

# 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

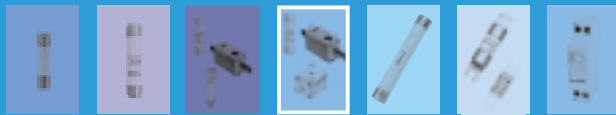
**AC:** Tested to IEC 269.4

#### 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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### PSC® - gRB 690 VAC

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

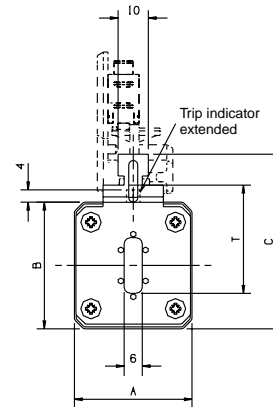
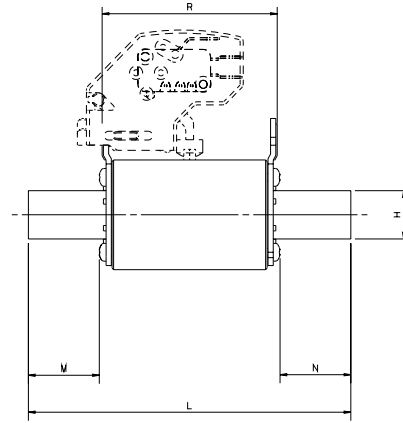


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### German standard PSC® - gRB 690 VAC Full blades (DIN 43620)

Size	Catalog Number	Reference Number	Weight (g)	Packaging
70	6,9 gRB 70 PA 050	Q301245	340	3
	6,9 gRB 70 PA 063	R301246		
	6,9 gRB 70 PA 080	S301247		
	6,9 gRB 70 PA 100	T301248		
	6,9 gRB 70 PA 125	T301179		
	6,9 gRB 70 PA 160	F301190		
	6,9 gRB 70 PA 200	S301178		
	6,9 gRB 70 PA 250	V301249		
	6,9 gRB 70 PA 315	W301250		
	6,9 gRB 70 PA 350	X301251		
71	6,9 gRB 71 PA 125	Y301252	550	3
	6,9 gRB 71 PA 160	Z301253		
	6,9 gRB 71 PA 200	A301254		
	6,9 gRB 71 PA 250	B301255		
	6,9 gRB 71 PA 315	R301177		
	6,9 gRB 71 PA 350	E301258		
	6,9 gRB 71 PA 400	V301226		
	6,9 gRB 71 PA 450	C301256		
	6,9 gRB 71 PA 500	D301257		
	72	6,9 gRB 72 PA 200		
6,9 gRB 72 PA 250		G301260		
6,9 gRB 72 PA 315		H301261		
6,9 gRB 72 PA 350		J301262		
6,9 gRB 72 PA 400		K301263		
6,9 gRB 72 PA 450		L301264		
6,9 gRB 72 PA 500		M301265		
6,9 gRB 72 PA 550		N301266		
6,9 gRB 72 PA 630		P301267		
6,9 gRB 72 PA 700		Q301268		
73	6,9 gRB 73 PA 315	R301269	1120	1
	6,9 gRB 73 PA 350	S301270		
	6,9 gRB 73 PA 400	T301271		
	6,9 gRB 73 PA 450	V301272		
	6,9 gRB 73 PA 500	W301273		
	6,9 gRB 73 PA 550	N301404		
	6,9 gRB 73 PA 630	X301274		
	6,9 gRB 73 PA 700	Y301275		
	6,9 gRB 73 PA 800	Z301276		
	6,9 gRB 73 PA 900	A301277		
6,9 gRB 73 PA 1000	B301278			



Microswitches : 70	MS PA 2-5	Réf.T210398
	MS PA 2-9	Réf.V210399
	MS PA 2-5 B2	Réf.W210400
71-72-73	MS PA 2-5	Réf.H210158
	MS PA 2-9V	Réf.J210159
	MS PA 2-5 B2	Réf.C210160

Microswitches supplied separately

Size	A	B	C	E <sup>2</sup>	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"

180° position trip indicator available under PV designation but no micro switch possible  
Fuse holder solution, see p.11