df Electric

CYLINDRICAL

FUSE LINKS & FUSE HOLDERS/BASES

aM
CYLINDRICAL
fuse links

CYL 14x51

8x32 10x38 14x51 22x58

PROTECTING THE WORLD

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fuse links

14x51

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14x51

RATED VOLTAGE
690V AC
500V AC
400V AC

RATED CURRENT
0,25A...50A

BREAKING CAPACITY
80kA @ 690V
120kA @ 500V/400V

STANDARDS
IEC/EN 60269-1
IEC/EN 60269-2

Industrial cylindrical fuse links

Cylindrical industrial aM class fuse links are intended for short-circuit protection in motors, transformers and other loads with high inrush currents. Provide excellent protection of switchgear (contactors, thermal switch, etc) due to good current limiting capability and low I^2t values.

These fuse links must be associated with an overload device protection as a thermal switch or equivalent.

The range comprises the following fuse links:

→ **Size 14x51 690V/500V/400V 0,25A to 50A**

Available in standard version and with visual fusing indicator. Also available in striker version intended for use in fuse holders with microswitch.

Manufactured with ceramic body with high withstand to internal pressure and thermal shock, that allow a high breaking capacity. Special design in the melting elements that avoid aging and maintain the characteristics along the time. Contacts are made in silver plated copper.

RoHS COMPLIANT

Range

Un	BREAKING CAPACITY	In (A)	REFERENCE WITHOUT INDICATOR	REFERENCE WITH INDICATOR
690V	80kA	0,25	**441031**	-
		0,50	**441002**	-
		1	**441001**	**441101**
		2	**441002**	**441102**
		4	**441004**	**441104**
		6	**441006**	**441106**
		8	**441008**	**441108**
		10	**441010**	**441110**
		12	**441012**	**441112**
		16	**441016**	**441116**
		20	**441020**	**441120**
		25	**441025**	**441125**
500V	120kA	32	**441032**	**441132**
		40	**441040**	**441140**
		45	**441045**	**441145**
400V	120kA	50	**441050**	**441150**

Un	BREAKING CAPACITY	In (A)	REFERENCE WITH STRIKER	PACKING Uni /BOX
500V	120kA	0,25	-	10/50
		0,50	-	10/50
		1	**441201**	10/50
		2	**441202**	10/50
		4	**441204**	10/50
		6	**441206**	10/50
		8	**441208**	10/50
		10	**441210**	10/50
		12	**441212**	10/50
		16	**441216**	10/50
		20	**441220**	10/50
		25	**441225**	10/50
		32	**441232**	10/50
		40	**441240**	10/50
		45	**441245**	10/50
400V	120kA	50	**441250**	10/50

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Technical data

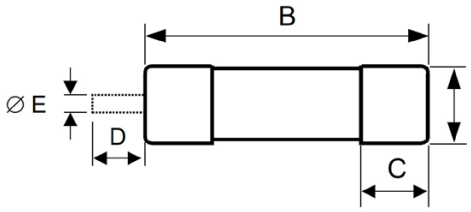
Rated voltage	690V +5% | 500V +10% | 400V +10%
Rated current	0,25A...50A
Rated breaking capacity	80kA @690V 120kA @500V/400V
Operating class	aM
Rated frequency	42…62Hz
Storage temperature	-40°C ... 90°C
Operating temperature *	-40°C ... 80°C

* For ambient temperatures higher than 25ºC it is necessary to apply a derating in maximum current.

Standards

IEC/EN 60269-1
IEC/EN 60269-2
RoHS Compliant

Dimensions



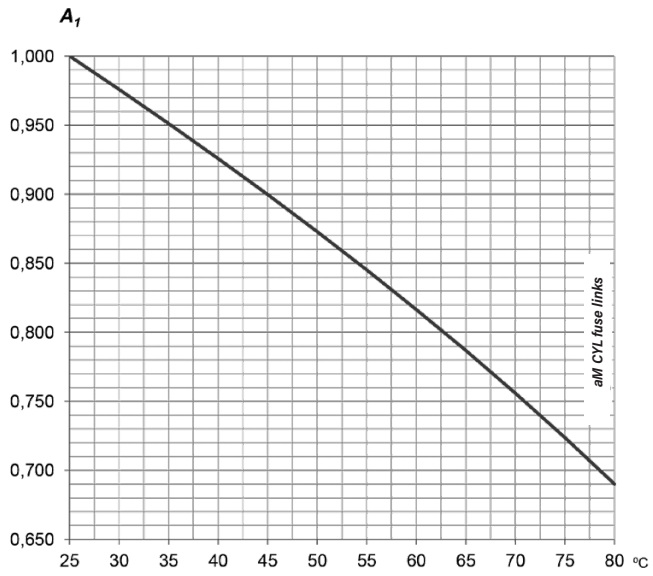
A	B	C	D	E
14,3	51	13	8	3,7

Weight 18gr

Power dissipation I^2t Values

I_n	POWER DISSIPATION	PREARCING I^2t	I^2t 690V	I^2t 500V	I^2t 400V
(A)	(W)	(A^2S)	(A^2S)	(A^2S)	(A^2S)
0,25	0,41	4,0	15	10,4	8,6
0,5	0,69	6,5	22	15,7	13,2
1	0,14	9,5	30	21,9	18,5
2	0,24	40	140	99	83
4	0,45	90	300	215	181
6	0,42	120	425	300	250
8	0,70	220	750	535	448
10	0,53	300	1400	916	733
12	0,88	380	1800	1173	936
16	1,16	550	3500	2103	1608
20	1,23	950	5000	3165	2488
25	1,46	1300	8000	4851	3728
32	2,04	2500	12000	7791	6207
40	2,60	4500	20000	13263	10685
45	2,85	8000	28000	19831	16538
50	2,90	10000	32000	23230	19626

Ambient temperature derating factor



t_a (ºC)	A_1
25	1,00
30	0,98
35	0,95
40	0,93
45	0,90
50	0,87
55	0,84
60	0,82
65	0,79
70	0,76
75	0,72
80	0,69

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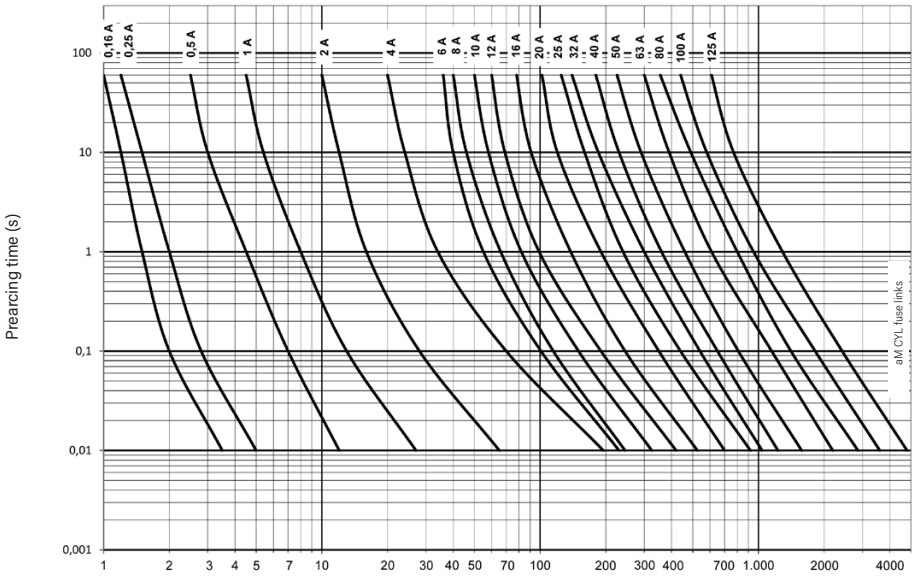
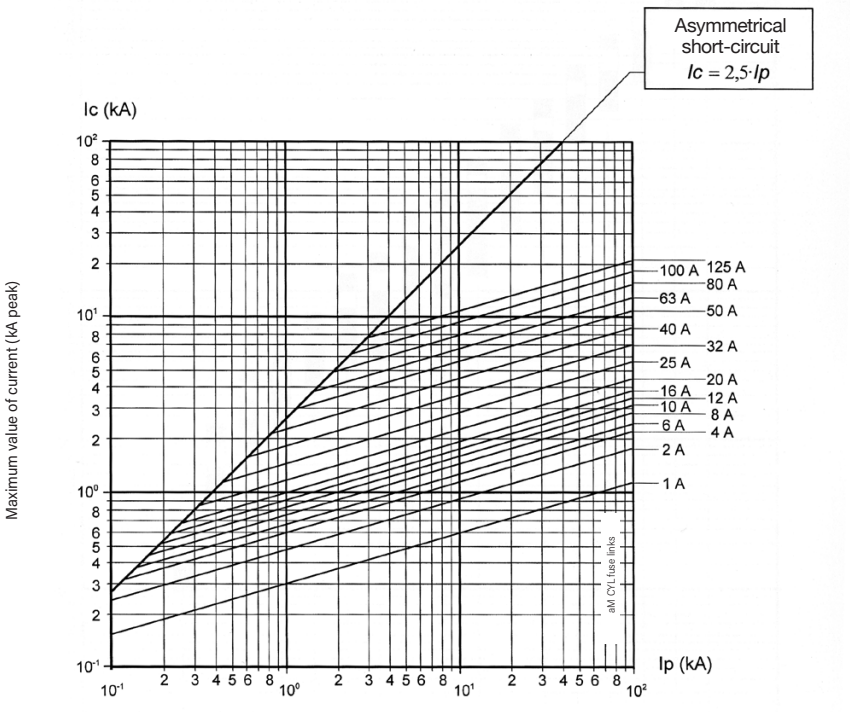
t-I characteristics



Prospective current (r.m.s. A)

Cut-off characteristics



Prospective current (r.m.s. kA)

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According to the waste of electrical and electronic equipment directive, electrical material should not be part of the usual waste. This symbol alerts users that these products should be recycled according to local environmental waste disposal regulations.

The "electro technical expert" logo marked on the products included in this data sheet indicates that the installation of these products must be carried out by expert personnel with specialized knowledge.

To prevent electrical hazards, carry out the installation without voltage.

Safety notice
Please capture the following QR code and read our safety notice carefully before installing our products.

The data reflected in this technical record are subject to the correct installation of the product in accordance with manufacturer's instructions, relevant installation standards and professional practices, maintained and used in applications for which they were made.

The products described in this document have been designed, developed and tested in accordance with specific standard. They are considered components that are integrated as part of installation, machine or equipment. The correct general operation of the referred product is responsibility of the manufacturer of the installation, machine or equipment.

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