

# Protistor® size 33 aR

450 to 690VAC (IEC) / 700VAC (UL)

## SEMICONDUCTOR PROTECTION FUSES

## 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 aR ultra-fast acting 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 and IGBT devices. Fuses are assembled with 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.

### TECHNICAL DATA OVERVIEW

Voltage Range AC	450 ... 690 VAC
Ampere Range (A)	450 ... 2500 A
Speed/Characteristic	aR
I.R. AC	110 ... 200 kA
Product Size	33

### 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.

### STANDARDS

- IEC 60269-4 Compliance
- UL/CSA Recognized E76491
- CCC 1359.4



# Protistor® size 33 aR

450 to 690VAC (IEC) / 700VAC (UL)

## PRODUCT RANGE



PC33UD69V100A

### Size 33 type DIN80 blades

Catalog number	Item number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Package	Weight
<b>Standard Terminal</b>										
PC33UD69V450A	T302168	690 V	700 V	450 A	13.45 kA <sup>2</sup> s	87 kA <sup>2</sup> s	200 kA	88 W	3	0.81 kg
PC33UD69V500A	G300248	690 V	700 V	500 A	19 kA <sup>2</sup> s	110 kA <sup>2</sup> s	200 kA	105 W	3	0.81 kg
PC33UD69V550A	H300249	690 V	700 V	550 A	27 kA <sup>2</sup> s	155 kA <sup>2</sup> s	200 kA	110 W	3	0.81 kg
PC33UD69V630A	J300250	690 V	700 V	630 A	40 kA <sup>2</sup> s	230 kA <sup>2</sup> s	200 kA	120 W	3	0.81 kg
PC33UD69V700A	K300251	690 V	700 V	700 A	57 kA <sup>2</sup> s	330 kA <sup>2</sup> s	200 kA	125 W	3	0.81 kg
PC33UD69V800A	L300252	690 V	700 V	800 A	93 kA <sup>2</sup> s	540 kA <sup>2</sup> s	200 kA	130 W	3	0.81 kg
PC33UD69V900A	M300253	690 V	700 V	900 A	130 kA <sup>2</sup> s	770 kA <sup>2</sup> s	200 kA	135 W	3	0.81 kg
PC33UD69V1000A	N300254	690 V	700 V	1000 A	170 kA <sup>2</sup> s	990 kA <sup>2</sup> s	200 kA	155 W	3	0.81 kg
PC33UD69V1100A	P300255	690 V	700 V	1100 A	240 kA <sup>2</sup> s	1390 kA <sup>2</sup> s	200 kA	160 W	3	0.81 kg
<b>Reinforced Terminal</b>										
PC33UD69V1250A	Q300256	690 V	700 V	1250 A	355 kA <sup>2</sup> s	2053 kA <sup>2</sup> s	200 kA	180 W	3	0.81 kg
PC33UD69V1400A	R300257	690 V	700 V	1400 A	465 kA <sup>2</sup> s	2700 kA <sup>2</sup> s	200 kA	200 W	3	0.81 kg
PC33UD60V1500A	M235071	600 V	650 V	1500 A	470 kA <sup>2</sup> s	2500 kA <sup>2</sup> s	200 kA	210 W	3	0.81 kg
PC33UD60V1600A	X301803	600 V	650 V	1600 A	555 kA <sup>2</sup> s	2900 kA <sup>2</sup> s	200 kA	240 W	3	0.81 kg
PC33UD60V1800A	E301971	600 V	650 V	1800 A	720 kA <sup>2</sup> s	3870 kA <sup>2</sup> s	200 kA	225 W	3	0.81 kg
PC33UD55V2000A	A302657	550 V	600 V	2000 A	950 kA <sup>2</sup> s	4500 kA <sup>2</sup> s	200 kA	250 W	3	0.81 kg

### Size 33 type DIN110 blades

Catalog number	Item number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Package	Weight
<b>Standard Terminal</b>										
PC33UD69V450D1A	V302169	690 V	700 V	450 A	13.45 kA <sup>2</sup> s	87 kA <sup>2</sup> s	200 kA	88 W	3	0.87 kg
PC33UD69V500D1A	S300258	690 V	700 V	500 A	19 kA <sup>2</sup> s	110 kA <sup>2</sup> s	200 kA	105 W	3	0.87 kg
PC33UD69V550D1A	T300259	690 V	700 V	550 A	27 kA <sup>2</sup> s	155 kA <sup>2</sup> s	200 kA	110 W	3	0.87 kg
PC33UD69V630D1A	V300260	690 V	700 V	630 A	40 kA <sup>2</sup> s	230 kA <sup>2</sup> s	200 kA	120 W	3	0.87 kg
PC33UD69V700D1A	W300261	690 V	700 V	700 A	57 kA <sup>2</sup> s	330 kA <sup>2</sup> s	200 kA	125 W	3	0.87 kg
PC33UD69V800D1A	X300262	690 V	700 V	800 A	93 kA <sup>2</sup> s	540 kA <sup>2</sup> s	200 kA	130 W	3	0.87 kg
PC33UD69V900D1A	Y300263	690 V	700 V	900 A	130 kA <sup>2</sup> s	770 kA <sup>2</sup> s	200 kA	135 W	3	0.87 kg
PC33UD69V10CD1A	Z300264	690 V	700 V	1000 A	170 kA <sup>2</sup> s	990 kA <sup>2</sup> s	200 kA	155 W	3	0.87 kg
PC33UD69V11CD1A	A300265	690 V	700 V	1100 A	240 kA <sup>2</sup> s	1390 kA <sup>2</sup> s	200 kA	160 W	3	0.87 kg
<b>Reinforced Terminal</b>										
PC33UD69V12CD1A	B300266	690 V	700 V	1250 A	355 kA <sup>2</sup> s	2053 kA <sup>2</sup> s	200 kA	180 W	3	0.87 kg
PC33UD69V14CD1A	C300267	690 V	700 V	1400 A	465 kA <sup>2</sup> s	2700 kA <sup>2</sup> s	200 kA	200 W	3	0.87 kg
PC33UD65V15CD1A	H301974	600 V	650 V	1500 A	470 kA <sup>2</sup> s	2500 kA <sup>2</sup> s	200 kA	210 W	3	0.87 kg
PC33UD60V16CD1A	Z301437	600 V	650 V	1600 A	500 kA <sup>2</sup> s	2900 kA <sup>2</sup> s	200 kA	240 W	3	0.87 kg
PC33UD55V20CD1A	S1015765	550 V	600 V	2000 A	950 kA <sup>2</sup> s	4500 kA <sup>2</sup> s	200 kA	290 W	3	0.87 kg

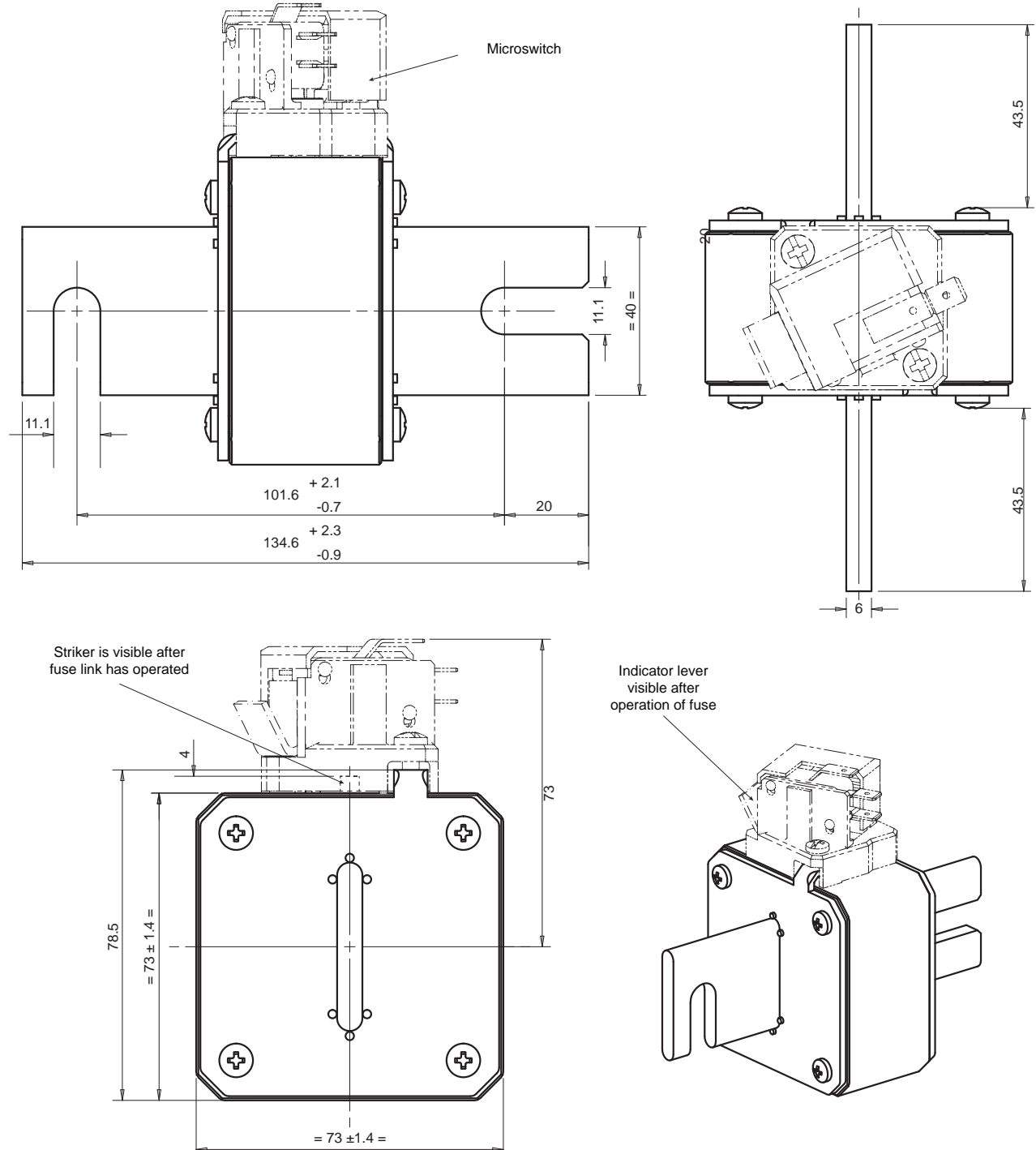
MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

# Protistor® size 33 aR

450 to 690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

size 33 type DIN 110 (102932)



Dimensions in mm

MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.