

Semiconductor Fuses

Large rectifier PSC fuse selection



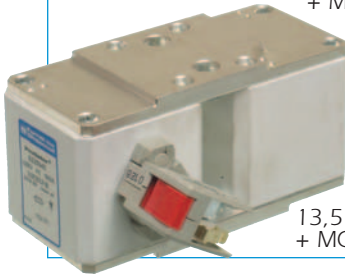
25 URD 123 TTF 630



4 URD TDF 1000



9,5 URD 94 PPASF 3800
+ MC3E 1-5N



13,5 URD 283 PLAF 1600
+ MCR3E 1-5NBS

Ferraz Shawmut PSC-LR 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 various body sizes with a broad range of ampere ratings allowing the greatest flexibility in equipment design.

The Ferraz Shawmut PSC-LR fuse range has been engineered to provide state of the art protection for high power semiconductors such as diodes, thyristors, GTO's, IGCT's and IGBT's.

They have pure silver fuse elements embedded in solidified sand which provides optimized I²t 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.



13,5 URD 294 TDSFF 3400
+ MCR3E 1-5NBS



13 URD 84 TQFPLA 0900

HIGHLIGHTS

- Highly current limiting.
- Isolating fuse
- High breaking capacities
- High capability of selection in case of external fault
- Worldwide acceptance.
- Superior cycling ability.
- High withstanding in rush current and overloads
- Optimized coordination ratio

APPLICATIONS

Protection of large rectifiers, inverters, static transfer switch, AC & DC drives and UPS systems.

Ratings

AC: up to 10 000A
130 V - 3 800V
100 - 240 kA IR
DC: Consult Factory

Approvals

AC: Tested to IEC 60269-4

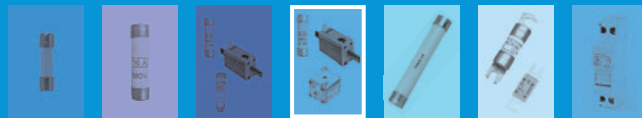
Features/Benefits

Customized terminals available under request

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



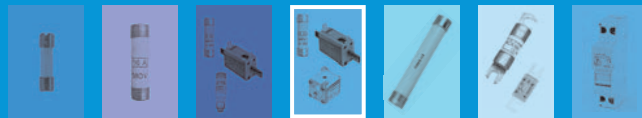
Semiconductor Fuses

PSC - LR range - Size 84

700 - 1450 V
8400 - 2000 A

PSC - LR range

Size	Ratings	Voltage	Pre-Arcing	Total Pt @ Un	I @ 10ms	Power losses (W)		Breaking capacities
	(A) In	(V) Un	I ² t @ 1ms I ² tp (kA ² s)	(kA ² s)	(A)	0,8In	In	(kA)
	1400	1250	635	4250	15000	143	285	112
	1500	1250	740	4960	16000	147	293	112
	1700	1250	990	6600	18000	150	300	112
	1800	1150	1050	6200	19000	160	320	115
	1900	1150	1250	7350	20000	165	330	115
	2000	1100	1530	8200	23000	170	340	115
	2100	1100	1750	9350	24000	173	345	115
	2200	1100	2035	11000	26000	175	350	115
	2300	1100	2270	12200	27500	180	360	115
84	2400	1100	2610	14000	29500	183	365	115
end contacts	2500	1000	2970	14000	31000	190	380	230
	2600	1000	3320	15800	33000	195	390	230
	2700	1000	3700	17500	35000	198	395	230
	2750	1000	3950	19000	36000	198	395	230
	2900	900	4650	20000	39000	200	400	210
	3000	900	5185	22000	41500	200	400	210
	3200	900	6170	26000	45000	210	420	210
	3400	800	7530	28200	50000	215	430	220
	3500	800	8100	30400	52000	218	435	220
	3700	800	9650	36200	56000	220	440	220
	4000	750	12500	43000	65000	233	465	198
	4200	750	14000	49500	67500	238	475	198
	1550	1250	635	4250	15000	180	360	112
	1650	1250	740	4960	16000	185	370	112
	1900	1250	990	6600	18000	190	380	112
	2000	1150	1050	6200	19000	198	395	115
	2100	1150	1250	7350	20000	205	410	115
	2200	1100	1530	8200	23000	208	415	115
	2300	1100	1750	9350	24000	209	417	115
	2400	1100	2035	11000	26000	210	420	115
	2500	1100	2270	12200	27500	215	430	115
84	2600	1100	2610	14000	29500	218	435	115
press pack	2700	1000	2970	14000	31000	220	440	230
	2800	1000	3320	15800	33000	225	450	230
	2900	1000	3700	17500	35000	230	460	230
	3000	1000	3950	19000	36000	233	465	230
	3100	900	4650	20000	39000	235	470	210
	3200	900	5185	22000	41500	238	475	210
	3350	900	6170	26000	45000	240	480	210
	3600	800	7530	28200	50000	248	495	220
	3700	800	8100	30400	52000	250	500	220
	3850	800	9650	36200	56000	255	510	220
	4300	750	12500	43000	65000	263	525	198
	4500	750	14000	49500	67500	268	535	198
	2000	1450	990	6550	18500	210	420	154
	2800	1350	2860	17200	31000	243	485	175
	3000	1200	2960	18500	32000	293	586	115
	3400	1150	3960	23000	36000	300	600	115
	3600	1050	4200	21500	38000	320	640	190
	3800	1050	5000	25300	40000	330	660	190
	4000	1000	6120	29000	46000	340	680	240
	4200	1000	7000	33000	48000	345	690	240
	4400	1000	8150	38500	52000	355	710	240
2x84	4600	1000	9000	43000	55000	360	720	235
double body	4800	1000	10440	49000	59000	365	730	240
press pack	5000	1000	11880	56000	62000	380	760	240
or end contacts	5200	1000	13280	63200	66000	390	780	240
	5400	1000	14800	70000	70000	390	780	240
	5500	1000	15800	75000	72000	395	790	240
	5800	850	15800	74000	78000	400	800	220
	6000	850	20740	83000	83000	400	800	220
	6400	850	24700	98000	90000	420	840	220
	6800	800	30120	113000	100000	430	860	215
	7000	800	32500	121000	104000	435	870	215
	7400	800	38600	145000	112000	440	880	215
	8000	700	50000	163300	130000	465	930	227
	8400	700	56000	187500	135000	475	950	227

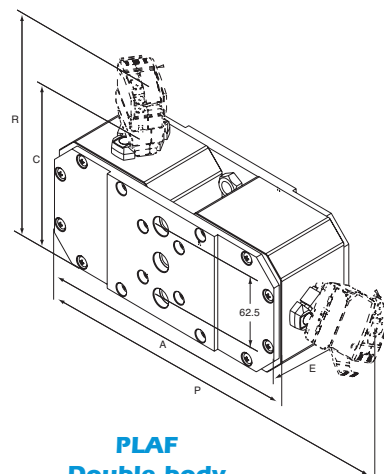


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PSC - LR range - Size 84

Size	Catalog Number	Weight (g)	Packaging
	14,5 URD 284 PLAF 2000		
	13,5 URD 284 PLAF 2800		
	12 URD 284 PLAF 3000		
	11,5 URD 284 PLAF 3400		
	10,5 URD 284 PLAF 3600		
	10,5 URD 284 PLAF 3800		
	10 URD 284 PLAF 4000		
	10 URD 284 PLAF 4200		
	10 URD 284 PLAF 4400		
	10 URD 284 PLAF 4600		
284*	10 URD 284 PLAF 4800	6100	1
double body	10 URD 284 PLAF 5000		
end contacts	10 URD 284 PLAF 5200		
	10 URD 284 PLAF 5400		
	10 URD 284 PLAF 5500		
	8,5 URD 284 PLAF 5800		
	8,5 URD 284 PLAF 6000		
	8,5 URD 284 PLAF 6400		
	8 URD 284 PLAF 6800		
	8 URD 284 PLAF 7000		
	8 URD 284 PLAF 7400		
	7 URD 284 PLAF 8000		
	7 URD 284 PLAF 8400		

* Press pack available on request



PLAF
Double body
Press pack

Microswitches :	MC3E1-5N		* - Ref. D310020	
	MC3E1-5NBS		* - Ref. E310021	Insulation voltage 1250 VAC - DC (data p 21)
	MC3E1-9NBS		* - Ref. F310022	
	MC3E1-5NET		- Ref. L310027	
	MCR3E1-5N		* - Ref. G310023	
	MCR3E1-5NBS		* - Ref. P310030	Insulation voltage 2200 VAC - DC (data p 21)
	MCR3E1-9NBS		* - Ref. H310024	
	MCR3E1-5NET		- Ref. Q310031	

Threaded studs and microswitches ordered separately

Size	A	C ⁽¹⁾	D	E ^{±1.7}	d	G ^{±0.1} Threaded depth	P	R
84 TDF	103	118	52	98,2	M 12	13	-	165
	4.06"	4.65"	2.05"	3.87"		0.51"		6.5"
84 PPASF	103	118	-	76,8	-	-	-	165
	4.06"	4.65"		3.02"				6.5"
284 PLASF	243	118	-	83,8	M 12	15	290	165
	9.57"	4.65"		3.30"		0.59"	11.42"	6.5"

Dimension in mm and inches

See studs p. 23

See mounting torque and clamping force information p 23

(1) Trip indicator extended

(*) Pending