

Protistor® size 33 aR

450 to 700VAC

Square Body High-Speed Fuse-Links AC Protection

The 690/700V Protistor® 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 different body sizes, each size having multiple worldwide acceptable mounting styles.

The Protistor® have been engineered to provide state-of-the-art protection for semiconductors: diodes, thyristors, GTO's and IGBT devices. Fuses are assembled with pure silver, die-cut elements embedded in solidified sand, which helps control arcing characteristics for a lower I^2t and high interrupting rating level. All contact surfaces are silver plated and all hardware is non-magnetic.

Each fuse-link can be equipped with a low voltage trip-indicator which can operate a field mountable microswitch.

Features Benefits

- Multiple body sizes and terminals or blades combination
- aR Class according to IEC 60269-4 and VDE 636-23
- Very low I^2t for improved semiconductor protection
- Ultra fast acting
- Current limiting
- Superior cycling capability

Applications

- Protection of inverters, motor drives, UPS systems and similar 690V or less equipments.

Technical data overview

| | |
|----------------------|-----------------|
| Voltage Range AC | 450 ... 700 VAC |
| Ampere Range (A) | 450 ... 2500 A |
| Speed/Characteristic | aR |
| I.R. AC (kA) | 200 kA |
| Product Size | 33 |



Standards

IEC 60269-4 Compliance

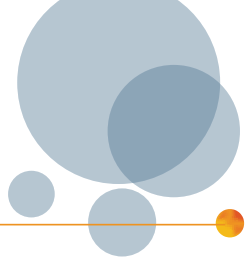
UL/CSA Recognized E76491

CCC 1359.4



Protistor® size 33 aR

450 to 700VAC



Product range



PC33UD69V1250TF

Size 33 type TTF M12 threaded terminals

| Catalog number | Reference number | Rated voltage AC (IEC) | Rated voltage AC (UL) | Rated current I _n | Pre-arcing I ² t | Clearing I ² t at Rated Voltage | Rated breaking capacity AC | Power dissipation at I _n | Weight | Package |
|--------------------------|------------------|------------------------|-----------------------|------------------------------|-----------------------------|--|----------------------------|-------------------------------------|--------|---------|
| Standard Terminal | | | | | | | | | | |
| PC33UD69V450TF | W302170 | 690 V | 700 V | 450 A | 13.45 kA ² s | 81.5 kA ² s | 200 kA | 84 W | 790 g | 3 |
| PC33UD69V500TF | V300076 | 690 V | 700 V | 500 A | 19 kA ² s | 110 kA ² s | 200 kA | 105 W | 790 g | 3 |
| PC33UD69V550TF | W300077 | 690 V | 700 V | 550 A | 27 kA ² s | 155 kA ² s | 200 kA | 105 W | 790 g | 3 |
| PC33UD69V630TF | X300078 | 690 V | 700 V | 630 A | 40 kA ² s | 230 kA ² s | 200 kA | 110 W | 790 g | 3 |
| PC33UD69V700TF | Y300079 | 690 V | 700 V | 700 A | 57 kA ² s | 330 kA ² s | 200 kA | 115 W | 790 g | 3 |
| PC33UD69V800TF | Z300080 | 690 V | 700 V | 800 A | 93 kA ² s | 540 kA ² s | 200 kA | 120 W | 790 g | 3 |
| PC33UD69V900TF | A300081 | 690 V | 700 V | 900 A | 130 kA ² s | 770 kA ² s | 200 kA | 120 W | 790 g | 3 |
| PC33UD69V1000TF | B300082 | 690 V | 700 V | 1000 A | 170 kA ² s | 990 kA ² s | 200 kA | 135 W | 790 g | 3 |
| PC33UD69V1100TF | C300083 | 690 V | 700 V | 1100 A | 240 kA ² s | 1390 kA ² s | 200 kA | 135 W | 790 g | 3 |

Reinforced Terminal

| | | | | | | | | | | |
|-----------------|---------|-------|-------|--------|------------------------|------------------------|--------|-------|-------|---|
| PC33UD69V1250TF | D300084 | 690 V | 700 V | 1250 A | 355 kA ² s | 2053 kA ² s | 200 kA | 150 W | 910 g | 3 |
| PC33UD69V1400TF | E300085 | 690 V | 700 V | 1400 A | 465 kA ² s | 2700 kA ² s | 200 kA | 160 W | 910 g | 3 |
| PC33UD60V1500TF | Y300585 | 600 V | 650 V | 1500 A | 470 kA ² s | 2500 kA ² s | 160 kA | 210 W | 910 g | 3 |
| PC33UD60V1600TF | Z300586 | 600 V | 650 V | 1600 A | 555 kA ² s | 2900 kA ² s | 160 kA | 210 W | 910 g | 3 |
| PC33UD60V1800TF | A300587 | 600 V | 650 V | 1800 A | 720 kA ² s | 3870 kA ² s | 160 kA | 225 W | 910 g | 3 |
| PC33UD55V2000TF | B300588 | 550 V | 600 V | 2000 A | 950 kA ² s | 4500 kA ² s | 150 kA | 250 W | 910 g | 3 |
| PC33UD50V2250TF | K300757 | 500 V | 550 V | 2250 A | 1250 kA ² s | 5160 kA ² s | 130 kA | 280 W | 910 g | 3 |
| PC33UD45V2500TF | L300758 | 450 V | 500 V | 2500 A | 1870 kA ² s | 6540 kA ² s | 110 kA | 280 W | 910 g | 3 |

Size 33 type TTI 1/2"-13 unified coarse threaded terminals

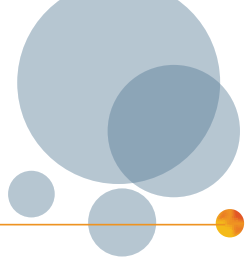
| Catalog number | Reference number | Rated voltage AC (IEC) | Rated voltage AC (UL) | Rated current I _n | Pre-arcing I ² t | Clearing I ² t at Rated Voltage | Rated breaking capacity AC | Power dissipation at I _n | Weight | Package |
|--------------------------|------------------|------------------------|-----------------------|------------------------------|-----------------------------|--|----------------------------|-------------------------------------|--------|---------|
| Standard Terminal | | | | | | | | | | |
| A070UD33TTI450 | X302171 | 690 V | 700 V | 450 A | 13.45 kA ² s | 81.5 kA ² s | 200 kA | 84 W | 790 g | 3 |
| A070UD33TTI500 | X300446 | 690 V | 700 V | 500 A | 19 kA ² s | 110 kA ² s | 200 kA | 105 W | 790 g | 3 |
| A070UD33TTI550 | Y300447 | 690 V | 700 V | 550 A | 27 kA ² s | 155 kA ² s | 200 kA | 105 W | 790 g | 3 |
| A070UD33TTI630 | Z300448 | 690 V | 700 V | 630 A | 40 kA ² s | 230 kA ² s | 200 kA | 110 W | 790 g | 3 |
| A070UD33TTI700 | A300449 | 690 V | 700 V | 700 A | 57 kA ² s | 330 kA ² s | 200 kA | 115 W | 790 g | 3 |
| A070UD33TTI800 | T300443 | 690 V | 700 V | 800 A | 93 kA ² s | 540 kA ² s | 200 kA | 120 W | 790 g | 3 |
| A070UD33TTI900 | B300450 | 690 V | 700 V | 900 A | 130 kA ² s | 770 kA ² s | 200 kA | 120 W | 790 g | 3 |
| A070UD33TTI1000 | C300451 | 690 V | 700 V | 1000 A | 170 kA ² s | 990 kA ² s | 200 kA | 135 W | 790 g | 3 |
| A070UD33TTI1100 | D300452 | 690 V | 700 V | 1100 A | 240 kA ² s | 1390 kA ² s | 200 kA | 135 W | 790 g | 3 |
| A070UD33TTI1250 | E300453 | 690 V | 700 V | 1250 A | 355 kA ² s | 2053 kA ² s | 200 kA | 150 W | 910 g | 3 |

Reinforced Terminal

| | | | | | | | | | | |
|-----------------|---------|-------|-------|--------|------------------------|------------------------|--------|-------|-------|---|
| A070UD33TTI1400 | F300454 | 690 V | 700 V | 1400 A | 465 kA ² s | 2700 kA ² s | 200 kA | 160 W | 910 g | 3 |
| A065UD33TTI1500 | F302064 | 600 V | 650 V | 1500 A | 470 kA ² s | 2500 kA ² s | 160 kA | 210 W | 910 g | 3 |
| A065UD33TTI1600 | S301086 | 600 V | 650 V | 1600 A | 555 kA ² s | 2900 kA ² s | 160 kA | 210 W | 910 g | 3 |
| A065UD33TTI1800 | T301087 | 600 V | 650 V | 1800 A | 720 kA ² s | 3870 kA ² s | 160 kA | 225 W | 910 g | 3 |
| A060UD33TTI2000 | V301088 | 550 V | 600 V | 2000 A | 950 kA ² s | 4500 kA ² s | 150 kA | 250 W | 910 g | 3 |
| A055UD33TTI2250 | W301089 | 500 V | 550 V | 2250 A | 1250 kA ² s | 5160 kA ² s | 130 kA | 280 W | 910 g | 3 |
| A050UD33TTI2500 | Y300838 | 450 V | 500 V | 2500 A | 1870 kA ² s | 6540 kA ² s | 110 kA | 280 W | 910 g | 3 |

Protistor® size 33 aR

450 to 700VAC



Product range



PC33UD69V1100A

Size 33 type DIN80 blades

| Catalog number | Reference number | Rated voltage AC (IEC) | Rated voltage AC (UL) | Rated current I _n | Pre-arcing I ² t | Clearing I ² t at Rated Voltage | Rated breaking capacity AC | Power dissipation at I _n | Weight | Package |
|----------------|------------------|------------------------|-----------------------|------------------------------|-----------------------------|--|----------------------------|-------------------------------------|--------|---------|
|----------------|------------------|------------------------|-----------------------|------------------------------|-----------------------------|--|----------------------------|-------------------------------------|--------|---------|

Standard Terminal

| | | | | | | | | | | |
|----------------|---------|-------|-------|--------|-------------------------|------------------------|-----|-------|--------|---|
| PC33UD69V450A | T302168 | 690 V | 700 V | 450 A | 13.45 kA ² s | 81.5 kA ² s | 200 | 88 W | 1070 g | 3 |
| PC33UD69V500A | G300248 | 690 V | 700 V | 500 A | 19 kA ² s | 110 kA ² s | 200 | 105 W | 1070 g | 3 |
| PC33UD69V550A | H300249 | 690 V | 700 V | 550 A | 27 kA ² s | 155 kA ² s | 200 | 110 W | 1070 g | 3 |
| PC33UD69V630A | J300250 | 690 V | 700 V | 630 A | 40 kA ² s | 230 kA ² s | 200 | 120 W | 1070 g | 3 |
| PC33UD69V700A | K300251 | 690 V | 700 V | 700 A | 57 kA ² s | 330 kA ² s | 200 | 125 W | 1070 g | 3 |
| PC33UD69V800A | L300252 | 690 V | 700 V | 800 A | 93 kA ² s | 540 kA ² s | 200 | 130 W | 1070 g | 3 |
| PC33UD69V900A | M300253 | 690 V | 700 V | 900 A | 130 kA ² s | 770 kA ² s | 200 | 135 W | 1070 g | 3 |
| PC33UD69V1000A | N300254 | 690 V | 700 V | 1000 A | 170 kA ² s | 990 kA ² s | 200 | 155 W | 1070 g | 3 |
| PC33UD69V1100A | P300255 | 690 V | 700 V | 1100 A | 240 kA ² s | 1390 kA ² s | 200 | 160 W | 1070 g | 3 |
| PC33UD69V1250A | Q300256 | 690 V | 700 V | 1250 A | 355 kA ² s | 2053 kA ² s | 200 | 180 W | 1070 g | 3 |
| PC33UD69V1400A | R300257 | 690 V | 700 V | 1400 A | 465 kA ² s | 2700 kA ² s | 200 | 200 W | 1070 g | 3 |

Reinforced Terminal

| | | | | | | | | | | |
|----------------|---------|-------|-------|--------|-----------------------|------------------------|--------|-------|--------|---|
| PC33UD65V1500A | M235071 | 600 V | 650 V | 1500 A | 470 kA ² s | 2500 kA ² s | 160 kA | 210 W | 1070 g | 3 |
| PC33UD60V1600A | X301803 | 600 V | 650 V | 1600 A | 555 kA ² s | 2900 kA ² s | 160 | 240 W | 1070 g | 3 |
| PC33UD60V1800A | E301971 | 600 V | 650 V | 1800 A | 720 kA ² s | 3870 kA ² s | 160 | 225 W | 1070 g | 3 |
| PC33UD60V2000A | A302657 | 550 V | 600 V | 2000 A | 950 kA ² s | 4500 kA ² s | 150 kA | 250 W | 1090 g | 3 |

Size 33 type DIN110 blades

| Catalog number | Reference number | Rated voltage AC (IEC) | Rated voltage AC (UL) | Rated current I _n | Pre-arcing I ² t | Clearing I ² t at Rated Voltage | Rated breaking capacity AC | Power dissipation at I _n | Weight | Package |
|----------------|------------------|------------------------|-----------------------|------------------------------|-----------------------------|--|----------------------------|-------------------------------------|--------|---------|
|----------------|------------------|------------------------|-----------------------|------------------------------|-----------------------------|--|----------------------------|-------------------------------------|--------|---------|

Standard Terminal

| | | | | | | | | | | |
|-----------------|---------|-------|-------|--------|-------------------------|------------------------|-----|-------|--------|---|
| PC33UD69V450D1A | V302169 | 690 V | 700 V | 450 A | 13.45 kA ² s | 81.5 kA ² s | 200 | 88 W | 1070 g | 3 |
| PC33UD69V500D1A | S300258 | 690 V | 700 V | 500 A | 19 kA ² s | 110 kA ² s | 200 | 105 W | 1070 g | 3 |
| PC33UD69V550D1A | T300259 | 690 V | 700 V | 550 A | 27 kA ² s | 155 kA ² s | 200 | 110 W | 1070 g | 3 |
| PC33UD69V630D1A | V300260 | 690 V | 700 V | 630 A | 40 kA ² s | 230 kA ² s | 200 | 120 W | 1070 g | 3 |
| PC33UD69V700D1A | W300261 | 690 V | 700 V | 700 A | 57 kA ² s | 330 kA ² s | 200 | 125 W | 1070 g | 3 |
| PC33UD69V800D1A | X300262 | 690 V | 700 V | 800 A | 93 kA ² s | 540 kA ² s | 200 | 130 W | 1070 g | 3 |
| PC33UD69V900D1A | Y300263 | 690 V | 700 V | 900 A | 130 kA ² s | 770 kA ² s | 200 | 135 W | 1070 g | 3 |
| PC33UD69V10CD1A | Z300264 | 690 V | 700 V | 1000 A | 170 kA ² s | 990 kA ² s | 200 | 155 W | 1070 g | 3 |
| PC33UD69V11CD1A | A300265 | 690 V | 700 V | 1100 A | 240 kA ² s | 1390 kA ² s | 200 | 160 W | 1070 g | 3 |
| PC33UD69V12CD1A | B300266 | 690 V | 700 V | 1250 A | 355 kA ² s | 2053 kA ² s | 200 | 180 W | 1070 g | 3 |
| PC33UD69V14CD1A | C300267 | 690 V | 700 V | 1400 A | 465 kA ² s | 2700 kA ² s | 200 | 200 W | 1070 g | 3 |

| Catalog number | Reference number | Rated voltage AC (IEC) | Rated voltage AC (UL) | Rated current I _n | Pre-arcing I ² t | Clearing I ² t at Rated Voltage | Rated breaking capacity AC | Power dissipation at I _n | Weight | Package |
|-----------------|------------------|------------------------|-----------------------|------------------------------|-----------------------------|--|----------------------------|-------------------------------------|--------|---------|
| PC33UD65V15CD1A | H301974 | 600 V | 650 V | 1500 A | 470 kA ² s | 2500 kA ² s | 160 | 210 W | 1070 g | 3 |
| PC33UD60V16CD1A | Z301437 | 600 V | 650 V | 1600 A | 500 kA ² s | 2900 kA ² s | 160 | 240 W | 1070 g | 3 |
| PC33UD65V18CD1A | - | 600 V | 650 V | 1800 A | 720 kA ² s | 3870 kA ² s | 160 | 225 W | 1070 g | 3 |
| PC33UD60V20CD1A | S1015765 | 550 V | 600 V | 2000 A | 950 kA ² s | 4500 kA ² s | 150 | 250 W | 1070 g | 3 |
| A070UD33LI550 | L300229 | 690 V | 700 V | 550 A | 27 kA ² s | 155 kA ² s | 200 | 110 W | 1070 g | 3 |
| A070UD33LI630 | M300230 | 690 V | 700 V | 630 A | 40 kA ² s | 230 kA ² s | 200 | 120 W | 1070 g | 3 |
| A070UD33LI700 | N300231 | 690 V | 700 V | 700 A | 57 kA ² s | 330 kA ² s | 200 | 125 W | 1070 g | 3 |
| A070UD33LI800 | P300232 | 690 V | 700 V | 800 A | 93 kA ² s | 540 kA ² s | 200 | 130 W | 1070 g | 3 |
| A070UD33LI900 | Q300233 | 690 V | 700 V | 900 A | 130 kA ² s | 770 kA ² s | 200 | 135 W | 1070 g | 3 |
| A070UD33LI1000 | R300234 | 690 V | 700 V | 1000 A | 170 kA ² s | 990 kA ² s | 200 | 155 W | 1070 g | 3 |
| A070UD33LI1100 | S300235 | 690 V | 700 V | 1100 A | 240 kA ² s | 1390 kA ² s | 200 | 160 W | 1070 g | 3 |
| A070UD33LI1250 | T300236 | 690 V | 700 V | 1250 A | 355 kA ² s | 2053 kA ² s | 200 | 180 W | 1070 g | 3 |
| A070UD33LI1400 | U300237 | 690 V | 700 V | 1400 A | 465 kA ² s | 2700 kA ² s | 200 | 200 W | 1070 g | 3 |

Size 33 type KI short slotted blades

| Catalog number | Reference number | Rated voltage AC (IEC) | Rated voltage AC (UL) | Rated current I _n | Pre-arcing I ² t | Clearing I ² t at Rated Voltage | Rated breaking capacity AC | Power dissipation at I _n | Wire Type | Weight | Package |
|----------------|------------------|------------------------|-----------------------|------------------------------|-----------------------------|--|----------------------------|-------------------------------------|-----------|--------|---------|
| A069UD33KI450 | 0 | 690 V | 700 V | 450 A | 13.45 kA ² s | 81.5 kA ² s | 200 | 88 W | - | 1070 g | 3 |