

Semiconductor & Special Protection

Protistor® Square body fuse-links

Sizes 7x gRB 690VAC 50 to 1000A

The 690V Protistor® fuse-links provide maximum flexibility in equipment design and ultimate protection for today's power conversion equipment. These square body fuse-links are available in different body sizes, each size having multiple worldwide acceptable mounting styles.

The Protistor® gR have been engineered to provide full range protection to eliminate all overloads and short circuit fault. Each fuse is assembled with pure silver, die-cut elements embedded in solidified sand, which helps control arcing characteristics for a lower I²t and high interrupting rating level. All contact surfaces are silver plated and all hardware is non-magnetic.

All fuse-links can be equipped with a low voltage trip-indicator which can operate a field mountable microswitch.



Benefits

- Extremely fast acting
- Eliminate all overloads
- Current limiting
- Low I²t for improved semiconductor protection
- Excellent cycling capability
- Multiple body sizes and terminals or blades combination
- gR Class according to VDE 636-23 and IEC 60269-4

Applications

Protection of inverters, UPS systems, motor drives and similar 690V or less equipment.

Ratings

690VAC IEC 60269-4 and 700VAC UL Recognized

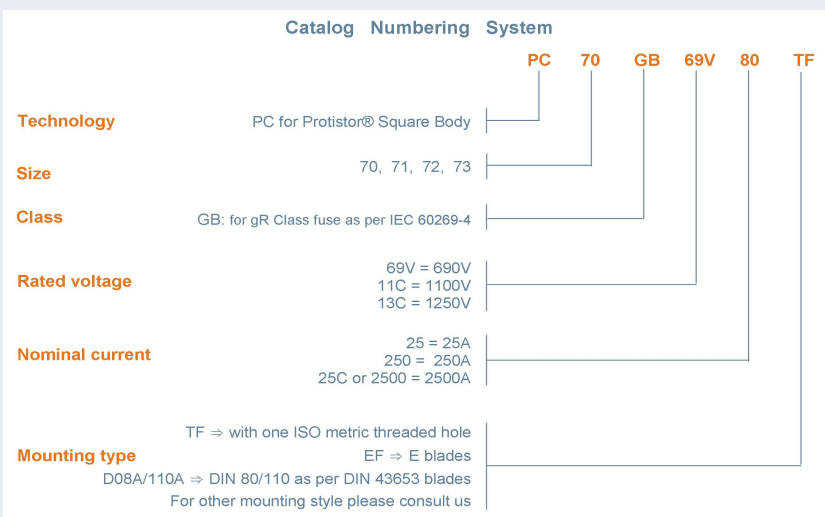
Approvals

IEC 60269-4 Compliance
RoHS Compliant



Related products

Mounting accessories: Metric Studs
Monitoring: MS7V Microswitch for 7x
Fuse-holders: SI and SF bases



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Size 70

Size	Rated Voltage (V)	Nominal Current (A)	Class	Catalog Number TTF	Reference Number TTF	Catalog Number EF	Reference Number EF	Catalog Number DIN110	Reference Number DIN110
70	690	50	gR	PC70GB69V50TF	C301279	PC70GB69V50ESF	P301290	-	-
70	690	63	gR	PC70GB69V63TF	D301280	PC70GB69V63ESF	Q301291	-	-
70	690	80	gR	PC70GB69V80TF	E301281	PC70GB69V80ESF	E301304	-	-
70	690	100	gR	PC70GB69V100TF	F301282	PC70GB69V100ESF	S301293	PC70GB69V100D1A	Q302027
70	690	125	gR	PC70GB69V125TF	G301283	PC70GB69V125ESF	F301305	PC70GB69V125D1A	S302742
70	690	160	gR	PC70GB69V160TF	L301310	PC70GB69V160ESF	G301306	PC70GB69V160D1A	R301591
70	690	200	gR	PC70GB69V200TF	M301311	PC70GB69V200ESF	H301307	PC70GB69V200D1A	S301592
70	690	250	gR	PC70GB69V250TF	N301312	PC70GB69V250ESF	J301308	PC70GB69V250D1A	Z301943
70	690	315	gR	PC70GB69V315TF	P301313	-	-	PC70GB69V315D1A	J301584
70	690	350	gR	-	-	-	-	PC70GB69V350D1A	W302124

Size	Rated Voltage (V)	Nominal Current (A)	Breaking Capacity @ Rated Voltage (kA)	Pre-arcing I ² t (A ² s)	Clearing I ² t @ Rated Voltage (A ² s)	Watts Loss @ 100% In (W)
70	690	50	150	118	700	17
70	690	63	150	266	1600	18
70	690	80	150	473	2800	22
70	690	100	150	1058	6200	23
70	690	125	150	1897	11200	26
70	690	160	150	4232	25000	29
70	690	200	150	7540	44000	34
70	690	250	150	13448	79000	40
70	690	315	150	24112	142000	47
70	690	350	150	40784	240000	47

Product weight: 339g max. for TTF, 400g max. for EF and 364g max. for DIN110

Packaging: 3 pieces

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Protistor® Square body fuse-links

Sizes 7x gRB 690VAC 50 to 1000A



Size 71

Size	Rated Voltage (V)	Nominal Current (A)	Class	Catalog Number TTF	Reference Number TTF	Catalog Number EF	Reference Number EF	Catalog Number DIN110	Reference Number DIN110
71	690	125	gR	PC71GB69V125TF	Q301314	-	-	PC71GB69V125D1A	B302658
71	690	160	gR	PC71GB69V160TF	R301315	PC71GB69V160EF	Z301322	PC71GB69V160D1A	C302659
71	690	200	gR	PC71GB69V200TF	S301316	PC71GB69V200EF	A301323	PC71GB69V200D1A	C302682
71	690	250	gR	PC71GB69V250TF	T301317	PC71GB69V250EF	B301324	PC71GB69V250D1A	R302143
71	690	315	gR	PC71GB69V315TF	N301427	-	-	-	-
71	690	350	gR	PC71GB69V350TF	V301318	PC71GB69V350EF	C301325	-	-
71	690	400	gR	PC71GB69V400TF	W301319	PC71GB69V400EF	D301326	-	-
71	690	450	gR	-	-	-	-	PC71GB69V450D1A	R301637
71	690	500	gR	PC71GB69V500TF	S301707	PC71GB69V500EF	G301858	PC71GB69V500D1A	A301737

Size	Rated Voltage (V)	Nominal Current (A)	Breaking Capacity @ Rated Voltage (kA)	Pre-arcing I ² t (A ² s)	Clearing I ² t @ Rated Voltage (A ² s)	Watts Loss @ 100% In (W)
71	690	125	150	1058	6200	35
71	690	160	150	2394	14000	38
71	690	200	150	5000	29500	42
71	690	250	150	9577	56000	48
71	690	315	150	18432	108000	53
71	690	350	150	23156	140000	60
71	690	400	150	38309	225000	61
71	690	450	150	61671	360000	61
71	690	500	150	78092	460000	67

Product weight: 514g max. for TTF, 537g max. for EF and 520g max. for DIN110

Packaging: 3 pieces

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Protistor® Square body fuse-links

Sizes 7x gRB 690VAC 50 to 1000A



Size 72

Size	Rated Voltage (V)	Nominal Current (A)	Class	Catalog Number TTF	Reference Number TTF	Catalog Number EF	Reference Number EF	Catalog Number DIN110	Reference Number DIN110
72	690	200	gR	PC72GB69V200TF	F301328	PC72GB69V200EF	N301335	-	-
72	690	250	gR	PC72GB69V250TF	G301329	PC72GB69V250EF	P301336	PC72GB69V250D1A	T302697
72	690	315	gR	PC72GB69V315TF	H301330	PC72GB69V315EF	Q301337	PC72GB69V315D1A	V302698
72	690	350	gR	PC72GB69V350TF	W301710	-	-	PC72GB69V350D1A	E302500
72	690	400	gR	PC72GB69V400TF	J301331	PC72GB69V400EF	R301338	PC72GB69V400D1A	V302215
72	690	450	gR	PC72GB69V450TF	X301711	-	-	PC72GB69V450D1A	Q302671
72	690	500	gR	PC72GB69V500TF	K301332	PC72GB69V500EF	S301339	-	-
72	690	550	gR	PC72GB69V550TF	L301333	PC72GB69V550EF	T301340	PC72GB69V550D1A	L301724
72	690	630	gR	PC72GB69V630TF	M301334	PC72GB69V630EF	V301341	PC72GB69V630D1A	J1001888
72	690	700	gR	PC72GB69V700TF	Y301712	-	-	-	-

Size	Rated Voltage (V)	Nominal Current (A)	Breaking Capacity @ Rated Voltage (kA)	Pre-arcing I ² t (A ² s)	Clearing I ² t @ Rated Voltage (A ² s)	Watts Loss @ 100% In (W)
72	690	200	150	4232	25000	45
72	690	250	150	8554	50000	50
72	690	315	150	17002	100000	57
72	690	350	150	23156	140000	60
72	690	400	150	34113	200000	65
72	690	450	150	47309	280000	70
72	690	500	150	68007	400000	72
72	690	550	150	84050	495000	78
72	690	630	150	123803	730000	86
72	690	700	150	154790	910000	89

Product weight: 734g max. for TTF, 758g max. for EF and 704g max. for DIN110

Packaging: 3 pieces

Semiconductor & Special Protection

Protistor® Square body fuse-links

Sizes 7x gRB 690VAC 50 to 1000A



Size 73

Size	Rated Voltage (V)	Nominal Current (A)	Class	Catalog Number TTF	Reference Number TTF	Catalog Number EF	Reference Number EF	Catalog Number DIN110	Reference Number DIN110
73	690	315	gR	PC73GB69V315TF	W301342	PC73GB69V315EF	C301348	-	-
73	690	350	gR	PC73GB69V350TF	B301715	-	-	-	-
73	690	400	gR	PC73GB69V400TF	X301343	PC73GB69V400EF	D301349	-	-
73	690	450	gR	PC73GB69V450TF	Y301344	PC73GB69V450EF	E301350	PC73GB69V450D1A	W236298
73	690	500	gR	PC73GB69V500TF	C301716	-	-	PC73GB69V500D1A	W302216
73	690	550	gR	PC73GB69V550TF	Z301345	PC73GB69V550EF	F301351	PC73GB69V550D1A	R302672
73	690	630	gR	PC73GB69V630TF	A301346	PC73GB69V630EF	G301352	PC73GB69V630D1A	X236299
73	690	700	gR	PC73GB69V700TF	B301347	PC73GB69V700EF	H301353	PC73GB69V700D1A	F301765
73	690	800	gR	PC73GB69V800TF	D301717	-	-	PC73GB69V800D1A	B236073
73	690	900	gR	PC73GB69V900TF	S301638	-	-	-	-
73-R	690	1000	gR	PC73GB69V10CTF	F301719	-	-	PC73GB69V10CD1A	S302673

Size	Rated Voltage (V)	Nominal Current (A)	Breaking Capacity @ Rated Voltage (kA)	Pre-arcing I ² t (A ² s)	Clearing I ² t @ Rated Voltage (A ² s)	Watts Loss @ 100% In (W)
73	690	315	150	11796	69000	67
73	690	350	150	17002	100000	68
73	690	400	150	26542	160000	73
73	690	450	150	34113	200000	82
73	690	500	150	47309	280000	86
73	690	550	150	68007	400000	87
73	690	630	150	101610	600000	94
73	690	700	150	138970	820000	100
73	690	800	150	226868	1330000	104
73	690	900	150	278855	1640000	109
73-R	690	1000	150	385793	2270000	127

Product weight: 1092g max. for TTF, 1220g max. for TTF 73-R (Reinforced terminal), 1110g max. for EF and 1120g max. for DIN110

Packaging: 1 piece

Semiconductor & Special Protection

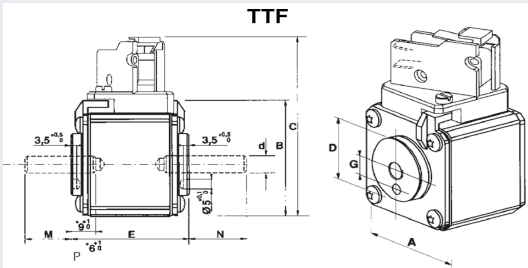
Protistor® Square body fuse-links

Sizes 7x gRB 690VAC 50 to 1000A

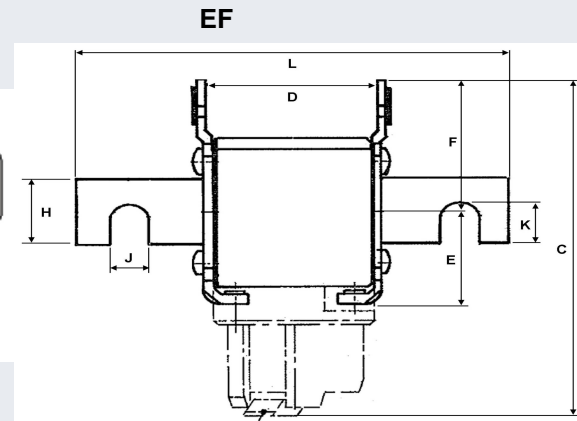
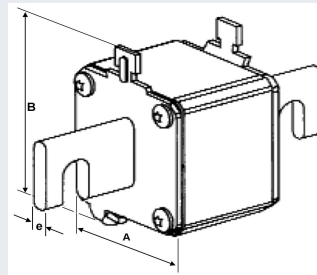


Dimensions mm (inches)

Size	A	B	C	D	d	G	M	N	P	E
70 TTF	40 (1-9/16")	46.5 (1-27/32")	82 (3-7/32")	26 (1-1/64")	M8	9 (23/64")	22	27	6 (15/64")	74 (2-29/32")
71 TTF	51 (2")	56.5 (2-7/32")	91 (3-37/64")	30 (1-3/16")	M8	9 (23/64")	19	24	9 (23/64")	74 (2-29/32")
72 TTF	60 (2-3/8")	65.5 (2-37/64")	100 (3-15/16")	38 (1-1/2")	M10	15 (19/32")	19	39	9 (23/64")	74 (2-29/32")
73 TTF	74.5 (2-15/16")	79.5 (3-1/8")	114 (4-1/2")	46 (1-13/16")	M12	15 (19/32")	24	39	9 (23/64")	74 (2-29/32")



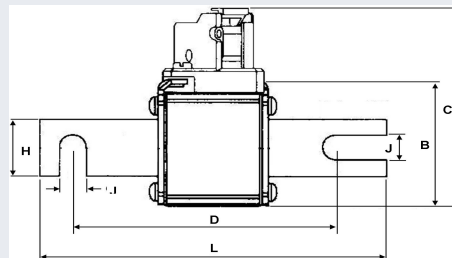
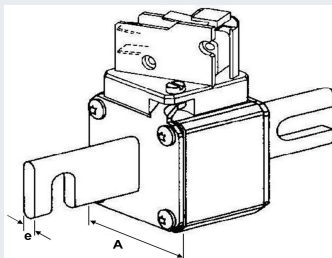
Microswitches supplied separately



Microswitches supplied separately

Size	A	B	C	D	E	F	H	J	K	L	e
70 EF	40	62	96	67	100	38	18	9	11	123.4	6
71 EF	51	69	103	68	110	39	25	10.5	16	133.4	6
72 EF	60	78	112	68	114.4	43	32	13	21.2	149.4	6
73 EF	74.5	92.5	127	68	114.4	57	40	13	19.5	149.4	6

DIN110



Microswitches supplied separately

Size	A	B	C	D	E	F	H	J	K	L	M	N	R	e
70 DIN110	40	46.5	82	71	100.4	21	25	10.5	17.7	133.4	11.5	18.5	25.2	6
71 DIN 110	51	56.5	91	71	100.4	25.5	25	10.5	17.7	133.4	11.5	18.5	25.2	6
72 DIN 110	60	65.5	100	71	100.4	30	32	10.5	21.2	133.4	11.5	18.5	25.2	6
73 DIN 110	74.5	79.5	114	72	100.4	37.2	40	10.5	25.2	133.4	11	18	25.2	6