



# LBS

Load break switch  
from 63 to 3150A

Load break switch



## Function

The **SOCOMEK LBS** ensures making and breaking on load and security breaking of any low voltage electrical circuit. They are available in 4 poles manual operation.

## Operations

### Direct

The pad lockable handle is mounted directly on the LBS and lockable in ON/OFF position.

### External

The pad lockable handle is to be mounted on the panel door and lockable in ON/OFF position. The external front operation ensures that the door is interlocked in ON position.

## General Characteristics

- Very compact design
- Resistant to Tropical conditions and Polluted environment
- Quick Make & Quick Break
- Fully visualized indicator
- High thermal and Dynamic withstand capacity
- Available in open execution and Sheet Steel Enclosure, for top or bottom cable entry.
- High performance: AC23 Category
- Any pole suitable for Neutral
- Unique Safety Handle with built in door Padlock facility
- High Electrical and Mechanical Endurance.

## The solution for

- > Main switchboard
- > Distribution panel
- > Emergency switching
- > Bus tie



## Strong points

- > Suitable for aluminium and copper connection
- > High reliability and performance

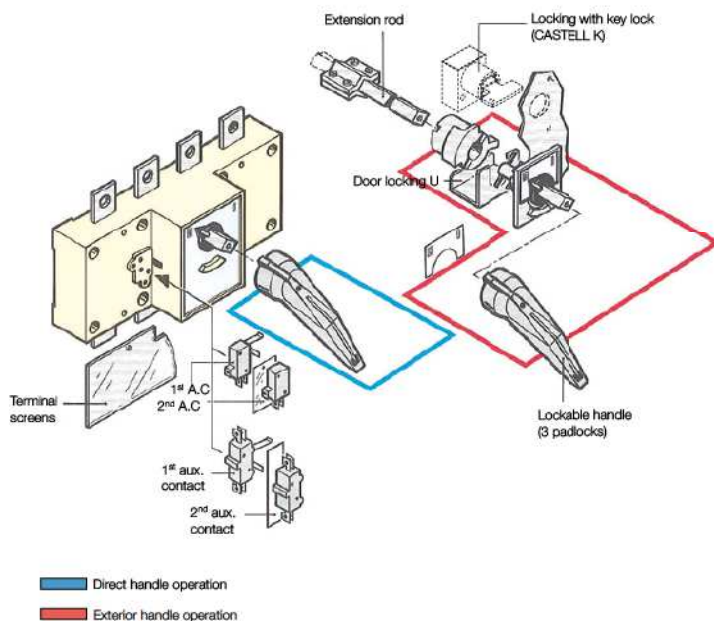
## Conformity to standards

- > IS/IEC 60947-3



## Functional diagram

Only available for 63A



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## Characteristics

63 to 630 A

LBS from 63 to 630 A							
References	GL00634POI	GL01254POI	GL02004POI	GL02504POI	GL03204POI	GL04004POI	GL06304POI
<b>Thermal current I<sub>th</sub> (40°C)</b>	<b>63 A</b>	<b>125 A</b>	<b>200 A</b>	<b>250 A</b>	<b>320 A</b>	<b>400 A</b>	<b>630 A</b>
Max. Normal rating of fuses	63	125	200	250	315	400	630
Insulation voltage U <sub>i</sub> (V)	750	1000	1000	1000	1000	1000	1000
Dielectric strength (V) 50 Hz 1 mn.	4000	5000	5000	5000	5000	8000	8000
Impulse voltage (kV)	6	6	6	8	8	12	12
<b>Rated operational current I<sub>e</sub> (A)</b>							
415 VAC-AC 23 A	63	125	200	250	320	400	630
500 VAC-AC 23 A	55	100	160	200	250	315	315
280 VDC-DC 21 A	63	125	200	250	320	400	630
280 VDC-DC 22 A	63	125	200	250	320	400	500
280 VDC-DC 23 A	63	125	160	200	250	400	500
440 VDC-DC 21 A	63	125	200	250	320	400	500
440 VDC-DC 22 A	63	125	160	200	250	400	500
440 VDC-DC 23 A	63	125	160	200	250	400	500
<b>Motor power (kW) 415V</b>							
415 VAC without pre-break auxiliary contact	30	63	80	132	160	200	220
500 VAC without pre-break auxiliary contact	30	63	63	140	220	220	220
690 VAC without pre-break auxiliary contact	22	55	55	90	150	150	150
415 VAC with pre-break auxiliary contact	30	63	80	132	160	220	355
500 VAC with pre-break auxiliary contact	30	80	80	160	220	280	355
690 VAC with pre-break auxiliary contact	35	110	110	110	220	220	295
Motor Reactive 415 VAC (kVAR)	25	55	60	100	125	150	2 x 125
<b>Protection</b>							
Short-circuit current with fuses (kA rms)	80	80	80	80	80	80	80
Fuse rating	63	125	200	250	315	400	630
Peak short-circuit making capacity (kA rms)	15	20	20	30	45	45	45
Admissible short time current 1 sec (kA rms)	5	7	7	9	13	13	13
<b>Making &amp; breaking characteristics</b>							
Breaking capacity (A rms) 415 VAC pf-0.35	504	1000	1600	2000	2520	3200	5040
Making capacity (A rms) 415 VAC pf-0.35	630	1250	2000	2500	3150	4000	6300
<b>Endurance</b>							
Mechanical No. of operations	10000	8000	8000	8000	5000	5000	5000
Electrical No. of operations	2500	1000	1000	1000	1000	1000	1000
Operating force (Nm)	3.5	9.5	9.5	11	11	17	17
<b>Connection</b>							
Min. Cu cable/bus bar size (mm <sup>2</sup> )	16	50	95	120	185	240	40 x 5 x 2
Min. Al cable/bus bar size (mm <sup>2</sup> )	25	70	150	185	240	300	40 x 8 x 2

## Accessories

### Handle

Rating (A)	Reference
63	42990001GI
125	42990003GI
200	42990005GI
250	42990006GI
320	42990007GI
400	42990008GI
630	42990009GI
800	42990010GI
1000 ... 3150	42990011GI



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### Door Interlock assembly

Rating (A)	Reference
63	26590001GI
125 ... 630	26590002GI
800 ... 3150	26590003GI



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## Characteristics (continued)

800 to 3150 A

LBS from 800 to 3150 A							
References	GL08004POI	GL010004POI	GL012504POI	GL016004POI	GL020004POI	GL025004POI	GL031504POI
<b>Thermal current <math>I_{th}</math> (40°C)</b>	<b>800 A</b>	<b>1000 A</b>	<b>1250 A</b>	<b>1600 A</b>	<b>2000 A</b>	<b>2500 A</b>	<b>3150 A</b>
Max. normal rating of fuses	800	1000	1250	1250	2 x 800	2 x 1000	2 x 1250
Insulation voltage $U_i$ (V)	1000	1000	1000	1000	1000	1000	1000
Dielectric strength (V) 50 Hz 1 mn.	8000	8000	10000	10000	10000	10000	10000
Impulse voltage (kV)	12	12	12	12	12	12	12
<b>Rated operational currents <math>I_e</math> (A)</b>							
415 VAC-AC 23A	800	1000	1000	1000	1250	1250	1250
500 VAC-AC 23A	630	1000	1000	1000	1000	1000	1000
260 VDC-DC 21A	800	1000	1250	1600	2000	2000	2000
260 VDC-DC 22A	800	1000	1250	1250	1250	1250	1250
260 VDC-DC 23A	800	1000	1250	1250	1250	1250	1250
440 VDC-DC 21A	630	1000	1250	1600	2000	2000	2000
440 VDC-DC 22A	800	1000	1250	1250	1250	1250	1250
440 VDC-DC 23A	800	1000	1000	1000	1000	1000	1000
<b>Motor Power (kW) 415V</b>							
415 VAC without pre-break auxiliary contact	450	560	560	560	710	710	710
500 VAC without pre-break auxiliary contact	450	560	560	710	710	710	710
690 VAC without pre-break auxiliary contact	185	400	400	475	475	750	750
415 VAC with pre-break auxiliary contact	450	560	710	710	900	1100	1155
500 VAC with pre-break auxiliary contact	550	710	710	900	900	1100	1100
690 VAC with pre-break auxiliary contact	475	600	600	750	750	900	900
Motor Reactive 415 VAC (kVAR)	2 x 150	3 x 150	4 x 125	5 x 150	6 x 150	7 x 150	9 x 150
<b>Overload Capacity</b>							
Short-circuit current with fuses (kA rms)	80	80	80	80	80	80	80
Fuse rating	800	1000	1250	2 x 800	2 x 1000	2 x 1250	2 x 1250
Peak short-circuit making capacity (kA rms)	55	105	105	110	110	110	120
Admissible short time current 1 sec (kA rms)	26	50	50	50	50	50	55
<b>Making &amp; Breaking Characteristics</b>							
Breaking capacity (Arms) 415 VAC pf-0.35	6400	8000	8000	8000	10000	10000	10000
Making capacity (Arms) 415 VAC pf-0.35	8000	10000	10000	10000	12500	12500	12500
<b>Endurance</b>							
Mechanical No. of Operations	4000	4000	4000	3000	3000	2500	2500
Electrical No. of Operations	500	500	500	500	500	500	500
Operating Force (Nm)	40	40	40	40	60	60	60
<b>Connection</b>							
Min. Cu cable / Bus bar size (mm <sup>2</sup> )	50 x 5 x 2	60 x 5 x 2	80 x 5 x 2	100 x 5 x 2	100 x 5 x 3	100 x 5 x 4	100 x 10 x 3
Min. Al cable / Bus bar size (mm <sup>2</sup> )	50 x 8 x 2	50 x 10 x 2	63 x 12 x 2	100 x 8 x 2	100 x 10 x 3	100 x 10 x 4	

## Accessories (continued)

### Auxiliary contact

1 <sup>st</sup> auxiliary contact	
Rating (A)	Reference
63	26091020GI
125 ... 3150	26091040GI

2 <sup>nd</sup> auxiliary contact	
Rating (A)	Reference
63	26092020GI
125 ... 3150	26092040GI



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### Phase barrier

Rating (A)	Reference
800 ... 1600	G89B765GI
2000 ... 3150	G89B143GI



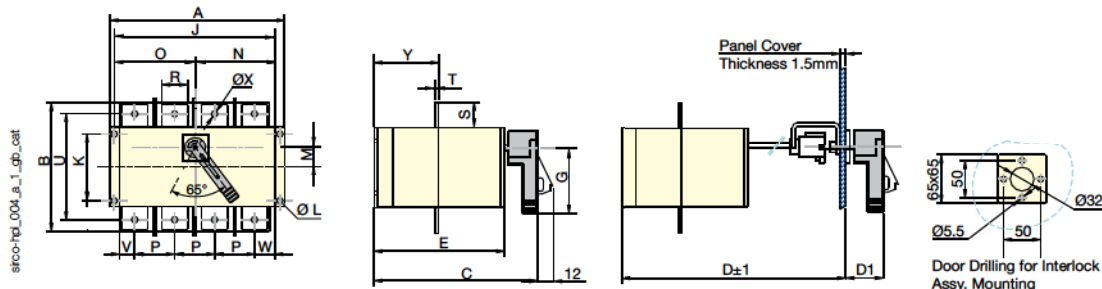
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## Dimensions (mm) - Load break switches - 4 Poles

### 63 A

Direct front operation

External front operation

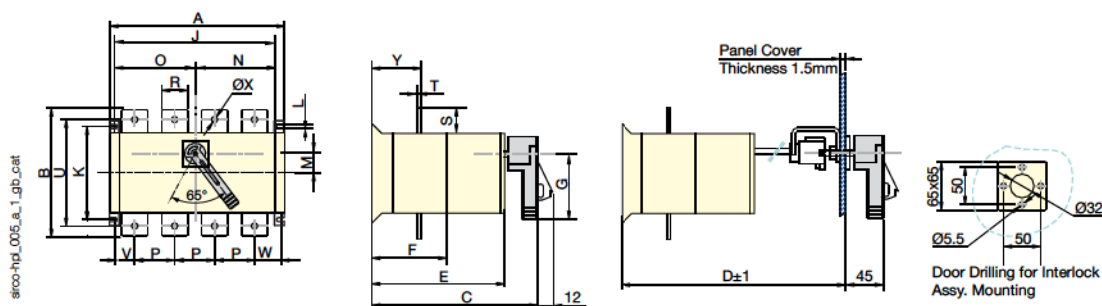


Rating (A)	Overall dimensions					Fixing of Sw.					Connection terminal							Sw. Wt.					
	A	B	C	D	D1	E	G	J	K	L	M	N	O	P	R	S	T	U	V	W	ØX	Y	Open Ex. (kg)
4 x 63	152.5	106	120	130	46.5	70	56	138.5	53	6.5	14	67.5	68	26.5	14	17	2	91	9.75	17	6.5	53	0.86

### 125 to 630 A

Direct front operation

External front operation



Rating (A)	Overall dimensions							Fixing of Sw.					Connection terminal							Sw. Wt.			
	A	B	C	D	E	F	G	J	K	L	M	N	O	P	R	S	T	U	V	W	ØX	Y	Open Ex. (kg)
4 x 125	178	142	160	171	101	72	115	159	95	7.0	15	81	81	45	22	28	3.0	118	12	12	8.5	56	1.8
4 x 200	178	155	160	171	101	72	115	159	95	7.0	15	81	81	48	25	35	4.0	123	7	7	10.5	57	2.1
4 x 250	230	192	174	187	115	79	127	212	111	7.5	20	110	110	64	32	46	4.5	152	7	13	12	64	3.1
4 x 320	230	192	174	187	115	79	127	212	111	7.5	20	110	110	64	32	46	4.5	152	7	13	12	64	3.1
4 x 400	290	235	216	225	157	98	140	271	180	9.0	30	135	135	73	40	40	5.0	205	26	26	11	86	6.0
4 x 630	290	270	216	225	157	98	140	271	180	9.0	30	135	135	81	55	55	5.0	230	14	14	14.5	86	7.0

# LBS

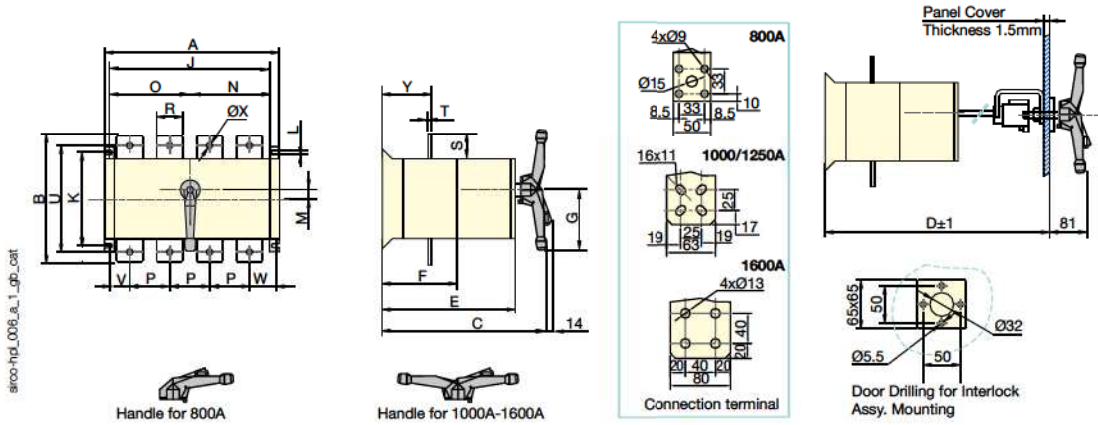
Load break switch  
from 63 to 3150A

## Dimensions (mm) - Load break switches - 4 Poles (continued)

### 800 to 1600 A

Direct front operation

External front operation

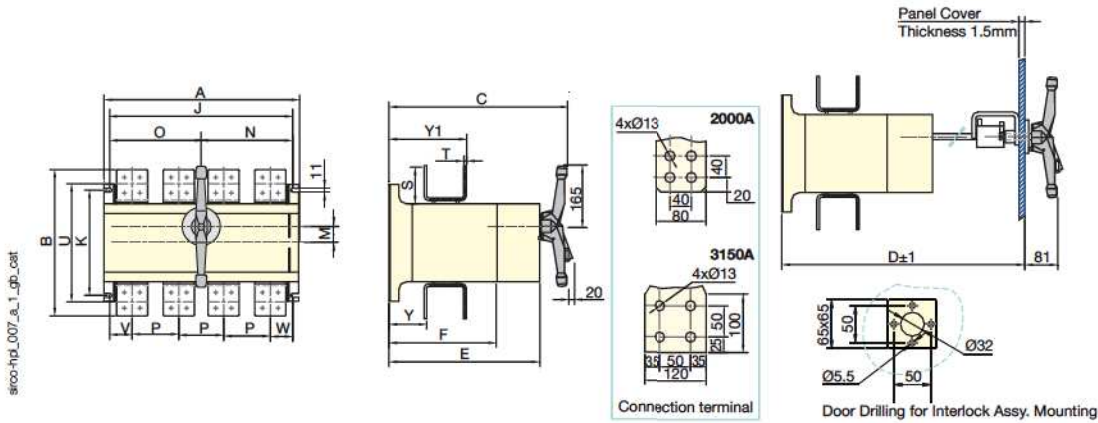


Rating (A)	Overall dimensions																Fixing of Sw.				Connection terminal						Sw. Wt.	
	A	B	C	D	E	F	G	J	K	L	M	N	O	P	R	S	T	U	V	W	ØX	Y	Open Ex. (kg)					
4 x 800	360	320	270	275	205	150	212	330	220	11	28	170	170	80	50	60	6.0	268	52	48	15	110	11.7					
4 x 1000	496	332	270	275	205	150	165	474	220	11	28	237	237	120	63	65	6.0	267	66	48		110	16.5					
4 x 1250	496	332	270	275	205	150	165	474	220	11	28	237	237	120	63	65	7.0	267	66	48		111	16.8					
4 x 1600	496	362	270	275	205	150	165	474	220	11	28	237	237	120	80	80	15	282	66	48		115	23.0					

### 2000 to 3150 A

Direct front operation

External front operation



Rating (A)	Overall dimensions																Fixing of Sw.				Connection terminal						Sw. Wt.	
	A	B	C	D	E	F	J	K	M	P	S	T	U	V	W	Y	Y1	Open Ex. (kg)										
4 x 2000	498	450	351	365	281	235	474	330	28	120	125	8	350	62	48	88	223	38.0										
4 x 2500	498	450	351	365	281	235	474	330	28	120	125	10	350	62	48	89	228	39.5										
4 x 3150	498	500	351	365	281	235	474	330	28	120	150	15	375	62	48	82	232	58.0										