Protistor® size 10x38 gR

690VAC

SEMICONDUCTOR PROTECTION FUSES

IEC HIGH-SPEED CYLINDRICAL FUSE-LINKS AC PROTECTION



Mersen's Standard Cylindrical fuses provide an extremely high interrupting ratings offering power semiconductor applications the ultimate in electrical protection.

The Protistor IEC semiconductor fuses offer is comprised of a gR range. The 10x38 gR cylindrical range is a fast acting, full range fuse used to protect from high short-circuit currents and small overload currents.

FEATURES & BENEFITS

- International 10 x 38 mm (1-1/2" x 13/32") for worldwide acceptance
- Extremely fast acting
- Current limiting
- Extremely low I^2t for improved semiconductor protection
- High breaking capacity
- Excellent cycling capability

APPLICATIONS

- Small inverters
- UPS systems
- Motor drives

STANDARDS

- IEC 60269-4 compliant
- UL/CSA 248-13 recognized
- CCC/GB 13539.4 certified

TECHNICAL DATA OVERVIEW

Voltage Range	IEC 60269-4: 690VAC UL/CSA 248-13: 700VAC and 500VDC
Ampere Range (A)	1A…32A
Speed/Characteristic	gR
Product Size	10x38
Max. Interrupting Rating IR	160kA
Package	10 pcs
Weight	8 g

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PRODUCT RANGE



FR10GR69V10

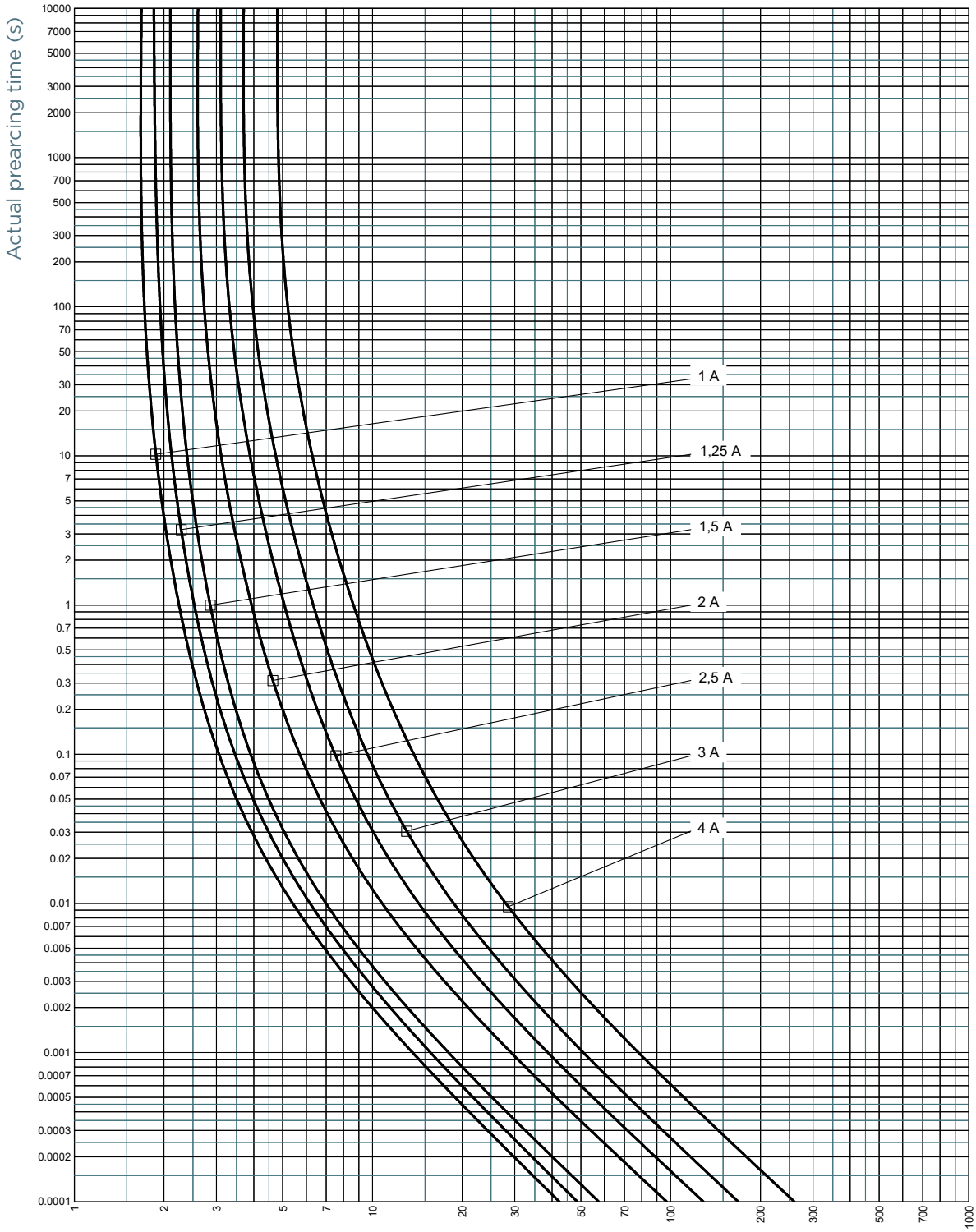
Size 10x38 gR 690VAC without striker

Catalog number	Item number	Rated voltage AC	Rated current I_n	Pre-arcing I^2t	Clearing I^2t @ Rated Voltage	Watt Loss @0,8I_n	Watt Loss @I_n
FR10GR69V1	L1014563	690 V	1 A	0,17 A²s	0,48 A²s	0,4 W	0,8 W
FR10GR69V1.25	N1014565	690 V	1,25 A	0,18A²s	0,55A²s	0,8 W	1,5 W
FR10GR69V1.5	P1014566	690 V	1,5 A	0,31 A²s	0,8 A²s	0,6 W	1,2 W
FR10GR69V2	Q1014567	690 V	2 A	0,7 A²s	1,3 A²s	0,94 W	2,5 W
FR10GR69V2.5	T1014570	690 V	2,5 A	1,65 A²s	4,5 A²s	0,8 W	1,4 W
FR10GR69V3	V1014571	690 V	3 A	2,83 A²s	7,8 A²s	0,9 W	1,5 W
FR10GR69V4	W1014572	690 V	4 A	6,7 A²s	12 A²s	1 W	1,7 W
FR10GR69V5	X1014573	690 V	5 A	7 A²s	30 A²s	0,6 W	0,9 W
FR10GR69V6	Y1014574	690 V	6 A	9 A²s	40 A²s	0,8 W	1,4 W
FR10GR69V8	Z1014575	690 V	8 A	5,4 A²s	35 A²s	1,1 W	1,9 W
FR10GR69V10	A1014576	690 V	10 A	6,7 A²s	55 A²s	1,2 W	2,1 W
FR10GR69V12.5	C1014578	690 V	12,5 A	11 A²s	90 A²s	1,3 W	2,8 W
FR10GR69V16	D1014579	690 V	16 A	19 A²s	140 A²s	1,7 W	3 W
FR10GR69V20	E1014580	690 V	20 A	39 A²s	245 A²s	2,1 W	3,7 W
FR10GR69V25	F1014581	690 V	25 A	69 A²s	425 A²s	2,4 W	4,3 W
FR10GR69V30	G1014582	690 V	30 A	107 A²s	675 A²s	2,7 W	4,8 W
FR10GR69V32	H1014583	690 V	32 A	154 A²s	945 A²s	2,8 W	5,1 W

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TIME CURRENT CHARACTERISTIC CURVES

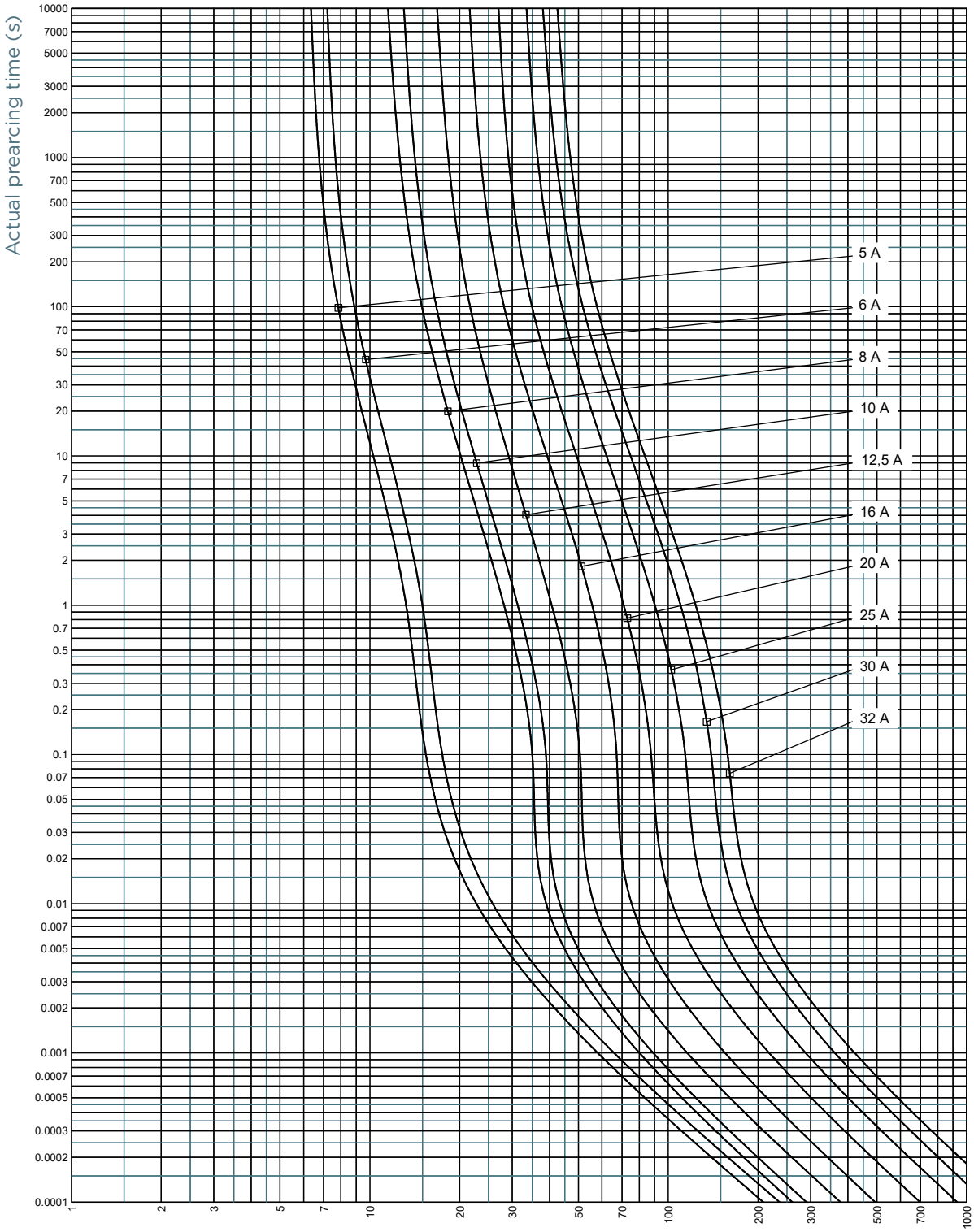
690V gR 1A-4A



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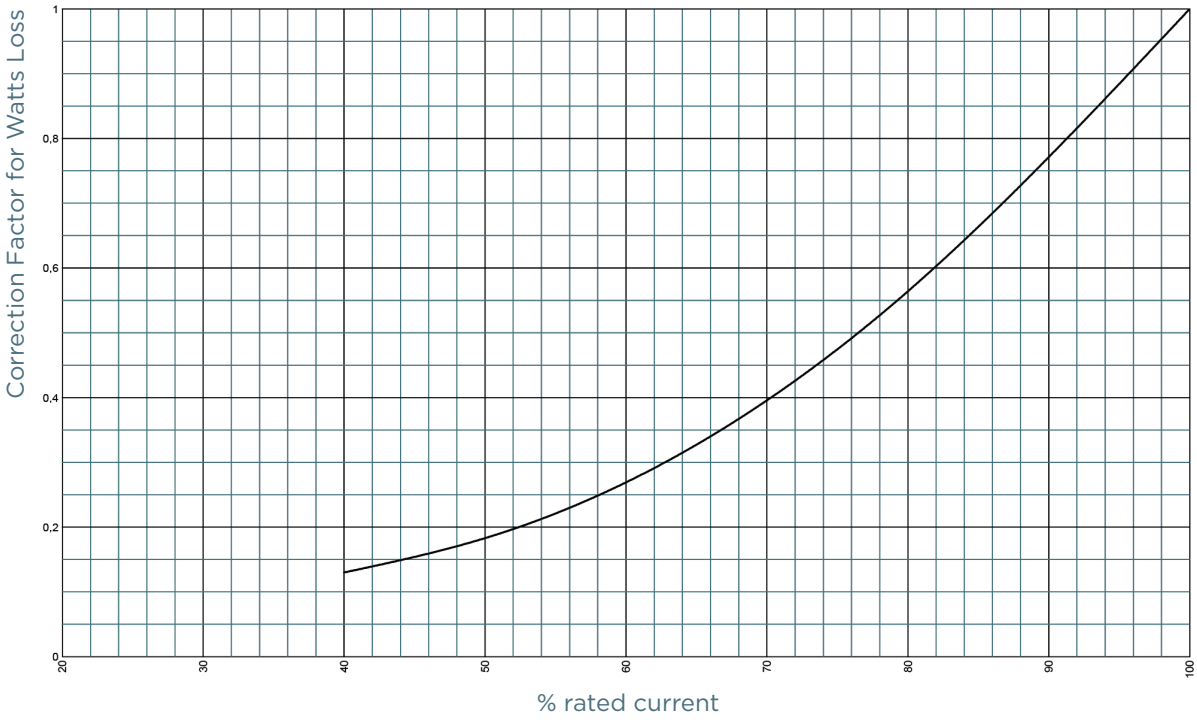
690V gR 5A-32A



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POWER DISSIPATION

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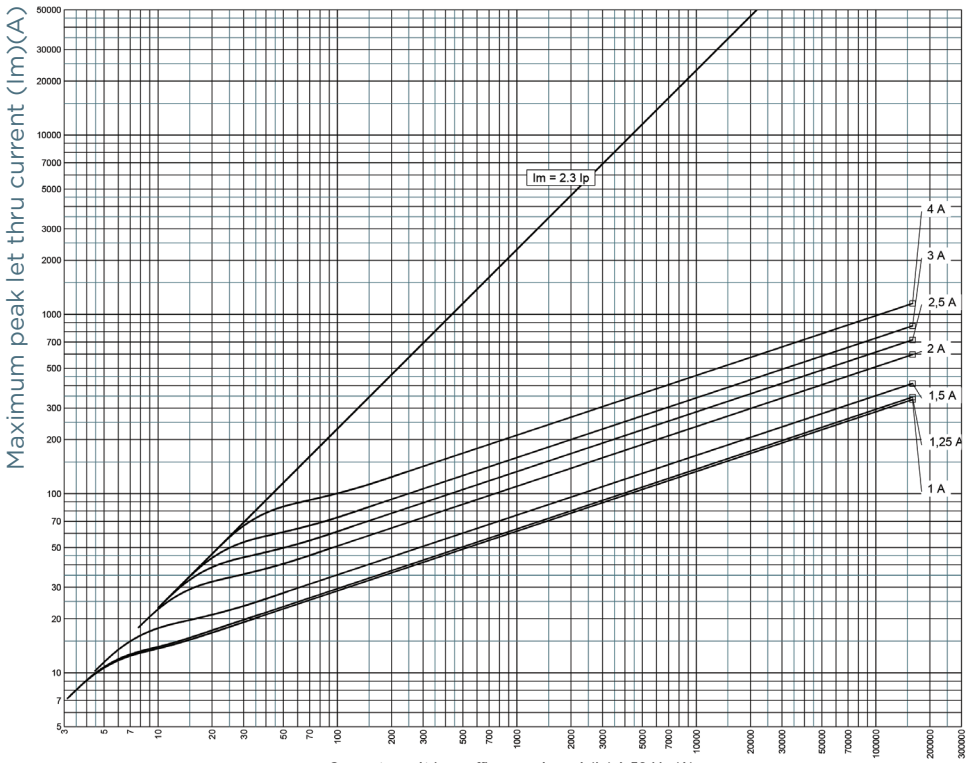
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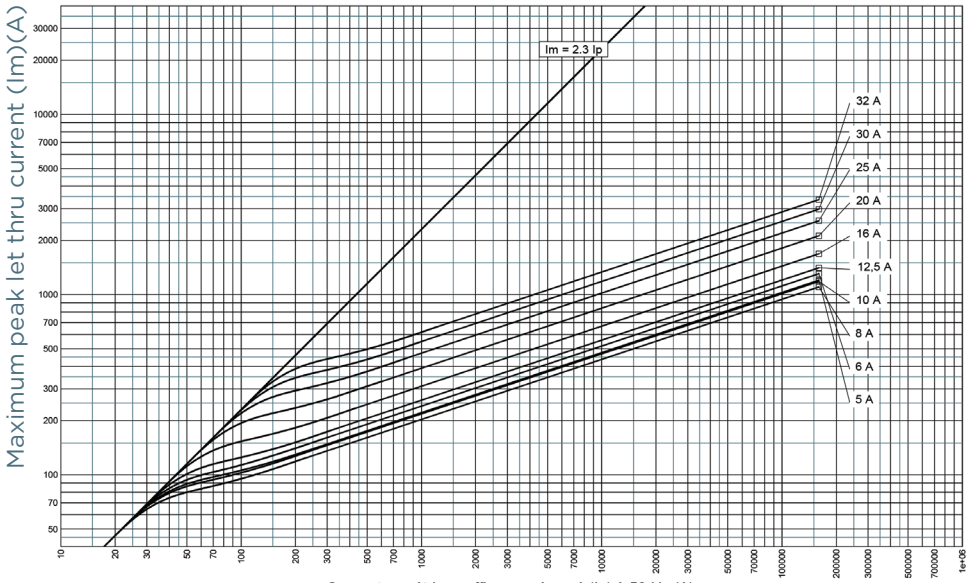
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PEAK LET THRU

690V gR 1A-4A



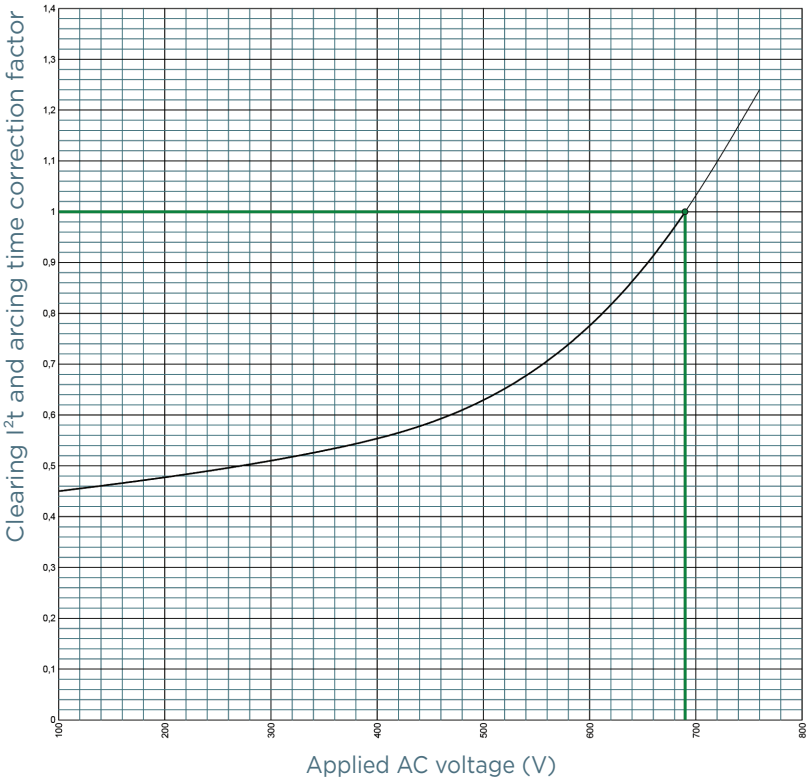
690V gR 5A-32A



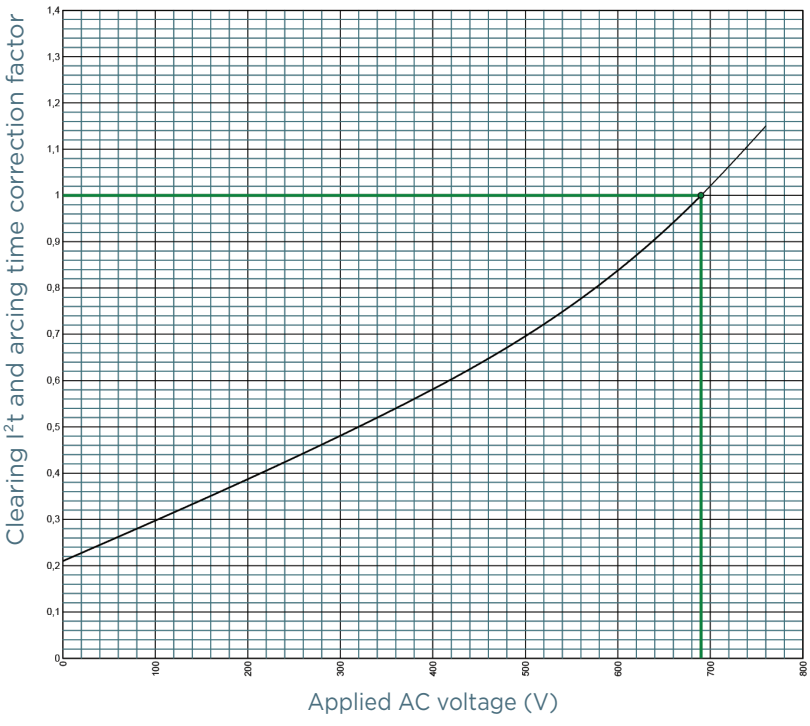
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I²T MULTIPLIER COEFFICIENT

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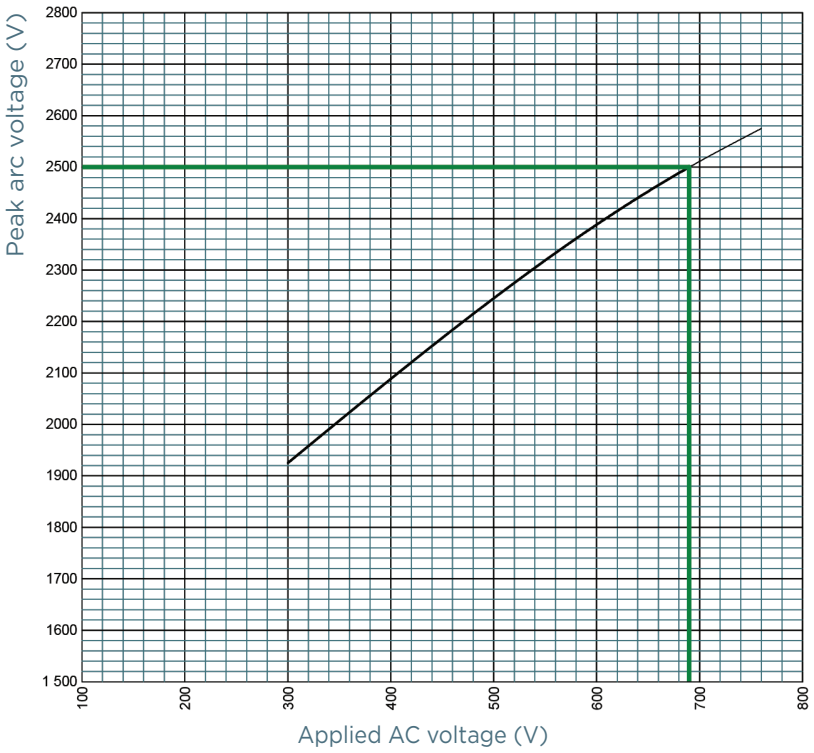
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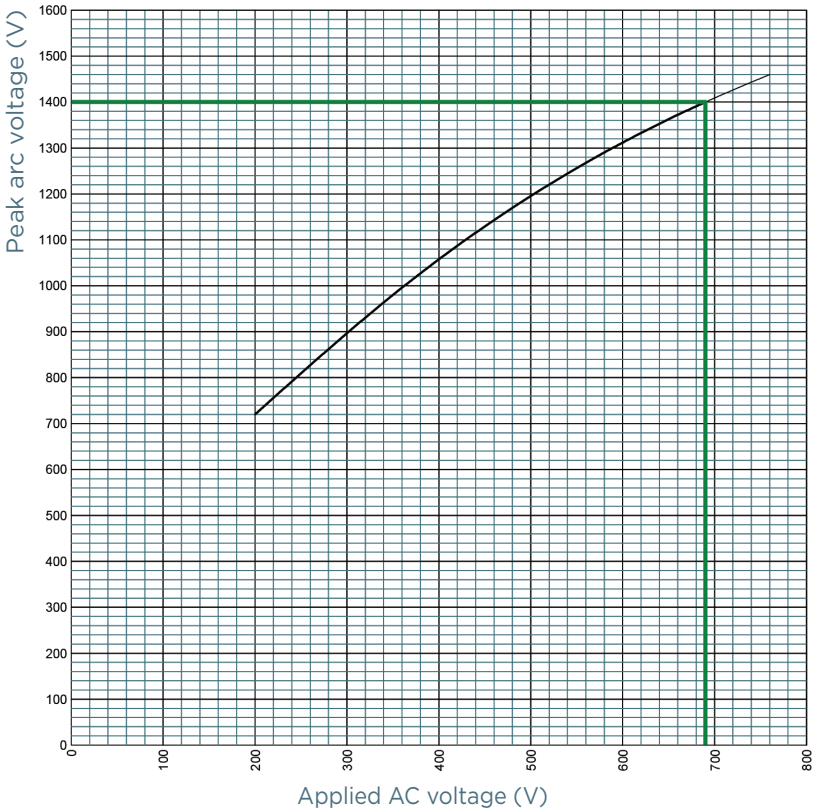
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PEAK ARC VOLTAGE

690V gR 1A-4A



690V gR 5A-32A



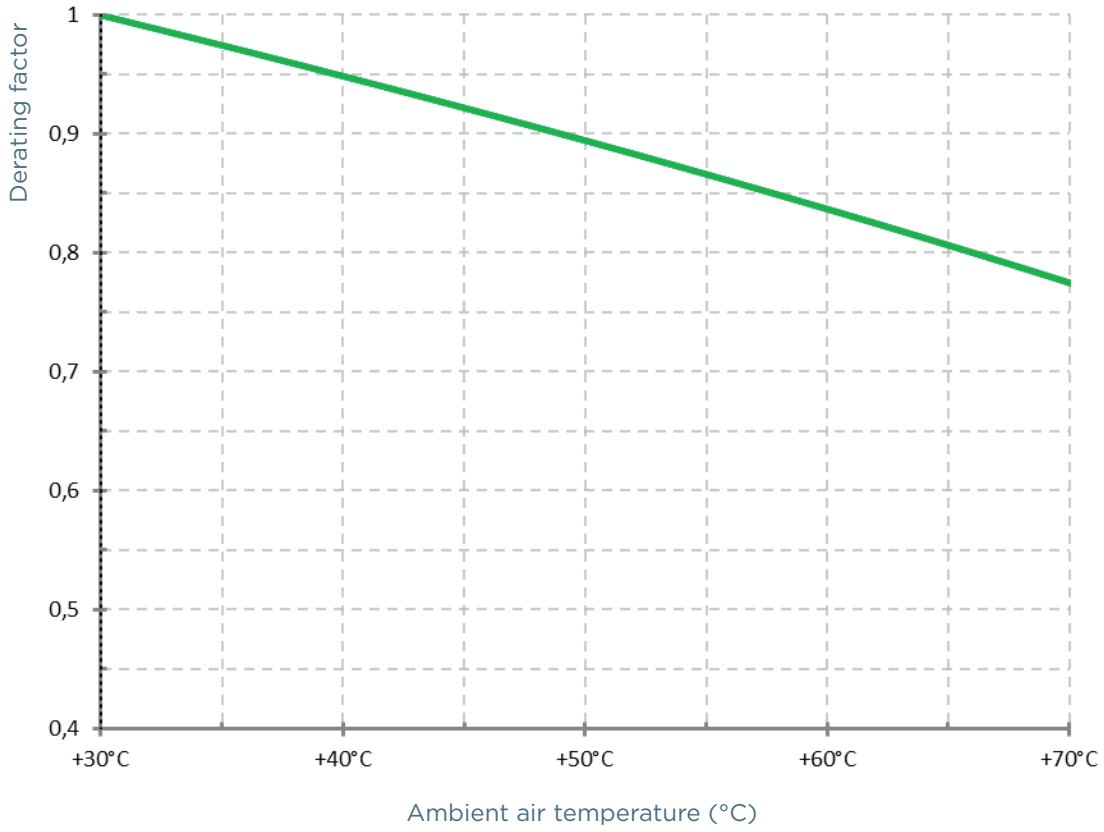
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TEMPERATURE DERATING

Derating factor of rated current according to ambient air temperature (°C)



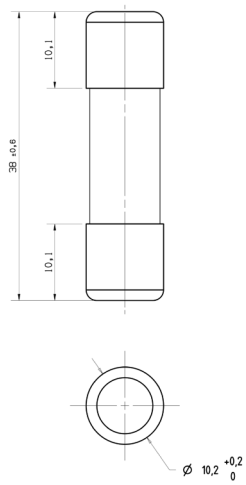
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DIMENSIONS

Size 10x38 gR 690VAC



Dimensions in mm

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