

Fuses for Semiconductor Protection

North American and European Standard Type - SQB Sizes 1, 2, 3, and 4



SIBA square body fuses type SQB are available in four body sizes. SQB sizes 1 thru 3 are available in various mounting styles, voltage and current ratings to the maximum flexibility in equipment design to meet global application requirements.

SIBA SQB fuses provides superior engineered design for the protection of today's power semiconductors. The special shapes and forms of the pure silver melting elements embedded in a silicated arc quenching medium provides excellent low I^2t value, low peak let thru currents, high current interrupting ratings with superb reliability under high cyclic loading conditions.

Class: aR

Voltage Ratings: 700V_{AC}, 1300V_{AC}, 2000V_{AC} and 2500V_{AC}

Current Ratings: 50A - 4000A

Standards: UL 248-13

IEC 60269-4

DIN VDE 0636-40

DIN 43653

Approvals:



E180276

Tested at:

UL - 1.0xU_n

IEC - 1.1xU_n

U_n

700V_{AC}/1300V_{AC}

690V_{AC}/1250V_{AC}

Features and Benefits



High current interrupt ratings



Very low I^2t total values



High cyclic loading withstand capabilities

Fuses for Semiconductor Protection

Selection Guide

North American and European Standard Type - SQB Sizes 1, 2, 3, and 4

Article	Description		Selection Guide	Technical Data
690V _{AC} IEC / 700V _{AC} UL				
SQB1				
2061632	US Bladed-Short	With fitting for micro-switch		396 - 397
2061832	US Bladed-Long			
2066432	Threaded 5/16" UNC			
2061232	DIN - 80mm	With fitting for micro-switch	392 - 393	
2061532	DIN - 110mm		394 - 395	
2066132	DIN Threaded M8			
SQB2				
2062632	US Bladed-Short	With fitting for micro-switch	398 - 399	402 - 403
2062832	US Bladed-Long			
2067432	Threaded 3/8" UNC			
2062232	DIN - 80mm	With fitting for micro-switch	400 - 401	
2062532	DIN - 110mm			
2067132	DIN Threaded M10			
SQB2X2 (Double Body)				
2067832	DIN Threaded M10	With fitting for micro-switch	404	405
SQB3				
2063632	US Bladed-Short	With fitting for micro-switch	406 - 407	410 - 411
2063832	US Bladed-Long			
2068432	Threaded 1/2" UNC			
2063232	DIN - 80mm	With fitting for micro-switch	408 - 409	
2063532	DIN - 110mm			
2068132	DIN Threaded M12			
SQB3 - 70				
2068152	DIN Threaded M12	With fitting for micro-switch	412	413

Fuses for Semiconductor Protection

Selection Guide

North American and European Standard Type - SQB Sizes 1, 2, 3, and 4

Article	Description		Selection Guide	Technical Data
690V _{AC} IEC / 700V _{AC} UL				
SQB3X2 (Double Body)				
2068832	DIN Threaded M12	With fitting for micro-switch	414	415
SQB4				
2069532	DIN Threaded M10	With fitting for micro-switch	416	417
1250V _{AC} IEC / 1300V _{AC} UL				
SQB1				
2071832	US Bladed-Long	With fitting for micro-switch	418 - 419	422 - 423
2076432	Threaded 5/16" UNC			
2071532	DIN - 110mm	With fitting for micro-switch	420 - 421	
2076132	DIN Threaded M8			
SQB2				
2072832	US Bladed-Long	With fitting for micro-switch	424 - 425	428 - 429
2077432	Threaded 3/8" UNC			
2072532	DIN - 110mm	With fitting for micro-switch	426 - 427	
2077132	DIN Threaded M10			
SQB2X2 (Double Body)				
2077832	DIN Threaded M10	With fitting for micro-switch	430	431
SQB3				
2073832	US Bladed-Long	No blown fuse indication	432 - 433	436 - 437
2078432	Threaded 1/2" UNC			
2073532	DIN - 110mm	No blown fuse indication	434 - 435	
2078132	DIN Threaded M12			
SQB3-70				
2078152	DIN Threaded M12	With fitting for micro-switch	438	439
SQB3X2 (Double Body)				
2078832	DIN Threaded M12	With fitting for micro-switch	440	441
SQB4				
2079532	DIN Threaded M10	With fitting for micro-switch	442	Contact SIBA
2000V IEC				
SQB3				
2075332	DIN Threaded M12	With fitting for micro-switch	443	Contact SIBA
2500V IEC				
SQB3				
2079152	DIN Threaded M12	With fitting for micro-switch	444	445

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Fuse Accessories for Semiconductor Protection

Selection Guide

North American and European Standard Type - SQB Sizes 1, 2, 3, and 4

Article	Description		Selection Guide	Technical Data
Fuse Base				
US UL E186970				
2131301	80mm mounting centers	630A, 900V - IEC / 700V - UL	446 - 447	
2131302	80mm mounting centers	1250A, 900V - IEC / 700V - UL		
2132301	110mm mounting centers	630A, 1400V - IEC / 1200V - UL		
2132302	110mm mounting centers	1250A, 1400V - IEC / 1200V - UL		
US UL E35113				
9990001	Fuse Standoff	1400A, 1000V - UL	447	
Microswitches				
B-Microswitch				
2800104	Standard Level	US	Single Change Over Circuit	448 - 449
2801104	Low Level			
M-Microswitch				
2800310	Standard Level	Single Change Over Circuit	448 - 449	
2800311				
2800312		Double Change Over Circuit		
2800320				
2800321				
2800322				
2800410	Low Level	Single Change Over Circuit		
2800411				
2800412		Double Change Over Circuit		
2800420				
2800421				
2800422				

URS	E180276	Rated Voltage	Rated Breaking Test	Class	Standard(s)
		690V _{AC} /600V _{AC}	Capacity	aR	UL 248-13
		700V _{AC}	200kA	IEC - 1.1Un	IEC 60269-4
				UL - 1.0Un	DIN VDE 0636-40
Size SQB1 - North American					

Rated Current I _n [A]	US-Blade Short With fitting for microswitch		US-Long Long With fitting for microswitch		US-Threaded 5/16" UNC With fitting for microswitch	
	Article Number	UL rec	Article Number	UL rec	Article Number	UL rec
50	2061632.50	✓	2061832.50	✓	2066432.50	✓
63	2061632.63	✓	2061832.63	✓	2066432.63	✓
80	2061632.80	✓	2061832.80	✓	2066432.80	✓
100	2061632.100	✓	2061832.100	✓	2066432.100	✓
125	2061632.125	✓	2061832.125	✓	2066432.125	✓
160	2061632.160	✓	2061832.160	✓	2066432.160	✓
200	2061632.200	✓	2061832.200	✓	2066432.200	✓
250	2061632.250	✓	2061832.250	✓	2066432.250	✓
315	2061632.315	✓	2061832.315	✓	2066432.315	✓
350	2061632.350	✓	2061832.350	✓	2066432.350	✓
400	2061632.400	✓	2061832.400	✓	2066432.400	✓
450	2061632.450	✓	2061832.450	✓	2066432.450	✓
500	2061632.500	✓	2061832.500	✓	2066432.500	✓
550	2061632.550	✓	2061832.550	✓	2066432.550	✓
630	2061632.630	✓	2061832.630	✓	2066432.630	✓
700	2061632.700	✓	2061832.700	✓	2066432.700	✓
800	2061632.800	✓	2061832.800	✓	2066432.800	✓
900	2061632.900*		2061832.900*		2066432.900*	
* Rated 600Vac - IEC						
Weight [kg / 1]						
0.52	0.52		0.52	0.52	0.50	0.50
Units per Package						
3	3		3	3	3	3

Accessories

 E309038						
Microswitch			Page			Page
2800104	Standard		448 - 449			
2801104	Low level					

URS



E180276

Rated Voltage
690V_{AC}/600V_{AC}
700V_{AC}

Rated Breaking Test
Capacity

200kA

Voltage
IEC - 1.1Un
UL - 1.0Un

Class
aR

Standard(s)

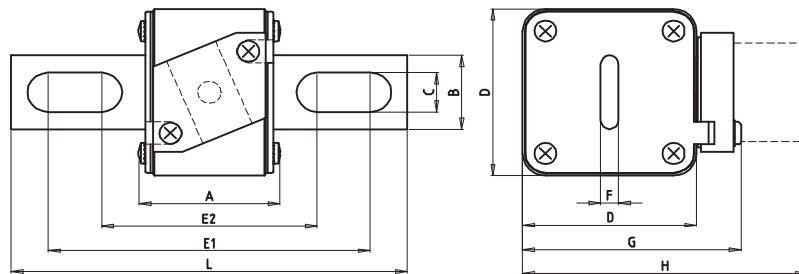
UL 248-13

IEC 60269-4

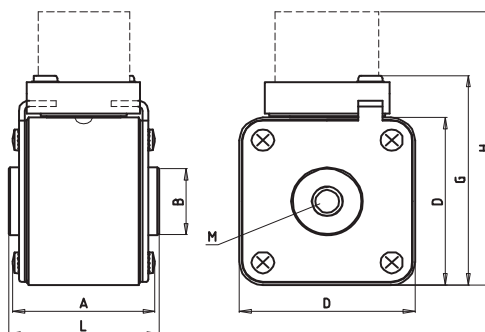
DIN VDE 0636-40

Size SQB1 - North American

	US-Blade Short With fitting for microswitch	US-Long Long With fitting for microswitch	US-Threaded 5/16" UNC With fitting for microswitch
	2061632	2061832	2066432
Dimensions [in / mm]			
A	1.87 / 47.5	1.87 / 47.5	1.87 / 47.5
B	1.02 / 26	1.02 / 26	0.94 / 24
C	0.55 / 14	0.55 / 14	
D	2.00 / 51	2.00 / 51	2.00 / 51
E ₁	4.29 / 109	5.04 / 128	
E ₂	2.87 / 73	3.62 / 92	
F	0.24 / 6	0.24 / 6	
G	2.60 / 66	2.60 / 66	2.60 / 66
H	3.50 / 89	3.50 / 89	3.50 / 89
L	5.28 / 134	6.06 / 154	2.00 / 51
M			5/16-UNC - Thread Depth 0.43 / 11
Torque Max			22N•m / 16.2lb•ft



2061632 / 2061832



2066432

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URS

E180276

Rated Voltage
690V_{AC}/600V_{AC}
700V_{AC}

Rated Breaking Test

Capacity

200kA

Voltage

IEC - 1.1Un

UL - 1.0Un

Class

aR

Standard(s)

UL 248-13

IEC 60269-4

VDE 0636- Part 40



Size SQB1 - DIN 43653

Rated Current I _n [A]	80mm With fitting for microswitch		110mm With fitting for microswitch		M8 With fitting for microswitch	
	Article Number	UL rec	Article Number	UL rec	Article Number	UL rec
50	2061232.50	✓	2061532.50	✓	2066132.50	✓
63	2061232.63	✓	2061532.63	✓	2066132.63	✓
80	2061232.80	✓	2061532.80	✓	2066132.80	✓
100	2061232.100	✓	2061532.100	✓	2066132.100	✓
125	2061232.125	✓	2061532.125	✓	2066132.125	✓
160	2061232.160	✓	2061532.160	✓	2066132.160	✓
200	2061232.200	✓	2061532.200	✓	2066132.200	✓
250	2061232.250	✓	2061532.250	✓	2066132.250	✓
315	2061232.315	✓	2061532.315	✓	2066132.315	✓
350	2061232.350	✓	2061532.350	✓	2066132.350	✓
400	2061232.400	✓	2061532.400	✓	2066132.400	✓
450	2061232.450	✓	2061532.450	✓	2066132.450	✓
500	2061232.500	✓	2061532.500	✓	2066132.500	✓
550	2061232.550	✓	2061532.550	✓	2066132.550	✓
630	2061232.630	✓	2061532.630	✓	2066132.630	✓
700	2061232.700	✓	2061532.700	✓	2066132.700	✓
800	2061232.800	✓	2061532.800	✓	2066132.800	✓
900	2061232.900*		2061532.900*		2066132.900*	
* Rated 600Vac - IEC						
Weight [kg / 1]						
0.51	0.51		0.51	0.51	0.50	0.50
Units per Package						
3	3		3	3	3	3

Accessories

 E186970			 E309038		
Fuse Base		Page	Microswitch		Page
2131301	80mm center (900V) to 630A	446 - 447	2800104	Standard	448 - 449
2131302	80mm center (900V) to 1250A		2801104	Low level	
2132301	110mm center (1400V) to 630A	446 - 447			
2132302	110mm center (1400V) to 1250A				

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URS

E180276

Rated Voltage
 $690V_{AC}/600V_{AC}$
 $700V_{AC}$

Rated Breaking Test
 Capacity

200kA

Voltage
 IEC - $1.1U_n$
 UL - $1.0U_n$

Class
 aR

Standard(s)

UL 248-13

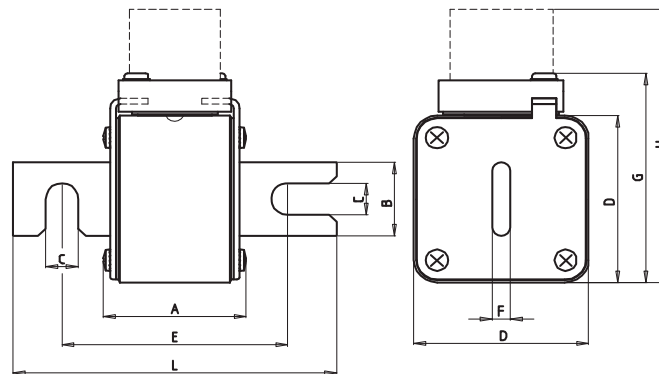
IEC 60269-4

VDE 0636- Part 40

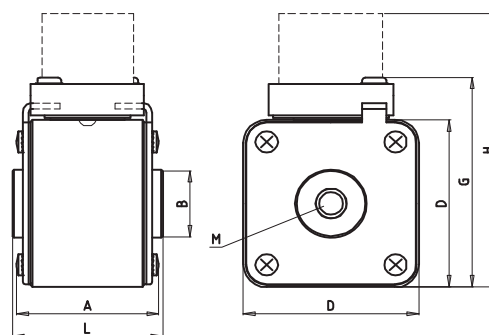


Size SQB1 - DIN 43653

	80mm With fitting for microswitch	110mm With fitting for microswitch	M8 With fitting for microswitch
	2061232	2061532	2066132
Dimensions [in / mm]			
A	1.87 / 47.5	1.87 / 47.5	1.87 / 47.5
B	1.02 / 26	1.02 / 26	0.94 / 24
C	0.43 / 11	0.43 / 11	
D	2.00 / 51	2.00 / 51	2.00 / 51
E	3.00 / 76	4.17 / 106	
F	0.24 / 6	0.24 / 6	
G	2.60 / 66	2.60 / 66	2.60 / 66
H	3.50 / 89	3.50 / 89	3.50 / 89
L	4.30 / 109	5.28 / 134	2.00 / 51
M			M8 - Thread Depth 0.43 / 11
Torque Max			22N•m / 16.2lb•ft



2061232 / 2061532



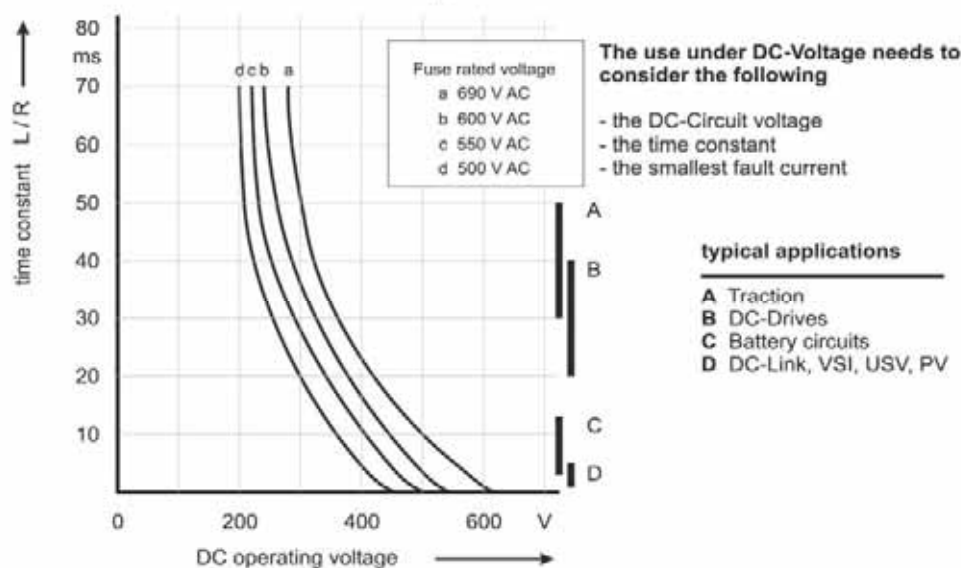
2066132

URS	E180276	Rated Voltage 690V _{AC} /600V _{AC} 700V _{AC}	Rated Breaking Test Capacity 200kA	Class aR	Standard(s) UL 248-13 IEC 60269-4 VDE 0636- Part 40
C RU US					
Size SQB1 - North American/DIN					

Rated Current I_n [A]	Rated Voltage[U_n] IEC 60269-4 [V]	Rated Voltage[U_n] UL 248-13 [V]	Power Loss [W]	Pre-arcing I^2t [A ² s]	Total I^2t @ 660V _{AC} [A ² s]	
50	690	700	12	110	590	
63	690	700	19	160	850	
80	690	700	24	260	1 400	
100	690	700	30	420	2 300	
125	690	700	35	600	3 100	
160	690	700	40	1 400	7 500	
200	690	700	44	2 400	13 000	
250	690	700	51	3 700	21 000	
315	690	700	59	6 600	39 000	
350	690	700	61	9 900	55 000	
400	690	700	65	17 000	96 000	
450	690	700	70	22 000	130 000	
500	690	700	72	31 000	180 000	
550	690	700	75	41 000	250 000	
630	690	700	80	61 000	370 000	
700	690*	700	85	86 000	490 000	
800	690*	700	99	120 000	750 000	
900	600*	700	105	170 000	990 000	

* Tested @ 1.05x U_n

DC Application



As a first assumption the minimum fault current should be 10 times the planned fuse rating. If smaller fault currents are expected our application engineers should be consulted.

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URS

E180276



Size SQB1 - North American/DIN

Rated Voltage
690V_{AC}/600V_{AC}
700V_{AC}

Rated Breaking Test
Capacity
200kA

Class
aR

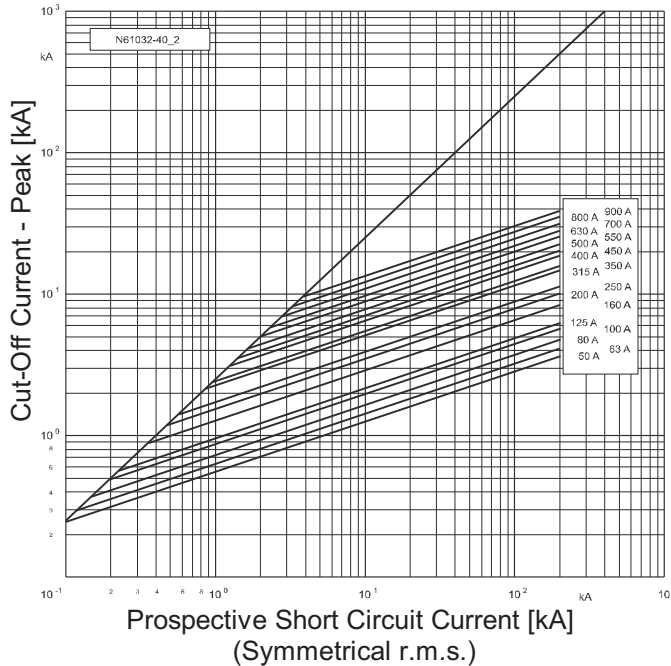
Voltage
IEC - 1.1U_n
UL - 1.0U_n

Standard(s)
UL 248-13
IEC 60269-4
VDE 0636- Part 40

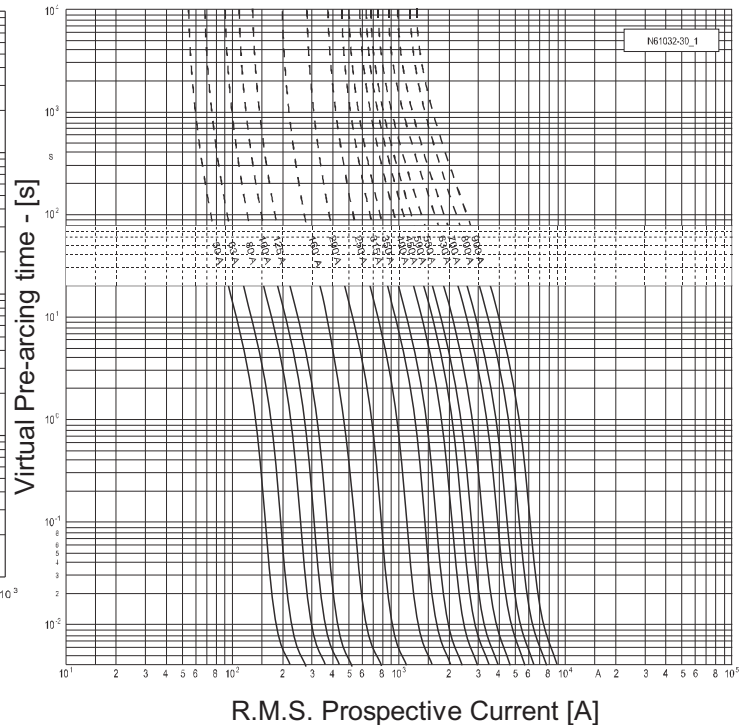
Coefficients for Heavy Duty Applications

a	A2	B1	B2	Cf3	N
130	0.6	1.25	0.6	0.8	1.5

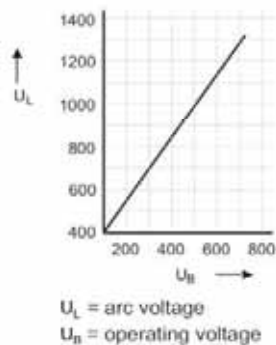
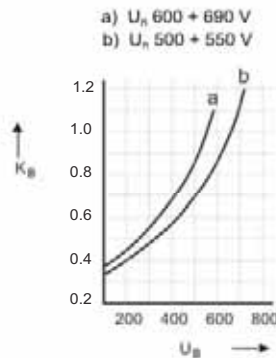
Cut-Off current Characteristics



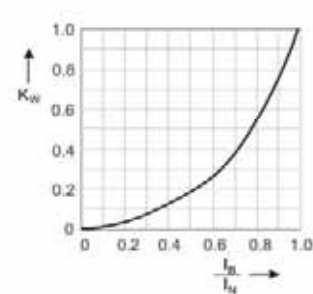
Time-Current Characteristics



Arc voltage diagram

Reduction factor total I²t-value

Reduction factor for power loss



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E180276

Rated Voltage
690V_{AC}/600V_{AC}
700V_{AC}

Rated Breaking Test

Capacity Voltage
200kA IEC - 1.1Un
UL - 1.0Un

Class
aR

Standard(s)

UL 248-13
IEC 60269-4
VDE 0636- Part 40

Size SQB2 - North American

Rated Current I _n [A]	US-Blade Short With fitting for microswitch		US-Long Long With fitting for microswitch		US-Threaded 3/8" UNC With fitting for microswitch	
	Article Number	UL rec	Article Number	UL rec	Article Number	UL rec
250	2062632.250		2062832.250		2067432.250	
315	2062632.315		2062832.315		2067432.315	
350	2062632.350		2062832.35		2067432.350	
400	2062632.400	✓	2062832.400	✓	2067432.400	✓
450	2062632.450	✓	2062832.450	✓	2067432.450	✓
500	2062632.500	✓	2062832.500	✓	2067432.500	✓
550	2062632.550	✓	2062832.550	✓	2067432.550	✓
630	2062632.630	✓	2062832.630	✓	2067432.630	✓
700	2062632.700	✓	2062832.700	✓	2067432.700	✓
800	2062632.800	✓	2062832.800	✓	2067432.800	✓
900	2062632.900	✓	2062832.900	✓	2067432.900	✓
1000	2062632.1000		2062832.1000		2067432.1000	
1100	2062632.1100*		2062832.1100*		2067432.1100*	
1250	2062632.1250*		2062832.1250*		2067432.1250*	
* Rated 600Vac - IEC						
Weight [kg / 1]						
0.60	0.60	0.60	0.60	0.50	0.50	
Units per Package						
3	3	3	3	3	3	

Accessories

 E309038					
Microswitch			Page		
2800104	Standard		448 - 449		
2801104	Low level				

URS

E180276

Rated Voltage
 $690V_{AC}/600V_{AC}$
 $700V_{AC}$

Rated Breaking Test
 Capacity

200kA

Voltage
 IEC - 1.1Un
 UL - 1.0Un

Class
 aR

Standard(s)

UL 248-13

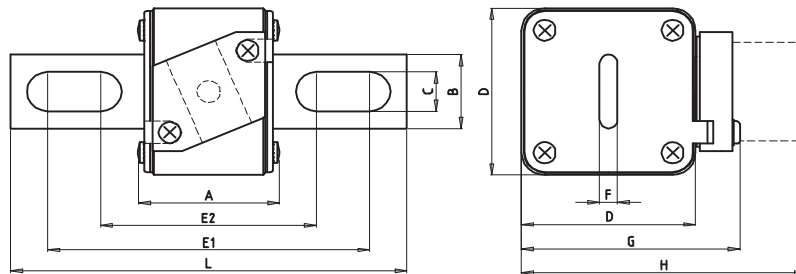
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VDE 0636- Part 40

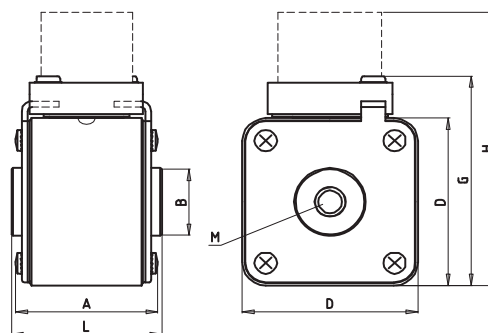


Size SQB2 - North American

	US-Blade Short With fitting for microswitch	US-Long Long With fitting for microswitch	US-Threaded 3/8" UNC With fitting for microswitch
	2061632	2061832	2066432
Dimensions [in / mm]			
A	1.87 / 47.5	1.87 / 47.5	1.87 / 47.5
B	1.02 / 26	1.02 / 26	0.94 / 24
C	0.55 / 14	0.55 / 14	
D	2.36 / 60	2.36 / 60	2.36 / 60
E ₁	4.29 / 109	5.04 / 128	
E ₂	2.87 / 73	3.62 / 92	
F	0.24 / 6	0.24 / 6	
G	2.95 / 75	2.95 / 75	2.95 / 75
H	3.86 / 98	3.86 / 98	3.86 / 98
L	5.28 / 134	6.06 / 154	2.00 / 51
M			3/8-UNC - Thread Depth 0.43 / 11
Torque Max			39N•m / 28.7lb•ft



2062632 / 2062832



2067432

URS



Size SQB2 - DIN 43653

E180276

Rated Voltage
690V_{AC}/600V_{AC}
700V_{AC}

Rated Breaking Test
Capacity Voltage
200kA IEC - 1.1Un
UL - 1.0Un

Class
aR

Standard(s)
UL 248-13
IEC 60269-4
VDE 0636- Part 40

Rated Current I _n [A]	80mm		110mm		M10	
	With fitting for microswitch		With fitting for microswitch		With fitting for microswitch	
	Article Number	UL rec	Article Number	UL rec	Article Number	UL rec
250	2062232.250		2062532.250		2067132.250	
315	2062232.315		2062532.315		2067132.315	
350	2062232.350		2062532.350		2067132.350	
400	2062232.400	✓	2062532.400	✓	2067132.400	✓
450	2062232.450	✓	2062532.450	✓	2067132.450	✓
500	2062232.500	✓	2062532.500	✓	2067132.500	✓
550	2062232.550	✓	2062532.550	✓	2067132.550	✓
630	2062232.630	✓	2062532.630	✓	2067132.630	✓
700	2062232.700	✓	2062532.700	✓	2067132.700	✓
800	2062232.800	✓	2062532.800	✓	2067132.800	✓
900	2062232.900	✓	2062532.900	✓	2067132.900	✓
1000	2062232.1000		2062532.1000		2067132.1000	
1100	2062232.1100*		2062532.1100*		2067132.1100*	
1250	2062232.1250*		2062532.1250*		2067132.1250*	
* Rated 600Vac - IEC						
Weight [kg / 1]						
0.51	0.51	0.51	0.51	0.50	0.50	
Units per Package						
3	3	3	3	3	3	

Accessories

 E309038			 E309038		
Fuse Base		Page	Microswitch		Page
2131301	80mm center (900V) to 630A	446 - 447	2800104	Standard	448 - 449
2131302	80mm center (900V) to 1250A		2801104	Low level	
2132301	110mm center (1400V) to 630A	446 - 447			
2132302	110mm center (1400V) to 1250A				

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URS

E180276

Rated Voltage
 $690V_{AC}/600V_{AC}$
 $700V_{AC}$

Rated Breaking Test
 Capacity

200kA

Voltage
 IEC - 1.1Un
 UL - 1.0Un

Class
 aR

Standard(s)

UL 248-13

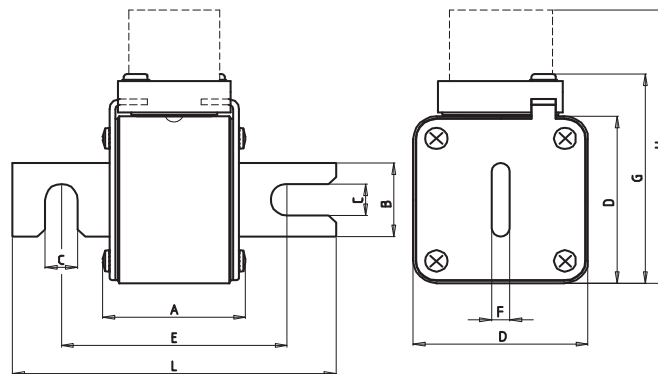
IEC 60269-4

VDE 0636- Part 40

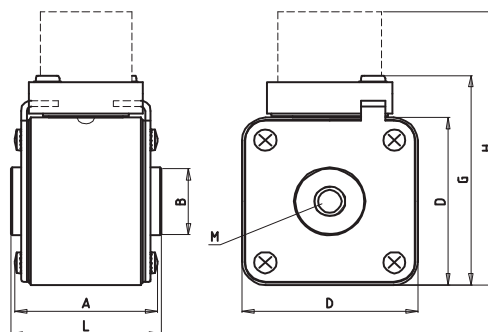


Size SQB2 - DIN 43653

	80mm With fitting for microswitch	110mm With fitting for microswitch	M10 With fitting for microswitch
	2062232	2062532	2067132
Dimensions [in / mm]			
A	1.87 / 47.5	1.87 / 47.5	1.87 / 47.5
B	1.02 / 26	1.02 / 26	0.94 / 24
C	0.43 / 11	0.43 / 11	
D	2.36 / 60	2.36 / 60	2.36 / 60
E	3.00 / 76	4.17 / 106	
F	0.24 / 6	0.24 / 6	
G	2.95 / 75	2.95 / 75	2.95 / 75
H	3.86 / 98	3.86 / 98	3.86 / 98
L	4.30 / 109	5.28 / 134	2.00 / 51
M			M10 - Thread Depth 0.43 / 11
Torque Max			39N•m / 28.7lb•ft



2062232 / 2062532



2067132

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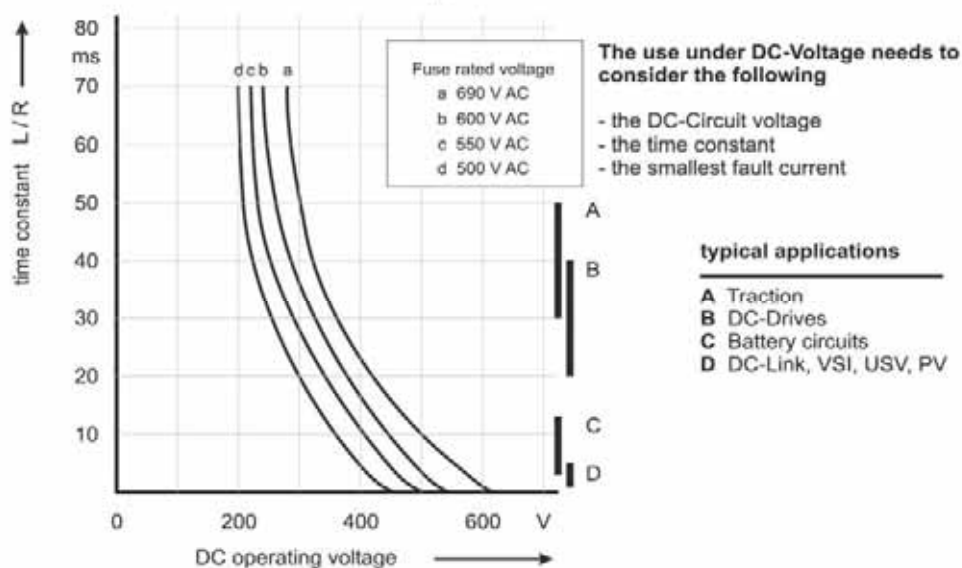
e-mail: info@sibafuse.com
 www.siba-fuses.us

URS	E180276	Rated Voltage 690V _{AC} /600V _{AC} 700V _{AC}	Rated Breaking Test Capacity 200kA	Voltage IEC - 1.1Un UL - 1.0Un	Class aR	Standard(s) UL 248-13 IEC 60269-4 VDE 0636- Part 40
Size SQB2 - North American/DIN						

Rated Current I_n [A]	Rated Voltage[U _n] IEC 60269-4 [V]	Rated Voltage[U _n] UL 248-13 [V]	Power Loss [W]	Pre-arcing I^2t [A ² s]	Total I^2t @ 660V _{AC} [A ² s]	
250	690	—	65	5 600	32 000	
315	690	—	75	7 800	45 000	
350	690	—	80	11 800	68 000	
400	690	700	65	13 000	75 000	
450	690	700	75	18 000	110 000	
500	690	700	80	26 000	150 000	
550	690	700	85	36 000	195 000	
630	690	700	94	55 000	300 000	
700	690	700	99	74 000	410 000	
800	690	700	108	100 000	580 000	
900	690*	700	111	170 000	950 000	
1000	690*	600	115	230 000	1 260 000	
1100	600*	600	130	290 000	1 600 000	
1250	600*	—	140	370 000	2 140 000	

* Tested @ 1.05xU_n

DC Application



As a first assumption the minimum fault current should be 10 times the planned fuse rating. If smaller fault currents are expected our application engineers should be consulted.

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URS

E180276

Rated Voltage
 $690V_{AC}/600V_{AC}$
 $700V_{AC}$

Rated Breaking Test
 Capacity

200kA

Voltage
 IEC - $1.1U_n$
 UL - $1.0U_n$

Class
 aR

Standard(s)

UL 248-13

IEC 60269-4

VDE 0636- Part 40

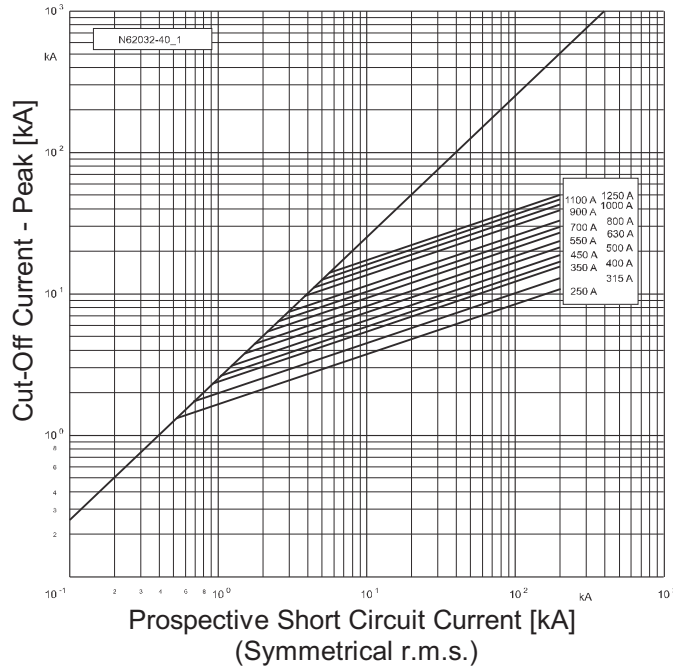


Size SQB2 - North American/DIN

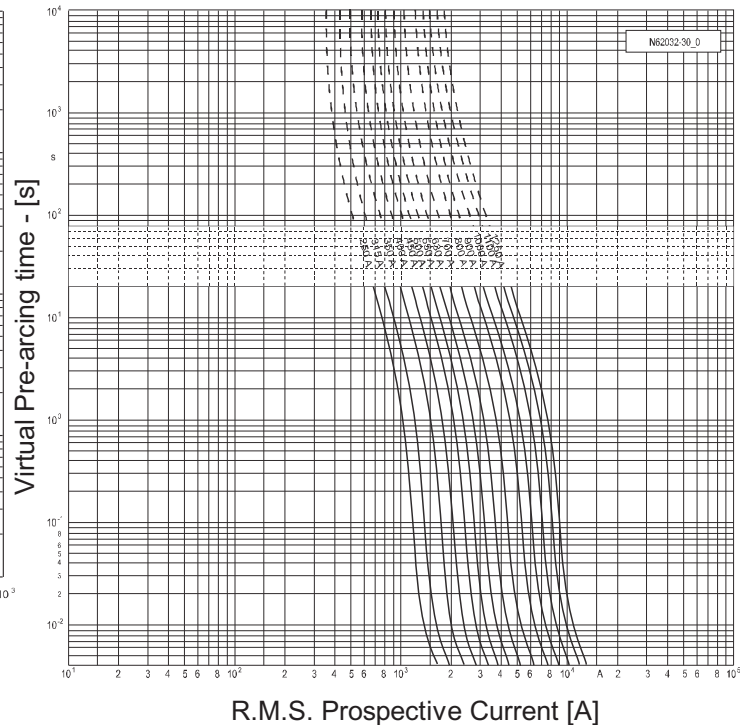
Coefficients for Heavy Duty Applications

a	A2	B1	B2	Cf3	N
130	0.6	1.25	0.6	0.8	1.5

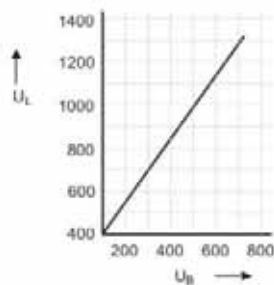
Cut-Off current Characteristics



Time-Current Characteristics



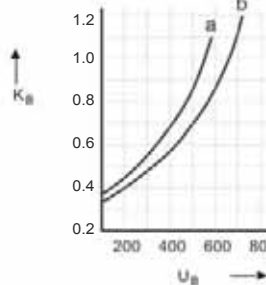
Arc voltage diagram



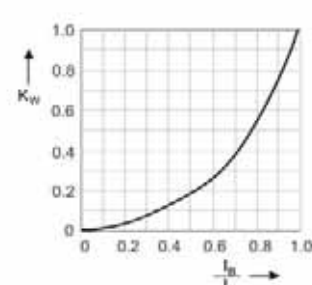
U_L = arc voltage
 U_B = operating voltage

Reduction factor total I²t-value

a) $U_n 600 + 690 V$
 b) $U_n 500 + 550 V$



Reduction factor for power loss



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URS	Rated Voltage 690V _{AC}	Rated Breaking Test Capacity 200kA	Class aR	Standard(s) IEC 60269-4 VDE 0636- Part 40
-----	-------------------------------------	--	-------------	---

Size SQB2x2 - DIN 43653

Rated Current I_n [A]	With fitting for microswitch Article Number	Rated Voltage[U] IEC 60269-4 [V]	Rated Voltage[U] UL 248-13 [V]	Power Loss [W]	Pre-arcing I^2t [A ² s]	Total I^2t @ 660V _{AC} [A ² s]
800	2067832.800	690	—	136	52 000	300 000
1000	2067832.1000	690	—	168	104 000	600 000
1250	2067832.1250	690	—	197	220 000	1 200 000
1400	2067832.1400	690	—	208	296 000	1 264 000
1600	2067832.1600	690	—	229	400 000	2 320 000

Weight [kg / 1]

1.02

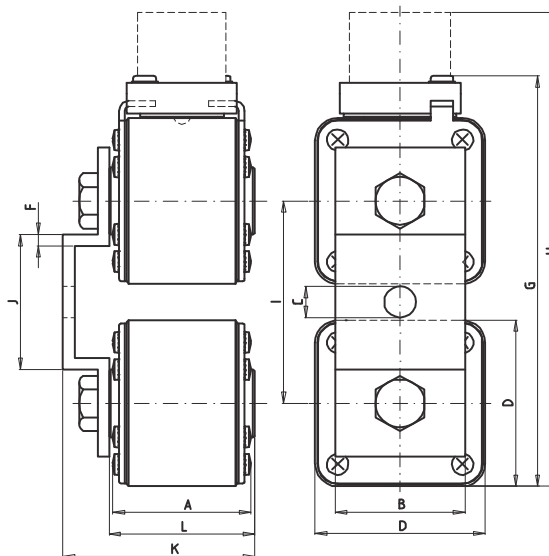
Units per Package

1

For DC Application see pages 402

2067832

	Dimensions [in / mm]
A	1.87 / 47.5
B	1.77 / 45
C	0.43 / 11
D	2.32 / 59
F	0.16 / 4
G	5.79 / 147
H	6.69 / 170
I	2.83 / 72
J	1.90 / 48
K	2.64 / 67
L	2.00 / 51
M	M10 - Thread Depth 0.43 / 11
Torque Max - 39Nm / 28.7lb•ft	

**Accessories**

 E309038				
Microswitch		Page	Page	
2800104	Standard	448 - 449		
2801104	Low level			

URS

Rated Voltage
690V_{AC}

Rated Breaking Test
Capacity
200kA

Voltage
IEC - 1.1U_n

Class
aR

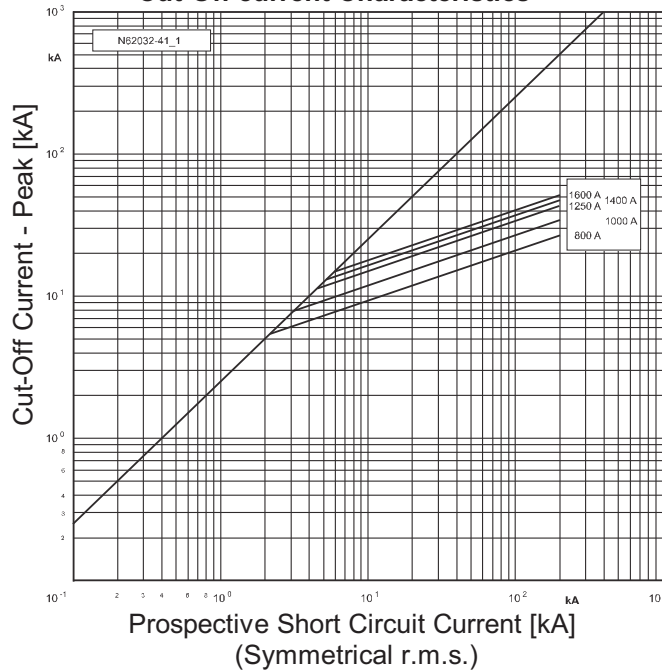
Standard(s)
IEC 60269-4
VDE 0636- Part 40

Size SQB2x2 - DIN 43653

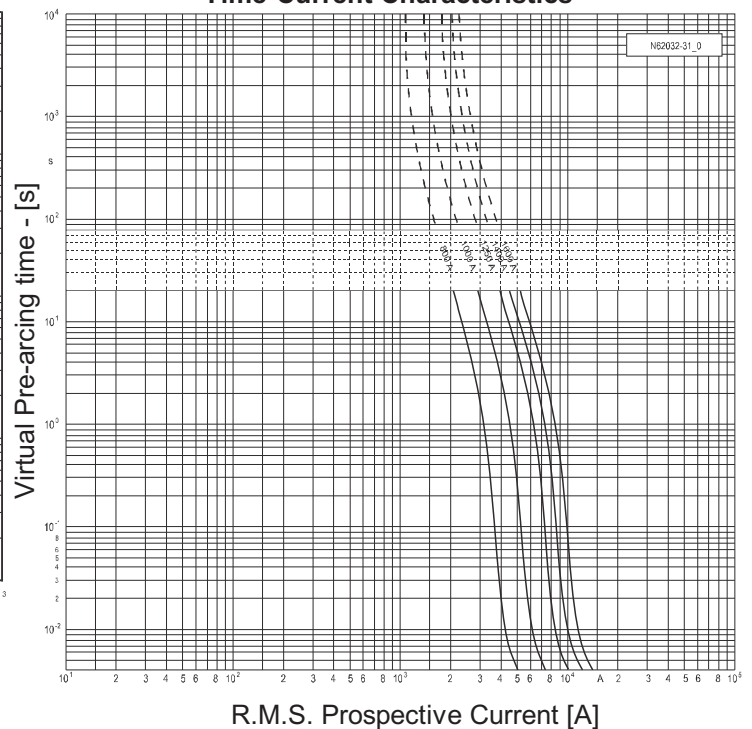
Coefficients for Heavy Duty Applications

a	A2	B1	B2	Cf3	N
130	0.6	1.25	0.6	0.8	1.5

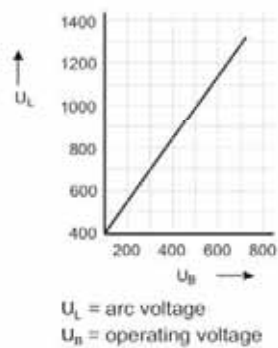
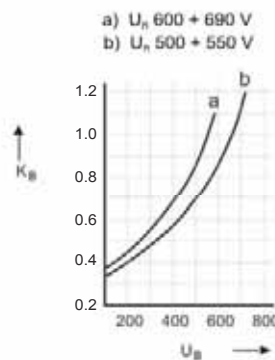
Cut-Off current Characteristics



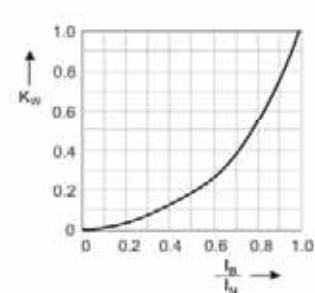
Time-Current Characteristics



Arc voltage diagram

Reduction factor total I²t-value

Reduction factor for power loss



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URS

E180276

Rated Voltage
690V_{AC}/600V_{AC}
700V_{AC}

Rated Breaking Test
Capacity Voltage
200kA IEC - 1.1Un
UL - 1.0Un

Class
aR

Standard(s)
UL 248-13
IEC 60269-4
VDE 0636- Part 40



Size SQB3 - North American

Rated Current I _n [A]	US-Blade Short With fitting for microswitch		US-Long Long With fitting for microswitch		US-Threaded 1/2" UNC With fitting for microswitch	
	Article Number	UL rec	Article Number	UL rec	Article Number	UL rec
500	2063632.500	✓	2063832.500	✓	2068432.500	✓
550	2063632.550	✓	2063832.550	✓	2068432.550	✓
630	2063632.630	✓	2063832.630	✓	2068432.630	✓
700	2063632.700	✓	2063832.700	✓	2068432.700	✓
800	2063632.800	✓	2063832.800	✓	2068432.800	✓
900	2063632.900	✓	2063832.900	✓	2068432.900	✓
1000	2063632.1000	✓	2063832.1000	✓	2068432.1000	✓
1100	2063632.1100	✓	2063832.1100	✓	2068432.1100	✓
1250	2063632.1250	✓	2063832.1250	✓	2068432.1250	✓
1400	2063632.1400	✓	2063832.1400	✓	2068432.1400	✓
1500	2063632.1500*		2063832.1500*		2068432.1500*	
1600	2063632.1600*		2063832.1600*		2068432.1600*	
* Rated 600Vac - IEC						
Weight [kg / 1]						
0.80	0.80	0.80	0.80	0.50	0.50	
Units per Package						
3	3	3	3	3	3	

Accessories

 E309038				
Microswitch		Page		
2800104	Standard	448 - 449		
2801104	Low level			

URS

E180276

Rated Voltage
 $690V_{AC}/600V_{AC}$
 $700V_{AC}$

Rated Breaking Test
 Capacity

200kA

Voltage
 IEC - $1.1U_n$
 UL - $1.0U_n$

Class
 aR

Standard(s)

UL 248-13

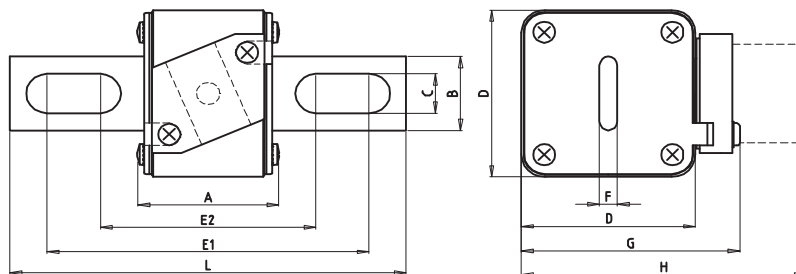
IEC 60269-4

VDE 0636- Part 40

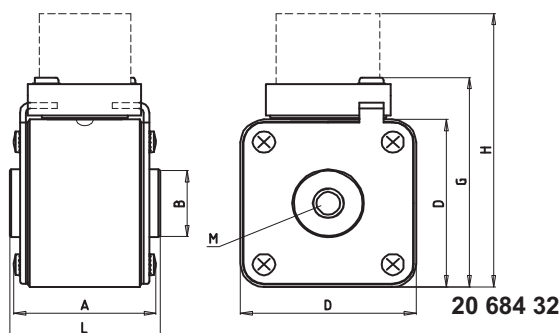


Size SQB3 - North American

	US-Blade Short With fitting for microswitch	US-Long Long With fitting for microswitch	US-Threaded 1/2" UNC With fitting for microswitch
	2063632	2063832	2068432
	Dimensions [in / mm]		
A	1.93 / 49	1.93 / 49	1.93 / 49
B	1.38 / 35	1.38 / 35	1.10 / 28
C	0.63 / 16	0.63 / 16	
D	2.87 / 73	2.87 / 73	2.87 / 73
E ₁	4.29 / 109	5.04 / 128	
E ₂	2.87 / 73	3.70 / 94	
F	0.24 / 6	0.24 / 6	
G	3.46 / 88	3.46 / 88	3.46 / 88
H	4.37 / 111	4.37 / 111	4.37 / 111
L	5.28 / 134	6.06 / 154	2.00 / 51
M			1/2-UNC - Thread Depth 0.47 / 12
Torque Max			52N•m / 38.3lb•ft



2063632 / 2063832



2068432

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URS	E180276	Rated Voltage 690V _{AC} /600V _{AC} 700V _{AC}	Rated Breaking Test Capacity 200kA	Voltage IEC - 1.1Un UL - 1.0Un	Class aR	Standard(s) UL 248-13 IEC 60269-4 VDE 0636- Part 40
	Size SQB3 - DIN 43653					

Rated Current I _n [A]	80mm With fitting for microswitch		110mm With fitting for microswitch		M12 With fitting for microswitch	
	Article Number	UL rec	Article Number	UL rec	Article Number	UL rec
500	2063232.500	✓	2063532.500	✓	2068132.500	✓
550	2063232.550	✓	2063532.550	✓	2068132.550	✓
630	2063232.630	✓	2063532.630	✓	2068132.630	✓
700	2063232.700	✓	2063532.700	✓	2068132.700	✓
800	2063232.800	✓	2063532.800	✓	2068132.800	✓
900	2063232.900	✓	2063532.900	✓	2068132.900	✓
1000	2063232.1000	✓	2063532.1000	✓	2068132.1000	✓
1100	2063232.1100	✓	2063532.1100	✓	2068132.1100	✓
1250	2063232.1250	✓	2063532.1250	✓	2068132.1250	✓
1400	2063232.1400	✓	2063532.1400	✓	2068132.1400	✓
1500	2063232.1500*		2063532.1500*		2068132.1500*	
1600	2063232.1600*		2063532.1600*		2068132.1600*	
* Rated 600Vac - IEC						
Weight [kg / 1]						
0.60	0.60		0.60	0.60	0.65	0.66
Units per Package						
3	3		3	3	3	3

Accessories

 E309038		 E309038			
Fuse Base		Page	Microswitch	Page	
2131301	80mm center (900V) to 630A	446 - 447	2800104	Standard	448 - 449
2131302	80mm center (900V) to 1250A		2801104	Low level	
2132301	110mm center (1400V) to 630A	446 - 447			
2132302	110mm center (1400V) to 1250A				

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URS

E180276

Rated Voltage
 $690V_{AC}/600V_{AC}$
 $700V_{AC}$

Rated Breaking Test
 Capacity

200kA

Voltage
 IEC - $1.1U_n$
 UL - $1.0U_n$

Class
 aR

Standard(s)
 UL 248-13

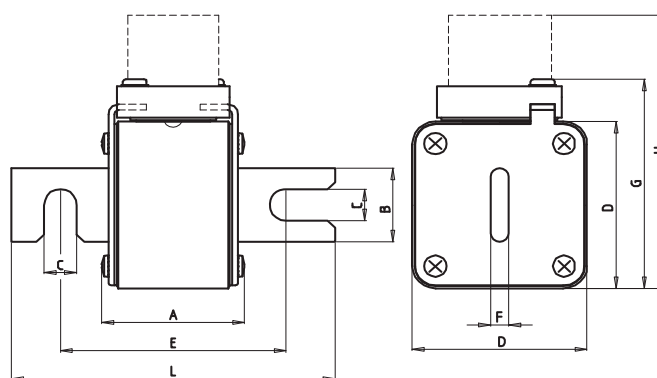
IEC 60269-4

VDE 0636- Part 40

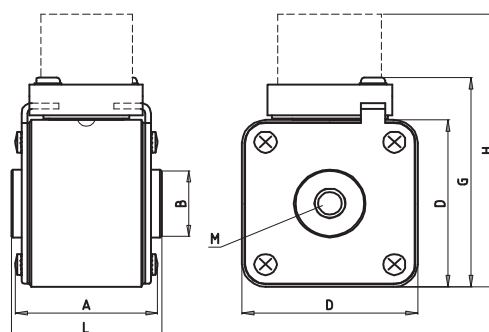


Size SQB3 - DIN 43653

	80mm With fitting for microswitch	110mm With fitting for microswitch	M12 With fitting for microswitch
	2063232	2063532	2068132
	Dimensions [in / mm]		
A	1.93 / 49	1.93 / 49	1.93 / 49
B	1.38 / 35	1.38 / 35	1.10 / 28
C	0.43 / 11	0.43 / 11	
D	2.87 / 73	2.87 / 73	2.87 / 73
E	3.00 / 76	4.17 / 106	
F	0.24 / 6	0.24 / 6	
G	3.46 / 88	3.46 / 88	3.46 / 88
H	4.37 / 111	4.37 / 111	4.37 / 111
L	4.30 / 109	5.28 / 134	2.00 / 51
M			M12 - Thread Depth 0.47 / 12
Torque Max			52N•m / 38.3lb•ft



2063232 / 2063532



2068132

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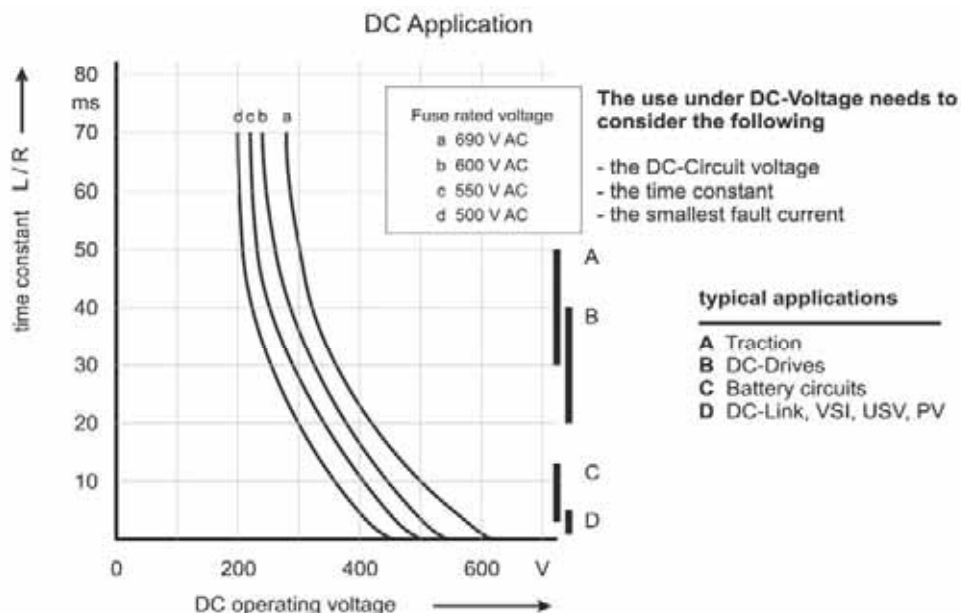
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URS	E180276	Rated Voltage 690V _{AC} /600V _{AC} 700V _{AC}	Rated Breaking Test Capacity 200kA	Voltage IEC - 1.1U _n UL - 1.0U _n	Class aR	Standard(s) UL 248-13 IEC 60269-4 VDE 0636- Part 40
Size SQB3 - North American/DIN						

Rated Current I _n [A]	Rated Voltage[U _n] IEC 60269-4 [V]	Rated Voltage[U _n] UL 248-13 [V]	Power Loss [W]	Pre-arcing I ² t [A ² s]	Total I ² t @ 660V _{AC} [A ² s]	
500	690	700	90	18 000	100 000	
550	690	700	100	22 000	130 000	
630	690	700	108	32 000	190 000	
700	690	700	113	50 000	300 000	
800	690	700	118	85 000	480 000	
900	690	700	120	115 000	660 000	
1000	690	700	131	140 000	860 000	
1100	690	700	136	210 000	1 200 000	
1250	690*	700	147	290 000	1 750 000	
1400	690*	700	161	380 000	2 200 000	
1500	600*	—	171	490 000	3 000 000	
1600	600*	—	190	590 000	3 700 000	

* Tested @ 1.05xU_n



As a first assumption the minimum fault current should be 10 times the planned fuse rating. If smaller fault currents are expected our application engineers should be consulted.

URS

E180276

Rated Voltage
 $690V_{AC}/600V_{AC}$
 $700V_{AC}$

Rated Breaking Test
 Capacity
 200kA

Class
 aR

Standard(s)
 UL 248-13
 IEC 60269-4
 VDE 0636- Part 40

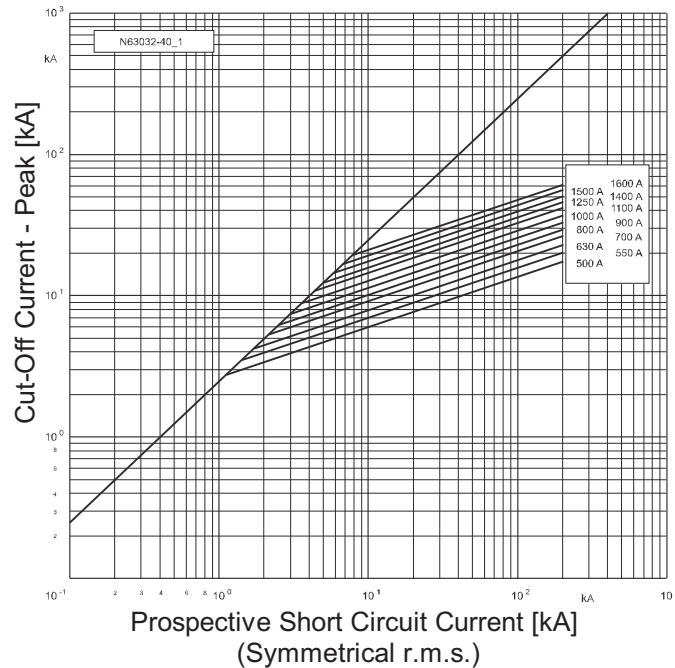


Size SQB3 - North American/DIN

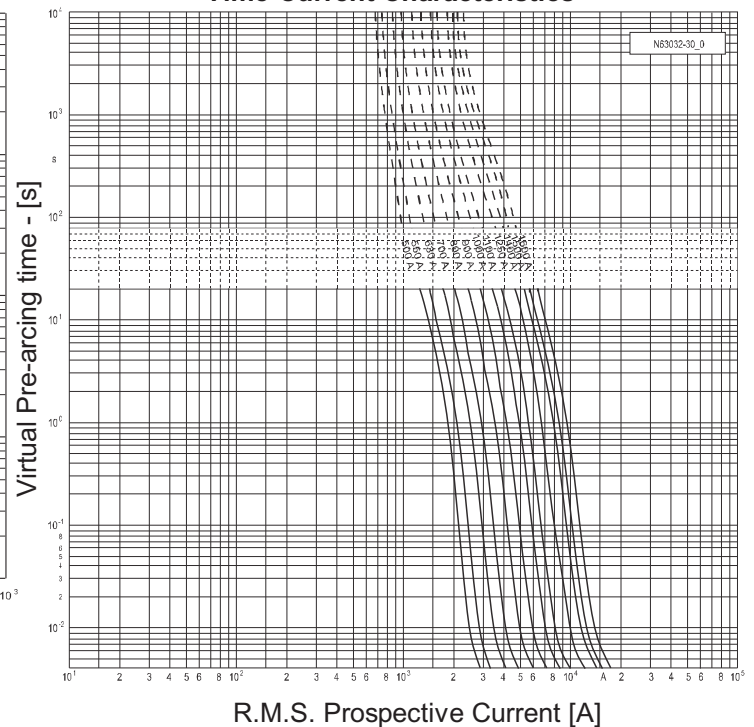
Coefficients for Heavy Duty Applications

a	A2	B1	B2	Cf3	N
130	0.6	1.25	0.6	0.8	1.5

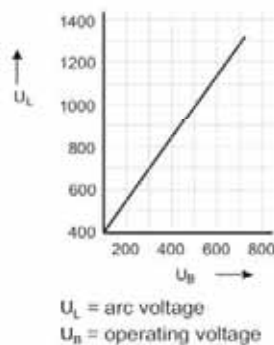
Cut-Off current Characteristics



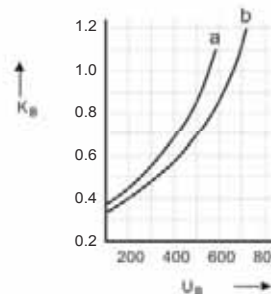
Time-Current Characteristics



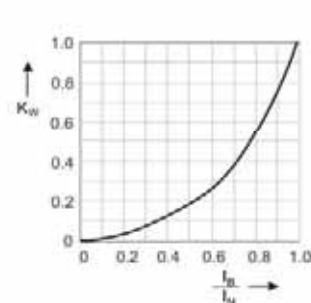
Arc voltage diagram

Reduction factor total I²t-value

- a) U_n 600 + 690 V
 b) U_n 500 + 550 V



Reduction factor for power loss



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URS	Rated Voltage	Rated Breaking Test Capacity	Class	Standard(s)
	550V _{AC} /500V _{AC}	200kA	aR	IEC 60269-4 VDE 0636- Part 40

Size SQB3-70 - DIN 43653

Rated Current I_n [A]	With fitting for microswitch Article Number	Rated Voltage[U] IEC 60269-4 [V]	Rated Voltage[U] UL 248-13 [V]	Power Loss [W]	Pre-arcing I^2t [A ² s]	Total I^2t @ Rated Voltage [A ² s]
1800	2068152.1800	550	—	225	795 000	3 720 000
2000	2068152.2000	550	—	250	1 000 000	4 950 000
2250	2068152.2250	500	—	275	1 190 000	6 000 000

Weight [kg / 1]

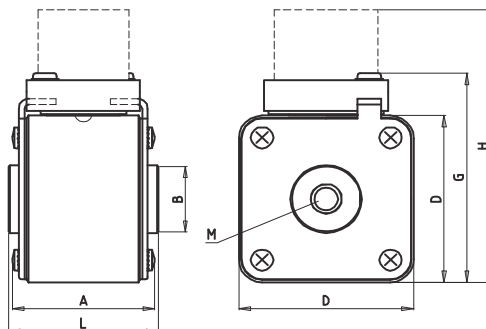
0.65

Units per Package

2

For DC Application see pages 410

	Dimensions [in / mm]
A	1.93 / 49
B	1.10 / 28
D	2.87 / 73
G	3.46 / 88
H	4.37 / 111
L	2.32 / 59
M	M12 - Thread Depth 0.47 / 12
Torque Max - 52Nm / 38.3lb•ft	



20 681 52

Accessories

 E309038				
Microswitch		Page		
2800104	Standard	448 - 449		
2801104	Low level			

URS

Rated Voltage
550V_{AC}/500V_{AC}

Rated Breaking Test
Capacity
200kA
Voltage
IEC - 1.1U_n

Class
aR

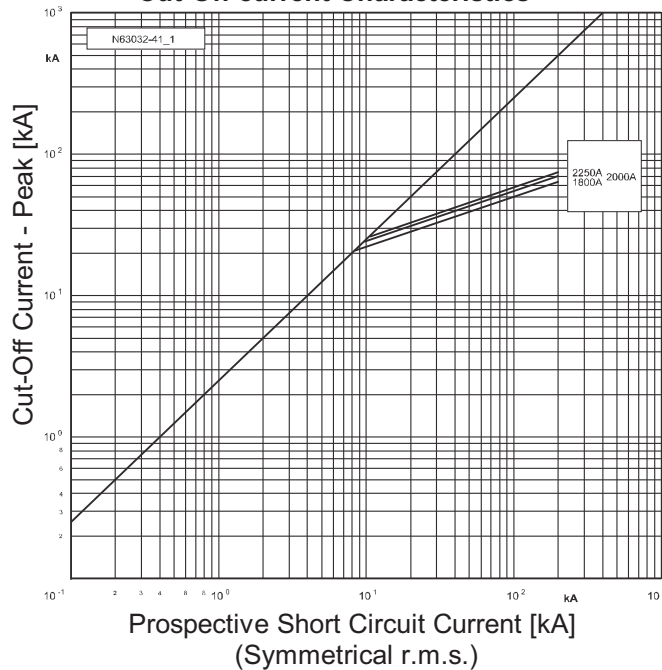
Standard(s)
IEC 60269-4
VDE 0636- Part 40

Size SQB3-70 - DIN 43653

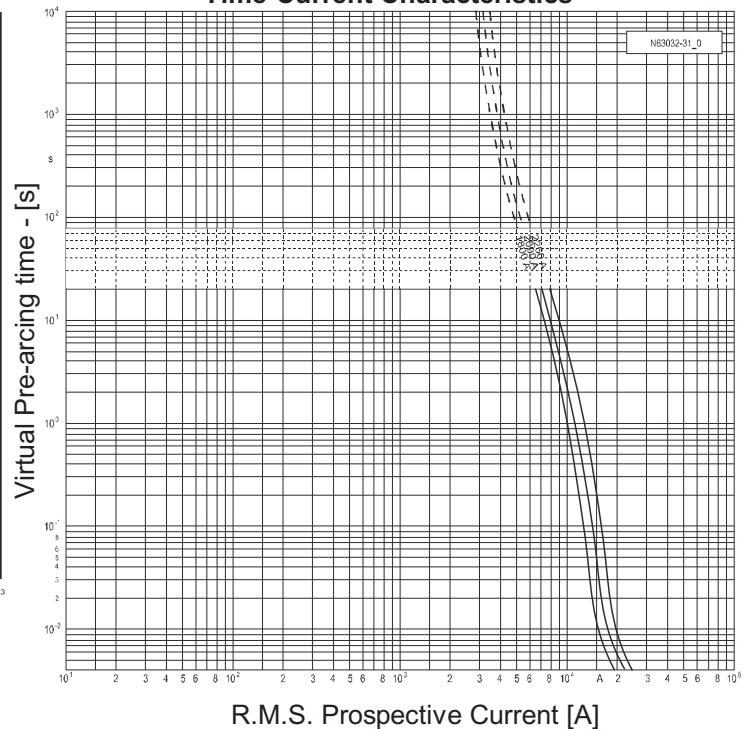
Coefficients for Heavy Duty Applications

a	A2	B1	B2	Cf3	N
130	0.6	1.25	0.6	0.8	1.5

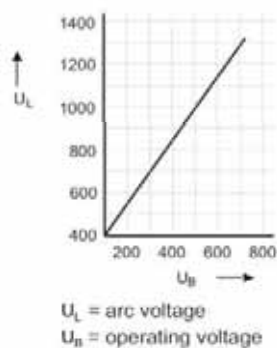
Cut-Off current Characteristics



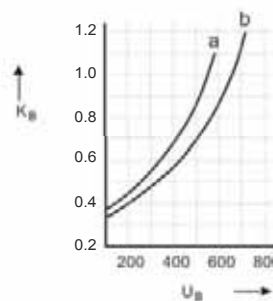
Time-Current Characteristics



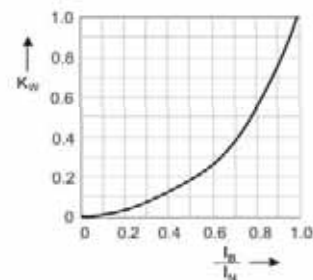
Arc voltage diagram

Reduction factor total I²t-value

- a) U_n 600 + 690 V
b) U_n 500 + 550 V



Reduction factor for power loss



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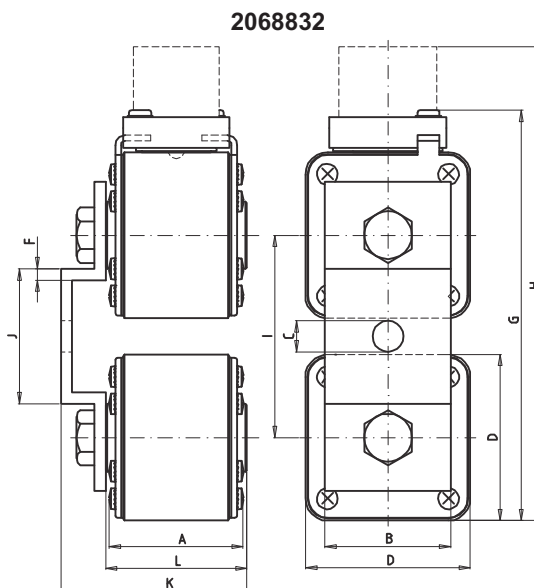
URS	Rated Voltage 690V _{AC}	Rated Breaking Test Capacity 200kA	Voltage IEC - 1.1U _n	Class aR	Standard(s) IEC 60269-4 VDE 0636- Part 40
-----	-------------------------------------	--	------------------------------------	-------------	---

Size SQB3x2 - DIN 43653

Rated Current I _n [A]	With fitting for microswitch Article Number	Rated Voltage[U] IEC 60269-4 [V]	Rated Voltage[U] UL 248-13 [V]	Power Loss [W]	Pre-arcing I ² _t [A ² s]	Total I ² _t @ 660V _{AC} [A ² s]
1000	2068832.1000	690	—	190	70 100	421 000
1100	2068832.1100	690	—	205	90 000	540 000
1250	2068832.1250	690	—	227	128 000	760 000
1400	2068832.1400	690	—	237	200 000	1 200 000
1600	2068832.1600	690	—	248	340 000	1 920 000
1800	2068832.1800	690	—	252	460 000	2 640 000
2000	2068832.2000	690	—	276	560 000	3 440 000
2500	2068832.2500	690*	—	310	1 160 000	7 000 000
3000	2068832.3000	690*	—	359	1 960 000	12 000 000
Weight [kg / 1]		*Tested at 1.05U _n				
1.2						
Units per Package						
1						

For DC Application see pages 410

	Dimensions [in / mm]
A	1.93 / 49
B	1.97 / 50
C	0.50 / 13
D	2.87 / 73
F	0.16 / 4
G	6.85 / 174
H	7.76 / 197
I	3.39 / 86
J	2.13 / 54
K	2.64 / 67
L	2.00 / 51
M	M12 - Thread Depth 0.47 / 12
Torque Max - 52Nm / 38.3lb•ft	



Accessories

 E309038				
Microswitch		Page	Page	
2800104	Standard	448 - 449		
2801104	Low level			

URS

Rated Voltage
690V_{AC}

Rated Breaking Test
Capacity
200kA

Voltage
IEC - 1.1U_n

Class
aR

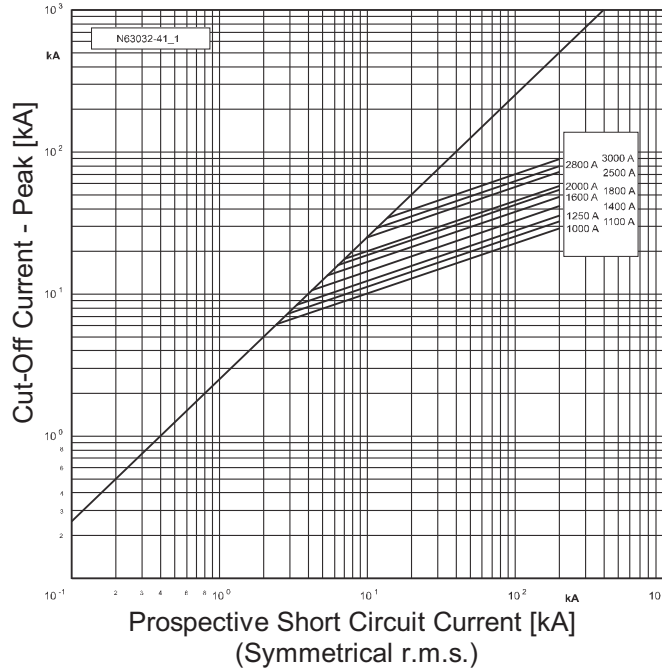
Standard(s)
IEC 60269-4

Size SQB3x2 - DIN 43653

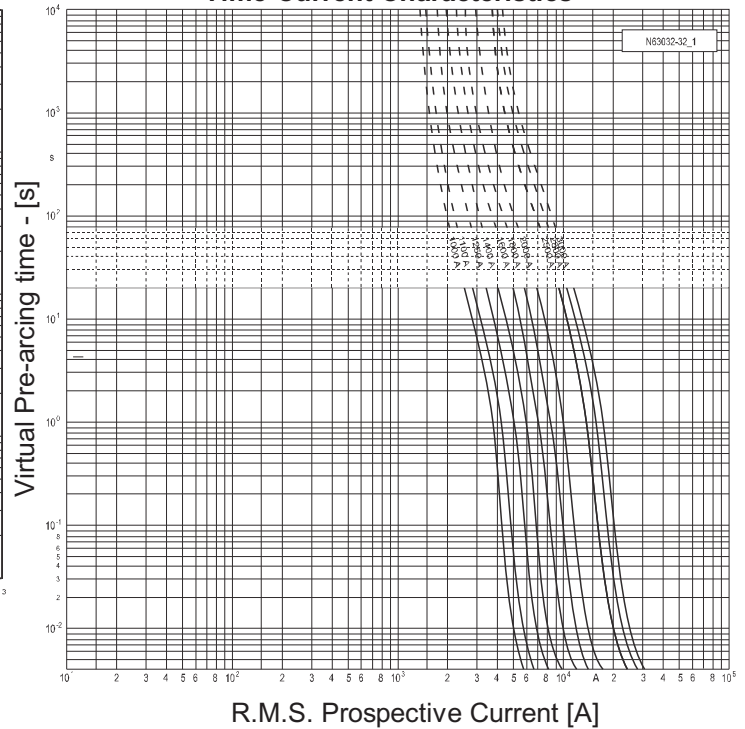
Coefficients for Heavy Duty Applications

a	A2	B1	B2	Cf3	N
130	0.6	1.25	0.6	0.8	1.5

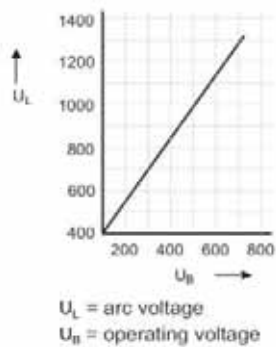
Cut-Off current Characteristics



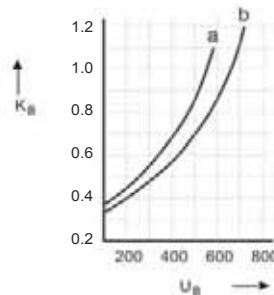
Time-Current Characteristics



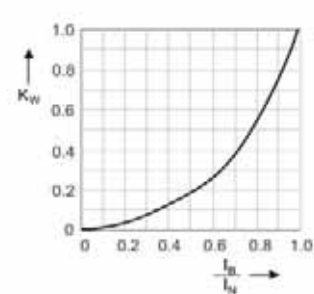
Arc voltage diagram

Reduction factor total I²t-value

- a) U_n 600 + 690 V
b) U_n 500 + 550 V



Reduction factor for power loss



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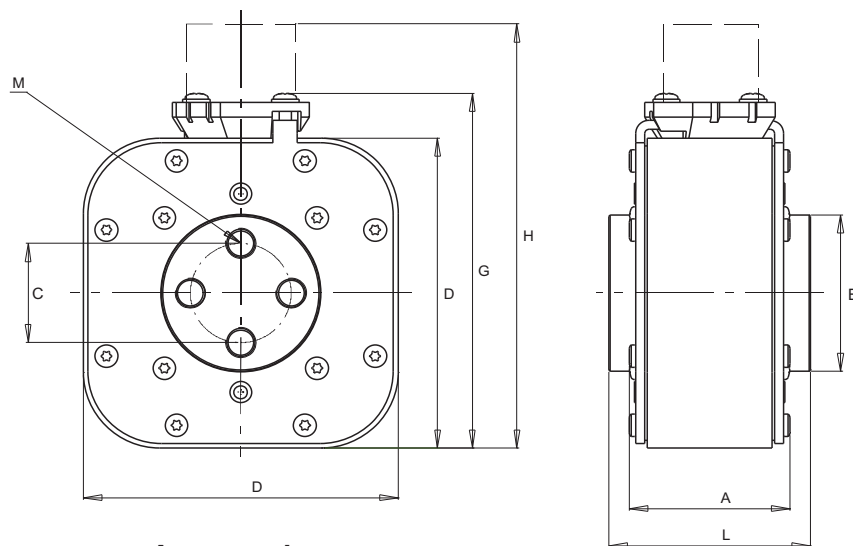
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URS	Rated Voltage	Rated Breaking Test Capacity	Class	Standard(s)
	690V _{AC} /400V _{AC}	120kA	aR	IEC 60269-4

Size SQB4 - DIN 43653

Rated Current I _n [A]	With fitting for microswitch Article Number	Rated Voltage[U] IEC 60269-4 [V]	Rated Voltage[U] UL 248-13 [V]	Power Loss (@ 0.8xI _n) [W]	Pre-arcing I ² t [A ² s]	Total I ² t @ Rated Voltage [A ² s]
1250	2069532.1250	690	—	145	125 000	760 000
1600	2069532.1600	690	—	151	300 000	1 800 000
1800	2069532.1800	690	—	156	419 000	2 500 000
2000	2069532.2000	690	—	162	596 000	3 600 000
2200	2069532.2200	690	—	165	859 000	5 200 000
2500	2069532.2500	690	—	170	1 190 000	7 200 000
3000	2069532.3000	690*	—	192	1 950 000	12 100 000
3500	2069532.3500	500**	—	244	3 140 000	18 200 000**
4000	2069532.4000	400**	—	254	4 640 000	21 600 000**
	Weight [kg / 1]	*Tested at 1.05U _n				**Tested at 1.1U _n
	1.9	**Tested at 1.1U _n				
	Units per Package					
	1					

2069532



	Dimensions [in / mm]
A	2.09 / 53
B	2.05 / 52
C	1.30 / 33
D	4.06 / 103
G	4.65 / 118
H	5.55 / 141
L	2.60 / 66
M	M10 - Thread Depth 0.43 / 11
Torque Max - 39Nm / 28.7lb•ft	

Press Pack Available Contact
SIBA

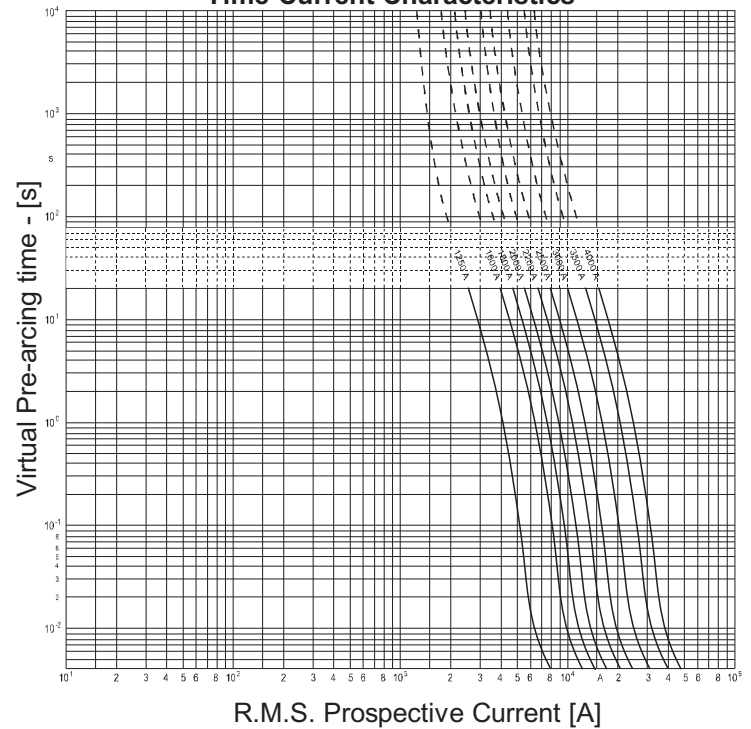
Accessories

 E309038			
Microswitch		Page	Page
2800104	Standard	448 - 449	
2801104	Low level		

URS**Rated Voltage**
690V_{AC}/400V_{AC}**Rated Breaking Test**
Capacity Voltage
120kA IEC - 1.1Un**Class**
aR**Standard(s)**
IEC 60269-4**Size SQB4 - DIN 43653**

Coefficients for Heavy Duty Applications

a	A2	B1	B2	Cf3
130	0.6	1.25	0.6	0.8

**Time-Current Characteristics**

URS



E180276

Rated Voltage

1250V_{AC}/1000V_{AC}1300V_{AC}/1200V_{AC}

Rated Breaking Test

Capacity

120kA

Voltage

IEC - 1.1Un

UL - 1.0Un

Class

aR

Standard(s)

UL 248-13

IEC 60269-4

VDE 0636- Part 40

Size SQB1 - North American

Rated Current I _n [A]	US-Long Long With fitting for microswitch		US-Threaded 5/16" UNC With fitting for microswitch		
	Article Number	UL rec	Article Number	UL rec	
50	2071832.50	✓	2076432.50	✓	
63	2071832.63	✓	2076432.63	✓	
80	2071832.80	✓	2076432.80	✓	
100	2071832.100	✓	2076432.100	✓	
125	2071832.125	✓	2076432.125	✓	
160	2071832.160	✓	2076432.160	✓	
200	2071832.200	✓	2076432.200	✓	
250	2071832.250	✓	2076432.250	✓	
315	2071832.315	✓	2076432.315	✓	
350	2071832.350	✓	2076432.350	✓	
400	2071832.400	✓	2076432.400	✓	
450	2071832.450	✓	2076432.450	✓	
500	2071832.500*	✓	2076432.500*	✓	
550	2071832.550*	✓	2076432.550*	✓	
630	2071832.630*	✓	2076432.630*	✓	
700	2071832.700**		20764 32.700**		

*Rated 1100V-IEC / 1200V-UL 248-13

**Rated 1000V-IEC

Weight [kg / 1]

0.54

0.54

0.51

0.51

Units per Package

3

3

3

3

Accessories

 E309038			
Microswitch		Page	Page
2800104	Standard	448 - 449	
2801104	Low level		

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E180276

Rated Voltage

1250V_{AC}/1000V_{AC}1300V_{AC}/1200V_{AC}

Rated Breaking Test

Capacity

120kA

Voltage

IEC - 1.1Un

UL - 1.0Un

Class

aR

Standard(s)

UL 248-13

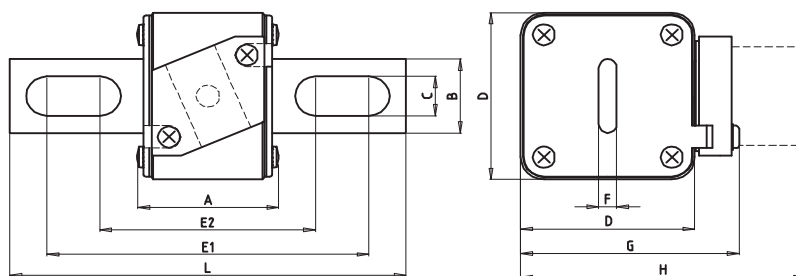
IEC 60269-4

VDE 0636- Part 40

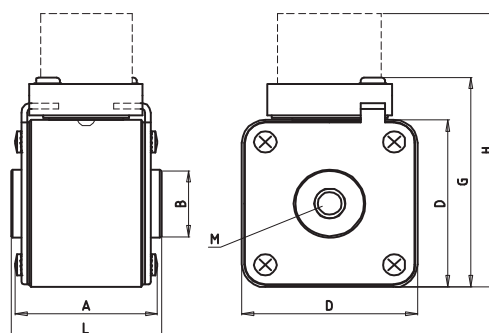


Size SQB1 - North American

	US-Long Long With fitting for microswitch	US-Threaded 5/16" UNC With fitting for microswitch	
	2071832	2076432	
	Dimensions [in / mm]		
A	2.78 / 70.5	2.78 / 70.5	
B	1.02 / 26	0.94 / 24	
C	0.55 / 14		
D	2.00 / 51	2.00 / 51	
E ₁	5.20 / 132		
E ₂	3.78 / 96		
F	0.24 / 6		
G	2.60 / 66	2.60 / 66	
H	3.50 / 89	3.50 / 89	
L	6.18 / 157	2.90 / 73.5	
M		5/16-UNC - Tread Depth 0.43 / 11	
Torque Max		22N•m / 16.2lb•ft	



2071832



2076432

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E180276

Rated Voltage

1250V_{AC}/1000V_{AC}1300V_{AC}/1200V_{AC}

Rated Breaking Test

Capacity

120kA

Voltage

IEC - 1.1Un

UL - 1.0Un

Class

aR

Standard(s)

UL 248-13

IEC 60269-4

VDE 0636- Part 40



Size SQB1 - DIN 43653

Rated Current I_n [A]	110mm		M8		
	With fitting for microswitch		With fitting for microswitch		
	Article Number	UL rec	Article Number	UL rec	
50	20 715 32.50	✓	20 761 32.50	✓	
63	20 715 32.63	✓	20 761 32.63	✓	
80	20 715 32.80	✓	20 761 32.80	✓	
100	20 715 32.100	✓	20 761 32.100	✓	
125	20 715 32.125	✓	20 761 32.125	✓	
160	20 715 32.160	✓	20 761 32.160	✓	
200	20 715 32.200	✓	20 761 32.200	✓	
250	20 715 32.250	✓	20 761 32.250	✓	
315	20 715 32.315	✓	20 761 32.315	✓	
350	20 715 32.350	✓	20 761 32.350	✓	
400	20 715 32.400	✓	20 761 32.400	✓	
450	20 715 32.450	✓	20 761 32.450	✓	
500	20 715 32.500*	✓	20 761 32.500*	✓	
550	20 715 32.550*	✓	20 761 32.550*	✓	
630	20 715 32.630*	✓	20 761 32.630*	✓	
700	20 715 32.700**		20 761 32.700**		
	*Rated 1100V-IEC / 1200V-UL 248-13				
	**Rated 1000V-IEC				
	Weight [kg / 1]				
	0.54	0.54	0.51	0.51	
	Units per Package				
	3	3	3	3	

Accessories

 E309038		 E309038	
Fuse Base	Page	Microswitch	Page
2132301	446 - 447	2800104	448 - 449
2132302		2801104	

URS



E180276

Rated Voltage
 $1250V_{AC}/1000V_{AC}$
 $1300V_{AC}/1200V_{AC}$

Rated Breaking Test
 Capacity

120kA

Voltage
 IEC - 1.1Un
 UL - 1.0Un

Class
 aR

Standard(s)

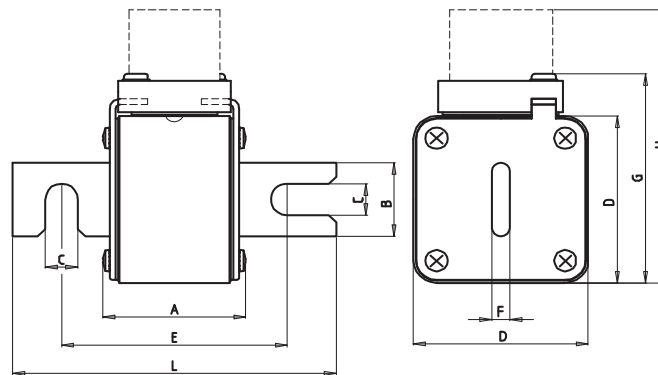
UL 248-13

IEC 60269-4

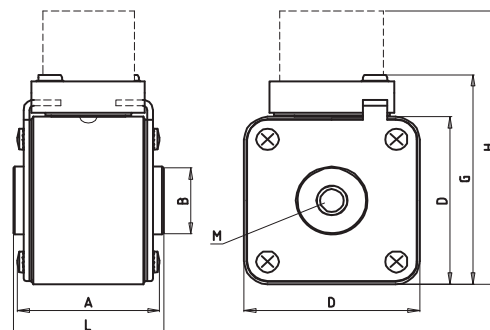
VDE 0636- Part 40

Size SQB1 - DIN 43653

	110mm With fitting for microswitch	M8 With fitting for microswitch	
	2071532	2076132	
	Dimensions [in / mm]		
A	2.78 / 70.5	2.78 / 70.5	
B	1.02 / 26	0.94 / 24	
C	0.43 / 11		
D	2.00 / 51	2.00 / 51	
E	4.17 / 106		
F	0.24 / 6		
G	2.60 / 66	2.60 / 66	
H	3.50 / 89	3.50 / 89	
L	5.43 / 138	2.90 / 73.5	
M		M8 - Thread Depth 0.43 / 11	
Torque Max		22N•m / 16.2lb•ft	



2071532



2076132

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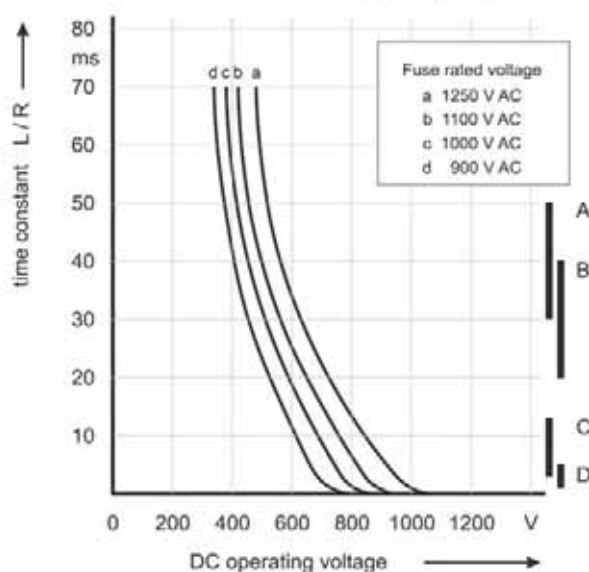
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www.siba-fuses.us

URS	E180276	Rated Voltage	Rated Breaking Test Capacity	Class	Standard(s)
		1250V _{AC} /1000V _{AC} 1300V _{AC} /1200V _{AC}	120kA	aR	UL 248-13 IEC 60269-4 VDE 0636- Part 40
Size SQB1 - North American/DIN					

Rated Current I_n [A]	Rated Voltage[U _n] IEC 60269-4 [V]	Rated Voltage[U _n] UL 248-13 [V]	Power Loss [W]	Pre-arcing I^2t [W]	Total I^2t @ 1000V _{AC} [A ² s]	
50	1 250	1 300	29	130	730	
63	1 250	1 300	32	250	1 400	
80	1 250	1 300	35	410	2 300	
100	1 250	1 300	38	930	5 200	
125	1 250	1 300	41	1 400	7 800	
160	1 250	1 300	45	2 500	14 000	
200	1 250	1 300	49	4 600	25 000	
250	1 250	1 300	58	8 400	46 000	
280	1 250	1 300	60	12 500	64 000	
315	1 250	1 300	67	15 000	81 000	
350	1 250	1 300	70	22 000	120 000	
400	1 250	1 300	75	36 000	200 000	
450	1 250	1 300	80	44 000	250 000	
500	1 100	1 200	87	66 000	340 000	
550	1 100	1 200	94	83 000	430 000	
630	1 100	1 200	99	126 000	670 000	
700	1 000	—	105	181 000	962 000	

DC Application



The use under DC-Voltage needs to consider the following

- the DC-Circuit voltage
- the time constant
- the smallest fault current

typical applications

- A Traction
- B DC-Drives
- C Battery circuits
- D DC-Link, VSI, USV, PV

As a first assumption the minimum fault current should be 10 times the planned fuse rating. If smaller fault currents are expected our application engineers should be consulted.

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URS

E180276

Rated Voltage

1250V_{AC}/1000V_{AC}1300V_{AC}/1200V_{AC}

Rated Breaking Test

Capacity

120kA

Voltage

IEC - 1.1Un

UL - 1.0Un

Class

aR

Standard(s)

UL 248-13

IEC 60269-4

VDE 0636- Part 40

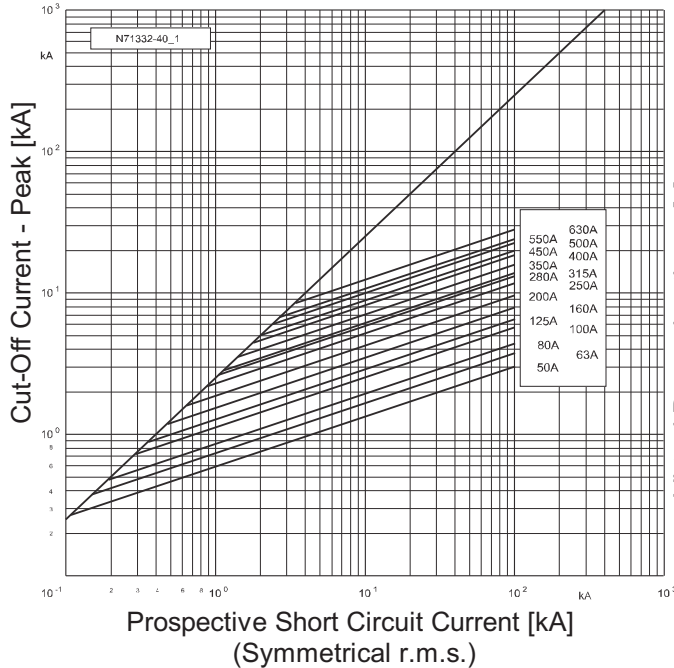


Size SQB1 - North American/DIN

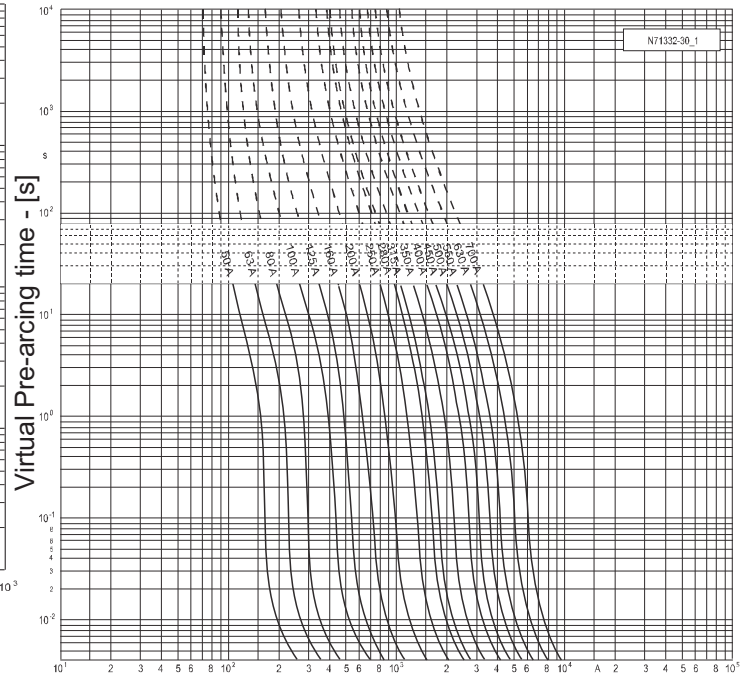
Coefficients for Heavy Duty Applications

a	A2	B1	B2	Cf3	N
130	0.6	1.25	0.6	0.8	1.5

Cut-Off current Characteristics

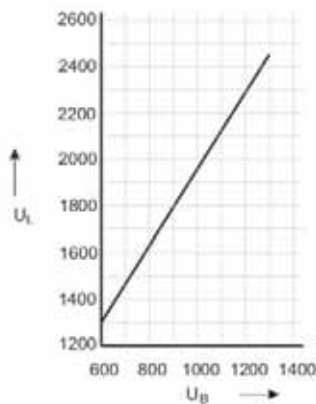


Time-Current Characteristics

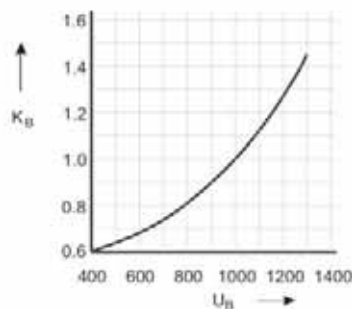


R.M.S. Prospective Current [A]

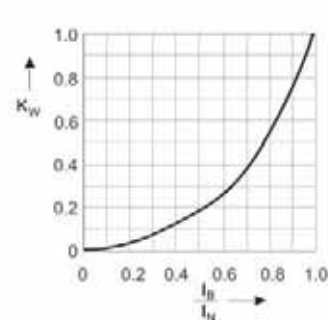
Arc voltage diagram



U_L = arc voltage
U_B = operating voltage

Reduction factor total I²t-value

Reduction factor for power loss



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URS

E180276

Rated Voltage

1250V_{AC}/1000V_{AC}1300V_{AC}/1200V_{AC}

Rated Breaking Test

Capacity

120kA

Voltage

IEC - 1.1Un

UL - 1.0Un

Class

aR

Standard(s)

UL 248-13

IEC 60269-4

VDE 0636- Part 40



Size SQB2 - North American

Rated Current I_n [A]	US-Long Long With fitting for microswitch		US-Threaded 3/8" UNC With fitting for microswitch		
	Article Number	UL rec	Article Number	UL rec	
250	2072832.250	✓	2077432.250	✓	
280	2072832.280	✓	2077432.280	✓	
315	2072832.315	✓	2077432.315	✓	
350	2072832.350	✓	2077432.350	✓	
400	2072832.400	✓	2077432.400	✓	
450	2072832.450	✓	2077432.450	✓	
500	2072832.500	✓	2077432.500	✓	
550	2072832.550	✓	2077432.550	✓	
630	2072832.630	✓	2077432.630	✓	
700	2072832.700*	✓	2077432.700*	✓	
800	2072832.800**	✓	2077432.800**	✓	
*Rated 1100V-IEC / 1200V-UL 248-13					
**Rated 1100V-IEC / 1100V-UL 248-13					
Weight [kg / 1]					
0.75		0.75	0.73	0.73	
Units per Package					
3		3	3	3	

Accessories

 E309038				
Microswitch		Page	Page	
2800104	Standard	448 - 449		
2801104	Low level			

URS



E180276

Rated Voltage

1250V_{AC}/1000V_{AC}1300V_{AC}/1200V_{AC}

Rated Breaking Test

Capacity

120kA

Voltage

IEC - 1.1Un

UL - 1.0Un

Class

aR

Standard(s)

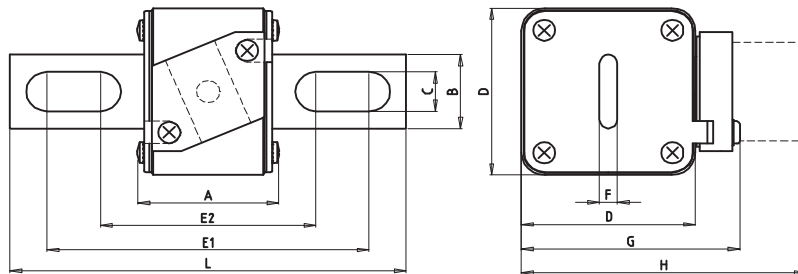
UL 248-13

IEC 60269-4

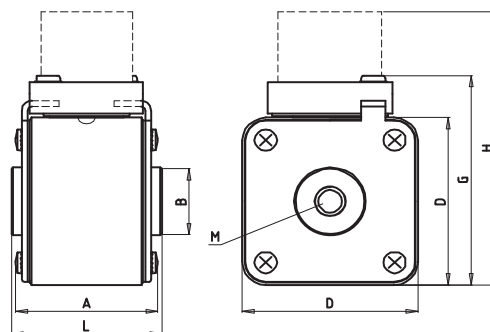
VDE 0636- Part 40

Size SQB2 - North American

	US-Long Long With fitting for microswitch	US-Threaded 3/8" UNC With fitting for microswitch	
	2072832	2077432	
Dimensions [in / mm]			
A	2.78 / 70.5	2.78 / 70.5	
B	1.02 / 26	0.94 / 24	
C	0.55 / 14		
D	2.36 / 60	2.36 / 60	
E ₁	5.20 / 132		
E ₂	3.78 / 96		
F	0.24 / 6		
G	2.95 / 75	2.95 / 75	
H	3.86 / 98	3.86 / 98	
L	6.18 / 157	2.90 / 73.5	
M		3/8-UNC - Thread Depth 0.43 / 11	
Torque Max		39N•m / 28.7lb•ft	



2072832



2077432

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URS

E180276

Rated Voltage

1250V_{AC}/1000V_{AC}1300V_{AC}/1200V_{AC}

Rated Breaking Test

Capacity

120kA

Voltage

IEC - 1.1Un

UL - 1.0Un

Class

aR

Standard(s)

UL 248-13

IEC 60269-4

VDE 0636- Part 40



Size SQB2 - DIN 43653

Rated Current I_n [A]	110mm With fitting for microswitch		M10 With fitting for microswitch		
	Article Number	UL rec	Article Number	UL rec	
250	2072532.250	✓	2077132.250	✓	
280	2072532.280	✓	2077132.280	✓	
315	2072532.315	✓	2077132.315	✓	
350	2072532.350	✓	2077132.350	✓	
400	2072532.400	✓	2077132.400	✓	
450	2072532.450	✓	2077132.450	✓	
500	2072532.500	✓	2077132.500	✓	
550	2072532.550	✓	2077132.550	✓	
630	2072532.630	✓	2077132.630	✓	
700	2072532.700*	✓	2077132.700*	✓	
800	2072532.800**	✓	2077132.800**	✓	
*Rated 1100V-IEC / 1200V-UL 248-13					
**Rated 1100V-IEC / 1100V-UL 248-13					
Weight [kg / 1]					
0.75		0.75	0.73	0.73	
Units per Package					
3		3	3	3	

Accessories

 E309038		 E309038	
Fuse Base		Page	Microswitch
2132301	110mm center (1400V) to 630A	446 - 447	2800104
2132302	110mm center (1400V) to 1250A		2801104
			Standard
			Low level
			Page
			448 - 449

URS

E180276

Rated Voltage

1250V_{AC}/1000V_{AC}1300V_{AC}/1200V_{AC}

Rated Breaking Test

Capacity

120kA

Voltage

IEC - 1.1Un

UL - 1.0Un

Class

aR

Standard(s)

UL 248-13

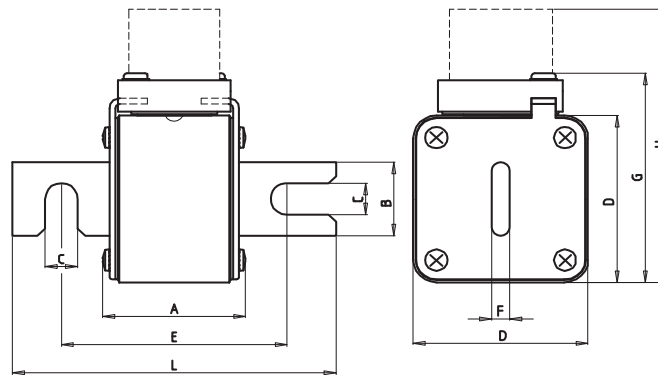
IEC 60269-4

VDE 0636- Part 40

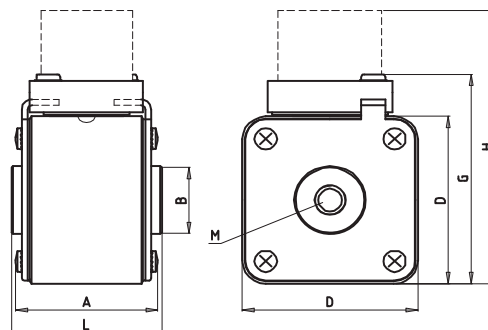


Size SQB2 - DIN 43653

	110mm With fitting for microswitch	M10 With fitting for microswitch	
	2072532	2077132	
	Dimensions [in / mm]		
A	2.78 / 70.5	2.78 / 70.5	
B	1.02 / 26	0.94 / 24	
C	0.43 / 11		
D	2.36 / 60	2.36 / 60	
E	4.17 / 106		
F	0.24 / 6		
G	2.95 / 75	2.95 / 75	
H	3.86 / 98	3.86 / 98	
L	5.43 / 138		
M		M10 - Thread Depth 0.43 / 11	
Torque Max		39N•m / 28.7lb•ft	



2072532



2077132

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URS

E180276

Rated Voltage

1250V_{AC}/1000V_{AC}1300V_{AC}/1200V_{AC}

Rated Breaking Test

Capacity

120kA

Voltage

IEC - 1.1Un

UL - 1.0Un

Class

aR

Standard(s)

UL 248-13

IEC 60269-4

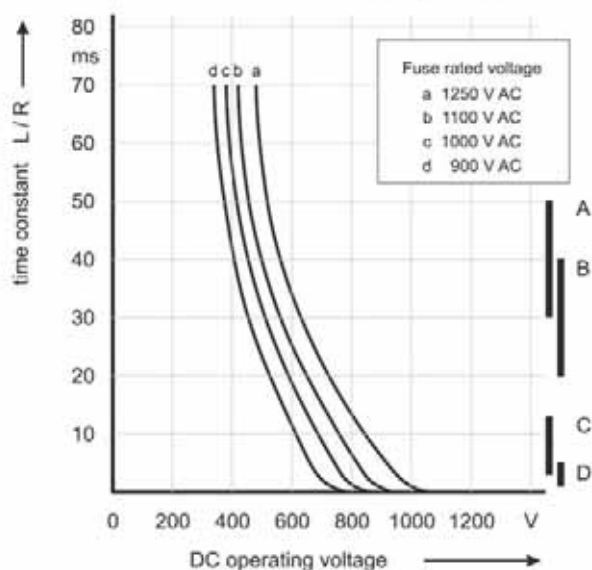
VDE 0636- Part 40



Size SQB2 - North American/DIN

Rated Current I_n [A]	Rated Voltage[U _n] IEC 60269-4 [V]	Rated Voltage[U _n] UL 248-13 [V]	Power Loss [W]	Pre-arcing I^2t [A ² s]	Total I^2t @ 1000V _{AC} [A ² s]	
250	1 250	1 300	55	8 200	45 000	
280	1 250	1 300	59	9 900	56 000	
315	1 250	1 300	66	14 000	78 000	
350	1 250	1 300	71	20 000	110 000	
400	1 250	1 300	75	31 000	170 000	
450	1 250	1 300	80	42 000	240 000	
500	1 250	1 300	90	56 000	310 000	
550	1 250	1 300	105	71 000	350 000	
630	1 250	1 300	110	105 000	540 000	
700	1 100	1 200	115	148 000	710 000	
800	1 100	1 100	123	225 000	1 180 000	

DC Application



The use under DC-Voltage needs to consider the following

- the DC-Circuit voltage
- the time constant
- the smallest fault current

typical applications

- A Traction
- B DC-Drives
- C Battery circuits
- D DC-Link, VSI, USV, PV

As a first assumption the minimum fault current should be 10 times the planned fuse rating. If smaller fault currents are expected our application engineers should be consulted.

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URS

E180276

Rated Voltage

1250V_{AC}/1000V_{AC}1300V_{AC}/1200V_{AC}

Rated Breaking Test

Capacity

120kA

Voltage

IEC - 1.1Un

UL - 1.0Un

Class

aR

Standard(s)

UL 248-13

IEC 60269-4

VDE 0636- Part 40

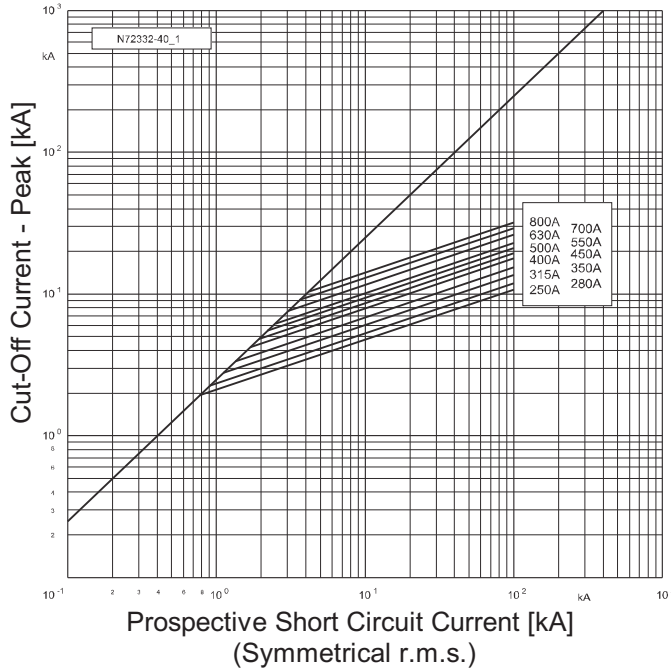


Size SQB2 - North American/DIN

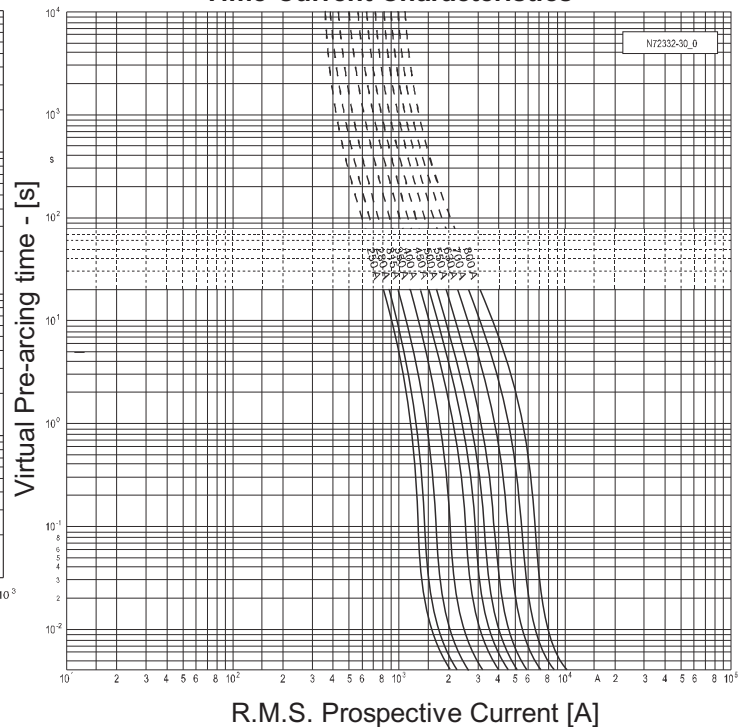
Coefficients for Heavy Duty Applications

a	A2	B1	B2	Cf3	N
130	0.6	1.25	0.6	0.8	1.5

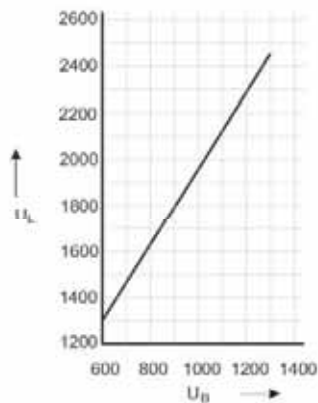
Cut-Off current Characteristics



Time-Current Characteristics

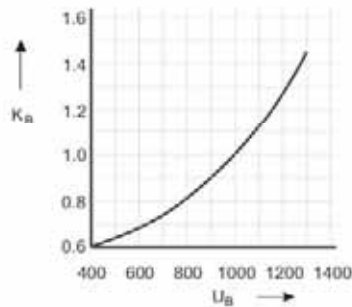


Arc voltage diagram

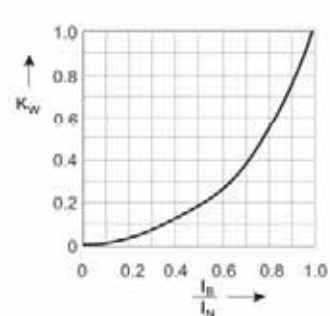


U_L = arc voltage
 U_B = operating voltage

Reduction factor total Pt-value



Reduction factor for power loss



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URS	Rated Voltage	Rated Breaking Test Capacity	Class	Standard(s)
	1250V _{AC} /1100V _{AC}	120kA	aR	IEC 60269-4 VDE 0636- Part 40

Size SQB2x2 - DIN 43653

Rated Current I_n [A]	With fitting for microswitch Article Number	Rated Voltage[U] IEC 60269-4 [V]	Rated Voltage[U] UL 248-13 [V]	Power Loss [W]	Pre-arcing I^2t [A ² s]	Total I^2t @ 1000V _{AC} [A ² s]
630	2077832.630	1 250	—	139	56 000	312 000
700	2077832.700	1 250	—	149	80 000	440 000
800	2077832.800	1 250	—	158	124 000	680 000
900	2077832.900	1 250	—	168	168 000	960 000
1000	2077832.1000	1 250	—	189	224 000	1 240 000
1100	2077832.1100	1 250	—	221	284 000	1 400 000
1250	2077832.1250	1 250	—	230	420 000	2 160 000
1400	2077832.1400	1 100	—	242	592 000	2 840 000
1600	2077832.1600	1 100	—	258	900 000	4 720 000

Weight [kg / 1]

1.02

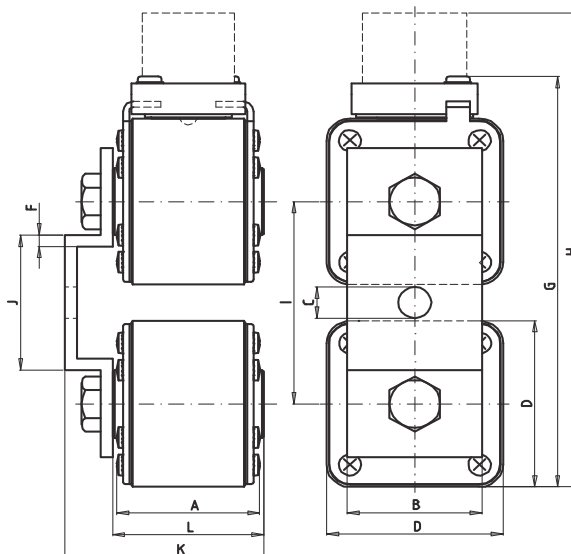
Units per Package

1

For DC Application see pages 428

2077832

	Dimensions [in / mm]
A	2.78 / 70.5
B	1.77 / 45
C	0.43 / 11
D	2.36 / 60
F	0.16 / 4
G	5.83 / 148
H	6.69 / 170
I	2.83 / 72
J	1.89 / 48
K	3.54 / 90
L	2.89 / 73.5
M	M10 - Thread Depth 0.43 / 11
Torque Max - 39Nm / 28.7lb•ft	

**Accessories**

 E309038			
Microswitch		Page	Page
2800104	Standard	448 - 449	
2801104	Low level		

URS

Rated Voltage
1250V_{AC}/1100V_{AC}

Rated Breaking Test
Capacity Voltage
120kA IEC - 1.1Un

Class
aR

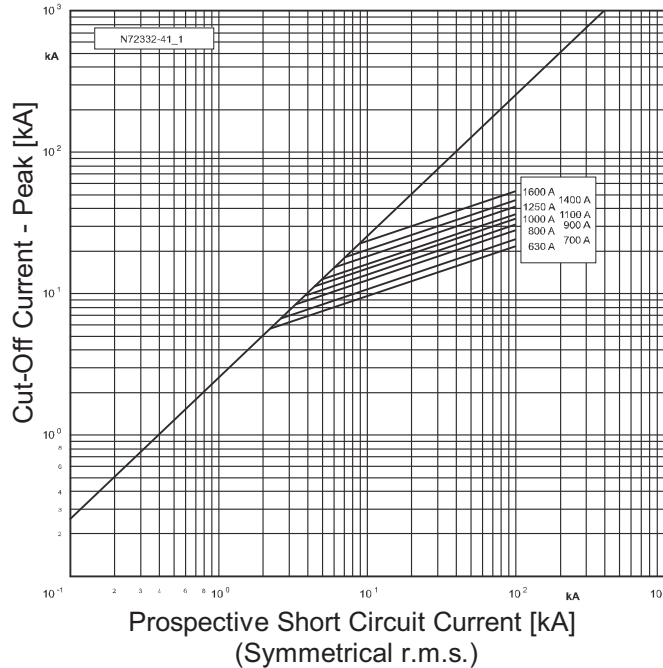
Standard(s)
IEC 60269-4
VDE 0636- Part 40

Size SQB2x2 - DIN 43653

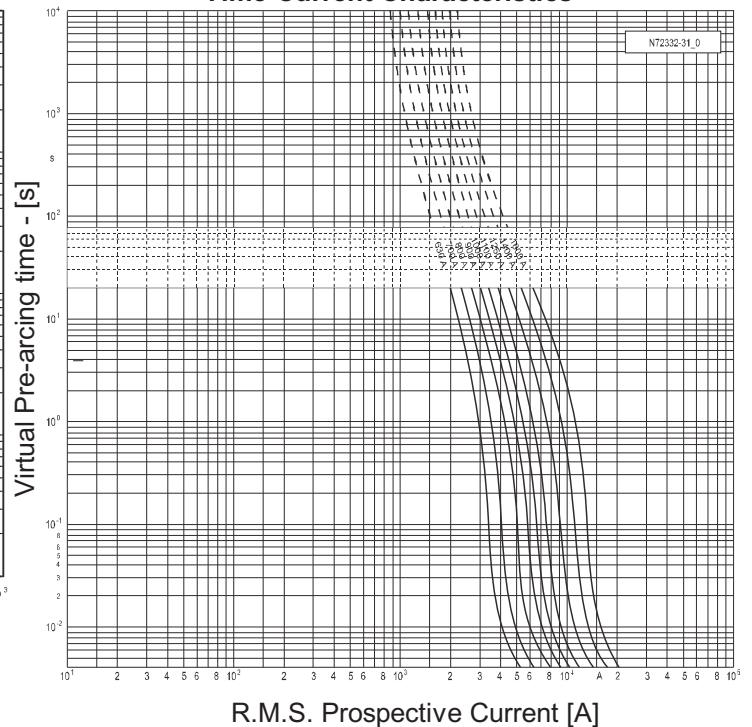
Coefficients for Heavy Duty Applications

a	A2	B1	B2	Cf3	N
130	0.6	1.25	0.6	0.8	1.5

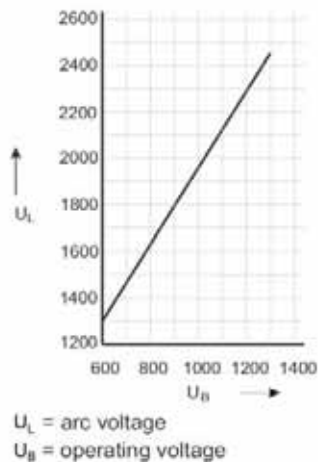
Cut-Off current Characteristics



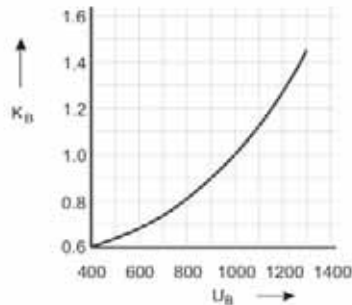
Time-Current Characteristics



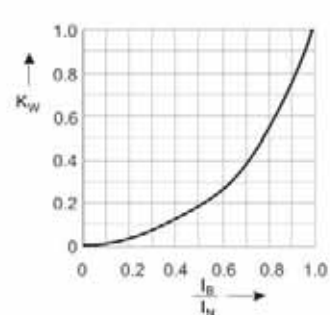
Arc voltage diagram



Reduction factor total Pt-value



Reduction factor for power loss



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URS



E180276

Rated Voltage

1250V_{AC}/900V_{AC}1300V_{AC}/1000V_{AC}

Rated Breaking Test

Capacity

120kA

Voltage

IEC - 1.1Un

UL - 1.0Un

Class

aR

Standard(s)

UL 248-13

IEC 60269-4

VDE 0636- Part 40

Size SQB3 - North American

Rated Current I_n [A]	US-Long Long With fitting for microswitch		US-Threaded 1/2" UNC With fitting for microswitch		
	Article Number	UL rec	Article Number	UL rec	
315	2073832.315	✓	2078432.315	✓	
350	2073832.350	✓	2078432.350	✓	
400	2073832.400	✓	2078432.400	✓	
450	2073832.450	✓	2078432.450	✓	
500	2073832.500	✓	2078432.500	✓	
550	2073832.550	✓	2078432.550	✓	
630	2073832.630	✓	2078432.630	✓	
700	2073832.700	✓	2078432.700	✓	
800	2073832.800	✓	2078432.800	✓	
900	2073832.900*	✓	20784 32.900*	✓	
1000	2073832.1000**	✓	2078432.1000**	✓	
1100	2073832.1100**	✓	2078432.1100**	✓	
1250	2073832.1250***		2078432.1250***		
1400	2073832.1400***		2078432.1400***		
*Rated 1200V-IEC / 1300V-UL 248-13 **Rated 1000V-IEC / 1000V-UL 248-13 ***Rated 900V-IEC					
Weight [kg / 1]					
1.04		1.04	1.02	1.02	
Units per Package					
3		3	3	3	

Accessories

 E309038				
Microswitch		Page		
2800104	Standard	448 - 449		
2801104	Low level			

URS



E180276

Rated Voltage
 $1250V_{AC}/900V_{AC}$
 $1300V_{AC}/1000V_{AC}$

Rated Breaking Test

Capacity

120kA

Voltage

IEC - 1.1Un

UL - 1.0Un

Class

aR

Standard(s)

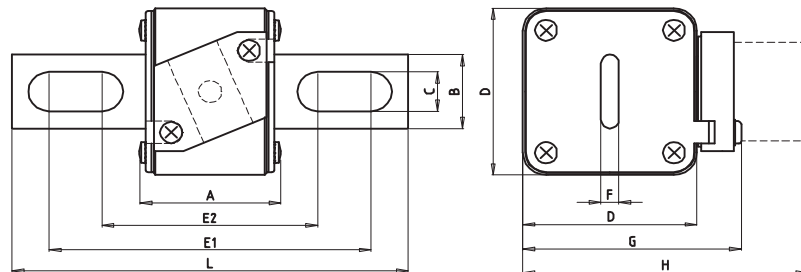
UL 248-13

IEC 60269-4

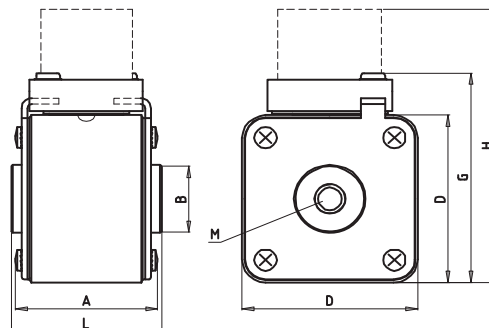
VDE 0636- Part 40

Size SQB3 - North American

	US-Long Long With fitting for microswitch	US-Threaded 1/2" UNC With fitting for microswitch	
	2073832	2078432	
Dimensions [in / mm]			
A	2.83 / 72	2.83 / 72	
B	1.38 / 35	1.10 / 28	
C	0.63 / 16		
D	2.87 / 73	2.87 / 73	
E ₁	5.20 / 132		
E ₂	3.86 / 98		
F	0.24 / 6		
G	3.46 / 88	3.43 / 88	
H	4.37 / 111	4.37 / 111	
L	6.22 / 158	2.90 / 73.5	
M		1/2-UNC - Thread Depth 0.47 / 12	
Torque Max		52N•m / 38.3lb•ft	



2073832



2078432

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URS



E180276

Rated Voltage

1250V_{AC}/900V_{AC}1300V_{AC}/1000V_{AC}

Rated Breaking Test

Capacity

120kA

Voltage

IEC - 1.1Un

UL - 1.0Un

aR

Standard(s)

UL 248-13

IEC 60269-4

VDE 0636- Part 40

Size SQB3 - DIN 43653

Rated Current I _n [A]	110mm With fitting for microswitch		M12 With fitting for microswitch		
	Article Number	UL rec	Article Number	UL rec	
315	2073532.315	✓	2078132.315	✓	
350	2073532.350	✓	2078132.350	✓	
400	2073532.400	✓	2078132.400	✓	
450	2073532.450	✓	2078132.450	✓	
500	2073532.500	✓	2078132.500	✓	
550	2073532.550	✓	2078132.550	✓	
630	2073532.630	✓	2078132.630	✓	
700	2073532.700	✓	2078132.700	✓	
800	2073532.800	✓	2078132.800	✓	
900	2073532.900*	✓	2078132.900*	✓	
1000	2073532.1000**	✓	2078132.1000**	✓	
1100	2073532.1100**	✓	2078132.1100**	✓	
1250	2073532.1250***		2078132.1250***		
1400	2073532.1400***		2078132.1400***		
*Rated 1200V-IEC / 1300V-UL 248-13 **Rated 1000V-IEC / 1000V-UL 248-13 ***Rated 900V-IEC Weight [kg / 1]					
1.04		1.04	1.02	1.02	
Units per Package					
3		3	3	3	

Accessories

E309038		E309038	
Fuse Base		Page	Microswitch
2132301	110mm center (1400V) to 630A	446 - 447	2800104 Standard
2132302	110mm center (1400V) to 1250A		2801104 Low level
			Page
			448 - 449

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URS

E180276

Rated Voltage

1250V_{AC}/900V_{AC}1300V_{AC}/1000V_{AC}

Rated Breaking Test

Capacity

120kA

Voltage

IEC - 1.1Un

UL - 1.0Un

Class

aR

Standard(s)

UL 248-13

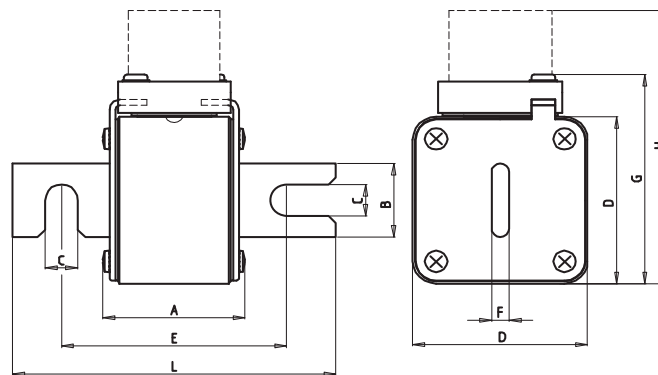
IEC 60269-4

VDE 0636- Part 40

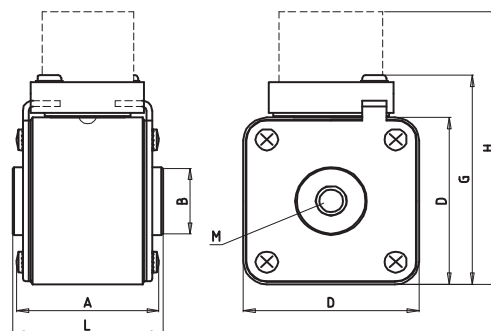


Size SQB3 - DIN 43653

	110mm With fitting for microswitch	M12 With fitting for microswitch	
	2073532	2078132	
	Dimensions [in / mm]		
A	2.83 / 72	2.83 / 72	
B	1.38 / 35	1.10 / 28	
C	0.43 / 11		
D	2.87 / 73	2.87 / 73	
E	4.17 / 106		
F	0.24 / 6		
G	3.46 / 88	3.46 / 88	
H	4.37 / 111	4.37 / 111	
L	5.43 / 138	2.90 / 73.5	
M		M12 - Thread Depth 0.47 / 12	
Torque Max		52N•m / 38.3lb•ft	



2073532



2078132

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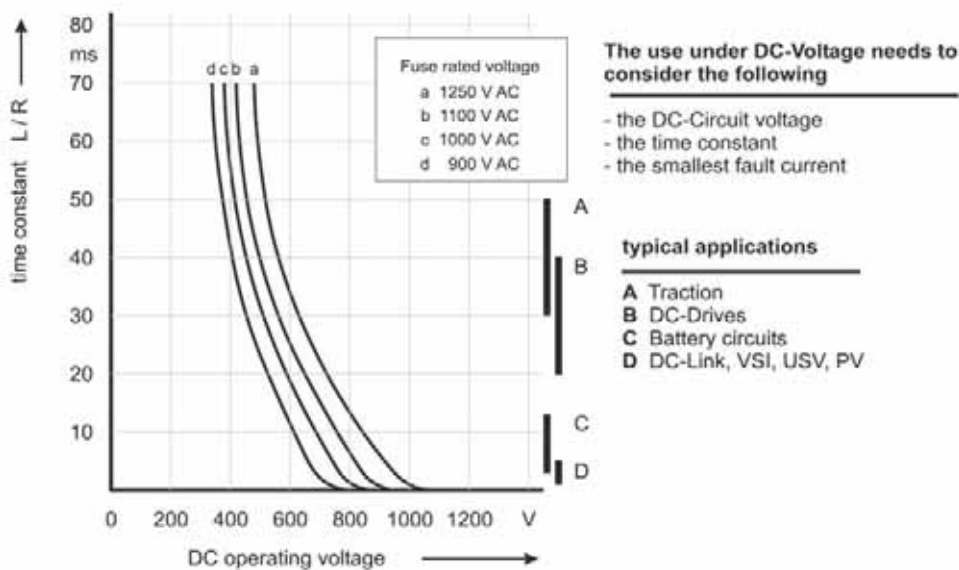
e-mail: info@sibafuse.com

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URS	E180276	Rated Voltage	Rated Breaking Test Capacity	Class	Standard(s)
UL		1250V _{AC} /900V _{AC}	120kA	aR	UL 248-13
US		1300V _{AC} /1000V _{AC}			IEC 60269-4
					VDE 0636- Part 40
Size SQB3 - North American/DIN					

Rated Current I_n [A]	Rated Voltage[U _n] IEC 60269-4 [V]	Rated Voltage[U _n] UL 248-13 [V]	Power Loss [W]	Pre-arcing I^2t [A ² s]	Total I^2t @ 1000V _{AC} [A ² s]	
315	1 250	1 300	83	11 000	60 000	
350	1 250	1 300	85	15 000	90 000	
400	1 250	1 300	92	22 000	130 000	
450	1 250	1 300	99	33 000	190 000	
500	1 250	1 300	110	42 000	230 000	
550	1 250	1 300	115	56 000	320 000	
630	1 250	1 300	120	83 000	480 000	
700	1 250	1 300	131	113 000	640 000	
800	1 250	1 300	135	201 000	1 070 000	
900	1 200	1 300	140	236 000	1 300 000	
1000	1 000	1 000	150	350 000	1 900 000	
1100	1 000	1 000	174	443 000	2 400 000	
1250	900	—	198	652 000	3 300 000	
1400	900	—	210	852 000	3 900 000	

DC Application



As a first assumption the minimum fault current should be 10 times the planned fuse rating. If smaller fault currents are expected our application engineers should be consulted.

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URS



Size SQB3 - North American/DIN

E180276

Rated Voltage

1250V_{AC}/900V_{AC}1300V_{AC}/1000V_{AC}

Rated Breaking Test

Capacity

120kA

Voltage

IEC - 1.1Un

UL - 1.0Un

Class

aR

Standard(s)

UL 248-13

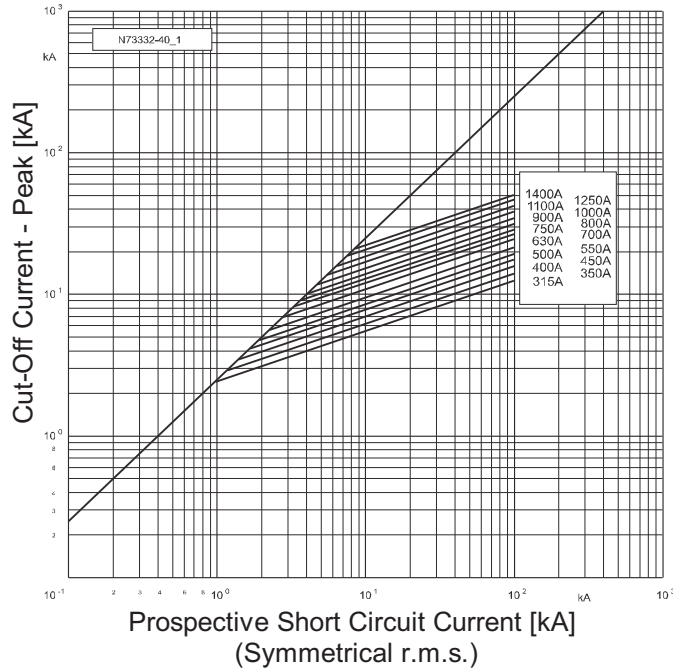
IEC 60269-4

VDE 0636- Part 40

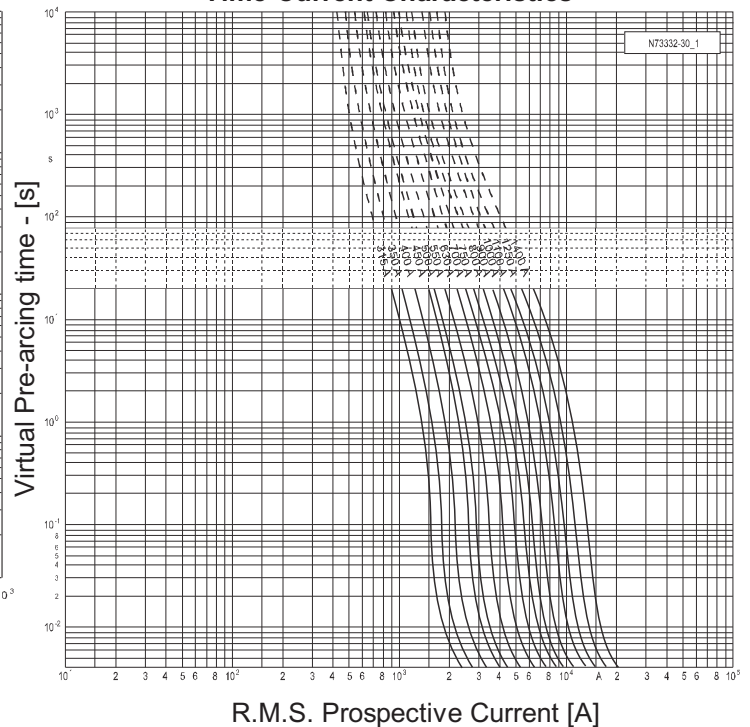
Coefficients for Heavy Duty Applications

a	A2	B1	B2	Cf3	N
130	0.6	1.25	0.6	0.8	1.5

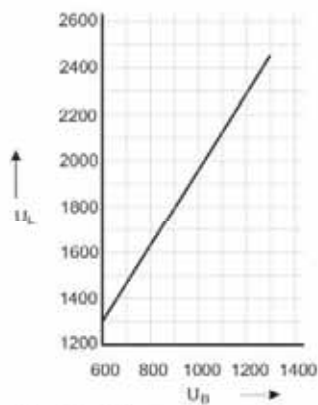
Cut-Off current Characteristics



Time-Current Characteristics

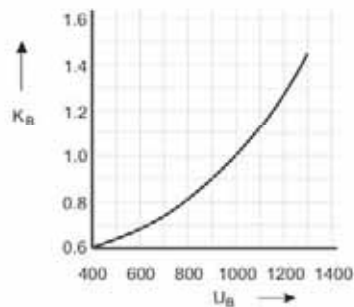


Arc voltage diagram

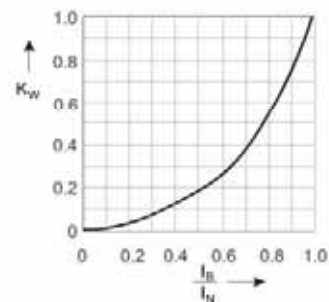


U_L = arc voltage
 U_B = operating voltage

Reduction factor total PI-value



Reduction factor for power loss



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URS	Rated Voltage 1250V _{AC} /900V _{AC}	Rated Breaking Test Capacity 120kA	Class aR	Standard(s) IEC 60269-4 VDE 0636- Part 40
		Voltage Un		

Size SQB3-70 - DIN 43653

Rated Current I_n [A]	With fitting for microswitch Article Number	Rated Voltage[U] IEC 60269-4 [V]	Rated Voltage[U] UL 248-13 [V]	Power Loss (@ 0.8xI _n) [W]	Pre-arcing I ² t [A ² s]	Total I ² t @ rated voltage [A ² s]
1000	2078152.1000	1 250	—	90	346 000	1 400 000
1100	2078152.1100	1 250	—	99	486 000	1 950 000
1250	2078152.1250	1 250	—	109	678 000	2 700 000
1400	2078152.1400	1 000	—	118	903 000	3 600 000
1500	2078152.1500	900	—	128	1 126 000	4 500 000
1600	2078152.1600	900	—	137	1 374 000	5 500 000

Weight [kg / 1]

1.03

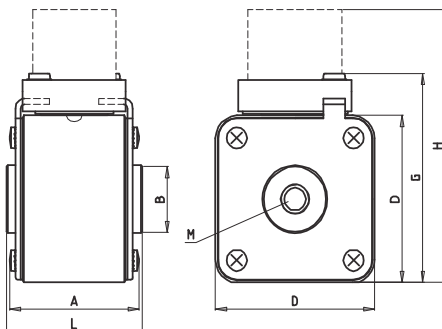
Units per Package

2

For DC Application see pages 436

2078152

Dimensions [in / mm]	
A	3.23 / 82
B	1.10 / 28
D	2.87 / 73
G	3.46 / 88
H	4.37 / 111
L	3.58 / 91
M	M12 - Thread Depth 0.47 / 12
Torque Max - 52N•m / 38.3lb•ft	

**Accessories**

 E309038				
Microswitch		Page	Page	
2800104	Standard	448 - 449		
2801104	Low level			

URS

Rated Voltage
1250V_{AC}/900V_{AC}

Rated Breaking Test
Capacity
120kA
Voltage
Un

Class
aR

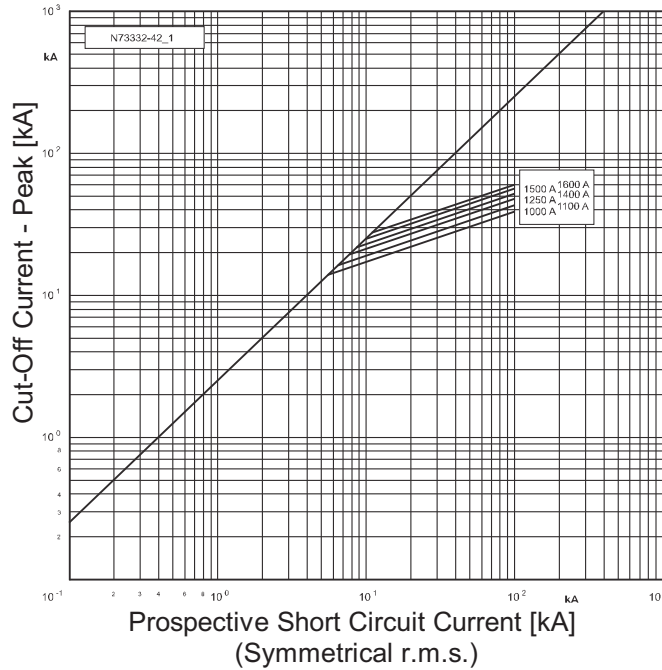
Standard(s)
IEC 60269-4
VDE 0636- Part 40

Size SQB3-70 - DIN 43653

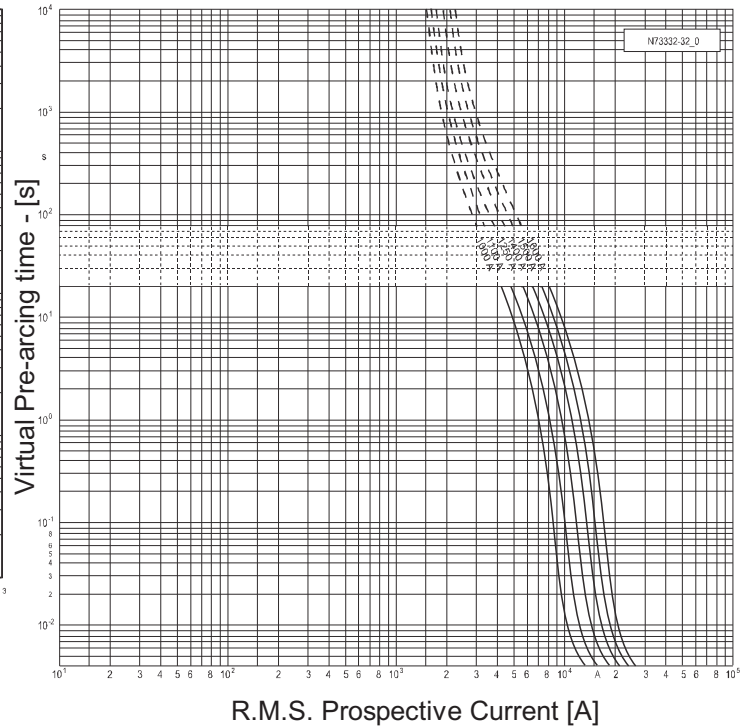
Coefficients for Heavy Duty Applications

a	A2	B1	B2	Cf3	N
130	0.6	1.25	0.6	0.8	1.5

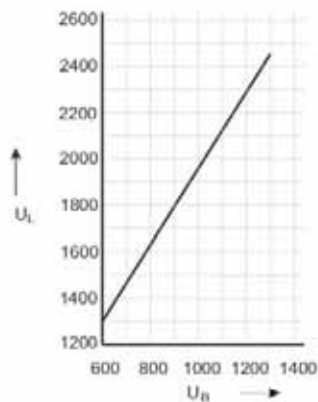
Cut-Off current Characteristics



Time-Current Characteristics

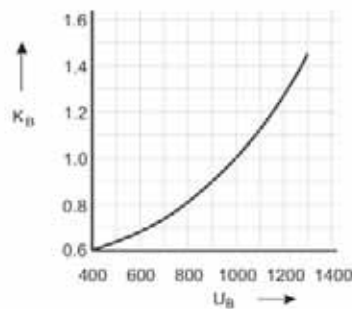


Arc voltage diagram

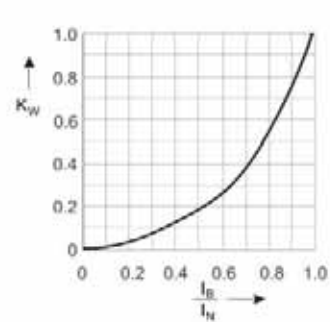


U_L = arc voltage
 U_B = operating voltage

Reduction factor total Pt-value



Reduction factor for power loss



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URS

Rated Voltage
1250V_{AC}/850V_{AC}

Rated Breaking Test
Capacity
120kA

Class
aR

Standard(s)
IEC 60269-4
VDE 0636- Part 40

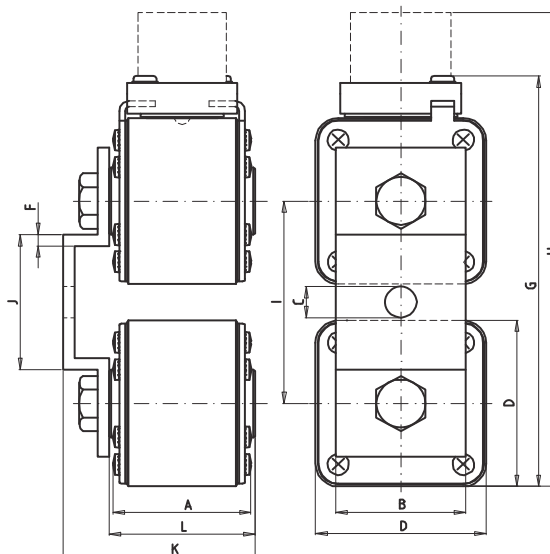
Size SQB3x2 - DIN 43653

Rated Current I_n [A]	With fitting for microswitch Article Number	Rated Voltage[U] IEC 60269-4 [V]	Rated Voltage[U] UL 248-13 [V]	Power Loss [W]	Pre-arcing I^2t [A ² s]	Total I^2t @ 1000V _{AC} [A ² s]
800	2078832.800	1 250	—	193	88 000	520 000
900	2078832.900	1 250	—	208	132 000	760 000
1000	2078832.1000	1 250	—	231	168 000	920 000
1250	2078832.1250	1 250	—	252	332 000	1 920 000
1400	2078832.1400	1 250	—	275	452 000	2 560 000
1600	2078832.1600	1 250	—	284	804 000	4 280 000
1800	2078832.1800	1 200	—	294	944 000	5 200 000
2000	2078832.2000	1 000	—	315	1 400 000	7 600 000
2200	2078832.2200	1 000	—	365	1 772 000	9 600 000
2500	2078832.2500	900	—	416	2 600 000	13 200 000
2800	2078832.2800	850	—	441	3 400 000	15 600 000
Weight [kg / 1]						
2.65						
Units per Package						
1						

For DC Application see pages 436

2078832

	Dimensions [in / mm]
A	2.83 / 72
B	1.97 / 50
C	0.51 / 13
D	2.87 / 73
F	0.16 / 4
G	6.85 / 174
H	7.76 / 197
I	3.39 / 86
J	2.13 / 54
K	3.54 / 90
L	2.89 / 73.5
M	M12 - Thread Depth 0.47 / 12
Torque Max - 52Nm / 38.3lbf·ft	



Accessories

 E309038			
Microswitch		Page	Page
2800104	Standard	448 - 449	
2801104	Low level		

URS

Rated Voltage
1250V_{AC}/850V_{AC}

Rated Breaking Test
Capacity Voltage
120kA 1000V_{AC}

Class
aR

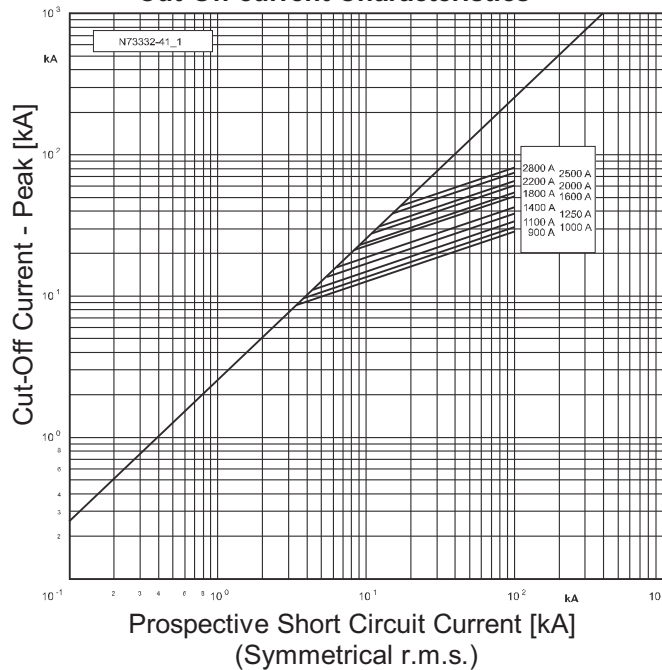
Standard(s)
IEC 60269-4
VDE 0636- Part 40

Size SQB3x2 - DIN 43653

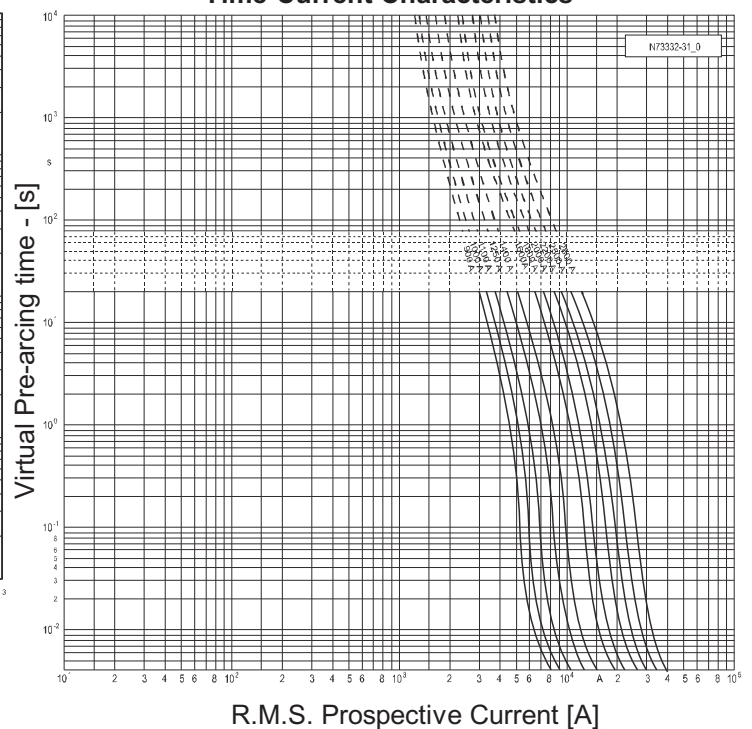
Coefficients for Heavy Duty Applications

a	A2	B1	B2	Cf3	N
130	0.6	1.25	0.6	0.8	1.5

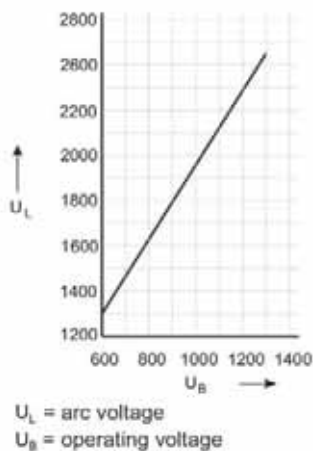
Cut-Off current Characteristics



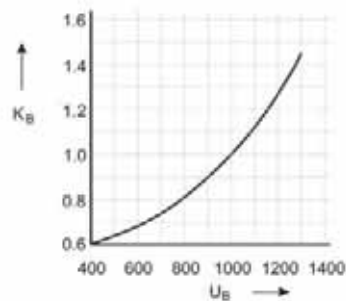
Time-Current Characteristics



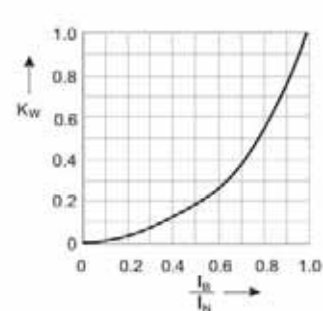
Arc voltage diagram



Reduction factor total PI-value



Reduction factor for power loss



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URS	Rated Voltage	Rated Breaking Test Capacity	Class	Standard(s)
	1100V _{AC} /800V _{AC}	120kA	aR	IEC 60269-4

Size SQB4 - DIN 43653

Rated Current I_n [A]	With fitting for microswitch Article Number	Rated Voltage[U _n] IEC 60269-4 [V]	Rated Voltage[U _n] UL 248-13 [V]	Power Loss (@ 0.8xI _n) [W]	Pre-arcing I ² t [A ² s]	Total I ² t @ 1000V _{AC} [A ² s]
1600	2079532.1600	1 100	—	—	—	—
2000	2079532.2000	1 000	—	282	1 180 000	5 560 000
2200	2079532.2200	1 000	—	320	1 770 000	8 350 000
2400	2079532.2400	900	—	353	2 714 000	12 800 000
						I ² t @ 880V _{AC} [A ² s]
3000	2079532.3000	800	—	235	3 613 000	22 300 000
3200	2079532.3200	800	—	260	4 640 000	28 640 000

Weight [kg / 1]

1.9

Units per Package

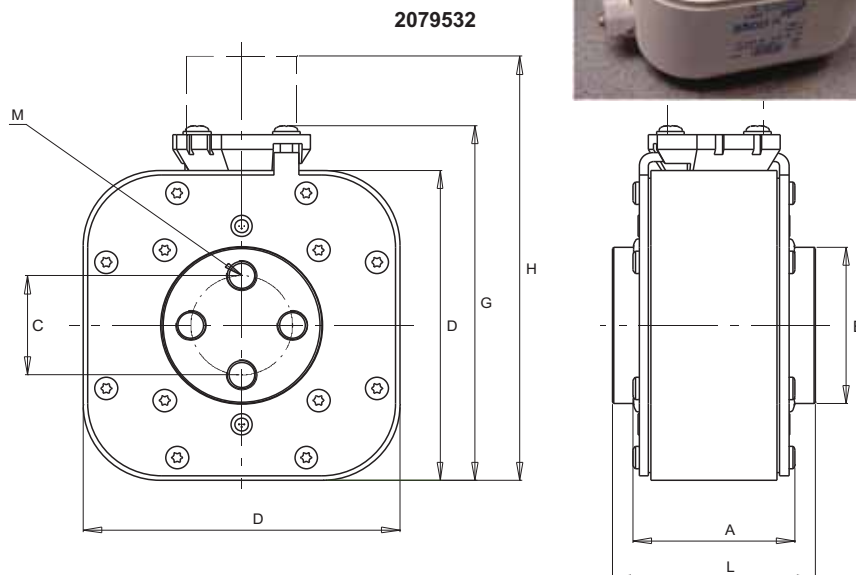
1

Coefficients for Heavy Duty Applications

a	A2	B1	B2	Cf3	N
130	0.5	1.25	0.6	0.8	1.5

Press Packs
Contact SIBA

	Dimensions [in / mm]
A	2.95 / 75
B	2.05 / 52
C	1.30 / 33
D	4.06 / 103
G	4.65 / 118
H	5.55 / 141
L	3.46 / 88
M	M10 - Thread Depth 0.43 / 11
Torque Max - 39N•m / 28.7lb•ft	



Accessories

 E309038			
Microswitch		Page	Page
2800104	Standard	448 - 449	
2801104	Low level		

URS	Rated Voltage 2000V _{AC}	Rated Breaking Test Capacity 100kA	Class aR	Standard(s) IEC 60269-4 VDE 0636- Part 40
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Size SQB3 - DIN 43653

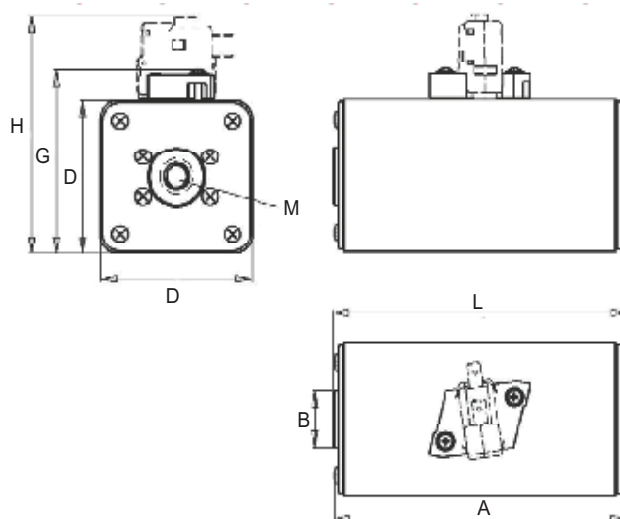
Rated Current I_n [A]	With fitting for microswitch Article Number	Rated Voltage[U_i] IEC 60269-4 [V]	Rated Voltage[U_i] UL 248-13 [V]	Power Loss [W]	Pre-arcing I^2t [A ² s]	Total I^2t @ 2000V _{AC} [A ² s]
250	2075332.250	2 000	—	121	56 500	356 000
450	2075332.450	2 000	—	131	66 500	419 000
500	2075332.500	2 000	—	135	89 200	562 000
550	2075332.550	2 000	—	138	124 600	785 000
630	2075332.630	2 000	—	142	220 000	1 390 000
700	2075332.700	2 000	—	145	329 000	2 250 000

Weight [kg /1]
2.1
Units per Package
1

Coefficients for Heavy Duty Applications					
a	A2	B1	B2	Cf3	N
130	0.6	1.25	0.5	0.8	1.5

New Product
Contact SIBA

	Dimensions [in / mm]
A	5.61 / 149.5
B	1.10 / 28
D	2.87 / 73
G	3.43 / 88
H	4.45 / 113
L	5.65 / 143.5
M	M12 - Thread Depth 0.47 / 12
Torque Max - 52Nm / 38.3lb•ft	



2075332

Accessories

Microswitch			Page	Microswitch			Page
2800311	Standard Level	Single Change Over Circuit	448 - 449	2800321	Standard Level	Double Change Over Circuit	448 - 449
2800411	Low level			2800421	Low level		

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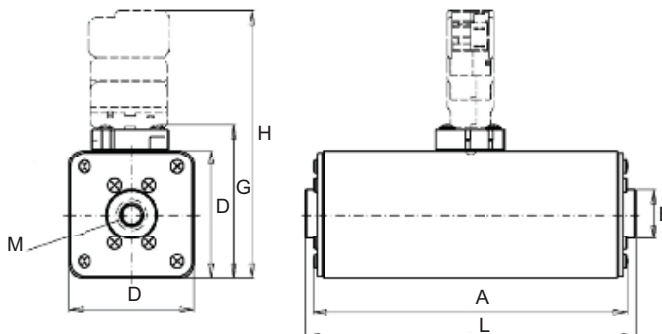
URS	Rated Voltage 2500V _{AC}	Rated Breaking Test Capacity 100kA	Class aR	Standard(s) Company - Standard
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Size SQB3 - DIN 43653

Rated Current I _n [A]	With fitting for microswitch Article Number	Rated Voltage[U _n] [V]	Rated Voltage[U _n] [V]	Power Loss [W]	Pre-arcing I ² _t [A ² s]	Total I ² _t @ 2 500V _{AC} [A ² s]
250	2079152.250	2 500	—	105	18 400	122 000
315	2079152.315	2 500	—	111	34 900	230 000
350	2079152.500	2 500	—	117	49 000	323 000
400	2079152.400	2 500	—	123	81 000	533 000
450	2079152.450	2 500	—	128	121 000	798 000
500	2079152.500	2 500	—	132	166 000	1 100 000
550	2079152.550	2 500	—	136	248 000	1 632 000
630	2079152.630	2 500	—	142	357 000	2 350 000
700	2079152.700	2 500	—	146	486 000	3 200 000
800	2079152.800	2 000	—	71	903 000	5 050 000*
1000	2079152.1000	1 800	—	111	1 160 000	5 450 000*
		Weight [kg / 1]				
		2.6				
		Units per Package				
		1				

*Tested at 1.1U_nNew Product
Contact SIBA

	Dimensions [in / mm]
A	7.17 / 181
B	1.10 / 28
D	2.87 / 73
G	3.43 / 88
H	5.98 / 152
L	7.52 / 191
M	M12 - Thread Depth 0.37 / 9.5
Torque Max - 52N•m / 38.3lb•ft	



2079152

Accessories

Microswitch			Page	Microswitch			Page
2800312	Standard Level	Single Change Over Circuit	448 - 449	2800322	Standard Level	Double Change Over Circuit	448 - 449
28004 2	Low level			2800422	Low level		

URS

Rated Breaking Test
 Rated Voltage [U_n] Capacity Voltage
 2500V_{AC} 100kA 2500V_{AC}

Class
 aR

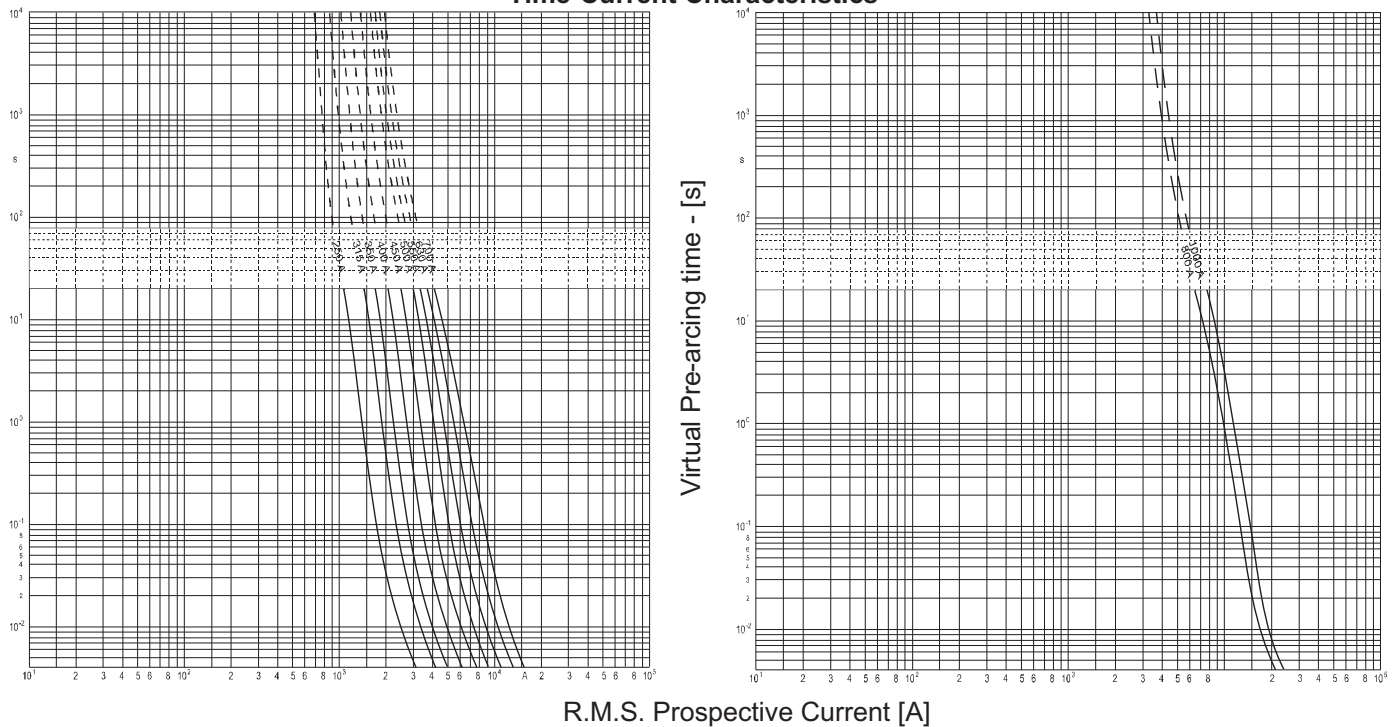
Standard(s)
 Company -
 Standard

Size SQB3 - DIN 43653

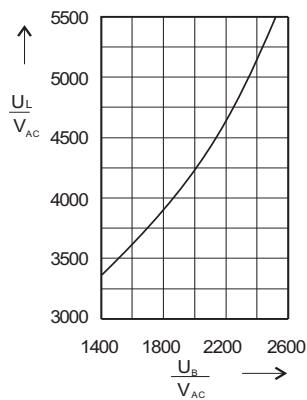
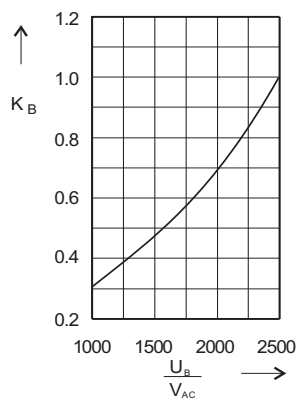
Coefficients for Heavy Duty Applications

a	A2	B1	B2	Cf3
130	0.6	1.25	0.6	0.8

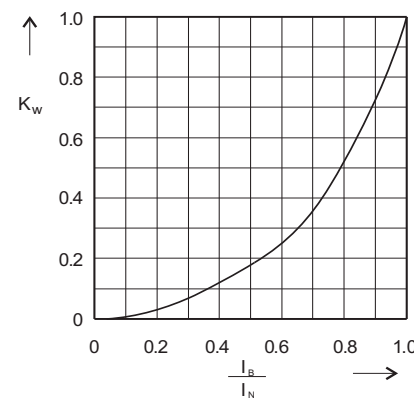
Time-Current Characteristics



Arc voltage diagram

Reduction factor for I^2t total

Reduction factor for power loss



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Accessories

Standard(s)

DIN 43653

IEC 60269 - 4 - 1

- Sec 1B



Fuse Bases for Fuse Links With Blade Contacts

700V - UL / 900V-IEC and 1200V -UL / 1400V - IEC

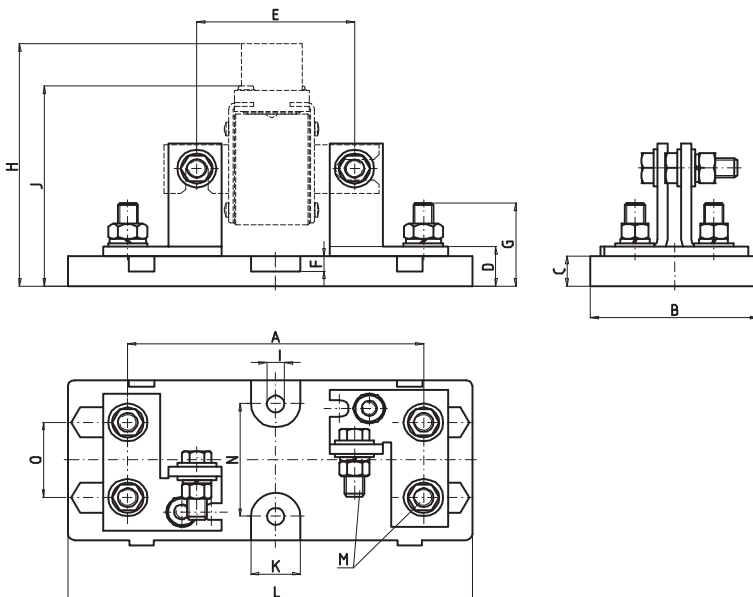
Fuse Bases for DIN SQB Sizes 1, 2 and 3 Fuses

UL E186970						
Article Number	Mounting Centers [mm]	Rated Voltage IEC / UL [V]	Rated Current IEC / UL [A]	Interrupt withstand current [kA]	Rated power acceptance [W]	Weight [kg / 1]
2131301	80	900 / 700	630 / 630	200	60	0.91
2131302	80	900 / 700	1250 / 1250	200	110	1.22
2132301	110	1400 / 1200	630 / 630	120	60	0.93
2132302	110	1400 / 1200	1250 / 1250	120	110	1.26
UL E35113						
99 900 01	—	— / 1000	— / 1400	200		0.2

Dimensions

[in / mm]

80mm Center		110mm Center
2131301		2132301
5.90 / 150	A	7.10 / 180
3.35 / 85	B	3.35 / 85
0.63 / 16	C	0.63 / 16
0.83 / 21	D	0.83 / 21
3.15 / 80	E	4.33 / 110
0.30 / 8	F	0.30 / 8
1.80 / 46	G	1.80 / 46
5.00 / 127	H(Size 1)	5.00 / 127
5.12 / 130	H(Size 2)	5.12 / 130
5.40 / 137	H(Size 3)	5.40 / 137
0.35 / 9	I	0.35 / 9
4.10 / 104	J(Size 1)	4.10 / 104
4.25 / 108	J(Size 2)	4.25 / 108
4.53 / 115	J(Size 3)	4.53 / 115
0.98 / 25	K	0.98 / 25
8.07 / 205	L_{max}	8.07 / 205
— / M10	M	— / M10
2.36 / 60	N	2.36 / 60
1.57 / 40	O	1.57 / 40
Nut Torque Max - 48N•m / 35.3lb•ft		
Base Torque Max - 15N•m / 41.3lb•in		



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URS



Accessories

Fuse Bases for Fuse Links with Blade Contacts
 700V - UL / 900V-IEC and 1200V -UL / 1400V - IEC

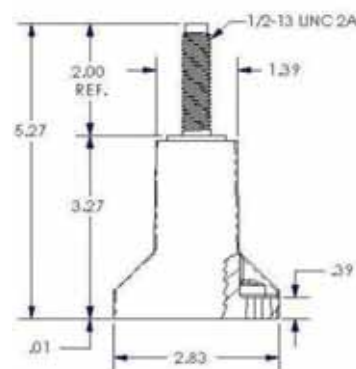
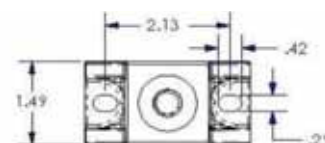
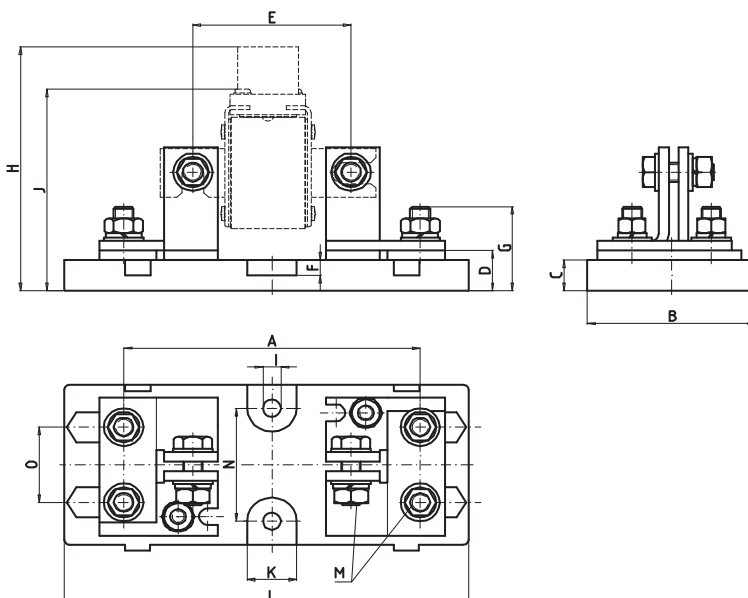
Standard(s)

DIN 43653

IEC 60269 - 4 - 1

- Sec 1B

Dimensions [in / mm]		
80mm Center		110mm Center
2131302		2132302
5.90 / 150	A	7.10 / 180
3.35 / 85	B	3.35 / 85
0.63 / 16	C	0.63 / 16
0.83 / 21	D	0.83 / 21
3.15 / 80	E	4.33 / 110
0.30 / 8	F	0.30 / 8
1.80 / 46	G	1.80 / 46
5.00 / 127	H(Size 1)	5.00 / 127
5.12 / 130	H(Size 2)	5.12 / 130
5.40 / 137	H(Size 3)	5.40 / 137
0.35 / 9	I	0.35 / 9
4.10 / 104	J(Size 1)	4.10 / 104
4.25 / 108	J(Size 2)	4.25 / 108
4.53 / 115	J(Size 3)	4.53 / 115
0.98 / 25	K	0.98 / 25
8.07 / 205	L_{max}	8.07 / 205
- / M10	M	- / M10
2.36 / 60	N	2.36 / 60
1.57 / 40	O	1.57 / 40
Nut Torque Max - 48N•m / 35.3lb•ft		
Base Torque Max - 15N•m / 41.3lb•in		



9990001

9990001
Rated Voltage - 1000V -UL
Rated Current - 1400A - UL
Maximum insulator base temperature 125°C.
Insulator base: Thermal Plastic
Flammability rating of insulator: UL 94 V-0
Stud: Steel, Zinc plated
Nuts: Steel, Nickel plated
Belleville washer: Steel, Zinc plated
RoHS Compliant
Nut Torque: 300lb•in
Mounting: 1/4" fastener, Torque 25 - 30lb•in

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Accessories

Standard(s)
DIN 43653

Microswitches for Fuse Links

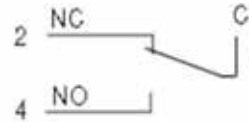
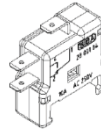
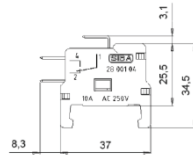
Standard Level Micro-switches						
Article Number	Insulating Voltage [V]	Change Over Circuits	Interrupt Rating (Resistive Load)			
			Minimum Load Requirement AC/DC		Maximum AC/DC	
			[V] _{resistive}	[mA]	[V]	[A]
M-Switch						
2800104	—	1	30	10	250	10
B-Switch						
2800310	1250	1	5V 30V 100V	50mA 10mA 5mA	250V _{AC} 35V _{DC}	12A _{AC} 10A _{DC}
2800311	2200	1				
2800312	5500	1				
Weight [kg / 1]						
0.025						
Units per Package						
10						
2800320	1250	2				
2800321	2200	2				
2800322	5500	2				
Weight [kg / 1]						
0.032						
Units per Package						
10						
Low Level Micro-switches						
Article Number	Insulating Voltage [V]	Change Over Circuits	Interrupt Rating (Resistive Load)			
			Minimum Load Requirement AC/DC		Maximum AC/DC	
			[V] _{resistive}	[mA]	[V]	[A]
M-Switch						
2801104		1	5	1	250V _{AC}	10A _{AC}
					35V _{DC}	1A _{DC}
B-Switch						
2800410	1250	1	DO NOT USE BELOW 5V	1mA	250V _{AC} 35V _{DC}	10A _{AC} 1A _{DC}
2800411	2200	1				
2800412	5500	1				
Weight [kg / 1]						
0.025						
Units per Package						
10						
2800420	1250	2				
2800421	2200	2				
2800422	5500	2				
Weight [kg / 1]						
0.032						
Units per Package						
10						

SIBA LLC

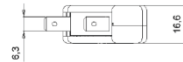
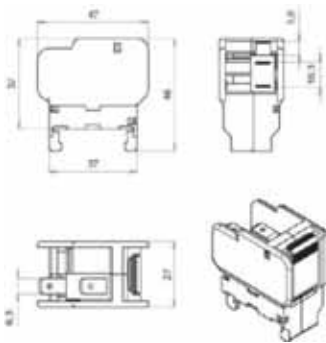
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Accessories**Microswitches for Fuse Links
B-Microswitch**

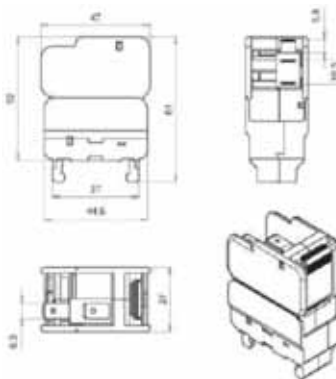
2800104 Standard
2801104 Low Level



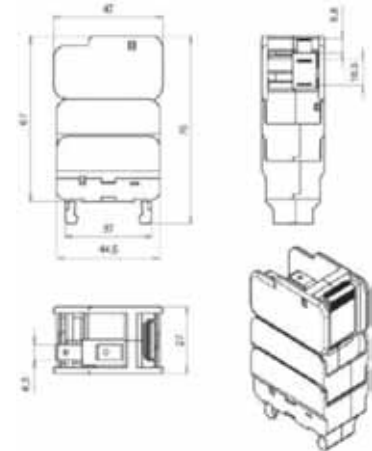
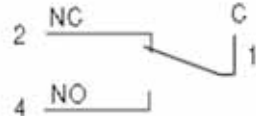
UL [®] **US**
E186970

**M-Microswitch**

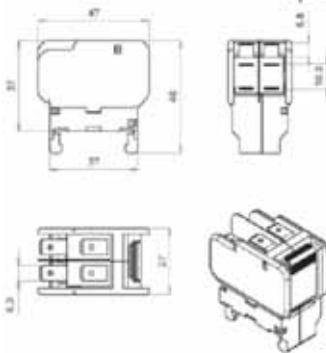
2800310
2800410
28 003 10



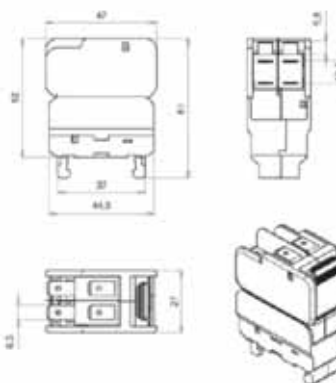
28 003 11
28 004 11



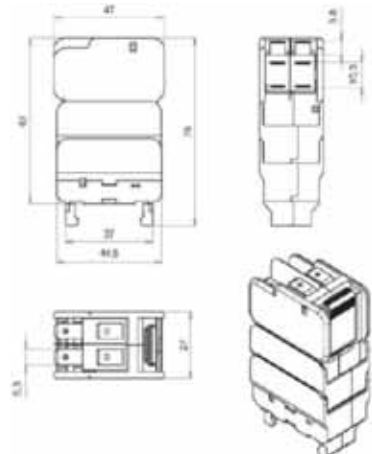
2800312
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