

# Protistor® size 10x38 gR

690VAC

## IEC High-Speed Cylindrical Fuse-Links AC Protection

The 10x38 gR cylindrical is a fast acting, full range fuse used in the protection of inverters, UPS, variable speed drives and other discrete semiconductor devices.

### Features Benefits

- International 10x38 mm (1-1/2" x 13/32") for worldwide acceptance
- gR Class according to VDE 636-23 and IEC 60269-4
- Low I<sup>2</sup>t for improved semiconductor protection
- Eliminate all overloads
- Extremely fast acting
- Current limiting
- Excellent cycling capability

### Applications

- Protection of small inverters, UPS systems, motor drives and similar 700V or less equipment.

### Technical data overview

Volt (VAC)	690 VAC
Ampere Range (A)	1 ... 32 A
Speed/Characteristic	gR
I.R. AC (kA)	160 kA
Product Size	10x38 mm



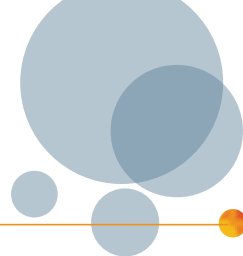
### Standards

UL/CSA Recognized Component  
IEC 60269-4 Compliance  
AC: UL Guide No. E76491



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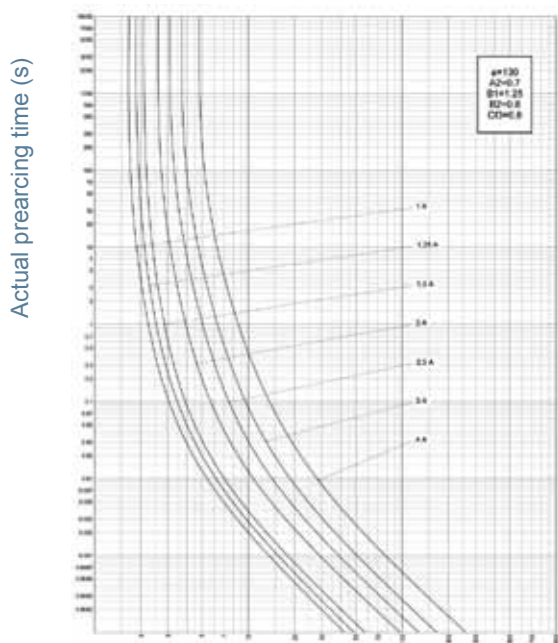


## Product range

### Size 10x38 gR 690VAC without striker

Catalog number	Reference number	Rated voltage AC (IEC)	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>	Weight	Package
FR10GR69V1	L1014563	690 V	1 A	0.17 A <sup>2</sup> s	0.48 A <sup>2</sup> s	160 kA	0.8 W	10 g	10
FR10GR69V1.25	N1014565	690 V	1.25 A	0.18 A <sup>2</sup> s	0.55 A <sup>2</sup> s	160 kA	1.5 W	10 g	10
FR10GR69V1.5	P1014566	690 V	1.5 A	0.31 A <sup>2</sup> s	0.8 A <sup>2</sup> s	160 kA	1.2 W	10 g	10
FR10GR69V2	Q1014567	690 V	2 A	0.94 A <sup>2</sup> s	2.5 A <sup>2</sup> s	160 kA	1.3 W	10 g	10
FR10GR69V2.5	T1014570	690 V	2.5 A	1.65 A <sup>2</sup> s	4.5 A <sup>2</sup> s	160 kA	1.4 W	10 g	10
FR10GR69V3	V1014571	690 V	3 A	2.83 A <sup>2</sup> s	7.8 A <sup>2</sup> s	160 kA	1.5 W	10 g	10
FR10GR69V4	W1014572	690 V	4 A	6.7 A <sup>2</sup> s	12 A <sup>2</sup> s	160 kA	1.7 W	10 g	10
FR10GR69V5	X1014573	690 V	5 A	7.5 A <sup>2</sup> s	30 A <sup>2</sup> s	160 kA	0.9 W	10 g	10
FR10GR69V6	Y1014574	690 V	6 A	8.5 A <sup>2</sup> s	40 A <sup>2</sup> s	160 kA	1.4 W	10 g	10
FR10GR69V8	Z1014575	690 V	8 A	5.4 A <sup>2</sup> s	35 A <sup>2</sup> s	160 kA	1.9 W	10 g	10
FR10GR69V10	A1014576	690 V	10 A	6.7 A <sup>2</sup> s	55 A <sup>2</sup> s	160 kA	2.1 W	10 g	10
FR10GR69V12.5	C1014578	690 V	12.5 A	11 A <sup>2</sup> s	90 A <sup>2</sup> s	160 kA	2.8 W	10 g	10
FR10GR69V16	D1014579	690 V	16 A	19 A <sup>2</sup> s	140 A <sup>2</sup> s	160 kA	3 W	10 g	10
FR10GR69V20	E1014580	690 V	20 A	39 A <sup>2</sup> s	245 A <sup>2</sup> s	160 kA	3.7 W	10 g	10
FR10GR69V25	F1014581	690 V	25 A	69 A <sup>2</sup> s	425 A <sup>2</sup> s	160 kA	4.3 W	10 g	10
FR10GR69V30	G1014582	690 V	30 A	107 A <sup>2</sup> s	675 A <sup>2</sup> s	160 kA	4.8 W	10 g	10
FR10GR69V32	H1014583	690 V	32 A	154 A <sup>2</sup> s	945 A <sup>2</sup> s	160 kA	5.1 W	10 g	10

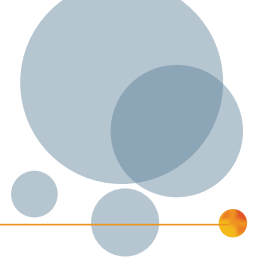
## Time current characteristic curves



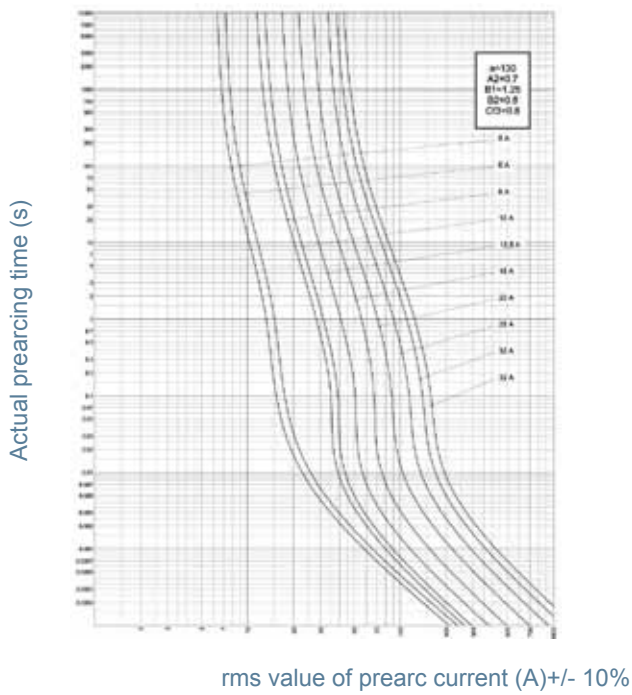
rms value of prearc current (A)+/- 10%

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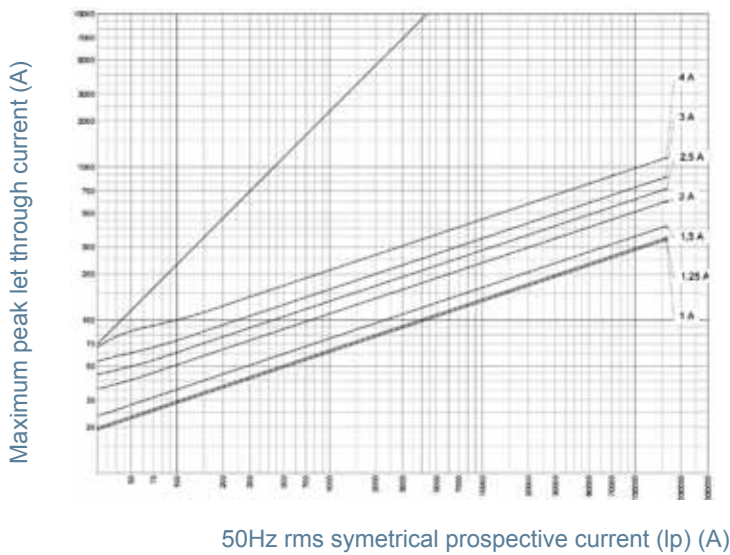
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## Time current characteristic curves

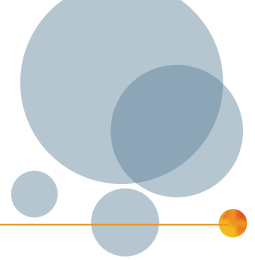


## Current limiting diagram

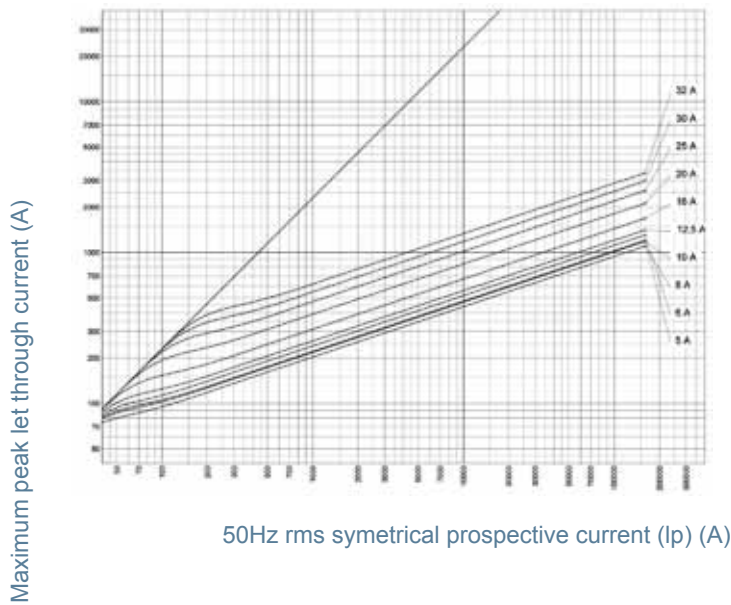


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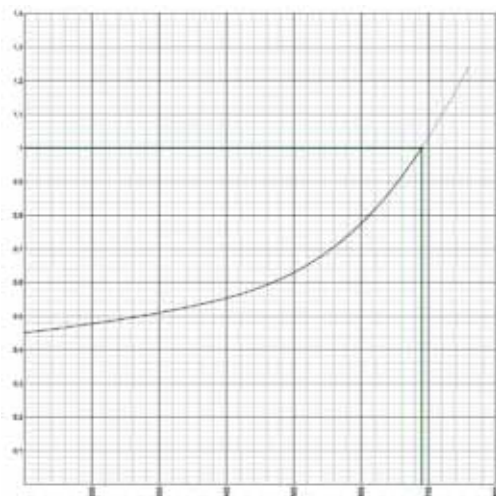
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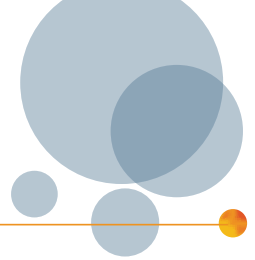


## I<sup>2</sup>t Multiplier coefficient

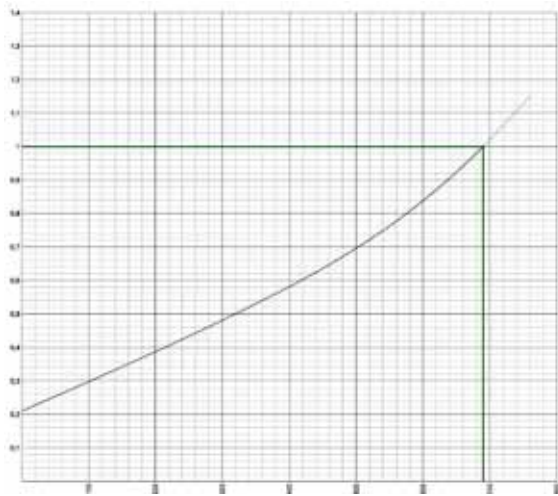


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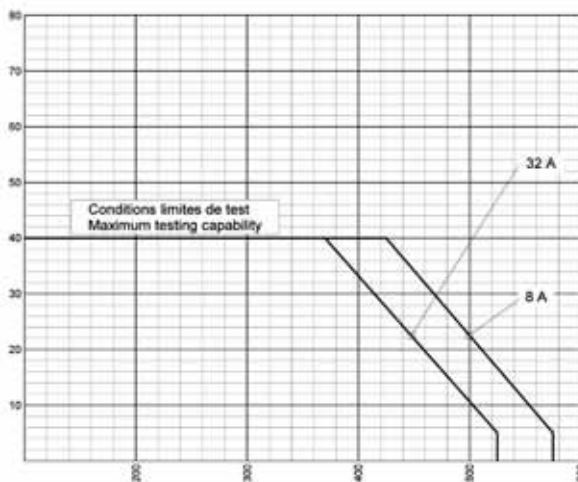
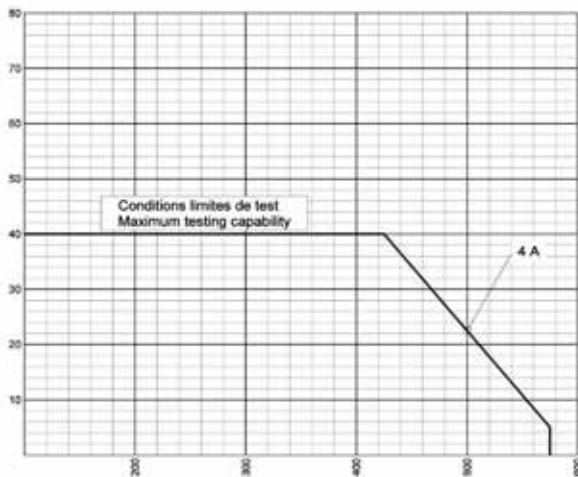
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## I<sup>2</sup>t Multiplier coefficient

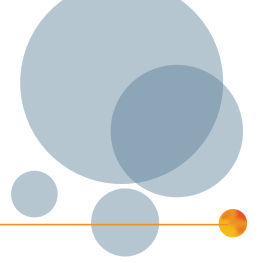


## L/R time constant vs DC voltage capability

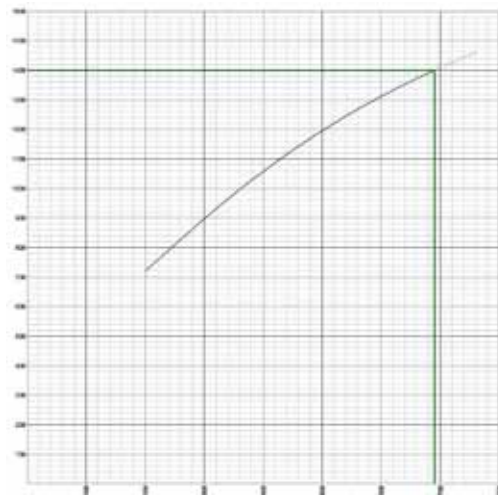
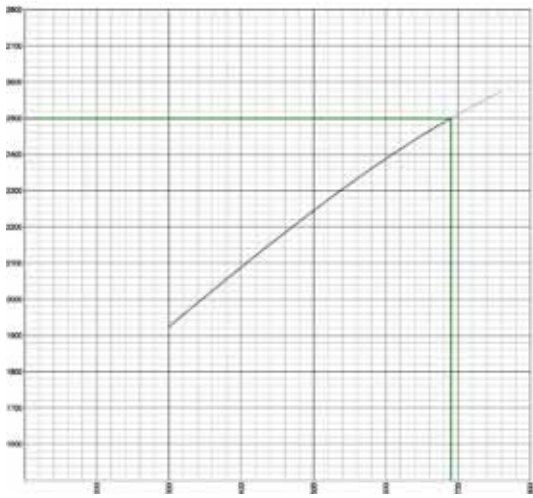


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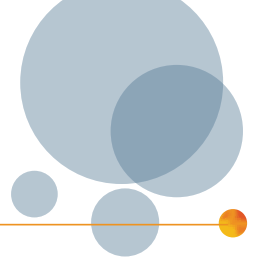


## Peak arc voltage

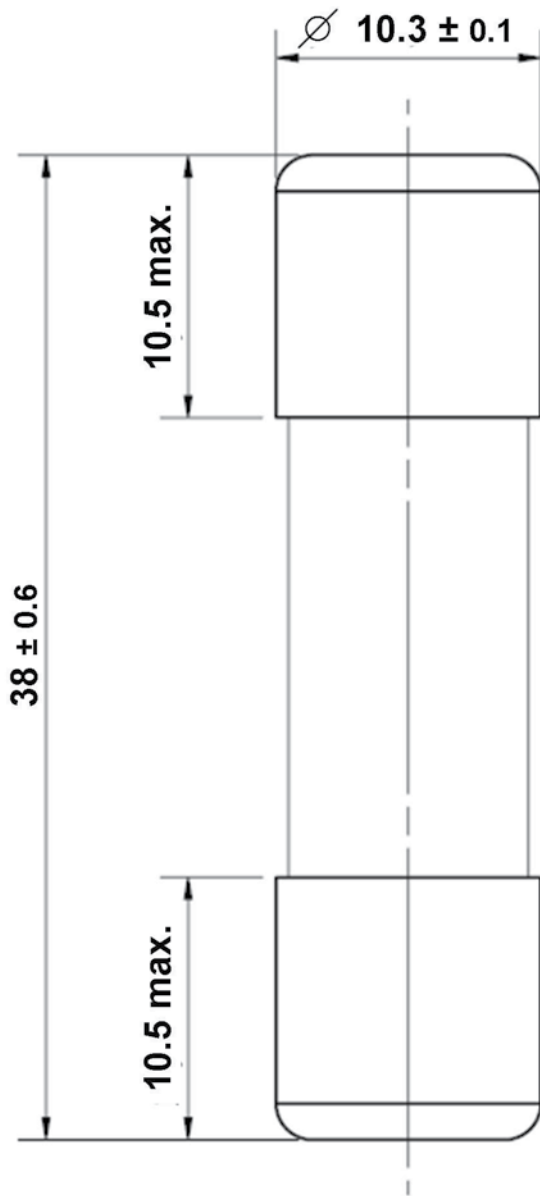


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## Dimensions



Dimensions in mm