



## SIMAFLEX SUBSTATION CONNECTOR SYSTEM FOR ALUMINUM FLEXIBLE CABLE CONNECTIONS UP TO 500 kV

### KEY FEATURES

- Designed to withstand the high mechanical stress of Extra High Voltage (EHV) substations
- Customizable to application requirements offering 2-3 keeper solutions from one product range
- High electrical performance with in-house machining combined with waxed bolts
- Short lead time thanks to casted components produced inhouse
- Adjustable connectors

TE Connectivity's (TE) SIMAFLEX is a product line of extra high voltage substation clamps and connectors, designed for stranded bare conductors in AC & DC applications up to 550 kV for both Metric and Imperial sizes.

The range includes mechanical support, derivations, connections to terminal equipment (stud & pads), transition connection to rigid aluminum busbars, as well as accessories such as earthing stirrups and spacers.

The Metric range covers connectors for aluminum stranded conductors from 15 mm always to 59 mm O/D and transition connections to aluminum tubular conductors from 80 mm O/D up to 250 MM O/D.

The Imperial range covers connectors for aluminum stranded conductors from 266.8 MCM (0.609") and up to 3500 MCM (2.159") and transition connections to aluminum tubular conductors from 2.5" to 6" for both SPS and EHPS dimensions.

Connections for Single, Twin, Triplex and Quad conductors bundle configurations are available from 100 MM (4") to 450 MM (18").

**Customers can count on consistent, high quality products, driven by TE's proven innovation and backed by our extraordinary customer support.**

## Metric Range



### TECHNICAL DATA

<b>Voltage</b>	63 kV to 550 kV (depending on the conductor's bundle configuration)		
<b>Current</b>	100 A and up to 6000 A		
<b>Short-time current</b>	40 kA / 3 sec and up to 80 kA / 1sec		
<b>Connector size/ conductor size</b>	Small 15 to 32,5 mm	Medium 28,6 to 42,5 mm	Large 42,6 to 59 mm
<b>Conductor's bundle spacing</b>	100 mm through 200 mm, 400 mm to 450 mm		
<b>Terminal fixing (stud)</b>	Solid studs in aluminum or copper from 30 mm to 60 mm O/D		
<b>Terminal fixing (pad)</b>	From 80x80 mm to 100x200 mm		
<b>Post insulator's interfaces</b>	76 MM PCD to 275 MM PCD		
<b>Material</b>	High-grade aluminum alloy		
<b>Fasteners</b>	M10/M12 Bolts in stainless steel with pre-waxed nuts to ensure pressure contact efficiency and contact reliability. Avoids bolts seizing during tightening operation.		
<b>Standards</b>	EN (IEC), ANSI/NEMA & DIN Compliant		



SMALL - 2 keepers



MEDIUM - 2 OR 3 keepers



LARGE - 2 OR 3 keepers

### ALUMINUM BUS SIZES (FOR TRANSITION CONNECTORS)

Busbar Size	Metric	80	90	100	120	125	140	150	160	200	220	250
O/D	(mm)	80	90	100	120	125	140	150	160	200	220	250

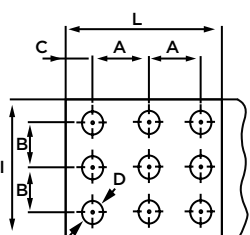
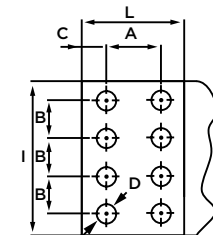
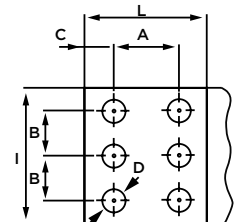
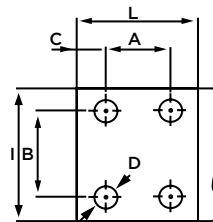
### TERMINAL STUDS

Available from 30mm, 40mm, 50mm to 60 mm diameter in both aluminum and copper material

### TERMINAL PADS CONNECTIONS

Available from 80x80, 100x100, 125x125, to 100x20 mm according to IEC, NF, NEMA and DIN standards

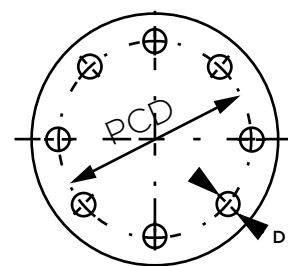
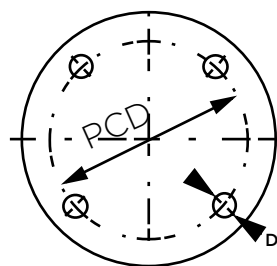
STANDARD	N° HOLES	L	I	A	B	C	D
IEC	4	80	80	40	40	20	14.5
NEMA		80	80	44.4	44.4	15.3	14.3
NF		80	80	45	45	16.5	16
IEC		100	100	40	40	30	14.5
NEMA	6	100	100	44.4	44.4	27.8	14.3
DIN		100	100	50	50	25	14.5
IEC		100	125	40	40	30	14.5
NEMA	8	10	125	44.4	44.4	27.8	14.3
DIN		100	200	50	50	25	14.5
IEC	9	125	125	40	40	22.5	14.5
NF		125	125	45	45	16.5	16



### POST INSULATOR FIXING

Available from 76 PCD through 127 PCD, 178 PCD, 225 PCD, 254 PCD and up to 275 PCD

PCD (mm)	N° HOLES	D
3 Inch	4	0.56"
5 Inch		0.7"
7 Inch		0.86"
8.86 Inch (225 mm)	8	0.7"
10 Inch		0.7"
10.8 Inch (275 mm)		0.7"



## Imperial Range



### TECHNICAL DATA

<b>Voltage</b>	63 kV to 550 kV (depending on the conductor's bundle configuration)		
<b>Current</b>	100 A and up to 6000 A		
<b>Short-time current</b>	40 kA / 3 sec and up to 55 kA / 1sec		
<b>Connector size/ conductor size</b>	Small 266.8 to 1200 MCM	Medium 795 to 2000 MCM	Large 2250 to 3500 MCM
<b>Conductor's bundle spacing</b>	4", 6" 8", 12", 16" and up to 18" nominal		
<b>Terminal fixing (stud)</b>	Threaded studs in aluminum or copper from 1-1/2", 2", 2-1/2" and 3"		
<b>Terminal fixing (pad)</b>	From 3" x 3", 4" x 4" 4" x 5", 4" x 6"		
<b>Post insulator's interfaces</b>	3" PCD and up to 10 Inch PCD		
<b>Material</b>	High-grade aluminum alloy		
<b>Fasteners</b>	Stainless steel hardware with pre-waxed nuts to ensure pressure contact efficiency and contact reliability. Avoids bolts seizing during tightening operation.		
<b>Standards</b>	ANSI/NEMA & DIN Compliant		



SMALL - 2 keepers



MEDIUM - 2 OR 3 keepers



LARGE - 2 OR 3 keepers

### ALUMINUM BUS SIZES (FOR TRANSITION CONNECTORS)

BUSBAR SIZE	Imperial	2.5 "	3"	3.5"	4"	5"	6"
O/D	(Inch)	2.875	3.5	4	4.5	5.563	5.625

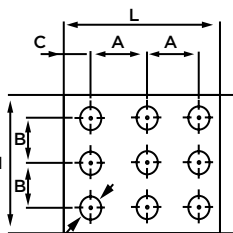
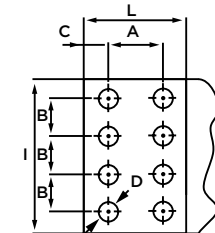
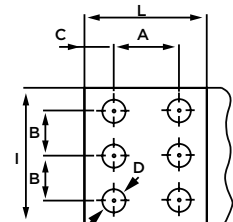
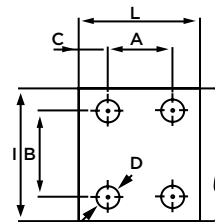
### TERMINAL STUDS

Available from 1-1/2", 2", 2-1/2", 3" Dia in both aluminum or copper material

### TERMINAL PADS CONNECTIONS

Available from 3" x 3 " through 4" x 4", 4" x 5", 4" x 6" NEMA standards and up to 4" x 8" according to DIN standards

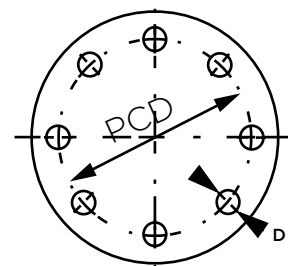
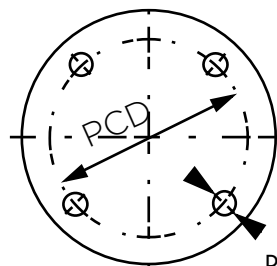
STANDARD	N° HOLES	L	I	A	B	C	D
NEMA	4	3"	3"	1.75"	1.75"	0.63"	0.56"
		4"	4"	1.75"	1.75"	1.13"	0.56"
	6	4"	5"	1.75"	1.75"	1.13"	0.56"
		4"	6"	1.75"	1.75"	1.13"	0.56"
DIN	8	4"	8"	1.97"	1.97"	1"	0.57"



### POST INSULATOR FIXING

Available from 3"PCD through 5"PCD, 7" PCD, 8.86" (225) PCD, 10" PCD and up to 10.8" (275) PCD

PCD (mm)	N° HOLES	D
3 Inch	4	0.56"
5 Inch	8	0.7"
7 Inch		0.86"
8.86 Inch (225 mm)		0.7"
10 Inch		0.7"
10.8" (275 mm)		0.7"



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