

Busbar supports

SPI SERIES

DIMENSIONS (mm)

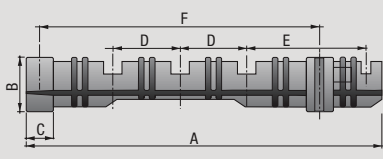
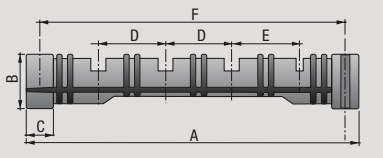
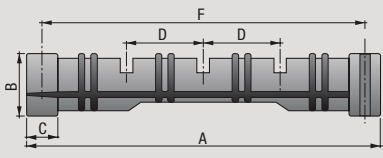
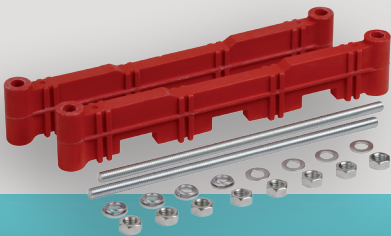
TECHNICAL CHARACTERISTICS

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

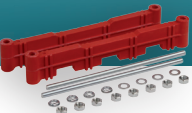
		Dimensions (mm)					
Code	Model	A	B	C	D	E	F
SA504800	SPI 44	422	62	23	110	110	340

INSULATORS AND BUSBAR SUPPORTS

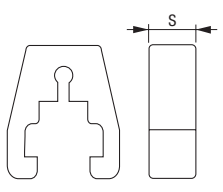
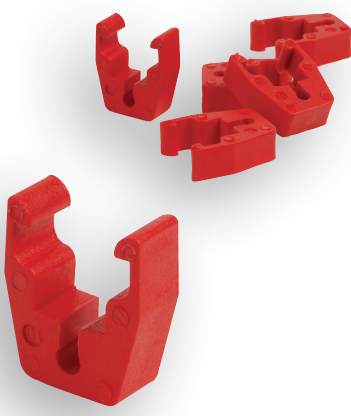
SELECTABLE ELEMENTS

Three-phase system		Three-phase system+Neutral		Bar dimensions (mm)		Ultimate strength (daN)	Busbar supports size
Code	Model	Code	Model	Phase	Neutral		
SA497500	SPI 31	SA501400	SPI 41	I 32x4 - 63x5	I 32x4 - 63 x 4	780	I
SA498300	SPI 32	SA502200	SPI 42	I 50x5 - 100x10	I 50x4 - 100x5	1300	II
				I 50x5 - 100x5			
SA499100	SPI 33	SA503000	SPI 43	I 50x8 - 125x10	I 50x4 - 125x10	2000	III
				I 50x5 - 125x10			
SA500600	SPI 34	SA504800	SPI 44	I 50x8 - 160x10	I 50x4 - 160x10	2500	IV
				I 50x5 - 160x10	I 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*																													
	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	Busbar supports	Spacers	Positioning diagram	Busbar supports	Spacers	Positioning diagram								
	■								■					■		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	
																																							SPI32	12-SB 50	3	SPI42	12-SB 50+2-SB 40	8
																																							SPI32	12-SB 45	3	SPI42	12-SB 45+2-SB 40	8
																																							SPI32	12-SB 35	3	SPI42	12-SB 35+2-SB 40	8
																																							SPI32	12-SB 25	3	SPI42	12-SB 25+2-SB 30	8
																																							SPI32	12-SB 50	3	SPI42	12-SB 50+2-SB 40	8
																																							SPI32	12-SB 45	3	SPI42	12-SB 45+2-SB 40	8
																																							SPI32	12-SB 35	3	SPI42	12-SB 35+2-SB 40	8
																																							SPI32	12-SB 25	3	SPI42	12-SB 25+2-SB 30	8
																																							SPI33	12-SB 110	3	SPI43	12-SB 110+2-SB 60	8
																																							SPI33	12-SB 100	3	SPI43	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*									Distance between supports (mm)																Busbar supports	Spacers	Positioning diagram	Busbar supports	Spacers	Positioning diagram
	32	40	50	63	80	100	125	160	4	5	6	8	10	4	5	6	8	10	Copper	Aluminium	10	15	20	25		30	35	40	45	50	60	70															
			■												■				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							
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					■										■				1970	1180		1225	980	815	700	615	545	490	370	270					SPI 33	18-SB 60	5	SPI 43	18-SB 60+2-SB 40	11							
					■										■				2120	1270			1310	1090	935	820	655	530	370	270					SPI 33	6-SB 80+12-SB 30	5	SPI 43	6-SB 80+12-SB 30+2-SB 20	11							
				■										■				2320	1390				1360	1080	830	655	530	370	270					SPI 33	6-SB 100	4	SPI 43	6-SB 100	9								
					■									■				2420	1450				1460	1220	1050	920	655	530	370	270					SPI 33	6-SB 80+12-SB 30	5	SPI 43	6-SB 80+12-SB 30+2-SB 20	11							
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					■										■				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							
					■										■				1690	1010		1285	1030	855	760	685	570	515	430	370					SPI 34	18-SB 60	5	SPI 44	18-SB 60+2-SB 40	11							
					■										■				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							
					■										■				1990	1190				1425	1225	1070	950	855	715	610					SPI 34	6-SB 100	4	SPI 44	6-SB 100	9							
						■									■				1820	1090		1195	955	795	685	600	530	480	400	340					SPI 34	6-SB 50+12-SB 75	5	SPI 44	8-SB 50+12-SB 75	11							
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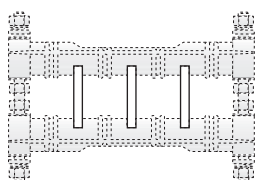
* Three-phase+Neutral system

Busbar supports SPACER POSITIONING DIAGRAMS

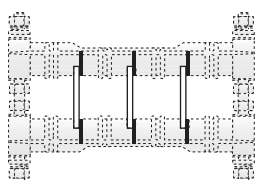
SPI SERIES

THREE-PHASE SYSTEM

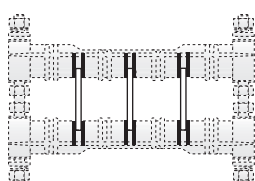
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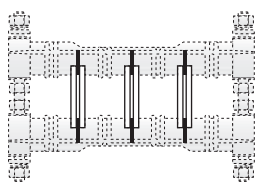
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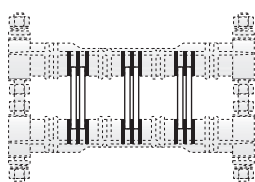
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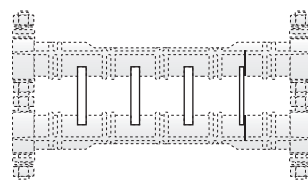


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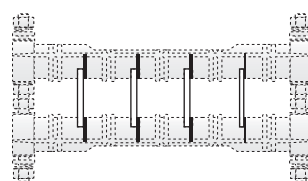


THREE-PHASE + NEUTRAL SYSTEM

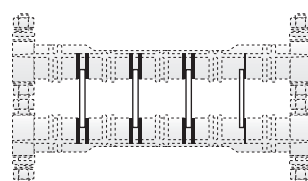
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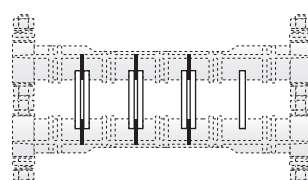
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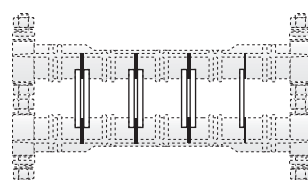
N° 8



N° 9



N° 10



N° 11

