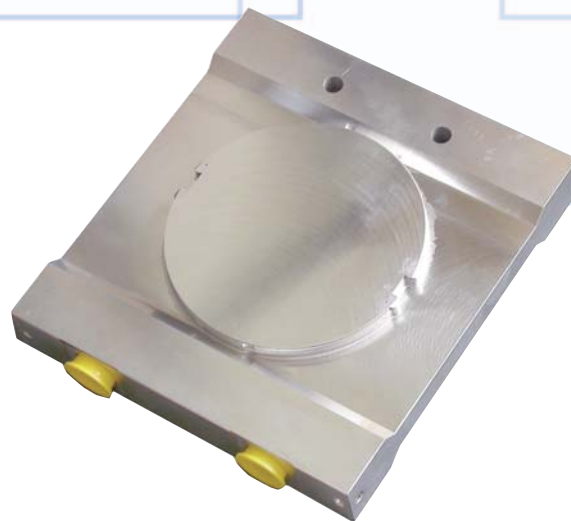
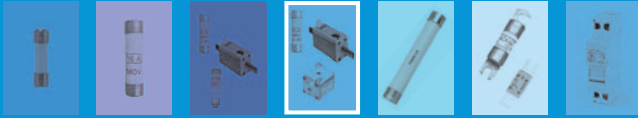


Protection of Power Conversion Equipment



PSC LR Fuses Thermal Management





Semiconductor Fuses

Large rectifier PSC fuse selection



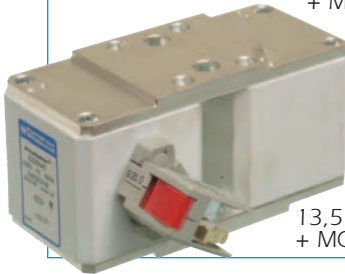
25 URD 123 TTF 630



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



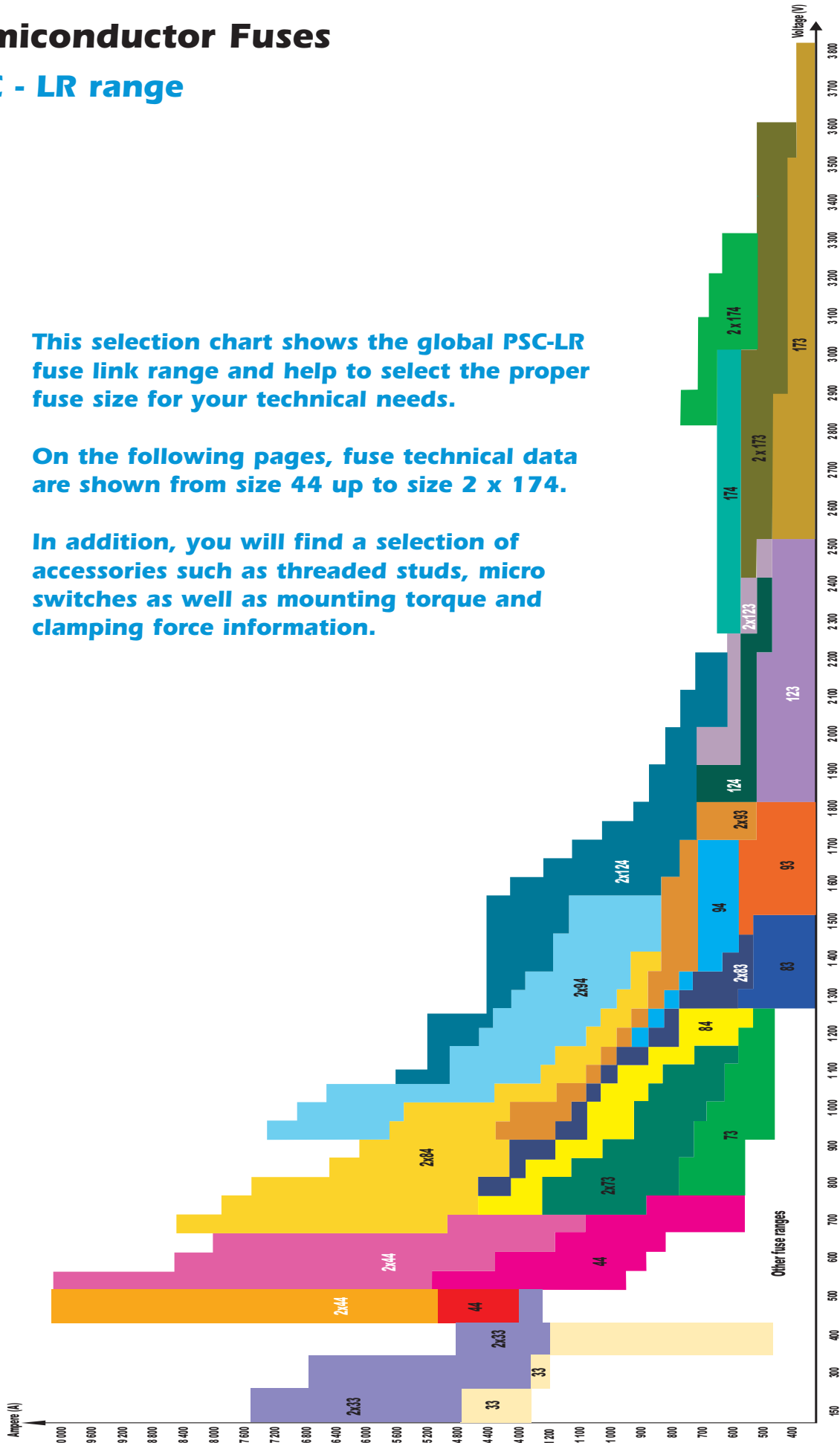
Semiconductor Fuses

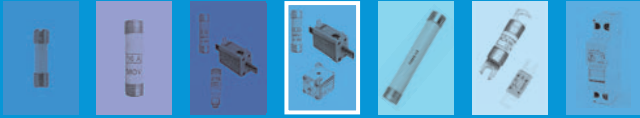
PSC - LR range

This selection chart shows the global PSC-LR fuse link range and help to select the proper fuse size for your technical needs.

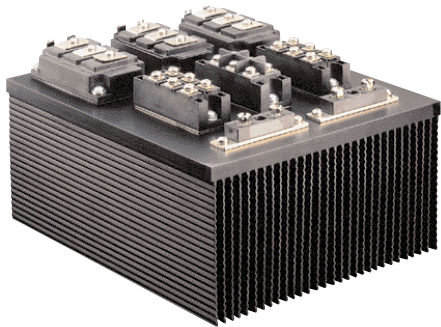
On the following pages, fuse technical data are shown from size 44 up to size 2 x 174.

In addition, you will find a selection of accessories such as threaded studs, micro switches as well as mounting torque and clamping force information.

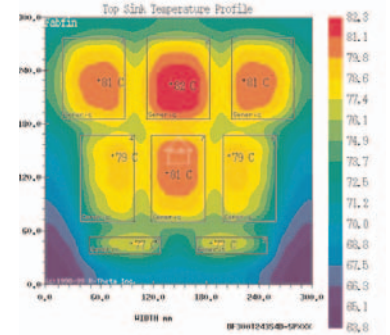
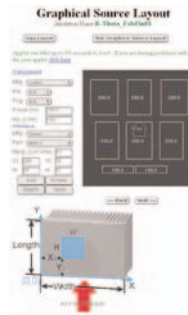




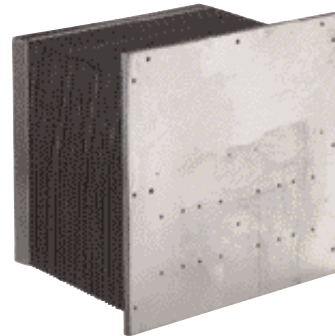
FERRAZ SHAWMUT is a Thermal Management leader for Industrial, Traction, Telecoms, Military and Medical Power Electronic Applications with its complete product range



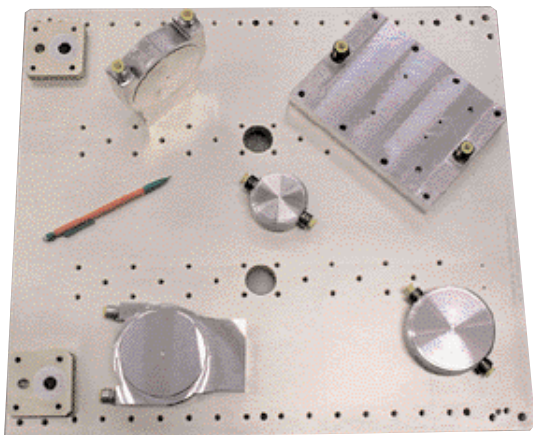
High-performance air heatsinks with thermal simulation capabilities



Fin forming (corrugated) air heat sink



Water cooled heat sinks



Cooling unit groups





Semiconductor Fuses

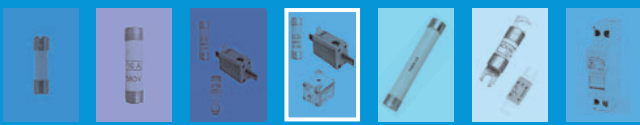
PSC - LR range - Size 33

130 - 550 V
630 - 7500 A

PSC - LR range

| Size | Ratings (A) In | Voltage (V) Un | Pre-Arcing I ² t @ 1ms I ² tp (kA ² s) | Total I ² t @ Un (kA ² s) | I @ 10ms (A) | Power losses (W) | | Breaking capacities (kA) @ U _N |
|--------------|----------------------|----------------------|---|--|-----------------|------------------|-----|---|
| | | | | | | 0.8In | In | |
| | 630 | 400 | 22,5 | 200 | 2 550 | 55 | 90 | 100 |
| | 700 | 400 | 27,5 | 250 | 2 850 | 60 | 100 | 100 |
| | 800 | 400 | 33,5 | 300 | 3 300 | 70 | 115 | 100 |
| | 900 | 400 | 47 | 430 | 3 700 | 80 | 130 | 100 |
| | 1 000 | 400 | 52 | 480 | 4 100 | 85 | 140 | 100 |
| | 1 100 | 400 | 63 | 580 | 4 550 | 100 | 160 | 100 |
| 33 | 1 250 | 400 | 88 | 800 | 5 400 | 110 | 180 | 100 |
| Press Pack | 1 400 | 380 | 133 | 1 050 | 6 600 | 130 | 210 | 100 |
| | 1 600 | 300 | 208 | 1 300 | 8 200 | 140 | 230 | 230 |
| | 1 750 | 300 | 252 | 1 570 | 9 000 | 150 | 250 | 230 |
| | 1 800 | 300 | 252 | 1 570 | 10 000 | 160 | 260 | 230 |
| | 2 000 | 300 | 468 | 2 900 | 12 500 | 170 | 280 | 230 |
| | 2 800 | 300 | 1600 | 8 100 | 24 000 | 208 | 270 | 200 |
| | 3 200 | 300 | 1900 | 9 400 | 26 000 | 231 | 300 | 200 |
| | 3 750 | 150 | 1870 | 9 100 | 25 000 | 294 | 350 | 200 |
| | 630 | 400 | 22,5 | 200 | 2 550 | 55 | 90 | 100 |
| | 700 | 400 | 27,5 | 250 | 2 850 | 60 | 100 | 100 |
| | 800 | 400 | 33,5 | 300 | 3 300 | 70 | 115 | 100 |
| | 900 | 400 | 47 | 430 | 3 700 | 80 | 130 | 100 |
| | 1 000 | 400 | 52 | 480 | 4 100 | 85 | 140 | 100 |
| | 1 100 | 400 | 63 | 580 | 4 550 | 100 | 160 | 100 |
| | 1 250 | 400 | 88 | 800 | 5 400 | 110 | 180 | 100 |
| 33 | 1 400 | 380 | 133 | 1 050 | 6 600 | 130 | 210 | 100 |
| End contacts | 1 600 | 300 | 208 | 1 300 | 8 200 | 140 | 230 | 230 |
| | 1 750 | 300 | 252 | 1 570 | 9 000 | 150 | 250 | 230 |
| | 1 800 | 300 | 252 | 1 570 | 10 000 | 160 | 260 | 230 |
| | 2 000 | 300 | 468 | 2 900 | 12 500 | 170 | 280 | 230 |
| | 2 500 | 150 | 1200 | 5 750 | 17 000 | 140 | 275 | 230 |
| | 3 000 | 150 | 1735 | 8 360 | 20 000 | 175 | 348 | 230 |
| | 3 500 | 150 | 2370 | 11 400 | 24 000 | 195 | 335 | 230 |
| | 4 000 | 150 | 3100 | 14 800 | 27 000 | 215 | 422 | 230 |
| | 4 500 | 150 | 3900 | 18 700 | 31 000 | 237 | 465 | 230 |
| | 4 700 | 150 | 4750 | 22 500 | 33 500 | 240 | 470 | 230 |
| | 3 000 | 550 | 1900 | 9000 | 25000 | 245 | 445 | 150 |
| | 3 200 | 550 | 2200 | 10800 | 27000 | 239 | 435 | 150 |
| | 3 600 | 500 | 2900 | 12400 | 31000 | 256 | 465 | 130 |
| | 4 000 | 500 | 3800 | 16200 | 36000 | 283 | 515 | 130 |
| | 4 500 | 450 | 5000 | 18600 | 41000 | 308 | 560 | 130 |
| | 5 000 | 400 | 7500 | 23100 | 50000 | 319 | 580 | 200 |
| | 2 000 | 350 | 440 | 2790 | 10400 | 135 | 255 | 200 |
| | 2 500 | 350 | 800 | 5220 | 16400 | 155 | 295 | 200 |
| | 3 200 | 300 | 1600 | 8700 | 24000 | 195 | 370 | 200 |
| 2x33 | 3 600 | 300 | 1880 | 9750 | 26000 | 210 | 390 | 200 |
| Double body | 4 000 | 260 | 3040 | 13250 | 32000 | 240 | 455 | 200 |
| End contact | 4 400 | 260 | 3200 | 14300 | 34000 | 260 | 485 | 200 |
| | 5 000 | 260 | 5200 | 23000 | 44000 | 270 | 505 | 200 |
| | 6 400 | 260 | 7600 | 32700 | 50000 | 340 | 640 | 200 |
| | 3 200 | 180 | 960 | 5440 | 17600 | 195 | 390 | 200 |
| | 3 600 | 180 | 1160 | 6460 | 20000 | 205 | 410 | 200 |
| | 4 000 | 180 | 1560 | 8840 | 24000 | 235 | 465 | 200 |
| | 4 400 | 180 | 1880 | 10540 | 26000 | 245 | 485 | 200 |
| | 5 000 | 130 | 3040 | 12920 | 32000 | 255 | 505 | 200 |
| | 5 600 | 130 | 3800 | 15980 | 34000 | 290 | 580 | 200 |
| | 6 400 | 130 | 5000 | 20740 | 42000 | 315 | 630 | 200 |
| | 7 200 | 130 | 6500 | 27200 | 46000 | 350 | 695 | 200 |
| | 7 500 | 130 | 7500 | 30940 | 50000 | 370 | 735 | 200 |

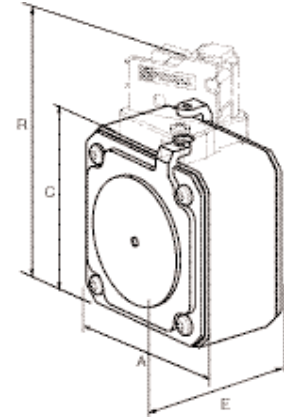
For other ratings consult us



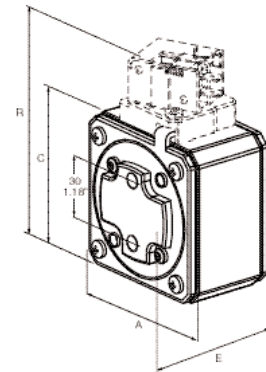
Semiconductor Fuses

PSC - LR range - Size 33

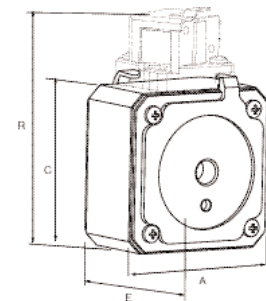
| Size | Catalog Number | Weight (g) | Packaging |
|--------------|----------------------|------------|-----------|
| | 1,5 URC 33 PPAF 3750 | | |
| | 3 URC 33 PPAF 3200 | | |
| | 3 URC 33 PPAF 2800 | | |
| | 3 URC 33 PPAF 1600 | | |
| | 3 URC 33 PPAF 1750 | | |
| | 3 URC 33 PPAF 1800 | | |
| 33 | 3 URC 33 PPAF 2000 | | |
| Press Pack | 3,8 URC 33 PPAF 1400 | 900 | 3 |
| | 4 URC 33 PPAF 0630 | | |
| | 4 URC 33 PPAF 0700 | | |
| | 4 URC 33 PPAF 0800 | | |
| | 4 URC 33 PPAF 0900 | | |
| | 4 URC 33 PPAF 1000 | | |
| | 4 URC 33 PPAF 1100 | | |
| | 4 URC 33 PPAF 1250 | | |
| | 1,5 URCG 33 TDF 2500 | | |
| | 1,5 URCG 33 TDF 3000 | | |
| | 1,5 URCG 33 TDF 3500 | | |
| | 1,5 URCG 33 TDF 4000 | | |
| | 1,5 URCG 33 TDF 4500 | | |
| | 1,5 URCG 33 TDF 4700 | | |
| | 3 URC 33 TDF 1600 | | |
| | 3 URC 33 TDF 1750 | | |
| 33 | 3 URC 33 TDF 1800 | | |
| End contacts | 3 URC 33 TTF 2000 | 1250 | 3 |
| | 3,8 URC 33 TTF 1400 | | |
| | 4 URC 33 TTF 0630 | | |
| | 4 URC 33 TTF 0700 | | |
| | 4 URC 33 TTF 0800 | | |
| | 4 URC 33 TTF 0900 | | |
| | 4 URC 33 TTF 1000 | | |
| | 4 URC 33 TTF 1100 | | |
| | 4 URC 33 TTF 1250 | | |



PPAF
Press Pack



TDF
End contacts



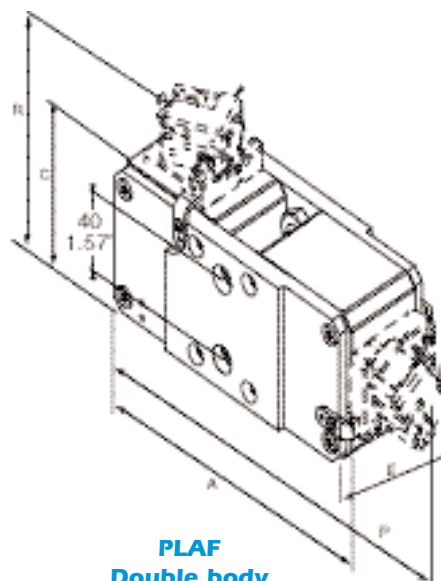
TTF
End contacts




Semiconductor Fuses

PSC - LR range - Size 33

| Size | Catalog Number | Weight (g) | Packaging |
|--------------|------------------------------|------------|-----------|
| | 1,3 URD 233 PLAF 5000 | | |
| | 1,3 URD 233 PLAF 5600 | | |
| | 1,3 URD 233 PLAF 6000 | | |
| | 1,3 URD 233 PLAF 6400 | | |
| | 1,3 URD 233 PLAF 7000 | | |
| | 1,3 URD 233 PLAF 7200 | | |
| | 1,3 URD 233 PLAF 7500 | | |
| | 1,8 URD 233 PLAF 3200 | | |
| | 1,8 URD 233 PLAF 3600 | | |
| | 1,8 URD 233 PLAF 4000 | | |
| | 1,8 URD 233 PLAF 4400 | | |
| 2x33 | 2,6 URD 233 PLAF 4000 | | |
| Double body | 2,6 URD 233 PLAF 4400 | 2500 | 1 |
| End contacts | 2,6 URD 233 PLAF 5000 | | |
| | 2,6 URD 233 PLAF 6400 | | |
| | 3 URD 233 PLAF 3200 | | |
| | 3 URD 233 PLAF 3600 | | |
| | 3,5 URD 233 PLAF 2000 | | |
| | 3,5 URD 233 PLAF 2500 | | |
| | 4 URD 233 PLAF 5000 | | |
| | 4,5 URD 233 PLAF 4500 | | |
| | 5 URD 233 PLAF 3600 | | |
| | 5 URD 233 PLAF 4000 | | |
| | 5,5 URD 233 PLAF 3000 | | |
| | 5,5 URD 233 PLAF 3200 | | |



PLAF
Double body
End contacts

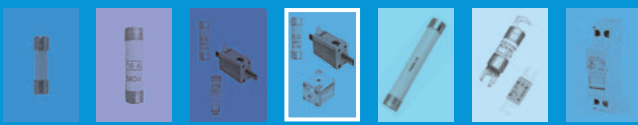
Microswitches : MS3V 1-5 - Ref. X310014
 MS3V 1-5  - Ref. Y310038 Insulation voltage
 MS3V 1-5 BS - Ref. W310013 1000 VAC - DC
 MS3V 1-5 ET - Ref. R310009
 MS3V 1-9 BS - Ref. T310011

Threaded studs : M8 x 20 mm - Ref. V099171F
 M10 x 30 mm - Ref. M099946F
 M12 x 35 mm - Ref. J099966F
 Exists in other length

Threaded studs and microswitches supplied separately

| Size | A | C ⁽¹⁾ | D | E±1.7 | d | G±0.1 threaded depth | P | R |
|----------|-------|------------------|-------|-------|------|-------------------------|-------|-------|
| 33 PPAF | 74.4 | 79.5 | 52 | 49.8 | | | | 114.4 |
| | 2.93" | 3.13" | 2.05" | 1.96" | | | | 4.5" |
| 33 TDF | 74.4 | 79.5 | - | 52 | M 8 | 9 | | 114.4 |
| | 2.93" | 3.13" | | 2.05" | | 0.35 | | 4.5" |
| 33 TTF | 74.4 | 79.5 | 52 | 50.6 | M 12 | 9 | | 114.4 |
| | 2.93" | 3.13" | 2.05" | 1.99" | | 0.35" | | 4.5" |
| 233 PLAF | 167 | 79.5 | - | 55 | M 10 | 15 | 207 | 114.4 |
| | 6.58" | 3.13" | | 2.17" | | 0.59" | 8.15" | 4.5" |

Dimension in mm and inches
 (1) Trip indicator extended



Semiconductor Fuses

PSC - LR range - Size 44

500 - 750 V
10 000 - 1200 A

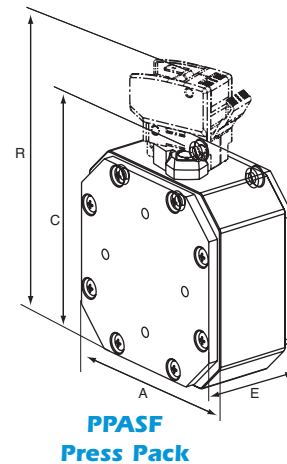
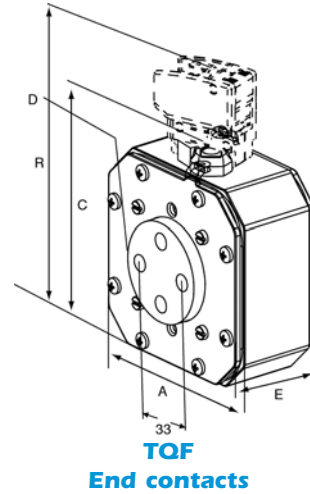
| Size | Ratings | Voltage | Pre-Arcing | Total I ² t @ Un | I @ 10ms | Power losses (W) | | Breaking capacities (kA) |
|--|-----------|-----------|---|-----------------------------|----------|------------------|-------|--------------------------|
| | (A) In | (V) Un | I ² t @ 1ms I ² tp (kA ² s) | (kA ² s) | (A) | In | 0,8In | |
| | 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 | 190 | 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 |
| 44 end contacts | 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 | 690 | 2 220 | 10 500 | 27 000 | 460 | 230 | 215 |
| | 3 300 | 690 | 2 550 | 12 100 | 28 800 | 466 | 233 | 215 |
| | 3 400 | 690 | 2 730 | 13 000 | 30 000 | 475 | 238 | 215 |
| | 3 500 | 690 | 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 |
| | 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 |
| 44 press pack | 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 | 690 | 2 220 | 10 500 | 27 000 | 545 | 273 | 215 |
| | 3 600 | 690 | 2 550 | 12 100 | 28 800 | 548 | 274 | 215 |
| | 3 700 | 690 | 2 730 | 13 000 | 30 000 | 550 | 275 | 215 |
| | 3 800 | 690 | 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 |
| | 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 | 690 | 4 400 | 20 800 | 37 800 | 810 | 405 | 215 |
| 2x44 double body press pack or end contacts | 5 400 | 690 | 5 400 | 25 600 | 42 000 | 840 | 420 | 215 |
| | 5 600 | 690 | 6 040 | 28 700 | 44 400 | 860 | 430 | 215 |
| | 6 000 | 690 | 7 460 | 35 600 | 50 000 | 880 | 440 | 215 |
| | 6 400 | 690 | 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 |
|--------------|-----------------------|----------------|-----------|
| | 7,5 URD 44 TDF 1200 | RU | |
| | 7,5 URD 44 TDF 1350 | RU | |
| | 7,5 URD 44 TDF 1600 | RU | |
| | 7,5 URD 44 TDF 1800 | RU | |
| | 7,5 URD 44 TDF 2240 | RU | |
| | 7,5 URD 44 TDF 2200 | RU | |
| | 7,5 URD 44 TDF 2400 | RU | |
| | 7 URD 44 TDF 2500 | RU | |
| | 7 URD 44 TDF 2800 | RU | |
| | 7 URD 44 TDF 3000 | RU | |
| 44 | 6,9 URD 44 TDF 3200 | RU | |
| end contacts | 6,9 URD 44 TDF 3300 | RU 2240 | 1 |
| | 6,9 URD 44 TDF 3400 | RU | |
| | 6,9 URD 44 TDF 3500 | RU | |
| | 6 URD 44 TDF 4000 | | |
| | 6 URD 44 TDF 4200 | | |
| | 5,5 URD 44 TDF 4400 | | |
| | 5,5 URD 44 TDF 4700 | | |
| | 5,5 URD 44 TDF 5000 | | |
| | 5 URD 44 TDF 5750 | | |
| | 7,5 URD 44 PPASF 1350 | RU | |
| | 7,5 URD 44 PPASF 1500 | RU | |
| | 7,5 URD 44 PPASF 1750 | RU | |
| | 7,5 URD 44 PPASF 2000 | RU | |
| | 7,5 URD 44 PPASF 2200 | RU | |
| | 7,5 URD 44 PPASF 2400 | RU | |
| 44 | 7,5 URD 44 PPASF 2600 | RU | |
| press pack | 7 URD 44 PPASF 2700 | RU 2400 | 1 |
| | 7 URD 44 PPASF 2900 | RU | |
| | 7 URD 44 PPASF 3000 | RU | |
| | 7 URD 44 PPASF 3200 | | |
| | 6,9 URD 44 PPASF 3500 | RU | |
| | 6,9 URD 44 PPASF 3600 | | |
| | 6,9 URD 44 PPASF 3800 | | |
| | 6 URD 44 PPASF 3900 | | |
| | 6 URD 44 PPASF 4000 | | |
| | 6 URD 44 PPASF 4200 | | |
| | 6 URD 44 PPASF 4400 | | |
| | 5,5 URD 44 PPASF 4800 | | |
| | 5,5 URD 44 PPASF 5500 | | |
| | 5 URD 44 PPASF 5600 | | |
| | 5 URD 44 PPASF 6200 | | |



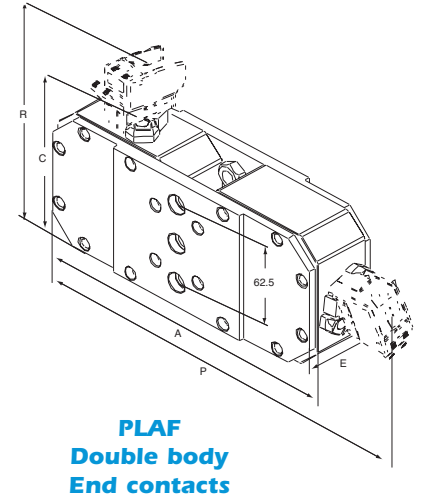





Semiconductor Fuses

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* | 6,9 URD 244 PLAF 5000 | | |
| double body | 6,9 URD 244 PLAF 5600 | 5300 | 1 |
| end contacts | 6,9 URD 244 PLAF 6000 | | |
| | 6,9 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

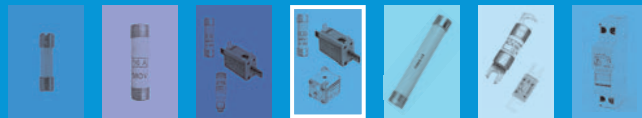


Microswitches : MC3E1-5N * - Ref. D310020
 MC3E1-5NBS * - Ref. E310021 Insulation voltage 1250 VAC - DC (data p 21)
 MC3E1-9NBS * - Ref. F310022
 MC3E1-5NET - Ref. L310027

Threaded studs and microswitches ordered separately

| Size | A | C ⁽¹⁾ | D | E ^{1,7} | d | G ^{0,1} threaded depth | P | R |
|----------|-------|------------------|-------|------------------|------|------------------------------------|--------|-------|
| 44 TOF | 103 | 118 | 52 | 65 | M 10 | 9 | - | 150 |
| | 4.06" | 4.65" | 2.05" | 2.56" | | 0.35" | | 5.91" |
| 44 PPASF | 103 | 118 | - | 54 | - | - | - | 150 |
| | 4.06" | 4.65" | | 2.13" | | | | 5.91" |
| 244 PLAF | 243 | 118 | - | 61 | M 12 | 15 | 275 | 150 |
| | 9.57" | 4.65" | | 2.40" | | 0.59" | 10.82" | 5.91" |

Dimension in mm and inches
 See studs p. 23
 See mounting torque and clamping force information p 23
 (1) Trip indicator extended
 (*) Pending



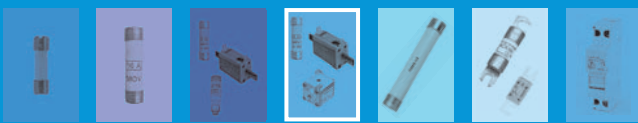
Semiconductor Fuses

650 - 1250 V
4800 - 800 A

PSC - LR range - 73

| Size | Ratings | Voltage | Pre-Arcing | Total Pt @ Un | I @ 10ms | Power losses (W) | | Breaking capacities |
|-----------------|-----------|-----------|---|---------------------|----------|------------------|-----|---------------------|
| | (A) In | (V) Un | Pt @ 1ms I ² tp (kA ² s) | (kA ² s) | (A) | 0,8In | In | (kA) |
| | 800 | 1250 | 170 | 1155 | 7500 | 80 | 160 | 110 |
| | 900 | 1250 | 235 | 1620 | 8800 | 85 | 170 | 110 |
| | 1000 | 1200 | 385 | 2500 | 12000 | 85 | 170 | 120 |
| | 1050 | 1200 | 440 | 2850 | 12500 | 85 | 170 | 120 |
| | 1100 | 1150 | 530 | 3330 | 13500 | 85 | 170 | 220 |
| 73 | 1250 | 1100 | 630 | 3650 | 15000 | 100 | 200 | 240 |
| end contacts | 1400 | 1000 | 860 | 4300 | 17000 | 110 | 220 | 220 |
| | 1500 | 950 | 1150 | 5500 | 20000 | 115 | 230 | 220 |
| | 1550 | 950 | 1270 | 6025 | 21000 | 120 | 240 | 220 |
| | 1750 | 850 | 1700 | 7150 | 24000 | 125 | 250 | 230 |
| | 1900 | 850 | 2100 | 9000 | 27000 | 140 | 280 | 230 |
| | 2200 | 750 | 2750 | 10200 | 31000 | 148 | 295 | 212 |
| | 2400 | 700 | 3950 | 13600 | 37000 | 153 | 305 | 212 |
| | 1600 | 1150 | 680 | 4200 | 8400 | 165 | 330 | 115 |
| | 1800 | 1150 | 940 | 5800 | 11600 | 170 | 340 | 115 |
| | 2000 | 1100 | 1540 | 8800 | 17600 | 170 | 340 | 220 |
| | 2100 | 1100 | 1760 | 10100 | 20200 | 170 | 340 | 220 |
| 2x73 | 2200 | 1050 | 2120 | 11500 | 23000 | 170 | 340 | 220 |
| press pack | 2500 | 1000 | 2520 | 12500 | 25000 | 200 | 400 | 220 |
| or end contacts | 2800 | 900 | 3440 | 15500 | 31000 | 220 | 440 | 220 |
| | 3000 | 850 | 4600 | 19500 | 39000 | 230 | 460 | 220 |
| | 3100 | 850 | 5080 | 21600 | 43200 | 240 | 480 | 220 |
| | 3500 | 850 | 6800 | 28600 | 57200 | 250 | 500 | 220 |
| | 3800 | 850 | 8400 | 36000 | 72000 | 280 | 560 | 220 |
| | 4400 | 700 | 11000 | 37700 | 75400 | 295 | 590 | 230 |
| | 4800 | 650 | 15800 | 50000 | 100000 | 305 | 610 | 230 |

PSC - LR range

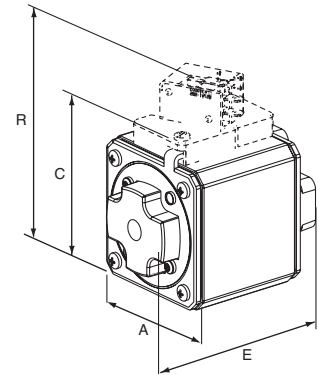


Semiconductor Fuses

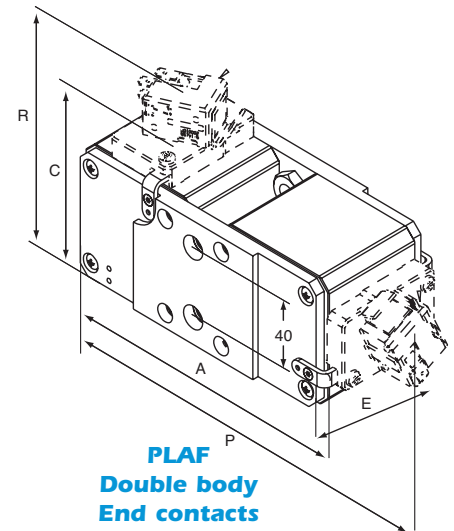
PSC - LR range - Size 73

| Size | Catalog Number | Weight (g) | Packaging |
|--------------|------------------------|------------|-----------|
| | 12,5 URD 73 TTF 0800 | | |
| | 12,5 URD 73 TTF 0900 | | |
| | 12 URD 73 TTF 1000 | | |
| | 12 URD 73 TTF 1050 | | |
| | 11,5 URD 73 TTF 1100 | | |
| 73 | 11 URD 73 TTF 1250 | | |
| end contacts | 10 URD 73 TTF 1400 | 430 | 3 |
| | 9,5 URD 73 TTF 1500 | | |
| | 9,5 URD 73 TTF 1550 | | |
| | 8,5 URD 73 TTF 1750 | | |
| | 8,5 URD 73 TTF 1900 | | |
| | 7,5 URD 73 TTF 2200 | | |
| | 7 URD 73 TTF 2400 | | |
| | 11,5 URD 273 PLAF 1600 | | |
| | 11,5 URD 273 PLAF 1800 | | |
| | 11 URD 273 PLAF 2000 | | |
| | 11 URD 273 PLAF 2100 | | |
| | 10,5 URD 273 PLAF 2200 | | |
| 2x73* | 10 URD 273 PLAF 2500 | 950 | 1 |
| double body | 9 URD 273 PLAF 2800 | | |
| end contacts | 8,5 URD 273 PLAF 3000 | | |
| | 8,5 URD 273 PLAF 3100 | | |
| | 8,5 URD 273 PLAF 3500 | | |
| | 8,5 URD 273 PLAF 3800 | | |
| | 7 URD 273 PLAF 4400 | | |
| | 6,5 URD 273 PLAF 4800 | | |


* Press pack available on request



TTF
End contacts



PLAF
Double body
End contacts

Microswitches : MS7V 1-5 - Ref. J310002
 MS7V 1-5  - Ref. Z310039
 MS7V 1-5 BS - Ref. K310003
 MS7V 1-9 BS - Ref. P310007
 MS7V 1-5 ET - Ref. S310010

Insulation voltage 1250 VAC-DC (data p 21)

Threaded studs and microswitches supplied separately

| Size | A | C ⁽¹⁾ | D | E ^{±1.7} | d | G ^{±0.1} threaded depth | P | R |
|----------|------------------|------------------|---------------|-------------------|------|-------------------------------------|----------------|----------------|
| 73 TTF | 74,5 2-15/16" | 79,5 3-1/8" | 52 2-1/16" | 90,9 3.58" | M 12 | 9 0.35" | - | 107,5 4.23" |
| 273 PLAF | 170,5 6.71" | 78,5 3.09" | - | 78 3.07" | M 10 | 15 0.59" | 204,5 8.05" | 107,5 4.23" |

Dimension in mm and inches
 See studs p. 23
 See mounting torque and clamping force information p 23
 (1) Trip indicator extended



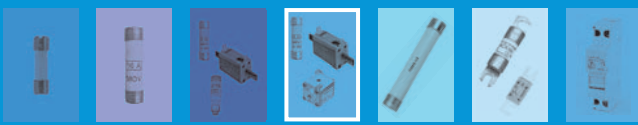
Semiconductor Fuses

PSC - LR range - Size 83

800 - 1500 V
4400 - 630 A

| Size | Ratings | Voltage | Pre-Arcing | Total P _t @ U _n | I @ 10ms | Power losses (W) | | Breaking |
|--|-----------------------|-----------------------|---|---------------------------------------|----------|-------------------|----------------|--------------------|
| | (A) I _n | (V) U _n | I ² t @ 1ms I ² t _p (kA ² s) | I ² t (kA ² s) | (A) | 0,8I _n | I _n | capacities (kA) |
| 83 end contacts | 630 | 1500 | 89 | 635 | 5400 | 60 | 120 | 173 |
| | 725 | 1500 | 139 | 990 | 6800 | 73 | 145 | 173 |
| | 800 | 1500 | 186 | 1330 | 8000 | 79 | 157 | 173 |
| | 850 | 1500 | 223 | 1590 | 8500 | 85 | 170 | 173 |
| | 900 | 1300 | 235 | 1700 | 8800 | 68 | 135 | 148 |
| | 950 | 1300 | 355 | 2600 | 11000 | 83 | 165 | 148 |
| | 1000 | 1250 | 385 | 2650 | 12000 | 85 | 170 | 115 |
| | 1050 | 1250 | 440 | 3020 | 12500 | 88 | 175 | 112 |
| | 1100 | 1200 | 530 | 3450 | 13500 | 88 | 175 | 115 |
| | 1250 | 1150 | 630 | 3950 | 15000 | 105 | 210 | 220 |
| | 1400 | 1100 | 860 | 4950 | 17000 | 110 | 220 | 115 |
| | 1550 | 950 | 1270 | 6020 | 21000 | 123 | 245 | 115 |
| | 1800 | 900 | 1755 | 7900 | 24500 | 130 | 260 | 235 |
| | 2000 | 850 | 2100 | 8900 | 26500 | 140 | 280 | 235 |
| | 2200 | 850 | 2750 | 11660 | 31000 | 150 | 300 | 235 |
| | 2400 | 750 | 3950 | 14700 | 37000 | 155 | 310 | 212 |
| 2x83 double body press pack or end contacts | 900 | 1450 | 172 | 1170 | 7470 | 63 | 125 | 158 |
| | 1100 | 1450 | 300 | 3000 | 9900 | 93 | 185 | 158 |
| | 1250 | 1350 | 356 | 2225 | 10800 | 120 | 240 | 115 |
| | 1450 | 1350 | 556 | 3475 | 13600 | 145 | 290 | 115 |
| | 1600 | 1350 | 744 | 4700 | 16000 | 158 | 315 | 115 |
| | 1700 | 1350 | 892 | 5630 | 17000 | 170 | 340 | 115 |
| | 1800 | 1300 | 940 | 6800 | 17600 | 135 | 270 | 175 |
| | 1900 | 1300 | 1420 | 10400 | 22000 | 165 | 330 | 175 |
| | 2000 | 1150 | 1540 | 9600 | 24000 | 170 | 340 | 115 |
| | 2100 | 1150 | 1760 | 11000 | 25000 | 175 | 350 | 111 |
| | 2200 | 1100 | 2120 | 12400 | 27000 | 175 | 350 | 220 |
| | 2500 | 1100 | 2520 | 14500 | 30000 | 210 | 420 | 220 |
| | 2800 | 1000 | 3440 | 17200 | 34000 | 220 | 440 | 220 |
| | 3100 | 850 | 5080 | 21500 | 42000 | 245 | 490 | 220 |
| 3600 | 850 | 7020 | 29850 | 49000 | 260 | 520 | 235 | |
| 4000 | 800 | 8400 | 33600 | 53000 | 280 | 560 | 212 | |
| 4400 | 800 | 11000 | 43900 | 62000 | 300 | 600 | 212 | |
| 4800 | 700 | 15800 | 54300 | 74000 | 310 | 620 | 230 | |

PSC - LR range









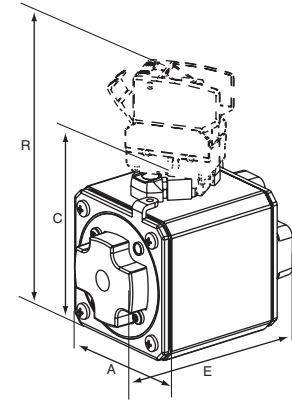
Semiconductor Fuses

PSC - LR range - 83

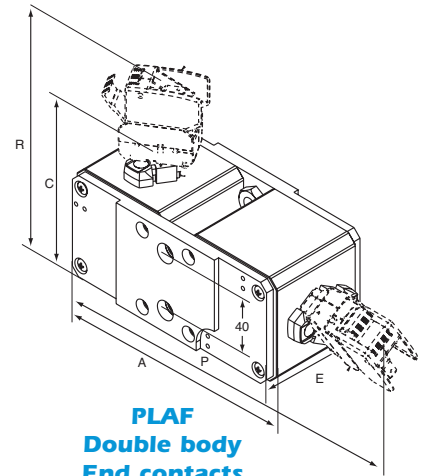
| Size | Catalog Number | Weight (g) | Packaging |
|--------------|------------------------|------------|-----------|
| | 15 URD 83 TTF 0630 | | |
| | 15 URD 83 TTF 0725 | | |
| | 15 URD 83 TTF 0800 | | |
| | 15 URD 83 TTF 0850 | | |
| | 13 URD 83 TTF 0900 | | |
| | 13 URD 83 TTF 0950 | | |
| | 12,5 URD 83 TTF 1000 | | |
| | 12,5 URD 83 TTF 1050 | | |
| 83 | 12 URD 83 TTF 1100 | | |
| end contacts | 11,5 URD 83 TTF 1250 | 1600 | 1 |
| | 11 URD 83 TTF 1400 | | |
| | 9,5 URD 83 TTF 1550 | | |
| | 9 URD 83 TTF 1800 | | |
| | 8,5 URD 83 TTF 2000 | | |
| | 8,5 URD 83 TTF 2200 | | |
| | 7,5 URD 83 TTF 2400 | | |
| | 14,5 URD 283 PLAF 0900 | | |
| | 14,5 URD 283 PLAF 1100 | | |
| | 12,5 URD 283 PLAF 1350 | | |
| | 13,5 URD 283 PLAF 1450 | | |
| | 13,5 URD 283 PLAF 1600 | | |
| | 13,5 URD 283 PLAF 1700 | | |
| 2x83* | 13 URD 283 PLAF 1800 | | |
| double body | 13 URD 283 PLAF 1900 | | |
| end contacts | 11,5 URD 283 PLAF 2000 | 3350 | 1 |
| | 11,5 URD 283 PLAF 2100 | | |
| | 11 URD 283 PLAF 2200 | | |
| | 11 URD 283 PLAF 2500 | | |
| | 10 URD 283 PLAF 2800 | | |
| | 8,5 URD 283 PLAF 3100 | | |
| | 8,5 URD 283 PLAF 3600 | | |
| | 8 URD 283 PLAF 4000 | | |
| | 8 URD 283 PLAF 4400 | | |
| | 7 URD 283 PLAF 4800 | | |

* 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
 MCR3E1-5N * - Ref. G310023
 MCR3E1-5NBS * - Ref. P310030
 MCR3E1-9NBS * - Ref. H310024 Insulation voltage 2200 VAC - DC (data p 21)
 MCR3E1-5NET - Ref. Q310031



TTF
End contacts



PLAF
Double body
End contacts

Threaded studs and microswitches ordered separately

| Size | A | C ⁽¹⁾ | D | E ^{+1,7} | d | G ^{±0,1} | P | R |
|----------|------|------------------|---|-------------------|------|-------------------|-------|-------|
| 83 TTF | 73 | 88 | - | 96,5 | M12 | 9 | - | 135 |
| | 2.9" | 3.5" | | 3.8" | | 0.35" | | 5.31" |
| 283 PLAF | 180 | 88 | - | 84 | M 10 | 15 | 227 | 135 |
| | 7.9" | 3.5" | | 3.31" | | 19.32" | 8.94" | 5.31" |

Dimension in mm and inches

See studs p. 23

See mounting torque and clamping force information p 23

(1) Trip indicator extended

(*) Pending



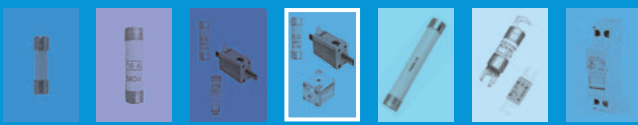
Semiconductor Fuses

PSC - LR range - Size 84

700 - 1450 V
8400 - 2000 A

PSC - LR range

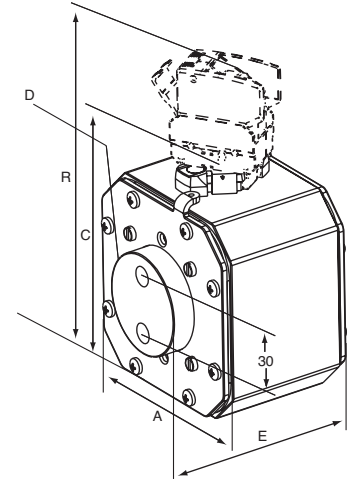
| Size | Ratings | Voltage | Pre-Arcing | Total Pt @ Un | I @ 10ms | Power losses (W) | | Breaking capacities |
|--|-----------|-----------|---|---------------------|----------|------------------|-----|---------------------|
| | (A) In | (V) Un | I ² t @ 1ms I ² tp (kA ² s) | (kA ² s) | (A) | 0,8In | 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 end contacts | 2400 | 1100 | 2610 | 14000 | 29500 | 183 | 365 | 115 |
| | 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 press pack | 2600 | 1100 | 2610 | 14000 | 29500 | 218 | 435 | 115 |
| | 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 double body press pack or end contacts | 4600 | 1000 | 9000 | 43000 | 55000 | 360 | 720 | 235 |
| | 4800 | 1000 | 10440 | 49000 | 59000 | 365 | 730 | 240 |
| | 5000 | 1000 | 11880 | 56000 | 62000 | 380 | 760 | 240 |
| | 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 |



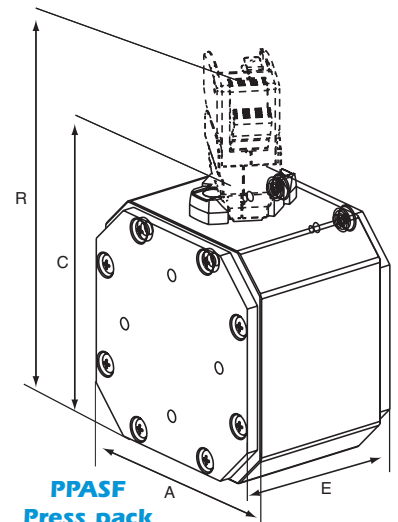
Semiconductor Fuses

PSC - LR range - Size 84




| Size | Catalog Number | Weight (g) | Packaging |
|--------------|------------------------|------------|-----------|
| | 12,5 URD 84 TDF 1400 | | |
| | 12,5 URD 84 TDF 1500 | | |
| | 12,5 URD 84 TDF 1700 | | |
| | 11,5 URD 84 TDF 1800 | | |
| | 11,5 URD 84 TDF 1900 | | |
| | 11 URD 84 TDF 2000 | | |
| | 11 URD 84 TDF 2100 | | |
| | 11 URD 84 TDF 2200 | | |
| 84 | 11 URD 84 TDF 2300 | | |
| end contacts | 11 URD 84 TDF 2400 | 2300 | 1 |
| | 10 URD 84 TDF 2500 | | |
| | 10 URD 84 TDF 2600 | | |
| | 10 URD 84 TDF 2700 | | |
| | 10 URD 84 TDF 2750 | | |
| | 9 URD 84 TDF 2900 | | |
| | 9 URD 84 TDF 3000 | | |
| | 9 URD 84 TDF 3200 | | |
| | 8 URD 84 TDF 3400 | | |
| | 8 URD 84 TDF 3500 | | |
| | 8 URD 84 TDF 3700 | | |
| | 7,5 URD 84 TDF 4000 | | |
| | 7,5 URD 84 TDF 4200 | | |
| | 12,5 URD 84 PPASF 1550 | | |
| | 12,5 URD 84 PPASF 1650 | | |
| | 12,5 URD 84 PPASF 1900 | | |
| | 11,5 URD 84 PPASF 2000 | | |
| | 11,5 URD 84 PPASF 2100 | | |
| | 11 URD 84 PPASF 2200 | | |
| | 11 URD 84 PPASF 2300 | | |
| | 11 URD 84 PPASF 2400 | | |
| | 11 URD 84 PPASF 2500 | | |
| | 11 URD 84 PPASF 2600 | | |
| 84 | 10 URD 84 PPASF 2700 | 2775 | 1 |
| press pack | 10 URD 84 PPASF 2800 | | |
| | 10 URD 84 PPASF 2900 | | |
| | 10 URD 84 PPASF 3000 | | |
| | 9 URD 84 PPASF 3100 | | |
| | 9 URD 84 PPASF 3200 | | |
| | 9 URD 84 PPASF 3350 | | |
| | 8 URD 84 PPASF 3600 | | |
| | 8 URD 84 PPASF 3700 | | |
| | 8 URD 84 PPASF 3850 | | |
| | 7,5 URD 84 PPASF 4300 | | |
| | 7,5 URD 84 PPASF 4500 | | |



TDF
End contacts



PPASF
Press pack

Microswitches : MC3E1-5N * - Ref. D310020
 MC3E1-5NBS * - Ref. E310021
 MC3E1-9NBS * - Ref. F310022
 MC3E1-5NET - Ref. L310027

Insulation voltage 1250 VAC - DC (data p 21)

(*) Pending

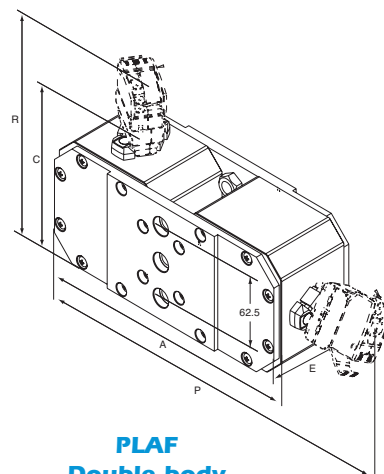


Semiconductor Fuses

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 | |
| | MCR3E1-9NBS | * | - Ref. H310024 | Insulation voltage 2200 VAC - DC (data p 21) |
| | 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" |

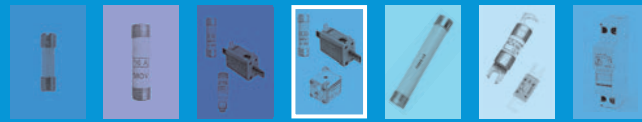
Dimension in mm and inches

See studs p. 23

See mounting torque and clamping force information p 23

(1) Trip indicator extended

(*) Pending



Semiconductor Fuses

PSC - LR range - Size 93

950 - 1800 V
4200 - 1050 A

| Size | Ratings (A) In | Voltage (V) Un | Pre-Arcing de @ 1ms I ² tp (kA ² s) | Total I ² t @ Un (kA ² s) | I @ 10ms (A) | Power losses (W) | | Breaking capacities (kA) |
|-----------------|----------------------|----------------------|---|--|-----------------|------------------|-----|--------------------------------|
| | | | | | | 0,8In | In | |
| | 525 | 1800 | 66 | 510 | 4600 | 71 | 142 | 115 |
| | 575 | 1800 | 84 | 650 | 5200 | 74 | 148 | 115 |
| | 600 | 1800 | 95 | 740 | 5500 | 76 | 152 | 115 |
| | 630 | 1800 | 110 | 850 | 6000 | 79 | 157 | 115 |
| | 700 | 1800 | 158 | 1225 | 7150 | 83 | 165 | 115 |
| | 750 | 1800 | 186 | 1438 | 7700 | 86 | 171 | 115 |
| | 850 | 1800 | 280 | 2200 | 10000 | 90 | 180 | 115 |
| 93 | 900 | 1700 | 315 | 2200 | 10750 | 100 | 200 | 115 |
| end contacts | 950 | 1700 | 355 | 2510 | 12000 | 103 | 205 | 115 |
| | 1000 | 1700 | 440 | 3100 | 12000 | 105 | 210 | 115 |
| | 1100 | 1400 | 680 | 3700 | 14800 | 105 | 210 | 115 |
| | 1250 | 1400 | 990 | 5500 | 18000 | 108 | 215 | 115 |
| | 1400 | 1200 | 1440 | 6500 | 21500 | 113 | 225 | 220 |
| | 1500 | 1200 | 1755 | 8000 | 24000 | 115 | 230 | 220 |
| | 2000 | 1100 | 2750 | 11300 | 30000 | 158 | 315 | 114 |
| | 2100 | 950 | 3950 | 14000 | 35800 | 150 | 300 | 223 |
| | 1050 | 1800 | 264 | 2040 | 9200 | 142 | 284 | 115 |
| | 1150 | 1800 | 336 | 2600 | 10400 | 148 | 296 | 115 |
| | 1200 | 1800 | 380 | 2960 | 11000 | 152 | 304 | 115 |
| | 1250 | 1800 | 440 | 3400 | 12000 | 157 | 314 | 115 |
| | 1400 | 1800 | 632 | 4900 | 14300 | 165 | 330 | 115 |
| | 1500 | 1800 | 744 | 5750 | 15400 | 171 | 342 | 115 |
| | 1700 | 1800 | 1120 | 8800 | 20000 | 180 | 360 | 115 |
| | 1800 | 1700 | 1260 | 8800 | 21500 | 200 | 400 | 115 |
| | 1900 | 1700 | 1420 | 10040 | 24000 | 205 | 410 | 115 |
| 2x93 | 2000 | 1600 | 1760 | 11500 | 24000 | 210 | 420 | 115 |
| double body | 2200 | 1300 | 2720 | 13500 | 29600 | 210 | 420 | 115 |
| press pack | 2500 | 1300 | 3960 | 20000 | 36000 | 215 | 430 | 115 |
| or end contacts | 2800 | 1100 | 5760 | 23500 | 43000 | 225 | 450 | 220 |
| | 3000 | 1100 | 7020 | 29000 | 48000 | 230 | 460 | 220 |
| | 4000 | 1000 | 11000 | 41100 | 60000 | 315 | 630 | 235 |
| | 4200 | 950 | 15800 | 56000 | 71600 | 300 | 600 | 222 |



Semiconductor Fuses

PSC - LR range - 93

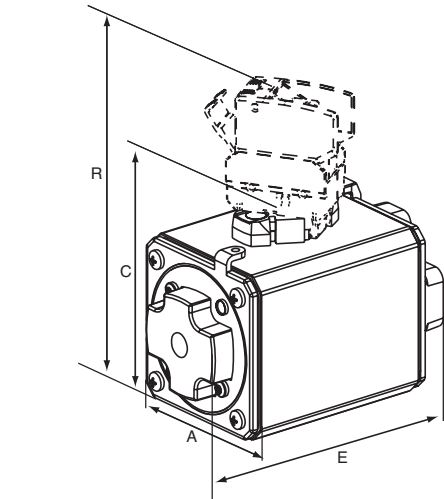
| Size | Catalog Number | Weight (g) | Packaging |
|--------------|-----------------------|------------|-----------|
| | 18 URD 93 TTF 525 | * | |
| | 18 URD 93 TTF 575 | * | |
| | 18 URD 93 TTF 600 | * | |
| | 18 URD 93 TTF 630 | * | |
| | 18 URD 93 TTF 700 | * | |
| | 18 URD 93 TTF 750 | * | |
| | 18 URD 93 TTF 850 | * | |
| 93 | 17 URD 93 TTF 900 | | |
| end contacts | 17 URD 93 TTF 950 | * 2000 | 1 |
| | 17 URD 93 TTF 1000 | * | |
| | 14 URD 93 TTF 1100 | | |
| | 14 URD 93 TTF 1250 | | |
| | 12 URD 93 TTF 1400 | | |
| | 12 URD 93 TTF 1500 | | |
| | 11 URD 93 TTF 2000 | | |
| | 9,5 URD 93 TTF 2100 | | |
| | 18 URD 293 PLAF 1050 | | |
| | 18 URD 293 PLAF 1150 | | |
| | 18 URD 293 PLAF 1200 | | |
| | 18 URD 293 PLAF 1250 | | |
| | 18 URD 293 PLAF 1400 | | |
| | 18 URD 293 PLAF 1500 | | |
| | 18 URD 293 PLAF 1700 | | |
| | 17 URD 293 PLAF 1800 | | |
| | 17 URD 293 PLAF 1900 | 4010 | 1 |
| 2x93* | 16 URD 293 PLAF 2000 | | |
| double body | 13 URD 293 PLAF 2200 | | |
| end contacts | 13 URD 293 PLAF 2500 | | |
| | 11 URD 293 PLAF 2800 | | |
| | 11 URD 293 PLAF 3000 | | |
| | 10 URD 293 PLAF 4000 | | |
| | 9,5 URD 293 PLAF 4200 | | |

* Press pack available on request

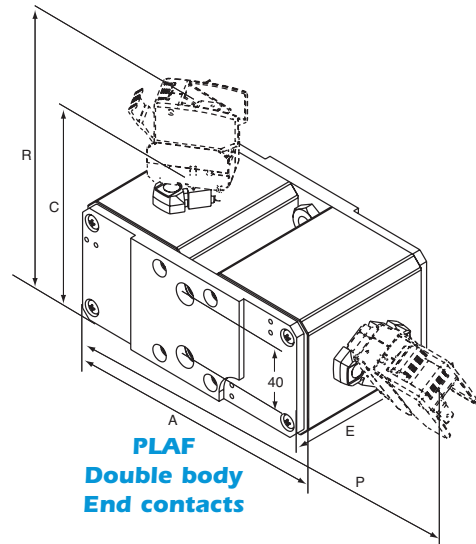
Microswitches : MC3E1-5N * - Ref. D310020
 MC3E1-5NBS * - Ref. E310021
 MC3E1-9NBS * - Ref. F310022
 MC3E1-5NET - Ref. L310027
 MCR3E1-5N * - Ref. G310023
 MCR3E1-5NBS * - Ref. P310030
 MCR3E1-9NBS * - Ref. H310024
 MCR3E1-5NET - Ref. Q310031

Insulation voltage 1250 VAC - DC (data p 21)

Insulation voltage 2200 VAC - DC (data p 21)



TTF
End contacts



PLAF
Double body
End contacts

Threaded studs and microswitches ordered separately

| Size | A | C ⁽¹⁾ | D | E ^{±1.7} | d | G ^{±0.1} threaded depth | P | R |
|----------|-------|------------------|---|-------------------|------|-------------------------------------|-------|-------|
| 93 TTF | 73 | 88 | - | 117,5 | M 12 | 9 | - | 135 |
| | 2.87" | 3.46" | | 4.63" | | 0.35" | | 5.32" |
| 293 PLAF | 180 | 88 | - | 104,1 | M 10 | 15 | 227 | 135 |
| | 7.09" | 3.46" | | 4.10" | | 0.59" | 8.94" | 5.32" |

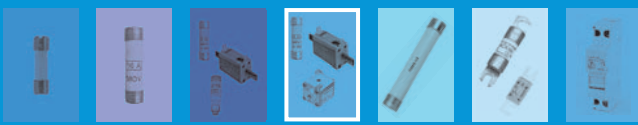
Dimension in mm and inches

See studs p. 23

See mounting torque and clamping force information p 23

(1) Trip indicator extended

(*) Pending



Semiconductor Fuses

PSC - LR range - Size 94

950 - 1700 V
7200 - 1550 A

| Size | Ratings (A) | Voltage (V) | Pre-Arcing I ² t @ 1ms I ² tp (kA ² s) | Total I ² t @ Un I ² t (kA ² s) | I @ 10ms (A) | Power losses (W) | | Breaking capacities (kA) |
|-----------------|-------------|-------------|---|--|--------------|------------------|------|--------------------------|
| | In | Un | | | | 0,8In | In | |
| | 1400 | 1700 | 741 | 5100 | 16000 | 153 | 305 | 115 |
| | 1500 | 1700 | 891 | 6130 | 17000 | 155 | 310 | 115 |
| | 1550 | 1700 | 988 | 6800 | 18000 | 158 | 315 | 115 |
| | 1700 | 1450 | 1460 | 7800 | 22000 | 160 | 320 | 120 |
| | 1900 | 1450 | 1870 | 10000 | 25000 | 170 | 340 | 120 |
| | 2000 | 1300 | 2270 | 11000 | 28000 | 175 | 350 | 115 |
| 94 | 2100 | 1300 | 2610 | 12500 | 30000 | 180 | 360 | 115 |
| end contacts | 2300 | 1250 | 3470 | 15600 | 34000 | 185 | 375 | 115 |
| | 2400 | 1200 | 4460 | 19000 | 38100 | 188 | 385 | 115 |
| | 2750 | 1100 | 6170 | 24000 | 45000 | 193 | 415 | 235 |
| | 3000 | 1050 | 7800 | 29000 | 51000 | 208 | 450 | 235 |
| | 3200 | 1050 | 9640 | 35850 | 56000 | 225 | 500 | 235 |
| | 3600 | 950 | 13900 | 47300 | 67500 | 270 | 540 | 235 |
| | 1550 | 1700 | 741 | 5100 | 16000 | 190 | 380 | 115 |
| | 1650 | 1700 | 891 | 6130 | 17000 | 193 | 385 | 115 |
| | 1700 | 1700 | 988 | 6800 | 18000 | 195 | 390 | 115 |
| | 1850 | 1450 | 1460 | 7800 | 22000 | 198 | 395 | 120 |
| | 2100 | 1450 | 1870 | 10000 | 25000 | 215 | 430 | 120 |
| 94 | 2200 | 1300 | 2270 | 11000 | 28000 | 220 | 440 | 115 |
| press pack | 2300 | 1300 | 2610 | 12500 | 30000 | 225 | 450 | 115 |
| | 2500 | 1250 | 3470 | 15600 | 34000 | 235 | 470 | 115 |
| | 2600 | 1200 | 4460 | 19000 | 38100 | 240 | 480 | 115 |
| | 3000 | 1100 | 6170 | 24000 | 45000 | 255 | 510 | 235 |
| | 3200 | 1050 | 7800 | 29000 | 51000 | 273 | 545 | 235 |
| | 3400 | 1050 | 9640 | 35850 | 56000 | 288 | 575 | 235 |
| | 3800 | 950 | 13900 | 47300 | 67500 | 310 | 620 | 235 |
| | 2800 | 1550 | 2965 | 17800 | 32000 | 305 | 610 | 115 |
| | 3000 | 1550 | 3565 | 21400 | 34000 | 310 | 620 | 115 |
| | 3100 | 1550 | 4000 | 23700 | 36000 | 315 | 630 | 115 |
| | 3400 | 1350 | 5840 | 29000 | 44000 | 320 | 640 | 215 |
| | 3800 | 1350 | 7500 | 37300 | 50000 | 340 | 680 | 215 |
| 2x94 | 4000 | 1250 | 9080 | 41000 | 56000 | 350 | 700 | 215 |
| double body | 4200 | 1250 | 10440 | 47000 | 60000 | 360 | 720 | 215 |
| press pack | 4400 | 1200 | 12100 | 51500 | 63000 | 370 | 740 | 220 |
| or end contacts | 4600 | 1150 | 13880 | 56500 | 68000 | 375 | 750 | 115 |
| | 4800 | 1100 | 17840 | 69000 | 76200 | 385 | 770 | 230 |
| | 5500 | 1050 | 24700 | 91800 | 90000 | 415 | 830 | 235 |
| | 6000 | 1050 | 31200 | 116200 | 102000 | 450 | 900 | 235 |
| | 6400 | 1050 | 38600 | 143500 | 112000 | 500 | 1000 | 235 |
| | 7200 | 950 | 55600 | 189200 | 135000 | 540 | 1080 | 235 |









Semiconductor Fuses

PSC - LR range - Size 94

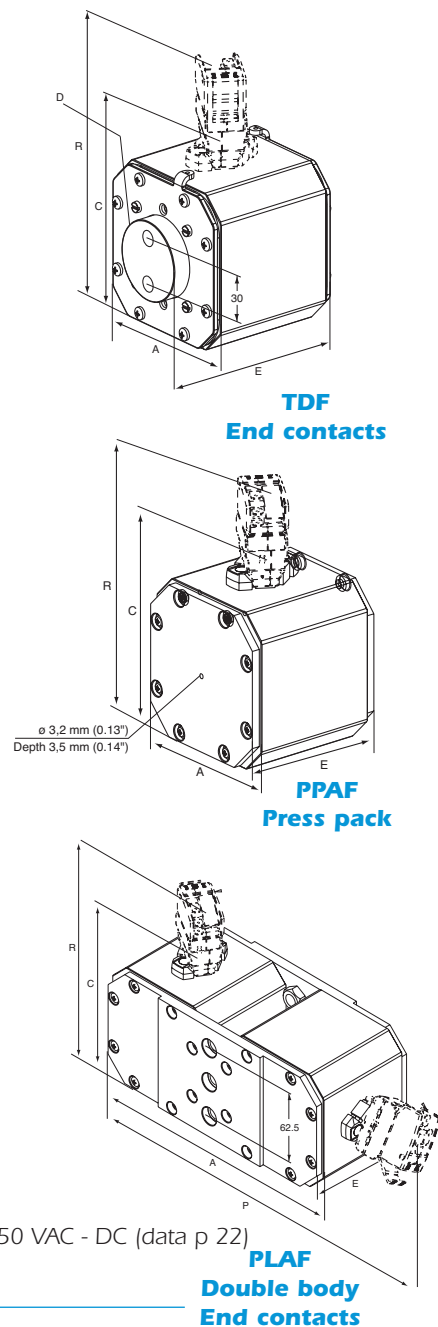
| Size | Catalog Number | Weight (g) | Packaging |
|--------------------------------------|------------------------|------------|-----------|
| 94 end contacts | 17 URD 94 TDF 1400 | 3410 | 1 |
| | 17 URD 94 TDF 1500 | | |
| | 17 URD 94 TDF 1550 | | |
| | 14,5 URD 94 TDF 1700 | | |
| | 14,5 URD 94 TDF 1900 | | |
| | 13 URD 94 TDF 2000 | | |
| | 13 URD 94 TDF 2100 | | |
| | 12,5 URD 94 TDF 2200 | | |
| | 12,5 URD 94 TDF 2300 | | |
| | 12 URD 94 TDF 2400 | | |
| | 11 URD 94 TDF 2750 | | |
| | 10,5 URD 94 TDF 3000 | | |
| 10,5 URD 94 TDF 3200 | | | |
| 9,5 URD 94 TDF 3600 | | | |
| 94 press pack | 17 URD 94 PPAF 1550 | 2800 | 1 |
| | 17 URD 94 PPAF 1650 | | |
| | 17 URD 94 PPAF 1700 | | |
| | 14,5 URD 94 PPAF 1850 | | |
| | 14,5 URD 94 PPAF 2100 | | |
| | 13 URD 94 PPAF 2200 | | |
| | 13 URD 94 PPAF 2300 | | |
| | 12,5 URD 94 PPAF 2400 | | |
| | 12 URD 94 PPAF 2600 | | |
| | 11 URD 94 PPAF 3000 | | |
| 10,5 URD 94 PPAF 3200 | | | |
| 10,5 URD 94 PPAF 3400 | | | |
| 9,5 URD 94 PPAF 3800 | | | |
| 2x94* double body end contacts | 15,5 URD 294 PLAF 2800 | 7400 | 1 |
| | 15,5 URD 294 PLAF 3000 | | |
| | 15,5 URD 294 PLAF 3100 | | |
| | 13,5 URD 294 PLAF 3400 | | |
| | 13,5 URD 294 PLAF 3800 | | |
| | 12,5 URD 294 PLAF 4000 | | |
| | 12,5 URD 294 PLAF 4200 | | |
| | 12 URD 294 PLAF 4400 | | |
| | 11,5 URD 294 PLAF 4600 | | |
| | 11 URD 294 PLAF 4800 | | |
| | 10,5 URD 294 PLAF 5500 | | |
| 10,5 URD 294 PLAF 6000 | | | |
| 10,5 URD 294 PLAF 6400 | | | |
| 9,5 URD 294 PLAF 7200 | | | |

* Press pack available on request

Microswitches : MC3E1-5N  * - Ref. D310020
 MC3E1-5NBS  * - Ref. E310021
 MC3E1-9NBS  * - Ref. F310022
 MC3E1-5NET - Ref. L310027
 MCR3E1-5N  * - Ref. G310023
 MCR3E1-5NBS  * - Ref. P310030
 MCR3E1-9NBS  * - Ref. H310024
 MCR3E1-5NET - Ref. Q310031

Insulation voltage 1250 VAC - DC (data p 22)

Insulation voltage 2200 VAC - DC (data p 22)



Threaded studs and microswitches ordered separately

| Size | A | C ⁽¹⁾ | D | E ^{1,7} | d | G ^{0,1} | P | R |
|----------|-------|------------------|-------|------------------|------|------------------|--------|------|
| 94 TDF | 103 | 118 | 52 | 118,5 | M 12 | 13 | - | 165 |
| | 4.06" | 4.65" | 2.05" | 4.67" | | 0.51" | | 6.5" |
| 94 PPAF | 103 | 118 | - | 97,1 | - | - | - | 165 |
| | 4.06" | 4.65" | | 3.82" | | | | 6.5" |
| 294 PLAF | 243 | 118 | - | 104,1 | M 12 | 16 | 290 | 165 |
| | 9.57" | 4.65" | | 4.10" | | 0.63" | 11.42" | 6.5" |

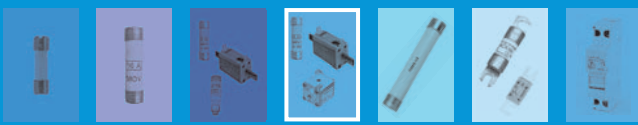
Dimension in mm and inches

See studs p. 23

See mounting torque and clamping force information p 23

(1) Trip indicator extended

(*) Pending

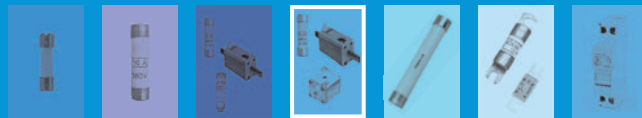


Semiconductor Fuses

1000 - 2500 V
5800 - 800 A

PSC - LR range - Size 123 - 124

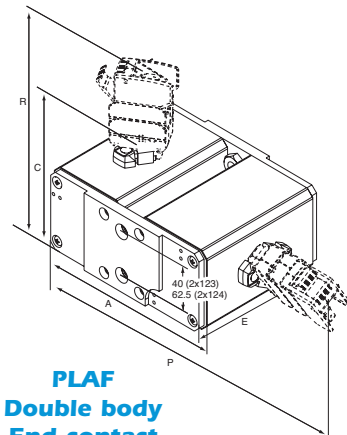
| Size | Ratings (A) | Voltage (V) | Pre-Arcing I ^t @ 1ms | Total I ^t @ Un (kA ² s) | I @ 10ms (A) | Power losses (W) | | Breaking capacities (kA) |
|------------------------------------|------------------------------------|----------------|-------------------------------------|---|--------------|-------------------|----------------|--------------------------|
| | I _n | U _n | I ^{tp} (kA ² s) | | | 0,8I _n | I _n | |
| 123 end contacts | 630 | 2 500 | 207 | 1 760 | 8 500 | 80 | 160 | 171 |
| | 750 | 2 200 | 325 | 2 330 | 10 500 | 86 | 171 | 115 |
| | 800 | 2 100 | 407 | 2 770 | 11 500 | 90 | 180 | 113 |
| | 1 100 | 1 600 | 990 | 5 100 | 18 000 | 108 | 216 | 114 |
| | 1 300 | 1 500 | 1 760 | 8 550 | 24 000 | 114 | 228 | 106 |
| | 1 400 | 1 300 | 2 250 | 9 900 | 27 000 | 119 | 237 | 100 |
| | 1 450 | 1 250 | 2 500 | 10 500 | 28 500 | 121 | 242 | 116 |
| | 1 500 | 1 200 | 2 750 | 11 200 | 30 000 | 123 | 246 | 116 |
| | 1 700 | 1 100 | 3 950 | 15 600 | 36 000 | 128 | 255 | 231 |
| | 2x123 double body press pack | 800 | 2 500 | 205 | 1 760 | 8 500 | 127 | 254 |
| 900 | | 2 500 | 290 | 2 460 | 10 000 | 137 | 274 | 106 |
| 1 100 | | 2 300 | 585 | 4 400 | 14 000 | 146 | 291 | 120 |
| 1 200 | | 2 200 | 760 | 5 400 | 16 000 | 150 | 299 | 115 |
| 1 500 | | 2 000 | 1 300 | 8 250 | 21 000 | 181 | 361 | 115 |
| 3 400 | | 1 100 | 15 800 | 62 500 | 72 000 | 257 | 513 | 231 |
| 124 end contacts | 700 | 2 500 | 200 | 1 700 | 8 100 | 101 | 201 | 106 |
| | 850 | 2 400 | 350 | 2 850 | 11 000 | 113 | 225 | 106 |
| | 1 000 | 2 200 | 555 | 4 000 | 13 500 | 140 | 265 | 115 |
| | 1 400 | 2 000 | 1 750 | 11 000 | 23 700 | 145 | 290 | 115 |
| | 1 600 | 1 900 | 2 075 | 12 600 | 26 000 | 188 | 375 | 170 |
| | 2 700 | 1 200 | 9 650 | 39 000 | 56 000 | 213 | 425 | 120 |
| 2x124 double body press pack | 2 900 | 1 100 | 14 200 | 55 000 | 68 000 | 230 | 455 | 230 |
| | 1 600 | 2 200 | 1 300 | 9 300 | 21 000 | 208 | 415 | 115 |
| | 4 100 | 1 600 | 17 500 | 89 000 | 76 000 | 375 | 750 | 235 |
| | 5 400 | 1 100 | 40 000 | 154 000 | 113 000 | 430 | 850 | 230 |
| | 5 800 | 1 000 | 56 500 | 210 000 | 136 000 | 440 | 870 | 230 |



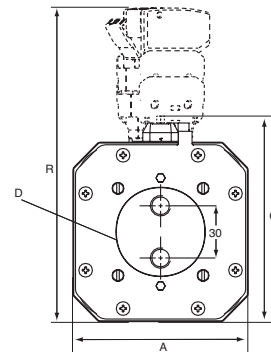
Semiconductor Fuses

PSC - LR range - Size 123 - 124

| Size | Catalog Number | Weight (g) | Packaging |
|--------------|-----------------------|------------|-----------|
| | 25 URD 123 TTF 0630 | | |
| | 22 URD 123 TTF 0750 | | |
| | 21 URD 123 TTF 0800 | | |
| | 16 URD 123 TTF 1100 | | |
| 123 | 15 URD 123 TTF 1300 | | |
| end contacts | 13 URD 123 TTF 1400 | | |
| | 12,5 URD 123 TTF 1450 | 2100 | 1 |
| | 12 URD 123 TTF 1500 | | |
| | 11 URD 123 TTF 1700 | | |
| | 25 URD 2123 PLAF 0800 | | |
| | 25 URD 2123 PLAF 0900 | | |
| 2x123* | 23 URD 2123 PLAF 1100 | | |
| end contacts | 22 URD 2123 PLAF 1200 | 4800 | 1 |
| | 20 URD 2123 PLAF 1500 | | |
| | 11 URD 2123 PLAF 3400 | | |
| | 25 URD 124 TDF 0700 | | |
| | 24 URD 124 TDF 0850 | | |
| | 22 URD 124 TDF 1000 | | |
| 124 | 20 URD 124 TDF 1400 | 4000 | 1 |
| end contacts | 19 URD 124 TDF 1600 | | |
| | 12 URD 124 TDF 2700 | | |
| | 11 URD 124 TDF 2900 | | |
| 2x124* | 22 URD 2124 PPAF 1600 | | |
| Press Pack | 16 URD 2124 PPAF 4100 | 8500 | 1 |
| | 11 URD 2124 PPAF 5400 | | |
| | 10 URD 2124 PPAF 5800 | | |



PLAF
Double body
End contact



TDF
End contact

* End contacts and Press pack available on request

| | | | | | |
|-----------------|--------------|--|---|----------------|--|
| Microswitches : | MCR3E1-5N | | * | - Ref. G310023 | |
| | MCR3E1-5NBS | | * | - Ref. P310030 | |
| | MCR3E1-9NBS | | * | - Ref. H310024 | Insulation voltage 2200 VAC - DC (data p 21) |
| | MCR3E1-5NET | | | - Ref. Q310031 | |
| | MC2R3E1-5NBS | | | - Ref. J310025 | |
| | MC2R3E1-9NBS | | | - Ref. K310026 | Insulation voltage 6000 VAC - DC (data p 21) |
| | MC2R3E1-5NET | | | - Ref. N310029 | |

Threaded studs and microswitches ordered separately

| Size | A | C ⁽¹⁾ | D | E ^{±1.7} | d | G ^{±0.1} threaded depth | P | R |
|-----------|-------|------------------|-------|-------------------|------|-------------------------------------|--------|-------|
| 123 TTF | 73 | 88 | - | 147,5 | M 12 | 9 | | 150 |
| | 2.87" | 3.46" | | 5.81" | | 0.35" | | 5.91" |
| 2123 PLAF | 180 | 88 | - | 133,9 | M 10 | 15 | 242 | 150 |
| | 7.09" | 3.46" | | 5.27" | | 0.59" | 9.53" | 5.91" |
| 124 TDF | 103 | 118 | 52 | 148,3 | M 12 | 13 | | 180 |
| | 4.06" | 4.65" | 2.05" | 5.84" | | 0.51" | | 7.1" |
| 2124 PPAF | 239 | 118 | - | 133,9 | - | - | 310 | 180 |
| | 9.41" | 4.65" | | 5.27" | | | 12.21" | 7.1" |

Dimension in mm and inches

See studs p. 23

See mounting torque and clamping force information p 23

(1) Trip indicator extended

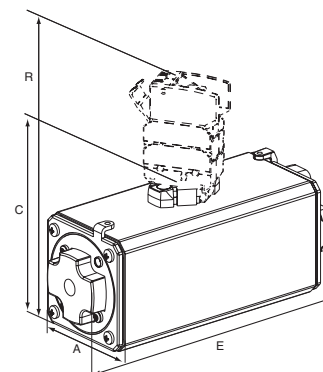
(*) Pending

Semiconductor Fuses

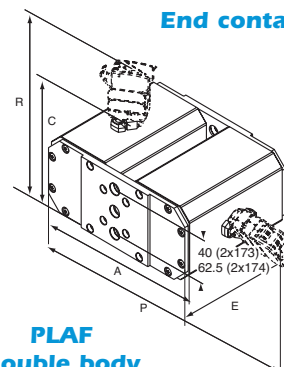
PSC - LR range - Size 173 - 174

| Size | Catalog Number | Weight (g) | Packaging |
|-------|-----------------------|------------|-----------|
| 173 | 38 URD 173 TTF 0400 | 4300 | 1 |
| | 35 URD 173 TTF 0500 | | |
| | 29 URD 173 TTF 0700 | | |
| | 28 URD 173 TTF 0800 | | |
| | 23 URD 173 TTF 1000 | | |
| 2173* | 36 URD 2173 PLAF 0800 | 7400 | 1 |
| | 33 URD 2173 PLAF 0950 | | |
| | 29 URD 2173 PLAF 1400 | | |
| 174 | 33 URD 174 TDF 0630 | 4500 | 1 |
| | 30 URD 174 TDF 0850 | | |
| | 26 URD 174 TDF 1150 | | |
| | 25 URD 174 TDF 1250 | | |
| | 23 URD 174 TDF 1500 | | |
| 2174* | 33 URD 2174 PLAF 1250 | 9000 | 1 |
| | 32 URD 2174 PLAF 1350 | | |
| | 31 URD 2174 PLAF 1500 | | |
| | 29 URD 2174 PLAF 1700 | | |
| | 28 URD 2174 PLAF 2000 | | |

* Press pack available on request



TTF
End contacts



PLAF
Double body
End contacts

Microswitches : MC2R3E1-5NBS - Ref. J310025
 MC2R3E1-9NBS - Ref. K310026
 MC2R3E1-5NET - Ref. N310029

Insulation voltage 6000 VAC - DC (data p 21)

Threaded studs and microswitches ordered separately

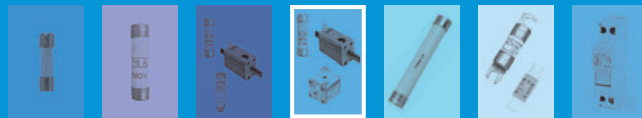
| Size | A | C ⁽¹⁾ | D | E ^{±1.7} | d | G ^{±0.1} threaded depth | P | R |
|-----------|-------|------------------|---|-------------------|------|-------------------------------------|-------|-------|
| 173 TTF | 73 | 88 | - | 186 | M 12 | 9 | | 150 |
| | 2.9" | 3.46" | | 7.32" | | 0.35" | | 5.91" |
| 2173 PLAF | 180 | 88 | - | 173.5 | M 10 | 15 | 242 | 150 |
| | 7.09" | 3.46" | | | | 0.59" | 9.53" | 5.91" |
| 174 TDF | 103 | 118 | - | 187 | M 12 | 13 | | 180 |
| | 4.06" | 4.65" | | 7.36" | | 0.51" | | 7.09" |
| 2174 PLAF | 243 | 118 | - | 172.5 | M 12 | 16 | 305 | 180 |
| | 9.57" | 4.65" | | 6.79" | | 0.63" | 12" | 7.09" |

Dimension in mm and inches

See studs p. 23

See mounting torque and clamping force information p 23

(1) Trip indicator extended



Micro Switches

- ▶ REMOTE SIGNALING SYSTEMS FOR FERRAZ SHAWMUT FUSES
- ▶ PERMANENT BLOWN FUSE INDICATION
- ▶ MANUALLY RESETTABLE
- ▶ STANDARD AND LOW ELECTRICAL LEVEL TYPE AVAILABLE
- ▶ TYPE "ET" AVAILABLE FOR VAPOR AND WATERTIGHT APPLICATION
- ▶ TYPE "BS" AVAILABLE FOR USE IN CORROSIVE APPLICATION

| Ref | Type | Catalog Number | AC or DC Insulation voltage rating U (V) | AC voltage withstand test (*) | Impulse voltage test Uimp 1,2/50µs (**) | Positive operating min. voltage /min. current | Current rating | Contact make/break rating | | | | | | | | | |
|----------|------------------|------------------|--|-------------------------------|---|---|----------------|---------------------------|-----------------------|-------|-------|-------------------------------|-------|-------|--|-----|-----|
| | | | | | | | | Current | Non-inductive circuit | | | Inductive circuit L/R = 25 ms | | | | | |
| | | | | | | | | | 30V | 110V | 250V | 30V | 110V | 250V | | | |
| D310020 | Standard | MC3E 1-5N | 1250 V | 15 kV | 20 kV | 20V 50 mA | 5 A | 50/60 Hz | 10 A | 10 A | 7 A | | | 6 A | | | |
| G310023 | | MCR3E 1-5N | 2200 V | 20 kV | 30 kV | | | DC | 5 A | 0,5 A | | 16 A | 0,3 A | | | | |
| E310021 | Low level | MC3E 1-5NBS | 1250 V | 15 kV | 20 kV | 10V 10 mA | 3 A | 50/60 Hz | 3 A | 3 A | 3 A | 2 A | 1 A | 1 A | | | |
| F310022 | | MCR3E 1-9NBS | | | | | | | | | | | | | | | |
| P310030 | | MCR3E 1-5NBS | 2200 V | 20 kV | 23 kV | | | 30 kV | 10V 10 mA | 3 A | DC | 10 A | 10 A | 7 A | | 6 A | |
| H310024 | | MCR3E 1-9NBS | | | | | | | | | | | | | | | |
| J310025 | | Watertight IP 50 | MC2R3E 1-5NBS | 6000 V | 24 kV | | | 40 kV | 10V 10 mA | 3 A | 50 Hz | | 3 A | 0,5 A | | 1 A | 1 A |
| K310026 | | | MC2R3E 1-9NBS | | 26 kV | | | | | | | 32 kV | | | | | |
| L310027 | Watertight IP 50 | MC3E 1-5NET | 1250 V | 11 kV | 16 kV | 10V 10 mA | 3 A | DC | | 0,5 A | | | 0,2 A | | | | |
| Q310031 | | MCR3E 1-5NET | 2200 V | 20 kV | 30 kV | | | | | | | | | | | | |
| N310029 | | MC2R3E 1-5NET | 6000 V | 24 kV | 40 kV | | | | | | | | | | | | |
| J3100002 | | MS7V 1-5 | 1500 V | 12 kV | 20 kV | 10 mA | 3 A | 50/60 Hz DC | 8 A | 0,4 A | 0,2 A | 4 A | 0,2 A | 0,1 A | | | |
| Z310039 | | MS7V 1-5 UR | | | | | | | | | | | | | | | |
| K310003 | | MS7V 1-5BS | | | | | | | | | | | | | | | |
| P310007 | | MS7V 1-9BS | | | | | | | | | | | | | | | |
| S310010 | | MS7V 1-9ET | | | | | | | | | | | | | | | |

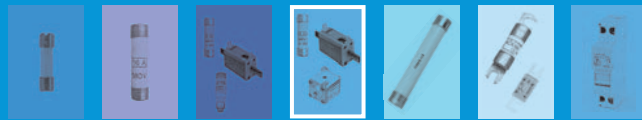
Catalog Numbering system: **MC.E 1-5, MS7V 1-5** single pole microswitch
MC.E 1-9, MS7V 1-9 double pole microswitch
MCR... MC2R... reinforced insulation microswitch.

* Between power circuit and microswitch terminals as per IEC 60 and 694 and NFC 64010 (50/60 Hz 1 min duration in dry air).

** Between power circuit and microswitch terminals impulse voltage according to IEC 947-1.

*** Between power circuit and microswitch terminals

Each microswitch weighs less than 100g, therefore no fume and smoke grade is required by NF F16102 standard



Mounting studs for semiconductor fuses

PSC - LR range

| Material | Designation | Maximum torque (Nm $\pm 3\%$) | | Ref.Number | Packaging |
|---|--|-----------------------------------|----------------------|------------|-----------|
| | | with balancing | without balancing | | |
| Standard Bichromate Zinc plated steel | Stud M8X20 | | | V099171F | 6 pairs |
| | Stud M8X25 | | | B099177F | 6 pairs |
| | Stud M8X30 | 13,5 | 13,5 | S099284F | 6 pairs |
| | Stud M8X50 | | | E099916F | 6 pairs |
| | Stud M8X60 | | | F099917F | 6 pairs |
| | Stud M10X25 | | | Y099197F | 6 pairs |
| | Stud M10X30 | | | M099946F | 6 pairs |
| | Stud M10X35 | 26 | 26 | G099918F | 6 pairs |
| | Stud M10X40 | | | H099919F | 6 pairs |
| | Stud M10X45 | | | K099944F | 6 pairs |
| | Stud M10X70 | | | L099945F | 6 pairs |
| | Stud M12X25 | | | B099200F | 6 pairs |
| | Stud M12X35 | | | J099966F | 6 pairs |
| | Stud M12X40 | 46 | 15 | P099948F | 6 pairs |
| | Stud M12X45 | | | Q099949F | 6 pairs |
| | Stud M12X60 | | | F099963F | 6 pairs |
| | Stud M12X80 | | | G099964F | 6 pairs |
| | Studs for laden atmosphere Stainless steel | Stud M8X30 BS | | | K099967F |
| Stud M8X35 BS | | 13,5 | 13,5 | L099968F | 6 pairs |
| Stud M8X40 BS | | | | N099970F | 6 pairs |
| Stud M8X50 BS | | | | P099971F | 6 pairs |
| Stud M10X35 BS | | | | S098134F | 6 pairs |
| Stud M10X50 BS | | 26 | 26 | Q099972F | 6 pairs |
| Stud M10X70 BS | | | | T099975F | 6 pairs |
| Stud M12X35 BS | | | | V099976F | 6 pairs |
| Stud M12X40 BS | | 46 | 15 | W099977F | 6 pairs |
| Stud M12X45 BS | | | | X099978F | 6 pairs |
| Stud M12X70 BS | | | Y099979F | 6 pairs | |

Studs unusable length because of the tool : - M8 = 5 mm ; M10 = 6 mm ; M12 = 8 mm (DIN 913 standard)

Mounting torque and clamping force information.

SIZE 73, 93, 123, 173

Press Pack :

- Single body Max clamping force : 5000 daN for a contact surface from a diameter of 60 mm or a square of 53 x 53 mm
- Double body Max. clamping force : 4 000 daN a contact surface from a diameter of 60 mm or a square of 53 x 53 mm
- mini. Pressure contact recommended > 0.4 daN/mm²

End contacts:

- Max. tightening torque :
 - TTF 46 Nm (M12)
 - TDF 46 Nm (M12)

Size 44, 84, 94, 124, 174

Press Pack :

- Single body Max clamping force : 8000 daN for a contact surface from a diameter of 88 mm or a square of 80 x 80 mm
- Double body Max. clamping force : 12 000 daN a contact surface from a diameter of 88 mm or a square of 80 x 80 mm
- mini. Pressure contact recommended > 0.4 daN/mm²

End contacts:

- Max. tightening torque :
 - TDF 46 Nm (M12)
 - TQF 26 Nm (M10)