

Semi conductor fuses gRB 690V





Semiconductor Fuses

European square-body fuses

PSC® - gRB 690 VAC (full range)



Ferraz Shawmut PSC-gRB 690 VAC fuse-links provide maximum flexibility in equipment design and ultimate protection for today's power conversion equipment.

This range is a fast acting, full range fuses engineered to provide state of the art protection for power semiconductors such as diodes, thyristors.

These square body fuse-links are available in various body sizes with a broad range of ampere ratings allowing the greatest flexibility in equipment design.

They have pure silver elements embedded in solidified sand which provides optimized I^2t and high interrupting rating. All contact surfaces are plated and all hardware non-magnetic.

All fuses are standard with a low voltage blown fuse indicator. This indicator can operate a microswitch which is easily mounted directly onto the fuse in service.



FEATURES

- Full range (gR curve), fast acting
- Highly current limiting.
- High breaking capacities
- Very low I^2t
- Worldwide mounting acceptance.
- Superior cycling ability.
- High withstanding in rush current and overloads

APPLICATIONS

Protection of rectifiers, inverters, static switch, AC & DC drives and UPS systems.

Ratings

AC: up to 1000 A
690 VAC
150 kA IR
DC: Consult Factory

Approvals

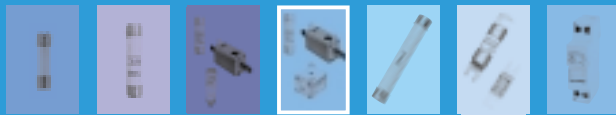
AC: Tested to IEC 269.4

Features/Benefits

Wide range of mounting styles

Broad range of ampere ratings in each body size for design flexibility

IEC 269-4 compliance for fuses for worldwide semiconductor applications



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Voltage	Size	Type	Rating In (A)	Pre-Arcing I²t @ 1ms A²s	Total I²t @ 690V A²s	PN: Power losses (W)				Breaking capacities (kA)
						End contacts		Blades		
						0,8 In	In	0,8In	In	
		gRB	50	0,12	0,7	9	17	9	17	
		gRB	63	0,27	1,6	9	18	9	18	
		gRB	80	0,47	2,8	11	22	11	22	
		gRB	100	1,06	6,2	12	23	12	23	
		gRB	125	1,9	11,2	13	26	13	26	
	70	gRB	160	4,2	25	15	29	15	29	
		gRB	200	7,5	44	17	33	17	34	
		gRB	250	13,5	79	20	39	20	40	
		gRB	315	24	142	23	46	24	47	
		gRB	350	41	240	23	46	24	47	
		gRB	125	1,06	6,2	18	35	18	35	
		gRB	160	2,4	14	19	38	19	38	
		gRB	200	5	29,5	21	41	21	42	
		gRB	250	9,5	56	23	46	24	48	
		gRB	315	18,5	108	27	53	27	54	
	71	gRB	350	23	140	29	58	30	60	
		gRB	400	38	225	30	59	31	61	
		gRB	450	62	360	30	59	31	61	
690V		gRB	500	78	460	32	64	34	67	150
		gRB	200	4,2	25	23	45	23	45	
		gRB	250	8,5	50	25	49	25	50	
		gRB	315	17	100	28	55	29	57	
		gRB	350	23	140	29	58	30	60	
		gRB	400	34	200	32	63	33	65	
	72	gRB	450	47	280	34	67	35	70	
		gRB	500	68	400	35	69	36	72	
		gRB	550	84	495	38	75	39	78	
		gRB	630	124	730	41	81	43	86	
		gRB	700	155	910	45	89	48	95	
		gRB	315	12	69	33	66	34	67	
		gRB	350	17	100	34	68	35	69	
		gRB	400	27	160	36	71	37	73	
		gRB	450	34	200	40	79	41	82	
		gRB	500	47	280	42	84	43	86	
	73	gRB	550	68	400	42	84	44	87	
		gRB	630	102	600	45	89	47	94	
		gRB	700	139	820	47	94	50	100	
		gRB	800	227	1330	48	96	52	104	
		gRB	900	280	1640	55	109	60	119	
		gRB	1000	385	2270	58	115	64	127	

Time/current characteristics see page 8
 Cut off characteristics see page 9
 Total I²t and total operating time see page 10
 Other curves see page 11

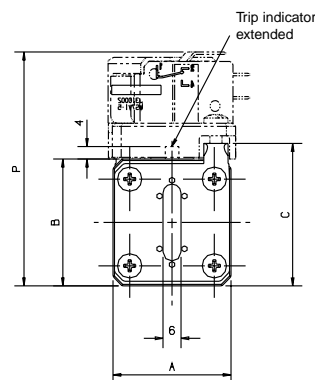
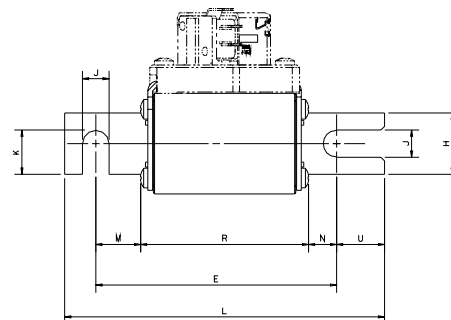


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German standard PSC® - gRB 690 VAC DIN 43653 blades

Size	Catalog Number	Reference Number	Weight (g)	Packaging
	6,9 gRB 70 D11A 050			
	6,9 gRB 70 D11A 063			
	6,9 gRB 70 D11A 080			
	6,9 gRB 70 D11A 100	Q30202		
	6,9 gRB 70 D11A 125			
70	6,9 gRB 70 D11A 160	R301591	370	3
	6,9 gRB 70 D11A 200	S301592		
	6,9 gRB 70 D11A 250	Z301943		
	6,9 gRB 70 D11A 315	J301584		
	6,9 gRB 70 D11A 350	W302124		
	6,9 gRB 71 D11A 125			
	6,9 gRB 71 D11A 160			
	6,9 gRB 71 D11A 200			
	6,9 gRB 71 D11A 250	R302143		
	6,9 gRB 71 D11A 315			
71	6,9 gRB 71 D11A 350	T302214	540	3
	6,9 gRB 71 D11A 400			
	6,9 gRB 71 D11A 450	R301637		
	6,9 gRB 71 D11A 500	A301737		
	6,9 gRB 72 D11A 200			
	6,9 gRB 72 D11A 250			
	6,9 gRB 72 D11A 315			
	6,9 gRB 72 D11A 350	Y300746		
	6,9 gRB 72 D11A 400	V302215		
72	6,9 gRB 72 D11A 450		800	3
	6,9 gRB 72 D11A 500	Z300747		
	6,9 gRB 72 D11A 550	L301724		
	6,9 gRB 72 D11A 630			
	6,9 gRB 72 D11A 700			
	6,9 gRB 73 D11A 315			
	6,9 gRB 73 D11A 350			
	6,9 gRB 73 D11A 400			
	6,9 gRB 73 D11A 450			
	6,9 gRB 73 D11A 500	W302216		
73	6,9 gRB 73 D11A 550		1150	1
	6,9 gRB 73 D11A 630			
	6,9 gRB 73 D11A 700	F301765		
	6,9 gRB 73 D11A 800			
	6,9 gRB 73 D11A 900			
	6,9 gRB 73 D11A 1000			



Microswitches : MS 7V 1-5		Réf.J310002
MS 7V 1-5 UR		Réf.Z310039
MS 7V 1-5 BS		Réf.K310003
MS 7V 1-9 BS		Réf.P310007
MS 7V 1-5 ET		Réf.S310010

Microswitches supplied separately

Size	A	B	C	E	H	J	K	L	M	N	P	R
70	39,8	41,8	62	100	18	9	11	123,4	28,2	28,2	81,8	67
	1.57"	1.65"	2.44"	3.94"	0.71"	0.35"	0.43"	4.86"	1.11"	1.11"	3.22"	2.64"
71	51	51	69	110	25	10,5	16	133,4	32,7	32,7	91	68
	2.00"	2.00"	2.72"	4.33"	0.98"	0.41"	0.63"	5.25"	1.29"	1.29"	3.58"	2.68"
72	60	60	78	114,4	32	13	21,2	149,4	40,7	40,7	100	68
	2.36"	2.36"	3.07"	4.50"	1.26"	0.51"	0.83"	5.88"	1.60"	1.60"	3.94"	2.68"
73	74,4	74,4	92,5	114,4	40	13	19,5	149,4	40,7	40,7	114,4	68
	2.93"	2.93"	3.64"	4.50"	1.58"	0.51"	0.77"	5.88"	1.60"	1.60"	4.50"	2.68"

Fuse holder solution, see p.11