

PSC PROTECTION SEMICONDUCTOR SQUARE BODY FUSES

SOLUTIONS GUIDE

Now manufactured in North America for faster delivery to our North American consumers



FERRAZ SHAWMUT IS NOW MERSEN

MERSEN

PSC Square Body Fuses: Built with speed in mind

Mersen's high-performance Protection Semiconductor (PSC) technology square body fuses are truly *built with speed in mind* from protection to delivery. Mersen PSC semiconductor fuses deliver the ultimate in protection for your power conversion equipment.

Mersen's speed is not only in the performance, but also in the speed it takes to deliver the semiconductor protection you need. We've increased our production capacity by adding new production lines in our Newburyport, USA and Juarez, Mexico facilities. Our PSC fuses are made to order within ten business days* and direct ship from our production plant to your facility.

What does this mean for you? Over 550 PSC square body fuses in eight different body sizes (Sizes 30, 31, 32, 33, 70, 71, 72, & 73) will be available to ship within two weeks.* With Mersen, you're guaranteed:

- Fast delivery
- Easy ordering
- Superior protection

MERSEN

PSC semiconductor square body fuses now with

Priority Shipping Commitment

Over 550 PSC fuses in eight different body sizes will be available to ship within two weeks.*

Sizes 30, 31, 32, 33, 70, 71, 72, and 73



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690/700 Volt PSC Square Body



Mersen 690/700V PSC square body fuses provide maximum flexibility in equipment design and ultimate protection for today's power conversion equipment. These square body fuses are available in four different body sizes, each size having more than seven worldwide acceptable mounting styles. The different mounting styles and body sizes along with a broad range of ampere ratings allow greatest flexibility in equipment design.

Mersen PSC fuses have been engineered to provide state-of-the-art protection for SCRs, diodes, thyristors, GTOs and IGBT devices. They have die-cut elements embedded in solidified sand, which helps control arcing characteristics for low I^2t and high interrupting rating. All contact surfaces are silver plated and all hardware is non-magnetic.

All PSC square body fuses are equipped with a low voltage trip-indicator. This trip-indicator can operate a field mountable microswitch which is easily mounted directly onto the fuse.

Features/Benefits:

- Choice of mounting styles gives wide choice for equipment design
- Broad range of ampere ratings in a given body size for design flexibility
- UL/CSA/IEC 60269-4 compliance for worldwide semiconductor applications

Highlights:

- Extremely fast-acting
- Current-limiting
- Very low I^2t
- Worldwide acceptability
- Superior cycling ability

Applications:

- Protection of rectifiers, inverters, DC drives, UPS Systems, reduced voltage motor starters, and other equipment in globally accepted applications

Ratings:

- Volts** : 450-700 VAC
 : DC - consult factory
- Amps** : 40-2500A
- I.R.** : 200kA AC

Approvals:

- UL recognized component
File E76491
- IEC 60269-4 certified
- CSA 012636 0 000
- CCC approved

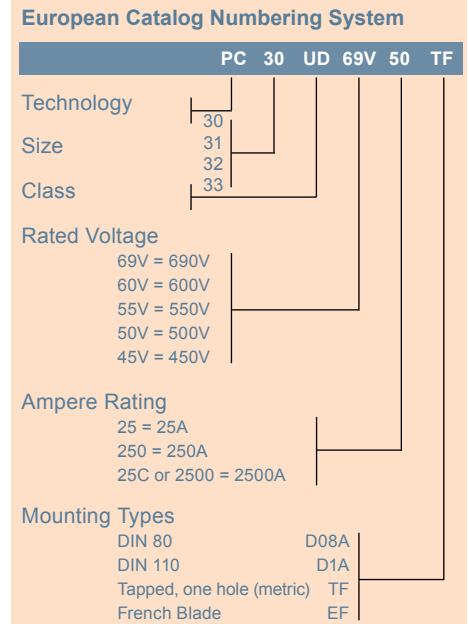
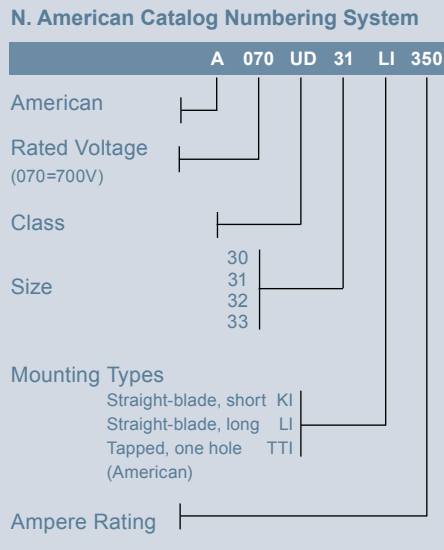


Catalog Number Designation:

A070 UD: North American Mounting Style/Approval Tested @ V_N

PC: European/IEC Mounting Style/Approval Tested @ $1.1 V_N$

* V_N = rated voltage

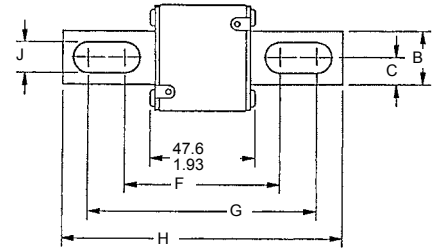


690/700 Volt PSC Square Body

North American Short Straight Blade, Type KI

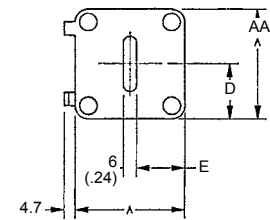
Body Size	Type	Dimensions - mm / in									
		A	B	C	D	E	F	G	H	J	
30	KI	40 (1.57)	25 (.98)	12.5 (.49)	21 (.83)	18 (.71)	68 (2.68)	107 (4.21)	129 (5.08)	10.5 (.41)	
31		51 (2.00)	25 (.98)	12.5 (.49)	25.5 (1.00)	22.5 (.88)	67.6 (2.66)	107.1 (4.216)	128.8 (5.07)	14.3 (.56)	
32		60 (2.36)	32 (1.26)	16 (.63)	30 (1.18)	27 (1.06)	74.2 (2.92)	109 (4.29)	134 (5.28)	14.6 (.57)	
33		74.5 (2.93)	40 (1.57)	20 (.79)	37.2 (1.46)	34.2 (1.35)	75.4 (2.97)	107.6 (4.24)	134 (5.28)	15.9 (.63)	

Outline Dimensions: Types KI and LI



North American Long Straight Blade, Type LI

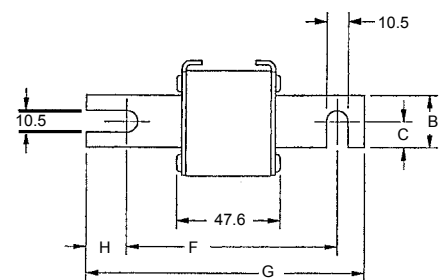
Body Size	Type	Dimensions - mm / in									
		A	B	C	D	E	F	G	H	J	
30	LI	40 (1.57)	25 (.98)	12.5 (.49)	21 (.83)	18 (.71)	87.6 (3.45)	126.6 (4.98)	148.6 (5.85)	10.5 (.41)	
31		51 (2.01)	25 (.98)	12.5 (.49)	25.5 (1.00)	22.5 (.89)	91.6 (3.61)	122.4 (4.82)	148.6 (5.85)	14.6 (.57)	
32		60 (2.36)	32 (1.26)	16 (.63)	30 (1.18)	27 (1.06)	94.2 (3.71)	129 (5.08)	153 (6.02)	14.6 (.57)	
33		74.5 (2.93)	40 (1.57)	20 (.79)	37.2 (1.46)	34.2 (1.35)	94.4 (3.72)	126.6 (4.98)	153 (6.02)	15.9 (.63)	



European Blade DIN 80, Type D08A

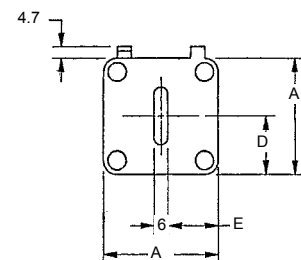
Body Size	Type	Dimensions - mm						
		A	B	C	D	E	F	G
30	DIN 80	40	25	12.5	21	17	77	110
31		51	25	12.5	25	22.5	77	110
32		60	32	16	30	27	77	110
33		74.5	40	20	37.2	34.25	77	110

Outline Dimensions: Types D08A and D1A



European Blade DIN 110, Type D1A

Body Size	Type	Dimensions - mm						
		A	B	C	D	E	F	G
30	DIN 110	40	25	12.5	21	17	101.6	134.6
31		51	25	12.5	25.5	22.5	101.6	134.6
32		60	32	16	30	27	101.6	134.6
33		74.5	40	20	37.2	34.25	101.6	134.6



690/700 Volt PSC Square Body

690 Volt European/IEC Style Ratings and Application Data, DIN 80 Mounting

Body Size	Ampere Rating I_n (A)	Rated Voltage V_n (V) (IEC)	Melting I^2t ($A^2s \times 10^3$)	Total Clearing I^2t @ V_n ($A^2s \times 10^3$)	Watts Loss @ I_n (W)	Reference No.	Catalog No.	Description
30	50	690	0.116	0.68	9	F301926	PC30UD69V50A	6,9URD30D08A0050
	63	690	0.2	1.2	14	E300108	PC30UD69V63A	6,9URD30D08A0063
	80	690	0.33	1.9	19	F300109	PC30UD69V80A	6,9URD30D08A0080
	100	690	0.47	2.7	26	G300110	PC30UD69V100A	6,9URD30D08A0100
	125	690	0.85	4.3	30	H300111	PC30UD69V125A	6,9URD30D08A0125
	160	690	1.6	9.2	37	J300112	PC30UD69V160A	6,9URD30D08A0160
	200	690	3	16.7	43	K300113	PC30UD69V200A	6,9URD30D08A0200
	250	690	5.8	32.4	50	L300114	PC30UD69V250A	6,9URD30D08A0250
	315	690	12	67	55	M300115	PC30UD69V315A	6,9URD30D08A0315
	350	690	15.5	86	60	N300116	PC30UD69V350A	6,9URD30D08A0350
	400	690	23	130	65	P300117	PC30UD69V400A	6,9URD30D08A0400
	450	690	26	165	88	A300403	PC30UD69V450A	6,9URD30D08A0450
	500	690	41	256	88	B300404	PC30UD69V500A	6,9URD30D08A0500
550	690	52	330	90	C300405	PC30UD69V550A	6,9URD30D08A0550	
31	200	690	2.6	14.6	45	Y300010	PC31UD69V200A	6,9URD31D08A0200
	250	690	4.7	27	52	Z300011	PC31UD69V250A	6,9URD31D08A0250
	315	690	7.5	43	65	A300012	PC31UD69V315A	6,9URD31D08A0315
	350	690	10.5	59	67	Q300049	PC31UD69V350A	6,9URD31D08A0350
	400	690	19	110	68	B300013	PC31UD69V400A	6,9URD31D08A0400
	450	690	26.5	150	70	C300014	PC31UD69V450A	6,9URD31D08A0450
	500	690	37	210	72	D300015	PC31UD69V500A	6,9URD31D08A0500
	550	690	52	300	75	E300016	PC31UD69V550A	6,9URD31D08A0550
	630	690	75	421	85	F300017	PC31UD69V630A	6,9URD31D08A0630
	700	690	95	530	95	G300018	PC31UD69V700A	6,9URD31D08A0700
800	690	140	880	120	D300406	PC31UD69V800A	6,9URD31D08A0800	
32	400	690	15	86	75	E300177	PC32UD69V400A	6,9URD32D08A0400
	450	690	22	124	80	F300178	PC32UD69V450A	6,9URD32D08A0450
	500	690	28	157	90	G300179	PC32UD69V500A	6,9URD32D08A0500
	550	690	37	211	95	H300180	PC32UD69V550A	6,9URD32D08A0550
	630	690	54	302	105	J300181	PC32UD69V630A	6,9URD32D08A0630
	700	690	76	432	110	K300182	PC32UD69V700A	6,9URD32D08A0700
	800	690	115	648	120	L300183	PC32UD69V800A	6,9URD32D08A0800
	900	690	170	972	125	M300184	PC32UD69V900A	6,9URD32D08A0900
	1000	690	240	1350	135	N300185	PC32UD69V1000A	6,9URD32D08A1000
	1100	600	270	1450	165	W302101	PC32UD60V1100A	6URD32D08A1100
	1250	550	410	1950	180	G300409	PC32UD50V1250A	5,5URD32D08A1250
33	500	690	19	108	105	G300248	PC33UD69V500A	6,9URD33D08A0500
	550	690	27	151	110	H300249	PC33UD69V550A	6,9URD33D08A0550
	630	690	40	227	120	J300250	PC33UD69V630A	6,9URD33D08A0630
	700	690	55	324	125	K300251	PC33UD69V700A	6,9URD33D08A0700
	800	690	95	529	130	L300252	PC33UD69V800A	6,9URD33D08A0800
	900	690	135	760	135	M300253	PC33UD69V900A	6,9URD33D08A0900
	1000	690	170	970	155	N300254	PC33UD69V1000A	6,9URD33D08A1000
	1100	690	240	1360	160	P300255	PC33UD69V1100A	6,9URD33D08A1100
	1250	690	350	2000	180	Q300256	PC33UD69V1250A	6,9URD33D08A1250
	1400	690	480	2700	200	R300257	PC33UD69V1400A	6,9URD33D08A1400
	1500	600	500		220	M235071	PC33UD60V1500A	6URD33D08A1500
	1600	600	555	3250	240	X301803	PC33UD60V1600A	6URD33D08A1600
	1800	600	720		260	E301971	PC33UD60V1800A	6URD33D08A1800