

INDUSTRIAL CYLINDRICAL FUSE LINKS

gG INDUSTRIAL CYLINDRICAL FUSE LINKS

20-21

Cylindrical fuse links gG class for use as general protection against overloads and short circuits, intended as protection of cables, power lines and equipment. Made of ceramic tube with high withstand to internal pressure and thermal shock, that allow a high breaking capacity in a reduced physical space. The melting elements are silver plated in order to avoid aging and thus maintain unalterable the electrical characteristics. Contact caps are made of silver plated copper. Versions available with fusing indicator or with striker for use in fuse holders with microswitch.

aM INDUSTRIAL CYLINDRICAL FUSE LINKS

22-23

Cylindrical fuse links aM class are intended for short circuit protection in motors, transformer and other load with high inrush currents. Excellent protection of switchgear (contactor, thermal switch) due to the good current limiting capability and low I^2t values. These fuse links must be associated to an overload device protection as a thermal switch. Made of ceramic tube with high withstand to internal pressure and thermal shock, that allow a high breaking capacity in a reduced physical space. The melting elements are silver plated in order to avoid the aging and thus keep unalterable the electric characteristics. Contacts caps are made of silver plated copper. Available versions with fusing indicator or with striker for use in fuse holders with microswitch.

gPV FUSE LINKS FOR PHOTOVOLTAIC APPLICATIONS

24

PV fuse-links for photovoltaic installations from DF Electric have been developed to offer a compact, safety and economic protection solution in photovoltaic installations where, due to the increase of the power and technologic evolution, no-load voltages up to 1000V DC are reached. Also meet the requirements for instruments (multimeters) and traction equipment auxiliary circuits. The range comprises 10x38 fuse-links with rated currents between 4A and 20A. Rated voltage is 1000V DC (direct current). Provide protection against overloads as well as short-circuits. Made with ceramic tube with high withstand to internal pressure and thermal shock, that allows a high breaking capacity in a reduced physical space. Contacts are made of silver plated copper and melting elements are made of pure silver in order to avoid the aging and thus keep unalterable the electric characteristics. For these fuse-links we recommend the utilization of PMF 1000V fuse holders in single pole version (ref. 481033) or two-pole version (ref.481233).

TECHNICAL DATA

25-29





INDUSTRIAL CYLINDRICAL FUSE LINKS

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I _n (A)	REFERENCE		U (V)	BREAKING CAPACITY (kA)	REFERENCE WITH STRIKER	U (V)	BREAKING CAPACITY (kA)	PACKING Uni,BOX
	WITHOUT INDICATOR	WITH INDICATOR						



8x31

0,5	420500	–	400	20	–	–	–	10/100
1	420501	–	400	20	–	–	–	10/100
2	420502	420602	400	20	–	–	–	10/100
4	420504	420604	400	20	–	–	–	10/100
6	420506	420606	400	20	–	–	–	10/100
8	420508	420608	400	20	–	–	–	10/100
10	420510	420610	400	20	–	–	–	10/100
12	420512	420612	400	20	–	–	–	10/100
16	420516	420616	400	20	–	–	–	10/100
20	420720	420820	400	20	–	–	–	10/100



420500

10x38

0,5	420000	–	500	120	–	–	–	10/100
1	420001	–	500	120	–	–	–	10/100
2	420002	420102	500	120	–	–	–	10/100
4	420004	420104	500	120	–	–	–	10/100
6	420006	420106	500	120	–	–	–	10/100
8	420008	420108	500	120	–	–	–	10/100
10	420010	420110	500	120	–	–	–	10/100
12	420012	420112	500	120	–	–	–	10/100
16	420016	420116	500	120	–	–	–	10/100
20	420020	420120	500	120	–	–	–	10/100
25	420025	420125	500	120	–	–	–	10/100
32*	420032	420132	400	120	–	–	–	10/100



420025

14x51

1	421001	–	690	80	–	–	–	10/50
2	421002	421102	690	80	421202	500	120	10/50
4	421004	421104	690	80	421204	500	120	10/50
6	421006	421106	690	80	421206	500	120	10/50
8	421008	421108	690	80	421208	500	120	10/50
10	421010	421110	690	80	421210	500	120	10/50
12	421012	421112	690	80	421212	500	120	10/50
16	421016	421116	690	80	421216	500	120	10/50
20	421020	421120	690	80	421220	500	120	10/50
25	421025	421125	690	80	421225	500	120	10/50
32	421032	421132	500	120	421232	500	120	10/50
40	421040	421140	500	120	421240	500	120	10/50
50	421050	421150	400	120	421250	400	120	10/50



421025

(*) Overrating fuses

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NEUTRAL LINKS



gG INDUSTRIAL CYLINDRICAL FUSE LINKS

I _n (A)	REFERENCE		U (V)	BREAKING CAPACITY (kA)	REFERENCE WITH STRIKER	U (V)	BREAKING CAPACITY (kA)	PACKING Uni./BOX
	WITHOUT INDICATOR	WITH INDICATOR						



22x58

2	422002	422102	690	80	-	-	-	10/50
4	422004	422104	690	80	422204	690	80	10/50
6	422006	422106	690	80	422206	690	80	10/50
8	422008	422108	690	80	422208	690	80	10/50
10	422010	422110	690	80	422210	690	80	10/50
12	422012	422112	690	80	422212	690	80	10/50
16	422016	422116	690	80	422216	690	80	10/50
20	422020	422120	690	80	422220	690	80	10/50
25	422025	422125	690	80	422225	690	80	10/50
32	422032	422132	690	80	422232	690	80	10/50
40	422040	422140	690	80	422240	690	80	10/50
50	422050	422150	690	80	422250	690	80	10/50
63	422063	422163	690	80	422263	690	80	10/50
80	422080	422180	500	120	422280	500	120	10/50
100	422000	422100	500	120	422200	500	120	10/50
125*	422015	422115	400	120	422215	400	120	10/50

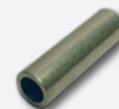


422002

(*) Overrating fuses

NEUTRAL LINKS

SIZE	I _n (A)	REFERENCE	PACKING Uni./BOX
8x31	N	430000	10/100
10x38	N	431000	10/100
14x51	N	432000	10/50
22x58	N	433000	10/50



430000

INDUSTRIAL CYLINDRICAL FUSE LINKS

aM INDUSTRIAL CYLINDRICAL FUSE LINKS

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aM INDUSTRIAL CYLINDRICAL FUSE LINKS

I _n (A)	REFERENCE		U (V)	BREAKING CAPACITY (kA)	REFERENCE WITH STRIKER	U (V)	BREAKING CAPACITY (kA)	PACKING Uni./BOX
	WITHOUT INDICATOR	WITH INDICATOR						



8x31

1	411101	411201	400	20	-	-	-	10/100
2	411102	411202	400	20	-	-	-	10/100
4	411104	411204	400	20	-	-	-	10/100
6	411106	411206	400	20	-	-	-	10/100
8	411108	-	400	20	-	-	-	10/100
10	411110	411210	400	20	-	-	-	10/100



411102

10x38

0,16	440031	-	500	120	-	-	-	10/100
0,25	440033	-	500	120	-	-	-	10/100
0,5	440000	-	500	120	-	-	-	10/100
1	440001	440101	500	120	-	-	-	10/100
2	440002	440102	500	120	-	-	-	10/100
4	440004	440104	500	120	-	-	-	10/100
6	440006	440106	500	120	-	-	-	10/100
8	440008	440108	500	120	-	-	-	10/100
10	440010	440110	500	120	-	-	-	10/100
12	440012	440112	500	120	-	-	-	10/100
16	440016	440116	500	120	-	-	-	10/100
20*	440020	440120	400	120	-	-	-	10/100
25*	440025	440125	400	120	-	-	-	10/100



440001

14x51

0,25	441031	-	690	80	-	-	-	10/50
0,5	441000	-	690	80	-	-	-	10/50
1	441001	441101	690	80	441201	500	120	10/50
2	441002	441102	690	80	441202	500	120	10/50
4	441004	441104	690	80	441204	500	120	10/50
6	441006	441106	690	80	441206	500	120	10/50
8	441008	441108	690	80	441208	500	120	10/50
10	441010	441110	690	80	441210	500	120	10/50
12	441012	441112	690	80	441212	500	120	10/50
16	441016	441116	690	80	441216	500	120	10/50
20	441020	441120	690	80	441220	500	120	10/50
25	441025	441125	690	80	441225	500	120	10/50
32	441032	441132	500	120	441232	500	120	10/50
40	441040	441140	500	120	441240	500	120	10/50
45	441045	441145	500	120	441245	500	120	10/50
50*	441050	441150	400	120	441250	400	120	10/50



441140

(*) Overrating fuses

INDUSTRIAL CYLINDRICAL FUSE LINKS

aM INDUSTRIAL CYLINDRICAL FUSE LINKS
NEUTRAL LINKS
gG/aM DIMENSIONS

aM

aM INDUSTRIAL CYLINDRICAL FUSE LINKS

I _n (A)	REFERENCE		U (V)	BREAKING CAPACITY (kA)	REFERENCE WITH STRIKER	U (V)	BREAKING CAPACITY (kA)	PACKING Uni./BOX
	WITHOUT INDICATOR	WITH INDICATOR						



22x58

2	442002	442102	690	80	442202	690	80	10/50
4	442004	442104	690	80	442204	690	80	10/50
6	442006	442106	690	80	442206	690	80	10/50
8	442008	442108	690	80	442208	690	80	10/50
10	442010	442110	690	80	442210	690	80	10/50
12	442012	442112	690	80	442212	690	80	10/50
16	442016	442116	690	80	442216	690	80	10/50
20	442020	442120	690	80	442220	690	80	10/50
25	442025	442125	690	80	442225	690	80	10/50
32	442032	442132	690	80	442232	690	80	10/50
40	442040	442140	690	80	442240	690	80	10/50
50	442050	442150	690	80	442250	690	80	10/50
63	442063	442163	690	80	442263	690	80	10/50
80	442080	442180	500	120	442280	500	120	10/50
100	442000	442100	500	120	442200	500	120	10/50
125*	442015	442115	400	120	442215	400	120	10/50



442063

(*) Overrating fuses

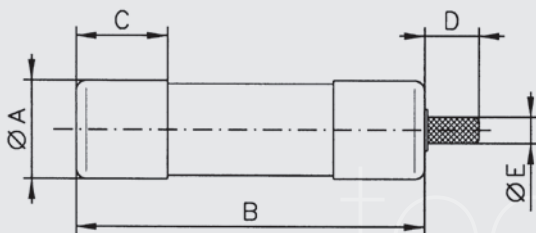
NEUTRAL LINKS

SIZE	I _n (A)	REFERENCE	PACKING Uni./BOX
8x31	N	430000	10/100
10x38	N	431000	10/100
14x51	N	432000	10/50
22x58	N	433000	10/50



430000

DIMENSIONS



SIZE	A	B	C	D	E
8,5x31,5	8,5	31,5	6,3	–	–
10,3x38	10,3	38	8,5	–	–
14,3x51	14,3	51	11,5	8	4
22,2x58	22,2	58	15,5	8	4

INDUSTRIAL CYLINDRICAL FUSE LINKS

gPV FUSE LINKS FOR PHOTOVOLTAIC APPLICATIONS



gPV

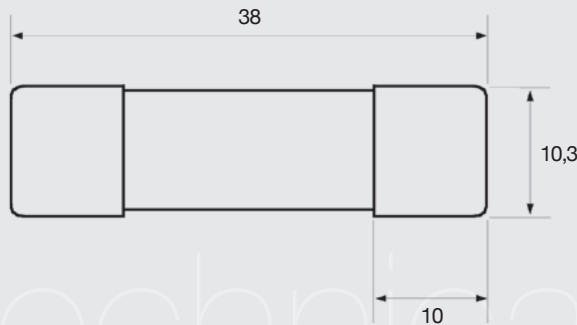
gPV FUSE LINKS FOR PHOTOVOLTAIC APPLICATIONS

I_n (A)	REFERENCE	U (V DC)	BREAKING CAPACITY (kA)	PACKING Unit/BOX
10x38				
2	491602	1000	30	10/100
3	491604	1000	30	10/100
4	491605	1000	30	10/100
6	491610	1000	30	10/100
8	491615	1000	30	10/100
10	491620	1000	30	10/100
12	491625	1000	30	10/100
16	491630	1000	30	10/100
20	491635	1000	30	10/100



491635

DIMENSIONS



technical data

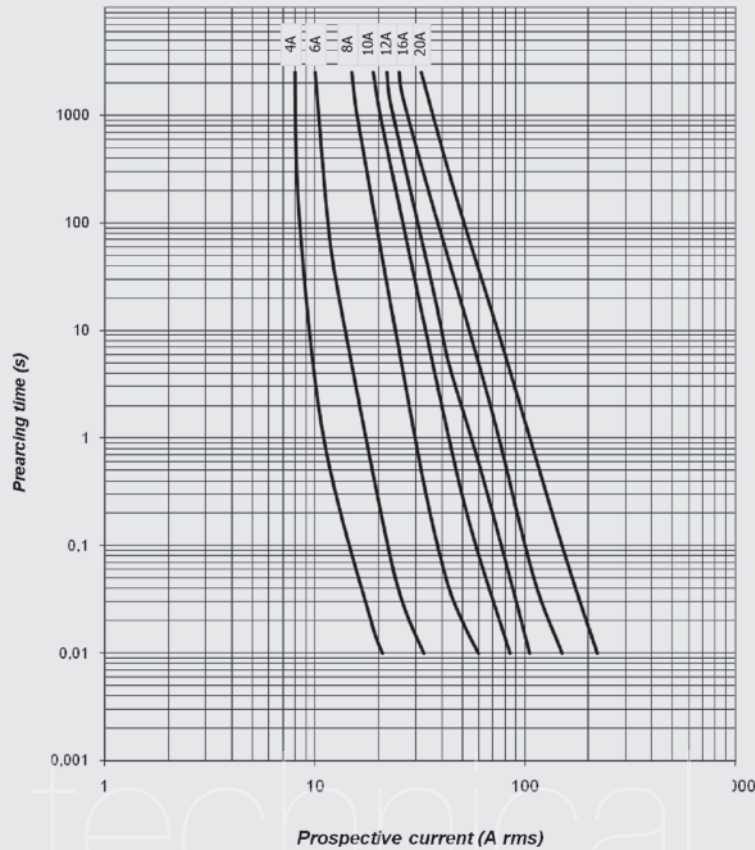


INDUSTRIAL CYLINDRICAL FUSE LINKS

gPV FUSE LINKS FOR PHOTOVOLTAIC APPLICATIONS

gPV

gPV t-I CHARACTERISTICS



TECHNICAL DATA

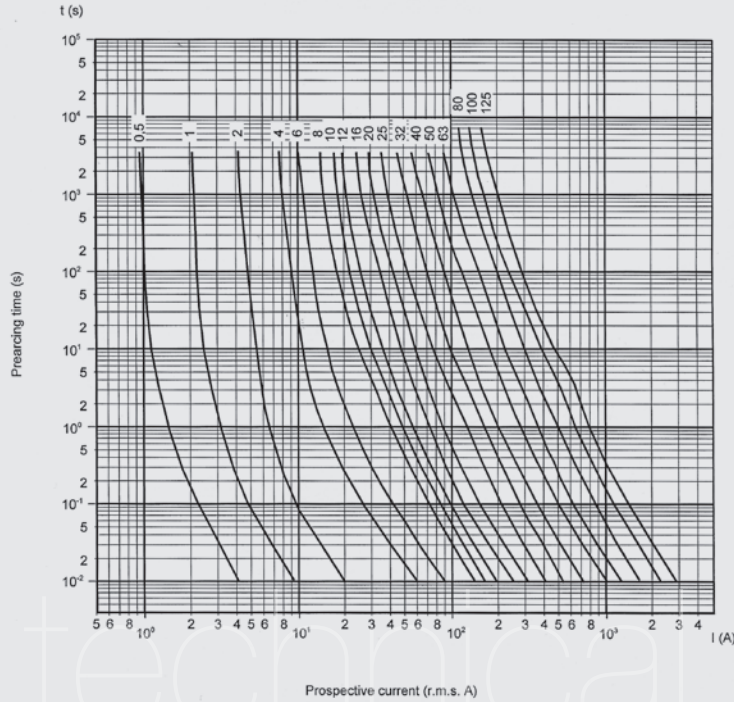
RATED CURRENT (A)	REFERENCE	POWER DISSIPATION (W @ 0,8 In)	POWER DISSIPATION (W @ In)	PREARcing I ² t (A ² s)	OPERATING I ² t 900V (A ² s)
4	491605	1,10	1,85	4	15
6	491610	1,45	2,50	9	42
8	491615	0,95	1,60	12	49
10	491620	1,25	2,15	19	69
12	491625	1,40	2,40	28	97
16	491630	1,80	3,10	48	178
20	491635	2,20	3,80	69	248

INDUSTRIAL CYLINDRICAL FUSE LINKS

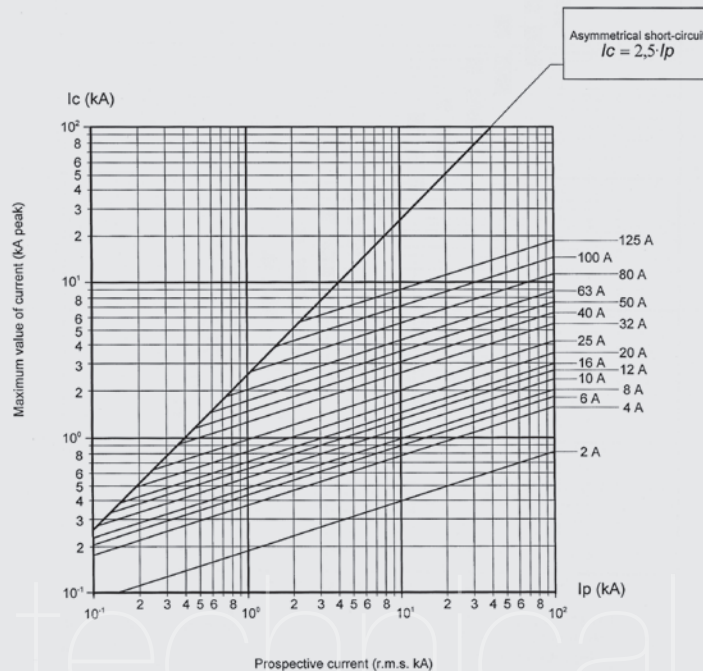
t-I CHARACTERISTICS
CUT-OFF CHARACTERISTICS



gG t-I CHARACTERISTICS



gG CUT-OFF CHARACTERISTICS

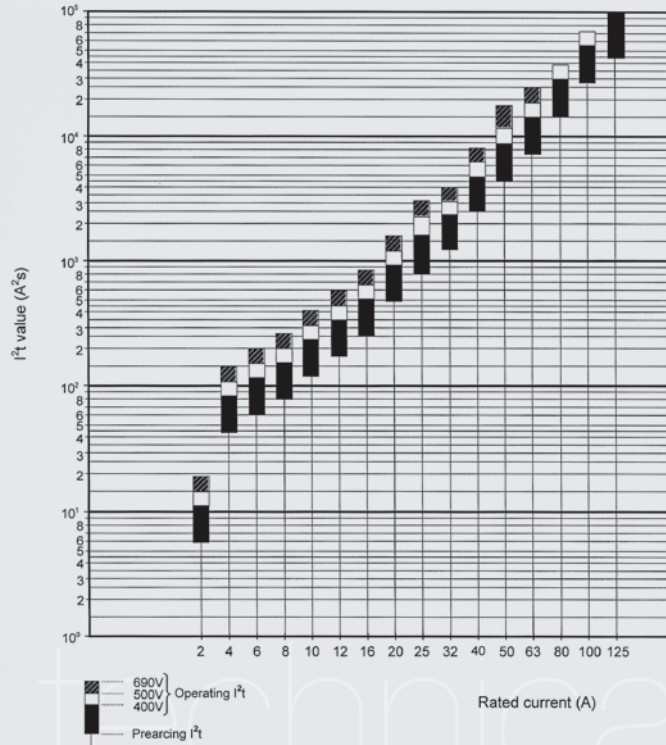


INDUSTRIAL CYLINDRICAL FUSE LINKS

I²t CHARACTERISTICS
POWER DISSIPATION



gG I²t CHARACTERISTICS



gG POWER DISSIPATION

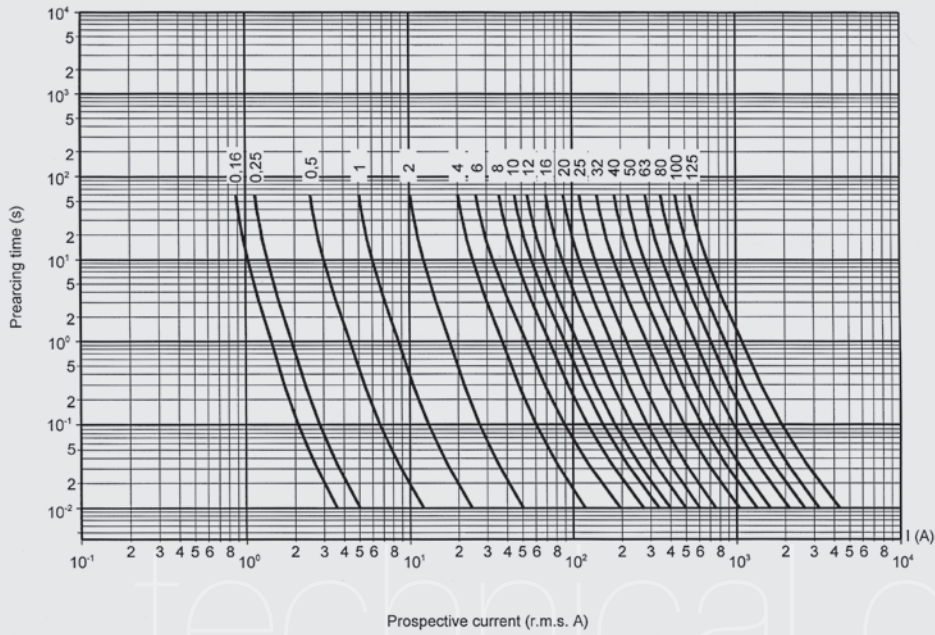
I _n (A)	SIZE			
	8,5x31,5 (W)	10x38 (W)	14x51 (W)	22x58 (W)
0,5	1,2	1,43	–	–
1	2,0	2,77	3,90	–
2	0,5	0,60	0,90	1,00
4	0,8	0,70	1,00	1,10
6	1,1	0,85	1,15	1,30
8	1,3	0,75	1,00	1,10
10	1,0	1,00	1,30	1,50
12	1,2	1,30	1,70	1,80
16	1,5	1,60	2,00	2,10
20	2,0	2,00	2,50	2,70
25	–	2,60	3,30	3,30
32	–	2,90	3,50	3,50
40	–	–	4,75	4,00
50	–	–	4,80	5,50
63	–	–	–	6,90
80	–	–	–	7,80
100	–	–	–	9,00
125	–	–	–	11,4

INDUSTRIAL CYLINDRICAL FUSE LINKS

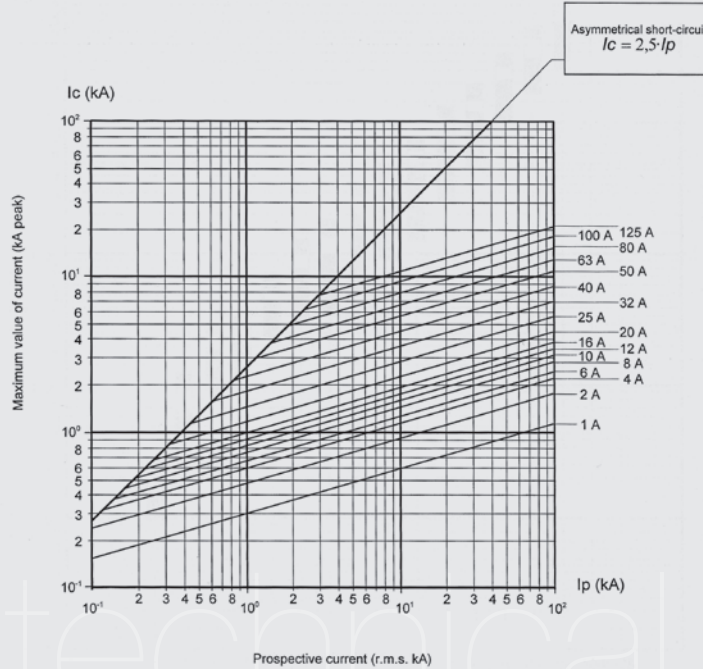
t-I CHARACTERISTICS
CUT-OFF CHARACTERISTICS

aM

aM t-I CHARACTERISTICS



aM CUT-OFF CHARACTERISTICS

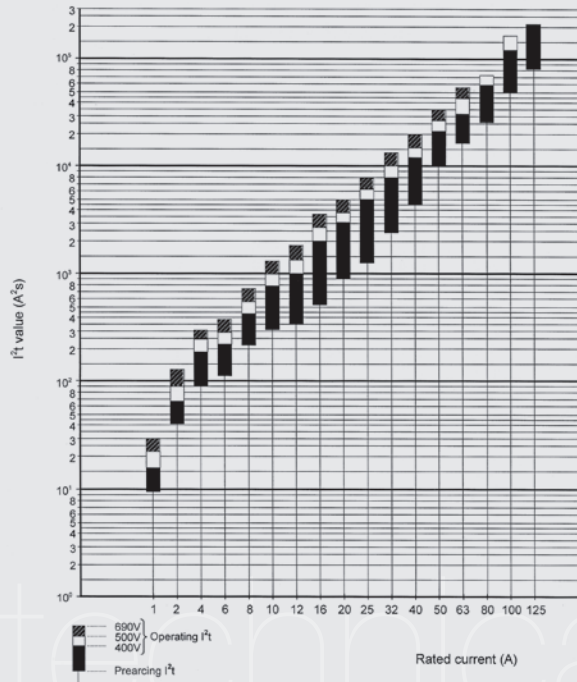


INDUSTRIAL CYLINDRICAL FUSE LINKS

I²t CHARACTERISTICS
POWER DISSIPATION

aM

aM I²t CHARACTERISTICS



aM POWER DISSIPATION

I _n (A)	SIZE			
	8,5x31,5 (W)	10x38 (W)	14x51 (W)	22x58 (W)
0,16	–	0,24	–	–
0,25	–	0,36	0,41	–
0,5	–	0,49	0,69	–
1	0,10	0,10	0,14	–
2	0,16	0,18	0,24	0,29
4	0,25	0,31	0,45	0,48
6	0,35	0,32	0,42	0,47
8	0,40	0,52	0,70	0,73
10	0,65	0,55	0,53	0,74
12	–	0,63	0,88	0,83
16	–	0,92	1,16	1,21
20	–	0,96	1,23	1,29
25	–	1,40	1,46	1,53
32	–	–	2,04	2,13
40	–	–	2,60	3,40
45	–	–	2,85	–
50	–	–	2,90	3,48
63	–	–	–	4,46
80	–	–	–	5,86
100	–	–	–	6,61
125	–	–	–	8,42