



# LBS

## Load Break Switch from 63 to 3150A

Load Break Switch



lbs\_007\_a

### 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



### Approvals and certifications

- > CPRI

### Function

The **SOCOMECLBS** 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 OFF position.

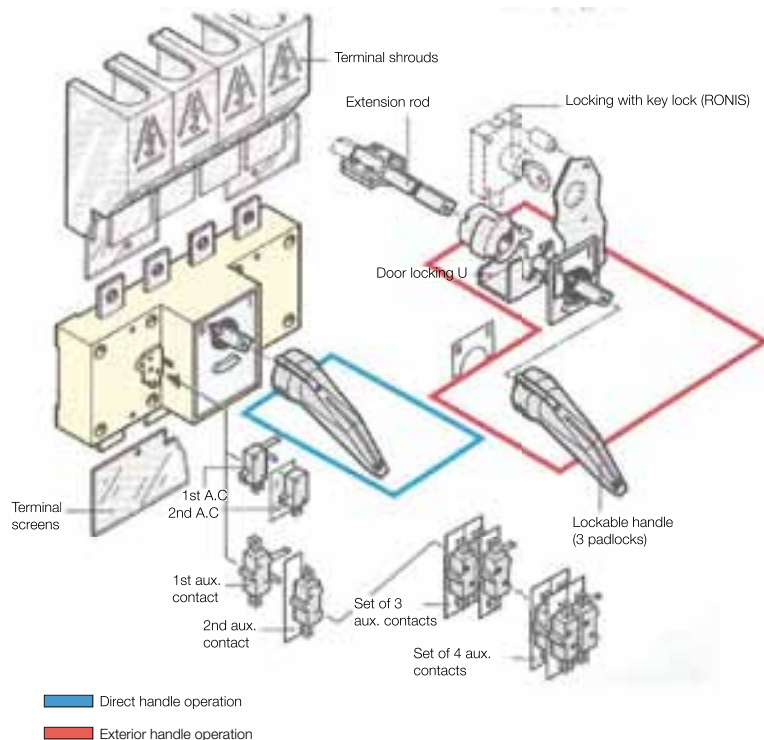
#### External

The pad lockable handle is to be mounted on the panel door and lockable in 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 breaking
- 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.

## Functional diagram



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### Characteristics

#### 63 to 630 A

References	LBS from 63 to 630 A						
	GL00634POI	GL01254POI	GL02004POI	GL02504POI	GL03204POI	GL04004POI	GL0 6304POI
<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
260 VDC-DC 21 A	63	125	200	250	320	400	630
260 VDC-DC 22 A	63	125	200	250	320	400	500
260 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 Aux. contact	30	63	80	132	160	200	220
500 VAC without pre-break Aux. contact	30	63	63	140	220	220	220
690 VAC without pre-break Aux. contact	22	55	55	90	150	150	150
415 VAC with pre-break Aux. contact	30	63	80	132	160	220	355
500 VAC with pre-break Aux. contact	30	80	80	160	220	280	355
690 VAC with pre-break Aux. 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	30x5x2	40x5x2
Min. Al cable/bus bar size (mm <sup>2</sup> )	25	70	150	185	240	32x8x2	40x8x2

### 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
800 - 3150	26590003GI



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### Characteristics (continued)

#### 800 to 3150 A

References	LBS from 800 to 3150 A						
	GL08004POI	GL010004POI	GL012504POI	GL016004POI	GL020004POI	GL025004POI	GL031504POI
<b>Thermal current I<sub>th</sub> (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 <sub>i</sub> (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 I<sub>e</sub> (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 Aux. contact	450	560	560	560	710	710	710
500 VAC without pre-break Aux. contact	450	560	560	710	710	710	710
690 VAC without pre-break Aux. contact	185	400	400	475	475	750	750
415 VAC with pre-break Aux. contact	450	560	710	710	900	1100	1155
500 VAC with pre-break Aux. contact	550	710	710	900	900	1100	1100
690 VAC with pre-break Aux. 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> )	50x5x2	60x5x2	80x5x2	100x5x2	100x5x3	100x5x4	100x10x3
Min. Al Cable / Bus bar size (mm <sup>2</sup> )	50x8x2	50x10x2	63x12x2	100x8x2	100x10x3	100x10x4	

### Accessories (continued)

#### Auxiliary Contact

1st Auxiliary Contact	
Rating (A)	Reference
63	26091020GI
125...630	26091040GI
800...3150	26091040GI
2nd Auxiliary Contact	
Rating (A)	Reference
63	26092020GI
125...630	26092040GI
800...3150	26092040GI



#### Phase barrier

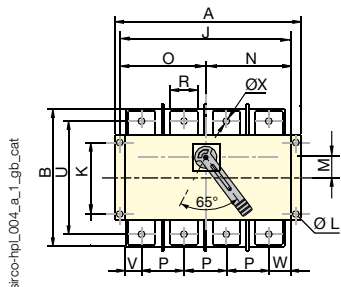
Rating (A)	Reference
800...1600	G89B765GI
2000...3150	G89B143GI



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

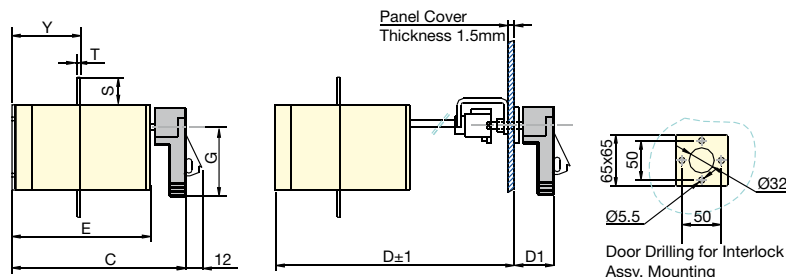
#### 63 A

Direct front operation



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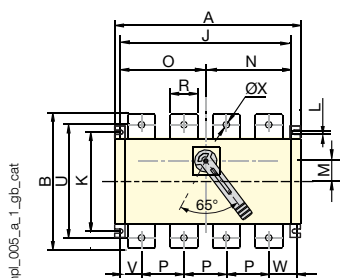
External front operation



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	153	106	120	134	45	70	84	138	53	6.5	15	69	69	27	14	18	2	91	8.5	17	6.5	53	0.860

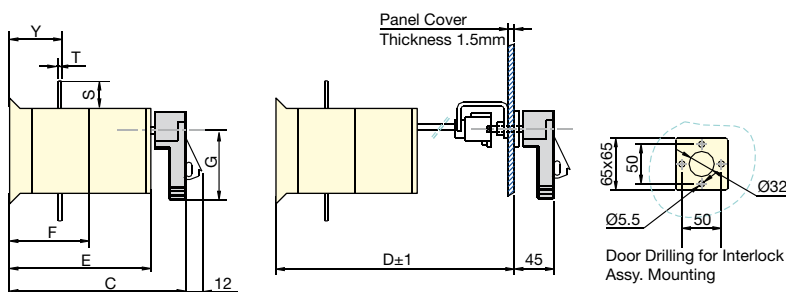
#### 125 to 630 A

Direct front operation



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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	118	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	118	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	130	212	111	7.5	20	110	110	64	32	48	4.5	152	7	13	12	64	3.1
4 x 320	230	192	174	187	115	79	130	212	111	7.5	20	110	110	64	32	48	4.5	152	7	13	12	64	3.1
4 x 400	290	235	216	225	157	98	142	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	142	271	180	9.0	30	135	135	81	55	55	5.0	230	14	14	14.5	86	7.0

# LBS

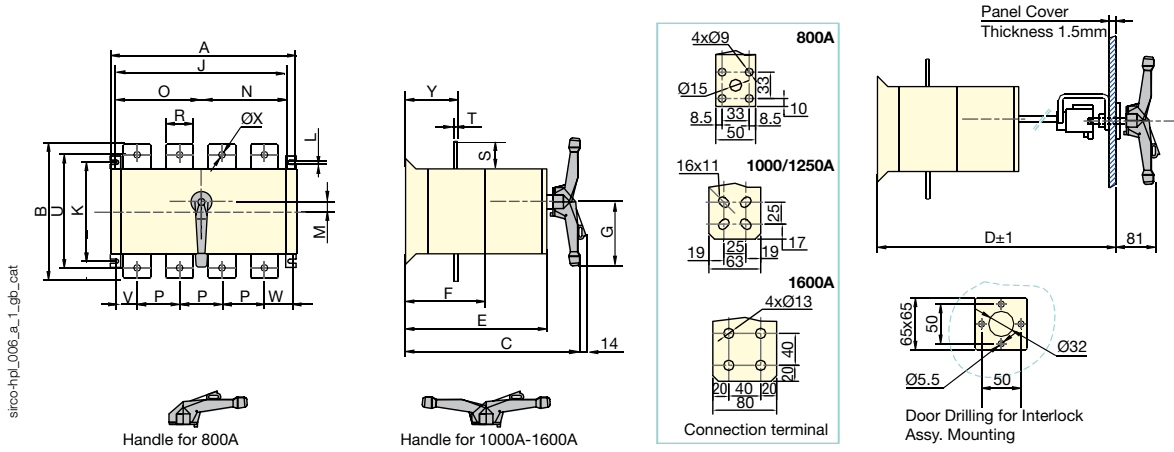
## Load Break Switch from 63 to 3150A

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

#### 800 to 1600 A

##### Direct front operation

##### External front operation

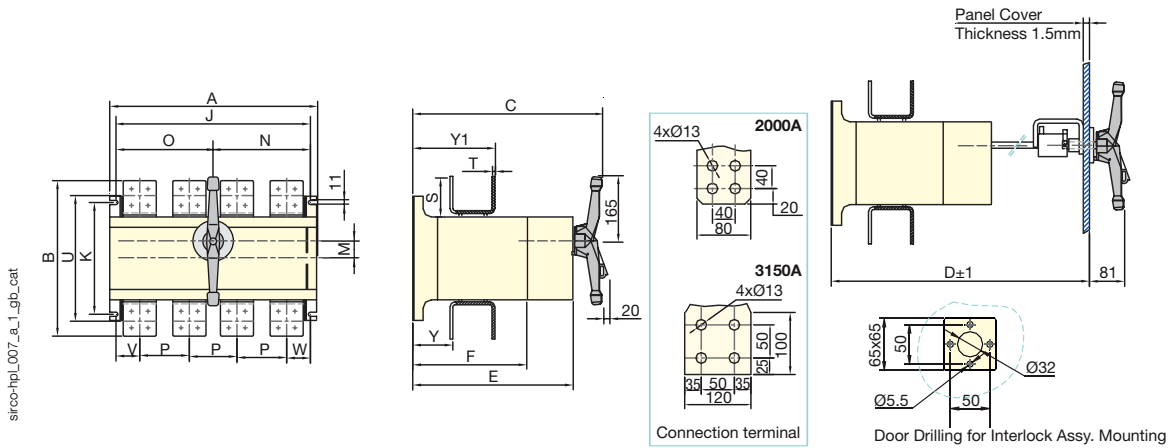


Rating (A)	Overall dimensions					Fixing of Sw.					Connection terminal							Sw. Wt.					
	A	B	C	D	E	F	G	J	K	L	M	N	O	P	R	S	T	U	V	W	ØX	Y	Open Ex. (kg)
4 x 800	360	320	270	275	205	150	212	340	220	11	28	170	170	80	50	60	6.0	268	52	48	15	110	11.7
4 x 1000	496	332	270	275	205	150	165	474	220	11	28	237	237	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



# Enclosed **LBS**

## Load Break Switch

from 63 to 1600 A

Load Break Switch



### The solution for

- > OEM
- > Industries
- > Service Sector Building
- > Power distribution



### Function

**Socomec enclosures** incorporate four pole manually operated load break switches which can make and break on load and provide isolation for any low voltage electrical circuit. The enclosure provides protection against contact with live parts as well as environmental factors such as dust, water and other hazards.

- On load switch ON and OFF
- Emergency breaking
- Safe and local isolation of downstream loads for maintenance purpose

### Advantages

#### Safety of operations

Door interlocking and positive break indication provide increased safety for the operator.

#### Inductive load breaking (AC23)

This enclosure range is provided with Load Break switches which are adapted to highly inductive loads.

#### Complete range

The range offers a wide variety of variants depending on the number of poles, rating and enclosure type.

### General Characteristics

- Adapted to environments subject to chemical, dust, contamination and atmospheric corrosion risks.
- Black Handle pad lockable in 0/II position
- CRCA sheet (Door 1.2 mm, Body 1.6 mm)
- Colour shade: RAL 7035
- 2 external earthing points on each side.
- Wall mounted with 4 bolts
- Door locking system allows opening of door only in off position
- Incoming & outgoing easily interchangeable at site
- Coating of epoxy polyester powder 70 micron
- Removable plate top & bottom
- Door with solid hinges.

### Strong points

- > Suitable for aluminium and copper connection
- > High reliability and performance AC-23
- > Complete range up to 3150 A

### Conformity to standards

- > IS/IEC 60947-3



### References & dimensions

Rating (A)	Reference	L (mm)	W (mm)	X (mm)	Y (mm)	H (mm)
63	GL00634POI	180	200	160	210	126
125	GL01254POI	260	250	213	285	195
200	GL02004POI	260	250	213	285	195
250	GL02504POI	345	320	275	375	210
320	GL03204POI	345	320	275	375	210
400	GL04004POI	395	370	320	420	250
630	GL06304POI	395	370	320	420	250
800	GL08004POI	500	470	422	550	307
1000	GL10004POI	630	510	435	675	307
1250	GL12504POI	630	510	435	675	307
1600	GL16004POI	630	510	435	675	307

For above ratings, please consult us.

