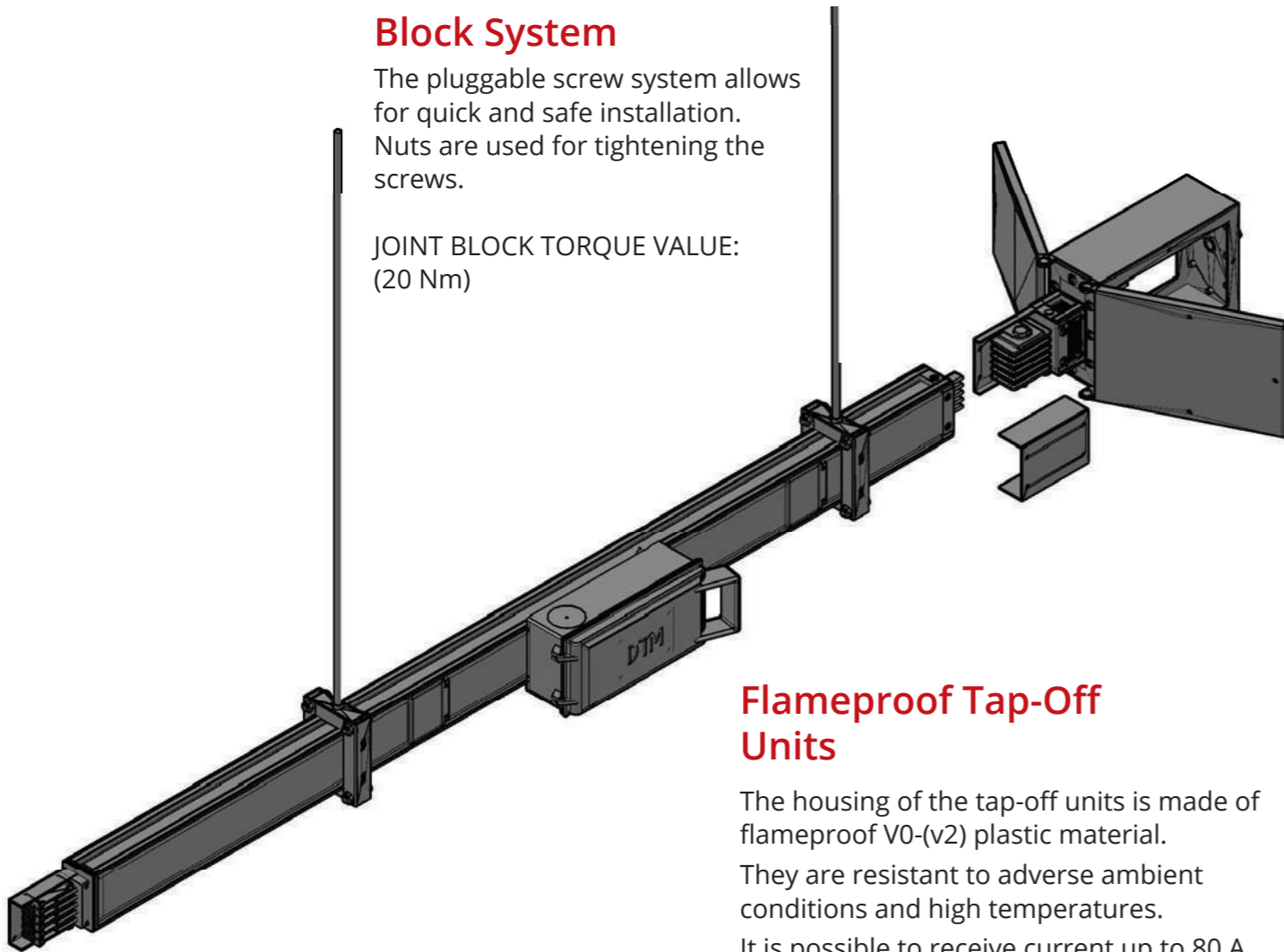
DTM's SP-H 100A -160A Busbar Trunking System is used as a power distribution line to meet power distribution requirements. The enclosure is made of galvanized sheet and RAL 7038 is used as the standard color.



Block System

The pluggable screw system allows for quick and safe installation. Nuts are used for tightening the screws.

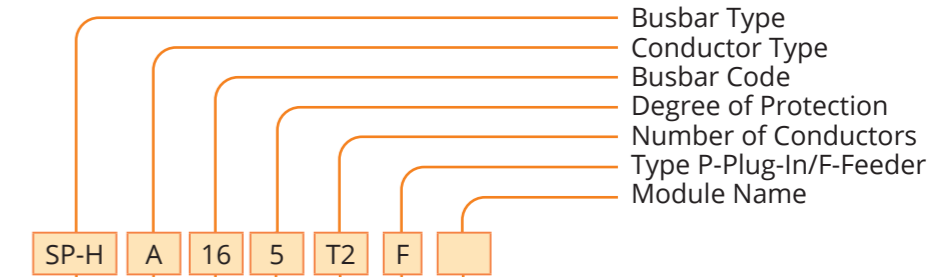
JOINT BLOCK TORQUE VALUE:
(20 Nm)



Flameproof Tap-Off Units

The housing of the tap-off units is made of flameproof V0-(v2) plastic material. They are resistant to adverse ambient conditions and high temperatures. It is possible to receive current up to 80 A using the tap-off units. Tap-off units are installed easily and safely without need for any skilled person.

Order Code System



Busbar Type

Conductor Type

Busbar Code

Degree of Protection

Number of Conductors

Module Name

ALUMINUM (AL)	(A)
COPPER (CU)	(C)

SP-H AL		SP-H CU	
CURRENT	BUSBAR CODE	CURRENT	BUSBAR CODE
100	10	100	11
160	16	160	17

IP	5
----	---

NUMBER OF CONDUCTORS	CODE	L1	L2	L3	N	1/2 EARTH	CLEAN EARTH	1/2 CLEAN EARTH	EARTH
3P+N+PE (4P)	T1	✓	✓	✓	✓				✓
3P+N+PE+FE1 (5P)	T2	✓	✓	✓	✓	✓			✓

Type
Information about the Busbar's Intended Use

(P) PLUG-IN USED FOR RECEIVING CURRENT FROM PLUG-IN POINTS IN STRAIGHT LENGTHS.
(F) FEEDER USED IN DIRECT SUPPLY POINTS.

Type P-Plug-in / F-Feeder

Feeder Busbar	FS
Plug-In Busbar	PS
Horizontal Elbow Vertical Elbow	YD DD
Feeder Optional Length	FX
Plug-In Optional Length	PX
Tap-Off Unit Plastic	KP
Top Feed Module	BM
End Feed Module	SM
Centre Feed Module	BR
Flanged End	S
Dilatation Module	D
Hanger Kit	A
Centre Feed Module Left	BL

TECHNICAL TABLE (SP-H AL)

ALUMINUM CONDUCTOR (AL)

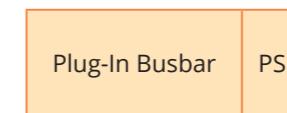
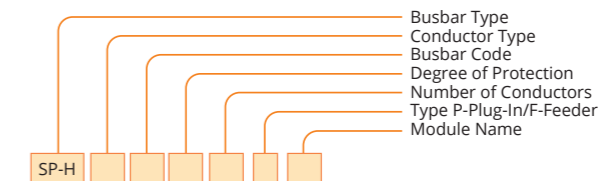
Rated Current	In	A	100	160
Busbar Code			SP-HA10	SP-HA16
Degree of Protection	IP55			
Standards	IEC 61439-6 TS EN 61439-6 IEC 61439-1 TS EN 61439-1			
Max. Rated Operational Voltage	Ue	Vac	690	
Rated Frequency	f	Hz	50	
Rated Insulation Voltage	Ui	V	690	Category IV
Mechanical Impact Resistance (IK Code)	Plug-in Busbar IK07			
Measures for the Protection of Humans	Basic Protection (HD 60364-4-41, Article A1)			
Rated Short-Time Current (1s)	I _{cw}	kA	3.7	6.5
Rated Peak Withstand Current	I _{pk}	kA	5.3	10.3
Rated Short-Time Current for Neutral Conductor (1s)	I _{cn}	kA	2.2	3.7
Rated Peak Withstand Current for Neutral Conductor	I _{pn}	kA	3.25	5.5
Rated Short-Time Current for Protective Circuit (1s)	I _{ccw}	kA	2.2	3.75
Rated Peak Withstand Current for Protective Circuit	I _{ccpk}	kA	3.25	5.5

TECHNICAL TABLE (SP-H CU)

COPPER CONDUCTOR (CU)

Rated Current	In	A	100	160
Busbar Code			SP-HC11	SP-HC17
Degree of Protection	IP55			
Standards	IEC 61439-6 TS EN 61439-6 IEC 61439-1 TS EN 61439-1			
Max. Rated Operational Voltage	Ue	Vac	690	
Rated Frequency	f	Hz	50	
Rated Insulation Voltage	Ui	V	690	Category IV
Mechanical Impact Resistance (IK Code)	Plug-in Busbar IK07			
Measures for the Protection of Humans	Basic Protection (HD 60364-4-41, Article A1)			
Rated Short-Time Current (1s)	I _{cw}	kA	3.7	6.5
Rated Peak Withstand Current	I _{pk}	kA	5.3	10.3
Rated Short-Time Current for Neutral Conductor (1s)	I _{cn}	kA	2.2	3.7
Rated Peak Withstand Current for Neutral Conductor	I _{pn}	kA	3.25	5.5
Rated Short-Time Current for Protective Circuit (1s)	I _{ccw}	kA	2.2	3.75
Rated Peak Withstand Current for Protective Circuit	I _{ccpk}	kA	3.25	5.5

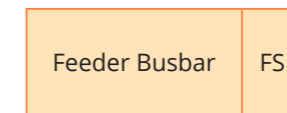
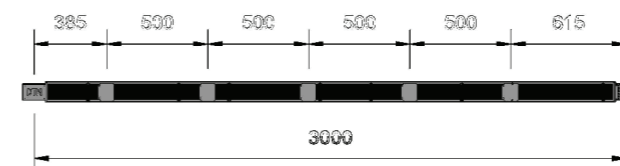
► **Standard Length**



SAMPLE ORDER

160 A Aluminum, Plug-In IP 55 5 Conductor

SP-HA165T2PS



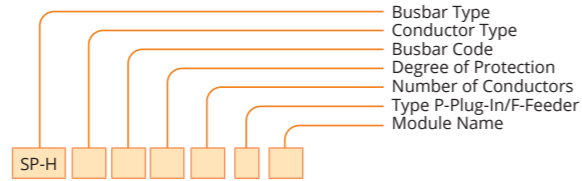
SAMPLE ORDER

100 A Aluminum, Feeder IP 55 5 Conductor

SP-HA105T2FS



Optional Length

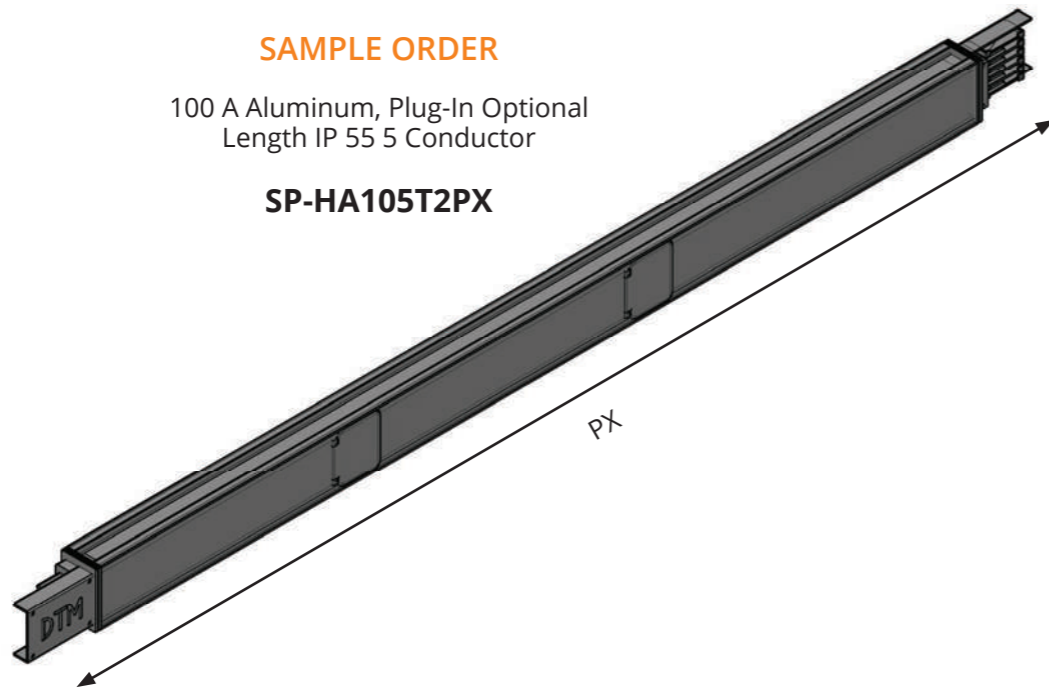


Plug-In Busbar Optional Length	PX
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SAMPLE ORDER

100 A Aluminum, Plug-In Optional Length IP 55 5 Conductor

SP-HA105T2PX

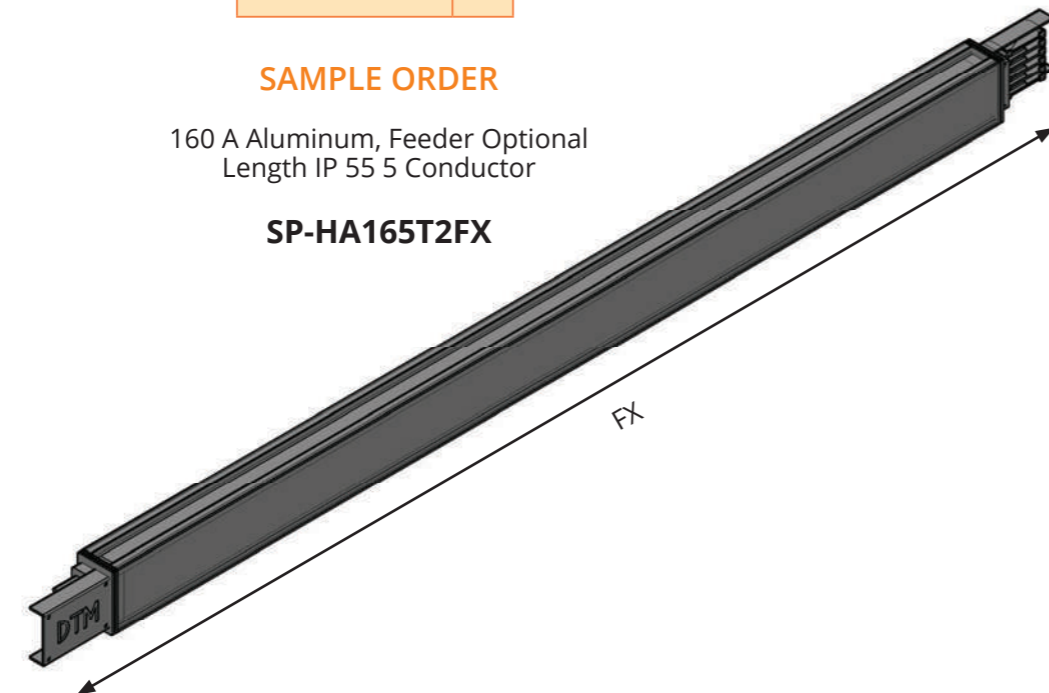


Feeder Busbar Optional Length	FX
----------------------------------	----

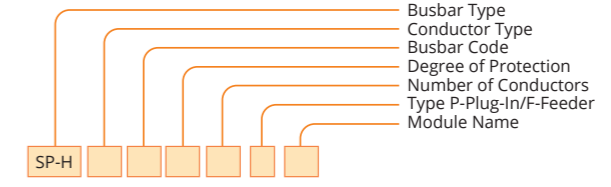
SAMPLE ORDER

160 A Aluminum, Feeder Optional Length IP 55 5 Conductor

SP-HA165T2FX



Elbow Modules

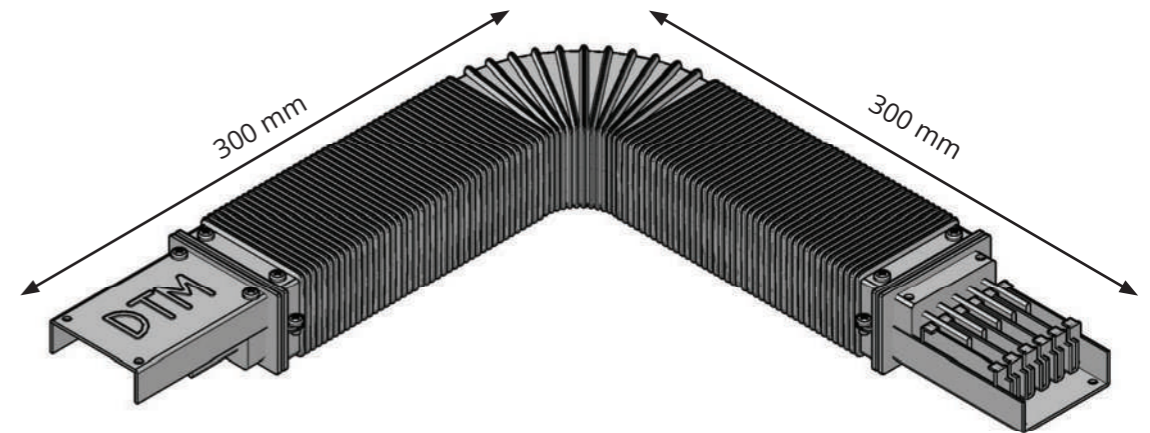


Horizontal Elbow Module	YD
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SAMPLE ORDER

100 A Aluminum, Horizontal Elbow IP 55 5 Conductor

SP-HA105T2YD

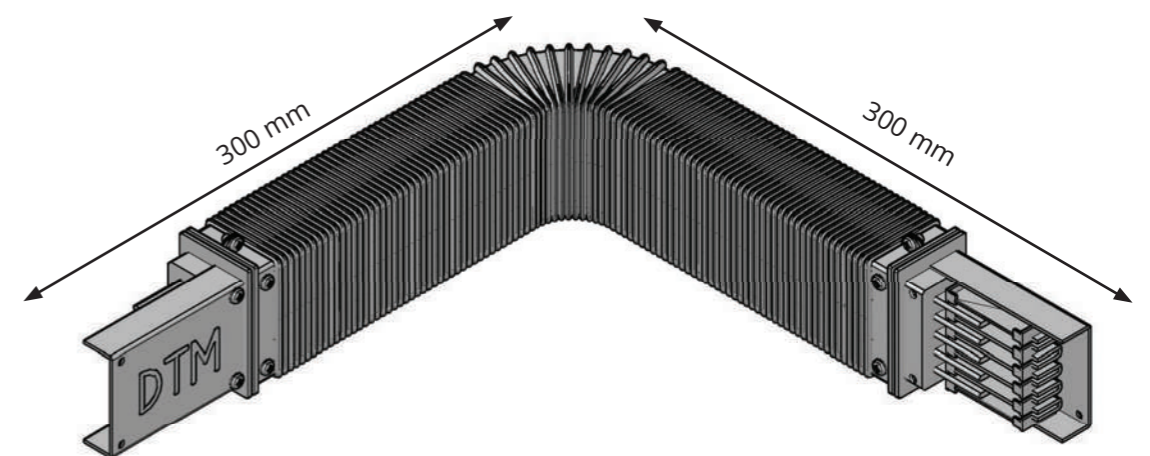


Vertical Elbow Module	DD
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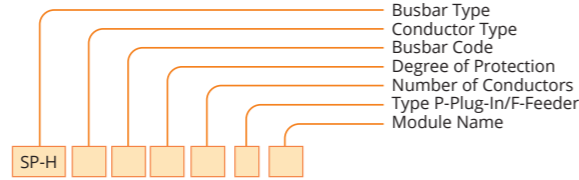
SAMPLE ORDER

160 A Aluminum, Vertical Elbow IP 55 5 Conductor

SP-HA165T2DD



Dilatation Module

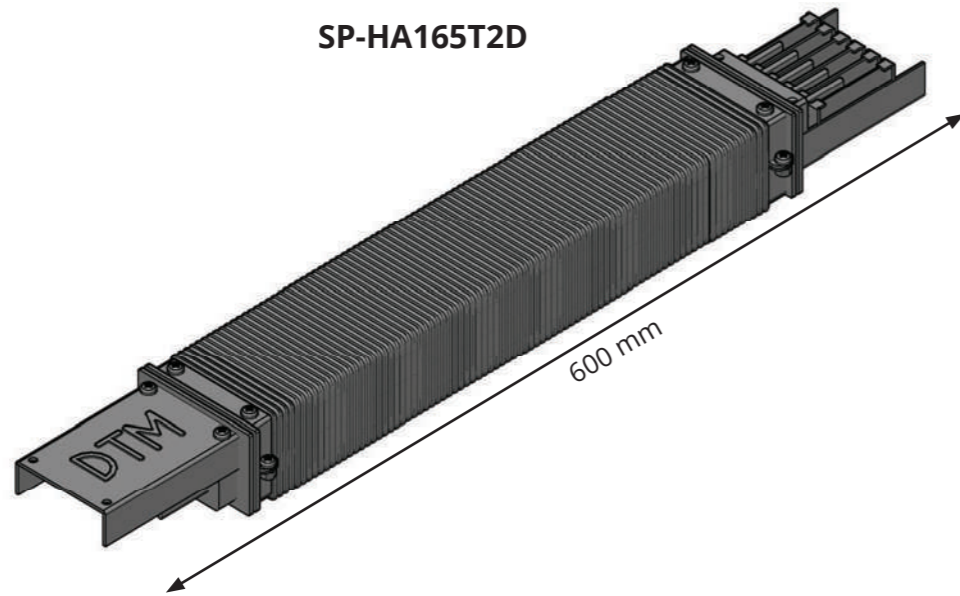


Dilatation Module	D
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SAMPLE ORDER

160 A Aluminum, Dilatation IP 55 5 Conductor

SP-HA165T2D

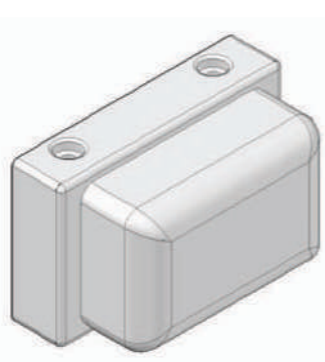


Flanged End	S
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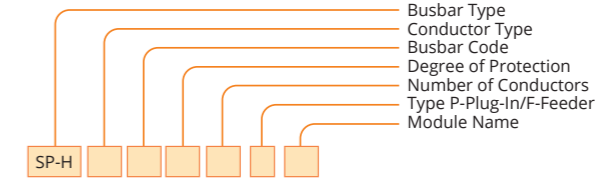
SAMPLE ORDER

100 A Aluminum, Flanged End IP 55 5 Conductor

SP-HA105T2S



Tap-Off Unit Plastic

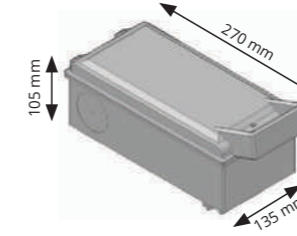


Tap-Off Unit	
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SAMPLE ORDER

16 A Aluminum, Tap-Off Unit Empty IP 55 5 Conductor

SPHA1655B2



SWITCH TYPE CODE

WITH SWITCH	EMPTY
M	B

STANDARD TAP-OFF UNITS (EMPTY) 16A			
CURRENT	CONDUCTOR	CONFIGURATION	CODE
16	4	L1,L2,L3,N,PE (HOUSING)	SPHA1654B1
	5	L1,L2,L3,N,PE +(HOUSING)	SPHA1655B2
	5	L1,L2,L3,N,CPE,PE (HOUSING)	SPHA1655B3

STANDARD TAP-OFF UNITS (EMPTY) 32A			
CURRENT	CONDUCTOR	CONFIGURATION	CODE
32	4	L1,L2,L3,N,PE (HOUSING)	SPHA3254B1
	5	L1,L2,L3,N,PE +(HOUSING)	SPHA3255B2
	5	L1,L2,L3,N,CPE,PE (HOUSING)	SPHA3255B3

STANDARD TAP-OFF UNITS (EMPTY) 40A			
CURRENT	CONDUCTOR	CONFIGURATION	CODE
40	4	L1,L2,L3,N,PE (HOUSING)	SPHA4054B1
	5	L1,L2,L3,N,PE +(HOUSING)	SPHA4055B2
	5	L1,L2,L3,N,CPE,PE (HOUSING)	SPHA4055B3

STANDARD TAP-OFF UNITS (EMPTY) 63A			
CURRENT	CONDUCTOR	CONFIGURATION	CODE
63	4	L1,L2,L3,N,PE (HOUSING)	SPHA6354B1
	5	L1,L2,L3,N,PE +(HOUSING)	SPHA6355B2
	5	L1,L2,L3,N,CPE,PE (HOUSING)	SPHA6355B3

STANDARD TAP-OFF UNITS (EMPTY) 80A			
CURRENT	CONDUCTOR	CONFIGURATION	CODE
80	4	L1,L2,L3,N,PE (HOUSING)	SPHA8054B1
	5	L1,L2,L3,N,PE +(HOUSING)	SPHA8055B2
	5	L1,L2,L3,N,CPE,PE (HOUSING)	SPHA8055B3

STANDARD TAP-OFF UNITS (MCB) 16A			
CURRENT	CONDUCTOR	CONFIGURATION	CODE
16	4	L1,L2,L3,N,PE (HOUSING)	SPHA1654M1
	5	L1,L2,L3,N,PE +(HOUSING)	SPHA1655M2
	5	L1,L2,L3,N,CPE,PE (HOUSING)	SPHA1655M3

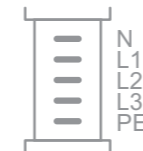
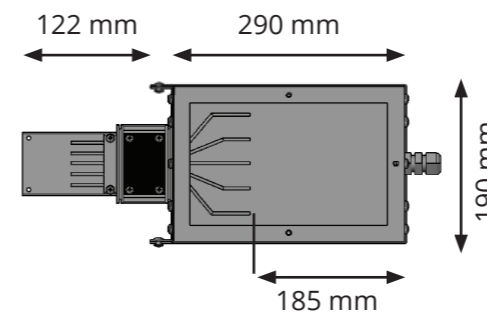
STANDARD TAP-OFF UNITS (MCB) 32A			
CURRENT	CONDUCTOR	CONFIGURATION	CODE
32	4	L1,L2,L3,N,PE (HOUSING)	SPHA3254M1
	5	L1,L2,L3,N,PE +(HOUSING)	SPHA3255M2
	5	L1,L2,L3,N,CPE,PE (HOUSING)	SPHA3255M3

STANDARD TAP-OFF UNITS (MCB) 40A			
CURRENT	CONDUCTOR	CONFIGURATION	CODE
40	4	L1,L2,L3,N,PE (HOUSING)	SPHA4054M1
	5	L1,L2,L3,N,PE +(HOUSING)	SPHA4055M2
	5	L1,L2,L3,N,CPE,PE (HOUSING)	SPHA4055M3

STANDARD TAP-OFF UNITS (MCB) 63A			
CURRENT	CONDUCTOR	CONFIGURATION	CODE
63	4	L1,L2,L3,N,PE (HOUSING)	SPHA6354M1
	5	L1,L2,L3,N,PE +(HOUSING)	SPHA6355M2
	5	L1,L2,L3,N,CPE,PE (HOUSING)	SPHA6355M3

STANDARD TAP-OFF UNITS (MCB) 80A			
CURRENT	CONDUCTOR	CONFIGURATION	CODE
80	4	L1,L2,L3,N,PE (HOUSING)	SPHA8054M1
	5	L1,L2,L3,N,PE +(HOUSING)	SPHA8055M2
	5	L1,L2,L3,N,CPE,PE (HOUSING)	SPHA8055M3

Feed Module

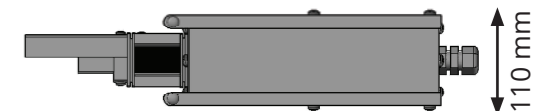
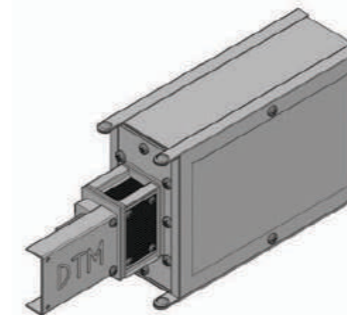


Top Feed Module	BM
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SAMPLE ORDER

160 A Aluminum, Feed Module IP 55 5 Conductor

SP-HA165T2BM



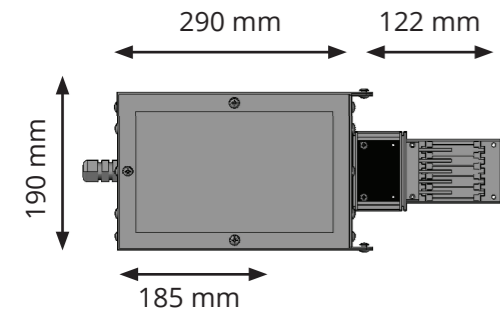
CABLE GLAND PLATES

AMR.	CABLE GLAND TYPE	CODE
100	PG21	BR1
160	PG36	BR2

SWITCH TYPE CODE

WITH SWITCH	EMPTY
M	B

► Feeder Modules



Busbar Type
Conductor Type
Busbar Code
Degree of Protection
Number of Conductors
Type P-Plug-In/F-Feeder
Module Name

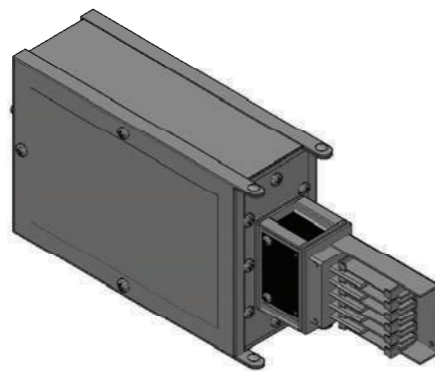
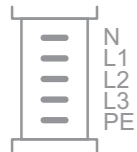
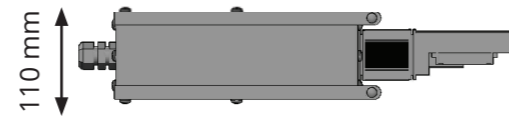
SP-H

End Feed Module SM

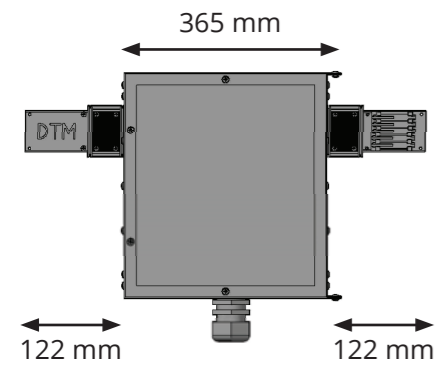
SAMPLE ORDER

160 A Aluminum,
Feed Module IP 55 5 Conductor

SP-HA165T2SM



CABLE GLAND PLATES		
AMR.	CABLE GLAND TYPE	CODE
100	PG21	SR1
160	PG36	SR2

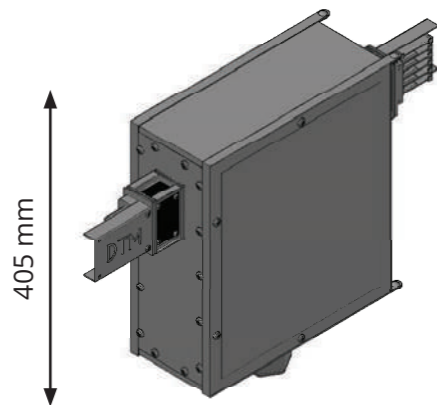
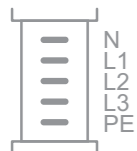
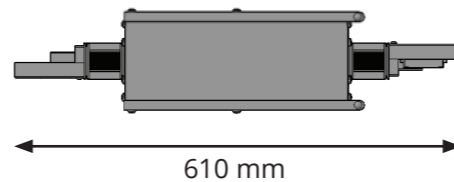


Centre Feed Module LEFT BL

SAMPLE ORDER

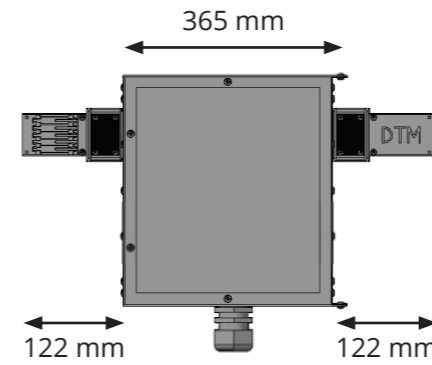
100 A Aluminum,
Centre Feed IP 55 5 Conductor

SP-HA105T2BL



CABLE GLAND PLATES		
AMR.	CABLE GLAND TYPE	CODE
100	PG21	OR1
160	PG36	OR2

► Feeder Modules



Busbar Type
Conductor Type
Busbar Code
Degree of Protection
Number of Conductors
Type P-Plug-In/F-Feeder
Module Name

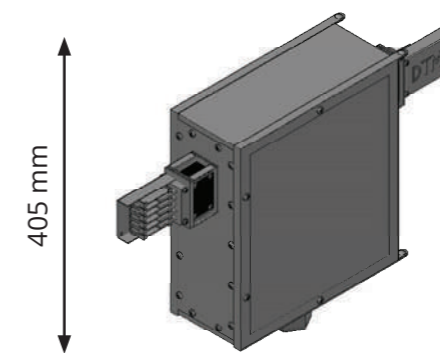
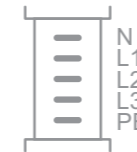
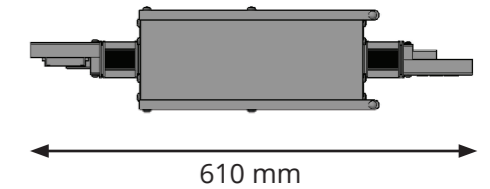
SP-H

Centre Feed Module Right BR

SAMPLE ORDER

160 A Aluminum,
Centre Feed IP 55 5 Conductor

SP-HA165T2BR



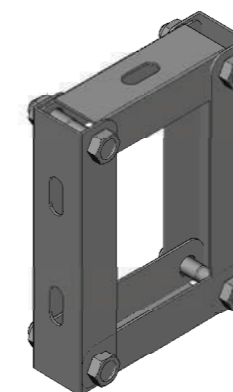
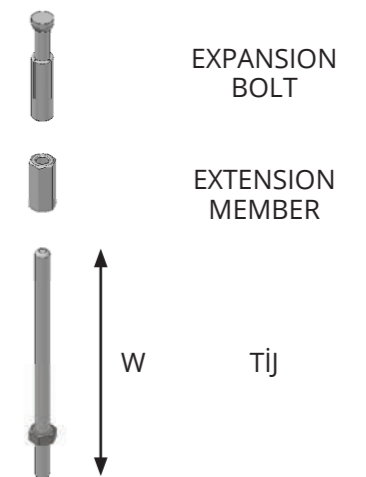
CABLE GLAND PLATES		
AMR.	CABLE GLAND TYPE	CODE
100	PG21	BR1
160	PG36	BR2

Hanger A

SAMPLE ORDER

100 A Aluminum,
Hanger Kit IP 55 5 Conductor

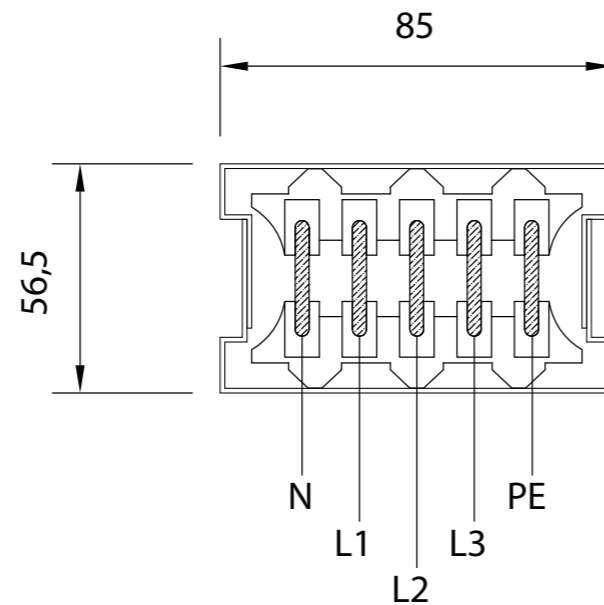
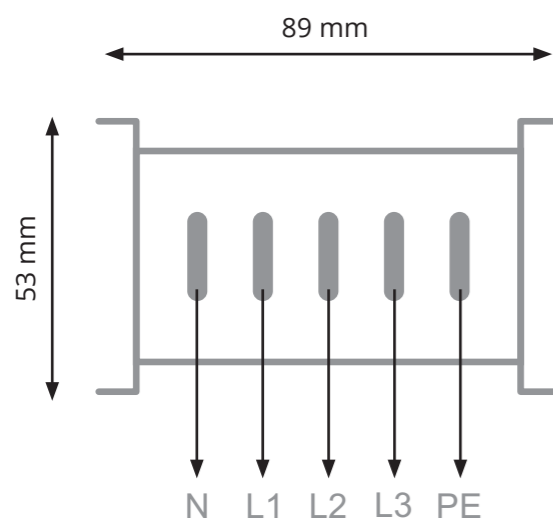
SP-HA105T2A



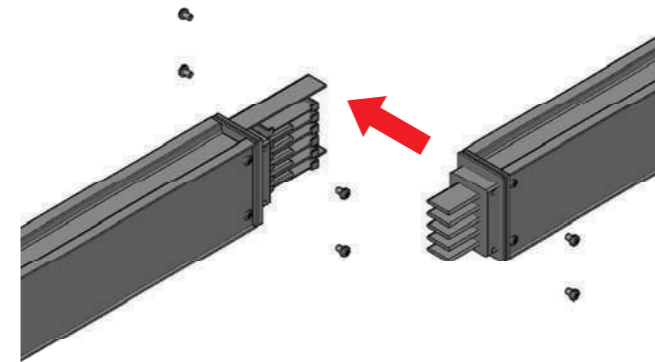
FITTINGS		
Description	W (mm)	Code
B-E 8 Rod Hanger (M8)	500	T101
B-E 8 Rod Hanger (M8)	1000	T102
(M8) Extension Member	-	T103
M 8 Draw-In Anchor	-	T104
M 8 Steel Nut	-	T105

► Busbar Technical Data

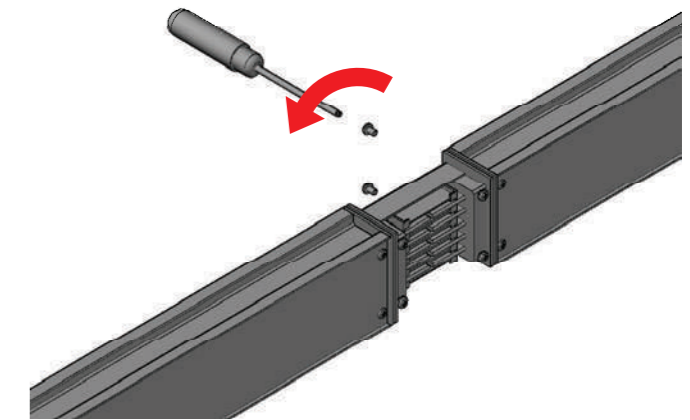
ALUMINUM BUSBAR DIMENSIONS AND WEIGHTS								
AMPERE RATING	BUSBAR MM		EACH PHASE MM			FEEDER KG		
						3P+N+PE (4)	3P+N+PE+FE1 (5)	
100A	53	X	89	3	X	16	1,95	2,15
160A	62		89			25	2,20	2,40
COPPER BUSBAR DIMENSIONS AND WEIGHTS								
AMPERE RATING	BUSBAR MM		EACH PHASE MM			FEEDER KG		
						3P+N+PE (4)	3P+N+PE+FE1 (5)	
100A	53	X	89	3	X	10	2,45	2,75
160A	62		89			16	2,98	3,30



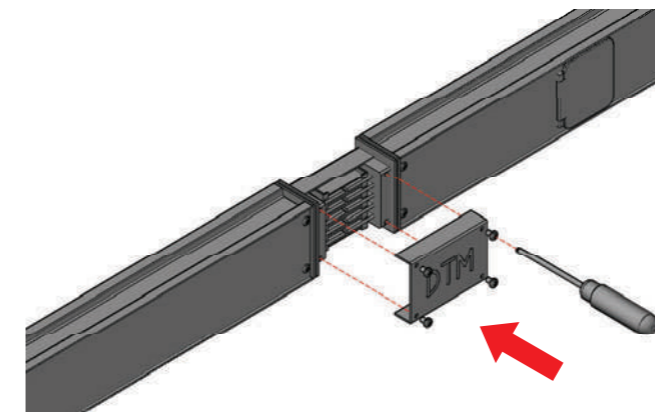
► Installation Instructions



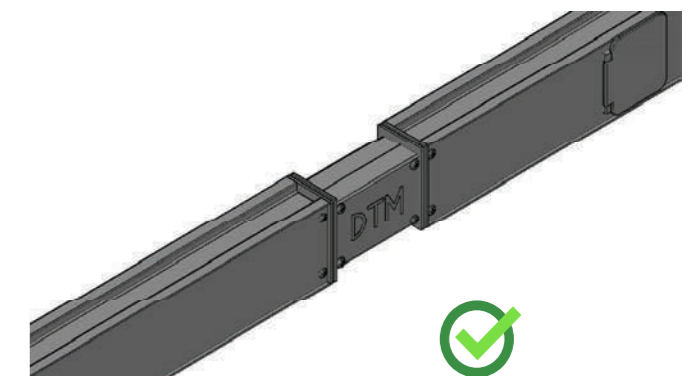
1 Attach the joint cover to the busbar, making sure it fits into the housing.



2 Attach the joint block to the busbar and fix it to the other housing.



3 Before closing the joint cover, check to see if the insulators are cracked/broken. If not, attach the joint cover.



4 For the joint block, torque value is 20Nm.

► Declaration

► Certificates

EC DECLARATION OF CONFORMITY

Product Group SP-H Busbar Power Distribution Systems

Manufacturer DTM Elektrotechnik San. ve Tic. A.Ş.
Çatalmeşe mah.Sultansuyu cad. No:129
34794 Çekmeköy / Istanbul

We hereby confirm that the above-stated product/product group manufactured in DTM's Plants is in conformity with the following standards and directives.

Standard

TS EN 61439-6

Low-voltage switchgear and control gear assemblies - Part 2: Busbar trunking systems (busways)

EC Directive

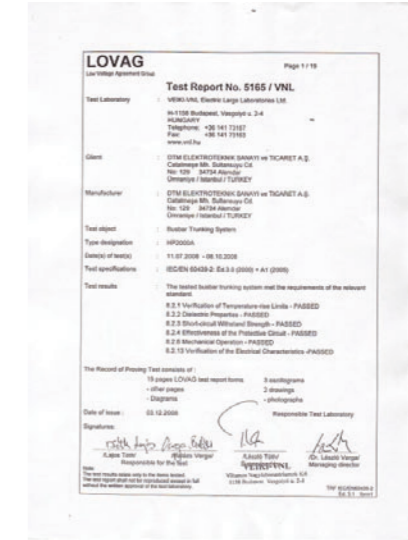
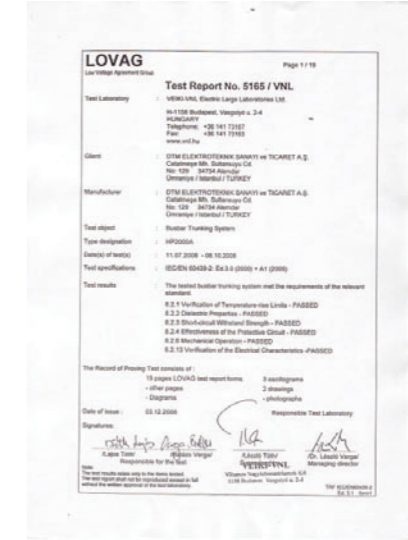
(2006/95/EC) "Directive relating to electrical equipment designed for use within certain voltage limits"

Date

15.01.2015

DTM Elektrotechnik A.Ş.

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