

Busbar supports

SPI SERIES

DIMENSIONS (mm)

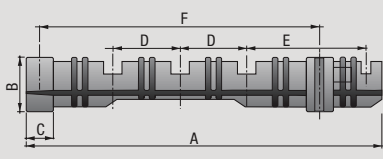
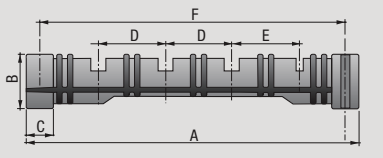
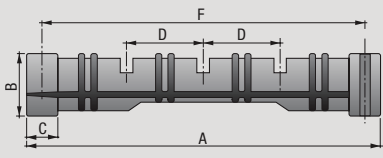
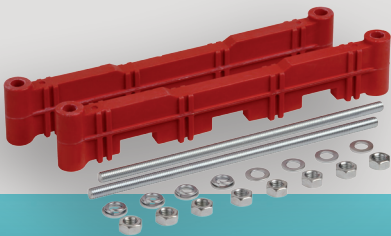
TECHNICAL CHARACTERISTICS

Series of insulators designed to be used as a busbar support element in three-phase systems and three-phase plus neutral systems.

The series consists of two families, each divided into four different measurements dimensionally related to the sections of the bars, four for the three-phase system and four for the three-phase plus neutral system.

The insulator consists of two crossbars on which socket slots are obtained whose width, which can be completed with a simple and patented system of rider spacers, allows the different bar sections to be adapted by always keeping the axle base constant between the phases. Everything is fitted with threaded shafts, washers and zinc coated nuts for fastening to the frame and the clamping of the two crossbars. Made of polyester resin with the addition of a high percentage of glass fibres, they guarantee a high electrodynamic resistance over time in case of faulty currents and an excellent performance in contaminated atmospheres.

- Colour: red RAL-3002 (a different colour can be provided on request in case of large orders)
- Arc resistance: > 120 s - ASTM D-495
- Material: self-extinguishing in class V0 (3.2 mm) according to the UL-94 standard
- Operating temperature: -40 °C ÷ +130 °C
- Water absorption: < 0.15% - UNI 4292
- Tracking resistance: 300 W/min - ASTM D-2303
- Dielectric rigidity: 12 kV/mm - UNI 4291
- Shock resistance: 25 kJ/m² - UNI 6062
- Expansion coefficient: 2x10-5 °C - UNI 6061
- AC/DC operating voltage: 750/900 V
- Max rated voltage at 50 Hz for 1 min: 3 kV
- Max rated pulse voltage: 8 kV



		Dimensions (mm)					
Code	Model	A	B	C	D	E	F
SA497500	SPI 31	173	32	17	40	-	156
SA498300	SPI 32	237	44	23	60	-	214
SA499100	SPI 33	293	52	23	80	-	270
SA500600	SPI 34	363	62	23	110	-	340

		Dimensions (mm)					
Code	Model	A	B	C	D	E	F
SA501400	SPI 41	213	34	17	40	40	196
SA502200	SPI 42	297	47	23	60	60	274
SA503000	SPI 43	363	56	23	80	70	340

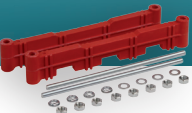
		Dimensions (mm)					
Code	Model	A	B	C	D	E	F
SA504800	SPI 44	422	62	23	110	110	340

INSULATORS AND BUSBAR SUPPORTS

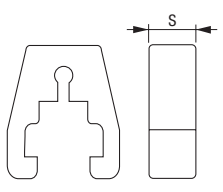
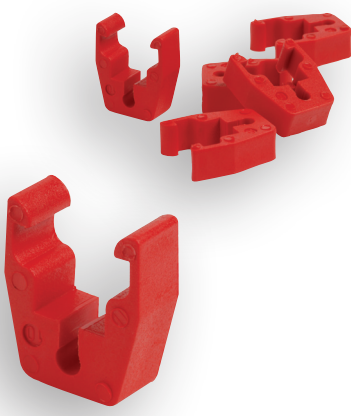
SELECTABLE ELEMENTS

Three-phase system		Three-phase system+Neutral		Bar dimensions (mm)		Ultimate strength	Busbar
Code	Model	Code	Model	Phase	Neutral	(daN)	supports size
SA497500	SPI 31	SA501400	SPI 41	■ 32x4 - 63x5	■ 32x4 - 63 x 4	780	I
SA498300	SPI 32	SA502200	SPI 42	■ 50x5 - 100x10	■ 50x4 - 100x5	1300	II
				■ 50x5 - 100x5			
SA499100	SPI 33	SA503000	SPI 43	■ 50x8 - 125x10	■ 50x4 - 125x10	2000	III
				■ 50x5 - 125x10			
SA500600	SPI 34	SA504800	SPI 44	■ 50x8 - 160x10	■ 50x4 - 160x10	2500	IV
				■ 50x5 - 160x10	■ 50x4 - 160x10	2500	

Ultimate strength tolerance ±10% 1 daN = 10 N



Spacing slugs



DIMENSIONS (mm)		
Code	Model	Thickness S (mm)
SA477700	SB 010	1
SA478500	SB 020	2
SA479300	SB 025	2.5
SA480100	SB 030	3
SA481900	SB 035	3.5
SA482700	SB 040	4
SA483500	SB 045	4.5
SA484300	SB 050	5
SA485000	SB 060	6
SA486800	SB 075	7.5
SA487600	SB 080	8
SA488400	SB 100	10
SA489200	SB 110	11



Busbar supports and spacers: one bar per phase
SELECTABLE ELEMENTS

SPI SERIES

Distance between phases	Phase bar height (mm)										Bar thickness (mm)		Rated current (A) In	Symmetrical short circuit current between phases (kA)				Symmetrical short circuit current between phases (kA)										Three-phase system			Three-phase system+Neutral									
											Phase	Neutral*																Busbar supports	Positioning diagram	Busbar supports	Positioning diagram									
	32	40	50	63	80	100	125	160	4	5	6	8	10	4	5	Copper	Aluminium	5	7.5	10	15	20	25	30	35	40	45					50	60	70						
	■								■					■		380	230	650	435	330												SPI31	6-SB 10	2	SPI41	8-SB 10	7			
	■									■				■		420	250	820	550	410	275											SPI31	-	1	SPI41	2-SB 10	6			
		■								■				■		470	280	730	490	365												SPI31	6-SB 10	2	SPI41	8-SB 10	7			
		■									■			■		520	310	915	610	460	305											SPI31	-	1	SPI41	2-SB 10	6			
			■							■				■		570	340	820	545	410	275											SPI31	6-SB 10	2	SPI41	8-SB 10	7			
			■								■			■		630	380	1020	680	510	340												SPI31	-	1	SPI41	2-SB 10	6		
				■						■				■		680	410	920	615	460	310												SPI31	6-SB 10	2	SPI41	8-SB 10	7		
				■							■			■		760	460	1145	765	575	385												SPI31	-	1	SPI41	2-SB 10	6		
																630	380	1250	835	625	420											SPI32	12-SB 50	3	SPI42	12-SB 50+2-SB 40	8			
																700	420		1000	750	500											SPI32	12-SB 45	3	SPI42	12-SB 45+2-SB 40	8			
																790	470			1000	670											SPI32	12-SB 35	3	SPI42	12-SB 35+2-SB 40	8			
																870	520			1250	835											SPI32	12-SB 25	3	SPI42	12-SB 25+2-SB 30	8			
																760	460	1400	935	705	470												SPI32	12-SB 50	3	SPI42	12-SB 50+2-SB 40	8		
																840	500		1125	845	560												SPI32	12-SB 45	3	SPI42	12-SB 45+2-SB 40	8		
																950	570			1125	750											SPI32	12-SB 35	3	SPI42	12-SB 35+2-SB 40	8			
																1100	660			1405	935											SPI32	12-SB 25	3	SPI42	12-SB 25+2-SB 30	8			
																930	560		1055	790	530												SPI32	12-SB 50	3	SPI42	12-SB 50+2-SB 40	8		
																1030	620		1265	950	635												SPI32	12-SB 45	3	SPI42	12-SB 45+2-SB 40	8		
																1130	680			1265	845												SPI32	12-SB 35	3	SPI42	12-SB 35+2-SB 40	8		
																1250	750				1055												SPI32	12-SB 25	3	SPI42	12-SB 25+2-SB 30	8		
																1120	670		1180	885	590												SPI32	12-SB 50	3	SPI42	12-SB 50+2-SB 40	8		
																1220	730		1415	1060	710												SPI32	12-SB 45	3	SPI42	12-SB 45+2-SB 40	8		
																1340	800			1415	945												SPI32	12-SB 35	3	SPI42	12-SB 35+2-SB 40	8		
																1480	890				1180												SPI32	12-SB 25	3	SPI42	12-SB 25+2-SB 30	8		
																790	470		1155	770												SPI33	12-SB 110	3	SPI43	12-SB 110+2-SB 60	8			
																870	520			1445	965												SPI33	12-SB 100	3	SPI43	12-SB 100+2-SB 50	8		
																950	570			1300	865												SPI33	12-SB 110	3	SPI43	12-SB 110+2-SB 60	8		
																1100	660				1080													SPI33	12-SB 100	3	SPI43	12-SB 100+2-SB 50	8	
																1130	680			1460	975												SPI33	12-SB 110	3	SPI43	12-SB 110+2-SB 60	8		
																1250	750				1215													SPI33	12-SB 100	3	SPI43	12-SB 100+2-SB 50	8	
																1340	800			1090														SPI33	12-SB 110	3	SPI43	12-SB 110+2-SB 60	8	
																1480	890			1360														SPI33	12-SB 100	3	SPI43	12-SB 100+2-SB 50	8	
																1560	940			1220															SPI33	12-SB 110	3	SPI43	12-SB 110+2-SB 60	8
																1750	1050			1520															SPI33	12-SB 100	3	SPI43	12-SB 100+2-SB 50	8
																	790	470		1355	915												SPI34	12-SB 110	3	SPI44	12-SB 110+2-SB 60	8		
																870	520			1060														SPI34	12-SB 100	3	SPI44	12-SB 100+2-SB 50	8	
																950	570			1015														SPI34	12-SB 110	3	SPI44	12-SB 110+2-SB 60	8	
																1100	660			1265														SPI34	12-SB 100	3	SPI44	12-SB 100+2-SB 50	8	
																1130	680			1140														SPI34	12-SB 110	3	SPI44	12-SB 110+2-SB 60	8	
																1250	750			1425														SPI34	12-SB 100	3	SPI44	12-SB 100+2-SB 50	8	
																1340	800			1280														SPI34	12-SB 110	3	SPI44	12-SB 110+2-SB 60	8	
																1480	890																		SPI34	12-SB 100	3	SPI44	12-SB 100+2-SB 50	8
																1560	940			1425															SPI34	12-SB 110	3	SPI44	12-SB 110+2-SB 60	8
																1750	1050																		SPI34	12-SB 100	3	SPI44	12-SB 100+2-SB 50	8
																	2080	1250																	SPI34	12-SB 100	3	SPI44	12-SB 100+2-SB 50	8

* Three-phase+Neutral system



Busbar supports and spacers: two bars per phase
SELECTABLE ELEMENTS

SPI SERIES

Distance between phases	Phase bar height (mm)		Bar thickness (mm)		Rated current (A) In	Symmetrical short circuit current between phases (kA)																Three-phase system			Three-phase system+Neutral																
			Phase	Neutral*		10	15	20	25	30	35	40	45	50	60	70	Busbar supports	Positioning diagram	Busbar supports	Positioning diagram																					
32	40	50	63	80	100	125	160	4	5	6	8	10	4	5	6	8	10	Copper	Aluminium																						
		■							■					■				1050	630	1250	835	625	500	420	360	315	SPI 32			6-SB 50	4	SPI 42	6-SB 50+2-SB 30	10							
			■						■					■				1270	760	1405	935	705	565	470	400	350	SPI 32			6-SB 50	4	SPI 42	6-SB 50+2-SB 30	10							
				■					■					■				1530	920	1055			790	635	530	455	395	320	SPI 32			6-SB 50	4	SPI 42	6-SB 50+2-SB 30	10					
					■				■					■				1820	1090	1180			885	710	590	505	405	320	SPI 32			6-SB 50	4	SPI 42	6-SB 50+2-SB 30	10					
		■							■					■				1050	630	1445	965	725	580	480	415	360	320	SPI 33			6-SB 50+12-SB 75	5	SPI 43	8-SB 50+12-SB 75	11						
		■								■						■		1150	690	1155	865	695	580	495	435	385	350	290	SPI 33			18-SB 60	5	SPI 43	18-SB 60+2-SB 40	11					
		■									■						■	1300	780	1155			925	770	660	580	515	465	370	270	SPI 33			6-SB 80+12-SB 30	5	SPI 43	6-SB 80+12-SB 30+2-SB 20	11			
		■										■					■	1420	850	1445			1155	965	825	725	640	530	370	270	SPI 33			6-SB 100	4	SPI 43	6-SB 100	9			
			■							■								1270	760	1080			810	650	540	465	405	360	325	SPI 33			6-SB 50+12-SB 75	5	SPI 43	8-SB 50+12-SB 75	11				
			■								■							1390	830	1295			975	780	650	555	490	435	390	325	270	SPI 33			18-SB 60	5	SPI 43	18-SB 60+2-SB 40	11		
			■									■						1540	920	1300			1040	865	740	650	575	520	370	270	SPI 33			6-SB 80+12-SB 30	5	SPI 43	6-SB 80+12-SB 30+2-SB 20	11			
			■										■					1770	1060	1300			1080	925	810	655	535	370	270	SPI 33			6-SB 100	4	SPI 43	6-SB 100	9				
				■						■								1530	920	1215			915	730	610	525	460	405	365	305	SPI 33			6-SB 50+12-SB 75	5	SPI 43	8-SB 50+12-SB 75	11			
				■							■							1690	1010	1460			1095	880	730	625	550	490	440	365	270	SPI 33			18-SB 60	5	SPI 43	18-SB 60+2-SB 40	11		
				■								■						1810	1090	1460			1170	975	835	730	650	530	370	270	SPI 33			6-SB 80+12-SB 30	5	SPI 43	6-SB 80+12-SB 30+2-SB 20	11			
				■									■					1990	1190	1460			1215	1045	915	655	530	370	270	SPI 33			6-SB 100	4	SPI 43	6-SB 100	9				
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							■							■			2710	1630	1470			1080	830	655	530	370	270	SPI 33			6-SB 100	4	SPI 43	6-SB 100	9						
			■						■					■				1050	630	1060	850	680	565	485	425	375	340	285	SPI 34			6-SB 50+12-SB 75	5	SPI 44	8-SB 50+12-SB 75	11					
			■							■						■		1150	690	1360	1020	820	680	535	510	455	410	340	290	SPI 34			18-SB 60	5	SPI 44	18-SB 60+2-SB 40	11				
			■								■						■	1300	780	1355			1085	905	775	680	600	540	450	390	SPI 34			6-SB 80+12-SB 30	5	SPI 44	6-SB 80+12-SB 30+2-SB 20	11			
			■									■						1420	850	1355			1130	970	850	755	680	565	485	SPI 34			6-SB 100	4	SPI 44	6-SB 100	9				
				■						■								1270	760	1295	950	760	635	545	475	425	380	315	270	SPI 34			6-SB 50+12-SB 75	5	SPI 44	8-SB 50+12-SB 75	11				
				■							■							1390	830	1140			910	760	650	570	505	455	380	325	SPI 34			18-SB 60	5	SPI 44	18-SB 60+2-SB 40	11			
				■								■						1540	920	1215			1015	870	760	675	610	505	435	SPI 34			6-SB 80+12-SB 30	5	SPI 44	6-SB 80+12-SB 30+2-SB 20	11				
				■									■					1770	1060	1520			1265	1085	950	845	760	635	545	SPI 34			6-SB 100	4	SPI 44	6-SB 100	9				
					■					■								1530	920	1425	1070	855	715	610	535	475	430	355	305	SPI 34			6-SB 50+12-SB 75	5	SPI 44	8-SB 50+12-SB 75	11				
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					■							■						1810	1090	1370			1140	980	855	760	685	570	490	SPI 34			6-SB 80+12-SB 30	5	SPI 44	6-SB 80+12-SB 30+2-SB 20	11				
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						■					■							1970	1180	1435	1150	955	820	720	640	575	480	410	SPI 34			18-SB 60	5	SPI 44	18-SB 60+2-SB 40	11					
						■						■						2120	1270	1275			1095	960	850	765	635	470	SPI 34			6-SB 80+12-SB 30	5	SPI 44	6-SB 80+12-SB 30+2-SB 20	11					
					■							■					2320	1390	1370			1200	1065	915	635	470	SPI 34			6-SB 100	4	SPI 44	6-SB 100	9							
						■							■				2420	1450	1425			1225	1070	950	855	715	610	SPI 34			6-SB 80+12-SB 30	5	SPI 44	6-SB 80+12-SB 30+2-SB 20	11						
							■							■			2710	1630	1530			1340	1130	915	635	470	SPI 34			6-S											

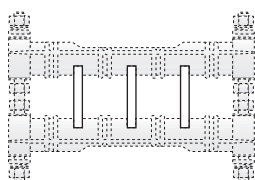
* Three-phase+Neutral system

Busbar supports SPACER POSITIONING DIAGRAMS

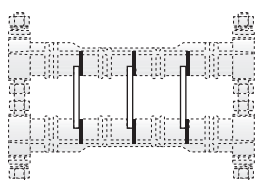
SPI SERIES

THREE-PHASE SYSTEM

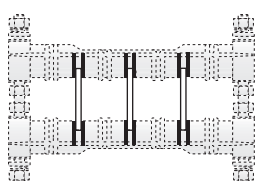
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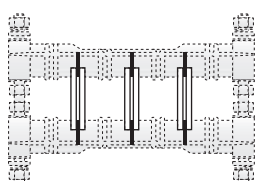
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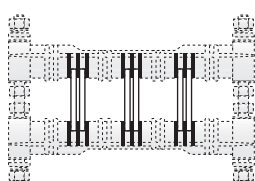
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N° 4

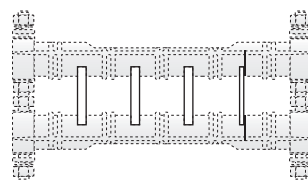


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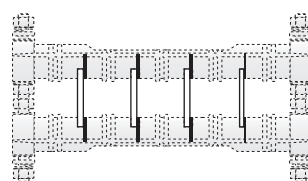


THREE-PHASE + NEUTRAL SYSTEM

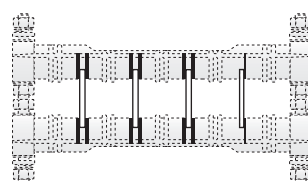
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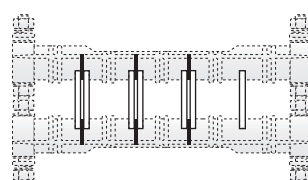
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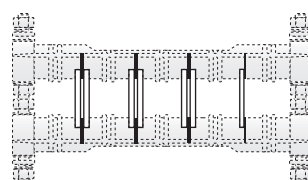
N° 8



N° 9



N° 10



N° 11

