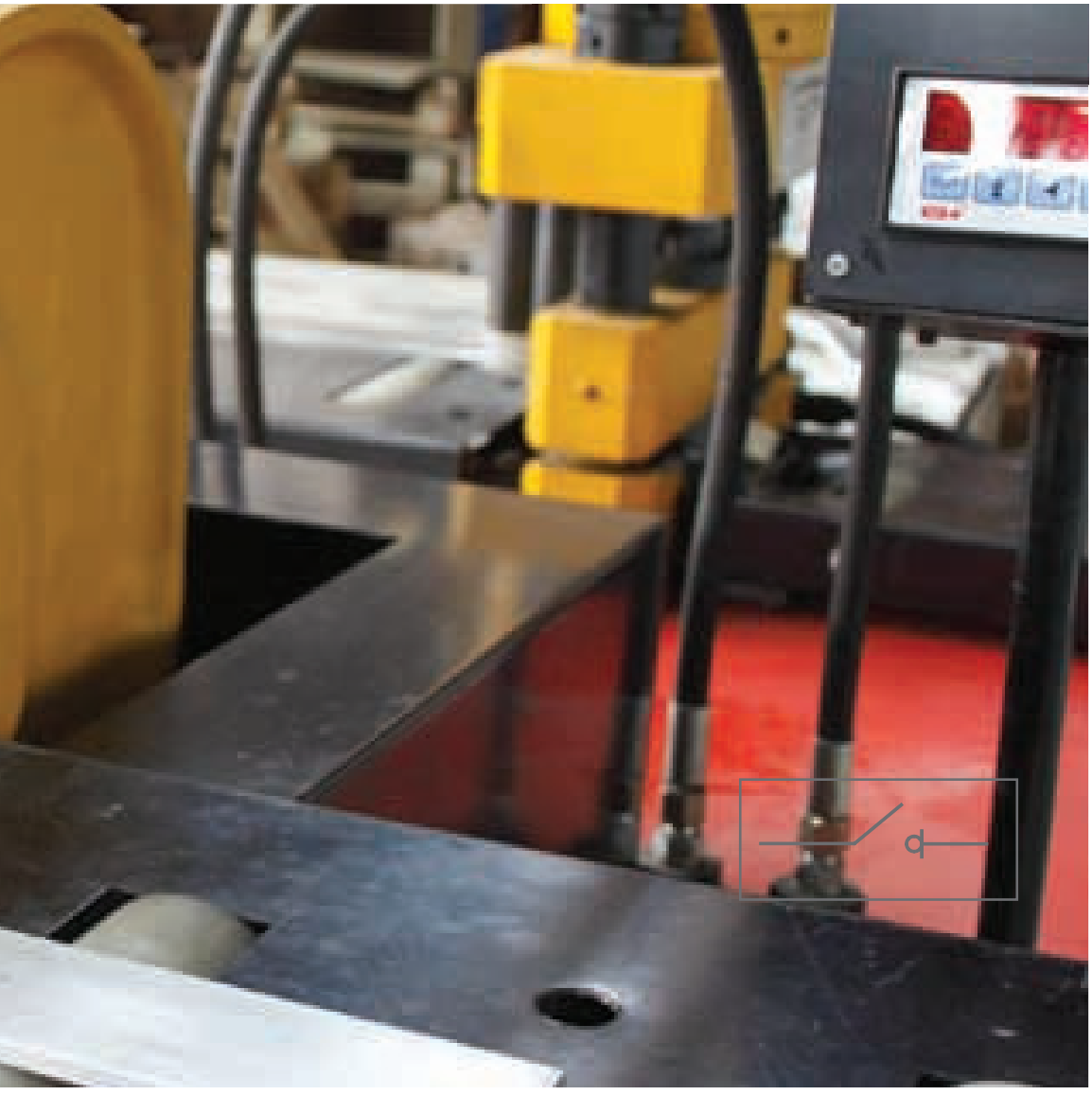
Euroload

Switch Disconnector

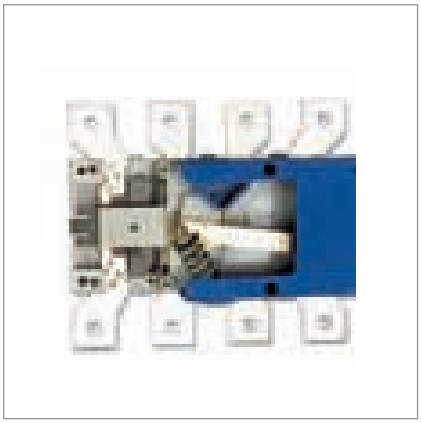


Construction

The switching mechanism is quick make, quick break type independent of the speed of the operation. There are four breaks per pole thereby resulting into faster quenching of arc. The load and line can be connected on either side by virtue of isolation on both the sides. The entire switching mechanism alongwith the fixed and moving contact assembly are housed in a polyester reinforced, moulded frame/cover, having high dielectric strength & thermal withstand capacity.

Contact Mechanism

The contact mechanism is knife blade type with self cleaning action during operation. The fixed contact terminals in each phase have separate main and arcing contacts. The moving contact assembly has three/four sets of contacts on moving carrier and the entire assembly rests on the spring loaded steel balls fitted in moving carrier in rating upto 320A and spring loaded buttons which assists in its true movement during making and breaking.

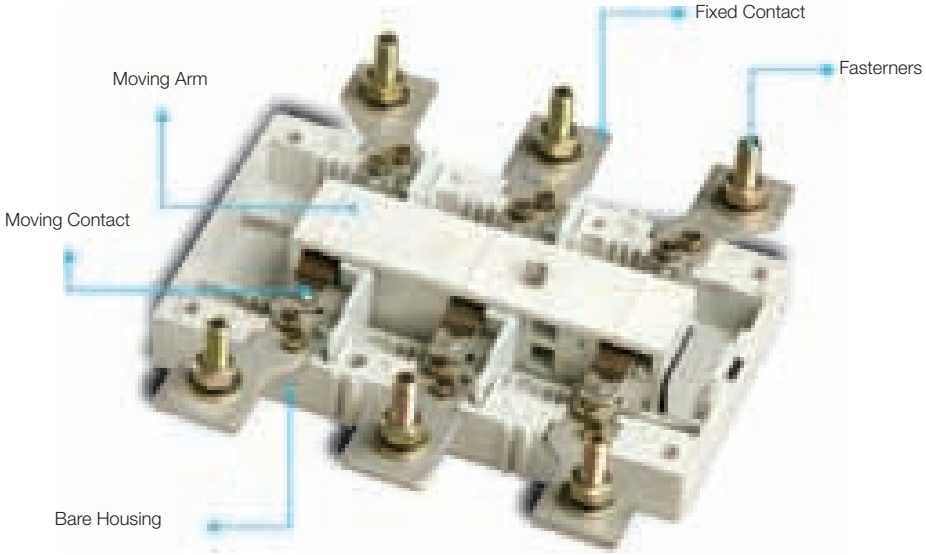


The moving contact mates with the fixed contact by a roll and slide movement of the moving contact assembly. The contact is first made with the arcing contact and thereafter with the main contact. During breaking, the arc formation is across the arcing contacts thereby protecting the main contacts which results into enhanced life of the switch. The arc is effectively quenched & confined by the set of arc chutes / arc barrier in each phase.

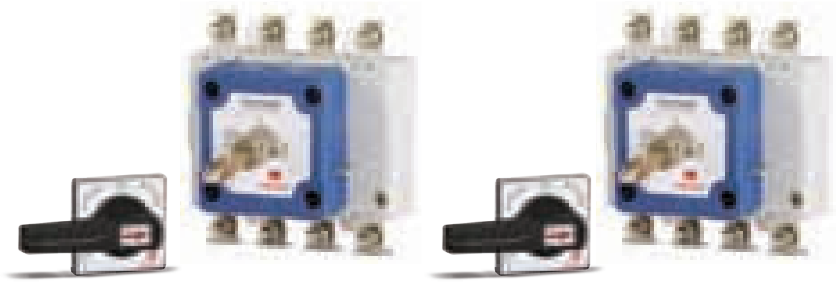
The switches can be mounted inside a panel either in horizontal or vertical mode without any effect on the performance.

Operating Mechanism

The operating mechanism consists of single/double side front operated handle which drives the spring assisted toggle mechanism, inturn operating the switch.



Technical Information



Frame Size			Size 00			
Rated operated Current at 40°C	I_e	A	40	63	80	100
Nos. of Poles			4	4	4	4
Rated Operational Voltage	U_e	V	415	415	415	415
Rated Insulation Voltage	U_i	V	1000	1000	1000	1000
Rated Impulse Voltage	$U_{imp.}$	kV	8	8	8	8
Dielectric strength, 50 Hz,	V_{im}	kV	5	5	5	5
Pollution Degree			3	3	3	3
Rated Current - ac 415V						
AC23A		A	40	63	80	100
Rated Motor Power	415V AC	KW	15	20	22.5	25
Making Capacity AC23A	415V	A	400	630	800	1000
Breaking Capacity AC23A	415V	A	320	504	640	800
Conditional Short ckt current	415V AC	KA_{rms}	80	80	80	80
Fuse Ratings gG		A	40	63	80	100
Rated Short Time Withstand						
Current for 1 Sec. rms value		KA_{rms}	5	5	5	5
Mechanical Endurance	opers.		10000	10000	10000	10000
Electrical Endurance	opers.		1500	1500	1500	1500
Min. Cu cable section	Sq.mm		10	16	25	35
Min. Al. cable section	Sq.mm		16	25	35	50
Terminal Bolt Size Metric thread diameter x length		mm		M6 X 16		
Overall Dimensions H X W X D		mm		105 X 122 X 101		
Weight Open Execution		kg.	0.8	0.8	0.9	0.9
In Enclosure		kg.	1.9	1.9	2.0	2.0

Catalogue No.		Size-0				
Current Rating at 40°C, I_{th}	A	80	100	125	160	200
Nos. of Poles		3	3	3/4	3/4	3/4
Rated insulation voltage, U_i	V	1000	1000	1000	1000	1000
Rated operational voltage, U_e	V	415	415	415	415	415
Dielectric strength, 50 Hz, V_{im}	KV	5	5	5	5	5
Rated impulse withstand voltage, U_{imp}	KV	8	8	8	8	8
Rated operational current, I_e						
Rated making capacity Amp,415V AC23A, p.f.- 0.30		800	1000	1250	1600	1600
Rated breaking capacity Amp,415V AC23A, p.f.- 0.30		640	800	1000	1280	1280
Rated Motor Power 415V, 3ø	KW	30	30	55	55	100
Fuse protected short circuit withstand						
Rated max. Current of gG fuses	A	80	100	125	160	200
Rated conditional short circuit current	KA_{rms}	80	80	80	80	80
Max. Allowed cut off current	KA_{peak}	12	15	17	18	22
Rated short time withstand current (1sec.)	KA_{rms}	7.5	7.5	7.5	7.5	7.5
Electrical Durability						
Nos. of operating cycles AC-23A		1500	1500	1000	1000	1000
Mechanical Durability						
Nos. of no load operating cycles		10000	10000	8000	8000	8000
Temperature withstand range (ambient)	°C	-5 to 50	-5 to 50	-5 to 50	-5 to 50	-5 to 50
Terminal connection						
Al. Cable /Bus Bar cross section	mm2	70	70	70	95	150
Cu. Cable /Bus Bar cross section	mm2	50	50	50	70	95
Weight						
Open Execution	Kg.	1.4	1.4	1.4/1.8	1.6/2.0	1.6/2.0
In Enclosure	Kg.	4.0	4.0	4.0/6.0	4.2/6.2	4.2/6.2

Frame Size		Size I		Size II		Size III
Current Rating at 40°C, I_{th}	A	250	320	400	630	800
Nos. of Poles		3/4	3/4	4	4	4
Rated insulation voltage, U_i	V	1000	1000	1000	1000	1000
Rated operational voltage, U_e	V	415	415	415	415	415
Dielectric strength, 50 Hz, V_{im}	KV	5	5	8	8	10
Rated impulse withstand voltage, U_{imp}	KV	8	8	8	8	8
Rated operational current, I_e						
at 415V AC 23A	A	250	320	400	630	800
Rated making capacity Amp,415V AC23A, p.f.- 0.30		2500	3200	4000	6300	8000
Rated breaking capacity Amp,415V AC23A, p.f.- 0.30		2000	2550	3200	5100	6400
Rated Motor Power 415V, 3ø	KW	132	160	220	315	450
Fuse protected short circuit withstand						
Rated max. Current of gG fuses	A	250	320	400	630	800
Rated conditional short circuit current	KA_{rms}	80	80	80	80	80
Max. Allowed cut off current	KA_{peak}	27	33	39	55	70
Rated short time withstand current (1sec.)	KA_{rms}	15	15	30	30	35
Electrical Durability						
Nos. of operating cycles AC-23A		1000	1000	1000	1000	500
Mechanical Durability						
Nos. of no load operating cycles		8000	5000	5000	5000	3000
Temperature withstand range (ambient)	°C	-5 to 50	-5 to 50	-5 to 50	-5 to 50	-5 to 50
Terminal connection						
Al. Cable /Bus Bar cross section	mm2	185	240	300	40x8x2	50x8x2
Cu. Cable /Bus Bar cross section	mm2	120	185	240	40x5x2	50x5x2
Weight						
Open Execution	Kg.	2.8/3.6	3.1/3.9	3.1	8.20	11.80
In Enclosure	Kg.	10.0/13.1	10.0/13.4	10.0	23.90	28.00

* For ratings 630A & above bus bar terminals in recommended.

Technical Information

Frame Size		Size IV			Size V		
Current Rating at 40°C, I_{th}	A	1000	1250	1600	2000	2500	3150
Nos. of Poles		4	4	4	4	4	4
Rated insulation voltage, U_i	V	1000	1000	1000	1000	1000	1000
Rated operational voltage, U_e	V	415	415	415	415	415	415
Dielectric strength, 50 Hz, V_{im}	KV	10	10	10	10	10	10
Rated impulse withstand voltage, U_{imp}	KV	8	8	8	8	8	8
Rated operational current, I_e							
at 415V AC 23A	A	1000	1250	1600	2000	2500	3150
Rated making capacity Amp,415V AC23A, p.f.- 0.30		10000	10000	10000	12500	12500	12500
Rated breaking capacity Amp,415V AC23A, p.f.- 0.30	8000	8000	8000	10000	10000	10000	
Rated operational power							
Rated Motor Power 415V, 3ø	KW	560	560	625	710	710	710
Electrical Durability							
Nos. of operating cycles AC-23A		500	500	500	500	500	500
Mechanical Durability							
Nos. of no load operating cycles		3000	3000	3000	3000	3000	2000
Temperature withstand range (ambient)	°C	-5 to 50	-5 to 50	-5 to 50	-5 to 50	-5 to 50	-5 to 50
Terminal connection							
Al. Cable /Bus Bar cross section	mm2	50x10x2	63x12x2	50x8x4	100x10x3	100x10x4	150x10x4
Cu. Cable /Bus Bar cross section	mm2	60x5x2	80x5x2	100x5x2	100x5x3	100x5x4	100x10x3
Weight							
Open Execution	Kg.	22.00	23.70	25.00	45.00	51.20	58.60
In Enclosure	Kg.	52.00	53.50	55.00	**	**	**

** Details on request

Size 00 (Four Pole)		
Current Rating (A)	Open Execution Cat. No.	In Enclosure Cat. No.
40	IHCSFO0040	IHCSFE0040
63	IHCSFO0063	IHCSFE0063
80	IHCSFO0080	IHCSFE0080
100	IHCSFO0100	IHCSFE0100

Size 0 (Three Pole)		
Current Rating (A)	Open Execution Cat. No.	In Enclosure Cat. No.
80	IHCSTO0080	IHCSTE0080
100	IHCSTO0100	IHCSTE0100
125	IHCSTO0125	IHCSTE0125
160	IHCSTO0160	IHCSTE0160
200	IHCSTO0200	IHCSTE0200

Size 1 (Three Pole)		
Current Rating (A)	Open Execution Cat. No.	In Enclosure Cat. No.
250	IHCSTO0250	IHCSTE0250
320	IHCSTO0320	IHCSTE0320
400	IHCSTO0400	IHCSTE0400

Size 0 (Four Pole)		
Current Rating (A)	Open Execution Cat. No.	In Enclosure Cat. No.
125	IHCSFO0125	IHCSFE0125
160	IHCSFO0160	IHCSFE0160
200	IHCSFO0200	IHCSFE0200

Technical Information

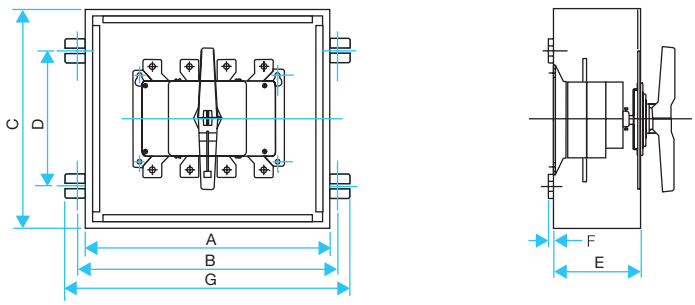
Size 1 (Four Pole)		
Current Rating (A)	Open Execution Cat. No.	In Enclosure Cat. No.
250	IHCSFO0250	IHCSFE0250
320	IHCSFO0320	IHCSFE0320

Size 2		
Current Rating (A)	Open Execution Cat. No.	In Enclosure Cat. No.
400	IHCSFO0400	IHCSFE0400
630	IHCSFO0630	IHCSFE0630

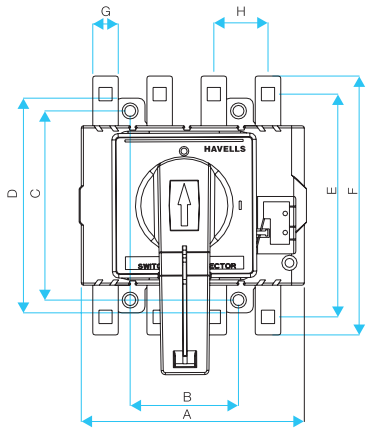
Size 3		
Current Rating (A)	Open Execution Cat. No.	In Enclosure Cat. No.
800	IHCSFO0800	IHCSFE0800

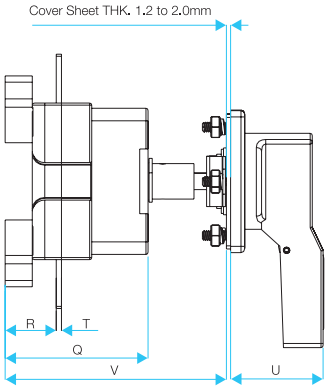
Size 4		
Current Rating (A)	Open Execution Cat. No.	In Enclosure Cat. No.
1000	IHCSFO1000	IHCSFE1000
1250	IHCSFO1250	IHCSFE1250
1600	IHCSFO1600	IHCSFE1600

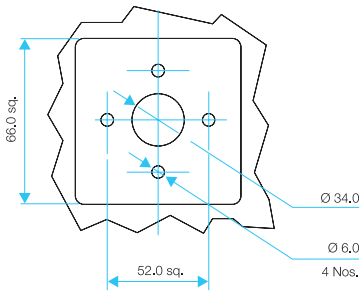
Size 4		
Current Rating (A)	Open Execution Cat. No.	In Enclosure Cat. No.
2000	IHCSFO2000	IHCSFE2000
2500	IHCSFO2500	IHCSFE2500
3150	IHCSFO3150	IHCSFE3150



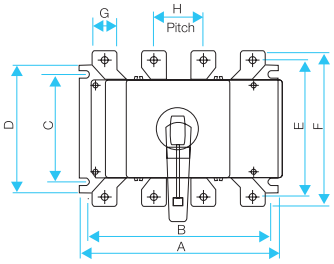
DIMENSIONS (in mm) - ENCLOSURE							
CURRENT (A)	A	B	C	D	E	F	G
80/100/125/160/200 A TP	270	220	244	194	145	5	-
250/320/400 A TP	310	260	280	230	155	5	-
40/63/80/100 A FP	210	160	200	150	100	5	-
125 A FP	270	210	248	188	145	3.2	-
160/200 A FP	320	210	248	188	145	3.2	-
250/320 A FP	310	250	290	250	155	5	-
400/630 A FP	475	415	425	365	210	5	-
800 A FP	520	550	480	330	203	5	580
1000/1250/1600 A FP	730	770	630	480	246	6	810
2000/2500/3150 A FP	730	770	710	560	350	6	810

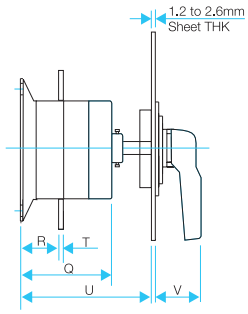


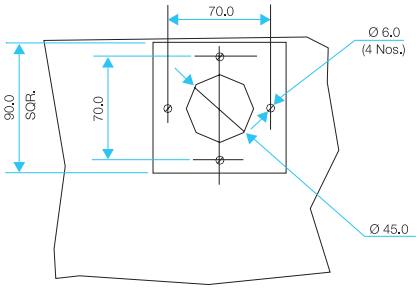




Fixing detail for Legend Plate Cum Handle on Cover (40/63/80/100)







Fixing detail for Legend Plate cum Handle on Cover (125-3150A)

DIMENSIONS (in mm) - OPEN EXECUTION													
CURRENT (A)	A	B	C	D	E	F	G	H	Q	R	T	U	V
80/100/125 A TP	136	122	113	132	124	148	15	34	90	36	3.2	150	62
160 A TP	136	122	113	132	124	148	24	34	90	36	3.2	150	62
200 A TP	136	122	113	132	124	148	24	52	90	36	3.2	150	62
250 A TP	197	187	134	156	147	148	28	58	109	38	4	170	62
320 A TP	197	187	134	156	165	148	35	63	109	38	4	170	62
400 A TP	197	187	134	156	165	198	35	63	109	38	4	170	62
40/63 A FP	105	51	89	101	93	110	12	26	64	20	2.5	101	44
80/100 A FP	105	51	89	101	105	122	12	26	64	20	3.2	101	44
125 A FP	180	166	113	132	122	148	20	46	90	54	3.2	142	62
160/200 A FP	180	166	113	132	122	148	24	46	90	54	3.2	142	62
250 A FP	249	234	134	156	147	177	28	58	110	57	4	152	62
320 A FP	249	234	134	156	165	198	35	63	110	57	4	152	62
400 A FP	325	297	184	206	221	251	40	80	153	67	5	173	62
630 A FP	325	297	184	206	241	281	55	80	153	67	5	173	62
800 A FP	368	226	212	234	280	331	45	97	164	71	8	184	62
1000 A FP	480	440	290	315	340	380	70	100	204	101	10	224	62
1250 A FP	480	440	290	315	340	380	70	100	204	101	12	224	62
1600 A FP	480	440	290	315	340	380	70	100	204	101	15	224	62
2000/2500/3150 A FP	480	440	290	315	387	455	80	100	308	74	15	328	62