

LOW VOLTAGE HRC FUSE RANGE





LAWSON FUSES INDIA LTD

Lawson Fuse India Ltd is subsidiary of Lawson Fuse Ltd, a long established UK company with a worldwide reputation for product quality and service excellence.





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500 Volt NH System Fuse-links with Blade Contacts to IEC60269-2/IS13703-2

Applications

Lawson Type "LSPN" fuse-links with blade contacts have a breaking capacity of 120ka (80kA for size 000) they are for use by authorised persons, mainly in industrial applications, and are suitable for fitting in fuse-bases and fuse-gear.

Standards

The fuse-links meet the requirements of the latest editions of IEC60269-2 together with IS 13703-2

Wiring Regulations

In complying with these standards the fuse-links have the classification "gG" thus meeting the requirements of IEC60364 for the Electrical Installation of Buildings and national wiring regulations based on the IEC document.

Characteristics

The fuse-links have time-current characteristics which meet the disconnection time required by the wiring regulations and ensure discrimination between current ratings in a ratio of 1:6:1. The fuse-link characteristics also ensure satisfactory performance under both cyclic low overload conditions and repeated transient overloads such as motor starting surges and inrush current to transformers or capacitors.

500 Volt NH Fuse System Accessories

Fuse Bases

A range of fuse bases for sizes 00, 1, 2, and 3 is available with silver plates contacts mounted on moulded DMC

Replacement Handle

A universal replacement handle capable of accommodating all sizes is available.

Electromagnetic Compatibility

The fuse-link meet the electromagnetic compatibility (EMC) requirements of European legislation since they are not sensitive to normal electromagnetic disturbances and any significant electromagnetic disturbance generated by the fuse-links themselves is limited to the instant of operation and controlled by the requirements of the IEC and IS standards.

Range

The range includes ratings up to 630A in standardized body sizes 000, 00, 0, 1, 2 and 3 in the standard "gG" classification

Dimensions

The dimensions are in accordance with DIN43620.

Indicator

The fuse-links incorporate a top mounted mechanical spring indicator.

Marking

The fuse-link have optional duplicate marking on the front and back faces of the body so that the marking is visible whether the fuse-links are mounted in a fuse-base or a fuse-switch.

ACCESSORIES

Solid/Neutral Links.

A range of silver plated solid/neutral links is available for sizes 00, 1, 2 and 3.

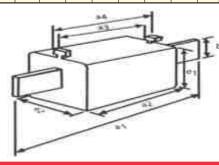




DIMENSION

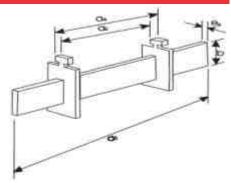
Size	List Ref	Current Ratings (A)			Din	nensio	ons (m	nm)		
000	LSPN000	6,10,16,20,25,32,40,50,63,80,100	a1	a2	а3	a4	b	e1	e2	e4
00	LSPN00	6,10,1,16,20,25,32,40,50,63,80,100,125,160	80	54	45	49	15	42	21	6
0	LSPN0	32,40,50,63,80,100,125,160	80	54	45	49	15	43	30	6
1	LSPN01	32,40,50,63,80,100,125,160,200,250	125	68	62	66	15	48	40	6
'			135	70	62	66	25	46	46	6
2	LSPN02**	,,,,,,,	150	70	62	66	30	57	57	6
3	LSPN03**	315,400,500,630	150	71	63	68	35	72	72	6

^{*}non-stadardized current rating
**ratings also available form 25A onwards in these sizes

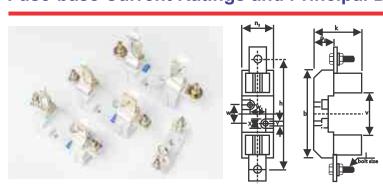


Size	List ref	Current Ratings (A)	Dimensions (mm)					
		()	a1	a2	а3	b	e4	
00	SLLPN00	160	78.5	45	49	15	6	
0	SLLPN0	160	125	62	66	15	6	
1	SLLPN01	250	135	62	66	20	6	
2	SLLPN02	400	150	62	66	25	6	
3	SLL PN03	630	150	63	69	32	6	

DIMENSION



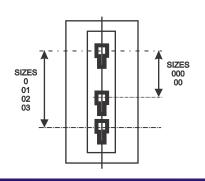
Fuse-base Current Ratings and Principal Dimensions



DIMENSION

Size	List ref	Ratings		Dimensions (mm)									
		(A)	٧	b	h	j	K	n2	p2	w1	w2	Х	У
00	DFB00	160	56.5	93	100	M8	56	33.5	21	00	25	14	7.5
1	DFB01	250	80	150	175	M10	85	59	36	30	25	20	10.5
2	DFB02	400	80	150	200	M10	94	59	36	30	25	20	10.5
3	DFB03	630	80	150	210	M12	106	59	36	30	25	20	10.5

Universal Replacement Handle



List Ref	Current Rating (A)
DUCH	630

DIMENSION





415 Volt BS System Fuse-links with Bolted Connections to IEC60269-2/BS88-2/IS13703-2

Applications

Lawson Type "DN & DT" fuse-links with offset blade and bolted connections have a breaking capacity of 80kA. The are for use by authorised persons, mainly in industrial applications and are suitable for fitting in fuse-bases and fuse-gear.

Standards

The fuse-links meet the requirements of the latest editions of IEC60269-2 together with IS 13703-2 and BS88-2.

Wiring Regulations

In complying with these standards the fuse-links have the classification "gG" or "gM" thus meeting the requirements of IEC60364 for the Electrical Installation of Buildings and national wiring regulations based on the IEC document.

Characteristics

The fuse-links have time-current characteristics which meet the disconnections times required by the wiring regulations and ensure discrimination between current ratings in a ratio of 1:6:1. The fuse-link characteristics also ensure satisfactory performance under both cyclic low overload conditions and repeated transient overloads such as moto starting surges and inrush currents to transformers or capacitors.

Motor Circuits

For usage in transient conditions, such as motor starting, where standard ratings (classifications "gG") are not suitable, a range of motor circuit protection fuse-links (classification :gM") with enhanced transient with stand capability is available.

I² t Values

Type "DN & DT" fuse-links have pre-arcing I² t values at 0.01 sec in the lower half of the standardized range which is the region identified as ensuring satisfactory co-ordination between fuses and contactors/motor starters.

Environment

Energy efficiency in type "DN & DT" fuse-links is ensured by power dissipations substantially below standardized limits. This low energy performance reduces the temperature of the fuse-links and their surrounding equipment thus reducing the risk of thermal deterionration of adjacent contacts or joints. In addition by operating at a lower temperature the fuse-links require less derating in high ambient temperature operating environments.

Economy

Energy consumption is lowered through the reduction in wasteful watts losses, which also give the economic benefits of smaller costs of Kwh and max demand charges.

Electromagnetic Compatibility

The fuse-link meet the electromagnetic compatibility (EMC) requirements of European legislation since they are not sensitive to normal electromagnetic disturbances and any significant electromagnetic disturbance generated by the fuse-links themselves is limited to the instant of operation and controlled by the requirements of the IEC and IS standards.

Range

The range includes all standardized reference fuse-links up to 800A rating in the standard "gG" classification and up to 200M315A rating in the motor circuit protection "gM" classification Non-reference tag variants are available to allow installation in non-standard or specialised equipment.

Dimensions

With dimensions very much less than the standardized limits the fuse-links are small and light in weight thus assisting cooling in installations and reducing the strain on fuse-switch mechanisms.

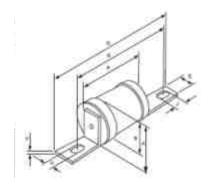


Fuse-link Current Ratings and Principal Dimensions

Offset plain tags

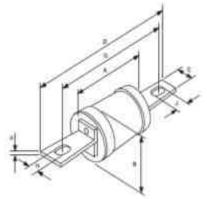
IEC/IS/BS Ref	List Ref	Current Ratings (A)	Dimensions (mm)							
1101	1101	(**)	A (max)	B (max)	D (max)	E (nom)	F (nom)	N (nom)		
E4	DNO	2,4,6,10,16,20,25,32	35.5	13.3	62	11	0.8	3.5		
F1	DNS	40*,50*,63*	39	17.5	62	11	0.8	3.5		
F2	DMES	10,16,20,25,32,40,50,63	39	17.5	69	15	1.4	3.5		





IEC/IS/BS	List	Current Ratings				Dimens	sions (n	nm)			
Ref	Ref	(A)	Α	В	D	Е		G	Н	J	K
		, ,	(max)	(max)	(max)	(max)		(nom)	(nom)	(nom)	(max)
A1	DNIT	2,4,6,10,16,20,25*,32*	35.5	13.3	56	10	8.0	44.5	4.1	aos	14.3
A2	DTIA	2,4,6,10,16,20,25,32	49	22	86	8.7	1.2	73	5.5	8	24
_	DNITL	32,40,50,63	39	17.5	65	11	1,2	53	5.5	aos	18
A3	DTIS	35*,40,50,63	49	22	89	13	1.2	73	5.5	aos	24
A3	פווט	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	11	25
A4	DTCP	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	DTFP	125,160,200	51	30	110	20	2.2	94	8.7	11	33

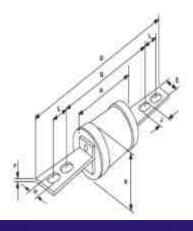
aos=axial open-ended slot



Central tags single hole fixing

IE	C/IS/BS	List	Current Ratings				Dimens	sions (n	nm)		
	Ref	Ref	(A)	Α	В	D	Е	F	G	Н	J
				(max)	(max)	(max)	(max)	(max)	(nom)	(nom)	(nom)
	B1	DTC	80,100,125*	49	26	137	20	3.2	111	8.7	16
	B2	DTF	125,160,200	49	30	137	20	3.2	111	8.7	16
	В3	DTKF	250,315	49	41	137	26	3.2	111	8.7	16
	B4	DTMF	355*,400	49	51	137	26	5	111	8.7	16

Central tags double hole fixing



IEC/	IS/BS	List					Dimens	sions (m	nm)			
R	lef	Ref	(A)	Α	В	D	Е	F	G	Н	J	L
				(max)	(max)	(max)	(max)	(max)	(max)	(max)	(max)	(max)
	01	DTM	355*,400	52	51	210	26	5	133	10.3	16	25.4
	02	DTTM	450*,500,560*,630	54	61	210	26	6.4	133	10.3	16	25.4
	23	DTLM	670*,710*,750*,800	56	73	210	26	9.5	133	10.3	16	25.4

^{*}non-stadardized current rating dimension A is distance over barrel, contact feet and rivet heads

^{*}non-stadardized current rating dimension A is distance over barrel, contact feet and rivet heads

^{*}non-stadardized current rating dimension A is distance over barrel, contact feet and rivet heads

^{*}non-stadardized current rating dimension A is distance over barrel, contact feet and rivet heads



MOTOR CIRCUIT PROTECTION FUSE-LINKS

A motor circuit protection fuse-link has a dual basis of current rating. The lower rating is the maximum continuous current rating determined by the rating of the equipment in which the fuse-link is normally fitted. The higher rating is the operational current rating determined by the time/current characteristic of the fuselink. The list reference incorporates both ratings seperated by the letter "M" .(egDNS20M32)

IES/IS/BS	List	Current	Equivalent				Dim	ension	s(mm)				
REF	Ref	Rating	Standard	Α	В	D	Е	F	G	Н	J	K	N
		Cont M	List ref	(max)	(max)	(max)	(max)	(max)	(nom)	(nom)	(nom)	(max)	(nom)
		motor		. ,	` ′	` ′	` ′	, ,	` ′	` '	` ′	` ′	` '
		(A)(A)											
F1	DNS	20M25	DNS	35.5	13.3	62	11	0.8	-	-	-	-	3.5
		20M32											
		32M40*^		39	17.5	62	11	0.8	-	-	-	-	3.5
		32M50*^											
		32M63*^											
A1	DNIT	20M25	DNIT	36.5	13.3	56	10	8.0	44.5	4.1	aos	14.3	-
		20M32											
		32M40*^		39	17.5	62	11	1.2	44.5	5.5	aos	18	-
		32M50*^											
		32M63*^											
A2	DTIA	32M40	DTIA	49	22	86	8.7	1.2	73	5.5	8	24	-
		32M50											
		32M63											
A3	DTIS	63M80	DTIS	49	26	89	13	1.2	73	5.5	aos	28	-
		63M100											
		100M125*											
A4	DTCP	100M125	DTCP	51	30	110	20	2.5	94	8.7	11	33	-
		100M160											
		100M260											
As A4	DTFP	200M250	DTFP	51	41	110	20	2.5	94	8.7	11	45	-
		200M315											
B1	DTC	100M125	DTC	49	30	137	20	3.2	111	8.7	16	-	-
		100M160											
		100M200											
B2	DTF	200M250	DTF	49	41	137	20	3.2	111	8.7	16	-	-
ı		200M315											

*non-standardized current rating

^barrel exceeds standardized dimensions

aos = asial open-ended slot

FUSE-LINK SELECTION FOR 3 PHASE 415V a.c.

MAXIMUM FULL LOAD CURRENT STARTING CAPABILITY

	INDUCTION MOTOR CIRCUITS									CORRENT STARTING CA	
мот	OR R	ATING	7xFL	OL START _C for 10sec USE-LINK	3.5x	ISTED START FLC for 20sec -LINK RATING		SSISTED ST xFLC for 10		DOLSTA (7xFLC for 1	
				RATING (A)		(A)	FUSE-L	INK RATING (A)	MAXIMUM MOTOR FLC	FUSE-LINK RATING (A)	MAXIMUM MOTOR
KW	HP	FLC	"gG"	"gM"	"gG"	"gM"	"gG'	"gM"	†		FLC
0.75 11	1.5	2.5	6 10	-	6	-	2	-	1.3	"gG" "gM"	i
1.5	2	3.5	10	-	6	-	4	-	2.4	go gw	
2.2	3	5	16	-	10	-	6	-	4.3		
3	4	6.5	20	-	16	-	10	-	6.4	2	
4	5	8	25	20M25	16	-	16	-	11	2	0.6
5.5	7.5	11	32	20M32	20	-	20	-	14	4	1.3
7.5	10	14	40	32M40	25	20M25	25	20M25	19	6	2.3
10	13.5	19	50	32M50	32	20M32	32	-	24	_	
11	15	21	50	32M50	32	-	40	32M40	31	10	4.1
15	20	28	63	32M63	40	32M40	50	-	46	16	6.0
18.5	25	35	80	63M80	50	-	63	-	51	20	7.9
22	30	41	100	63M100	50	-	80	-	69		
26	35	48	100	63M100	63	-	100	-	94	25	10
30	40 45	55 62	125 160	100M125 100M160	80	63M80 63M80	125	-	110	32	13
37	50	69	160	100M160	100	-	160	-	150	40	18
45	60	83	200	100M160	100	-	200	-	180		
5355	70	97	200	100M200	125	100M125	250	-	220	50	26
60	75	100	200	100M200	125	100M125	315	-	250	63	30
67	80	110	250	200M250	160	-	355*	-	310	80	40
75	90	120	250	200M250	160	-	400	-	340		
90	1	135	250	200M250	160	-	450*	400M500*	380	100	54
93	1.5	160	315	200M315	200	-	500	-	430	125	61
110	2	170	355*	-	200	-	560*	-	460		
130	3	200	400	-	250	200M250	630	-	500	160	82
150	4	230	400	-	315	-	670*	-	530	200	110
160	5	260	450*	-	315	-	710*	-	550	250	150
170	7.5	280	500 500	-	355*	-	750*	-	570		
180	10	290	500 560*	-	355*	-	800	-	600	315	170
200 220	13.5 15	320 350	630	-	400	-					
250	20	380	670*	-	450	-					
260	25	420	710*	-	500	-					
300	30	450	750*		560	-					

This data is based upon normal condition and average efficiencies and power factors. Conditions such as long run-up times, large numbers of starts in succession, high ambient temperatures or abnormal transients during starting may necessitate adjustments to fuse-link selection.



INDUSTRIAL FUSE-LINKS WITH BOLTED CONNECTIONS SS

660/690 Volt Industrial Fuse-Links with Bolted Connections to BS88: Part 2 IEC60269-2

Rated voltages:660V a.c., 250V d.c. Breaking range and utilization category: gG Rated breaking capacities: 80kA at 660V a.c., 40kA at 250V d.c.



Lawson Type "SS" fuse-links are for use in industrial applications and have been approved by leading authorities including Electricity Supply Authorities The range includes all BS88:Part 2 reference fuse-links up to 800 Amps and has gG classification. Non-reference tag variants cater for installation in non-standard or specialised equipment.

> The range has a rated voltage of 660V a.c., and has been certified at a test recovery voltage of at least 110%. These fuse-links are therefore suitable on systems that meet the nominal hamonised voltage of 690V a.c., + 5% The range also has a rating of 250V d.c. A complementary range of solid/neutral links is available to suit our fuse-link range.

These Fuse-Links are manufactured in the UK and Comply with the Quality assurance systems employed by Lawson Fuses Ltd.

Product Detail

	Product detail - Offset Tag Fuse-Links												
List Reference	Current Rating (A)	BS88 Reference	Voltage Rating (V)	Breaking Capacity (kA)	BS Standard	IEC Standard	Carton Quantity	Carton Weight (Kg)					
SSA1 SSA2 SSA3 SSA4 SSFP 85SSM 86SST 86SST	2,4,6,10,16,20 2,4,6,10,16,20,25,32 35,40,50,63 32,40,50,63,80,100 125,160,200 355,400 450,500,560,630 670,710,750,800	A1 A2 A3 A4 (asA4) - -	660 a.c. 250d.c.	80kA-a.c. 40kA-d.c.	BS88:Part 2	60269-2	10 10 10 5 1 1	0.15 0.50 0.80 0.90 0.25 1.05 1.40					

Product detail - Offset Tag Fuse-Links

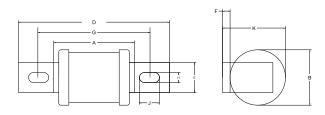
List	Current Rating	BS88	Voltage Rating	Breaking	BS	IEC	Carton	Carton Weight (Kg)
Reference	(A)	Reference	(V)	Capacity (kA)	Standard	Standard	Quantity	
SSB SSBC SSBC SSB1 SSB2 84SSF SSB3 84SSK SSKM SSB4 SSC1 SSMT SSC2 SST SSC3 SSLT SSLU SSLU	2,4,6,10,16,20,25 3,2,35,40,50,63 2,4,6,10,16,20,25 32,35,40,50,63 80,100 125,160,200 125,160,200 250,315 250,315 125,160,200,250,315 355,400 355,400 450,500,560,630 450,500,560,630 670,710,750,800 450,500,560,630 670,710,750,800	- (as B1) (as B1) B1 B2 - B3 - C1 - C2 - C3 - D1 D1	660 a.c. 250d.c.	80kA-a.c. 40kA-d.c.	BS88:Part 2	60269-2	10 10 10 10 5 1 1 1 1 1 1 1 1 1	0.60 0.75 0.60 0.75 0.90 0.25 0.45 0.45 0.45 0.65 0.78 0.83 1.05 1.05 1.40 1.40 2.40 2.40



INDUSTRIAL FUSE-LINKS WITH BOLTED CONNECTIONS

TYPE SS

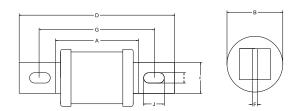
Dimensional Drawings



BS88: Part 2 reference 'A' fuse-link dimensions and tag variants

Door	_		DIMENSIONS(mm)								
BS88 Ref.	Type Ref.	Current Ratings(A)	Α	В	D	Е	F	G	Н	J	K
			max	max	max	max	nom	nom	nom	nom	max
A1	SSA1	2,4,6,10,16,20	34	14.3	56	9.5	12	44.5	4.8	OPEN	14.3
A2	SSA2	2,4,6,10,16,20,25,32	49	22	86	9	12	73	5.5	8	24
А3	SSA3	35*,40,50,63	53	26	89	13	12	73	55	OPEN	28
A4	SSA4	32,40,50,63	51	26	110	20	2.4	94	8.7	11	25
A4	SSA4	80,100	60	35	110	20	2.4	94	8.7	11	38
as A4	SSFP	125,160,200	60	41	110	20	2.4	94	8.7	11	42
-	85SSM	355,400	60	61	110	20	2.4	102	8.7	11	42
_	86SST	450*,500,560*,630	60	73	110	20	2.4	102	8.7	11	42
-	86551	670*,710*,750*,800	60	83	110	20	2.4	102	8.7	11	42

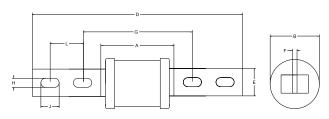
^{*} Non- Standardized current rating additional to BS88: Part 2



BS88: Part 2 reference 'B' fuse-link dimensions and tag variants

	_			-	DI	MENS	1)2NO	nm)	-	
BS88 Ref.	Type Ref.	Current Ratings (A)		В	D	Е	F	G	Н	J
				max	max	max	nom	nom	nom	nom
	SSB	2,4,6,10,16,20,25,32	45	22	111	13	12	97	7.1	13
-	335	35*,40,50,63	53	26	111	13	12	97	7.1	13
as B1	SSBC	2,4,6,10,16,20,25,32	45	22	137	15	14	111	8.7	14
as D I	0000	35*,40,50,63	53	26	137	15	14	111	8.7	14
B1	SSB1	80,100	60	35	137	20	3.2	111	8.7	14
B2	SSB2	125,160,200	60	41	137	20	3.2	111	8.7	14
-	84SSF	125,160,200	60	41	137	20	3.2	111	8.7	14
В3	SSB3	250,315	75	51	137	26	3.2	111	8.7	14
-	84SSK	250,315	60	51	137	20	3.2	111	8.7	14
-	SSKM	125,160,200,250,315	75	51	159	26	3.2	133	10.3	14
В4	SSB4	355*,400	77	61	137	26	6.4	111	8.7	16

^{*} Non- Standardized current rating additional to BS88: Part 2



BS88: Part 2 reference 'C' fuse-link dimensions and tag variants

	_					DIME	NOIS	S(mm))		
BS88 Ref.	Type Ref.	Current Ratings (A)	Α	В	D	Е	F	G	Н	J	L
		(* -7	max	max	max	max	nom	nom	nom	nom	max
C1	SSC1	355*,400	77	61	210	26	6.3	133	10.3	16	25.4
-	SSMT	355*,400	77	61	267	26	6.3	165	10.3	16	318
C2	SSC2	450*,500,560*,630	80	73	210	26	7.8	133	10.3	16	25.4
-	SST	450*,500,560*,630	80	73	267	26	7.8	165	10.3	16	318
C3	SSC3	670*,710*,750*,800	83	83	210	26	9.5	133	10.3	16	25.4
-	SSLT	670*,710*,750*,800	83	83	267	26	9.5	165	10.3	16	318
D1	SSLU	450*,500,560*,630	83	73	267	26	9.5	149	10.3	16	318
ы	SSLU	670*,710*,750*,800		83	267	26	9.5	149	10.3	16	318

^{*} Non- Standardized current rating additional to BS88: Part 2





415 Volt BS System Fuse-holders

Applications

Lawson Type "DBFF" Fuse Holders accommodate Industrial fuse-link with offset blade and bolted connections to IEC60269-2 together with IS 13703-2 and BS88-2.

Standards

The fuse-holders meet the requirements of IS 13703-2

Construction

The basic fuse-holder incorporates a base with unshrouded terminal blocks.

Range

The fuse-holder range consists of five fuse-holders which accommodate compact dimension 415V fuse-links up to 32A rating together with 415V offset tag industrial fuse-links up to 100A

Also have 415V compact dimenion fuse-holders to BS88,IEC60269, IS13703 Type DCF (Clip Fit Range)

Wiring Connection

The fuse-holder are available with double front wiring connections (FC/FC) or a single front wiring connection together with a rear busbar connection (FC/BBC) The 20A Fuse-holder is available in two versions which occomodate compact dimension fuse-links and offset tag fuse-links Both versions are available with double back connections (BC/BC).

Base Terminals

To Improve the mechanical and electrical connection of the cable the 32A, 63A and 100A terminal blocks incorporate double terminal screws.

Degrees of Protection

When installed the basic fuse-holders have the degree of protection IP2X.

Terminal Shrouds

For enhanced protection the 32A, 63A and 125A fuse-bases can be supplied or retro fitted with separate insulated terminal shrouds for fitting over both incoming and outgoing terminal blocks. The terminal shrouds provide protection to degree IP2X when the fuse-carrier is removed and enable work to be carried out on a dead terminal with the other terminal live. With terminal shrouds fitted the bases accommodate Lawson fuse-links from the "DN&DT" range , which feature barrel dimensions below standardized limits. Fuse-links with larger dimensions may not be able to be fitted in the shrouded bases.

Cable Ferrules

Insulated cable ferrules may be fitted to all front connected cable entries to provide cable support at the point of entry together with an enhanced degree of protection.

Din Rail Adaptor

A multi fixing adaptor is available which can be fitted to the rear of the DBFF20F1, the DBFF20A1 and the DBFF32 bases enabling them to be mounted on the standard 35mm top hat DIN rail. The adaptor can also be used to attach other items of equipment to the DIN rail.

Labelling

The fuse carriers incorporate two white labels. Circuit identification can be entered on one label. Circuit details such as fuse-links rating can be entered on the other.



Fuse-holeder Current Ratings and Principal Dimensions

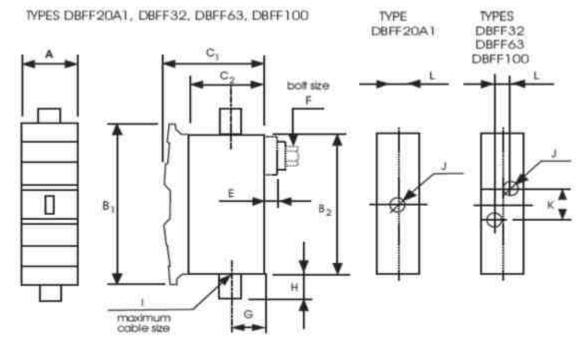
77.6 43.7 32.7 67.6 67.6 67.6 maximum cable size

DIMENSION

	CURRENT	LAWSON
REFERENCE	RATING	FUSE-LINK
	(A)	REFERENCE
DBFF 20 F1 FC/FC BK	20/32	DNS
DBFF 20 F1 FC/BBC BK	20/32	DNS
DBFF 20 F1 BC/BC BK	20/32	DNS
DCF 32 FC/FC BK	32A	DNS(F1)*
DCF 32 FC/BBC BK	32A	DNS(F1)*
DCF 32 FC/BC BK	32A	DNS(F1)*
DCF 32 FC/BC BK	32A	DNS(F1)*

^{*}All bases include integral DIN-rail adaptor.

FIXING DETAILS



	CURRENT	LAWSON	DIMENSIONS (mm.)												
REFERENCE	RATING (A)	FUSE-LINK REFERENCE	Α	В ₁	В2	C ₁	C ₂	Е	F	G	Н	l ₂ mm	J	K	L
DBFF 20 A1 FC/FC BK	20/32	DNIT	24.5	27.6	67.6	43.7	32.7	-	-	18.7	15	10	5.0	-	5
DBFF 20 A1 BC/BBC BK	20/32	DNIT	24.5	77.6	67.6	43.7	32.7	1	-	18.7	15	10	5.0	-	5
DBFF 20 A1 BC/BC BK	20/32	DNIT	24.5	77.6	67.6	43.7	32.7	-	-	18.7	15	10	5.0	-	5
DBFF 32 FC/FC BK	32	DTIA	32.2	103	99	64	41	-	-	21	15	16	5.8	6.3	12.7
DBFF 32 FC/BBC BK	32	DTIA	32.2	103	99	64	41	1.5	M6	21	15	16	5.8	6.3	12.7
DBFF 63 FC/FC BK	63	DTIS	36	111	105	72.5	46	-	-	23	15	25	5.8	6.3	12.7
DBFF 63 FC/BBC BK	63	DTIS	36	111	105	72.5	46	1.5	M6	23	15	25	5.8	6.3	12.7
DBFF 100 FC/FC BK	100	DTCP	51	141	130	98	64	-	-	28.5	15	70	8.7	22	19
DBFF 100 VF/BBC BK	100	DTCP	51	141	130	98	64	1.5	M10	28.5	15	70	8.7	22	19



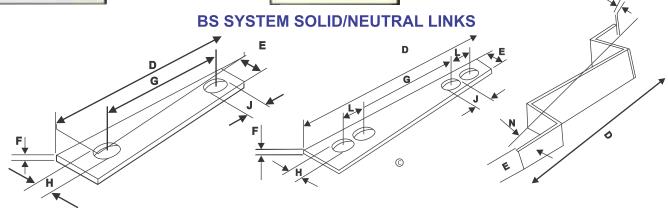
FUSE-HOLDER ACCESSORIES







DIN Rall Adaptor



					Dimensio	ons (mm)			
List Ref	Current Rating (A)	D (max)	E (max)	F (max)	G (nom)	H (nom)	J (nom)	L (nom)	N (nom)
DSLA1	20	56	10	0.8	44.5	4.1	qos	-	-
DSLA2	32	86	8.7	1.2	73	5.5	8	-	-
DSLA1L	63	65	11	1.2	53	5.5	qos	-	-
DSLA3	63	89	13	1.2	73	5.5	qos	-	-
DSLA4	125	110	20	2.5	94	8.7	11	-	-
DLSB1	100	137	20	3.2	111	8.7	16	-	-
DSLB2	200	137	20	3.2	111	8.7	16	-	-
DSLB3	315	137	26	3.2	111	8.7	16	-	-
DSLB4	400	137	26	5	111	8.7	16	-	-
DSLC1	400	210	26	5	133	10.3	16	26	-
DSLC2	630	210	26	6.4	133	10.3	16	26	-
DSLC3	800	210	26	9.5	133	10.3	16	26	-
DSLF1	32	62	11	0.8	-	-	-	-	3.5



ELECTRICITY SUPPLY FUSE-LINKS

TYPEJ

DJPU & DJSU

400/415 Volt Electricity Supply Distribution Fuse-Links BS88-2/ IEC60269-2

Rated Voltage: 415V a.c., Breaking Range and Utilization Category: gU, Rated Breaking Capacity:80kA



Lawson Type "J" fuses are for use in a.c. electricity supply networks. They are installed in distribution boards, feeder pillars, line boxes, pole mounted cut-outs and heavy duty service intakes. The range includes all the current ratings up to 400A specified in BS88-2/IEC60269-2 for fuse-links with the standard 82mm and 92mm fixing centres, together with additional non-standardized current ratings.

The range has a rated voltage of 415 V a.c. and has been certified at a test recovery voltage of 110%. These fuse-links are therefore suitable for use on systems with voltages up to 457V a.c. The rated & test voltages also ensure that the range meets all the transitional voltage requirements specified within the harmonized nominal voltage of 400V a.c.



Performance Data and Product Detail

Performance Data-Electricity Supply Fuse-Links

LIST REF.	RATED CURRENTS (A)	RATED VOLTAGE (V a.c.)	RATED BREAKING CAPACITY (kA)	BS/IEC STANDARDS
DJPU	20,32,40,50,63, 80,100*,125,160*,200*, 250*,315*,355*,400*	445	00	DC 00 0/IF C 00000 0
DJSU	20,32,40,50,63, 80,100*,125,160*,200*, 250*,315*,355*,400*	415	80	BS 88-2/IEC 60269-2

^{*}Standardized current rating to BS88-2/IEC 60269-2

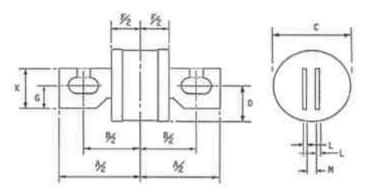


Principal Dimensions

DIMENSION

400/415 Volt Electricity Supply Distribution Fuse-Links BS88-2/ IEC60269-2

Rated Voltage: 415V a.c., Breaking Range and Utilization Category: gU, Rated Breaking Capacity:80kA



	CUDDENT				DIMEN	SIONS	S (m m)	-	-	
LICT DEE	CURRENT	Α	В	С	D	F	G	K	L	М
LIST REF.	RATINGS	Max	Nom	Max	Max	Max	Nom	Max	Max	Max
	(A)									Min
	ST	ANDA	RDIZE	D DIM	ENSIO	NS				
DJPU	20,32,40,50,63, 80,100,125,160*,200*	112 82	31	16	45	18	31	2.4	6.53	
DJFO	250*,315*,355*,400*	112	82	41	18	45	10	31	2.4	6.45
DIGH	20,32,40,50,63, 80,100,125,160*,200*	122	132 92	31	16		22	38	3.2	8.13
DJSU	250*,315*,355*,400*	132		41	20	45	22	J0	3.2	8.05

^{*}Standardized current rating to BS88-2/IEC 60269-2

FUSE-HOLDERS FOR ELECTRICITY SUPPLY FUSE-LINKS TYPE DFH

DFH 92 Fuse Holders

Suitable for DJSU fuse-Links rated up to 630A. Breaking Capacity rating of 80kA at 415V a.c. tested in compliance with BS 88-1/IEC 60269-1 and BS 88-2/IEC 60269-2





DFH 82 Fuse Holders

Suitable for DJPU fuse-Links rated up to 400A. Breaking Capacity rating of 80kA at 415V a.c. tested in compliance with BS 88-1/IEC 60269-1 and BS 88-2/IEC 60269-2



CYLINDRICAL FUSE-LINKS

TYPE DFN

ROUND TYPE

500 Volt Cylindrical Fuse-Links to IEC60269-2

Rated Voltage 500V a.c., Breaking Range & Utilization Category:gG, Rated Breaking Capacity 80kA

Lawson Type DFN Cylindrical fuse-links are used widely in both commercial and industrial applications. The fuse-links are tested in compliance with IEC 60269-2. A complementary range of solid/neutral links is available.



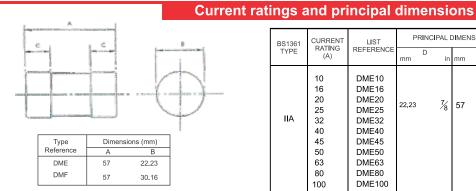
LIST REFERENCE	DIMENSIO	CIPAL ONS (mm) or IEC LENGTH	RATED CURRENT (A)	RATED VOLTAGE	RATED BREAKING CAPACITY	RATED POWER DISSPATION (W)				
			6			0.9				
		10 38 10 10 500V a.c	10			1.0				
DFN 10G	10		16	500\/ 0.0	80 kA	1.7				
	10		300 v a.c.	00 KA	2.0					
			25			3.0				
			32			3.0				
			10			1.0				
			16			1.8				
			20			3.0				
DFN 14G	14	E1	F4	E1	E1	51	51 25 500V a.c.		80 kA	3.1
DI N 14G	14	31	32	300 v a.c.	00 KA	4.7				
			40			4.9				
			50			5.0				
			63			6.0				

HOUSE SERVICE CUT-OUT FUSE LINKS

TYPE DME & DMF

400/415 Volt House Service Cut-Out Fuse-Links to IEC60269-3/BS 88-3

Rated voltage 415Va.c. breaking capacity 80kA a.c. Breaking Range and Utilisation Category gG.



Lawson type DME & DMF industrial Fuse-links are for use in single or three phase house service cut-outs or similar installations. The Standardised breaking capacity is 31.5kA at 0.3pf. However, to cater for increased fault levels, all Fuse-links have been certified to 80kA at 0.15pf.

l	BS1361	CURRENT	LIST	PRING	IPAL [IMEN:	SIONS
l	TYPE	RATING (A)	REFERENCE	mm	in	mm	L in
	IIA	10 16 20 25 32 40 45 50 63 80 100	DME10 DME16 DME20 DME25 DME32 DME40 DME45 DME50 DME63 DME80 DME100	22.23	1∕8	57	214
	IIB	20 32 40 50 63 80 100	DMF20 DMF32 DMF40 DMF50 DMF63 DMF80 DMF100	30.16	1 ³ /16	57	2 1/4



MODULAR FUSE-HOLDER

TYPE LMSC

FUSE HOLDER



LMSC14 Fuse-holder

Suitable for the cylindrical 14x51mm fuse-links rated up to 63A. Breaking capacity rating of 80kA at 500V a.c. tested in compliance with IEC60269-1

LMSC10 Fuse-holder

Suitable for the cylindrical 10x38mm fuse-links rated up to 32A. Breaking capacity rating of 80kA at 500V a.c. tested in compliance with IEC60269-1



Voltage & Current Ratings and Principal Dimensions

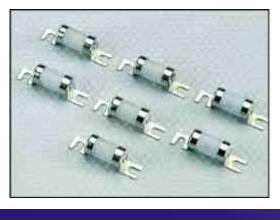
FUSE- HOLDER LIST		RATED BREAKING CAPACITY	1 1151 1	CURRENT RATING (A)	DIMENSIO	CIPAL ONS (mm) er IEC	
REFERENCE	(V a.c.)	CAPACIT	REFERENCE		DIMETER	LENGTH	
LMSC10	500	80 kA	DFN10G	6,10,16, 20,25,32	10	38	
LMSC14	500	80 kA	DFN14G	10,16,20,25, 32,40,50,63	14	51	

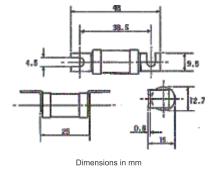
STREET LIGHTING

TYPE DLST

230/240 Volt Street Lighting Cut-Out Fuse-Links to BS88: Part 1 and IEC602669-1

Rated Voltage 240V a.c., Breaking Range & Utilization Category:gG, Rated Breaking Capacity: 20kA at 240Va.c.





Current ratings and fixing centre

CURRENT RATING (A)	LIST REFERENCE	FIXING CENTRE				
(/ ()		mm	in			
2	DLST2					
4	DLST4					
6	DLST6					
10	DLST10		4.			
16	DLST16	38.5	1/2			
20	DLST20					
25	DLST25					
32	DLST32					



SEMICONDUCTOR FUSE-LINKS WITH BOLTED CONNECTIONS

TYPE LSC

Semiconductor Protection Fuse-Links to BS88: Part4.IEC60269-4

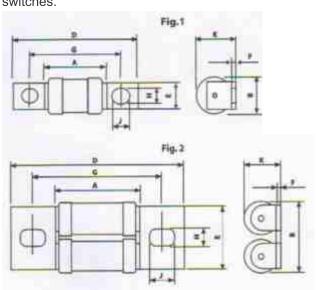
Rated Voltages:240/690V a.c

Rated breaking capacities: 100KA at 240/690V a.c & 120/350V d.c



A comprehensive range of Fuse-Links for the protection of semiconductor devices. The 240 and 690 volt, series comply with the performance and dimensional requirements of BS88; Part 4 and IEC60269-4. These Fuse-links are manufactured in the UK and Comply with the quality assurance systems employed by Lawson Fuses Ltd.

A range of Hi-Speed Fuse-Links to DIN 43620 is also available. Ranges of cylindrical Fuse-Links are available for mounting in fuse clips, fuse holders, fuse blocks or fused switches.



Principal ratings

Voltage Rating a.c. (V)	Current Rating (A)	List Ref.	Fig.	
240	10 16 20 25 32 40 50 63 80 100	LSCA 10 LSCA 16 LSCA 20 LSCA 25 LSCA 32 LSCA 40 LSCA 50 LSCA 63 LSCA 80 LSCA 100	1	
240	125 160 200 250 315	LSCA 125 LSCA 160 LCSA 200 LSCA 250 LSCA 315	1	
240	350 400 450 500 630	LSCA 350 LSCA 400 LCSA 450 LSCA 500 LSCA 630	3	
690	10 16 20 25 32 40 50 63 80 100	LSCB 10 LSCB 16 LSCB 20 LSCB 25 LSCB 32 LSCB 40 LSCB 50 LSCB 63 LSCB 80 LSCB 100	1	
690	125 140 160 180 200	LSCB 125 LSCB 140 LSCB 160 LSCB 180 LSCB 200	2	
690	200 225 225 315 355	LSCB 200 LSCB 225 LSCB 250 LSCB 315 LSCB 355	1	
	350 400 500 630	LSCB 350 LSCB 400 LSCB 500 LSCB 630	3	

Indicators

Trip-indicator fuse-links are available for use in parallel with the main fuse-link Indicator fuse-links can either be attached to the associated fuse-link or mounted separately in panel mounted fuse clips. A push-on adaptor and micro switch attachment is available for use with the trip indicator to give the facility of remote indication.

Voltage Curre	ge Current	1 ~ 1	Dimensions in Millimetres								
	Ratings Ratings (V) (A)		A max.	B max.	D max.	E nom.	F max.	G nom.	H nom.	J min.	K max.
240	10-100	1	29.2	17.7	58.4	12.7	2.5	41.8	6.4	7.9	19.3
240	125-315	1	32.6	38.2	85.0	25.4	3.3	59.0	10.3	13.0	41.5
240	350-630	3	32.6	38.2	85.0	25.4	6.4	59.0	10.3	13.0	83.0
690	10-100	1	50.6	17.7	79.8	12.7	2.5	63.5	6.4	7.9	19.3
690	125-200	2	50.6	37.0	95.0	32.0	1.6	70.0	8.7	10.3	19.9
690	200-55	1	60.0	38.2	114.0	25.4	3.3	85.0	10.3	13.0	41.5
690	350-630	3	60.0	38.2	114.0	25.4	6.4	85.0	10.3	13.0	83.0



Comparatives

LAWSON	BUSSMANN	SIBA	GEPOWER	MEM	FERRAZ	IR	DORMAN
LSCA10	LET10			10FNA	N076648	L350-10	DSL10
LSCA16	LET16			16FNA	Q077650	L350-16	DSL16
LSCA20	LET20			20FNA	L097507	L350-20	DSL20
LSCA25	LET25	5005306/25	GSA25	25FNA	R076651	L350-25	DSL25
LSCA32	LET32			32FNA		L350-32	DSL32
LSCA40	LET40		GSA40	40FNA	T076653	L350-40	DSL40
LSCA50	LET50	5005306/50	GSA50	50FNA	V076654	L350-50	DSL50
LSCA63	LET63			63FNA		L350-63	DSL63
LSCA80	LET80			80FNA	Z085559	L350-80	DSL80
LSCA100	LET100	5005306/100	GSA100	100FNA	Y08558	L350-100	DSL100
LSCA125			GSA125				
LSCA160	LMT160			160FPA			
LSCA200	LMT200	5005406/200	GSA200	200FPA	P082468	T350-200	DST200
LSCA250	LMT250		GSA250	250FPA	N082467	T350-250	DST250
LSCA315	LMT315		GSD315	315FPA	M082466	T350-315	DST315
LSCA350			GSA350				
LSCA400	LMMT400		GSA400	400FPA2	H082462	TT350-400	DSTT400
LSCA500	LMMT500		GSA500	500FPA2	G082461	TT350-500	DSπ500
LSCA630	LMMT630		GSA630	630FPA2	F082460	TT350-630	DSTT630
LSCB10	10ET	5007306/10		10FRB		E1000-10	DSG10
LSCB16	15ET	5007306/16	GSGB16	16FRB	G075883	E1000-15	DSG15
LSCB20	20ET	5007306/20		20FRB	H075884	E1000-20	DSG20
LSCB25	25ET	5007306/25	GSB25	25FRB	J075885	E1000-25	DSG25
LSCB32	32ET	5007306/32	GSGB30	32FRB	KO75886	E1000-32	DSG32
LSCB40	40ET	5007306/40	GSGB40	40FRB	M075888	E1000-40	DSG40
LSCB50	56ET	5007306/55	GSB55	56FRB	Q075891	E1000-56	DSG55
LSCB63	63ET	5007306/63	GSGB63	63FRB	R075892	E1000-63	DSG64
LSCB80	80ET	5007306/80	GSB80	80FRB	T075894	E1000-80	DSG80
LSCB100	100ET	5007306/100	GSB100	100FRB		E1000-100	DSG100
LSCBT125	125EET		GSGB125	125FTB2	B099959	EE1000-125	DSGG125
LSCBT140	140EET			140FTB2	J075908	EE1000-140	DSGG140
LSCBT150			GSGB150				
LSCBT160	160EET		GSGB160	160FTB2	K075909	EE1000-160	DSGG160
LSCBT180	000555		0000000	0005700		FF4000 000	D000000
LSCBT200	200EET	E007400/000	GSGB200	200FTB2	T007400	EE1000-200	DSGG200
LSCB200	200MT	5007406/200	GSB200	200FUB	T097169	M1000-200	DSM200
LSCB225	SEOME	E007406/0E0	CCDOEO	OFOELID	14/007474	M4000 050	DOMOSO
LSCB250	250MT	5007406/250	GSB250	250FUB	W097171	M1000-250	DSM250
LSCB315 LSCB355	315MT 355MT	5007406/315 5007406/355		315FUB 355FUN	B097176 C097177	M1000-315	DSM315 DSM355
LSCB355 LSCBD350	JJJIVI I	5007406/355	GSGB350	3331-UN	Coariti	M1000-355	טטטוטטט
LSCBD350	400MMT	5007506/350	GSGB350 GSB400	400FUB2	T097284	MM1000-400	DSMM400
LSCBD400	500MMT	5007506/400	GSB400 GSB500	500FUB2	Z097289	MM1000-400	DSMM500
LSCBD300	630MMT	5007506/630	305300	630FUB2	B097291	MM1000-630	DSMM630
2000000	COOMINIT			0001 002	5007201	191191 1000-000	DOIMINIO20

This comparative table is provided only as a guide to semiconductor fuse-link products in the market place. Lawson Fuses do not claim an identical match with the corresponding product codes as these specifications may change without notice. For detailed comparisons please contact Lawson marketing team.



OTHER PRODUCTS available from LAWSON FUSES INDIA LTD

FINAL DISTRIBUTION PRODUCTS

Miniature Circuit Breakers

230/400 Volt,6A to 63 A ,10KA ,SP,SPN,DP,TP,TPN & FP with B & C Curves

MCB Isolators

Current Ratings 40,63 & 100A,SP,DP,TP & FP

Residual Current Circuit Breakers

Current Ratings 16,25,32,40,63,80 & 100A,DP & FP with Current Sensivity 30/100/300mA

Distribution Boards

SPN, TPN Horizontal, TPN Vertical, PPI & Phase Selector DBs

Plug and Socket Distribution Boards

SPN & TPN Plug & Socket DBs

Metal & Plastic Enclosures

Metal Enclosures
Plastic Enclosures

All items from the Lawson Fuses Ltd range of products are also available from Lawson Fuses India Ltd.

See www.lawson-fuses.co.uk for product details, technical data and application guide.

Contact: Team Lawson

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Website: www.lawsonfuses-india.com

LAWSON FUSES INDIA LIMITED

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The products referred in this publication are manufactured and tested to the specification indicated on the product as applicable to the 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.

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