



Range : 32A-800A with Bolted / Din type fuse links
Execution : TPN & TPSN
Isolator Switch Range : 100A to 1000A
Execution : TPN
Specification : IS : 13947- 1 & 3 & IEC : 60947 - 1 & 3



STANDARD
SWITCH DISCONNECTOR FUSE
(Cubicle Fuse Switch Units)

STANDARD presents state of the art designed Switch Disconnector Fuse for various power distribution applications giving trouble free reliable performance.

Construction

The contact system has dual advantage of knife contacts & roller contacts. The moving contact system consists of four spring loaded, silver plated Cu. roller held in position by a steel retainer which allows the rollers to rotate individually.

The snap action of the switch makes the contact movement independent of the operating speed of the handle to prevent indefinite positioning. The uniform contact pressure ensures excellent behavior of the switch under overload & short circuit conditions.

The moulded parts of the switch are in accordance with existing standards concerning creepage, inflammability and

Design

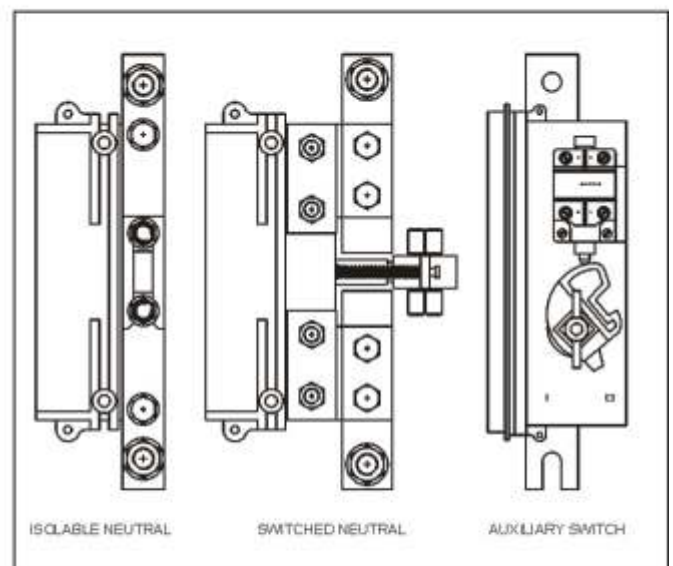
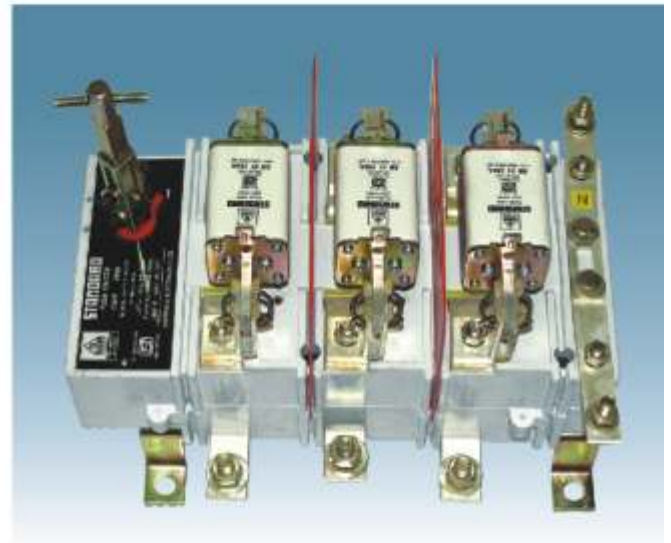
The compact design of the Switch Disconnector Fuse reduces space requirement on panel boards. This also results in considerable economy on bus bars, wiring and sheet steel fabrication.

High Making & Breaking Capacity

High making and breaking capacity is achieved primarily by dividing the make/break process between four breaking points per phase. This results in distribution of the breaking load to the effect that arcing time and contact burning are reduced and the contact life is increased.

Features

- Wide Range of Choice : Switch Disconnector Fuse from 32A to 800A in Bolted/Din type. Switch Disconnectors/Isolators from 100A to 1000A.
- CPRI Tested/High Short Circuit Breaking Capacity : Tested at CPRI for 80KA, utilisation category AC 23A and conforms to IS : 13947 (P3)/IEC : 947 (P3).
- Two way Isolation : Fuselinks remain isolated from both incoming and outgoing circuits, when the switch is in OFF position.
- Flexibility of Mounting : Can be mounted in Vertical or Horizontal position.
- The unique roller contact system and quick switching mechanism prevents contacts from welding at extreme fault currents.
- Available with Isolable Neutral and Switched Neutral.
- Facility of auxiliary contacts 2NO + 2NC on request.
- Padlock, door interlock and defeat mechanism interlock provided.

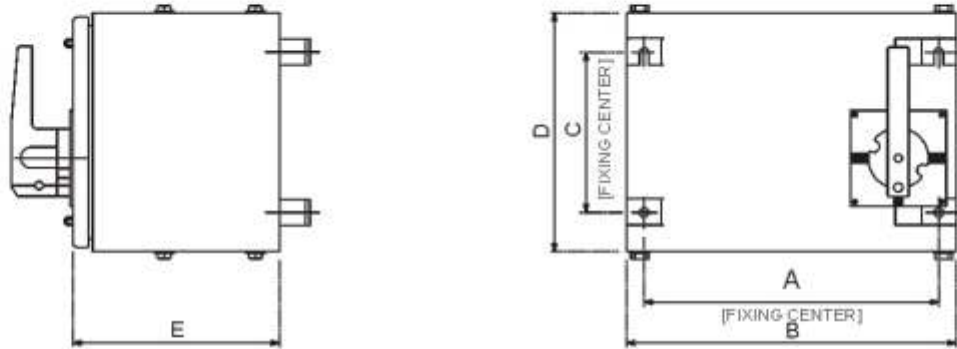


Technical Data

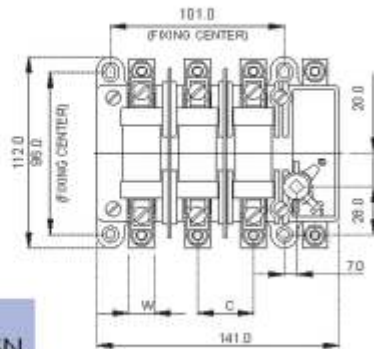
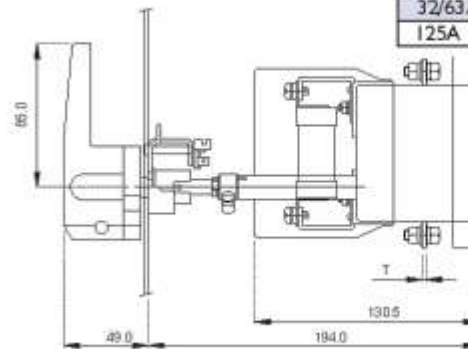
Ordering Code	CISF 100 TPN	CISF 125 TPN	CISF 200 TPN	CISF 400 TPN	CISF 630 TPN	CISF 800 TPN	CISF 1000 TPN	FSHF 32 TPN	FSHF 63 TPN	FSHF 125 TPN Cont. Regular	FSHF 160 TPN	FSHF 200 TPN	FSHF 250 TPN	FSHF 320 TPN	FSHF 400 TPN	FSHF 630 TPN	FSHF 800 TPN
Number of Pole with Isolating /Switched Neutral	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Rated Insulation Voltage, Ui	V 660	660	660	660	660	660	660	660	660	660	660	660	660	660	660	660	660
Rated Operational Voltage, Ue	V 415	415	415	415	415	415	415	415	415	415	415	415	415	415	415	415	415
Rated Current	Amp. 100	125	200	400	630	800	1000	32	63	125	125	160	200	250	320	400	630
Category of Utilization	AC23A	AC23A	AC23A	AC23A	AC23A	AC23A	AC22A	AC23A	AC23A	AC23A	AC23A	AC23A	AC23A	AC23A	AC23A	AC23A	AC23A
Rated Making Capacity at 415V, 50Hz, COS f-0.35 +	Amp. 1000	1000	1600	3200	5040	6400	3000	320	630	1250	1250	1600	2000	2500	3200	4000	6300
Rated Breaking Capacity at 415V, 50Hz, COS f-0.35 +	Amp. 800	800	1200	2400	3780	4800	3000	256	504	1000	1000	1000	1600	2000	2560	3200	5040
AC23A, Rating at 415V, 50Hz	KW 45	59	90	200	335	400	-	17	30	59	59	80	100	132	160	200	335
AC22A, Rating at 415V, 50Hz	KW -	-	-	-	-	-	520	-	-	-	-	-	-	-	-	-	-
KVAR Rating (Max. Capacitor Bank Rating at 415V)	KVAR 30	58	100	198	260	374	500	15	28	58	58	75	99	124	150	198	374
Rated Fuse Short Circuit Making Capacity at 415V	KA (RMS) 80	80	80	80	80	80	-	80	80	80	80	80	80	80	80	80	80
Rated Fuse Short Circuit with Stand Capacity at 415V	KA (RMS) 80	80	80	80	80	80	-	80	80	80	80	80	80	80	80	80	80
Fuse Link of Max. Rating	Amp. 100	125	200	400	630	800	-	32	63	125	125	160	200	250	320	400	630
Fuse Type																	
Knife Type	Size -	-	-	-	-	-	-	00	00	00	00	00	-	1	2	2	3
Bolted Type	Size -	-	-	-	-	-	-	A2	A3	A4	B1	B1	^ B2	B3	B3	B4	C3
Rated Short Time Withstand Capacity for 1 Sec	KA (RMS) 2	5	4	30	-	-	-	1	2	-	5	5	5	5	10	30	-
DC Application																	
Rated Voltage	V 400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400
Rated Current	AMP 100	125	200	400	630	800	1000	32	63	125	125	160	200	250	320	400	630
Rated DC Making/ Breaking Capacity at 400V, DC L/R =2.5msec. With 2 Poles in Series and 3rd Pole (-ve)	AMP 150	300	300	1000	1000	2000	1500	100	150	300	300	300	300	1000	1000	1000	2000
Mechanical Life	Operation 10000	10000	10000	10000	10000	5000	5000	10000	10000	10000	10000	10000	10000	10000	10000	10000	5000
Electrical Life at Rated Current, Ue, Cos f-0.65 #	Operation 1500	1000	1000	1000	1000	500	500	1500	1500	1000	1000	1000	1000	1000	1000	1000	500
Terminal Size	mm 15x2	15x4	20x4	25x6	30x6	40x6	40x8	15x2	15x2	20x2.6	20x4	20x4	25x4	25x4	25x4	25x6	40x6
Operation Torque	Nm 4.2	7.5	7.5	7.5	7.5	16.0	16.0	4.2	4.2	4.8	7.5	7.5	7.5	7.5	7.5	7.5	16.0
Ref. Specification IS : 13947(P3)/IEC : 947 (P3)																	
ISI Marked as per IS : 13947 (P3)/ IEC : 947 (P3)	-	-	-	-	-	-	-	-	-	-	✓	-	-	✓	✓	✓	✓

Our Switch Disconnector Fuse 32A to 800A can be used for 400 Cycles/Sec. Upto 500 Volts.

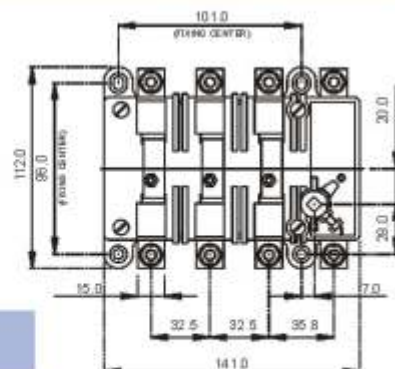
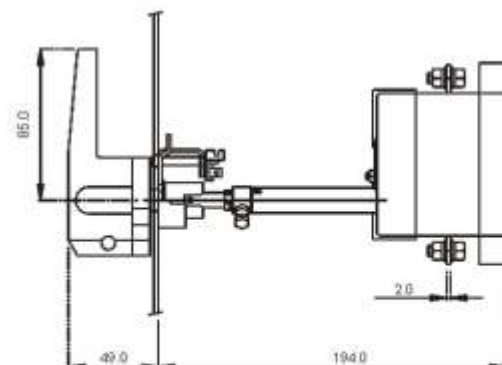
* Use fuse of reputed make only + Category AC22 has Cos f-0.65 # For Category AC 22 Cos f-0.8 ^ STF Fuse of 33q

Dimensions (Switch Disconnecter Fuse TPN / Isolator / Switch Disconnecter (with Enclosure) (in mm)


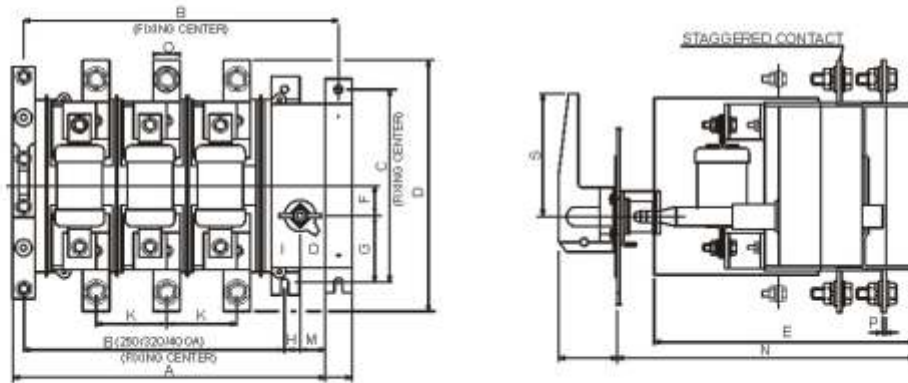
Rating Amps.	Type	A	B	C	D	E
32/63/125 Compact	FSHF 32/63/125 TPN	158	230	115	175	195
125/160/200	FSHF 125/160/200 TPN	305	335	131	210	220
250/320/400	FSHF 250/320/400 TPN	390	420	183	280	262
630/800	FSHF 630/800 TPN	420	450	210	375	290
100	CISF 100 TPN	158	230	115	175	195
125/200	CISF 125/200 TPN	305	335	131	210	220
400/630	CISF 400/630 TPN	390	420	183	280	262
800/1000	CISF 800/1000 TPN	420	450	210	375	290

 General Tolerance ± 1.5
Switch Disconnecter Fuse (Compact Design)

 32/63/125A
 Execution TPN/TPSN


Rating	W	C	T
32/63A	15.0	32.5	2.0
125A	20.0	36.5	2.6

Switch Disconnecter (Compact Design)

 100A
 Execution TPN


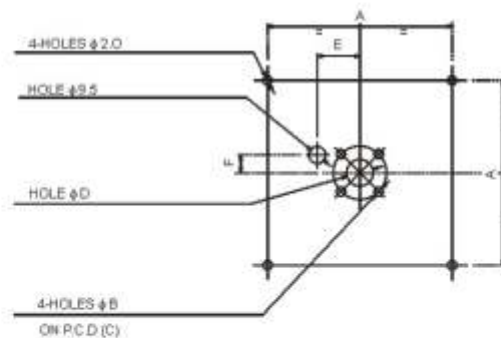
Switch Disconnecter Fuse TPN-Open Execution



Dimensions (in mm)

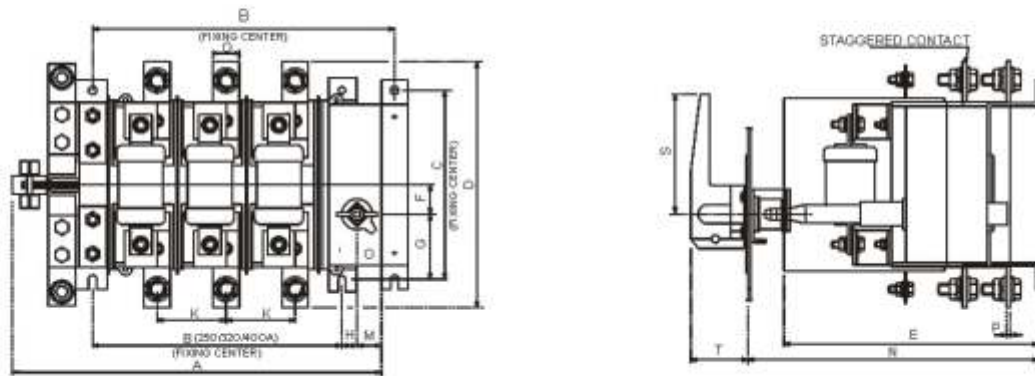
S. No.	Rating Amps.	Execution Type	Type	A	B	C	D	E	F	G	H	K	M	N	O	P	S	T	BOLT Size
1	125	TPN	FSHF 125 TPN	244	221	131	162	157	26	39.5	-	44	43	222	20	4	120	70	M8
2	160	TPN	FSHF 160 TPN	244	221	131	162	157	26	39.5	-	44	43	222	20	4	120	70	M8
3	200	TPN	FSHF 200 TPN	244	221	131	162	157	26	39.5	-	44	43	222	25	4	120	70	M8
4	250	TPN	FSHF 250 TPN	311	250	183	224	212	26	65.5	15	70	32.5	264	25	4	160	67	M10
5	320	TPN	FSHF 320 TPN	311	250	183	224	212	26	65.5	15	70	32.5	264	25	6	160	67	M10
6	400	TPN	FSHF 400 TPN	311	250	183	224	212	26	65.5	15	70	32.5	264	25	6	160	67	M12
7	630	TPN	FSHF 630 TPN	340	315	210	358	240	26	78	-	87	32.5	285	40	6	160	67	M12
8	800	TPN	FSHF 800 TPN	340	315	210	358	240	26	78	-	87	32.5	285	40	8	160	67	M12

Dimensions of Cover Name Plate Fixing Detail

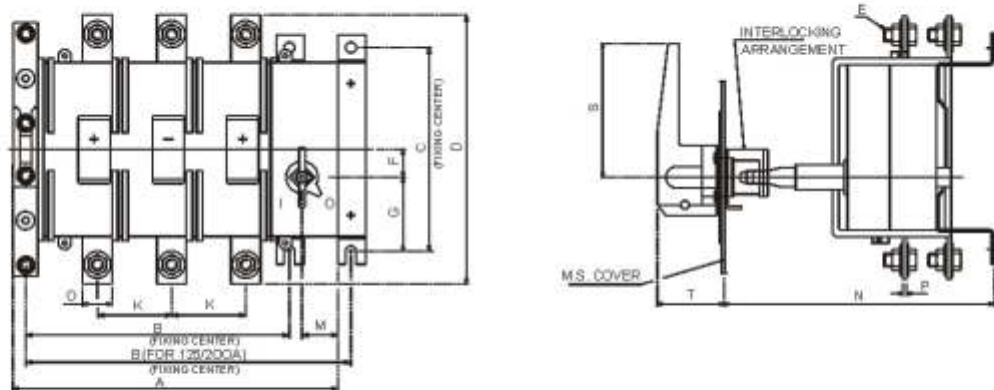


S. No.	Rating Amps.	A	B	C	D	E	F
1.	32/63/125 Compact	80	4.5	30	12.5	22	9.5
2	125/160/200	104	6	38	16.6	26	12.5
3	250/320/400	104	7	44	22	26.5	16.5
4	630/800	104	7	44	22	26.5	16.5

General Tolerance ± 1.5

Switch Disconnecter Fuse (Switched Neutral Pole)-Open Execution

Dimensions

S. No.	Rating Amps.	Execution	Type	A	B	C	D	E	F	G	H	K	M	N	O	P	S	T	BOLT Size
1	125	TPSN	FSHF 125 TPSN	283	221	131	162	157	26	39.5	-	44	43	222	20	4	120	70	M8
2	160	TPSN	FSHF 160 TPSN	283	221	131	162	157	26	39.5	-	44	43	222	20	4	120	70	M8
3	200	TPSN	FSHF 200 TPSN	283	221	131	162	157	26	39.5	-	44	43	222	25	4	120	70	M8
4	250	TPSN	FSHF 250 TPSN	372	250	183	224	212	26	65.5	15	70	32.5	264	25	4	160	67	M10
5	320	TPSN	FSHF 320 TPSN	372	250	183	224	212	26	65.5	15	70	32.5	264	25	6	160	67	M10
6	400	TPSN	FSHF 400 TPSN	372	250	183	224	212	26	65.5	15	70	32.5	264	25	6	160	67	M12
7	630	TPSN	FSHF 630 TPSN	401	315	210	358	240	26	78	-	87	32.5	285	40	6	160	67	M12
8	800	TPSN	FSHF 800 TPSN	401	315	210	358	240	26	78	-	87	32.5	285	40	8	160	67	M12

Switch Disconnecter / Isolator Open Execution


S. No.	Rating Amps.	Execution	Type	A	B	C	D	F	G	K	M	N	O	P	S	T	BOLT Size
1	125	TPN	CISF 125 TPN	244	221	131	162	26	39.5	44	43	222	15	4	120	70	M8
2	200	TPN	CISF 200 TPN	244	221	131	162	26	39.5	44	43	222	20	4	120	70	M8
3	400	TPN	CISF 400 TPN	311	250	183	224	26	65.5	70	32.5	264	25	6	160	67	M12
4	630	TPN	CISF 630 TPN	311	250	183	224	26	65.5	70	32.5	264	30	6	160	67	M12
5	800	TPN	CISF 800 TPN	340	315	208	358	26	78	87	32.5	285	40	6	160	67	M12
6	1000	TPN	CISF 1000 TPN	340	315	208	358	26	78	87	32.5	285	40	6	160	67	M12

Selection of HBC Fuse Links

Rating of Switch Amps.	Size as per IS : 13703	HBC Fuse Type	Range of HBC Fuses																					
			6	10	16	20	25	32	50	63	80	100	125	160	200	250	300/ 315	350	400	425	500	630	800A	
32	A2	STIA	●	●	●	●	●	●																
	00	SB00	●	●	●	●	●	●																
63	A2	STIA	●	●	●	●	●	●																
	A3	STIS							●	●														
	00	SB00	●	●	●	●	●	●	●	●														
125 (Compact)	A4	STCP								●	●	●												
	00	SB00	●	●	●	●	●	●	●	●	●	●												
125	B1	STC								●	●	●												
	00	SB00	●	●	●	●	●	●	●	●	●	●												
160	00	SB00	●	●	●	●	●	●	●	●	●	●	●											
	B2	*STF										●	●											
200	B2	*STF											●	●	●									
	B1	STC								●	●	●												
250	B2	STF										●	●	●										
	B3	STKF														●								
	1	SB1						●	●	●	●	●	●	●	●	●	●							
	2	SB2															●	●	●	●				
320	B1	STC								●	●	●												
	B2	STF										●	●	●										
	B3	STKF														●	●							
	1	SB1						●	●	●	●	●	●	●	●	●	●	●						
	2	SB2															●	●	●	●				
	400	B1	STC								●	●	●											
400	B2	STF										●	●	●										
	B3	STKF														●	●							
	B4	STMF																●	●					
	1	SB1						●	●	●	●	●	●	●	●	●	●	●						
	2	SB2															●	●	●	●				
	630	C3	STLM/ STTM														●	●	●	●				
630	1	SB1						●	●	●	●	●	●	●	●	●	●							
	2	SB2														●	●	●	●					
	3	SB3															●			●	●	●		
800	C3	STLM																●	●	●	●		⊙	

* STF Fuse of 33φ ⊙ Use fuse of Reputed make only

SWITCH DISCONNECTOR FUSE TPN

Rating	Cat No.	
	Open Execution	With Sheet Steel Enclosure
32	FSCTO4032	FSCTE4032
63	FSCTO4063	FSCTE4063
100	FSCTO4100	FSCTE4100
125	FSCTO4125	FSCTE4125
160	FSCTO4160	FSCTE4160
200	FSCTO4200	FSCTE4200
250	FSCTO4250	FSCTE4250
320	FSCTO4320	FSCTE4320
400	FSCTO4400	FSCTE4400
630	FSCTO4630	FSCTE4630
800	FSCTO4800	FSCTE4800

SWITCH DISCONNECTOR FUSE TPSN

Rating	Cat No.
	Open Execution
125	FSCN04125
250	FSCN04250
400	FSCN04400
630	FSCN04630
800	FSCN04800


SWITCH DISCONNECTOR / LOAD BREAK (CUBICLE TYPE)

Rating	Cat No.	
	Open Execution	With Sheet Steel Enclosure
100	ISCTO4100	ISCTW4100
125	ISCTO4125	ISCTW4125
200	ISCTO4200	ISCTW4200
400	ISCTO4400	ISCTW4400
630	ISCTO4630	ISCTW4630

