

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

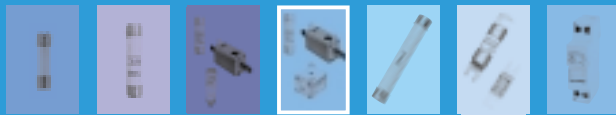
AC: Tested to IEC 269.4

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

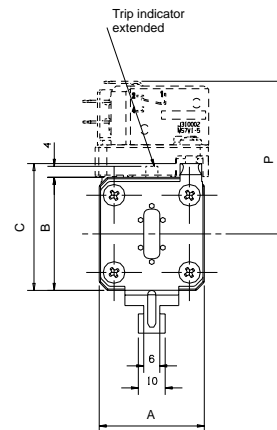
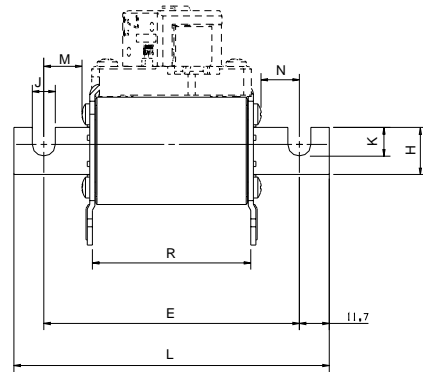



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French standard PSC® - gRB 690 VAC French blades

Size	Catalog Number	Reference Number	Weight (g)	Packaging
70	6,9 gRB 70 EF 050	P301405	200	3
	6,9 gRB 70 EF 063	Q301406		
	6,9 gRB 70 EF 080	R301407		
	6,9 gRB 70 EF 100	S301408		
	6,9 gRB 70 EF 125	T301409		
	6,9 gRB 70 EF 160	V301410		
	6,9 gRB 70 EF 200			
	6,9 gRB 70 EF 250			
	6,9 gRB 70 EF 315			
	6,9 gRB 70 EF 350			
71	6,9 gRB 71 EF 125	Y301321	490	3
	6,9 gRB 71 EF 160	Z301322		
	6,9 gRB 71 EF 200	A301323		
	6,9 gRB 71 EF 250	B301324		
	6,9 gRB 71 EF 315			
	6,9 gRB 71 EF 350	C301325		
	6,9 gRB 71 EF 400	D301326		
	6,9 gRB 71 EF 450	E301327		
	6,9 gRB 71 EF 500	G301858		
	6,9 gRB 72 EF 200	N301335		
6,9 gRB 72 EF 250	P301336			
6,9 gRB 72 EF 315	Q301337			
6,9 gRB 72 EF 350				
6,9 gRB 72 EF 400	R301338			
6,9 gRB 72 EF 450				
6,9 gRB 72 EF 500	S301339			
6,9 gRB 72 EF 550	T301340			
6,9 gRB 72 EF 630	V301341			
6,9 gRB 72 EF 700				
73	6,9 gRB 73 EF 315	C301348	1100	1
	6,9 gRB 73 EF 350			
	6,9 gRB 73 EF 400	D301349		
	6,9 gRB 73 EF 450	E301350		
	6,9 gRB 73 EF 500			
	6,9 gRB 73 EF 550	F301351		
	6,9 gRB 73 EF 630	G301352		
	6,9 gRB 73 EF 700	H301353		
	6,9 gRB 73 EF 800			
	6,9 gRB 73 EF 900			
6,9 gRB 73 EF 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"

Reinforced and longer knives available under designation ESF
 Fuse holder solution, see p.11