

LOW VOLTAGE FUSES

EUROPEAN NH KNIFE-BLADE FUSE SYSTEM



SIBA NH Fuse-links with top and center indicator are available in a large variety of voltage ratings, body sizes and operating classes:

Sizes: **000, 00, 0, 1, 2, 3 and 4**

Voltage ratings: AC 400 / 500 / 690 /
1000 / 1500 V

Operation class: **gG:** General Purpose
Cable and
Line protection

gB: For general application

aM: Motor circuit short
circuit protection

gTr: General Purpose
Transformer Protection

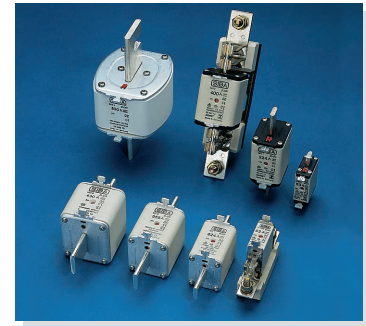
gTF: For general application

Standards: IEC 60269-1-2 / EN 60269-1-2
DIN VDE 0636 part 201
DIN VDE 0636 part 2011
DIN 43620

Approvals: Germany, Austria, Switzerland

Features / Benefits

- ▶ Combination indicator (top and center) for easy identification of blown fuses
- ▶ High interrupting rating up to 120 kA
- ▶ Voltage ratings AC 400 - 1500 V
- ▶ Operation classes gG / gB / aM / gTr / gTF available for all applications
- ▶ Fuse bases and accessories available, made of sheet steel base plate with ceramic support
- ▶ Low power losses and temperatures
- ▶ All fuse links are entirely corrosionresistant
- ▶ Removal tags: Standard design in metal, insulated removal tags available for increased safety



LOW VOLTAGE FUSES
EUROPEAN NH KNIFE-BLADE FUSE SYSTEM

Selection Guide

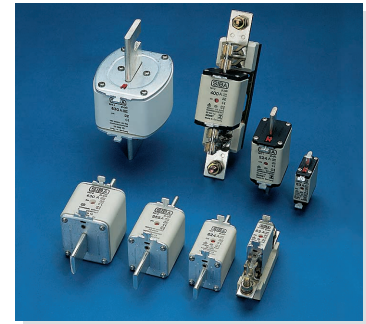
gG - General Application

Size	Rated Voltage AC V	Removal Tags	Indicator Type	Part No.	Selector Guide Page	Techn. Data Page
000	500	metal	combi indicator	20 000 13	NH 6	NH 25
00	500	metal	combi indicator	20 001 13	NH 6	NH 25
0	500	metal	combi indicator	20 002 13	NH 7	NH 25
1	500	metal	combi indicator	20 003 13	NH 7	NH 26
2	500	metal	combi indicator	20 004 13	NH 8	NH 26
3	500	metal	combi indicator	20 005 13	NH 8	NH 26
4	500	metal	top indicator	20 006 13	NH 9	NH 27
4	500	metal	top indicator	20 228 13	NH 9	NH 27
4a	500	metal	top indicator	20 120 13	NH 9	NH 27
000	500	insulated	combi indicator	20 438 13	NH 12	NH 25
00	500	insulated	combi indicator	20 439 13	NH 12	NH 25
1	500	insulated	combi indicator	20 441 13	NH 13	NH 26
2	500	insulated	combi indicator	20 442 13	NH 13	NH 26
3	500	insulated	combi indicator	20 443 13	NH 14	NH 26
000	690	metal	combi indicator	20 477 13	NH 6	NH 29
00	690	metal	combi indicator	20 209 13	NH 6	NH 29
0	690	metal	combi indicator	20 210 13	NH 7	NH 29
1	690	metal	combi indicator	20 211 13	NH 7	NH 30
2	690	metal	combi indicator	20 212 13	NH 8	NH 30
3	690	metal	combi indicator	20 213 13	NH 8	NH 30
4	690	metal	top indicator	20 225 13	NH 9	NH 31
4a	690	metal	top indicator	20 227 13	NH 9	NH 31
000	690	insulated	combi indicator	20 452 13	NH 12	NH 29
00	690	insulated	combi indicator	20 453 13	NH 12	NH 29
1	690	insulated	combi indicator	20 455 13	NH 13	NH 30
2	690	insulated	combi indicator	20 456 13	NH 13	NH 30

Selection Guide

gB - General Application

Size	Rated Voltage AC V	Removal Tags	Indicator Type	Part No.	Selector Guide Page	Techn. Data Page
000	1000	metal	top indicator	20 386 03	NH 16	NH 33
00	1000	metal	top indicator	20 389 03	NH 16	NH 33



LOW VOLTAGE FUSES
EUROPEAN NH KNIFE-BLADE FUSE SYSTEM

gG GENERAL APPLICATION

Size
2

**Metal Removal Tags
with combi indicator**

Standard
IEC 60269-2-1

Rated voltage **AC 500 V**

Rated voltage **AC 690 V**

Rated current	Part No.	Weight (kg/1)	Pack
35 A	20 004 13	0.28	3
40 A	20 004 13	0.28	3
50 A	20 004 13	0.28	3
63 A	20 004 13	0.28	3
80 A	20 004 13	0.28	3
100 A	20 004 13	0.28	3
125 A	20 004 13	0.28	3
160 A	20 004 13	0.28	3
200 A	20 004 13	0.48	3
224 A	20 004 13	0.48	3
250 A	20 004 13	0.48	3
300 A	20 004 13	0.65	3
315 A	20 004 13	0.65	3
355 A	20 004 13	0.65	3
400 A	20 004 13	0.65	3

Rated current	Part No.	Weight (kg/1)	Pack
35 A	20 212 13	0.48	3
40 A	20 212 13	0.48	3
50 A	20 212 13	0.48	3
63 A	20 212 13	0.48	3
80 A	20 212 13	0.48	3
100 A	20 212 13	0.48	3
125 A	20 212 13	0.48	3
160 A	20 212 13	0.48	3
200 A	20 212 13	0.48	3
224 A	20 212 13	0.65	3
250 A	20 212 13	0.65	3
300 A	20 212 13	0.65	3
315 A	20 212 13	0.65	3
355 A	20 212 13	0.65	3
400 A	20 212 13	0.65	3

Size
3

**Metal Removal Tags
with combi indicator**

Standard
IEC 60269-2-1

Rated voltage **AC 500 V**

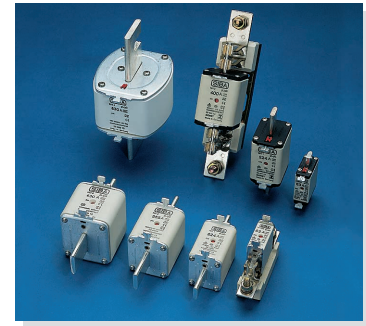
Rated voltage **AC 690 V**

Rated current	Part No.	Weight (kg/1)	Pack
315 A	20 005 13	0.65	3
355 A	20 005 13	0.65	3
425 A	20 005 13	0.88	3
500 A	20 005 13	0.88	3
630 A	20 005 13	0.88	3

Rated current	Part No.	Weight (kg/1)	Pack
300 A	20 213 13	0.88	3
315 A	20 213 13	0.88	3
355 A	20 213 13	0.88	3
400 A	20 213 13	0.88	3
425 A	20 213 13	0.88	3
500 A	20 213 13*	1.27	3

* with Top indicator

Dimensions see Page NH 10 + NH 11



LOW VOLTAGE FUSES EUROPEAN NH KNIFE-BLADE FUSE SYSTEM

gG GENERAL APPLICATION

Dimensions Metal Removal Tags

Rated voltage AC 500 V

Standard IEC 60269-2-1

20 000 13

A _{max.}	2.13"	(54 mm)
B	0.60"	(15 mm)
C	1.85"	(47 mm)
D	0.80"	(20.5 mm)
E	1.60"	(40.5 mm)
F	0.24"	(6 mm)
G	1.38"	(35 mm)
H	2.05"	(52 mm)
I	0.28"	(7 mm)
L	3.07"	(78 mm)

20 001 13

A _{max.}	2.13"	(54 mm)
B	0.60"	(15 mm)
C	1.85"	(47 mm)
D	1.16"	(29.5 mm)
E	1.80"	(46 mm)
F	0.24"	(6 mm)
G	1.38"	(35 mm)
H	2.28"	(58 mm)
I	0.50"	(13 mm)
L	3.07"	(78 mm)

20 002 13

A _{max.}	2.80"	(71.5 mm)
B	0.60"	(15 mm)
C	2.56"	(65 mm)
D	1.16"	(29.5 mm)
E	1.80"	(46 mm)
F	0.24"	(6 mm)
G	1.38"	(35 mm)
H	2.28"	(58 mm)
I	0.50"	(13 mm)
L	4.92"	(125 mm)

20 003 13 ≤ 160 A

A _{max.}	2.95"	(75 mm)
B	0.80"	(20 mm)
C	2.56"	(65 mm)
D	1.16"	(29.5 mm)
E	1.80"	(46 mm)
F	0.24"	(6 mm)
G	1.57"	(40 mm)
H	2.28"	(58 mm)
I	0.30"	(8 mm)
L	5.30"	(135 mm)

20 003 13 > 160 A

A _{max.}	2.95"	(75 mm)
B	0.80"	(20 mm)
C	2.56"	(65 mm)
D	1.65"	(42 mm)
E	2.03"	(51.5 mm)
F	0.24"	(6 mm)
G	1.57"	(40 mm)
H	2.52"	(64 mm)
I	0.55"	(14 mm)
L	5.30"	(135 mm)

20 004 13 ≤ 160 A

A _{max.}	2.95"	(75 mm)
B	0.80"	(20 mm)
C	2.56"	(65 mm)
D	1.16"	(29.5 mm)
E	1.80"	(46 mm)
F	0.24"	(6 mm)
G	1.90"	(48 mm)
H	2.48"	(63 mm)
I	0.24"	(8 mm)
L	5.90"	(150 mm)

20 004 13 200 - 250 A

A _{max.}	2.95"	(75 mm)
B	0.80"	(20 mm)
C	2.56"	(65 mm)
D	1.65"	(42 mm)
E	2.03"	(51.5 mm)
F	0.24"	(6 mm)
G	1.90"	(48 mm)
H	2.83"	(72 mm)
I	0.55"	(14 mm)
L	5.90"	(150 mm)

20 004 13 > 250 A

A _{max.}	2.95"	(75 mm)
B	1.02"	(26 mm)
C	2.56"	(65 mm)
D	2.10"	(53 mm)
E	2.32"	(59 mm)
F	0.24"	(6 mm)
G	1.90"	(48 mm)
H	2.83"	(72 mm)
I	0.55"	(14 mm)
L	5.90"	(150 mm)

20 005 13 ≤ 400 A

A _{max.}	2.95"	(75 mm)
B	1.02"	(26 mm)
C	2.56"	(65 mm)
D	2.10"	(53 mm)
E	2.32"	(59 mm)
F	0.24"	(6 mm)
G	2.36"	(60 mm)
H	3.27"	(83 mm)
I	0.55"	(14 mm)
L	5.90"	(150 mm)

20 005 13 > 400 A

A _{max.}	2.95"	(75 mm)
B	1.26"	(32 mm)
C	2.56"	(65 mm)
D	2.56"	(65 mm)
E	2.90"	(73.5 mm)
F	0.24"	(6 mm)
G	2.36"	(60 mm)
H	3.40"	(86 mm)
I	0.67"	(17 mm)
L	5.90"	(150 mm)

20 006 13 400 A - 1250 A

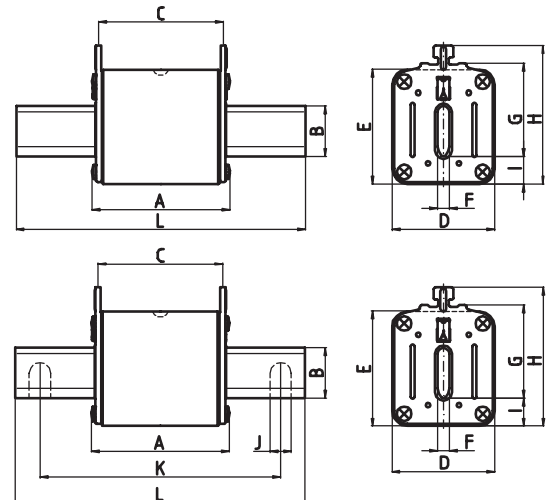
A _{max.}	3.54"	(90 mm)
B	1.97"	(50 mm)
C	2.56"	(65 mm)
D	3.94"	(100 mm)
E	4.25"	(108 mm)
F	0.30"	(8 mm)
G	3.35"	(85 mm)
H	4.84"	(123 mm)
I	1.10"	(28 mm)
J	5.90"	(150 mm)
K	0.63"	(16 mm)
L	7.87"	(200 mm)

20 006 13 1600 A

A	3.54"	(100 mm)
B	1.97"	(50 mm)
C	3.42"	(87 mm)
D	3.54"	(100 mm)
E	4.25"	(108 mm)
F	0.30"	(8 mm)
G	3.35"	(85 mm)
H	4.84"	(123 mm)
I	1.10"	(28 mm)
J	5.90"	(150 mm)
K	0.63"	(16 mm)
L	7.87"	(200 mm)

20 120 13

A _{max.}	3.94"	(100 mm)
B	1.97"	(50 mm)
C	3.43"	(87 mm)
D	3.94"	(100 mm)
E	4.25"	(108 mm)
F	0.24"	(6 mm)
G	3.35"	(85 mm)
H	4.84"	(123 mm)
I	1.10"	(28 mm)
J	-	
K	-	
L	7.87"	(200 mm)



Size 1 **Rated voltage AC 500 V** **Operating class gG** **Rated breaking capacity 120 kA** **Standard IEC 60269-2-1**

Rated current	Part No.	Power loss W	Pre-arcing I ² t-value A ² s	Total I ² t-value @ 254 V A ² s	Total I ² t-value @ 440 V A ² s
16 A	20 003 13/20 441 13	1.9	420	490	810
20 A	20 003 13/20 441 13	2.2	760	910	1,480
25 A	20 003 13/20 441 13	2.6	1,440	1,780	2,890
32 A	20 003 13/20 441 13	3.5	2,600	3,360	5,630
35 A	20 003 13/20 441 13	3.9	3,100	4,770	7,610
40 A	20 003 13/20 441 13	4.3	4,700	6,750	11,300
50 A	20 003 13/20 441 13	5.1	5,900	8,340	13,600
63 A	20 003 13/20 441 13	5.8	10,300	16,200	26,400
80 A	20 003 13/20 441 13	6.5	17,300	27,200	45,500
100 A	20 003 13/20 441 13	7.8	28,900	45,500	88,600
125 A	20 003 13/20 441 13	10.0	44,400	78,600	127,500
160 A	20 003 13/20 441 13	12.8	78,500	139,600	226,600
200 A	20 003 13/20 441 13	15.0	157,600	248,200	390,900
224 A	20 003 13/20 441 13	16.2	194,800	297,600	483,400
250 A	20 003 13/20 441 13	17.9	240,800	368,000	616,000

Size 2 **Rated voltage AC 500 V** **Operating class gG** **Rated breaking capacity 120 kA** **Standard IEC 60269-2-1**

Rated current	Part No.	Power loss W	Pre-arcing I ² t-value A ² s	Total I ² t-value @ 254 V A ² s	Total I ² t-value @ 440 V A ² s
35 A	20 004 13/20 442 13	3.9	3,100	4,770	7,610
40 A	20 004 13/20 442 13	4.3	4,700	6,750	11,300
50 A	20 004 13/20 442 13	5.1	5,900	8,340	13,600
63 A	20 004 13/20 442 13	5.8	10,300	16,200	26,400
80 A	20 004 13/20 442 13	6.5	17,300	27,200	45,500
100 A	20 004 13/20 442 13	7.8	28,900	45,500	88,600
125 A	20 004 13/20 442 13	10.0	44,400	78,600	127,500
160 A	20 004 13/20 442 13	12.8	78,500	139,600	226,600
200 A	20 004 13/20 442 13	15.5	157,600	248,200	390,900
224 A	20 004 13/20 442 13	16.4	194,800	297,600	483,400
250 A	20 004 13/20 442 13	18.0	240,800	368,000	616,000
315 A	20 004 13/20 442 13	21.5	513,000	716,000	1,164,000
355 A	20 004 13/20 442 13	23.7	616,000	859,000	1,483,000
400 A	20 004 13/20 442 13	29.5	859,000	1,236,000	2,008,000

Size 3 **Rated voltage AC 500 V** **Operating class gG** **Rated breaking capacity 120 kA** **Standard IEC 60269-2-1**

Rated current	Part No.	Power loss W	Pre-arcing I ² t-value A ² s	Total I ² t-value @ 254 V A ² s	Total I ² t-value @ 440 V A ² s
315 A	20 005 13/20 443 13	21.5	513,000	716,000	1,164,000
355 A	20 005 13/20 443 13	23.7	616,000	859,000	1,483,000
400 A	20 005 13/20 443 13	29.5	859,000	1,236,000	2,008,000
500 A	20 005 13/20 443 13	38.0	1,130,000	1,670,000	2,800,000
630 A	20 005 13/20 443 13	46.0	1,950,000	2,980,000	4,840,000