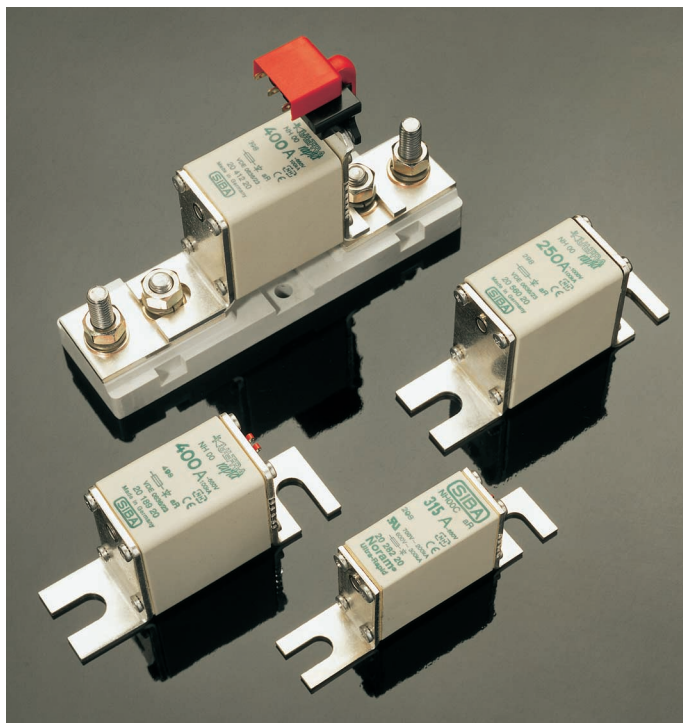


FUSES FOR SEMICONDUCTOR PROTECTION

EUROPEAN STANDARD

SIZES 000 AND 00



Class: aR

Voltage rating: AC 660 V – AC 1000 V

Current rating: 10 A to 400 A

Approvals: 

Standards: DIN 43653
IEC 60269-1 and -4
DIN VDE 0636-40
UL 248-13

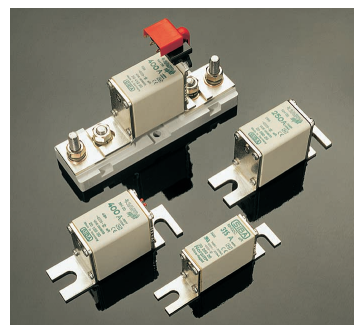
Features / Benefits

- ▶ Extremely high interrupting rating 100 kA – 300 kA
- ▶ Voltage rating AC 660 V – AC 1000 V
- ▶ Protection of Power Semiconductors according to IEC 60269-1 and -4
- ▶ Complies with DIN 43653 – sizes 000 and 00 with or without Topindicator and trip microswitch
- ▶ aR class 10 A–400 A according to IEC 60269-4 and DIN VDE 0636-40
- ▶ Fuse Bases and Accessories are available

FUSES FOR SEMICONDUCTOR PROTECTION

EUROPEAN STANDARD

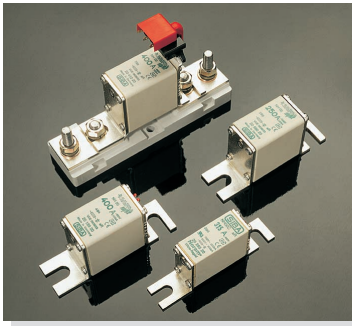
SIZES 000 AND 00



Selection Guide

Size	Rated Voltage AC	Fixing Center	Indicator *	Part No. Type	Selector Guide Page	Techn. Data Page
000	660 V	3.15" (80 mm)	with Topindicator	20 282 04	URB 3	URB 10
000	660 V	3.15" (80 mm)	without Topindicator	20 282 41	URB 3	URB 10
000	660 V	3.15" (80 mm)	with microswitch fitting	20 558 04	URB 4	URB 10
000	690/700 V	3.15" (80 mm)	with Topindicator	20 282 20	URB 3	URB 11
000	690/700 V	3.15" (80 mm)	without Topindicator	20 282 21	URB 3	URB 11
000	690/700 V	3.15" (80 mm)	with microswitch fitting	20 558 20	URB 4	URB 11
00	660 V	3.15" (80 mm)	with Topindicator	20 189 04	URB 5	URB 12
00	660 V	3.15" (80 mm)	without Topindicator	20 189 41	URB 5	URB 12
00	660 V	3.15" (80 mm)	with microswitch fitting	20 412 04	URB 6	URB 12
00	690/700 V	3.15" (80 mm)	with Topindicator	20 189 20	URB 5	URB 13
00	690/700 V	3.15" (80 mm)	without Topindicator	20 189 21	URB 5	URB 13
00	690/700 V	3.15" (80 mm)	with microswitch fitting	20 412 20	URB 7	URB 13
00	1000 V	3.15" (80 mm)	with Topindicator	20 560 20	URB 8	URB 14
00	1000 V	3.15" (80 mm)	without Topindicator	20 560 21	URB 8	URB 14
00	1000 V	3.15" (80 mm)	with microswitch fitting	20 562 20	URB 9	URB 14
Fuse Base	1000 V			21 189 01		URB 15
Microswitch	250 V			28 002 05		URB 15

* Minimum operating voltage for Topindicator 6.5 V



FUSES FOR SEMICONDUCTOR PROTECTION
EUROPEAN STANDARD

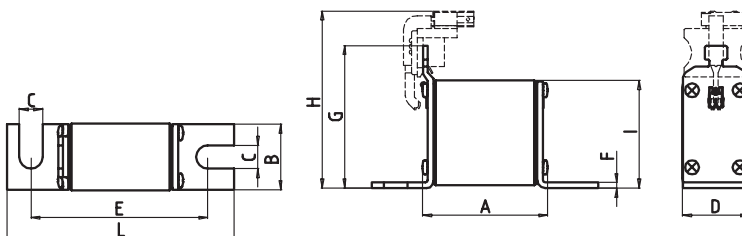
SIZES 000 AND 00

Size
00

Rated voltage
AC 690/700 V

Standard
DIN 43653

Rated current	Part No. Topindicator and fitting for microswitch		UL Rec.	Weight (kg/100)	Pack	
32 A	20 412 20			21	3	
35 A	20 412 20			21	3	
40 A	20 412 20			21	3	
50 A	20 412 20			21	3	
63 A	20 412 20			21	3	
80 A	20 412 20			21	3	
100 A	20 412 20			21	3	
125 A	20 412 20			21	3	
160 A	20 412 20		✓	21	3	
200 A	20 412 20		✓	21	3	
250 A	20 412 20		✓	21	3	
315 A	20 412 20		✓	21	3	
350 A	20 412 20		✓	21	3	
400 A	20 412 20			21	3	



A	2.17" (55 mm)	F	0.10" (2.5 mm)
B	1.13" (28.8 mm)	G	2.48" (63 mm)
C	0.40" (10.3 mm)	H	3.15" (80 mm)
D	1.16" (29.5 mm)	I	1.54" (39 mm)
E	3.07" (78 mm)	L_(max)	4.13" (105 mm)

Size
00

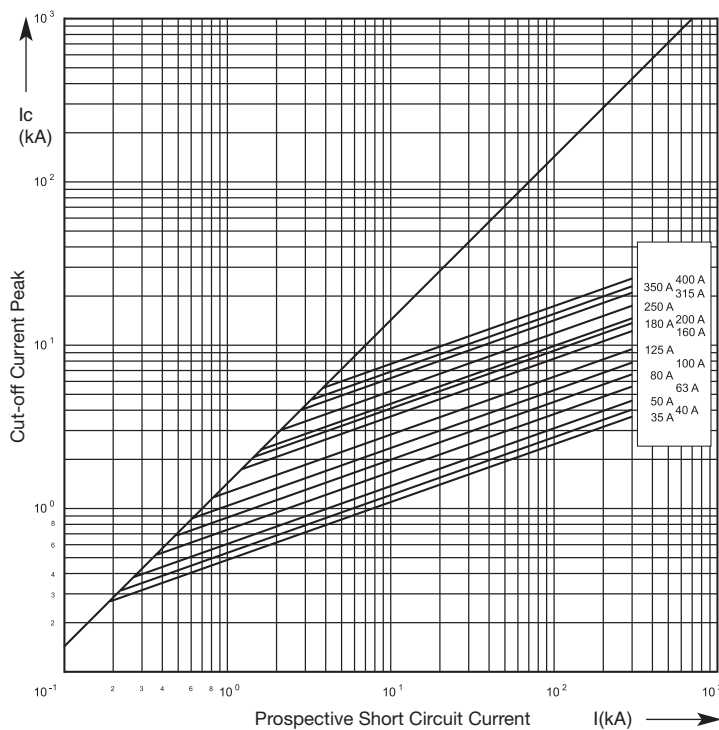
Rated voltage
AC 690/700 V

Operating class
aR

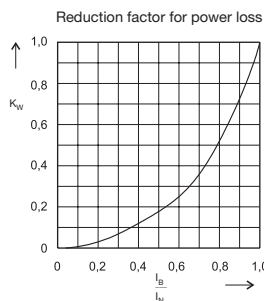
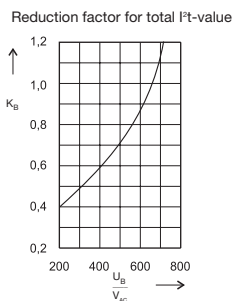
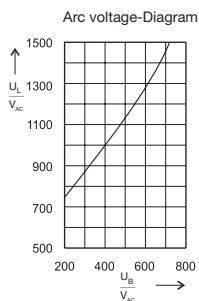
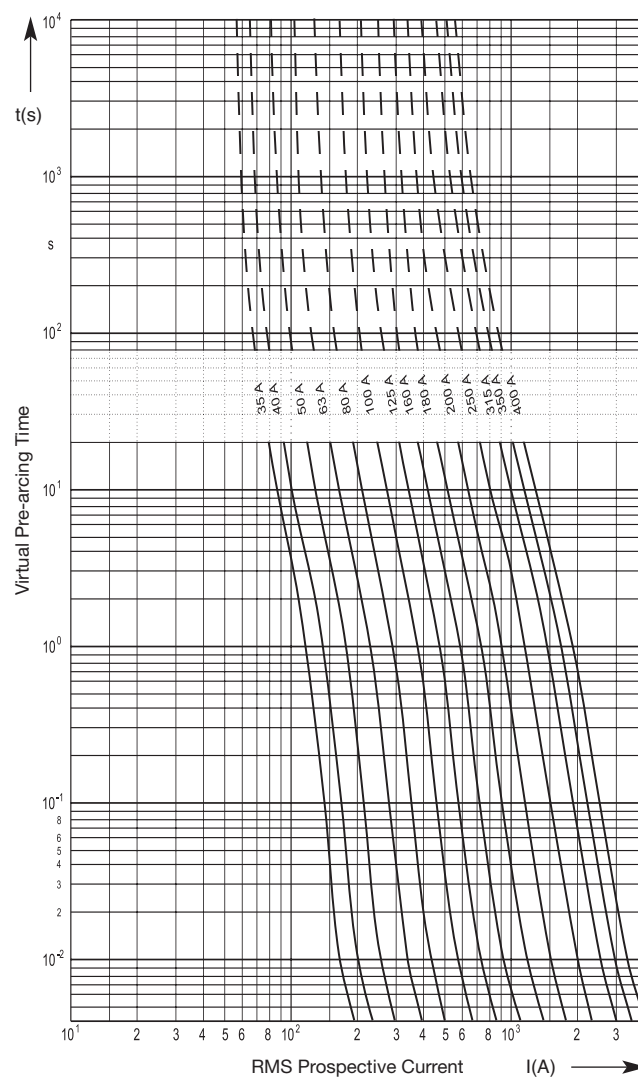
Rated breaking capacity
600 V / 300 kA · 700 V / 200 kA

Rated current	Part No. with Topindicator	Part No. without Topindicator	Part No. Topindicator and fitting for microswitch	Power loss W	Pre-arcing I ² t-value A ² s	Total I ² t-value @ 660 V A ² s
35 A	20 189 20	20 189 21	20 412 20	8	66	360
40 A	20 189 20	20 189 21	20 412 20	10	90	500
50 A	20 189 20	20 189 21	20 412 20	12	140	770
63 A	20 189 20	20 189 21	20 412 20	14	250	1,400
80 A	20 189 20	20 189 21	20 412 20	17	470	2,600
100 A	20 189 20	20 189 21	20 412 20	21	730	4,000
125 A	20 189 20	20 189 21	20 412 20	25	1,300	7,200
160 A	20 189 20	20 189 21	20 412 20	31	2,800	15,400
180 A	20 189 20	20 189 21	20 412 20	34	4,200	23,100
200 A	20 189 20	20 189 21	20 412 20	37	5,000	27,500
250 A	20 189 20	20 189 21	20 412 20	44	8,500	46,800
315 A	20 189 20	20 189 21	20 412 20	53	15,600	86,000
350 A	20 189 20	20 189 21	20 412 20	57	20,000	110,000
400 A	20 189 20	20 189 21	20 412 20	68	28,400	156,000

Cut-off-characteristics



Time / Current Characteristics

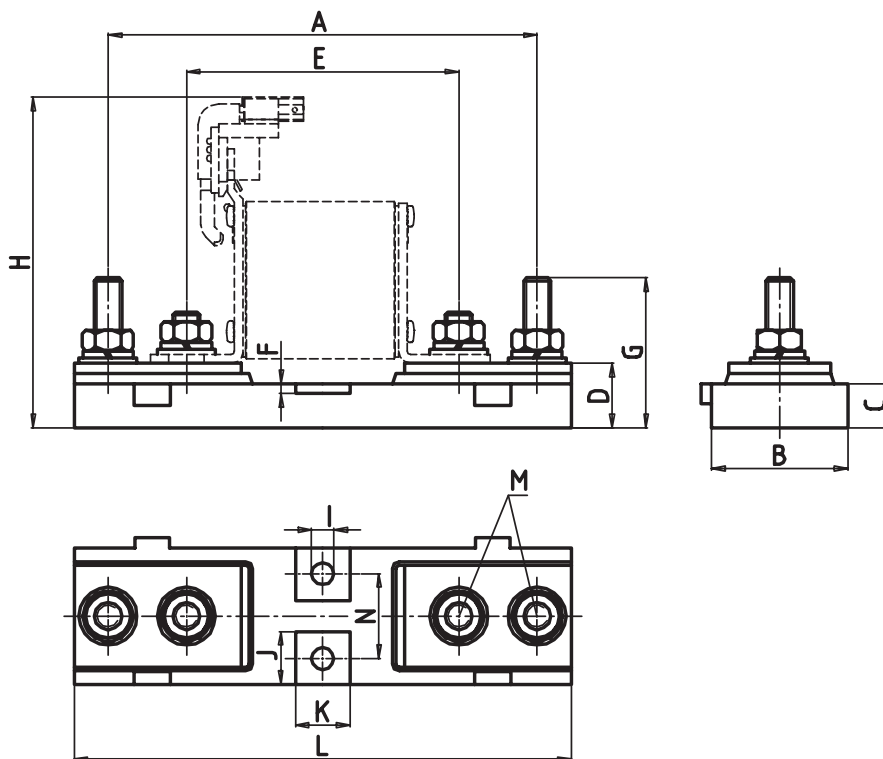


Fuse Base
400 A

Size
000 and 00

Rated voltage
AC 1000 V

Standard
DIN 43653



600 V

Part No. 21 189 01

Rated Current: 400 A

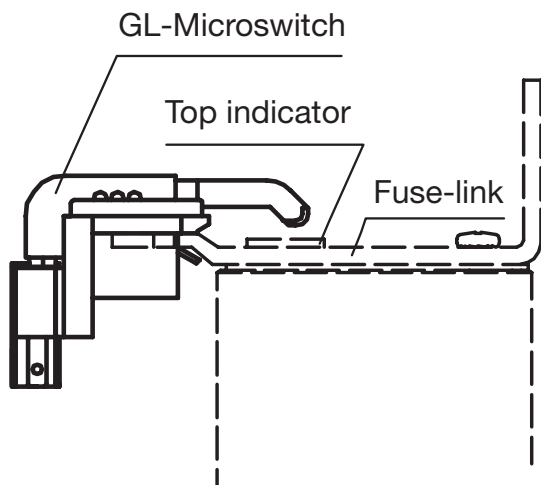
Rated Power Acceptance: 34 W

Nut Torque: 22 Nm

A	4.96" (126 mm)
B	1.57" (40 mm)
C	0.50" (13 mm)
D	0.75" (19 mm)
E	3.15" (80 mm)
F	0.12" (3 mm)
G	1.73" (44 mm)
H	3.82" (97 mm)
I	0.26" (6,5 mm)
J	0.60" (15,5 mm)
K	0.63" (16 mm)
L_(max)	5.75" (146 mm)
M	M 8
N	0.98" (25 mm)

Microswitch

Rated voltage
AC 250 V



Part No. 28 002 05

Rated voltage

Breaking capacity

AC 250 V

non inductive Load	inductive Load
5 A	5 A

Rated voltage

Breaking capacity

DC 60 V	500 mA	200 mA
DC 24 V	2 A	2 A

non inductive Load	inductive Load (L/R = 25 ms)
500 mA	200 mA