



## Semiconductor Fuses

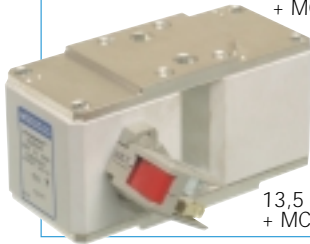
### Large rectifier PSC fuse selection



25 URD 123 TTF 630



9,5 URD 94 PPASF 3800  
+ MCR3E 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, GTOs, IGBTs and IGBTs.

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  
500 V - 3 800V  
100 - 240 kA IR  
**DC:** Consult Factory

#### Approvals

**AC:** Tested to IEC 269.4

#### 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 44

500 - 750 V  
10 000 - 1200 A

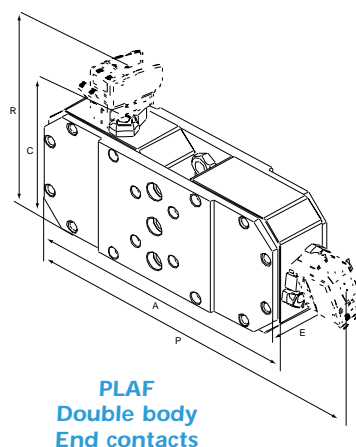
Size	Ratings	Voltage	Pre-Arcing	Total I <sup>2</sup> t @ Un	I @ 10ms	Power losses (W)		Breaking
	(A) In	(V) Un	I <sup>2</sup> t @ 1ms I <sup>2</sup> tp (kA <sup>2</sup> s)	(kA <sup>2</sup> s)	(A)	In	0,8In	capacities (kA)
44 end contacts	1 200	750	110	617	5 970	285	142	215
	1 350	750	158	890	7 200	295	148	215
	1 600	750	290	1 600	9 850	320	160	215
	1 800	750	415	2 350	11 650	342	171	215
	2 000	750	580	3 250	13 750	350	175	215
	2 200	750	740	4 100	15 530	380	190	215
	2 400	750	990	5 500	18 000	395	790	215
	2 500	700	1 100	5 650	18 900	405	203	190
	2 700	700	1 350	6 900	21 000	420	210	190
	2 800	700	1 510	7 750	22 200	430	215	190
	3 000	700	1 865	9 500	25 000	440	220	190
	3 200	660	2 220	10 500	27 000	460	230	215
	3 300	660	2 550	12 100	28 800	466	233	215
	3 400	660	2 730	13 000	30 000	475	238	215
	3 500	660	3 000	14 300	31 500	480	240	215
	3 600	600	3 200	13 600	32 500	485	243	225
	3 700	600	3 500	14 200	34 000	495	248	225
	4 000	600	4 350	18 500	38 000	510	255	225
	4 200	600	5 000	21 200	40 500	525	263	225
	4 400	550	6 170	24 000	45 000	540	270	227
4 700	550	7 530	29 000	49 500	550	275	227	
5 000	550	9 650	37 300	56 000	570	285	227	
5 750	500	14 000	49 500	67 500	650	325	230	
44 press pack	1 350	750	110	617	5 970	380	190	215
	1 500	750	158	890	7 200	385	193	215
	1 750	750	290	1 600	9 850	390	195	215
	2 000	750	415	2 350	11 650	420	210	215
	2 200	750	580	3 250	13 750	425	213	215
	2 400	750	740	4 100	15 530	455	228	215
	2 600	750	990	5 500	18 000	460	230	215
	2 700	700	1 100	5 650	18 900	480	240	190
	2 900	700	1 350	6 900	21 000	490	245	190
	3 000	700	1 510	7 750	22 200	500	250	190
	3 200	700	1 865	9 500	25 000	510	255	190
	3 500	660	2 220	10 500	27 000	545	273	215
	3 600	660	2 550	12 100	28 800	548	274	215
	3 700	660	2 730	13 000	30 000	550	275	215
	3 800	660	3 000	14 300	31 500	560	280	215
	3 900	600	3 200	13 600	32 500	575	288	225
	4 000	600	3 500	14 200	34 000	580	290	225
	4 200	600	4 350	18 500	38 000	590	295	225
	4 400	600	5 000	21 200	40 500	600	300	225
	4 800	550	6 170	24 000	45 000	625	313	227
5 500	550	9 650	37 300	56 000	660	330	227	
6 200	500	14 000	49 500	67 500	750	375	230	
2x44 double body press pack or end contacts	2 400	700	440	2 250	11 940	285	570	215
	2 700	700	632	3 250	14 000	590	295	215
	3 200	700	1 160	6 000	19 700	640	320	215
	3 600	700	1 660	8 500	23 300	684	342	215
	4 000	700	2 320	12 000	27 500	700	350	215
	4 400	700	2 970	15 200	31 060	760	380	215
	4 800	700	3 960	20 000	36 000	790	395	215
	5 000	660	4 400	20 800	37 800	810	405	215
	5 400	660	5 400	25 600	42 000	840	420	215
	5 600	660	6 040	28 700	44 400	860	430	215
	6 000	660	7 460	35 600	50 000	880	440	215
	6 400	660	8 880	42 000	54 000	920	460	215
	6 600	600	10 200	43 200	57 600	932	466	225
	6 800	600	10 920	46 000	60 000	950	475	225
	7 000	600	12 000	51 400	63 000	960	480	225
7 200	600	12 800	54 400	65 000	970	490	225	
7 400	600	14 000	59 000	68 000	990	495	225	
8 000	600	17 400	74 000	76 000	1 020	510	225	
8 400	600	20 000	85 000	81 000	1 050	525	225	
8 500	550	24 700	95 700	90 000	1 150	575	228	
9 000	500	38 600	137 400	112 000	1 200	600	230	
10 000	500	56 000	198 000	135 000	1 300	650	230	




# Semiconductor Fuses

## PSC - LR range - Size 44

Size	Catalog Number	Weight (g)	Packaging
	7 URD 244 PLAF 2400		
	7 URD 244 PLAF 2700		
	7 URD 244 PLAF 3200		
	7 URD 244 PLAF 3600		
	7 URD 244 PLAF 4000		
	7 URD 244 PLAF 4400		
	7 URD 244 PLAF 4800		
2x44*	6,6 URD 244 PLAF 5000		
double body	6,6 URD 244 PLAF 5600	2640	1
end contacts	6,6 URD 244 PLAF 6000		
	6,6 URD 244 PLAF 6400		
	6 URD 244 PLAF 6600		
	6 URD 244 PLAF 7000		
	6 URD 244 PLAF 7400		
	6 URD 244 PLAF 8000		
	6 URD 244 PLAF 8400		
	5,5 URD 244 PLAF 8500		
	5 URD 244 PLAF 9000		
	5 URD 244 PLAF 10000		

\* Press pack available on request



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

Threaded studs and microswitches ordered separately

Size	A	C <sup>(1)</sup>	D	E <sup>+1,7</sup>	d	G <sup>+0,1</sup> threaded depth	P	R
44 TOF	103	118	52	65	M 10	9	-	98,5
	4.06"	4.65"	2.05"	2.56"		0.35"		3.88"
44 PPASF	103	118	-	54	-	-	-	98,5
	4.06"	4.65"		2.13"				3.88"
244 PLAF	243	118	-	61	M 10	15	132,5	100
	9.57"	4.65"		2.40"		0.59"	52.17"	3.94"

Dimension in mm and inches

See studs p. 22

See mounting torque and clamping force information p 23

(1) Trip indicator extended

(\*) Pending