Semiconductor & Special Protection

Protistor® Cylindrical fuse-links

10x38 gR 690VAC from 1 to 32A

Data Sheet

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.



Benefits

International 10x38 mm (1-1/2" x 13/32") for worldwide acceptance

Extremely fast acting

Eliminate all overloads

Current limiting

Low I^2t for improved semiconductor protection

Excellent cycling capability

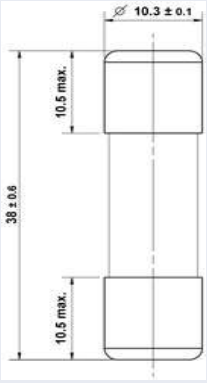
gR Class according to VDE 636-23 and IEC 60269-4

Applications

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

Rated Voltage (V)	Nominal Current (A)	Class	Catalog Number	Reference Number
690	1	gR	FR10GR69V1	L1014563
690	1.25	gR	FR10GR69V1.25	N1014565
690	1.5	gR	FR10GR69V1.5	P1014566
690	2	gR	FR10GR69V2	Q1014567
690	2.5	gR	FR10GR69V2.5	T1014570
690	3	gR	FR10GR69V3	V1014571
690	4	gR	FR10GR69V4	W1014572
690	5	gR	FR10GR69V5	X1014573
690	6	gR	FR10GR69V6	Y1014574
690	8	gR	FR10GR69V8	Z1014575
690	10	gR	FR10GR69V10	A1014576
690	12.5	gR	FR10GR69V12.5	C1014578
690	16	gR	FR10GR69V16	D1014579
690	20	gR	FR10GR69V20	E1014580
690	25	gR	FR10GR69V25	F1014581
690	30	gR	FR10GR69V30	G1014582
690	32	gR	FR10GR69V32	H1014583

Dimensions (mm)



Ratings

690VAC IEC 60269-4 and 700VAC UL Recognized

500VDC UL Recognized

Approvals

UL/CSA Recognized Component

AC: UL Guide No. E76491

IEC 60269-4 Compliance

RoHS Compliant

A008700

Related products

Fuse-holders: Modulostar® CMS10

Product weight: 10g max.

Packaging: 10 pieces

Contact : ts.sbm@mersen.com or +33 4 26 29 29 29
www.ferrazshawmut.mersen.com

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Rated Voltage (V)	Nominal Current (A)	Breaking Capacity @ Rated Voltage (kA)	Pre-arcing I²t (A²s)	Clearing I²t @ Rated Voltage (A²s)	Watts Loss @ 100% In (W)	Watts Loss @ 80% In (W)
690	1	160	0.17	0.48	0.8	0.4
690	1.25	160	0.18	0.55	1.5	0.8
690	1.5	160	0.31	0.80	1.2	0.6
690	2	160	0.94	2.5	1.3	0.7
690	2.5	160	1.65	4.5	1.4	0.8
690	3	160	2.83	7.8	1.5	0.9
690	4	160	6.7	12	1.7	1.0
690	5	160	7.5	30	0.9	0.6
690	6	160	8.5	40	1.4	0.8
690	8	160	5.4	35	1.9	1.1
690	10	160	6.7	55	2.1	1.2
690	12.5	160	11	90	2.8	1.3
690	16	160	19	140	3.0	1.7
690	20	160	39	245	3.7	2.1
690	25	160	69	425	4.3	2.4
690	30	160	107	675	4.8	2.7
690	32	160	154	945	5.1	2.8

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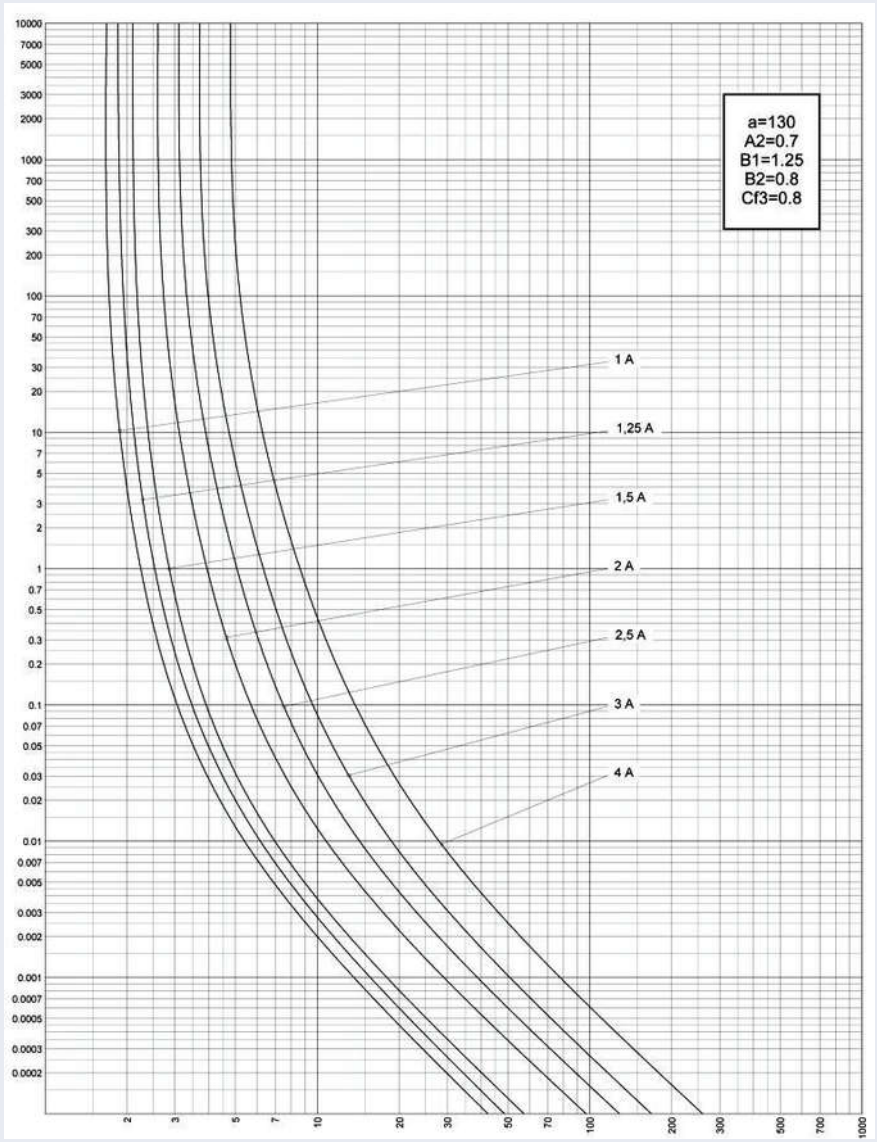
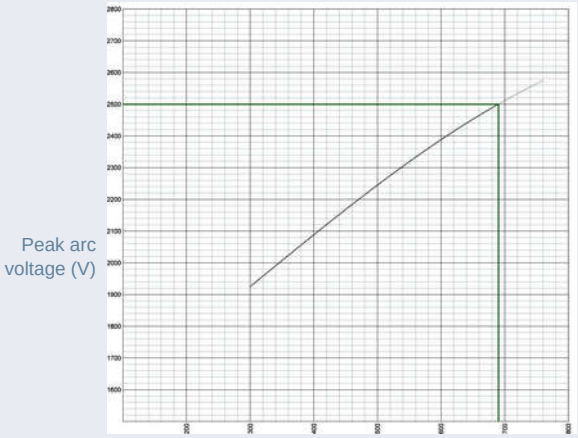
Time current characteristics 1 to 4A



Peak arc voltage 1 to 4A



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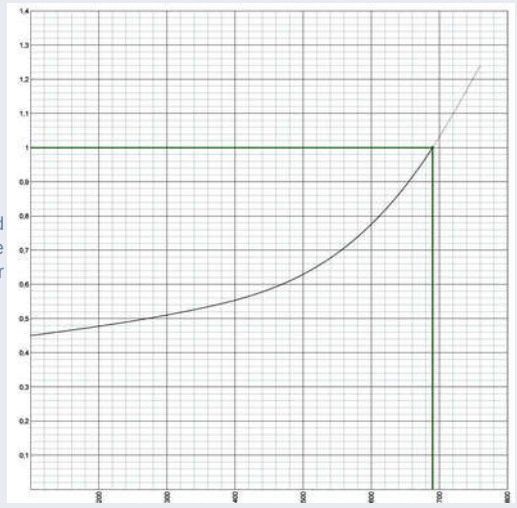
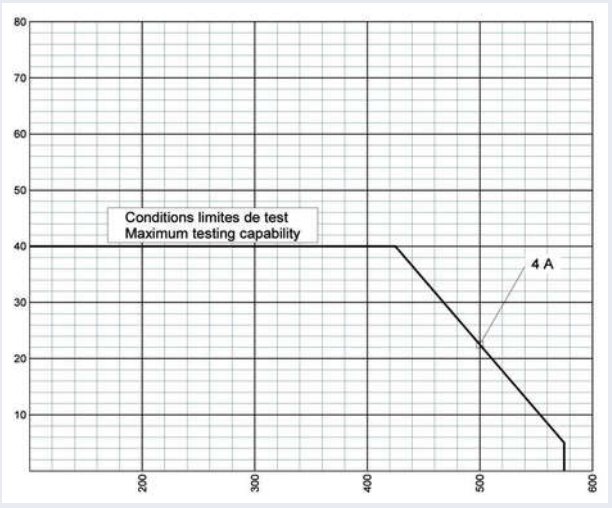
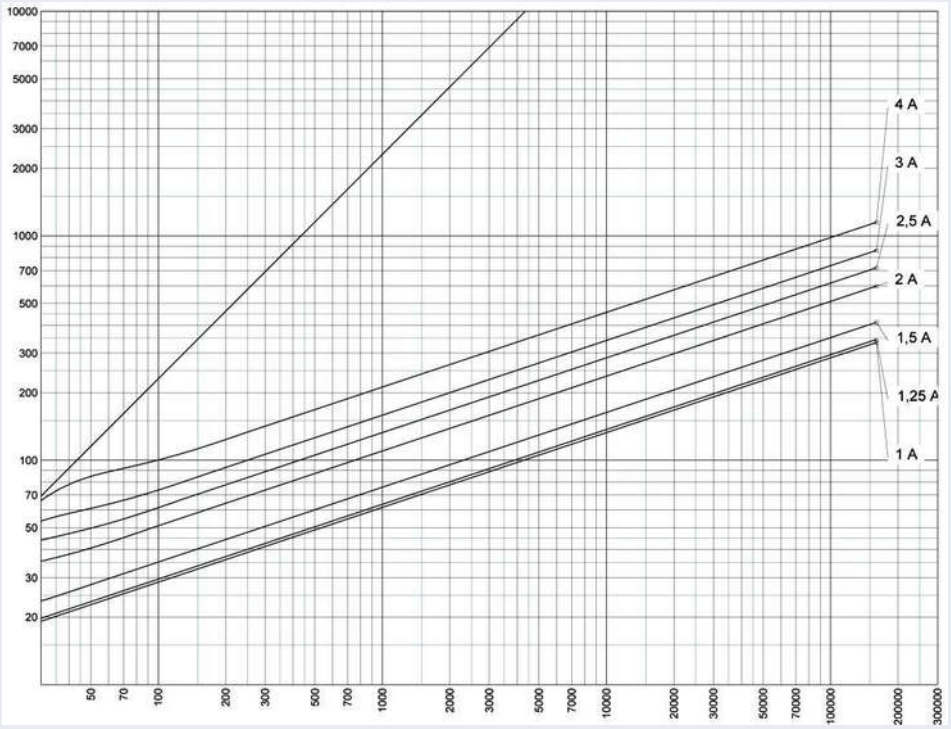
I²t multiplier coefficient 1 to 4A



L/R time constant vs DC voltage capability 1 to 4A



Peak let thru characteristics 1 to 4A



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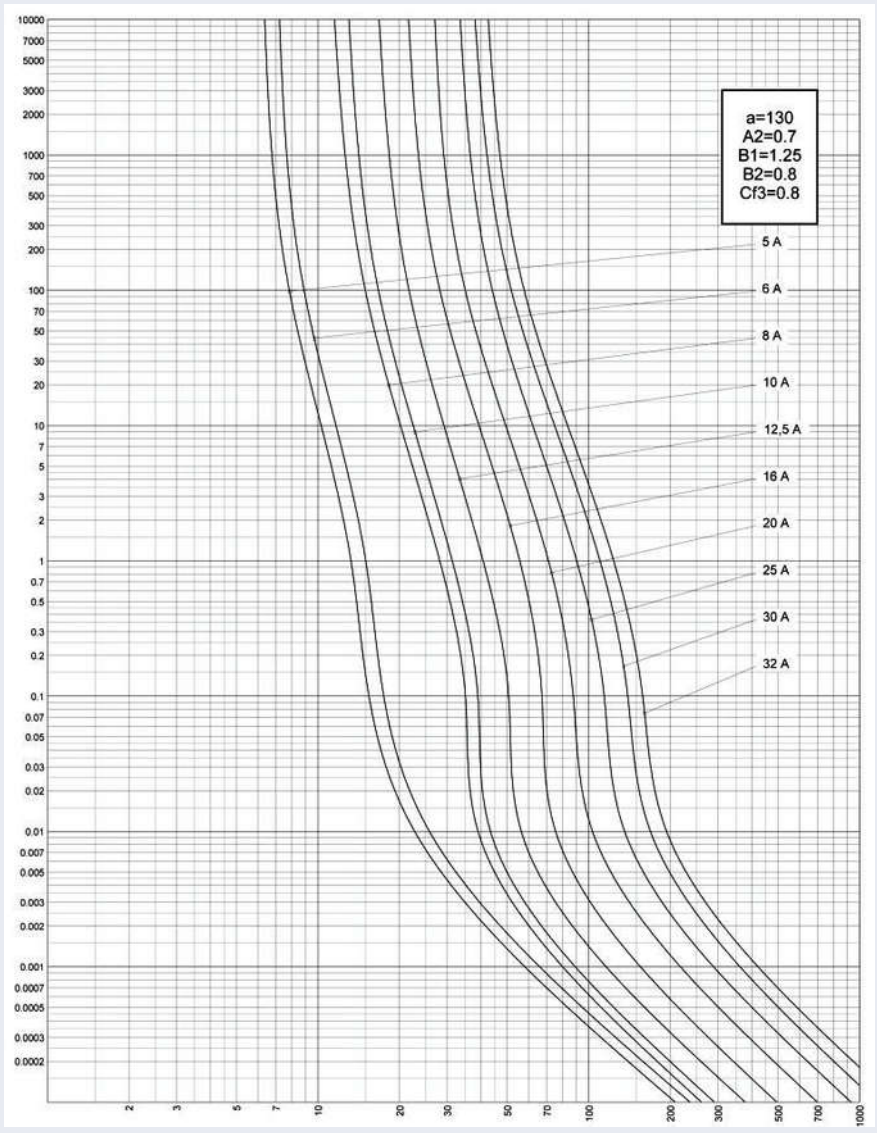
Time current characteristics
5 to 32A



Peak arc voltage
5 to 32A



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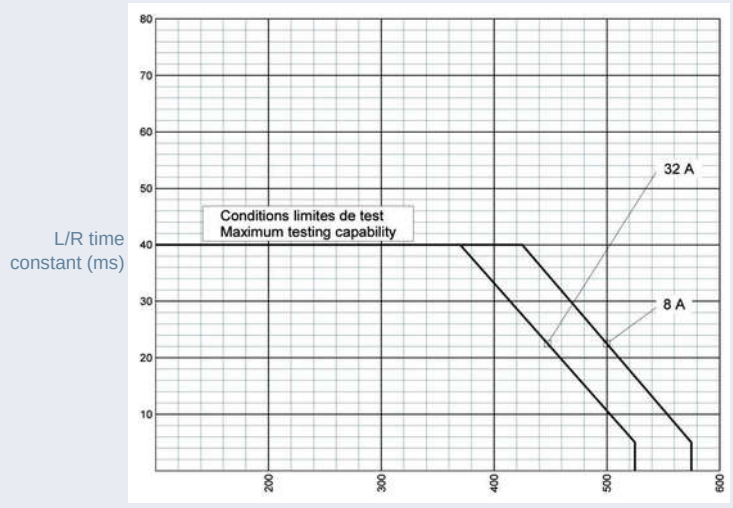
I²t multiplier coefficient 5 to 32A



L/R time constant vs DC voltage capability 5 to 32A



Peak let thru characteristics 5 to 32A

