

Semiconductor (AC) fuses

Other Protistor® Fuses

Ferrule Fuses

27x60 URGD - 600 V to 690 VAC



EXTREMELY BREAKING CAPACITY RATING FUSES:
PROTECTION OF POWER SEMICONDUCTORS ACCORDING TO
IEC STANDARD 60269.1 AND 4

600 V - 690 V AC VOLTAGE RATING

aR- CLASS ACCORDING TO VDE 636-23 AND IEC 60269.4

Main Characteristics

| Voltage rating U_N (VAC) | Class | Current rating I_N (A) | Pre-arcing $i^2t @ 1 \text{ ms}$ I^2t_p (A ² s) | Total clearing I^2t I^2t_t (A ² s) | Watts loss | | Tested Breaking capacity |
|---------------------------------|-------|-------------------------------|--|--|------------|-------|-----------------------------|
| | | | | | 0.8 I_N | I_N | |
| 690 V | URGD | 63 | 405 | 1840 @ 660 V | 12 | 22 | 200 kA @ 690 V |
| | | 80 | 860 | 3750 @ 660 V | 13.5 | 24.6 | |
| | | 100 | 1620 | 6800 @ 660 V | 15 | 27 | |
| | | 125 | 3425 | 13600 @ 660 V | 16 | 29.5 | |
| | | 160 | 6480 | 24600 @ 660 V | 17 | 32.5 | |
| | | 200 | 13700 | 61500 @ 660 V | 18.5 | 35.7 | |
| 600 V | URGD | 250 | 29600 | 107000 @ 600 V | 21 | 40 | 200 kA @ 600 V |

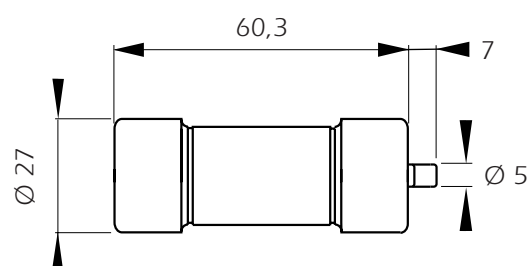
Minimum operating voltage for trip-indicator: 20 V

Ref. Numbers

27x60 - With trip-indicator

| Type | Voltage | Current rating | Designation | Ref. Number | Catalog Number |
|------|---------|----------------|-------------------------|-------------|----------------|
| URGD | 690 V | 63 A | 6.921 CP URGD 27x60/ 63 | A076820 | FR27UD69V63T |
| | | 80 A | 6.921 CP URGD 27x60/ 80 | B076821 | FR27UD69V80T |
| | | 100 A | 6.921 CP URGD 27x60/100 | C076822 | FR27UD69V100T |
| | | 125 A | 6.921 CP URGD 27x60/125 | D076823 | FR27UD69V125T |
| | | 160 A | 6.921 CP URGD 27x60/160 | E076824 | FR27UD69V160T |
| | | 200 A | 6.921 CP URGD 27x60/200 | F076825 | FR27UD69V200T |
| URGD | 600 V | 250 A | 621 CP URGD 27x60/250 | W076264 | FR27UD60V250T |

Fuseholder Solution: See Gears and Fuse gears section

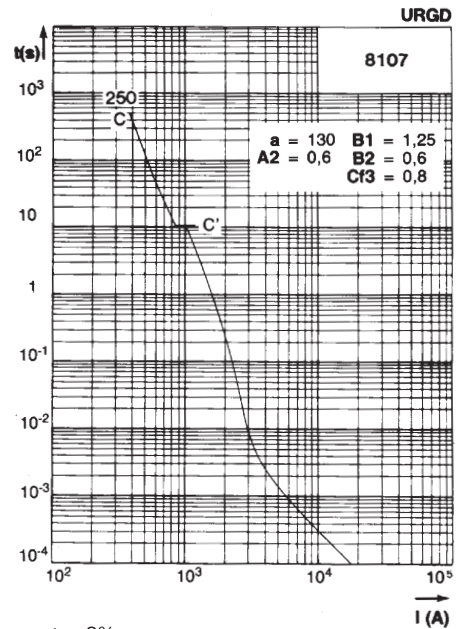
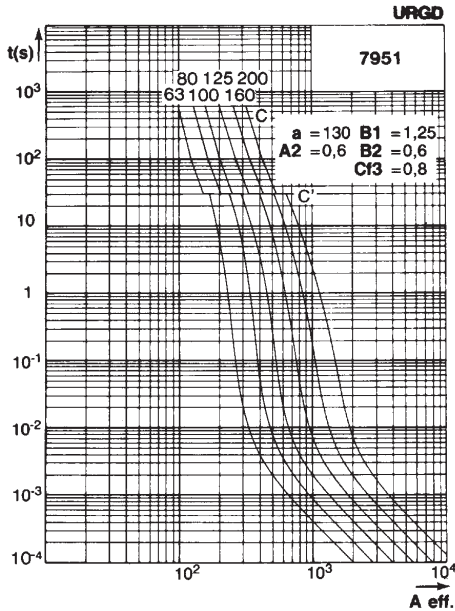


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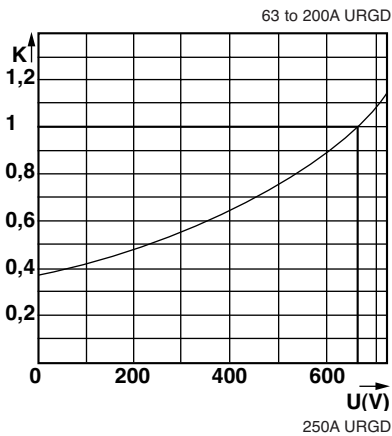
Time vs current characteristics



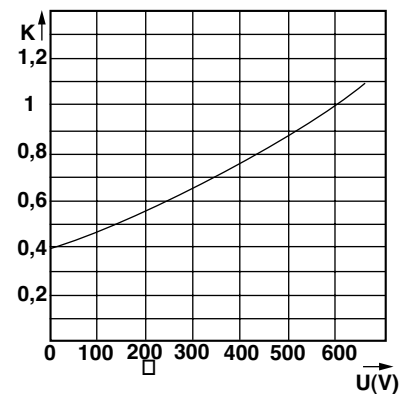
Tolerance for mean pre-arcing current $\pm 8\%$

These curves indicate, for each rated current, pre-arcing time vs. R.M.S. pre-arcing current.

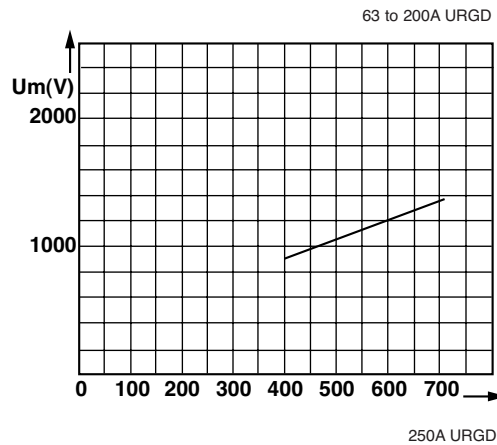
Corrective factor



Left: Mean curves showing variation of total clearing time ($I^2 t_t$) and the total clearing duration t_t as a function of the operating voltage U



Peak arc voltage



Left: Curves show peak value U_m of arc voltage which appears across the fuse-link as a function of operating voltage U @ $\cos \varphi = 0.15$.

