

Switch-Disconnectors - ISD Range (100A - 1250A)

A robust range of load break switches to ensure simple installation in applications such as power distribution boards. The compact design also suits OEM's and stand alone enclosure installations. A range of accessories extends the versatility.

Features:-



- On-load AC23A ratings.
- Four frame sizes covering 100A - 1250A.
- Direct lug connections onto plated Copper palms.
- Windows for contact inspection
- Supplied as either 3 or 4 pole versions.
- IP65 sealing door interlocking handles.
- Internal locking feature.

The catalogue numbers below include:-

- On-load AC23A switch-disconnector.
- 200mm standard length shaft assembly.
- IP65 door interlock handle.(Black)
- Terminal covers.



Typical assembly containing switch block, standard length shaft (200mm), handle assembly and incoming terminal covers.

Catalogue Numbers

Current rating	100A	125A	160A	200A	250A	400A	630A	800A	1000A	1250A
Frame size	B1	B1	B1	B2	B2	B3	B3	B3	B4	B4
3 Pole	SD01003B	SD01253B	SD01603B	SD02003B	SD02503B	SD04003B	SD06303B	SD08003B	SD10003B	SD12503B
4 Pole	SD01004B	SD01254B	SD01604B	SD02004B	SD02504B	SD04004B	SD06304B	SD08004B	SD10004B	SD12504B

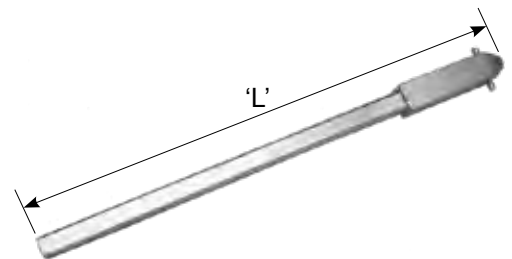
For door interlock handles in 'R/Y', replace the 'B' in the catalogue number with 'R' e.g. SDC01603R

Alternative shafts

As an alternative to the standard 200mm shaft a 400mm option is available as indicated below. The shafts are manufactured from square section steel and zinc plated. The height setting is adjusted by passing the shaft through a bush in the switch mechanism and locking it in position using two 'cup point' grub screw.

Catalogue Numbers

Shaft length 'L'	Load break switch current Rating		
	100A - 160A	200A - 250A	400 - 1250A
400mm	SSH13	SSH14	SSH15
Drive Shaft Section	6mm ²	8mm ²	12mm ²
Max. possible enclosure depth	200mm	270	285
	400mm	450	470



Handle assembly supplied with the 'B2' frame size(**SDH3BLK**).



Handle assembly supplied with the 'B3' (**SDH4/BLK**) & 'B4' (**SDH7/BLK**) frame sizes



Accessories

Auxiliary Contacts

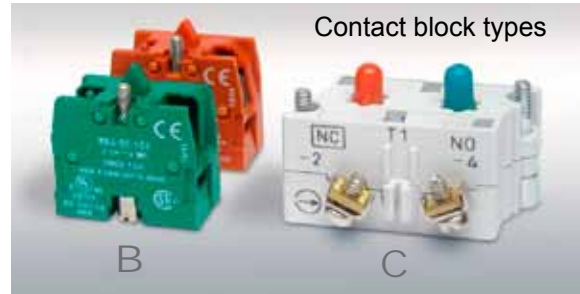
Add-on auxiliary contacts are available for the 100A - 1250A range and can be selected from the table below.

All auxiliary kits contain the necessary fixings and attachments to install the contact blocks which are supplied in 1 N/O + 1 N/C format.

All N/O contacts are early break with respect to the main poles when switching from 'On' to 'Off'.

Catalogue Numbers

Rating (A)	Load break switch rating			
	100 - 160A	250A	400 - 800A	1000 - 1250A
Catalogue No.	SAUXKITA	SAUXKITB	SAUXKITC	SAUXKITD
Block type	C	B	B	C



Auxiliary Contacts Type A - Data supplied against tests to BS EN 60947-1

	Sym.	Category	Auxiliary blocks type 'B'	Auxiliary blocks type 'C'
Thermal current	I_{th}		10A	10A
Rated insulation voltage	U_i		660V a.c. or d.c.	500V
Utilisation Category	-	AC15	6.0A at 120V, 4.0A at 250V, 2.0A at 660V	240V - Make 30A, Break 3A 480V - Make 15A, Break 1.5A
		DC13	1.0A at 120V, 0.5A at 240V, 0.1A at 660V	240V - Make 30A, Break 3A 480V - Make 15A, Break 1.5A
		Pure Resistive	10A	-

Dimensions

Aux. contact block

SDH1 Handle (A0 & A1)

SDH3/4/7 Handles

Handle	Shaft section	Dimension 'Y'	Isolator Frame Sizes
SDH3	8mm ²	80mm	A2, A3, B1 & B2
SDH4	12mm ²	146mm	B3
SDH7	12mm ²	220mm	B4

ISD Standard Range 100A - 1250A

Technical Data
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Dimensions
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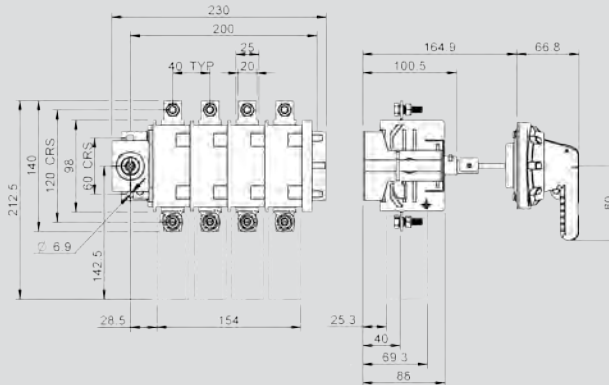
Data supplied against tests to BS EN 60947-3

Application	Sym	Unit	Category	ISDC Compact Range												ISD Standard Range							
				25	32	40	63	80	100	125	160	200	250	320	400	630	800	1000	1250				
Rated thermal current	I_{th}	A		25	32	40	63	80	100	125	160	200	250	320	400	630	800	1000	1250				
Rated insulation voltage	U_i	V		690	690	690	690	690	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000				
Rated impulse voltage	U_{imp}	kV		6	6	6	6	6	8	8	8	8	8	12	12	12	12	12	12				
Rated operational current (AC)	I_e	A	Up to 415V - AC21A	25	32	40	63	80	100	125	160	200	250	320	400	630	800	1000	1250				
			440-690V - AC21A	25	32	40	63	80	100	125	160	200	250	320	400	630	800	1000	1250				
			Up to 415V - AC22A	25	32	40	63	80	100	125	160	200	250	320	400	630	800	1000	1250				
			690V - AC22A	25	32	40	63	80	100	125	160	160	200	250	320	400	630	800	-	-			
Rated operational current (DC) (poles in series)	I_e	A	Up to 415V - AC23A	21	29	29	48	56	99	112	128	128	128	160	200	250	320	400	720				
			690V - AC23A	17	17	17	33	33	53	57	57	57	57	63	200	250	350	350	350				
			Up to 48V - DC21A	25/1	32/1	40/1	63/1	80/1	-	-	-	100/2	125/2	160/2	200/2	250/2	320/2	400/2	630/1	800/1			
			220V - DC21A	25/3	32/3	40/3	63/4	80/4	-	-	-	100/3	125/3	160/3	200/2	250/2	320/2	400/2	630/2	800/2			
Rated operational power	P_e	kW	Up to 48V - DC22A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
			220V - DC22A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
			Up to 48V - DC23A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
			220V - DC23A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Short circuit making capacity	I_{cm}	kA	400/415V - AC23A	11	15	15	25	30	59	63	75	75	75	110	132	200	315	355	400				
			690V - AC23A	15	15	15	30	30	51	55	55	55	55	55	55	170	200	315	355	355			
Short circuit withstand (1sec)	I_{cw}	kA	Peak value	1.2	1.4	1.4	2.9	3.0	3.7	4.0	5.0	5.0	5.0	3.6	3.6	7	35	65	80				
			rms value	0.5	0.6	0.6	1.3	1.4	2.6	2.8	3.0	3.0	3.0	3.0	2.5	2.5	5	8	17	17			
Min. mechanical endurance			Operations	250 x 10 ³	250 x 10 ³	250 x 10 ³	250 x 10 ³	250 x 10 ³	50 x 10 ³	50 x 10 ³	50 x 10 ³	50 x 10 ³	50 x 10 ³	20 x 10 ³	20 x 10 ³	20 x 10 ³	16 x 10 ³	10 x 10 ³	6 x 10 ³				
			Min. electrical endurance	-	-	-	-	-	-	-	-	-	-	-	-	5,000	1,000	1,000	1,000	500	500		
Connecting capacity			Terminal type																				
			Min/Max	2.5/6	2.5/10	2.5/10	2.5/25	2.5/25	10/70	10/70	10/70	10/70	10/70	10/70	-	-	-	-	-	-	-		
			Stud/Cu palm width	-	-	-	-	-	-	-	-	-	-	-	8/20	8x20	8x20	8x20	8x20	8x20	10/25	12/60	
			Tightening torque	1.2	1.2	1.2	1.2	1.2	2	2	2	2	2	2	2	6	8	8	20	25	25	40	40



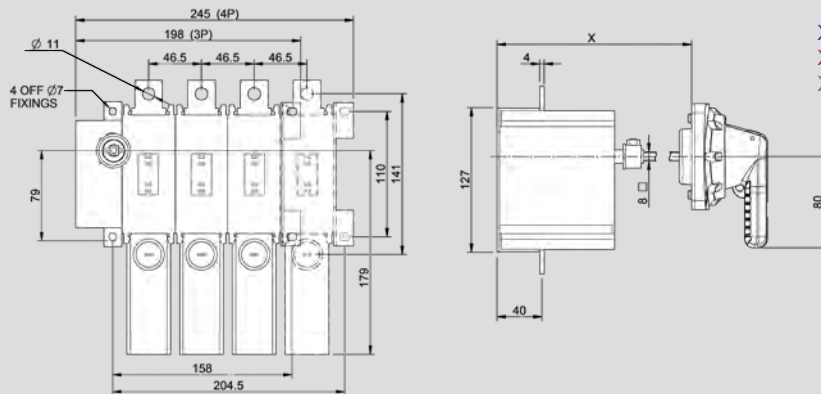
Dimensions (Continued)

B1 Size (100A - 160A)



X1 - 130
X3 - 255
X4 - 455

B2 Size (200A - 250A)

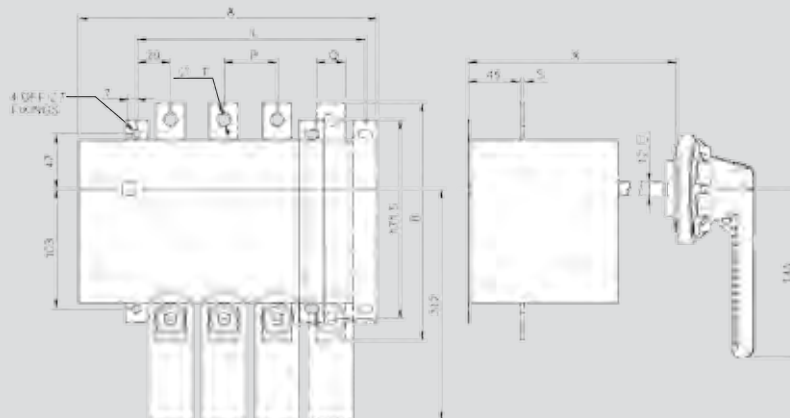


X1 - 190
X3 - 270
X4 - 470

B3 Size (400A - 800A)

Rating	A		B		L	
	3P	4P	3P	4P	3P	4P
400A	211	257	205	151	197	
600A	244	306	223	183	245	
800A	260	330	223	199	269	

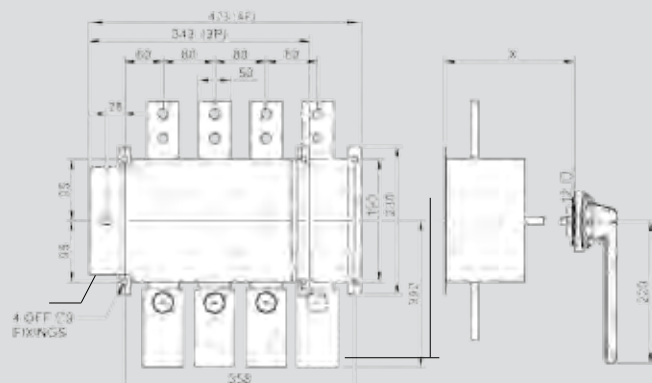
Rating	P	Q	S	T
400A	46	25	4	11
600A	62	40	5	13.5
800A	70	40	5	13.5



X1 - 220
X3 - 285
X4 - 485

B4 Size (1000A - 1250A)

- X1 Minimum depth.
- X3 Maximum depth with 200mm shaft extension.
- X4 Maximum depth with 400mm shaft extension.



X1 - 240
X3 - 285
X4 - 485

