



# Industrial fuses

NFC-DIN industrial fuselinks gG and aM curves  
from 0.16 to 1250 A

Fuse protection



gG type fuse, 14 x 51  
from 1 to 50 A



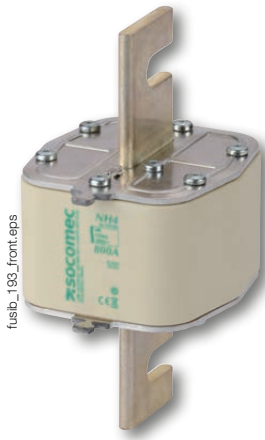
aM type fuse, NH000  
from 6 to 100 A



gG type fuse, NH0,  
with striker  
from 16 to 200 A



gG type fuse, NH2  
from 100 to 500 A



aM type fuse, NH4  
from 315 to 1250 A

## The solution for

- > Motor protection
- > Cable and device protection



## Strong points

- > High level performances
- > High reliability
- > Improved safety

## Conformity to standards

- > IEC 60269-1
- > DIN EN 60269-1
- > NF EN 60269-1
- > IEC 60269-2
- > NF EN 60269-2



## Function

SOCOMECC industrial fuses protect installations and people from overcurrents for any low voltage electrical circuit.

## Advantages

### High level performances

- High breaking capacity - 120 kA at 400/500 V, 80 kA at 690 V.
- High short-circuit limitation capacity.
- Simple and reliable discrimination.
- NH (size 000 to 3) type gG fuse links without striker : 250 VDC, 80 kA, L/R 20ms

### High reliability

- Absolute protection over time guaranteed by the simplicity of manufacture and function (Joule effect).
- No downgrading of fuse characteristics over time.

### Improved safety

The energy released whilst eliminating the fault (fuse blowing) is contained within the cartridge (no degassing).

## References

### gG type fuses (in multiples of 10)

Rating (A)	10 x 38 without striker		14 x 51 without striker		14 x 51 with striker		22 x 58 without striker		22 x 58 with striker	
	Voltage (VAC)	Reference	Voltage (VAC)	Reference	Voltage (VAC)	Reference	Voltage (VAC)	Reference	Voltage (VAC)	Reference
0.5	500	6012 0000								
1	500	6012 0001	690	6022 0001						
2	500	6012 0002	690	6022 0002	500	6052 0002	690	6032 0002		
4	500	6012 0004	690	6022 0004	500	6052 0004	690	6032 0004	690	6062 0004
6	500	6012 0006	690	6022 0006	500	6052 0006	690	6032 0006	690	6062 0006
8	500	6012 0008	690	6022 0008	500	6052 0008	690	6032 0008	690	6062 0008
10	500	6012 0010	690	6022 0010	500	6052 0010	690	6032 0010	690	6062 0010
12	500	6012 0012	690	6022 0012	500	6052 0012	690	6032 0012	690	6062 0012
16	500	6012 0016	690	6022 0016	500	6052 0016	690	6032 0016	690	6062 0016
20	500	6012 0020	690	6022 0020	500	6052 0020	690	6032 0020	690	6062 0020
25	500	6012 0025	690	6022 0025	500	6052 0025	690	6032 0025	690	6062 0025
32	400	6012 0032	500	6022 0032	500	6052 0032	690	6032 0032	690	6062 0032
40			500	6022 0040	500	6052 0040	690	6032 0040	690	6062 0040
50			400	6022 0050	400	6052 0050	690	6032 0050	690	6062 0050
63							690	6032 0063	690	6062 0063
80							500	6032 0080	500	6062 0080
100							500	6032 0100	500	6062 0100
125							400	6032 0125	400	6062 0125

#### Description of accessories

	Reference		Reference		Reference		Reference		Reference
Solid cylindrical link	6019 0000		6029 0000		6029 0000		6039 0000		6039 0000

### aM type fuses (in multiples of 10)

Rating (A)	10 x 38 without striker		14 x 51 without striker		14 x 51 with striker		22 x 58 without striker		22 x 58 with striker	
	Voltage (VAC)	Reference	Voltage (VAC)	Reference	Voltage (VAC)	Reference	Voltage (VAC)	Reference	Voltage (VAC)	Reference
0.16	500	6013 0007								
0.25	500	6013 0005	690	6023 0005						
0.5	500	6013 0000	690	6023 0000						
1	500	6013 0001	690	6023 0001						
2	500	6013 0002	690	6023 0002	500	6053 0002	690	6033 0002		
4	500	6013 0004	690	6023 0004	500	6053 0004	690	6033 0004	690	6063 0004
6	500	6013 0006	690	6023 0006	500	6053 0006	690	6033 0006	690	6063 0006
8	500	6013 0008	690	6023 0008	500	6053 0008	690	6033 0008	690	6063 0008
10	500	6013 0010	690	6023 0010	500	6053 0010	690	6033 0010	690	6063 0010
12	500	6013 0012	690	6023 0012	500	6053 0012	690	6033 0012	690	6063 0012
16	500	6013 0016	690	6023 0016	500	6053 0016	690	6033 0016	690	6063 0016
20	400	6013 0020	690	6023 0020	500	6053 0020	690	6033 0020	690	6063 0020
25	400	6013 0025	690	6023 0025	500	6053 0025	690	6033 0025	690	6063 0025
32			500	6023 0032	500	6053 0032	690	6033 0032	690	6063 0032
40			500	6023 0040	500	6053 0040	690	6033 0040	690	6063 0040
50			400	6023 0050	400	6053 0050	690	6033 0050	690	6063 0050
63							690	6033 0063	690	6063 0063
80							500	6033 0080	500	6063 0080
100							500	6033 0100	400	6063 0100
125							400	6033 0125	400	6063 0125

#### Description of accessories

	Reference		Reference		Reference		Reference		Reference
Solid cylindrical link	6019 0000		6029 0000		6029 0000		6039 0000		6039 0000

# Industrial fuses

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## References (continued)

### Knife-edge fuses (NH), gG type

Rating (A)	000/00C without striker (in multiples of 3)		00 without striker (in multiples of 3)		0 without striker (in multiples of 3)		0 with striker (in multiples of 3)		1 without striker (in multiples of 3)		1 with striker (in multiples of 3)	
	Voltage (VAC)	Reference	Voltage (VAC)	Reference	Voltage (VAC)	Reference	Voltage (VAC)	Reference	Voltage (VAC)	Reference	Voltage (VAC)	Reference
6	500	6600 0006										
10	500	6600 0010										
16	500	6600 0016			500	6702 0016						
20	500	6600 0020			500	6702 0020						
25	500	6600 0025			500	6702 0025						
32	500	6600 0032			500	6702 0032	690	6852 0032				
40	500	6600 0040			500	6702 0040	690	6852 0040				
50	500	6600 0050			500	6702 0050	690	6852 0050				
63	500	6600 0063			500	6702 0063	690	6852 0063	500	6712 0063		
80	500	6600 0080			500	6702 0080	690	6852 0080	500	6712 0080	690	6862 0080
100	500	6600 0100			500	6702 0100	690	6852 0100	500	6712 0100	690	6862 0100
125			500	6692 0125	500	6702 0125	500	6852 0125	500	6712 0125	690	6862 0125
160			500	6692 0160	500	6702 0160	500	6852 0160	500	6712 0160	690	6862 0160
200					500	6702 0200	500	6852 0200	500	6712 0200	690	6862 0200
250									500	6712 0250	500	6862 0250
315									400	6712 0315	500	6862 0315

### Description of accessories

	Reference		Reference		Reference		Reference		Reference		Reference
Neutral bar	6420 0000		6420 0000		6421 0000		6421 0000		6421 0001		6421 0001

Rating (A)	2 without striker (in multiples of 3)		2 with striker (in multiples of 3)		3 without striker (to this unit)		3 with striker (to this unit)		4 without striker (to this unit)		4 with striker (to this unit)	
	Voltage (VAC)	Reference	Voltage (VAC)	Reference	Voltage (VAC)	Reference	Voltage (VAC)	Reference	Voltage (VAC)	Reference	Voltage (VAC)	Reference
100	500	6722 0100										
125	500	6722 0125	690	6872 0125								
160	500	6722 0160	690	6872 0160								
200	500	6722 0200	690	6872 0200								
250	500	6722 0250	690	6872 0250								
315	500	6722 0315	690	6872 0315	500	6732 0315	690	6882 0315	500	6746 0315	500	6896 0315
400	500	6722 0400	500	6872 0400	500	6732 0400	690	6882 0400	500	6746 0400	500	6896 0400
500	500	6722 0500	500	6872 0500	500	6732 0500	690	6882 0500	500	6746 0500	500	6896 0500
630					500	6732 0630	500	6882 0630	500	6746 0630	500	6896 0630
800					500	6732 0800			500	6746 0800	500	6896 0800
900									500	6746 0900	500	6896 0900
1000									500	6746 1000	500	6896 1000
1250									500	6746 1200	500	6896 1200

### Description of accessories

	Reference		Reference		Reference		Reference		Reference		Reference
Neutral bar	6421 0002		6421 0002		6421 0003		6421 0003		6441 0005		6441 0005

Knife-edge fuses (NH), aM type

Rating (A)	000/00C without striker (in multiples of 3)		00 without striker (in multiples of 3)		0 without striker (in multiples of 3)		0 with striker (in multiples of 3)		1 without striker (in multiples of 3)		1 with striker (in multiples of 3)	
	Voltage (VAC)	Reference	Voltage (VAC)	Reference	Voltage (VAC)	Reference	Voltage (VAC)	Reference	Voltage (VAC)	Reference	Voltage (VAC)	Reference
6	500	6601 0006										
10	500	6601 0010										
16	500	6601 0016			500	6703 0016						
20	500	6601 0020			500	6703 0020						
25	500	6601 0025			500	6703 0025						
32	500	6601 0032			500	6703 0032	690	6853 0032				
40	500	6601 0040			500	6703 0040	690	6853 0040				
50	500	6601 0050			500	6703 0050	690	6853 0050				
63	500	6601 0063			500	6703 0063	690	6853 0063				
80	500	6601 0080			500	6703 0080	690	6853 0080			690	6863 0080
100			500	6693 0100	500	6703 0100	690	6853 0100	500	6713 0100	690	6863 0100
125			500	6693 0125	500	6703 0125	690	6853 0125	500	6713 0125	690	6863 0125
160			500	6693 0160	500	6703 0160	690	6853 0160	500	6713 0160	690	6863 0160
200					500	6703 0200	500	6853 0200	500	6713 0200	690	6863 0200
250									500	6713 0250	690	6863 0250
315									500	6713 0315	500	6863 0315

Description of accessories

	Reference		Reference		Reference		Reference		Reference		Reference
Neutral bar	6420 0000		6420 0000		6421 0000		6421 0000		6421 0001		6421 0001

Rating (A)	2 without striker (in multiples of 3)		2 with striker (in multiples of 3)		3 without striker (to this unit)		3 with striker (to this unit)		4 without striker (to this unit)		4 with striker (to this unit)	
	Voltage (VAC)	Reference	Voltage (VAC)	Reference	Voltage (VAC)	Reference	Voltage (VAC)	Reference	Voltage (VAC)	Reference	Voltage (VAC)	Reference
100	500	6723 0100										
125	500	6723 0125										
160	500	6723 0160	690	6873 0160								
200	500	6723 0200	690	6873 0200								
250	500	6723 0250	690	6873 0250								
315	500	6723 0315	690	6873 0315	500	6733 0315	690	6883 0315	500	6747 0315	500	6897 0315
400	500	6723 0400	690	6873 0400	500	6733 0400	690	6883 0400	500	6747 0400	500	6897 0400
500	500	6723 0500	500	6873 0500	500	6733 0500	690	6883 0500	500	6747 0500	500	6897 0500
630					500	6733 0630	500	6883 0630	500	6747 0630	500	6897 0630
800									500	6747 0800	500	6897 0800
1000									500	6747 1000	500	6897 1000
1250									500	6747 1200	500	6897 1200

Description of accessories

	Reference		Reference		Reference		Reference		Reference		Reference
Neutral bar	6421 0002		6421 0002		6421 0003		6421 0003		6441 0005		6441 0005

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## Accessories

### Solid cylindrical link

#### Use

Solid link to be used in conjunction with the neutral pole of cylindrical fused disconnecting switches.

3 sizes: 10 x 38, 14 x 51, 22 x 58.

Rating (A)	Size	To be ordered in multiples of	Reference
32	10 x 38	10	6019 0000
50	14 x 51	10	6029 0000
100	22 x 58	10	6039 0000



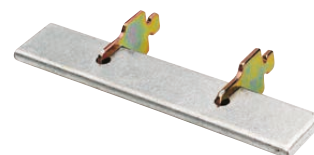
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### Solid links

#### Use

Solid link to be used in conjunction with fuse bases or knife-edge fused disconnecting switches, generally fitted on the neutral pole.  
6 sizes: 000/00C/00-0-1-2-3-4.

Rating (A)	Size	Tightening	Reference
160	000/00C/00	elastic	6420 0000
160	0	elastic	6421 0000
315	1	elastic	6421 0001
400	2	elastic	6421 0002
630	3	elastic	6421 0003
1250	4	blocked	6441 0005



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### Fuse extraction tool

#### Use

For inserting and extracting knife-edge fuses, sizes 000 to 4.

Type	Reference
Fuse extraction tool	6401 0011

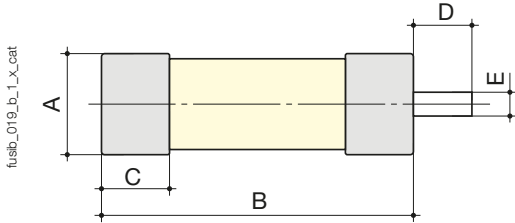


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## Dimensions

### Cylindrical fuses (NF)

Without striker - with striker

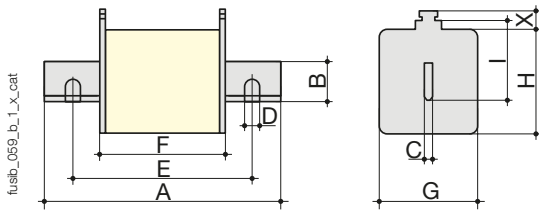


Standard dimensions (mm) as per IEC 60269-2-1

Size	A	B	C	D	E
10 x 38	10.3	38	10.5		
14 x 51	14.3	51	13.8	7.5	3.8
22 x 58	22.2	58	16.2	7.5	3.8

### Knife-edge fuses (NH)

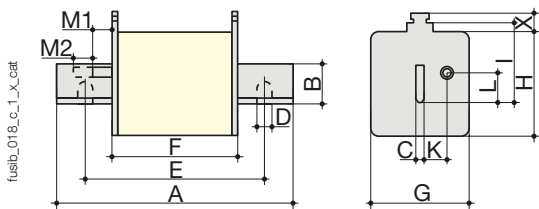
without striker



Standard dimensions (mm) as per IEC 60269-2-1

Size	A maxi	B mini	C	D	E mini	F maxi	G maxi	H maxi	I	X mini
000/00C	80	15	6			54	21	41	35	11
00	80	15	6			54	30	48	35	11
0	127.5	15	6			68	40	48	35	11
1	137.5	20	6			75	52	53	40	11
2	152.5	25	6			75	60	61	48	11
3	152.5	32	6			75	75	76	60	11
4	203	49	8	16	150	90	105	110	87	11

With striker



Standard dimensions (mm) as per IEC 60269-2-1

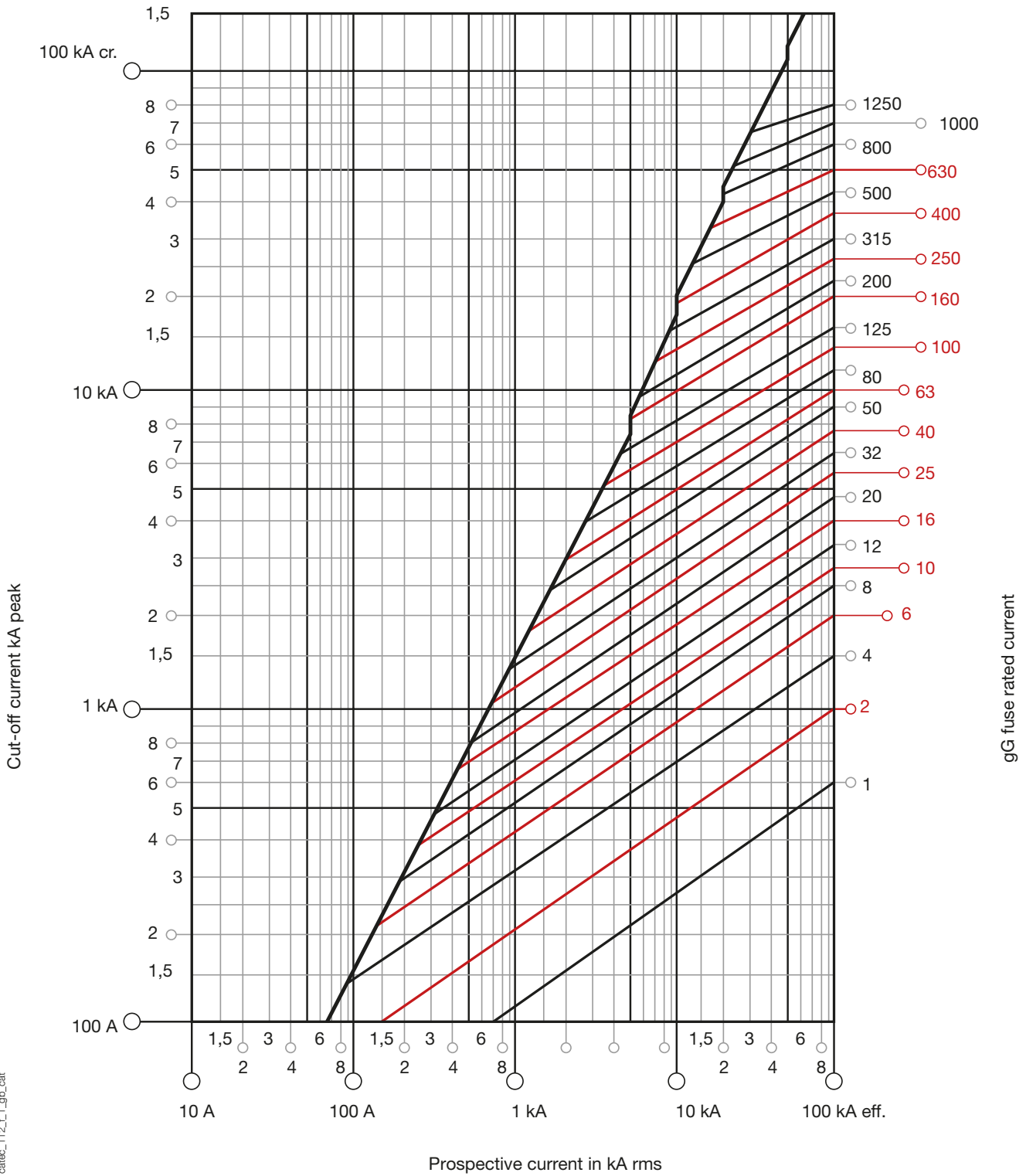
Size	A maxi	B mini	C	D	E	F maxi	G maxi	H maxi	I	K	L	M1	M2 mini	X mini
0	127.5	15	6			68	39	47	35	11.5	14	25	13	11
1	137.5	20	6			75	52	53	40	13	14.5	25.5	13	11
2	152.5	25	6			75	60	61	48	16	14.5	25.5	13	11
3	152.5	32	6			75	75	76	60	21	14.5	25.5	13	11
4	203	49	8	16	150	90	105	110	87	24.5	14.5	35	13	11

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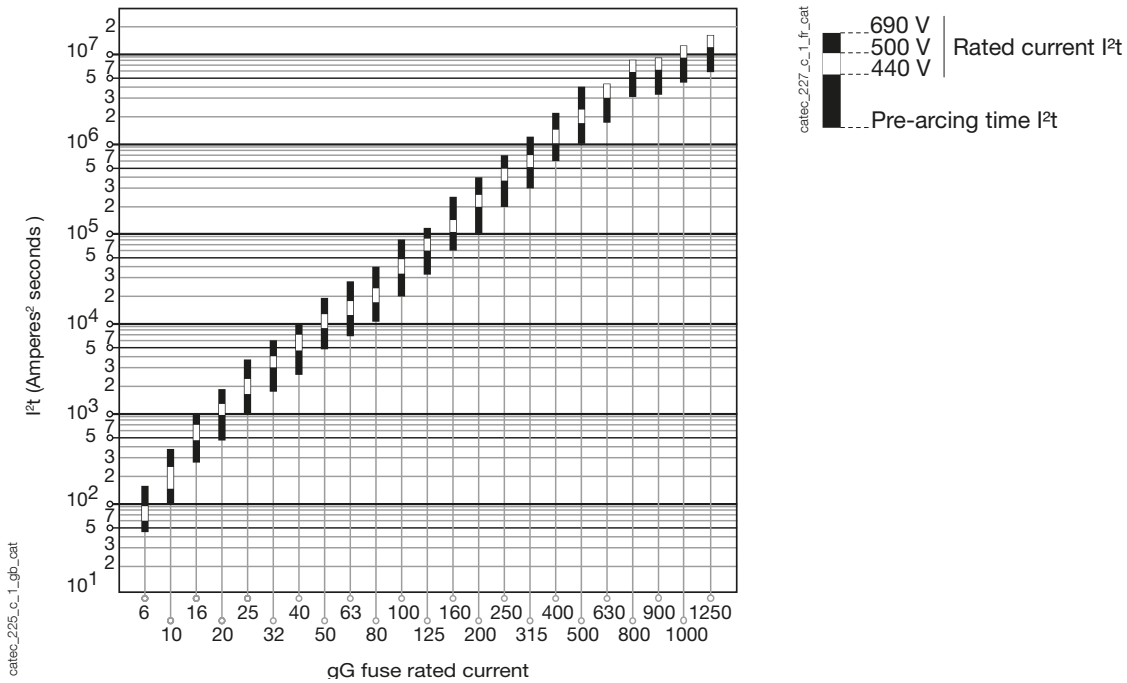
## Curves characteristic of NF and NH gG type fuses

### Cut-off current diagram

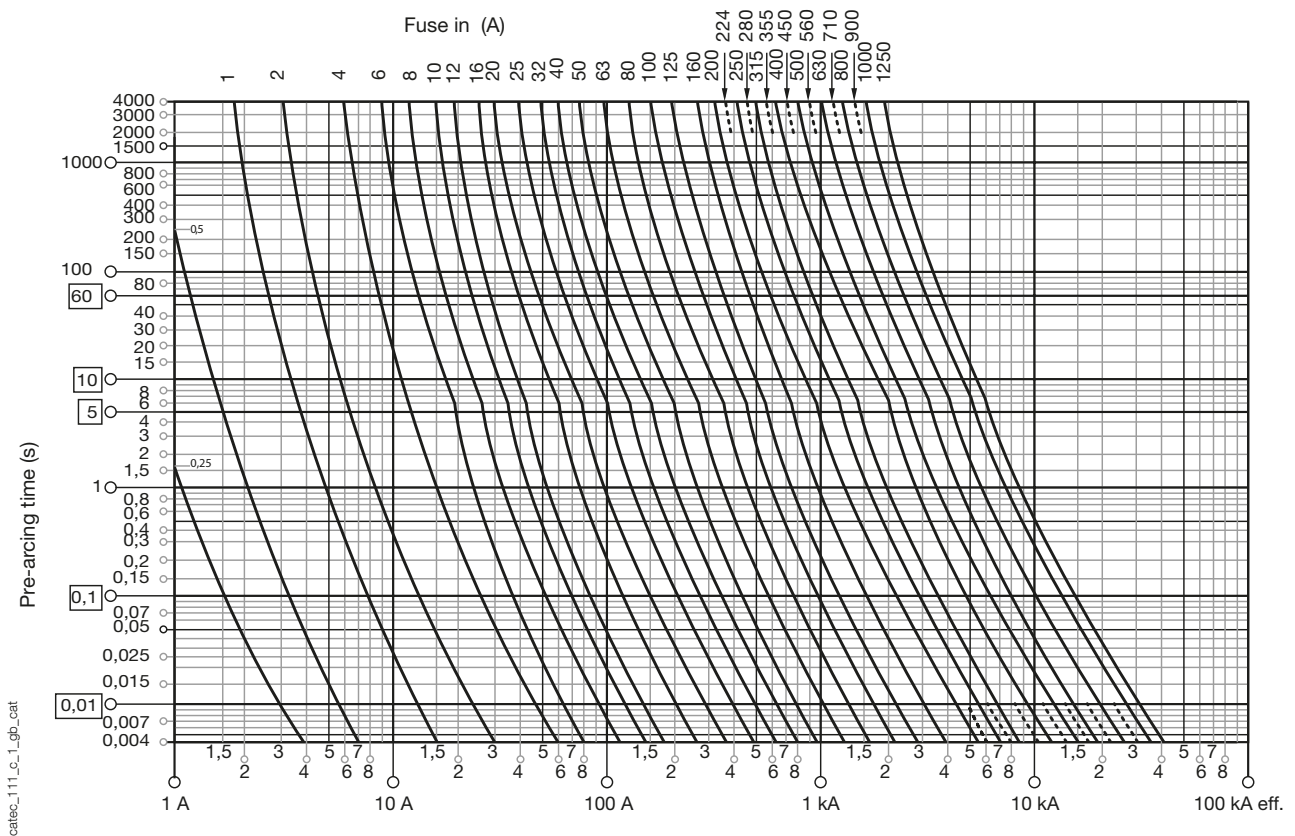


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Diagram of thermal constraint limitation



Time/current operation characteristics



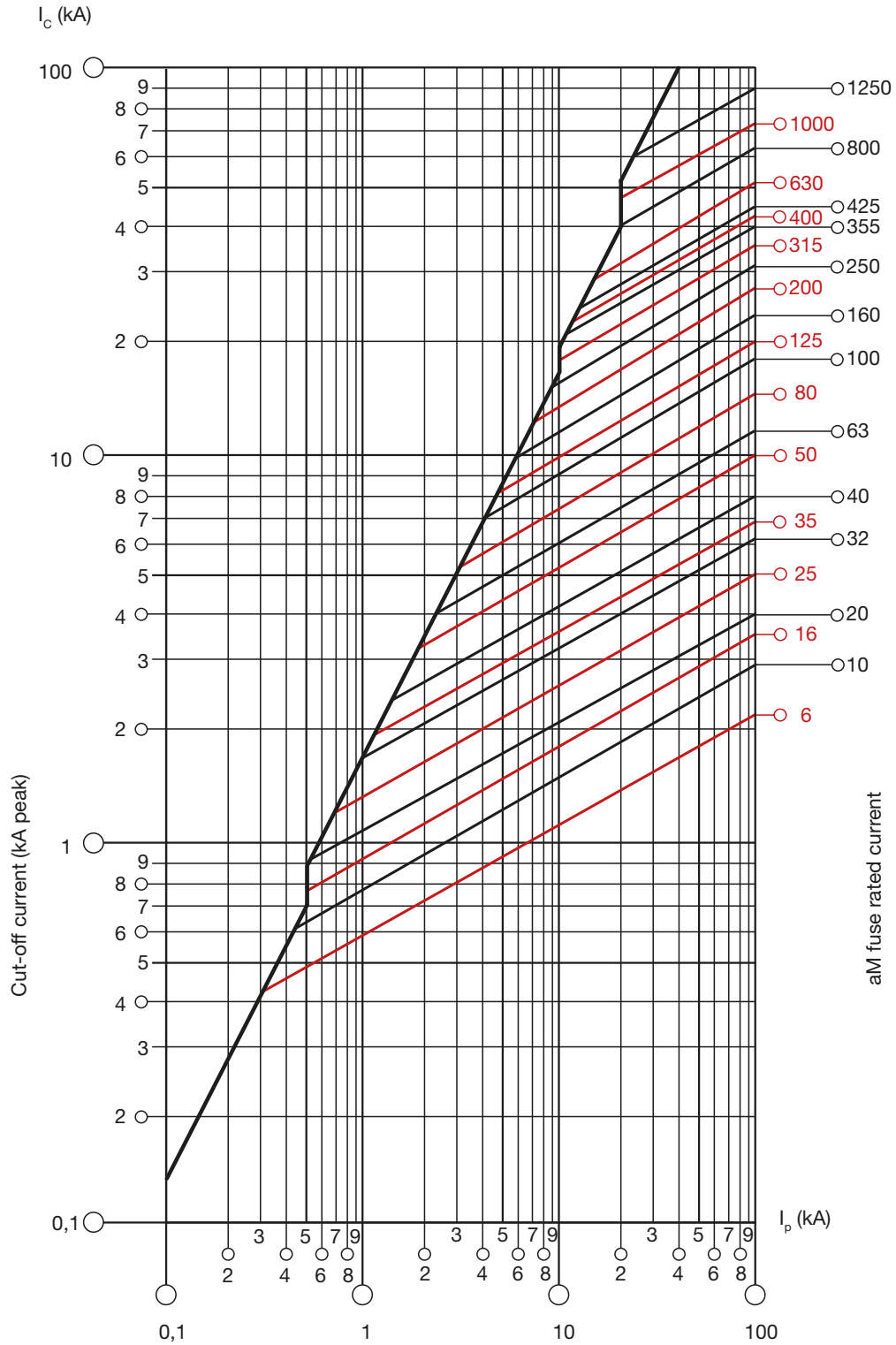


# Industrial fuses

NFC-DIN industrial fuselinks gG and aM curves  
from 0.16 to 1250 A

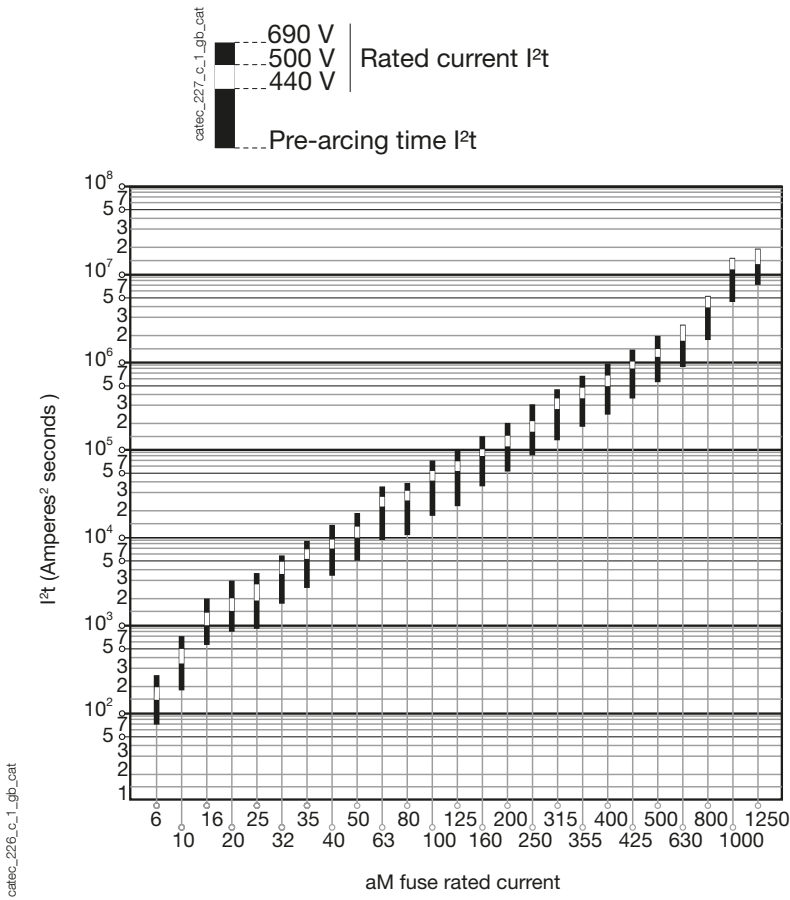
## Curves characteristic of NF and NH aM type fuses

### Cut-off current diagram



cattec\_114\_g\_1\_gpb\_cat

## Diagram of thermal constraint limitation



Dissipated power without striker (W)

Rated operational currents $I_n$ (A)	Fuse size						
	000	00	0/0S	1	2	3	4
6	0.33		0.42				
10	0.52		0.67				
16	0.81		0.98				
20	0.92		1.04				
25	1.08		1.17				
32	1.42		1.67				
35	1.58		1.72				
40	1.68		1.91				
50		2.28	2.51				
63		2.9	3.35	3.2			
80		4.19	4.93	4.6			
100		5.09	5.72	5.7			
125		6.29	7.30	6.98	7.6		
160		7.73	9.50	9.2	9.7		
200			12.3	13.7	13.9		
224				14.0	14.0		
250				15.3	17.0		
315					26.0	20.6	18.8
355					25.2	23.9	
400					29.3	26.5	23.5
425						28.3	
500						35.8	34
630						56.9	49
800							70
1000							80
1250							108

## Time/current operation characteristics

