

The background of the cover features a low-angle photograph of several modern skyscrapers with glass facades, reflecting the sky. A large, bright blue circle is positioned on the left side, partially overlapping the buildings. Below the blue circle is a solid orange rectangle. A thin orange line curves from the bottom right of the blue circle, extending across the bottom of the page. The text "LOW VOLTAGE H.R.C. FUSE PRODUCTS" is written in white, bold, sans-serif capital letters within the blue circle.

LOW VOLTAGE H.R.C. FUSE PRODUCTS

FUSELEC BY SHIVSHAKTI SWITCHGEARS PVT LTD. (SSPL)

SSPL offers a wide range of Low Voltage H.R.C Fuse-Links, Fuse-Holders and accessories. SSPL Product range meets the latest requirements of International, Indian, British and other national Standards. The Company is also independently accredited to ISO9001:2015 for its manufacturing operations and to ISO14001:2015 for its environmental activities.

Our Vision is to attain a leadership position in the manufacturing and commercialisation of our products, also to strengthen our global presence for achieving the same we devote ourselves uncompromisingly to our specific core business as well as rely on our own research and development so that you can be sure that our fuses will work when needed.

SINCE
2000



LOW VOLTAGE H.R.C. FUSE RANGE

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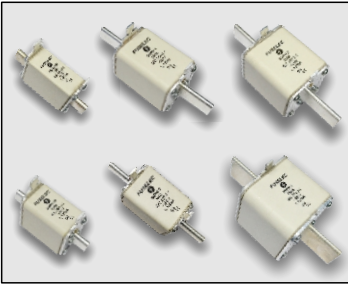
Street Lighting Cut-Out Fuse-Links

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Street Lighting Cut-Out Fuse-Links.

DIN/NH FUSE SYSTEM

FUSE-LINKS

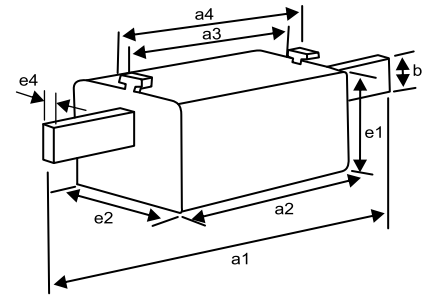


Size	List Ref	Current Ratings (A)	Dimensions (mm)							
			a1	a2	a3	a4	b	e1	e2	e4
000	SSPN000	6,10,16,20,25,32,40,50,63,80,100	80	54	45	49	15	36	21	6
00	SSPN00	6,10,16,20,25,32,40,50,63,80,100,125,160	80	54	45	49	15	43	30	6
0	SSPN0	32,40,50,63,80,100,125,160	125	64	54	60	15	48	40	6
1	SSPN1**	32,40,50,63,80,100,125,160,200,250	135	70	62	66	20	46	46	6
2	SSPN2**	100,125,160,200,250,315,355*,400	150	71	62	66	25	57	57	6
3	SSPN3**	315,400,500,630	150	72	63	68	35	72	72	6

*non-standardized current rating **ratings also available from 25A onwards in these sizes

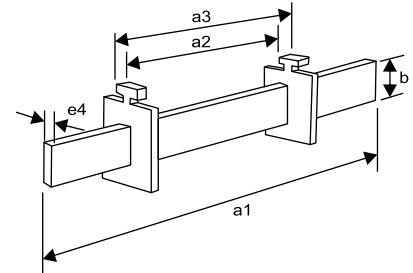
Technical Specification:

- 500 Voltage a.c.
- Upto 120kA Breaking Capacity.
- 6-630A Current Ratings.
- IS/IEC 60269-2.
- Breaking Range & Utilization Category "gG".

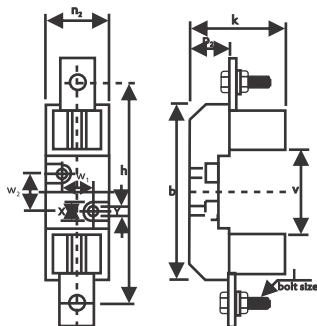
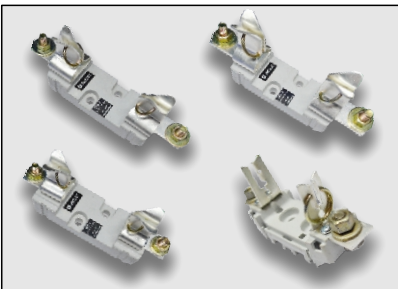


SOLID/NEUTRAL LINKS

Size	List ref	Current Ratings (A)	Dimensions (mm)				
			a1	a2	a3	b	e4
000/00	SSLPN000/00	160	78.5	45	49	15	6
0	SSLPN0	160	125	62	66	15	6
1	SSLPN1	250	135	62	66	20	6
2	SSLPN2	400	150	62	66	25	6
3	SSLPN3	630	150	63	69	32	6



FUSE-BASES

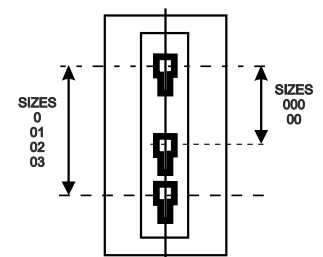


Size	List ref	Current Ratings (A)	Dimensions (mm)											
			v	b	h	j	K	n2	p2	w1	w2	x	y	
000/00	SFB000/00	160	56.5	93	100	M8	56	33.5	21	00	25	14	7.5	
1	SFB1	250	80	150	175	M10	85	59	36	30	25	20	10.5	
2	SFB2	400	80	150	200	M10	94	59	36	30	25	20	10.5	
3	SFB3	630	80	150	210	M12	106	59	36	30	25	20	10.5	

REPLACEMENT HANDLE



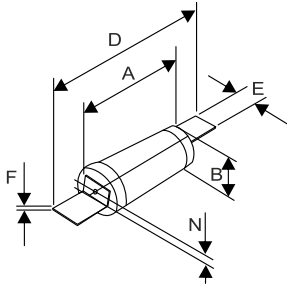
List Ref	Current Rating (A)
SHNH	6- 630



BS SYSTEM FUSE-LINKS

Technical Specification: ♦ Rated Voltage 415V a.c. ♦ Breaking Range & Utilization Category “gG”
♦ Rated Breaking Capacity 80kA. ♦ IS/IEC 60269-2 & BS 88-2.

OFFSET PLAIN TAGS

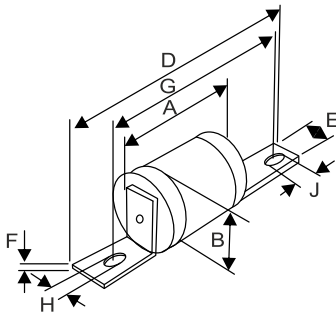


IEC/IS/BS Ref	List Ref	Current Ratings (A)	Dimensions (mm)					
			A (max)	B (max)	D (max)	E (nom)	F (nom)	N (nom)
F1	SNS	2,4,6,10,16,20,25,32	35.5	13.3	62	11	0.8	3.5
F2	SMES	10,16,20,25,32,40,50,63	39	17.5	69	15	1.4	3.5

*non-standardized current rating.

Dimension A is distance over barrel, contact feet and rivet heads

OFFSET SLOTTED TAGS



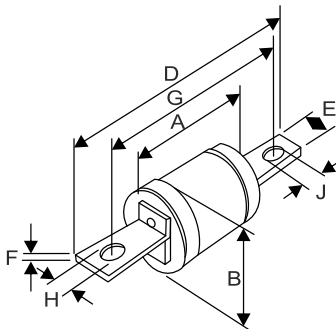
IEC/IS/BS Ref	List Ref	Current Ratings (A)	Dimensions (mm)								
			A (max)	B (max)	D (max)	E (max)	F (max)	G (nom)	H (nom)	J (nom)	K (max)
A1	SNIT #	2,4,6,10,16,20,25*,32*	35.5	13.3	56	10	0.8	44.5	4.1	aos	14.3
A2	STIA #	2,4,6,10,16,20,25,32	49	22	86	8.7	1.2	73	5.5	8	24
-	SNITL #	32,40,50,63	39	17.5	65	11	1.2	53	5.5	aos	18
A3	STIS	35*,40,50,63	49	22	89	13	1.2	73	5.5	aos	24
		80*,100*,125*	49	26	89	13	1.2	73	8.5	aos	28
		16,20,25,32,40,50,63	51	22	110	20	2.5	94	8.7	aos	25
A4	STCP	80,100*,125*	51	26	110	20	2.5	94	8.7	11	29
		160*	51	30	110	20	2.5	94	8.7	11	33
aS A4	STFP	125,160,200	51	30	110	20	2.2	94	8.7	11	33

*non-standardized current rating.

Dimension A is distance over barrel, contact feet and rivet heads

aos=axial open-ended slot

CENTRAL TAGS SINGLE FIXING HOLE

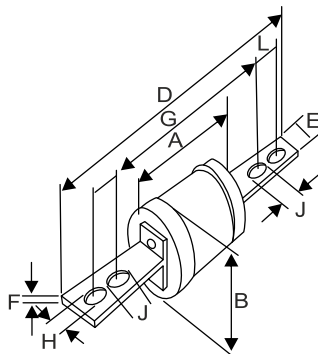


IEC/IS/BS Ref	List Ref	Current Ratings (A)	Dimensions (mm)							
			A (max)	B (max)	D (max)	E (max)	F (max)	G (nom)	H (nom)	J (nom)
B1	STC	80,100,125*	49	26	137	20	3.2	111	8.7	16
B2	STF	125,160,200	49	35	137	20	3.2	111	8.7	16
B3	STKF	250,315	49	41	137	26	3.2	111	8.7	16
B4	STMF	355*,400	49	51	137	26	5	111	8.7	16

*non-standardized current rating.

Dimension A is distance over barrel, contact feet and rivet heads

CENTRAL TAGS DOUBLE FIXING HOLE



IEC/IS/BS Ref	List Ref	Current Ratings (A)	Dimensions (mm)								
			A (max)	B (max)	D (max)	E (max)	F (max)	G (max)	H (max)	J (max)	L (max)
C1	STM	355*,400	52	51	210	26	5	133	10.3	16	25.4
C2	STTM	450*,500,560*,630	54	61	210	26	6.4	133	10.3	16	25.4
C3	STLM	670*,710*,750*,800	56	73	210	26	9.5	133	10.3	16	25.4

*non-standardized current rating.

Dimension A is distance over barrel, contact feet and rivet heads

MOTOR CIRCUIT PROTECTION FUSE-LINKS

Technical Specification: ♦ Rated Voltage 415V a.c. ♦ Breaking Range & Utilization Category “gM”
♦ Rated Breaking Capacity 80kA.

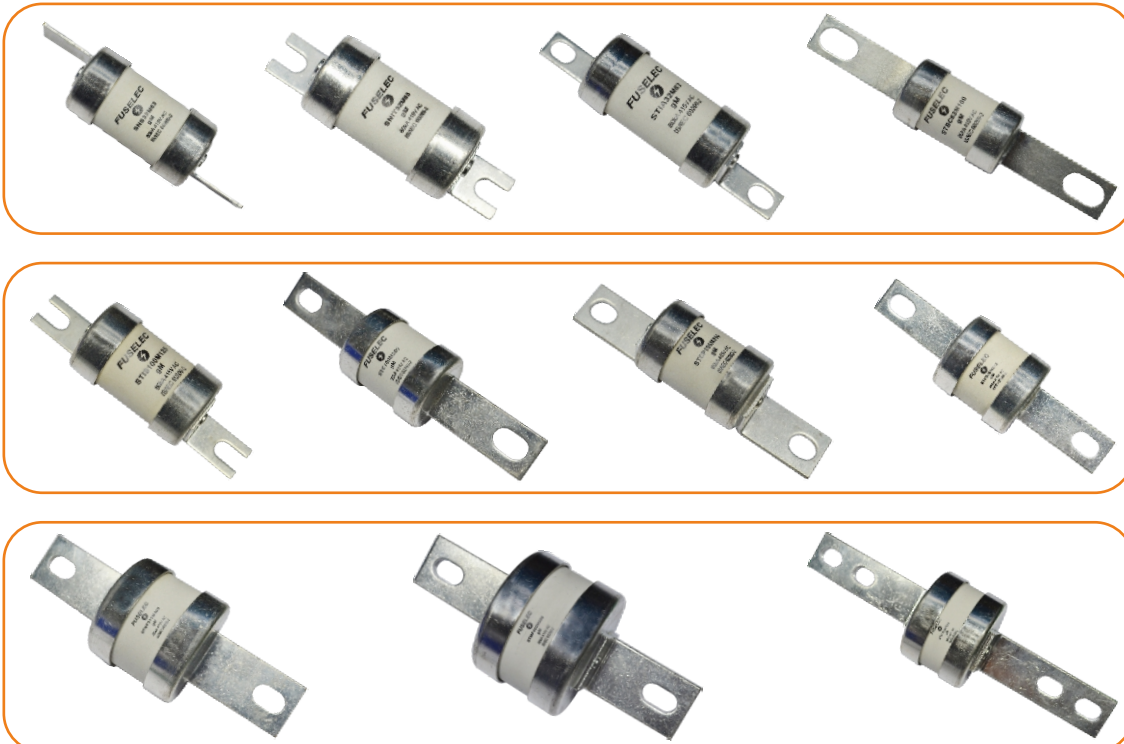
The motor circuit protection fuse-link has a dual basis of current rating. The lower rating is the maximum continuous current rating and the higher rating is the operational current rating. The list reference incorporates both ratings separated by the letter “M”.

IES/IS/BS REF	List Ref	Current Rating Cont M motor (A) (A)	Equivalent Standard List ref	Dimensions(mm)									
				A (max)	B (max)	D (max)	E (max)	F (max)	G (nom)	H (nom)	J (nom)	K (max)	N (nom)
F1	SNS	20M25	NS	35.5	13.3	62	11	0.8	-	-	-	-	3.5
		20M32											
		32M40* ^A		39	17.5	62	11	0.8	-	-	-	-	3.5
		32M50* ^A											
		32M63* ^A											
A1	SNIT	20M25	NIT	36.5	13.3	56	10	0.8	44.5	4.1	aos	14.3	-
		20M32											
		32M40* ^A		39	17.5	62	11	1.2	44.5	5.5	aos	18	-
		32M50* ^A											
		32M63* ^A											
A2	STIA	32M40	TIA	49	22	86	8.7	1.2	73	5.5	8	24	-
		32M50											
		32M63											
A3	STIS	63M80	TIS	49	26	89	13	1.2	73	5.5	aos	28	-
		63M100											
		100M125*											
A4	STCP	100M125	TCP	51	30	110	20	2.5	94	8.7	11	33	-
		100M160											
		100M260											
As A4	STFP	200M250	TFP	51	41	110	20	2.5	94	8.7	11	45	-
		200M315											
B1	STC	100M125	TC	49	35	137	20	3.2	111	8.7	16	-	-
		100M160											
		100M200											
B2	STF	200M250	TF	49	41	137	20	3.2	111	8.7	16	-	-
		200M315											
B3	STKF	315M400	TKF	49	51	137	26	3.2	133	8.7	16	-	-
B4	STMF	400M500	TMF	51	60	137	26	6	111	8.7	16	-	-
C1	STM	400M500	TM	53	60	210	26	6	133	10.3	16	-	-

*non-standardized current rating

^Abarrel exceeds standardized dimensions

aos = axial open-ended slot



BS SYSTEM FUSE-HOLDERS

FUSELEC Type "SBFF" Fuse Holders accommodate Fuse-Link with offset blade and bolted type connections.
Type "SCF" Fuse Holders accommodate Fuse-Link with offset plain tag fuses.

Technical Specification

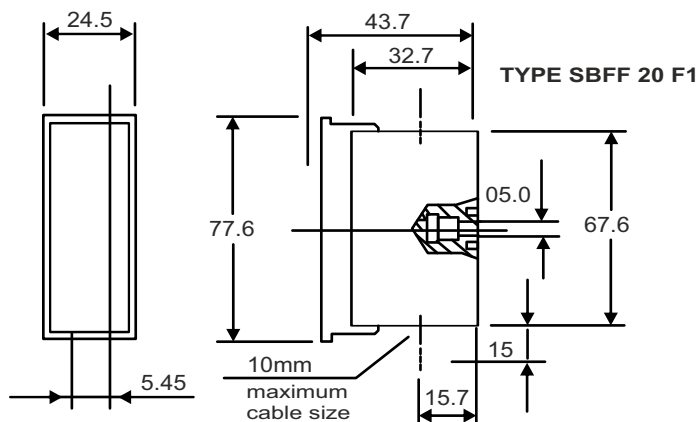
- 415/500 Voltage a.c.
- For 2-125A Current rating Fuses.
- IEC/IS 60269-2 & BS 88-2.
- DIN RAIL mountable & Boltin variants available.
- Holders are available in White & Black colors.
- Breaking Capacity 80kA.

Wiring Connection

- FC/FC: Double front wiring connection.
- FC/BC: Single front wiring connection & Rear busbar connection.
- BC/BC: Double back connection.

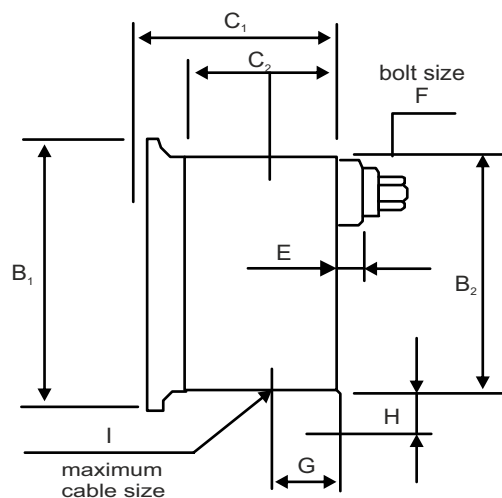


CURRENT RATINGS & DIMENSIONS



LIST REFERENCE	CURRENT RATING (A)	FUSE REFERENCE
SBFF 20 F1 FC/FC	20/32	SNS
SBFF 20 F1 FC/BC	20/32	SNS
SBFF 20 F1 BC/BC	20/32	SNS
SCF 32 FC/FC*	32A	SNS
SCF 32 FC/BC	32A	SNS
SCF 32 BC/BC	32A	SNS

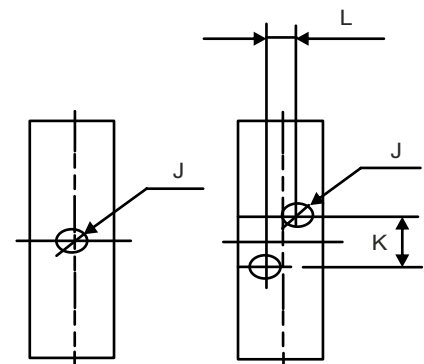
*DIN RAIL Mountable/CLIP Fit.



SBFF20F1 • SBFF32 • SBFF63 • SBFF100

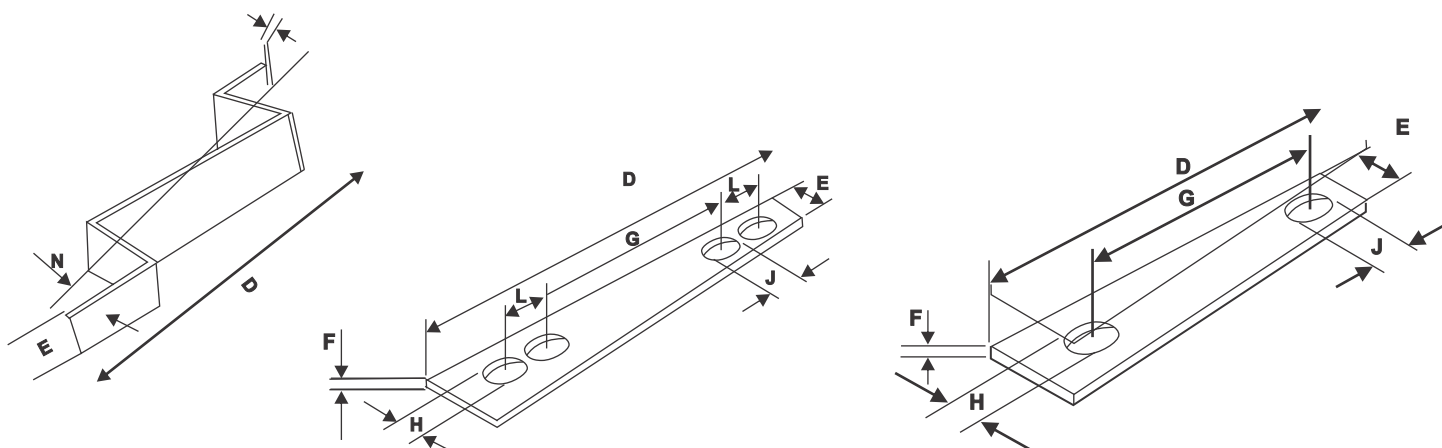
FIXING DETAILS TYPE

SBFF20F1 • SBFF32 • SBFF63 • SBFF100



REFERENCE	CURRENT RATING (A)	FUSELEC FUSE-LINK REFERENCE	DIMENSIONS (mm.)												
			A	B ₁	B ₂	C ₁	C ₂	E	F	G	H	I ₂ mm	J	K	L
SBFF F1 20 FC/FC	20/32	SNS	24.5	27.6	67.6	43.7	32.7	-	-	18.7	15	10	5.0	-	5
SBFF F1 20 FC/BC	20/32	SNS	24.5	77.6	67.6	43.7	32.7	-	-	18.7	15	10	5.0	-	5
SBFF F1 20 BC/BC	20/32	SNS	24.5	77.6	67.6	43.7	32.7	-	-	18.7	15	10	5.0	-	5
SBFF 32 FC/FC	32	STIA	32.2	103	99	64	41	-	-	21	15	16	5.8	6.3	12.7
SBFF 32 FC/BC	32	STIA	32.2	103	99	64	41	1.5	M6	21	15	16	5.8	6.3	12.7
SBFF 63 FC/FC	63	STIS	36	111	105	72.5	46	-	-	23	15	25	5.8	6.3	12.7
SBFF 63 FC/BC	63	STIS	36	111	105	72.5	46	1.5	M6	23	15	25	5.8	6.3	12.7
SBFF 100 FC/FC	100	STCP	51	141	130	98	64	-	-	28.5	15	70	8.7	22	19
SBFF 100 FC/BC	100	STCP	51	141	130	98	64	1.5	M10	28.5	15	70	8.7	22	19

BS SYSTEM SOLID/NEUTRAL LINKS



List Ref	Current Rating (A)	Dimensions (mm)							
		D (max)	E (max)	F (max)	G (nom)	H (nom)	J (nom)	L (nom)	N (nom)
SSLA1	20	56	10	0.8	44.5	4.1	qos	-	-
SLA2	32	86	8.7	1.2	73	5.5	8	-	-
SLA1L	63	65	11	1.2	53	5.5	qos	-	-
SLA3	63	89	13	1.2	73	5.5	qos	-	-
SLA4	125	110	20	2.5	94	8.7	11	-	-
SLSB1	100	137	20	3.2	111	8.7	16	-	-
SLB2	200	137	20	3.2	111	8.7	16	-	-
SLB3	315	137	26	3.2	111	8.7	16	-	-
SLB4	400	137	26	5	111	8.7	16	-	-
SLC1	400	210	26	5	133	10.3	16	26	-
SLC2	630	210	26	6.4	133	10.3	16	26	-
SLC3	800	210	26	9.5	133	10.3	16	26	-
SLF1	32	62	11	0.8	-	-	-	-	3.5

J TYPE ELECTRICITY SUPPLY FUSE-LINKS

SJPU & SJSU

Technical Specification

- 415 Voltage a.c.
- 20-400A Current Rating Fuses.
- IEC 60269-2 & BS 88-2.
- Breaking Range & Utilization Category “gU”.
- 82mm & 92mm Fixing Center.
- 80kA Breaking Capacity.
- Cylindrical Variant Also Available.

SJPU 82mm



SJSU 92mm

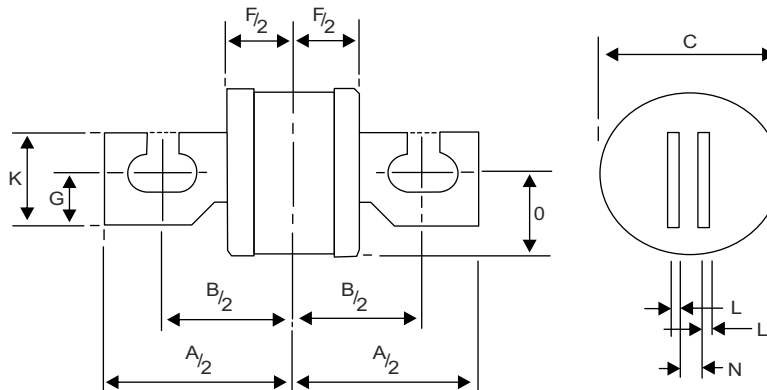


Performance Data

LIST REF.	RATED CURRENTS (A)	RATED VOLTAGE (V a.c.)	RATED BREAKING CAPACITY (kA)	BS/IEC STANDARDS
SJPU	20, 32, 40, 50,	415	80	BS 88-2 & IEC 60269-2
	63, 80, 100*, 125,			
	160*, 200*, 250*,			
	315*, 355*, 400			
SJSU	20, 32, 40, 50,			
	63, 80, 100*, 125,			
	160*, 200*, 250*,			
	315*, 355*, 400			

*Standardized current rating to BS88-2 & IEC 60269-2

DIMENSIONS



LIST REF.	CURRENT RATINGS (A)	DIMENSIONS (mm)								
		A	B	C	D	F	G	K	L	M
		Max	Nom	Max	Max	Max	Nom	Max	Max	Max
										Min
STANDARDIZED DIMENSIONS										
S JPU	20, 32, 40, 50, 63, 80, 100*, 125, 160	112	82	26	12	45	18	31	2.4	6.53
	20, 32, 40, 50, 63, 80, 100*, 125, 160*, 200*			31	16					6.45
	200*, 250*, 315*, 355*, 400*			41	18					
S JSU	20, 32, 40, 50, 63, 80, 100*, 125, 160*	132	92	26	12	45	22	38	3.2	8.13
	20, 32, 40, 50, 63, 80, 100*, 125, 160*, 200			31	16					8.05
	200*, 250*, 315*, 355*, 400*			41	18					

*Standardized current rating to BS 88-2 & IEC 60269-2

FUSE-HOLDERS FOR J TYPE FUSE LINKS

Technical Specification

- 415 Voltage a.c.
- 20-630A Current Rating Fuse Holders.
- 80kA Breaking Capacity.
- IEC 60269-2 & BS 88-2.
- 82mm & 92mm Fixing Center.
- Fuse-Bases for 82mm & 92mm are also available.

SFH 82 Fuse Holder



SFH 92 Fuse Holder



CYLINDRICAL FUSE-LINKS

Technical Specification:

- Rated Voltage 500V a.c.
- Breaking Range & Utilization category “gG”
- Rated Breaking Capacity 80kA
- IS/IEC 60269-2.



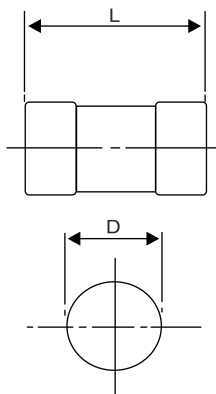
LIST REFERENCE	PRINCIPAL DIMENSIONS (mm) as per IEC		RATED CURRENT (A)	RATED VOLTAGE	RATED BREAKING CAPACITY	RATED POWER DISSIPATION (W)
	DIAMETER	LENGTH				
SNF 10	10	38	6	500V a.c.	80 kA	0.9
			10			1.0
			16			1.7
			20			2.0
			25			3.0
			32			3.0
SNF 14	14	51	10	500V a.c.	80 kA	1.0
			16			1.8
			20			3.0
			25			3.1
			32			4.7
			40			4.9
			50			5.0
			63			6.0

HOUSE SERVICE CUT-OUT FUSE LINKS

Technical Specification:

- 415 Voltage a.c.
- 10-100A Current Ratings.
- 80kA Breaking Capacity.
- Breaking Range & Utilization Category “gG”.
- IEC 60269-3 & BS 88-3.
- IIA & IIB Type.
- For Use in House Service Cut-Outs or Similar Installations.

CURRENT RATINGS AND PRINCIPAL DIMENSIONS



BS 88-3 TYPE	CURRENT RATING (A)	LIST REFERENCE	PRINCIPAL DIMENSIONS			
			D		L	
			mm	in	mm	in
IIA	10	SME10	22.23	$\frac{7}{8}$	57	$2\frac{1}{4}$
	16	SME16				
	20	SME20				
	25	SME25				
	32	SME32				
	40	SME40				
	45	SME45				
	50	SME50				
	63	SME63				
	80	SME80				
	100	SME100				
IIB	20	SMF20	30.16	$1\frac{3}{16}$	57	$2\frac{1}{4}$
	32	SMF32				
	40	SMF40				
	50	SMF50				
	63	SMF63				
	80	SMF80				
	100	SMF100				

HOUSE SERVICE CUTOUT

Technical Specification

- ✦ 240 / 415 Voltage ac.
- ✦ Suitable For 10-100A Current Rating IIA & IIB Type House Service Fuses.
- ✦ BS 7657.
- ✦ Glass reinforced polyester DMC.
- ✦ Fuse link clips / contacts are made of high conductivity hard drawn copper having uniform pressure to ensure effective contact with long service life.
- ✦ Sealing wire facility.
- ✦ Single Pole cut out (SP) and Single Pole Neutral cut out (SPN).
- ✦ Silver plated Terminal blocks.
- ✦ Two incoming and outgoing Phase terminations which accept either Aluminum or copper, stranded or solid conductors up to 35 mm².
- ✦ Common housing carrier for IIA & IIB Type House Service Fuses, Easy upgrading of cutout by replacing the fuse clips.



POLE MOUNTED CUTOUT

Technical Specification

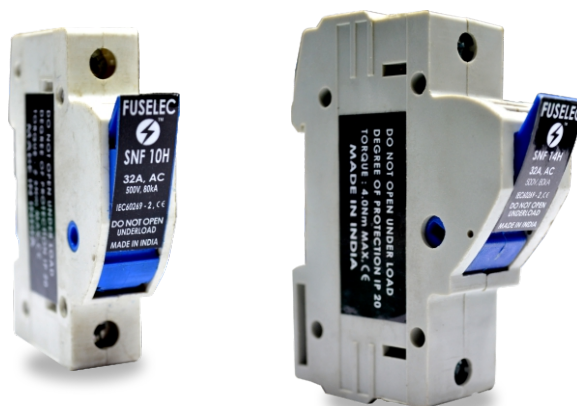
- ✦ 400A, Pole Mounted Cutouts (PMC).
- ✦ Enclosure is made of DMC for Robust design, suitable for outdoor applications.
- ✦ BS 7656.
- ✦ Designed to accept BS88 standard 'J' Type fuse links with 82mm fixing centers.
- ✦ Accepts aluminum & copper conductors up to 300mm².
- ✦ Front cover is removable for ease of jointing.
- ✦ IP 43 degree of protection.
- ✦ Robust Cooper tin contacts.
- ✦ Single bolt mounting.



MODULAR FUSE-HOLDER

Technical Specification

- 500 Voltage a.c.
- For 2-63A Current Rating for Cylindrical Fuses.
- 80kA Breaking Capacity.
- IEC 60269-2.
- SNF 10H for 10x38 Fuse Link.
- SNH 14H for 14x51 Fuse Link.
- Breaking Range & Utilization Category “gG”.
- Single Pole, Double Pole, Triple Pole & Four Pole Units Available.



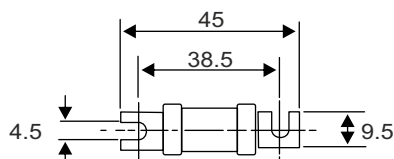
FUSE-HOLDER REFERENCE	VOLTAGE RATING (a.c.)	RATED BREAKING CAPACITY	FUSE-LINK REFERENCE	CURRENT RATING (A)	FUSE LINK DIMENSIONS (mm) as per IEC	
					DIAMETER	LENGTH
SNF10H	500	80 kA	SNF10	2,4,6,10,16,20,25,32	10	38
SNF14H	500	80 kA	SNF14	2,4,6,10,16,20,25,32,40,50,63	14	51

STREET LIGHTING FUSE LINKS

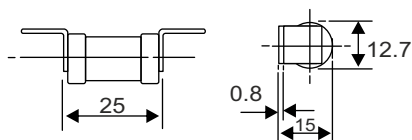
Technical Specification

- 240 Voltage a.c.
- 2-32A Current Ratings.
- 20kA Breaking Capacity.
- IEC 60269-1 & BS 88-1.
- For Use in Street Lighting Cut-Outs.
- Breaking Range & Utilization Category “gG”.

CURRENT RATING (A)	LIST REFERENCE	FIXING CENTRE	
		mm	in
2	SLCO2	38.5	1 1/2
4	SLCO4		
6	SLCO6		
10	SLCO10		
16	SLCO16		
20	SLCO20		
25	SLCO25		
32	SLCO32		



Dimensions in mm



Dimensions in mm

H.R.C FUSE INFORMATION

What Does HRC mean?

HRC means high rupturing capacity. Also known as high breaking capacity (HBC) or interrupting capacity.

What are Fuses used for?

Fuses serve two main purposes:

- To protect components and equipment from costly damage caused by over-currents.
- To isolate sub-systems from the main system once a fault has occurred.

Why use a Fuse?

Fuses have many unique performance characteristics, such as:

• Optimum Component Protection

Fuses reduce short circuit (fault) currents that flow to a low value by "current limitation". There is no need for complex short circuit calculations and no concerns about costly future upgrades due to system expansion with increased fault currents. Their compact size offers low cost over-current protection for the highest short circuit levels.

• Safety

Fuses do not produce gas, flames, arcs or other materials when clearing any value of over-current up to the highest level of short circuit. In addition, the speed of operation on high short circuit currents limits significantly the flash hazard at the fault location.

• Reliability

No moving parts to wear out or become contaminated by dust, oil or corrosion and no nuisance tripping. If a fault occurs, the fuse immediately operates in its predetermined manner or co-ordinates with other circuit components. The cause of the fault is then ascertained, corrected and a new fuse fitted. Fuse replacement ensures protection is restored to its original state of integrity.

How do you read Fuse markings?

- Fuse standard, size and reference. This defines the operating performance and mechanical design of the fuse. Voltage rating. Fuses may be operated up to the maximum voltage stated in the rating. Voltage ratings may be colour coded to reduce the risk of incorrect installation.
- Current rating. This represents the value of the current that the fuse can carry continuously without deterioration under specified conditions.
- Rated breaking capacity. This is the maximum value of prospective current that a fuse is capable of breaking under standard conditions.
- Breaking range and utilization category are indicated by letter codes. The first (lower case) letter indicates the breaking range, i.e. the range of prospective currents the fuse is able to break. The second (capital) letter indicates the utilization category, i.e. time-current characteristics for typical applications.
- Fuse manufacturer trademark.
- Manufacturer's product reference or part number.



FUSELEC

NOTES

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



The products referred in this publication are manufactured and tested to the specification Indicated on the product as applicable to appropriate type reference number. To provide protection within the capability of the stated ratings and related performance characteristics the product must be correctly installed by competent personnel.

The information obtained in this publication is correct at the time of publication, but the company reserve the right to change the design or construction of any listed product. The company also reserves the right to supply products differing in construction or performance.

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