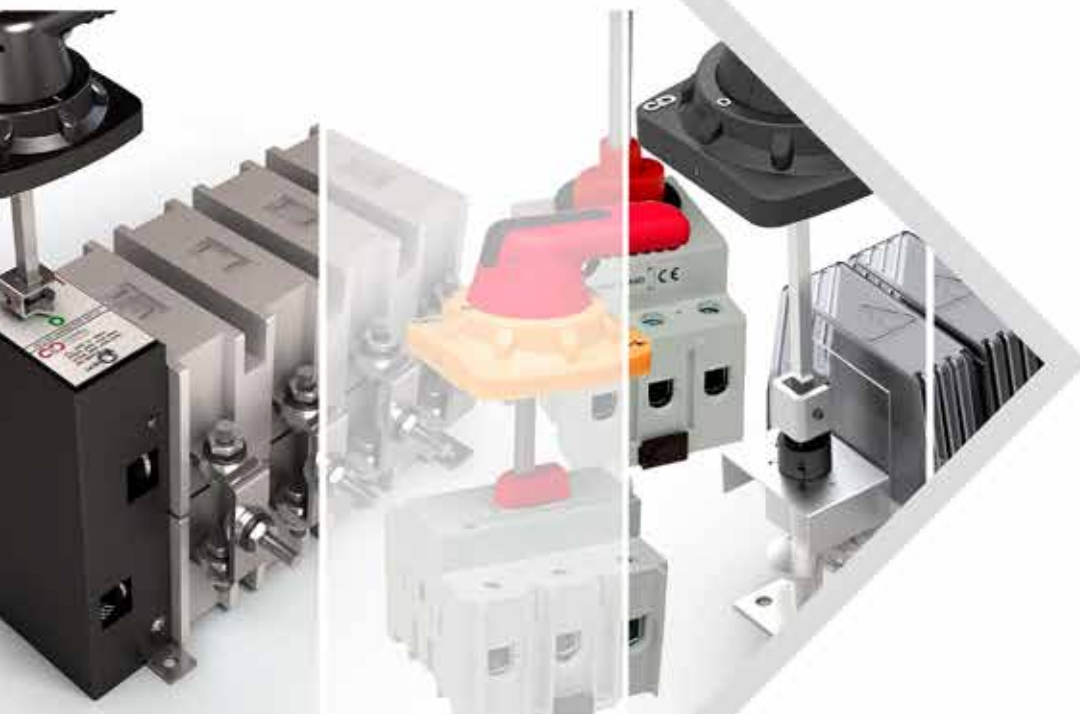


## PANEL ISOLATORS

Craig & Derricott has a range of products designed specifically for control panel and switchboard construction. Most panels require a means of electrical isolation and the i-switch range can offer variants in the range of 25A- 1250A. All handle assemblies employ safety features with an override facility for testing or emergency situations. A choice of shaft lengths, auxiliary contacts & shields provide the flexibility to suit most applications.



## Compact Range

Craig & Derricott has ranges of compact control panel isolation equipment for panel mounting ranging from 25A to 200A. All come supplied with operating handle and a standard length shaft.


A compact range of Switch-Disconnectors with the capacity to add auxiliary and neutral block options to the basic load break switch block.

### Features

- IP2X terminal protection.
- Door interlock handles with override facility
- DIN rail or base mounting.
- Add-on auxiliary/neutral blocks.

The Cat. No.s below include:

- On-load AC23A Switch-disconnector.
- 100mm standard length shaft assembly.
- IP65 minimum door interlock handle.(Black)
- Incoming terminal covers (A3 frame sizes only).

Image	Rating	Format	Cat. No.	Frame Size
	25A	3P	SD00253B	A0
		6P	SD00256B	A0-A0
	32A	3P	SD00323B	A0
	40A	3P	SD00403B	A0
		6P	SD00406B	A1-A1
	63A	3P	SD00633B	A1
		6P	SD00636B	A1-A1
	80A	3P	SD00803B	A1
	100A	3P	SDC01003B	A2
		6P	SDC01006B	A2-A2
	125A	3P	SDC01253B	A2
		6P	SDC01256B	A2-A2
	160A	3P	SDC01603B	A2
		6P	SDC01606B	A2-A2
200A	3P	SDC02003B	A3	

'B' = Black Handle. For Red Handle, replace B with R in the Cat. No.. i.e. SD00253R

## Accessories

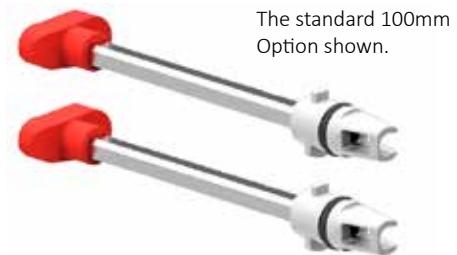
All of the accessories listed below can be retrofitted. One block can be fitted either side of the main assembly on all of the 3 pole Switch-Disconnecter interiors.

Image	Description	Cat. No.
	Auxiliary Contact- 2 Early Break	SAUX2EB
	Auxiliary Contact- 1 N/O + 1 N/C	SAUXCO
	25A- 40A Compact Neutral (Unswitched)	SNLC40
	63A Neutral (Unswitched)	SNL63
	80A Neutral (Unswitched)	SNL80
	100A Neutral (Unswitched)	SNL100
	125A Neutral (Unswitched)	SNL125
	160A Neutral (Unswitched)	SNL160
	200A Neutral (Unswitched)	SNL200
	25A Neutral (Switched)	SSP25
	40A Neutral (Switched)	SSP40
	63A Neutral (Switched)	SSP63
	80A Neutral (Switched)	SSP80
	100A Neutral (Switched)	SSP100
	125A Neutral (Switched)	SSP125
	160A Neutral (Switched)	SSP160
	200A Neutral (Switched)	SSP200

## Extended Shafts

Both the standard 100mm shaft and the longer version as shown below can easily be adjusted to suit specific panel depths.

Shaft length	Frame size	Shaft (mm <sup>2</sup> )	Cat. No.
200mm	A0 & A1	6	SSH2
200mm	A2 & A3	8	SSH17



The standard 100mm Option shown.



Handle assembly supplied with the 'A0' & 'A1' frame Sizes (SDH1/BLK).

Handle assembly supplied with the 'A2' & 'A3' frame Sizes (SDH3/BLK).

## Standard Range


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 Cat. No.s below include:-

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



Image	Rating	Format	Cat. No.	Frame Size
	100A	3P	SD01003B	B1
		4P	SD01004B	
	125A	3P	SD01253B	B1
		4P	SD01254B	
	160A	3P	SD01603B	B1
		4P	SD01604B	
	200A	3P	SD02003B	B2
		4P	SD02004B	
	250A	3P	SD02503B	B2
		4P	SD02504B	
	400A	3P	SD04003B	B3
		4P	SD04004B	
	630A	3P	SD06303B	B3
		4P	SD06304B	
	800A	3P	SD08003B	B3
		4P	SD08004B	
1000A	3P	SD10003B	B4	
	4P	SD10004B		
1250A	3P	SD12503B	B4	
	4P	SD12504B		

'B' = Black Handle. For Red Handle, replace B with R in the Cat. No.. i.e. SD01003R

## Accessories

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'.

Image	Description	Cat. No.
	Auxiliary Contact-100A - 160A	SAUXKITA
	Auxiliary Contact- 1000A - 1250A	SAUXKITD
	Auxiliary Contact- 200A - 250A	SAUXKITB
	Auxiliary Contact- 400A - 800A	SAUXKITC

Handle assembly supplied with the 'B1' / 'B2' frame size (SDH2/BLK or SDH3/BLK).



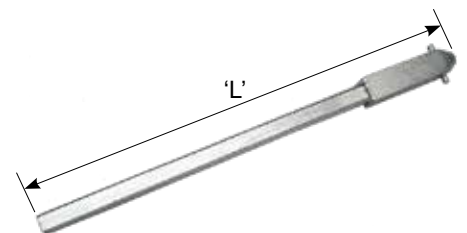
Handle assembly supplied with the 'B3' (SDH4/BLK) & 'B4' (SDH7/BLK) frame sizes.



## 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 a 'cup point' grub screw.

Rating	Shaft length	Cat. No.
100A - 160A	400mm	SSH13
200A - 250A	400mm	SSH14
400A - 1250A	400mm	SSH15



## Fuse Combination Range

A compact range of fuse combination units designed specifically for the panel builder market.

### Features

- IP2X terminal protection.
- Suitable for std. IEC/BS EN 60269 (BS88) fuse links.
- Supplied as 3P&N or 3P&NL (Neutral Switched or Unswitched respectively).
- Add-on auxiliary/neutral blocks.

The Cat. No.s below include:-

- On-load AC23A fuse combination unit.
- 200mm standard length shaft and IP65 door interlocking handle.

Image	Rating	Format	Cat. No.	Frame Size
	32A	3P+N	SDF00323NB	D1
		3P+NL	SDF00323NLB	
	63A	3P+N	SDF00633NB	D1
		3P+NL	SDF00633NLB	
	100A	3P+N	SDF01003NB	D2
		3P+NL	SDF01003NLB	
	125A	3P+N	SDF01253NB	D2
		3P+NL	SDF01253NLB	
	160A	3P+N	SDF01603NB	D3
		3P+NL	SDF01603NLB	
	200A	3P+N	SDF02003NB	D4
		3P+NL	SDF02003NLB	
	250A	3P+N	SDF02503NB	D4
		3P+NL	SDF02503NLB	
	315A	3P+N	SDF03153NB	D5
		3P+NL	SDF03153NLB	
400A	3P+N	SDF04003NB	D5	
	3P+NL	SDF04003NLB		
630A	3P+N	SDF06303NB	D6	
	3P+NL	SDF06303NLB		

'B' = Black Handle. For Red Handle, replace B with R in the Cat. No.. i.e. SDF00253R

## Accessories

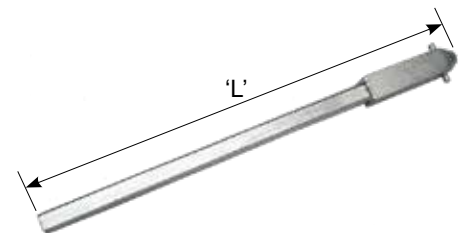
Auxiliary blocks and fuse links are available for all Fuse Combination Units. Please select from the tables below. All auxiliaries are supplied as 1 N/O+1 N/C pair. All N/O auxiliary contacts are early break with respect to the main poles when switching from 'On' to 'Off'. Fuse links can be fitted to a lower rating to suit a particular load: please refer to the rating table below to maintain the correct size/tag format (A2, A4, B1 etc.)

Image	Description	Fuse Fixing CRS (mm)	Cat. No.
	Auxiliary Contact - 32A - 160A		SAUXKITA
	Auxiliary Contact - 630A		SAUXKITD
	Auxiliary Contact - 200A - 400A		SAUXKITC
	32A fuse link for BS fuse format A2 - A3	73 nom.	SFL32
	63A fuse link for BS fuse format A2 - A3	73 nom.	SFL63
	100A fuse link for BS fuse format A4	94 nom.	SFL100
	125A fuse link for BS fuse format A4	94 nom.	SFL125
	160A fuse link for BS fuse format B1 - B2	111 nom.	SFL160
	200A fuse link for BS fuse format B1 - B2	111 nom.	SFL200
	250A fuse link for BS fuse format B1 - B2	111 nom.	SFL250
	315A fuse link for BS fuse format B1 - B4	111 nom.	SFL315
	400A fuse link for BS fuse format B1 - B4	111 nom.	SFL400
630A fuse link for BS fuse format C1 - C3	133 / 184 nom.	SFL630	

## 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.

Rating	Shaft length	Cat. No.
32A - 160A	400mm	SSH13
200A - 630A	400mm	SSH15



## Changeover Range


A compact range of load break Changeover Switches suitable for a wide range of applications.

### Features

- Compact 'piggy-back' design.
- On-load AC23A ratings.
- Supplied as four pole format.
- Windows for visual contact inspection.

The Cat. No.s below include:-

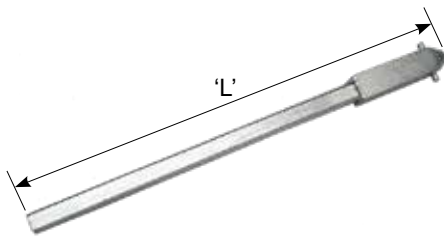
- On-load AC23A changeover four pole switch.
- 200mm standard length shaft assembly.
- IP65 door interlocking handle.

Image	Rating	Format	Cat. No.	Frame Size
	63A	4P	SCOD00634B	C1C
	100A	4P	SCOD01004B	C1C
	125A	4P	SCOD01254B	C2C
	160A	4P	SCOD01604B	C2C
	200A	4P	SCOD02004B	C2C
	250A	4P	SCOD02504B	C2
	400A	4P	SCOD04004B	C3
	630A	4P	SCOD06304B	C3

## 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 a 'cup point' grub screw.

Rating	Shaft length	Cat. No.
63A- 100A	400mm	SSH14
125A- 200A	400mm	SSH18
250A- 630A	400mm	SSH15



## Supplied Handles

Designed to compliment the handles used on our enclosed equipment, the door interlocked versions are capable of being locked with up to three individual padlocks (Ø6.4 max shackle dia). All handles are sealed to IP65 which will enable installations in a wide variety of environmental conditions.

If the contacts should weld due to a fault or an excessive current situation, an override facility is provided for the use of a competent person which will allow the enclosure lid to be opened.





















Handle assembly supplied with the 'C1C & C2C' frame size (PSA0515). Handle length 145mm.



Handle assembly supplied with the 'C2' & 'C3' frame size (SDH6/BLK). Handle length 220mm.

## Technical Specification - Panel Isolators

Data supplied against tests to BS EN 60947-3. \*All AC21, AC22 &amp; AC23 tests carried out at 415V.

Compact Range													
Application	Sym	Unit	Category	25	32	40	63	80	100	125	160	200	
Rated thermal current	$I_{th}$	A		25	32	40	63	80	100	125	160	200	
Rated insulation voltage	$U_i$	V		690	690	690	690	690	1000	1000	1000	1000	
Rated impulse voltage	$U_{imp}$	kV		6	6	6	6	6	8	8	8	8	
Rated operational current (AC)	$I_e$	A	400V- AC21A	25	32	40	63	80	100	125	160	200	
			400V- AC22A	-	-	-	-	-	100	125	160	200	
			400V- AC23A	21	29	29	48	56	100	112	128	128	
Rated operational current (DC) ( /poles in series)	$I_e$	A	Up to 48V- DC21A	25/1	32/1	40/1	63/1	80/1	-	-	-	-	
			220V- DC21A	25/3	32/3	40/3	63/4	80/4	-	-	-	-	
			Up to 48V- DC22A	-	-	-	-	-	-	-	-	-	-
			220V- DC22A	-	-	-	-	-	-	-	-	-	-
			Up to 48V- DC23A	-	-	-	-	-	-	-	-	-	-
			220V- DC23A	-	-	-	-	-	-	-	-	-	-
Rated operational power	$P_e$	kW	400/415V- AC23A	11	15	15	25	30	59	63	75	75	
Short circuit making capacity	$I_{cm}$	kA	Peak value	1.2	1.4	1.4	2.9	3.0	3.7	4.0	5.0	5.0	
Short circuit withstand (1sec)	$I_{cw}$	kA	rms value	0.5	0.6	0.6	1.3	1.4	2.6	2.8	3.0	3.0	
Min. mechanical endurance	-	-	Operations	250 x 10 <sup>3</sup>	250 x 10 <sup>3</sup>	250 x 10 <sup>3</sup>	250 x 10 <sup>3</sup>	250 x 10 <sup>3</sup>	50 x 10 <sup>3</sup>	50 x 10 <sup>3</sup>	50 x 10 <sup>3</sup>	50 x 10 <sup>3</sup>	
Min. electrical endurance	-	-	415V- at 0.65 pf	-	-	-	-	-	-	-	-	-	
Connecting capacity	-	-	Terminal type										
	mm <sup>2</sup>	Min/Max		2.5/6	2.5/10	2.5/10	2.5/25	2.5/25	10/70	10/70	10/70	-	
	mm	Stud/Cu palm width		-	-	-	-	-	-	-	-	8/20	
	Nm	Tightening torque		1.2	1.2	1.2	1.2	1.2	5	5	5	6	
Standard Range													
Application	Sym	Unit	Category	100	125	160	200	250	400	630	800	1000	1250
Rated thermal current	$I_{th}$	A		115	125	160	200	270	500	630	720	1000	1250
Rated insulation voltage	$U_i$	V		750	750	750	1000	1000	1000	1000	1000	1000	1000
Rated impulse voltage	$U_{imp}$	kV		8	8	8	12	12	12	12	12	8	8
Rated operational current (AC)	$I_e$	A	400V- AC21A	100*	125*	160*	200*	250*	400*	630*	800*	1000*	1250*
			400V- AC22A	100*	125*	160*	200*	250*	400*	630*	800*	1000*	1250*
			400V- AC23A	100*	125*	135*	200*	250*	400*	630*	720*	-	-
Rated operational current (DC) ( /poles in series)	$I_e$	A	Up to 48V- DC21A	100/2	125/2	160/2	200/2	250/2	400/2	630/1	800/1	1000/1	1250/1
			220V- DC21A	100/3	125/3	160/3	200/2	250/2	400/2	630/2	800/2	1000/3	1250/3
			Up to 48V- DC22A	100/2	125/2	160/2	200/2	250/2	400/1	630/1	800/1	-	-
			220V- DC22A	100/3	125/3	160/3	200/2	250/2	400/2	630/2	800/2	-	-
			Up to 48V- DC23A	100/2	125/2	160/2	200/2	250/2	400/1	630/1	800/1	-	-
			220V- DC23A	100/3	125/3	160/3	200/2	250/2	400/2	630/2	630/2	-	-
Rated operational power	$P_e$	kW	400/415V- AC23A	37	45	75	110	132	200	315	355	400	400
Short circuit making capacity	$I_{cm}$	kA	Peak value	7	7	7	35	35	65	80	80	105	105
Short circuit withstand (1sec)	$I_{cw}$	kA	rms value	5	5	5	8	8	17	17	17	50	50
Min. mechanical endurance	-	-	Operations	20 x 10 <sup>3</sup>	20 x 10 <sup>3</sup>	20 x 10 <sup>3</sup>	16 x 10 <sup>3</sup>	16 x 10 <sup>3</sup>	10 x 10 <sup>3</sup>	10 x 10 <sup>3</sup>	10 x 10 <sup>3</sup>	6 x 10 <sup>3</sup>	6 x 10 <sup>3</sup>
Min. electrical endurance	-	-	415V- at 0.65 pf	5,000	5,000	1,000	1,000	1,000	1,000	500	500	500	500
Connecting capacity	-	-	Terminal type										
	mm <sup>2</sup>	Min/Max		-	-	-	-	-	-	-	-	-	
	mm	Stud/Cu palm width		8x25	8x25	8x25	8x25	10x30	10x40	12x40	12x40	12x60	12/60
	Nm	Tightening torque		6	8	8	20	25	25	40	40	40	40

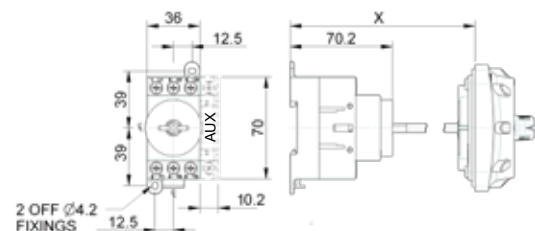
## Technical Specification - Panel Isolators

Data supplied against tests to BS EN 60947-3. \*Two Pole in series.

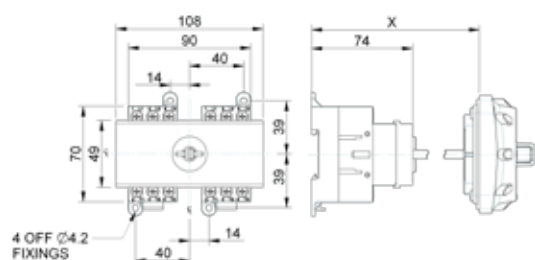
Fuse Combination Range													
Application	Sym	Unit	Category	32	63	100	125	160	200	250	315	400	630
Rated thermal current	$I_{the}$	A		32	63	100	125	160	200	250	315	400	630
Rated insulation voltage	$U_i$	V		750	750	750	750	750	750	750	750	750	750
Rated impulse voltage	$U_{imp}$	kV		12	12	12	12	12	12	12	12	12	12
Rated operational current	$I_e$	A	415V- AC23A	32	63	100	125	160	200	250	315	400	630
			220V- DC23A	-	-	100	125	160	200	250	315	400	630
Rated making capacity (AC23A)		A	415V, 0.35 pf	320	630	1,000	1,250	1,600	2,000	2,500	3,150	4,000	6,300
Rated breaking capacity (AC23A)		A	415V, 0.35 pf	256	504	800	1,000	1,280	1,600	2,000	2,520	3,200	5,040
Rated Conditional (Fused) short circuit		kA	S/C current rms	80	80	80	80	80	80	80	80	80	80
		A	back-up fuse	32	63	100	125	160	200	250	315	400	630
Min. mechanical endurance		-	Operations	25,000	25,000	15,000	15,000	15,000	10,000	10,000	10,000	10,000	6,000
Min. electrical endurance		-	415V- at 0.65 pf	1,500	1,500	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
BS fuse format				A2	A2	A4	A4	B1, B2	B1, B2	B1, B2	B1, B4	B1, B4	C1, C3
Connecting capacity		-	Terminal type										
	mm <sup>2</sup>	Min/Max		16	25	95	95	120	240	240	300	300	400
	mm	Stud/Cu palm width		-	-	8x20	8x20	8x20	10x25	10x25	10x25	10x25	12x50
	Nm	Tightening torque		2.5	2.5	9	12	16	25	30	35	45	50
Changeover Range													
Application	Sym	Unit	Category	63	100	125	160	200	250	400	630		
Rated thermal current	$I_{the}$	A		63	100	125	160	200	250	400	630		
Rated insulation voltage	$U_i$	V		750	750	1000	1000	1000	1000	1000	1000		
Rated impulse voltage	$U_{imp}$	kV		6	6	6	6	6	12	12	12		
Rated operational current	$I_e$	A	415V- AC22A	63	100	125	160	200	250	400	630		
Rated making capacity (AC23A)		A	415V, 0.35 pf	630	630	1,250	1,600	2,000	2,500	4,000	6,300		
Rated breaking capacity (AC23A)		A	415V, 0.35 pf	504	504	1,000	1,280	1,600	2,000	3,200	5,040		
Short circuit current		kA	rms (with fuses)	80	80	80	80	80	100	100	80		
Rated S/C making capacity		kA	Peak	15	15	20	20	20	30	40	50		
Min. mechanical endurance		-	Operations	20,000	20,000	10,000	10,000	10,000	10,000	10,000	10,000		
Min. electrical endurance		-	415V- at 0.65 pf	2,500	1,500	1,000	1,000	1,000	1,000	1,000	500		
Connecting capacity		-	Terminal type										
	mm <sup>2</sup>	Max		35	35	95	95	95	240	300	400		
	mm	Stud/Cu palm width		6/12	6/12	8/22	8/22	8/22	10/25	10/25	12/50		
	Nm	Tightening torque		3	3	10	10	10	30	45	50		

### Compact Range

A0 Size (25A- 40A) - x1 = n/a | x2= 105-180 | x3 = 105-280

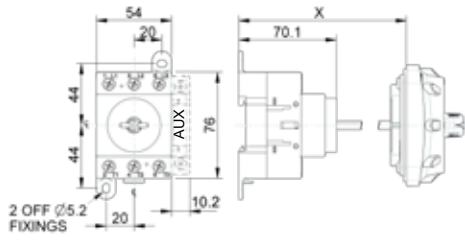


A0-A0 Size (6 pole 25A) - x1 = 98 | x2= 116-191 | x3 = 116-291

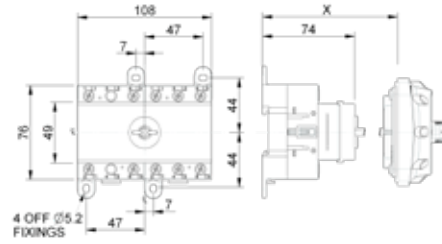


### Compact Range

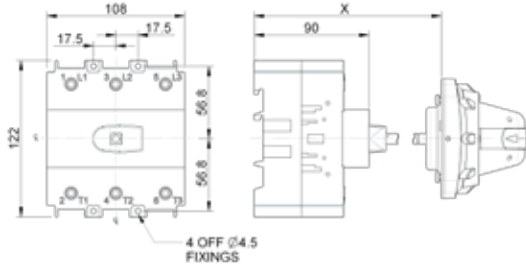
A1 Size (63A- 80A) - x1 = 98 | x2= 110-185 | x3 = 110-285



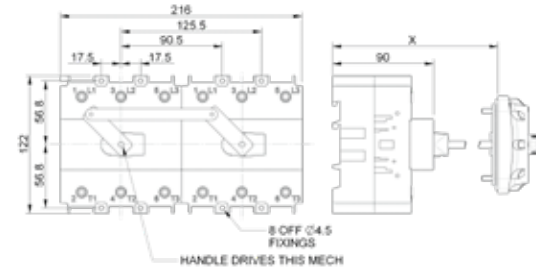
A1-A1 Size (6 pole 40A-80A) - x1 = 98 | x2= 116-191 | x3 = 116-291



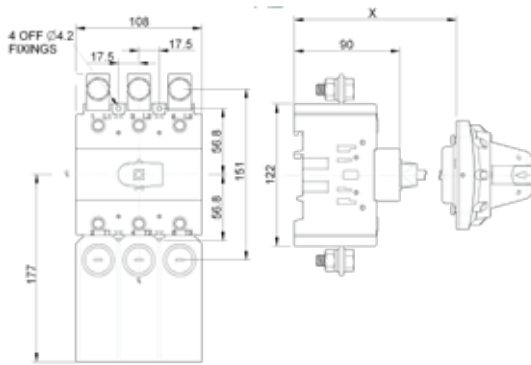
A2 Size (100A- 160A) - x1 = 121-166 | x2= n/a | x3 = 121-235



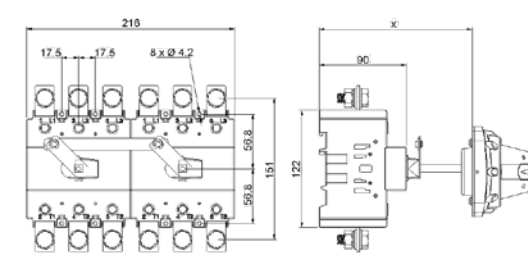
A2-A2 Size (6 pole 100A-160A) - x1 = 121-166 | x2= n/a | x3 = 121-235



A3 Size (200A) - x1 = 121-166 | x2= n/a | x3 = 121-235

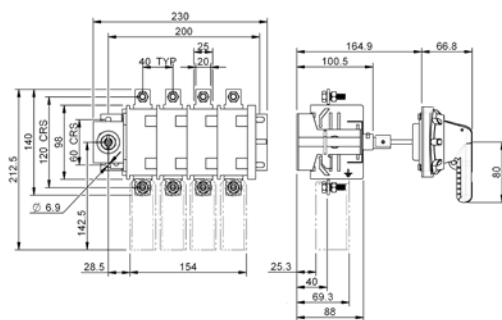


A3 Size (6 pole 200A) - x1 = 121-166 | x2= n/a | x3 = 121-235

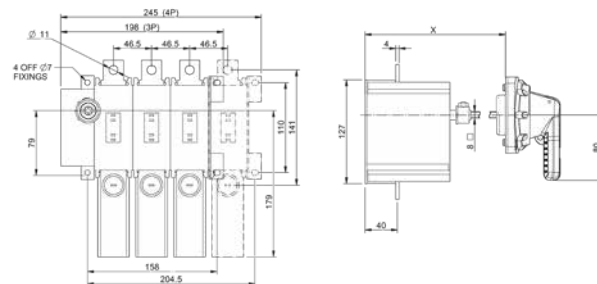


### Standard Range

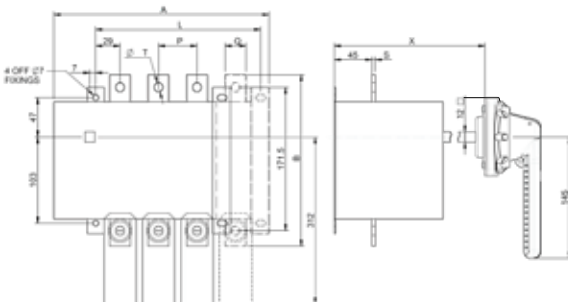
B1 Size (100A- 160A) - x3 = 156-251 | x4= 156-351



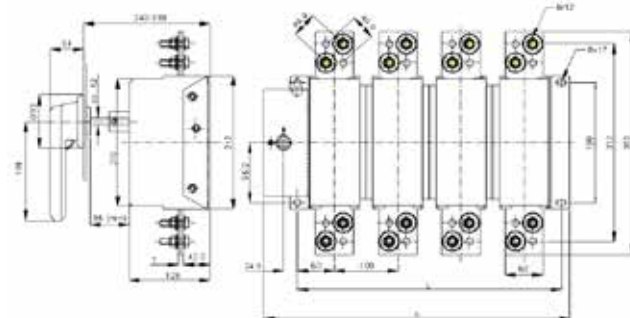
B2 Size (200A- 250A) - x3 = 158-254 | x4= 158-354



B3 Size (315A- 800A) - x3 = 163-257 | x4= 163-357



B4 Size (1000A-1250A)



Rating	A		B	L		P	Q	S	T
	3P	4P		3P	4P				
400A	211	257	205	151	197	46	25	4	11
600A	244	306	223	183	245	62	40	5	13.5
800A	260	330	223	199	269	70	40	5	13.5

Rating	A		L		T
	3P	4P	3P	4P	
1000A	383	483	318	418	8
1250A	383	483	318	418	8

Standard Range

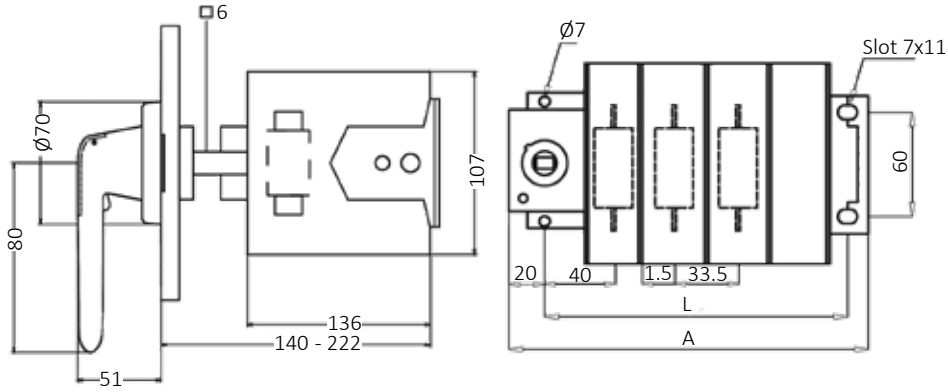
x3 = Min. & Max. (mm) with 200mm shaft extension

x4 = Min. & Max. (mm) with 400mm shaft extension



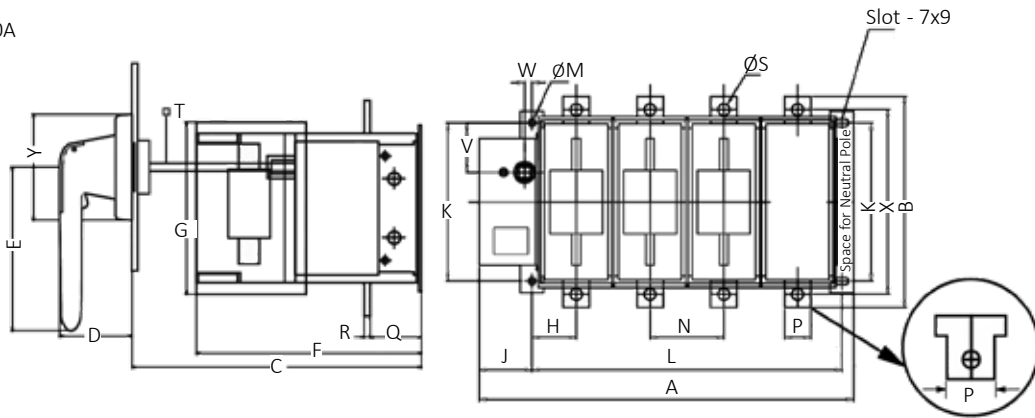
## Fuse Combination Range

32A - 63A



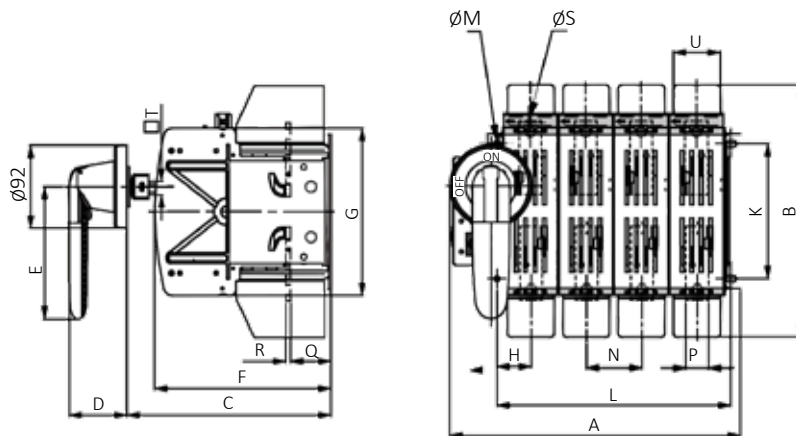
Format	A	L
3P+NL	168	138
3P+N	201	171
Frame Size D1		

100A - 160A



Rating (A)	A		B	C	D	E	F	G	H	J	K	L		M	N	P	Q	R	S	T	V	W	X	Y	Frame Size
	3P&NL	3P&N										3P&NL	3P&N												
100-125	190	230	142	135-225	67	80	134	98	44.5	20	60	160	195	7	40	20	40	2	9	6	30	0	122	93	D2
160	212	260	142	135-225	67	80	134	98	44.5	20	60	182	230	7	48	20	40	3	9	6	30	0	122	93	D3

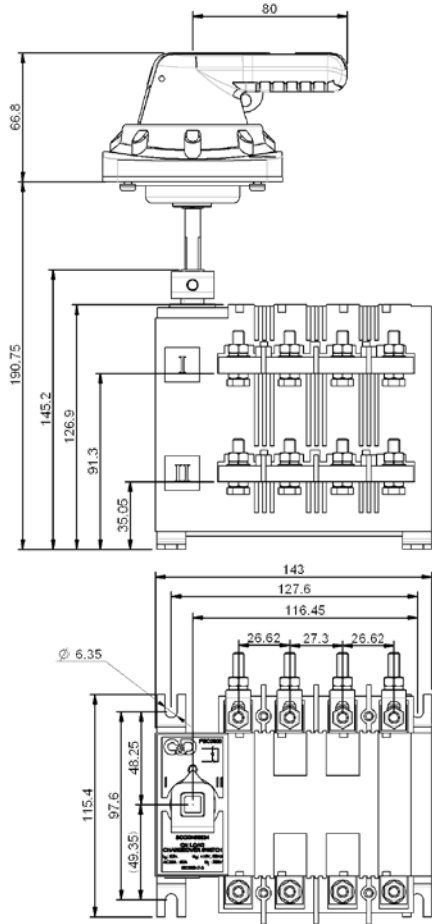
200A - 630A



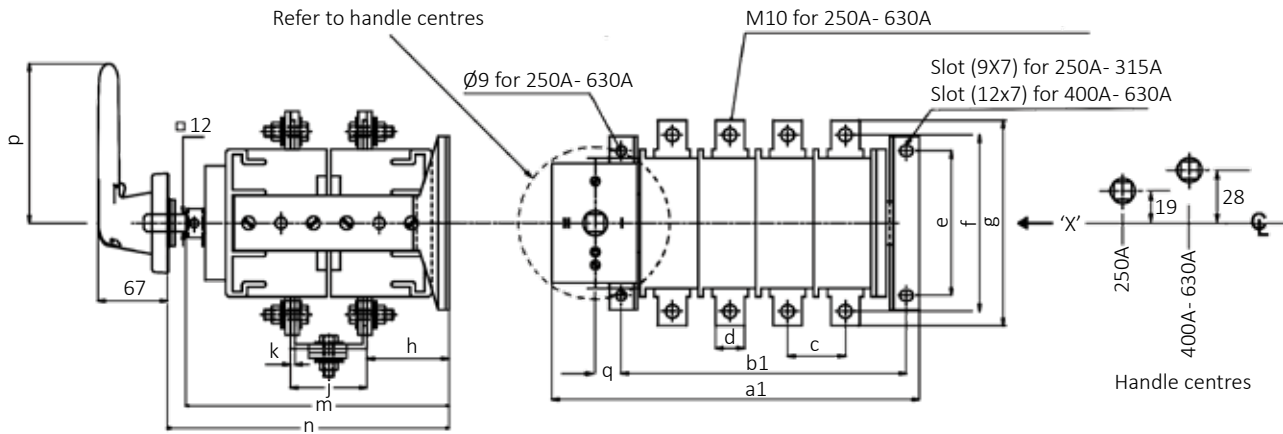
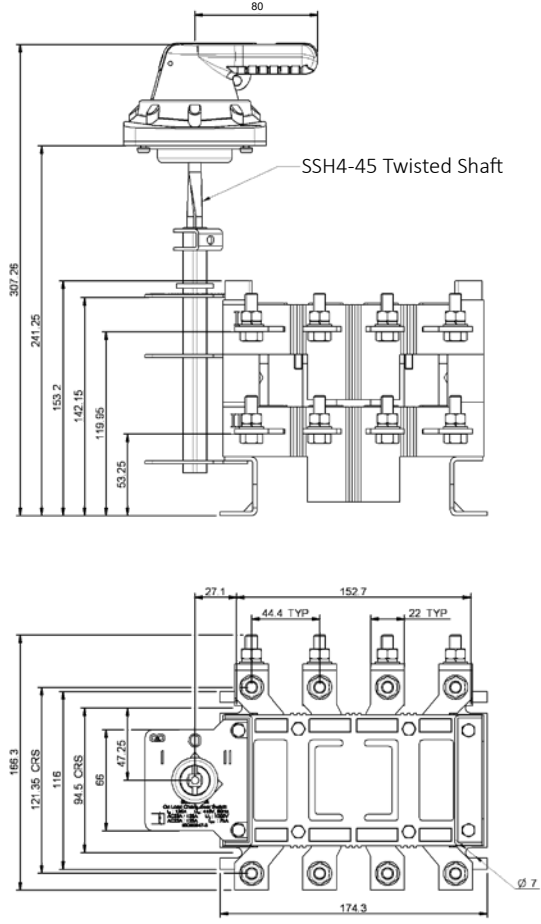
Rating (A)	A		B	C	D	E	F	G	H	K	L		M	N	P	Q	R	S	T	U	Frame Size
	3P&NL	3P&N									3P&NL	3P&N									
200-250	261	323	280	230-310	67	145	196	186	37	150	198	260	7	62	25	45	5	11	12	52	D4
315-400	285	355	280	230-310	67	145	196	186	37	150	222	292	7	70	25	45	5	11	12	52	D5
630	360	440	444	245-305	67	145	231	250	60	190	340	440	9	80	40	40	6	13	12	61	D6

## Changeover Range

Frame Size C1C- 63A & 100A Ratings



Frame Size C2C- 125A, 160A & 200A Ratings



Rating (A)	A1	B1	C	D	E	F	G	H	J	K	M	N	P	Q	Frame Size
250 (C2)	309.5	252	61	25	124	138	163	65.5	81	4.0	242	255-355	145	18	C2
400 (C3)	352	276	70	25	150	180	205	85	96	4.0	262	300-400	220	26	C3
630 (C3)	352	276	70	40	150	185	223	84	98	5.0	262	300-400	220	26	C3