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.



Ratings:

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

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

Approvals:

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

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

Catalog Number Designation:

A070 UR: North American Mounting Style/Approval Tested @ V_n

PC: European/IEC Mounting Style/Approval Tested @ 1.1 V_n

*V_n = rated voltage

N. American Catalog Numbering System

A	070	UD	31	LI	350

- American
- Rated Voltage (070=700V)
- Class
- Size: 30, 31, 32, 33
- Mounting Types: Straight-blade, short KI; Straight-blade, long LI; Tapped, one hole (American) TTI
- Ampere Rating

European Catalog Numbering System

PC	30	UD	69V	50	TF

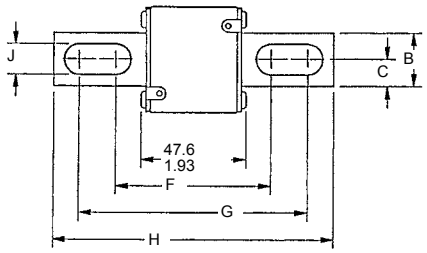
- Technology: 30
- Size: 31, 32, 33
- Class
- Rated Voltage: 69V = 690V; 60V = 600V; 55V = 550V; 50V = 500V; 45V = 450V
- Ampere Rating: 25 = 25A; 250 = 250A; 25C or 2500 = 2500A
- Mounting Types: DIN 80 D08A; DIN 110 D1A; Tapped, one hole (metric) TF; French Blade EF

690/700 Volt PSC Square Body

North American Short Straight Blade, Type KI

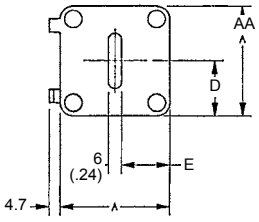
Body Size	Type	Dimensions - mm / in								
		A	B	C	D	E	F	G	H	J
30	KI	40	25	12.5	21	18	68	107	129	10.5
		(1.57)	(.98)	(.49)	(.83)	(.71)	(2.68)	(4.21)	(5.08)	(.41)
31		51	25	12.5	25.5	22.5	67.6	107.1	128.8	14.3
		(2.00)	(.98)	(.49)	(1.00)	(.88)	(2.66)	(4.216)	(5.07)	(.56)
32		60	32	16	30	27	74.2	109	134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

Outline Dimensions: Types KI and LI



North American Long Straight Blade, Type LI

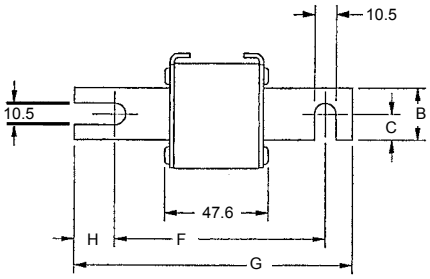
Body Size	Type	Dimensions - mm / in								
		A	B	C	D	E	F	G	H	J
30	LI	40	25	12.5	21	18	87.6	126.6	148.6	10.5
		(1.57)	(.98)	(.49)	(.83)	(.71)	(3.45)	(4.98)	(5.85)	(.41)
31		51	25	12.5	25.5	22.5	91.6	122.4	148.6	14.6
		(2.01)	(.98)	(.49)	(1.00)	(.89)	(3.61)	(4.82)	(5.85)	(.57)
32		60	32	16	30	27	94.2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



European Blade DIN 80, Type D08A

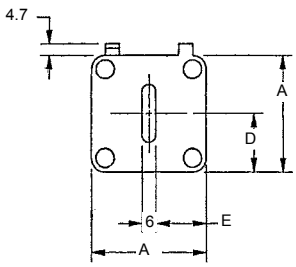
Body Size	Type	Dimensions - mm						
		A	B	C	D	E	F	G
30	DIN 80	40	25	12.5	21	17	77	110
31		51	25	12.5	25	22.5	77	110
32		60	32	16	30	27	77	110
33		74.5	40	20	37.2	34.25	77	110

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

700 Volt North American Style Ratings and Application Data, KI Mounting

Body Size	Ampere Rating I_n (A)	Rated Voltage V_n (V)	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	63	700	0.2	1.2	14	B300128	A070UD30KI63	A070URD30KI0063
	80	700	0.33	1.9	19	C300129	A070UD30KI80	A070URD30KI0080
	100	700	0.47	2.7	26	D300130	A070UD30KI100	A070URD30KI0100
	125	700	0.85	4.9	30	E300131	A070UD30KI125	A070URD30KI0125
	160	700	1.6	9.2	37	F300132	A070UD30KI160	A070URD30KI0160
	200	700	3	16.7	43	G300133	A070UD30KI200	A070URD30KI0200
	250	700	5.8	32.4	50	H300134	A070UD30KI250	A070URD30KI0250
	315	700	12	67	55	J300135	A070UD30KI315	A070URD30KI0315
	350	700	15.5	86	60	K300136	A070UD30KI350	A070URD30KI0350
	400	700	23	130	65	L300137	A070UD30KI400	A070URD30KI0400
	450	700	26	165	88	T301064	A070UD30KI450	A070URD30KI0450
	500	700	41	264	88	V301065	A070UD30KI500	A070URD30KI0500
	550	700	52	330	90	W301066	A070UD30KI550	A070URD30KI0550
31	200	700	2.6	14.6	45	S300028	A070UD31KI200	A070URD31KI0200
	250	700	4.7	27	52	T300029	A070UD31KI250	A070URD31KI0250
	315	700	7.5	43	65	V300030	A070UD31KI315	A070URD31KI0315
	350	700	10.5	59	67	R300050	A070UD31KI350	A070URD31KI0350
	400	700	19	110	68	W300031	A070UD31KI400	A070URD31KI0400
	450	700	26.5	150	70	X300032	A070UD31KI450	A070URD31KI0450
	500	700	37	210	72	Y300033	A070UD31KI500	A070URD31KI0500
	550	700	52	300	75	Z300034	A070UD31KI550	A070URD31KI0550
	630	700	75	421	85	A300035	A070UD31KI630	A070URD31KI0630
	700	700	95	530	95	B300036	A070UD31KI700	A070URD31KI0700
	800	700	140	880	120	A301070	A070UD31KI800	A070URD31KI0800
32	400	700	15	86	75	Z300195	A070UD32KI400	A070URD32KI0400
	450	700	22	124	80	A300196	A070UD32KI450	A070URD32KI0450
	500	700	28	157	90	B300197	A070UD32KI500	A070URD32KI0500
	550	700	37	211	95	C300198	A070UD32KI550	A070URD32KI0550
	630	700	54	302	105	D300199	A070UD32KI630	A070URD32KI0630
	700	700	76	432	110	E300200	A070UD32KI700	A070URD32KI0700
	800	700	115	648	120	F300201	A070UD32KI800	A070URD32KI0800
	900	700	170	972	125	G300202	A070UD32KI900	A070URD32KI0900
	1000	700	240	1350	135	H300203	A070UD32KI1000	A070URD32KI1000
33	500	700	19	108	105	W300238	A070UD33KI500	A070URD33KI0500
	550	700	27	151	110	X300239	A070UD33KI550	A070URD33KI0550
	630	700	40	227	120	Y300240	A070UD33KI630	A070URD33KI0630
	700	700	55	324	125	Z300241	A070UD33KI700	A070URD33KI0700
	800	700	95	529	130	A300242	A070UD33KI800	A070URD33KI0800
	900	700	135	760	135	B300243	A070UD33KI900	A070URD33KI0900
	1000	700	170	970	155	C300244	A070UD33KI1000	A070URD33KI1000
	1100	700	240	1360	160	D300245	A070UD33KI1100	A070URD33KI1100
	1250	700	350	2000	180	E300246	A070UD33KI1250	A070URD33KI1250
	1400	700	480	2700	200	F300247	A070UD33KI1400	A070URD33KI1400
	1600	650	555	3250	240	E302063	A065UD33KI1600	A065URD33KI1600