

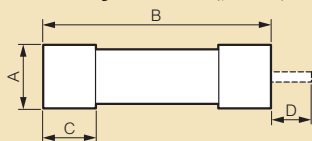


Pack	Cat.Nos		Cylindrical type aM (motor rated)		
			Conform to EN 60269-1, IEC 60269-1 and 2 Veritas approved		
			8 x 32 (previously 8.5 x 31.5)		
	Without indicator		Rating (Amps)	Voltage ~ (Volts)	Rupture capacity (Amps)
10	120 04		4	400	20000
10	120 06		6		
10	120 08		8		
10	120 10		10		
	Without indicator		10 x 38 HRC		
10	130 95		0.50	500	100000
10	130 01		1		
10	130 02		2		
10	130 04		4		
10	130 06		6		
10	130 08		8		
10	130 10		10		
10	130 12		12		
10	130 16		16	400	
10	130 20 ⁽²⁾		20		
10	130 25 ⁽²⁾		25		
	Without striker	With striker	14 x 51 HRC		
10		141 02	2	500	100000
10		141 04	4		
10		141 06	6		
10		141 08	8		
10	140 10	141 10	10		
10	140 12	141 12	12		
10	140 16	141 16	16		
10	140 20	141 20	20		
10	140 25	141 25	25	400	
10	140 32	141 32	32		
10	140 40	141 40	40		
10	140 50 ⁽¹⁾	141 50 ⁽¹⁾	50		
	Without striker	With striker	22 x 58 HRC		
10	150 25	151 25	25	500	100000
10	150 32	151 32	32		
10	150 40	151 40	40		
10	150 50	151 50	50		
10	150 63	151 63	63	400	
10	150 80	151 80	80		
10	150 96	151 95	100		
10	150 97	151 97	125		

Bold pack quantities: Minimum quantities to be ordered

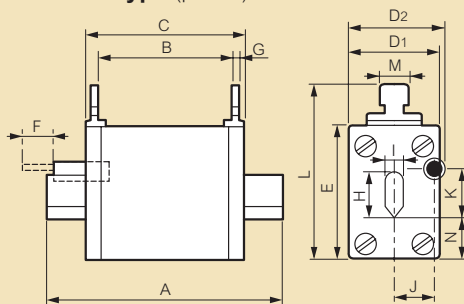
cartridge fuses

■ HRC cylindrical (p. 132)



Size (mm)	A	B	C	D
8 x 32	8.5	31.5	6.3	-
10 x 38	10.3	38	10	-
14 x 51	14.3	51	13	7.5
22 x 58	22.2	58	16	7.5

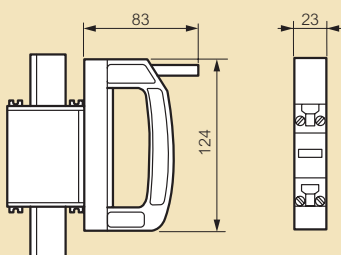
■ Blade type (p. 134)



Size (mm)	00	0	1	2	3	4
A	78	125	135	150	150	200
B	44	62	64	64	61	61
C	52	67	74	74	75	78
D1	30	36	47	50	70	90
D2	-	39	47	50	64	77
E	46	46	52	60	75	107
F	-	14	14	14	14	14
G	2.5	2.5	3	3	2.5	2.5
H	15	15	21	28	36	60
I	6	6	6	6	6	8
J	-	14.5	16	19	23	27
K	-	14.5	14.5	14.5	14.5	14.5
L	59	59	64	72	88	119
M	10	10	10	10	10	10
N	14.5	14.5	14.5	14.5	18	23

Note: Force of striker at the beginning of stroke 1.9 kg and 1 kg at the end according to NF C 63-213

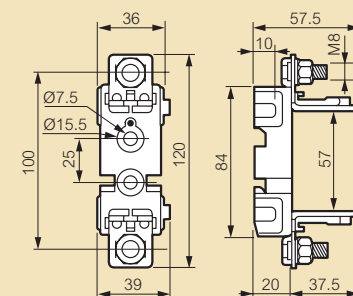
■ Removable handle (p. 133)



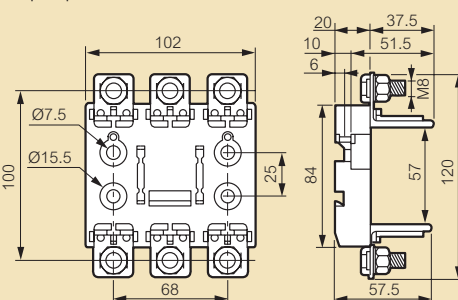
■ Bases for blade type (p. 133)

Size 00

Single pole Cat.Nos 160 01 - 162 00

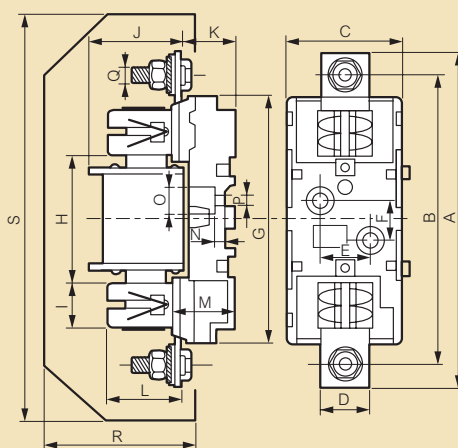


Triple pole Cat.Nos 160 05 - 162 04



Sizes 0 to 4

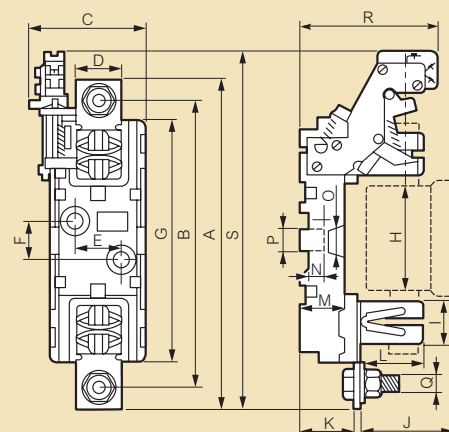
Single pole without micro-switch



Size (mm)	0	1	2	3	4
A	171	200	225	250	320
B	150	175	200	210	270
C	47	59	67	82	114
D	20	25	30	41	51
E	-	30	30	30	45
F	25	25	25	25	30
G	125	150	170	158	220
H	75	80	80	83	98
I	23	28	32	35	50
J	68	68	83	92	125
K	24	35	35	35	40
L	43	46	58	68	93
M	28	38	39	40	40
N	11.5	13.5	13.5	14	14
O	14	20	20	20	28
P	7.5	10.5	10.5	10.5	13
Q	8	10	10	12	16
R	96	107	121	110	138
S	180	224	240	266	336

Size 0 to 4 (continued)

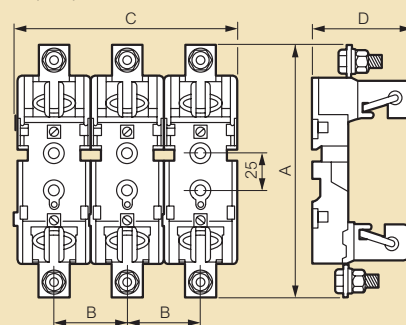
Single pole with micro-switch



Size (mm)	0	1	2	3	4
A	171	200	225	250	320
B	150	175	200	210	270
C	63	72	78	91	114
D	20	25	30	41	51
E	-	30	30	30	45
F	25	25	25	25	30
G	125	150	170	158	220
H	75	80	80	83	98
I	23	28	32	35	50
J	68	68	83	92	125
K	24	35	35	35	40
L	43	46	58	68	93
M	28	38	39	40	40
N	11.5	13.5	13.5	14	14
O	14	20	20	20	28
P	7.5	10.5	10.5	10.5	13
Q	8	10	10	12	16
R	75	85	90	94	105.5
S	198	215	229	242	280

Size 0 - 1 - 2

Triple pole



Size (mm)	0	1	2
A	171	200	225
B	48	62.5	68
C	144	180	204
D	67	81	93

selection charts

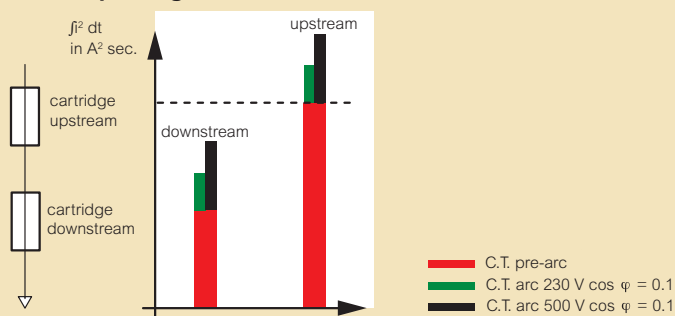
■ How to select a protection system ?

Depending on the type of failure, overload or short-circuit, use 2 series of data

① Overloads: use the operating zone curves of the different protection devices. On the same row, the operating zones should not overlap

② Short-circuits: use the I^2t tables. The total I^2t of the protection system the furthest downstream must be less than the upstream protection pre-arc I^2t

■ Example of good selection



■ Selection between cartridge fuses (according to IEC 60269-2-1)

Upstream rating gG cartridge fuse (A)	Downstream maximum rating determined according to class and voltage to obtain selection	
	aM	gG
2		
4	1	1
6	2	2
8	2	2
10	2	4
12	2	4
16	4	6
20	6	10
25	8	16
32	10	20
35	12	20
40	12	25
50	16	32
63	20	40
80	25	50
100	36	63
125	40	80
160	63	100
200	80	125
250	125	160
315	125	200
400	160	250
500	200	315
630	250	400
800	315	500
1000	400	630
1250	500	800

Upstream rating aM cartridge fuse (A)	Downstream maximum rating determined according to class and voltage to obtain selection	
	aM	gG
2	1	1
4	2	4
6	2	6
8	4	8
10	6	10
12	6	12
16	10	16
20	12	20
25	12	25
32	20	32
36	20	32
40	25	32
50	25	40
63	40	50
80	50	63
100	63	80
125	80	100
160	100	125
200	125	160
250	160	160
315	200	200
400	250	250
500	315	315
630	400	400
800	500	500
1000	630	500
1250	800	630

■ Motor protection

Motor three-phase									Cartridges																	
230 V			400 V			500 V			10 x 38 ratings		14 x 51 ratings		22 x 58 ratings		S. 00 ratings		S. 0 ratings		S. 1 ratings		S. 2 ratings		S. 3 ratings		S. 4 ratings	
kW	Hp	In A	kW	Hp	In A	kW	Hp	In A	gG	aM	gG	aM	gG	aM	gG	aM	gG	aM	gG	aM	gG	aM	gG	aM	gG	aM
			0.37	0.5	1.03	0.75	1	1.5	4	2	4	2														
0.37	0.5	1.8	0.75	1	2	1.5	2	2.6	6	4	6	4														
0.75	1	3.5	1.5	2	3.5	2.2	3	3.8	8	4	8	4														
1.1	1.5	4.4	2.2	3	5	3.7	5	5.9	12	6	12	6														
1.8	2.5	7	3	4	6.6	4	5.5	6.5	16	8	16	8	16													
2.2	3	8.7	4	5.5	8.5	5.5	7.5	9	20	10	20	10	20													
3	4	11.5	5.5	7.5	11.5	7.5	10	12	25	12	25	12	25		25											
4	5.5	14.3	7.5	10	15.5	11	15	18.4		20 ⁽¹⁾	32	20	32	20	32	20										
5.5	7.5	20	11	15	22	15	20	23		20 ⁽¹⁾	50	25	50	25	50	25										
7.5	10	27	15	20	30	18.5	25	28.5			32	50	32	50	32											
10	13.5	35	18.5	25	37	25	34	39.4			40	63	40	63	40	63	63									
11	15	39	22	30	44	30	40	45			50 ⁽¹⁾	80	50	80	50	80	80									
15	20	52	25	34	51	40	54	60				100	63	100	63	100	63									
18.5	25	64	30	40	60	45	60	65					80	125	80	125	80	125								
22	30	75	37	50	72	51	70	75					80	125	80	125	80	125								
25	35	85	45	60	85	63	109	89					100	160	100	160	100	160								
30	40	103	55	75	105	80	110	112					125 ⁽¹⁾		125	200	125	200	125	200						
45	60	147	75	100	138	110	150	156									160	250	160	250						
55	75	182	90	125	170	132	180	187											200	315	200					
75	100	239	110	150	205	160	220	220											250	400	250					
80	160	260	132	180	245	220	300	310													315					
90	125	295	160	218	300																315					
110	150	356	200	270	370	250	340	360													400					
132	180	425	250	340	475	335	450	472																		
160	218	520	315	430	584	450	610	608																		
220	300	710	400	550	750	500	680	680																		
																										800

(1) 400 V max.

blade cartridge fuses gG and aM types

The gG or aM types protect the conductors of electrical circuits in the event of overbad or short-circuit

gG cartridge fuses:

The selectivity ratio is 1.6 instead of 2

The breaking capacity of 120000 A provides full protection in the most critical situations

aM cartridge fuses:

These cartridge fuses must be combined with a low-overload thermal protection device

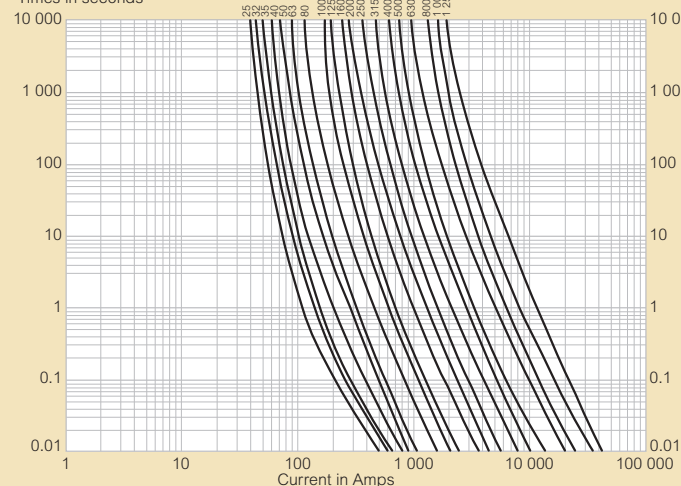
The breaking capacity of 100000 A from size 10 x 38 upwards provides full protection in the most critical situations

Cylindrical industrial cartridge fuses can be used to protect DC circuits supplied at up to 48 V max.

■ Rupture capacity curves

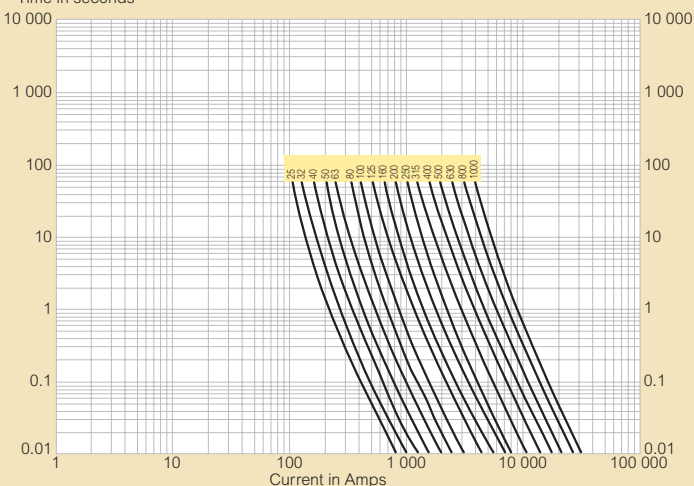
gG type

Times in seconds



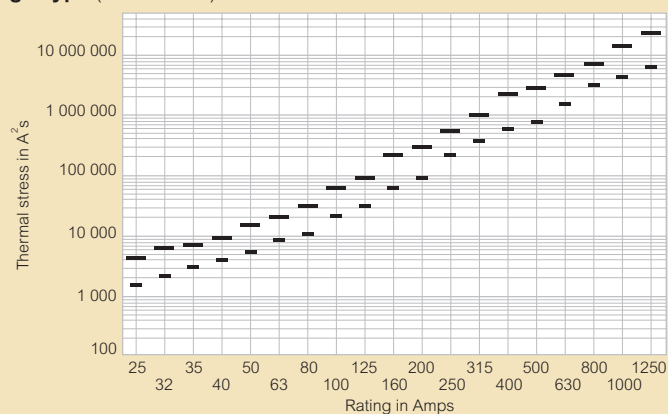
aM type

Time in seconds



■ Thermal stresses ($\int I^2 dt$)

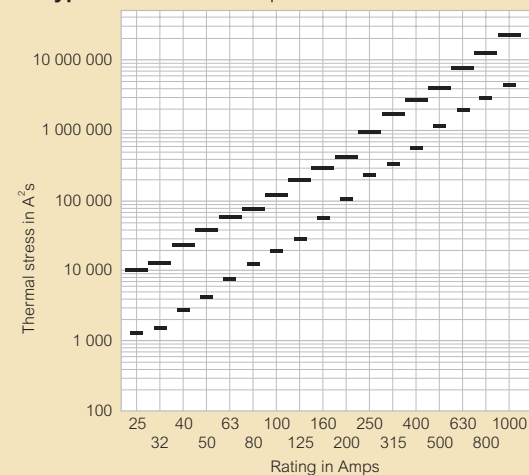
gG type (for 500 V $\sim$)



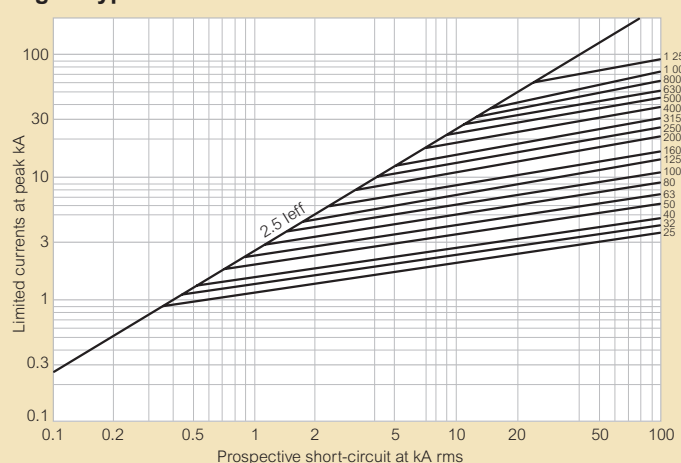
— Total maximum thermal stress for critical current

- Pre-arc thermal stress for critical current

aM type for 500 V_~ - except 1250 A for 400 V



■ gG⁽¹⁾ type limitation curve



(1) For aM cartridge fuses, see technical data sheets in the Legrand e-catalogue

■ Consumption in watts when hot, at rated current

Fuse ratings (A)	Cartridge fuses			
	gG		aM	
	Size 00	Size 0 to 4	Size 00	Size 0 to 4
25	2.1		1.3	
32	3		1.8	
35	3			
40	3.3	4.2	2.5	
50	4.5	5.5	3	
63	6	6.5	3.6	3.9
80	7	8.5	5.2	5.5
100	7.5	9.5	6	6.5
125	13	12	7	8.5
160	15	15		11.5
200		19		13.5
250		23		17
315		24		24
400		33		28
500		36		34
630		45		41
800		51		49
1000		77		70
1250		80		75