

General Purpose Fuses



NH Fuses



NH Fuse System

DIN 57 636/VDE 0636 Parts 1, 10, 21, 22, 201
IEC 60269-2
DIN 43 620 Parts 1 to 4 (Standard dimensions)

The utilization category is identified by two letters, the first indicating the **operational class** and the second the **object to be protected**. The Lindner range includes fuse-links to DIN VDE 0636 standard for the following utilization categories:

- gG: general purpose cable and line protection
- aM: backup switchgear and controlgear protection
- gTr: general purpose transformer protection
- gR: general purpose, fast acting
- aR: partial purpose, fast acting

Classification

The NH system is classed among plug-in fuse systems and is comprised of:

- fuse-base, (possibly including terminal covers and phase barriers)
- fuse-link with blade contact
- fuse-link replacement device (LV HRC fuse puller)

Since the design of this system cannot guarantee non-interchangeability of rated current, it must be handled by a qualified professional.

Approval symbols



Germany



Austria



Switzerland



Netherlands

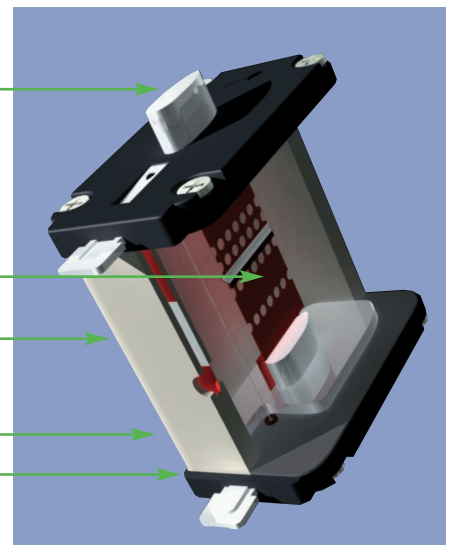


Beige melted



Red non melted

- ~ 0% lead
- ~ 0% cadmium
- ~ it costs you not a eanny more !
- ~ it corresponds with the 2nd design of European electronical scraps guideline
- ~ 100% for a sure future



General Purpose Fuses



NH Fuses

NH Fuse-links ~500V aM for protection of switchgear

NH fuse-links in operating class aM are current-limiting fuse-links for short circuit protection (back-up) of switchgear. The minimum melting time for these fuse-links is safely more than 1 minute at $4 \times I_n$. In the range up to $4 \times I_n$, no ageing occurs when the overload capacity characteristic is adhered to. Thermally-retarded switching devices, to which the fuse links have been classified, function in this current-time range without having to take the fuse into consideration.

At $4 \times I_n$ and above, the time-current characteristic of the aM fuse links has a very steep curve (i.e. the fuse links are very fast acting). It can be assigned to the switchgear in such way that the fuse link safely breaks when the switching capacity has been exceeded.

NH fuse links with operating class aM have a rated voltage of ~ 500 V and are available for delivery in the following sizes and with the following rated currents:

00	2...	160 A rated current
0	6...	160 A rated current
1	16...	250 A rated current
2	32...	400 A rated current
3	315...	630 A rated current
4 a	630...	1250 A rated current

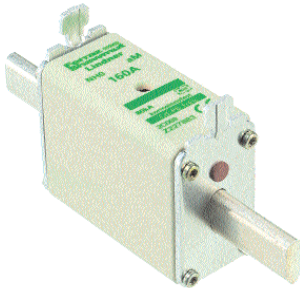
The breaking capacity of these fuse-links is 120 kA.

General Purpose Fuses



NH Fuses

500V aM



NH Fuse-links
~500 V aM
with voltage-conducting
grip lug,
contact blades,
complying with
DIN VDE 0636 part 22,
DIN 43620 part 1

SIZE	RATED In CURRENT (A)	POWER LOSSES In (W)	CATALOG NUMBER	REFERENCE NUMBER	PACK.
000/C00	2		2B613.000000	K232493	3
	4		2B619.000000	L232494	3
	6		2B623.000000	M232495	3
	10		2B631.000000	N232496	3
	16		2B635.000000	P232497	3
	20		2B637.000000	Q232498	3
	25		2B639.000000	R232499	3
	32		2B643.000000	S232500	3
	35		2B645.000000	T232501	3
	40		2B647.000000	V232502	3
	50		2B651.000000	W232503	3
	63		2B655.000000	X232504	3
	80		2B659.000000	C227863	3
00	100		2B763.000000	Y232505	3
	125		2B765.000000	Z232506	3
	160		2B769.000000	J227869	3
0	100		2B063.000000	A232507	3
	125		2B065.000000	B232508	3
	160		2B069.000000	C232509	3
	200		2B071.000000	A227884	3
1	100		2B163.000000	D232510	3
	125		2B165.000000	E232511	3
	160		2B169.000000	F232512	3
	200		2B171.000000	G232513	3
	224		2B173.000000	H232514	3
	250		2B175.000000	J232515	3
	315		2B179.000000	K227962	3
2	250		2B275.000000	K232516	3
	315		2B277.000000	L232517	3
	355		2B279.000000	M232518	3
	400		2B281.000000	N232519	3
	500		2B287.000000	C227978	3
3	355		2B381.000000	Q232521	1
	400		2B383.000000	R232522	1
	425		2B385.000000	S232523	1
	450		2B386.000000	T232524	1
	500		2B387.000000	V232525	1
	630		2B389.000000	M227987	1

Characteristic curves page 98/99

Dimensions page 102

Microswitch

MS 4L 2.5 B6 + PRES Ref Number: F210156 ou

MS 4L 2.5 B2 + PRES REF Number G210157

General Purpose Fuses



NH Fuses

690V aM



NH Fuse-links
~690 V aM
with voltage-conducting grip lug,
contact blades,
complying with
DIN VDE 0636 part 22,
DIN 43620 part 1
Microswitch – Sizes 000 to 3

SIZE	RATED In CURRENT (A)	POWER LOSSES In (W)	CATALOG NUMBER	REFERENCE NUMBER	PACK.
000	2		2C613.000000	P227851	3
	4		2C619.000000	Q227852	3
	6		2C623.000000	R227853	3
	10		2C631.000000	S227854	3
	16		2C635.000000	T227855	3
	20		2C637.000000	V227856	3
	25		2C639.000000	W227857	3
	32		2C643.000000	X227858	3
	35		2C645.000000	Y227859	3
	40		2C647.000000	Z227860	3
	50		2C651.000000	A227861	3
	63		2C655.000000	B227862	3
	00	50		2C751.000000	D227864
63			2C755.000000	E227865	3
80			2C759.000000	F227866	3
100			2C763.000000	G227867	3
125			2C765.000000	H227868	3
0	6		2C023.000000	K227870	3
	10		2C031.000000	L227871	3
	16		2C035.000000	M227872	3
	20		2C037.000000	N227873	3
	25		2C039.000000	P227874	3
	32		2C043.000000	Q227875	3
	35		2C045.000000	R227876	3
	40		2C047.000000	S227877	3
	50		2C051.000000	T227878	3
	63		2C055.000000	V227879	3
	80		2C059.000000	W227880	3
	100		2C063.000000	X227881	3
	125		2C065.000000	Y227882	3
160		2C069.000000	Z227883	3	
1	16		2C135.000000	B227885	3
	20		2C137.000000	C227886	3
	25		2C139.000000	D227887	3
	32		2C143.000000	E227888	3
	35		2C145.000000	F227889	3
	40		2C147.000000	G227890	3
	50		2C151.000000	H227891	3
	63		2C155.000000	J227892	3
	80		2C159.000000	K227893	3
	100		2C163.000000	L227894	3
	125		2C165.000000	M227895	3
	160		2C169.000000	N227896	3
	200		2C171.000000	P227897	3
	224		2C173.000000	Q227898	3
	250		2C175.000000	R227899	3
2	35		2C245.000000	L227963	3
	40		2C247.000000	M227964	3
	50		2C251.000000	N227965	3
	63		2C255.000000	P227966	3
	80		2C259.000000	Q227967	3
	100		2C263.000000	R227968	3
	125		2C265.000000	S227969	3
	160		2C269.000000	T227970	3
	200		2C271.000000	V227971	3
	224		2C273.000000	W227972	3
	250		2C275.000000	X227973	3
	300		2C277.000000	Y227974	3
	315		2C279.000000	Z227975	3
	355		2C281.000000	A227976	3
	400		2C283.000000	B227977	3
3	250		2C375.000000	D227979	1
	300		2C377.000000	E227980	1
	315		2C379.000000	F227981	1
	355		2C381.000000	G227982	1
	400		2C383.000000	H227983	1
	425		2C385.000000	J227984	1
	450		2C386.000000	K227985	1
	500		2C387.000000	L227986	1

Accessories



MS4L2-5B6+PRES	F210156	3
MS4L2-5B2+PRES	G210157	3

Microswitch Mounted



Blown-Fuse Indicator



Characteristic curves page 98/99
Dimensions page 102

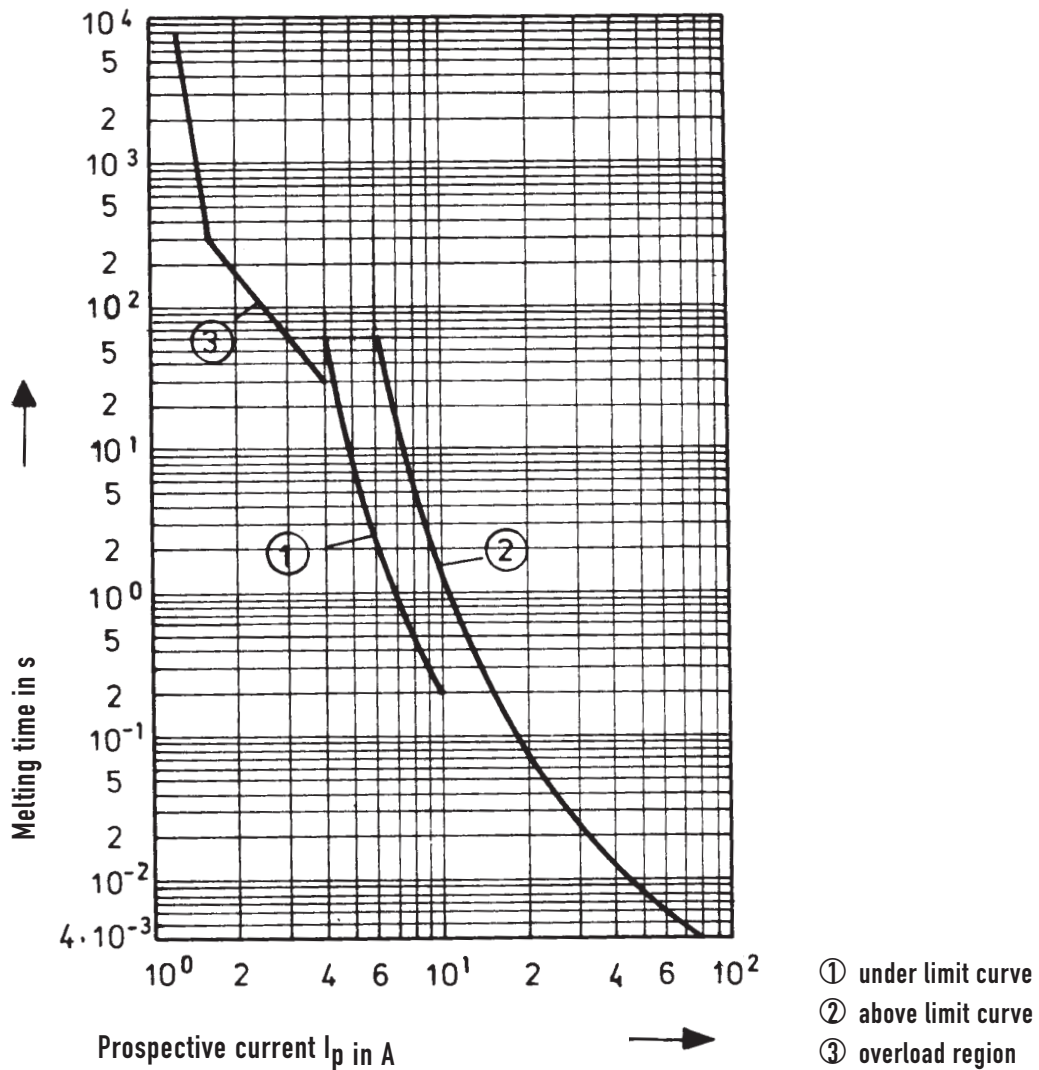
General Purpose Fuses



NH Fuses

Melting time - current data

Class aM, ~ 500 V, ~ 690 V



$\times I_N$	4	6,3	8	10	12,5	25	50
$t_{va} \text{ max s}$	-	60	-	-	0,5	0,04	0,009
$t_{vs} \text{ min s}$	60	-	0,5	0,2	-	-	-

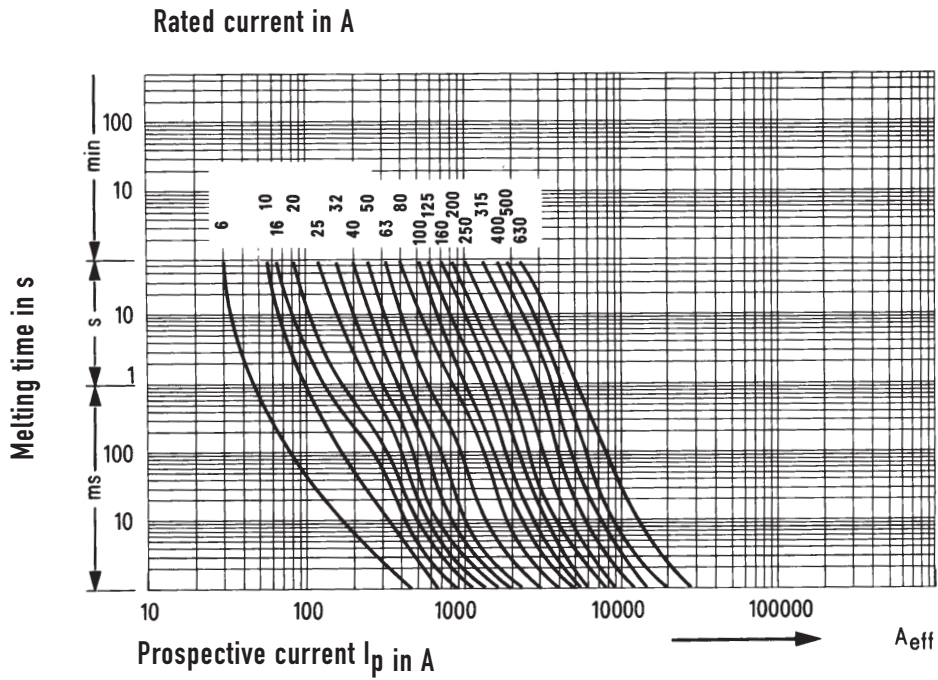
General Purpose Fuses



NH Fuses

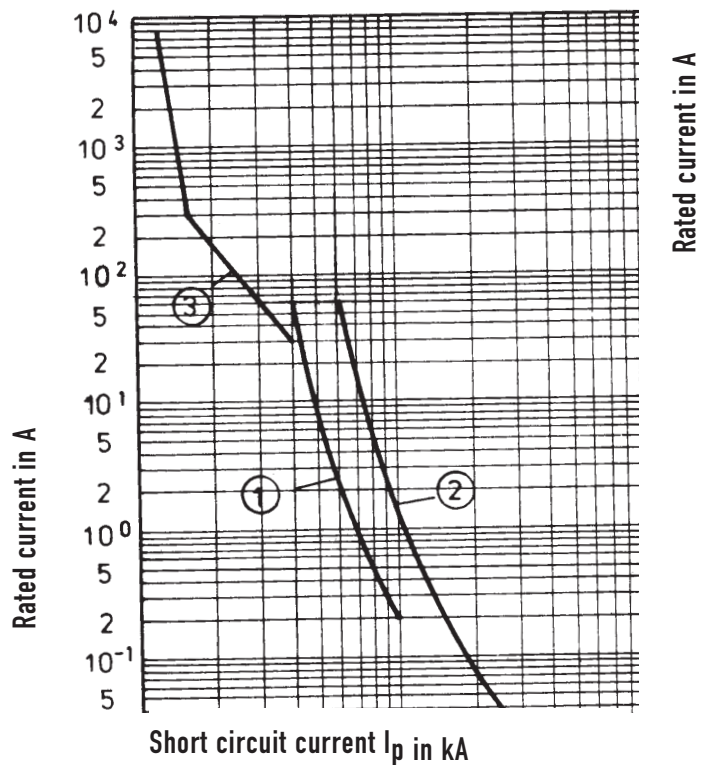
Melting time - current data

Class aM, ~ 500 V, ~ 690 V



Peak let-thru current data

Class aM, ~ 500 V, ~ 690 V



General Purpose Fuses



NH Fuses

aM

500V

LOW VOLTAGE FUSES

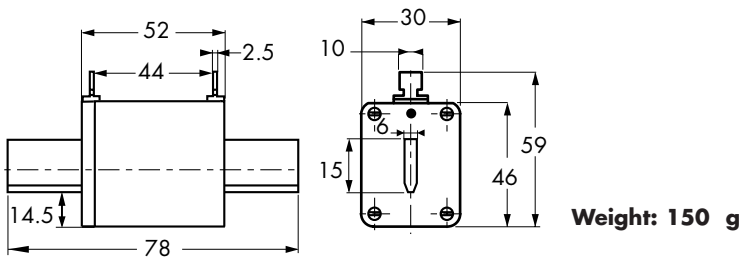
from 16 to 125 A

Size: 00

BLADE-STYLE FUSES: WITH BLOWN FUSE INDICATOR

COMPLYING WITH IEC 269.1 AND 2.1 NF EN 60269.1 & 2 NF C 63210 AND DIN 43620 STANDARDS

DIMENSIONS



Size	Voltage rating (V)	Current rating I _N (A)	Watts loss	With blown fuse indicator	
				Catalog Number	Reference Number
00	500 V	16	0.8	aM 00 L / 16	F098307
		20	1.1	aM 00 L / 20	G098308
		25	1.3	aM 00 L / 25	H098309
		32	1.8	aM 00 L / 32	J098310
		35	2.0	aM 00 L / 35	K098311
		40	2.5	aM 00 L / 40	L098312
		50	3.0	aM 00 L / 50	M098313
		63	3.6	aM 00 L / 63	N098314
		80	5.2	aM 00 L / 80	P098315
		100	6.0	aM 00 L / 100	Q098316
	400 V	125	7.0	aM 00 L / 125	R098317

Accessories: Neutral link BS00 - Reference Number F097709
 Pull-out handle - PMP - Reference Number E097708

General Purpose Fuses

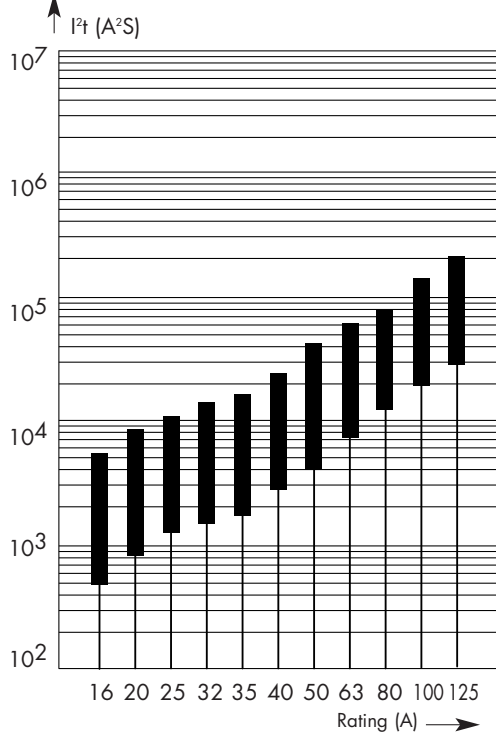


NH Fuses

aM

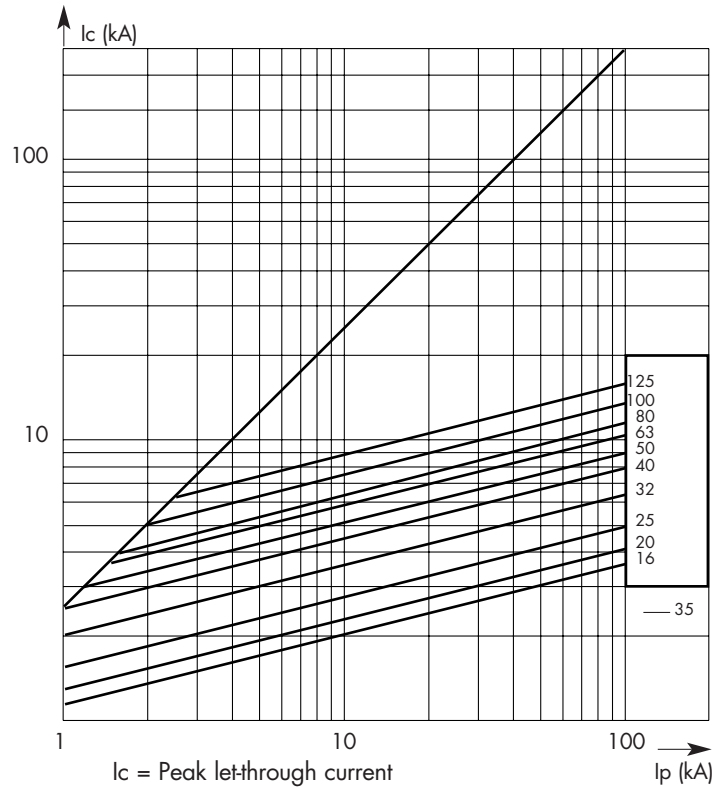
500V

TOTAL CLEARING I^2t



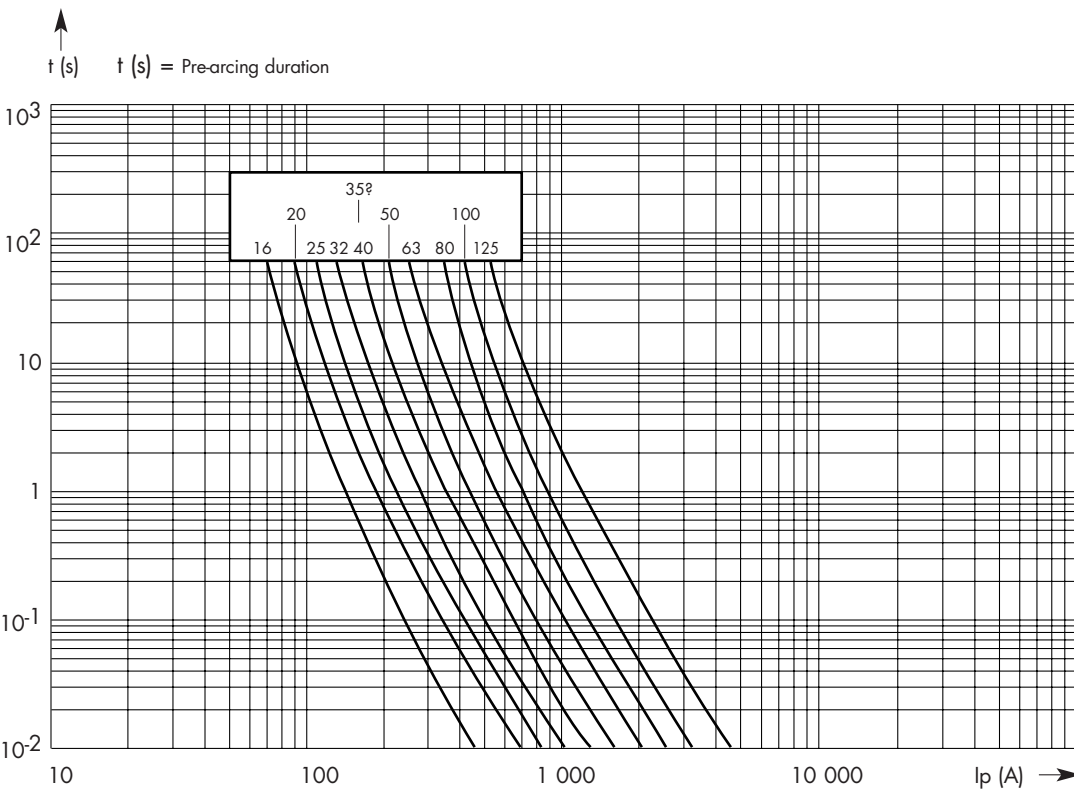
— b: total clearing I^2t @ 500 V
 — a: pre-arcing I^2t

CURRENT LIMITATION CURVES



I_c = Peak let-through current
 I_p = Available fault current

TIME VS. CURRENT CHARACTERISTICS



Interrupting rating
100 kA

I_p (A) = R.M.S. available fault current

General Purpose Fuses



aM

500V

LOW VOLTAGE FUSES

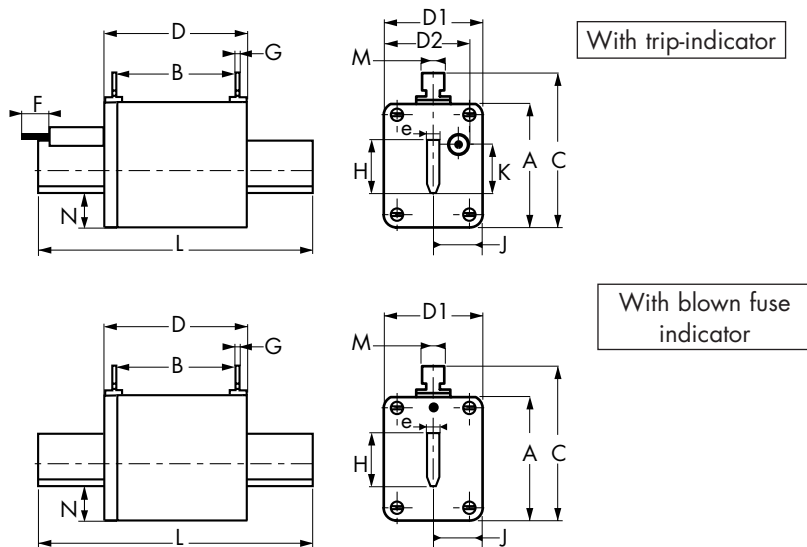
from 40 to 315 A

Sizes: 0 - 1

BLADE-STYLE FUSES: WITH BLOWN FUSE INDICATOR OR TRIP-INDICATOR

COMPLYING WITH IEC 269.1 AND 2.1, NF EN 60269.1 & 2 NF C 63210 - 63211 AND DIN 43620

DIMENSIONS



Size	A	B	C	D	D1	D2*	F*	G	H	J	K	L	M	N	e	Wgt.
0	46	62	59	67	36	39	14	2,5	15	14,5	14,5	125	10	14,5	6	230g
1	52	64	64	74	47	47	14	3	21	16	14,5	135	10	14,5	6	400g

* For fuses with trip-indicator

Size	Voltage rating (V)	Current rating I _N (A)	Watts loss	With blown fuse indicator		With trip-indicator	
				Catalog Number	Ref. Number	Catalog Number	Ref. Number
0	500 V	40	2,7	aM 0 / 40	K095114	aM 0 / 40 P	N095232
		50	3,2	aM 0 / 50	L095115	aM 0 / 50 P	R095235
		63	3,9	aM 0 / 63	M095116	aM 0 / 63 P	X095240
		80	5,5	aM 0 / 80	P095118	aM 0 / 80 P	Z095242
		100	6,5	aM 0 /100	R095120	aM 0 /100 P	A095243
		125	8,5	aM 0 /125	T095122	aM 0 /125 P	B095244
		160	11,5	aM 0 /160	Y095126	aM 0 /160 P	M095254
1	500 V	200	13,5	aM 0 /200	R088519	aM 0 /200 P	F088509
		80	5,5	aM 1 / 80	R095166	aM 1 / 80 P	P095256
		100	6,5	aM 1 /100	T095168	aM 1 /100 P	E095270
		125	8,5	aM 1 /125	C095130	aM 1 /125 P	V095330
		160	11,5	aM 1 /160	D095131	aM 1 /160 P	W095331
		200	13,5	aM 1 /200	E095132	aM 1 /200 P	X095332
		250	17	aM 1 /250	H095135	aM 1 /250 P	A095335
315	24	aM 1 /315	T088521	aM 1 /315 P	B095336		

Accessories: Neutral link BS0 Reference Number G097710 - BS1 Reference Number H097711
Pull-out handle - PMP Reference Number E097708

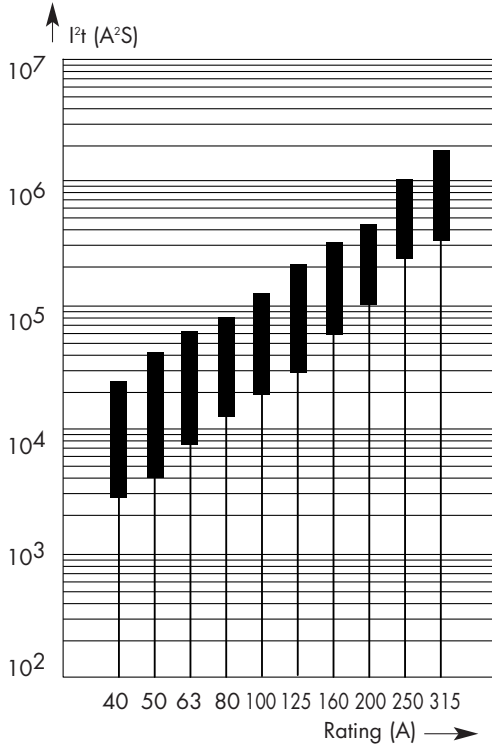
General Purpose Fuses



aM

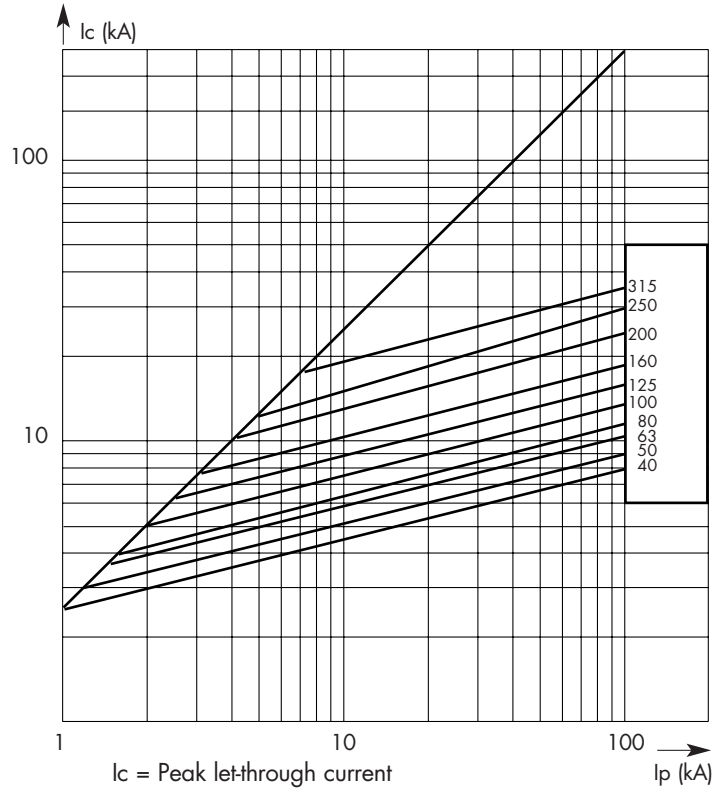
500V

TOTAL CLEARING I²t

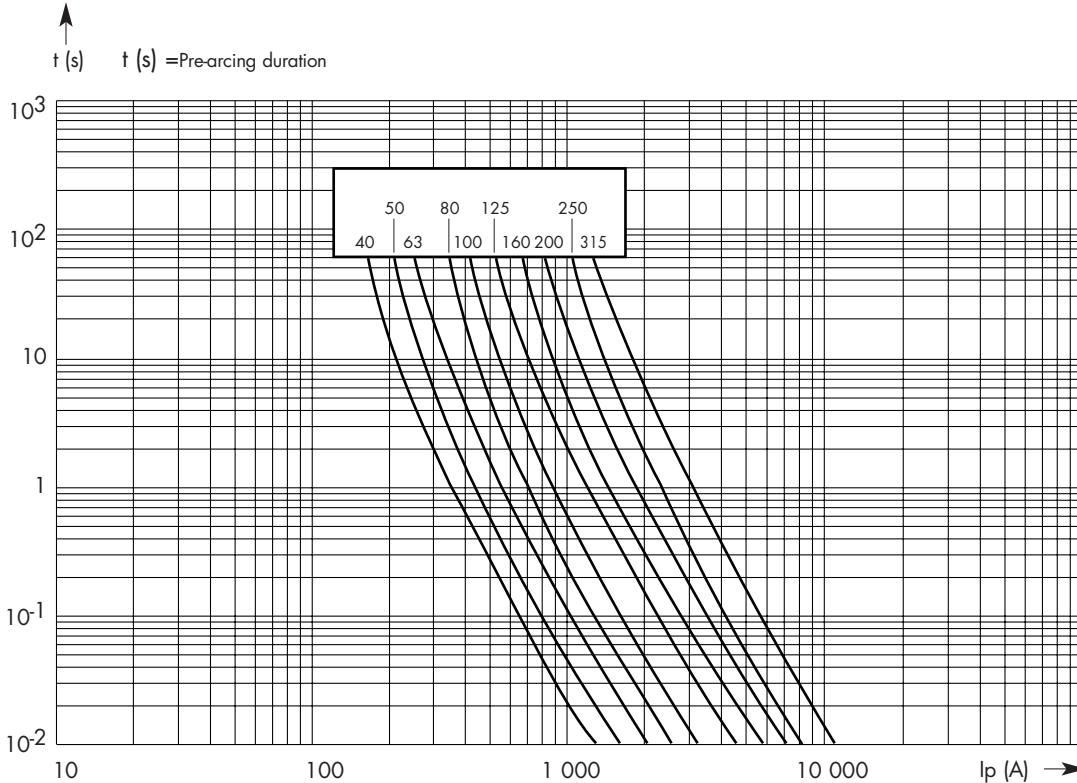


b: total clearing I²t @ 500 V
 a: pre-arcing I²t

CURRENT LIMITATION CURVES



TIME VS. CURRENT CHARACTERISTICS



Interrupting rating
100 kA

I_p (A) = R.M.S. available fault current

General Purpose Fuses



aM

500V

from 125 to 630 A

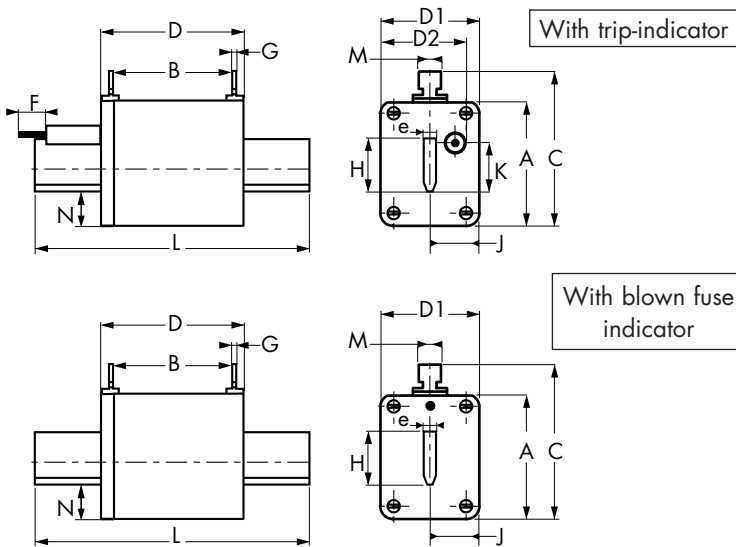
Sizes: 2 - 3

LOW VOLTAGE FUSES

BLADE-STYLE FUSES: WITH BLOWN FUSE INDICATOR OR TRIP-INDICATOR

COMPLYING WITH IEC 269.1 AND 2.1, NF EN 60269.1 & 2 NF C 63210 - 63211 AND DIN 43620

DIMENSIONS



Size	A	B	C	D	D1	D2*	F*	G	H	J	K	L	M	N	e	Wgt.
2	60	64	72	74	50	50	14	3	28	19	14,5	150	10	14,5	6	590g
3	75	61	88	75	70	64	14	2,5	36	23	14,5	150	10	18	6	850g

* For fuses with trip-indicator

Size	Voltage rating (V)	Current rating I _N (A)	Watts loss	With blown fuse indicator		With trip-indicator	
				Catalog Number	Ref. Number	Catalog Number	Ref. Number
2	500 V	125	8,5	aM 2 /125	P095210	aM 2 /125 P	Z095196
		160	11,5	aM 2 /160	Q095211	aM 2 /160 P	S095213
		200	13,5	aM 2 /200	R095212	aM 2 /200 P	F095340
		250	17	aM 2 /250	Q095142	aM 2 /250 P	H095342
		315	24	aM 2 /315	R095143	aM 2 /315 P	J095343
		400	28	aM 2 /400	S095144	aM 2 /400 P	K095344
		500	34	aM 2 /500	W088523	aM 2 /500 P	L095345
3	500 V	315	24	aM 3 /315	J095182	aM 3 /315 P	Q095073
		400	28	aM 3 /400	D095154	aM 3 /400 P	W095354
		500	34	aM 3 /500	E095155	aM 3 /500 P	X095355
		630	41	aM 3 /630	F095156	aM 3 /630 P	Y095356

Accessories: Neutral link BS2 Reference Number J097712 - BS3 Reference Number K097713
Pull-out handle - PMP Reference Number E097708

General Purpose Fuses

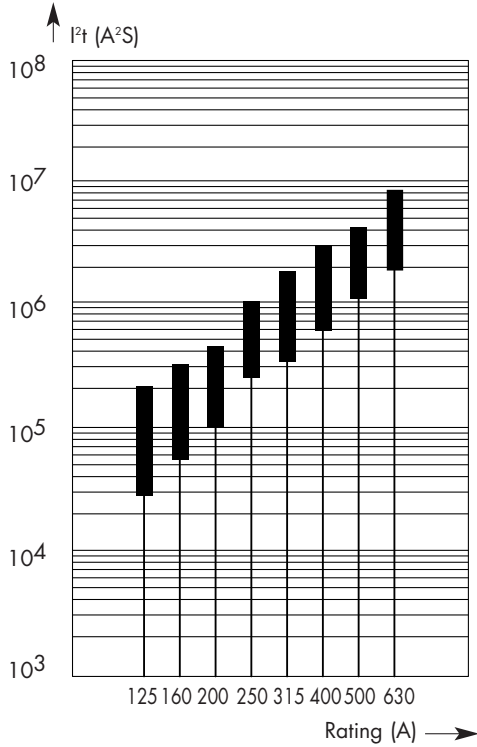


NH Fuses

aM

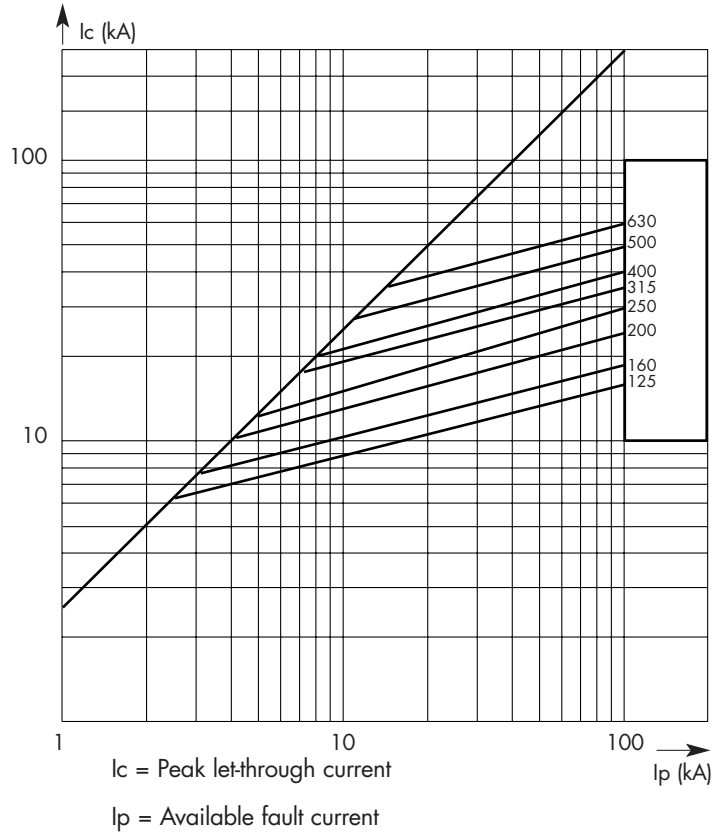
500V

TOTAL CLEARING I^2t

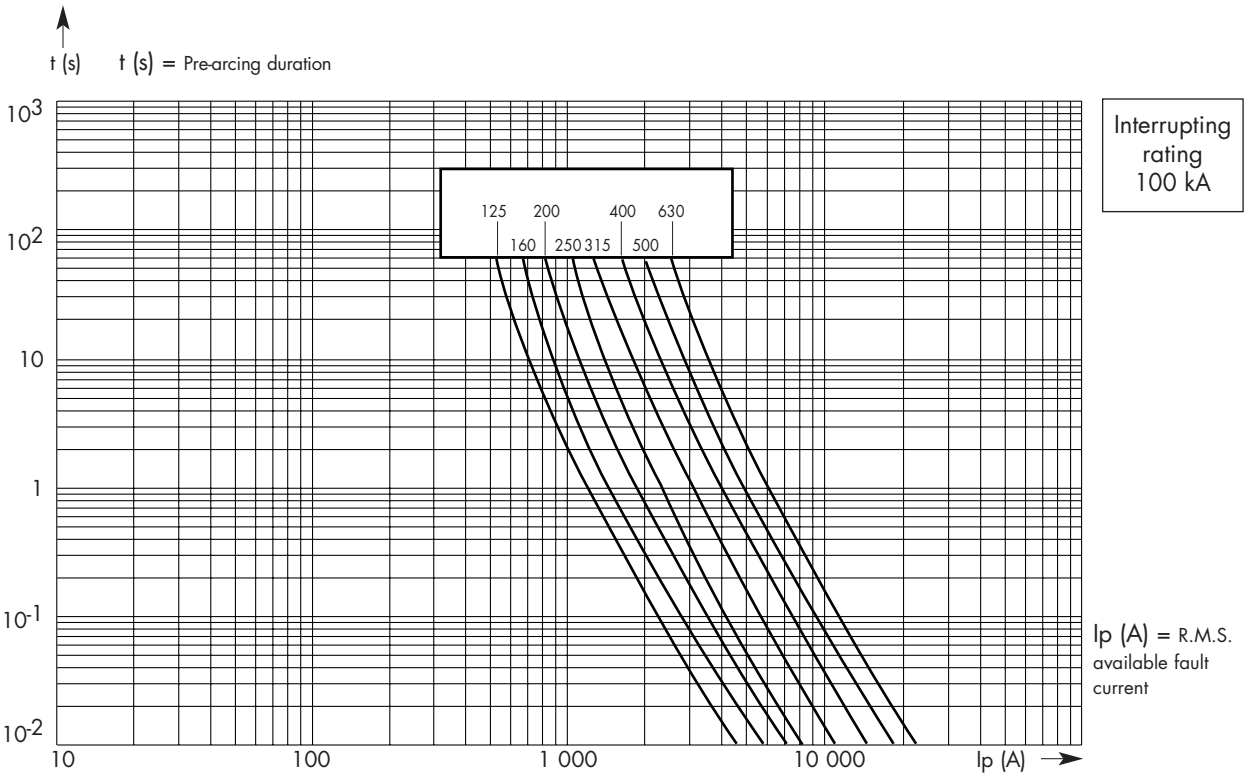


— b: total clearing I^2t @ 500 V
 — a: pre-arcing I^2t

CURRENT LIMITATION CURVES



TIME VS. CURRENT CHARACTERISTICS



General Purpose Fuses



aM

500V

LOW VOLTAGE FUSES

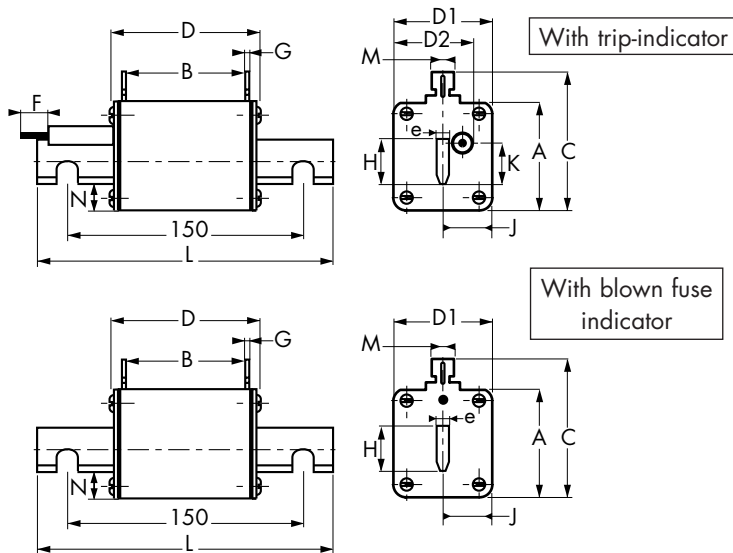
from 630 to 1250 A

Size: 4

BLADE-STYLE FUSES: WITH BLOWN FUSE INDICATOR OR TRIP-INDICATOR

COMPLYING WITH IEC 269.1 AND 2.1, NF EN 60269.1 & 2 NF C 63210 - 63211 AND DIN 43620

DIMENSIONS



Size	A	B	C	D	D1	D2*	F*	G	H	J	K	L	M	N	e	Wgt.
4	107	61	119	78	90	77	14	2,5	60	27	14,5	200	10	23	8	1900g

* For fuses with trip-indicator

Size	Voltage rating (V)	Current rating I _N (A)	Watts loss	With blown fuse indicator		With trip-indicator	
				Catalog Number	Ref. Number	Catalog Number	Ref. Number
4	500 V	630	41	aM 4 / 630	X098322	aM 4 / 630 P	M088515
		800	49	aM 4 / 800	A098325	aM 4 / 800 P	N088516
		1000	70	aM 4 /1000	B098326	aM 4 /1000 P	P088517
	400 V	1250	75	aM 4 /1250	C098327	aM 4 /1250 P	Q088518

Accessories: Neutral link - BS4 Reference Number M097715
Pull-out handle - PMP Reference Number E097708