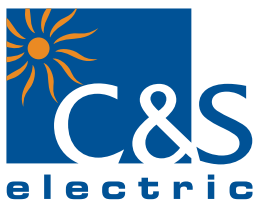


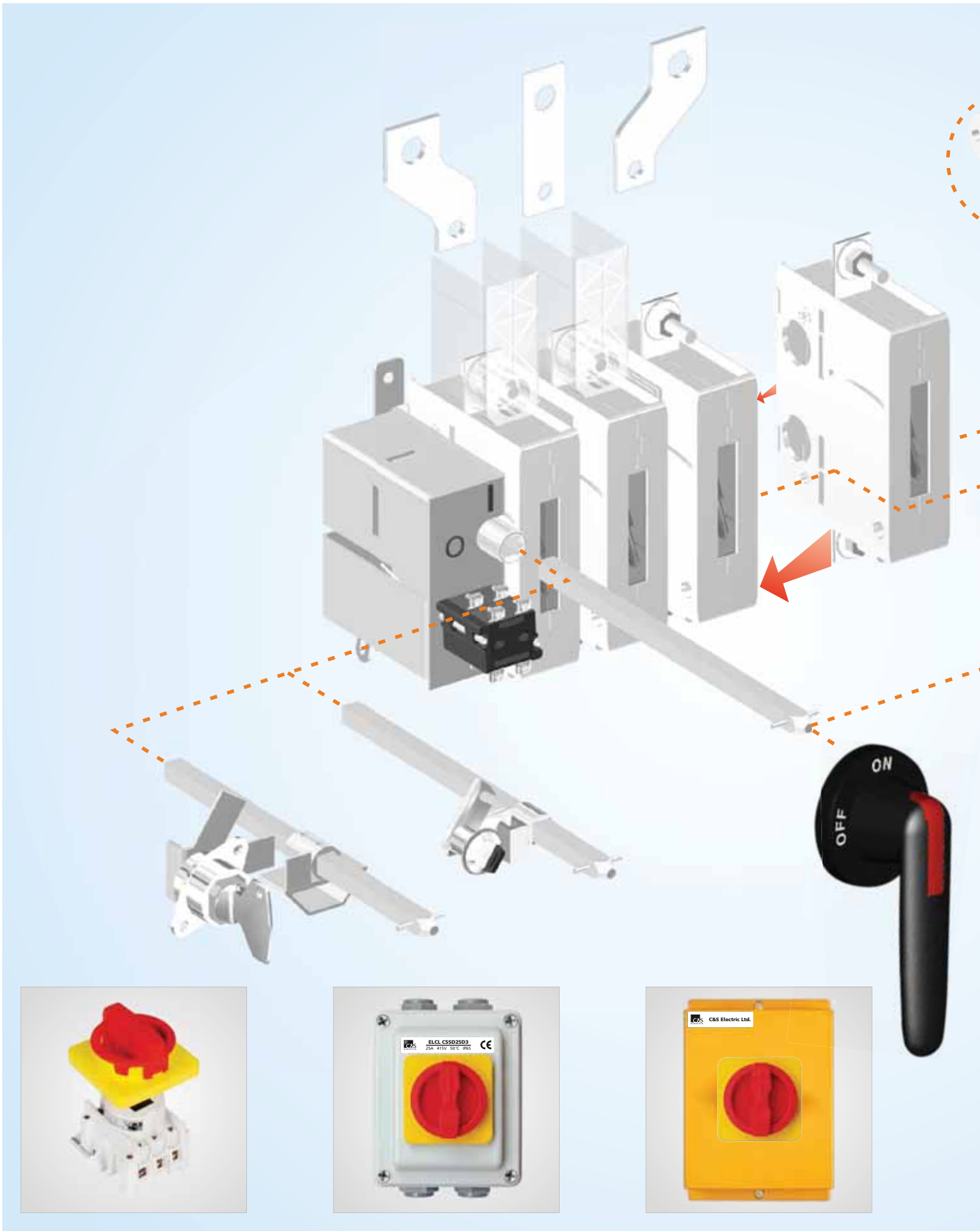
We touch your **electricity** everyday!



CE



**Switch Disconnectors**



## Rugged construction, Integrating end user convenience with installation flexibility

C&S Electric offers a wide range of Switch Disconnectors (On Load Break Switches) - 25A to 3150A, suitable for operation upto 750/1000V. Available in 3 Pole as well as 4 Pole, interiors as well as in enclosure, they are suitable for AC23A utilization category and conform to IEC 60947-3/IS 13947-3.

Available in ratings of 63A and above. These switches are of single pole construction, enabling combination up to 8 poles. Thus, modular yet rugged construction, with all poles including the neutral having 100% rating & reliability.

Modular arrangement also eliminates need for matching standard 3 pole switch to specific installation requirement by adding neutral pole in 3 phase 4 wire AC system or looping poles for DC system. Hence these switches are most suited and economical for any applications.

- Main Incomer Switch
- AC or DC Power Distribution System
- Switching & Isolating Motors
- Switching & Isolating Capacitors
- Switching & Isolating Industrial Control Equipment
- AC or DC Safety Switch

Their mounting flexibility offers numerous & matchless benefits for use in power distribution boards or for standalone mountings. They are compact enough occupying least panel space yet allowing ease of installation and rendering it safe for maintenance.

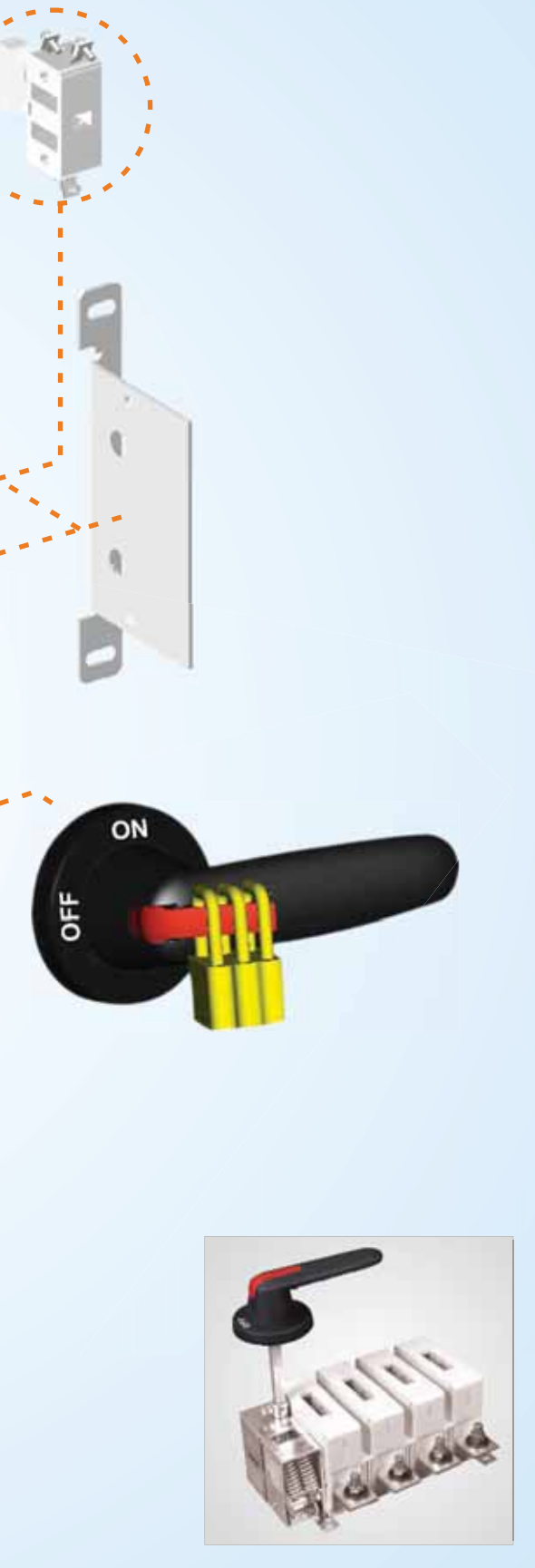
For machine tool or distribution systems which are scattered in buildings, switches upto 125A are also available in plastic enclosure, which are corrosion proof and add to the aesthetics of the installation.

Multiple accessories suiting application requirements enhance the flexibility of operation and safety level of installation. These switches also facilitate and match diverse application requirements.

Manufactured in ISO 9001 certified facilities, rugged design combining ease of operation and maintenance, they have stood the test of adverse environments in all types of climate in various countries, including India for more than in 15 years .

These switches are ideal for breaking stalled motor current, switching highly inductive loads, capacitor banks, DC loads etc.

They have been used successfully in almost every industry, becoming the exclusive choice of every discerning user, be it Power Plants, Building segments, Telecommunication field or industries like Steel, Chemical, Cement, Automobile, Machine Tools etc.



# Modular and user friendly

## Internationally Endorsed

Tested & Accepted  
World over

C&S Switch Disconnectors have been tested for their conformity to International as well as Indian Standards at various independent Laboratories like - ASTA for conformity to International Standards – IEC 60947 - 3 and CPRI, ERDA for conformity to Indian Standards IS 13947 - 3. These also conform to the safety regulations adopted in the European Union and carry the CE marking.

OEMs and panel assemblers can be re-assured that the design is being used and exported to many countries world over.

An ISO 9001 certified manufacturing facilities gives the assurance of quality & consistency of these switches

## Flexible Design

Modular yet reliable  
construction

C&S Switch Disconnector have a modular assembly for operating mechanism and pole. Contact system, placed in separate housing for individual phase poles, are joined together to form a switch with multi -pole formation upto 8 poles.

This arrangement offers flexibility of placing mechanism in between the poles. 63A-800A, switches with side operated mechanism are also offered.

Every pole has 100% rating and operates with same reliability. As each pole is independent of the other, its maintenance or replacement is easy & economical in the event of damage.

Switches can hence be ordered as per installation requirement 2 pole for DC; 3 pole for 3 phase, 3 wire system; 4 pole for 3 phase, 4 wire system or 6 pole for Star Delta motors.

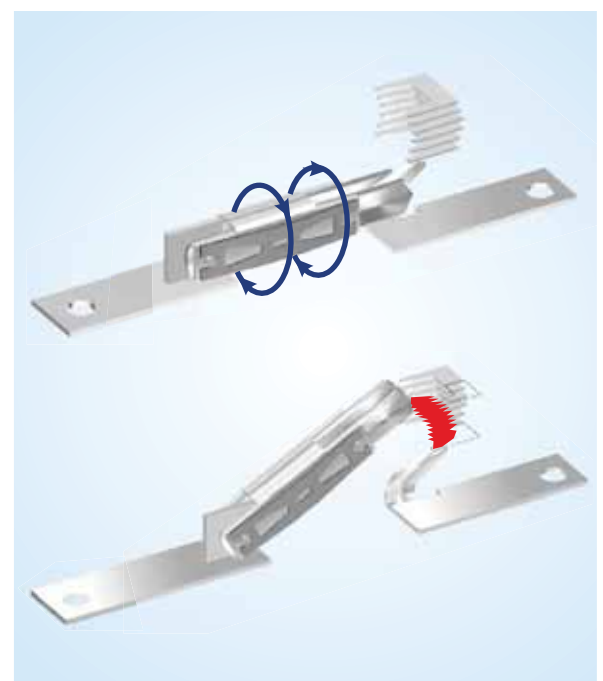
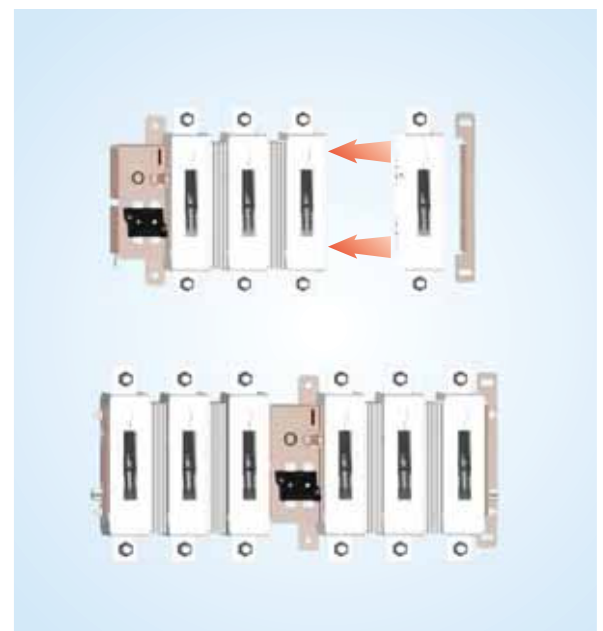
## Unique Contact Mechanism

Efficient Switching  
& Long life

Switch Disconnectors of rating 200A and above employ unique Knife Contact Mechanism, which uses magnetic attraction principle in iron circuit on the moving contacts. As current increases, automatically the contact force too increases, ensuring - good contacts at all times, high making and breaking capacity upto 690V and low temperature rise leading to long electrical life.

The special form of fixed contacts results in separate arcing and current carrying surfaces. It again ensures that current carrying surface remains unaffected by arcing, maintaining identical contact pressure and enhancing electrical life. Special shape of fixed contacts also help blow out the Arc into Arc - Chute where it is swiftly extinguished under controlled conditions, safely.

During each switching, the knife contacts cleans itself. This makes them perfectly suited for Indian conditions in general and for high pollution and corrosive conditions as in Chemical Plants, Cement Plants, Steel Plants, etc., including applications like Motors and capacitor switching.





## Common Characteristics

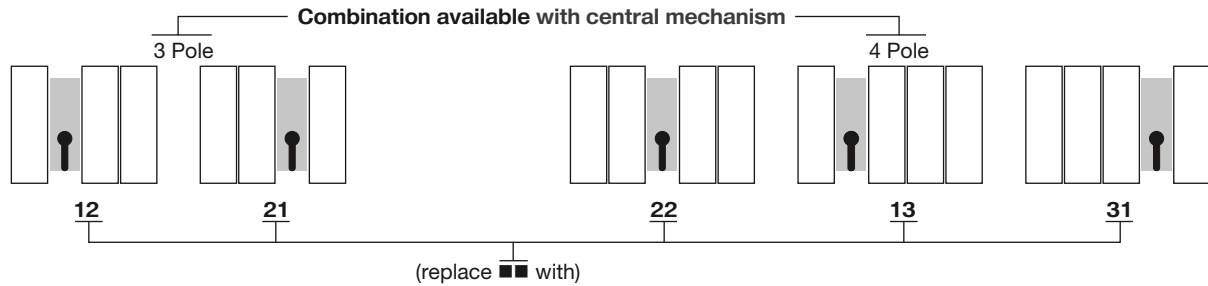
Conformity to Standards	-	IEC 60947-3 / IS 13947-3
Rated Operational Voltage (Ue)	V	415
Rated Operational Frequency	Hz	50 / 60
Suitability for Isolation	-	YES
Pollution Degree as per IEC / IS	-	3
Ambient / Cubicle Service Temp.	°C	55
IP Level after mounting	-	IP 54
Number of Poles (4th Pole always 100% rated in 4 Pole switches)	-	3/4P*

\*Other Pole configuration available on request

Replace '•' with 3 in case of 3 pole or with 4 in case of 4 pole

## Parameters

Type - CSSD with side mechanism		
Type - CSSD with central mechanism, 3 pole		
Type - CSSD with central mechanism, 4 pole		
Rated insulation voltage and rated operational voltage AC20 / DC20		V
Dielectric strength	50 Hz, 1min.	KV
Rated impulse withstand voltage		KV
Rated thermal current and rated operational current AC20 / DC20 / ambient 40°C	Open Execution	A
/ ambient 40°C	Enclosure	A
/ ambient 60°C	Enclosure	A
With minimum conductor cross section	Cu	mm <sup>2</sup>
Rated operational current, AC-21A	up to 415V	A
	440-690V	A
	1000V	A
Rated operational current, AC-22A	up to 415V	A
	440-500V	A
	690V	A
	1000V	A
Rated operational current, AC-23A	up to 415V	A
	440V	A
	500V	A
	690V	A
	1000V	A
Rated operational current / poles in series, DC-21A	up to 48V	A
	110V	A
	220V	A
	440V	A
	750V	A
Rated operational current / poles in series, DC-22A	up to 48V	A
	110V	A
	220V	A
	440V	A
	750V	A
Rated operational current / poles in series, DC-23A	up to 48V	A
	110V	A
	220V	A
	440V	A
	750V	A



25A	40A	63A		100A	125A	100A	125A	160A	200A
CSSD25D●	CSSD40D●	CSSD63K●	CSSD63D●	CSSD100D●	CSSD125D●	CSSD100DM●	CSSD125DM●	CSSD160DM●	CSSD200DM●
-	-	-	-	-	-	-	-	-	CSSD200DM■■
-	-	-	-	-	-	-	-	-	CSSD200DM■■
750	750	750	750	750	750	750	750	750	1000
6	6	6	6	6	6	6	6	6	10
8	8	8	8	8	8	8	8	12	12
32	40	63	63	115	135	115	135	160	250
25	40	63	63	100	125	100	125	160	200
16	25	40	40	63	100	63	100	125	175
6	10	16	16	35	50	-	-	70	95
25	40	63	80	100	125	100	125	160	200
25	40	63	63	100	125	100	125	160	200
-	-	-	-	-	-	-	-	-	200
25	40	63	63	100	125	100	125	160	200
-	-	-	-	-	-	-	125	160	200
-	-	-	-	-	-	100	125	160	200
-	-	-	-	-	-	-	-	-	200
25	40	63	63	100	125	100	125	160	200
20	25	40	40	50	63	60	70	100	200
20	25	32	32	50	63	60	70	100	200
16	25	32	32	40	50	40	50	63	200
-	-	-	-	-	-	-	-	63	125
16/2	16/2	16/2	16/2	16/2	16/2	100/2	125/2	160/2	200/2
16/3	16/3	16/3	16/3	16/3	16/3	100/3	125/3	160/3	200/2
16/3	16/3	16/3	16/3	16/3	16/3	100/3	125/3	160/3	200/2
16/4	16/4	16/4	16/4	-	-	-	-	-	200/3
-	-	-	-	-	-	-	-	-	200/4
16/2	16/2	16/2	16/2	16/2	16/2	100/2	125/2	160/2	200/2
16/3	16/3	16/3	16/3	16/3	16/3	100/3	125/3	160/3	200/2
16/3	16/3	16/3	16/3	16/3	16/3	100/3	125/3	160/3	200/2
16/4	16/4	16/4	16/4	-	-	-	-	-	200/3
-	-	-	-	-	-	-	-	-	200/4
16/2	16/2	16/2	16/2	16/2	16/2	100/2	125/2	160/2	200/2
16/3	16/3	16/3	16/3	16/3	16/3	100/3	125/3	160/3	200/2
16/3	16/3	16/3	16/3	16/3	16/3	100/3	125/3	160/3	200/2
16/4	16/4	16/4	16/4	-	-	-	-	-	200/3
16/4	16/4	16/4	16/4	-	-	-	-	-	200/4

# Technical Data

Parameters			
Rated operational power, AC-23A	The kW-ratings are accurate for 3 phase 1500 R.P.M. standard asynchronous motors	220-240V	kW
		400-415V	kW
		440V	kW
		500V	kW
		690V	kW
Rated breaking capacity, AC-23A		up to 415V	A
		440V	A
		500V	A
		690V	A
Rated breaking capacity/poles in series, DC-23A		up to 48V	A
		110V	A
		220V	A
		440V	A
		750V	A
Rated conditional (fused) short-circuit current r.m.s. and corresponding cut-off current of the fuse in single-phase test according IEC 269	Cut-off /Back up fuse Rating	50kA	kA
		415V	
		50kA	kA
		500V	
		50kA	kA
		690V	
		100kA	kA
		500V	
Rated short-time withstand current	R.M.S. -value I <sub>cw</sub>	690V,0.2s	kA
		690V,0.25s	kA
		690V,1s	kA
Rated short circuit making capacity	Peak value I <sub>cm</sub>	690V/500V	kA
Rated capacitor power	The capacitor ratings are limited by the fuse link	400V	kVAR
		415V	kVAR
Power loss / pole	At rated operational current		watt
Mechanical Endurance	Divide by two for operation cycles		Operations
Electrical Endurance	At 0.65 pf	415V	Operations
Weight without accessories	With handle and shaft	3-Pole	kg
		4-Pole	kg
Terminal suitable for cable lug size	Cu- wire suitable for terminal clamp		Sq mm
Terminal tightening torque	Counter torque required		Nm
Operating torque	3-pole switch-disconnector		Nm

## Catalogue Reference



### Mounting

EABW	Plastic Enclosure, Gray base & Gray cover (25A-63A)
EACL	Plastic Enclosure, Gray base & Yellow cover (25A-63A)
ELCL / ELBL	Aluminum Enclosure, Gray base & Gray cover (16A-125A) (Refer our Enclosed Switch Catalogue for more info.)
E	In Sheet Steel Enclosure
Blank	Without Enclosure



### Rating

40	40A
800	800A
2500	2500A

25A	40A	63A		100A	125A	100A	125A	160A	200A
4	5.5	11	11	22	22	22	22	22	55
9	11	22	22	37	45	37	45	45	110
9	11	22	22	37	45	37	45	45	110
9	11	22	22	37	45	37	45	45	132
9	11	15	15	37	45	37	45	45	170
200	320	504	504	800	1000	800	1000	1280	1600
160	200	320	320	400	504	480	560	1280	1600
160	200	256	256	400	504	480	560	1280	1600
128	200	256	256	320	400	320	400	1280	1600
100/2	128/2	180/2	180/2	400/2	500/2	400/2	500/2	640/1	800/2
100/2	128/2	180/2	180/2	400/2	500/2	400/2	500/2	640/2	800/2
100/4	128/4	180/4	180/4	252/4	252/4	252/4	252/4	252/4	800/2
40/4	40/4	40/4	40/4	-	-	-	-	-	800/3
64/8	64/8	-	-	-	-	-	-	-	800/4
6.5	6.5	13	13	16.5	16.5	16.5	16.5	18	36
40/32	40/32	100/80	100/80	125/125	125/125	125/125	125/125	160/160	400/400
6.5	6.5	13	13	16.5	16.5	16.5	16.5	18	36
40/32	40/32	100/80	100/80	125/125	125/125	125/125	125/125	160/160	400/400
4	4	11	11	10	10	10	10	10	48
25/16	25/16	80/63	80/63	63/63	63/63	63/63	63/63	63/63	400/400
-	-	17	17	-	-	-	-	-	48
-	-	100/80	100/80	-	-	-	-	-	400/400
1	1	2	2	5	5	5	5	8	17.5
1	1	2	2	5	5	5	5	8	-
0.5	0.5	1	1	2.5	2.5	2.5	2.5	5	8
0.7	0.7	1.4	1.4	3.6	3.6	3.6	3.6	7	35
10	15	25	25	40	50	40	50	60	90
10	15	25	25	40	50	40	50	60	90
0.6	1.6	2.8	2.8	4	6.3	4	6.3	9	3.5
20000	20000	20000	20000	20000	20000	20000	20000	20000	16 000
5000	5000	5000	5000	5000	5000	5000	5000	1000	1000
0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	1.8	3
0.25	0.25	0.4	0.5	0.5	0.5	0.5	0.5	2.25	3.7
0.75-10	1.5-35	1.5-35	1.5-35	10-70	10-70	10-70	10-70	10-95	8x25
0.8	2	2	5.5	6	8	6	8	8	30...44
1	1	1.2	1.2	2	2	2	2	2.5	8.2



### Switch Type

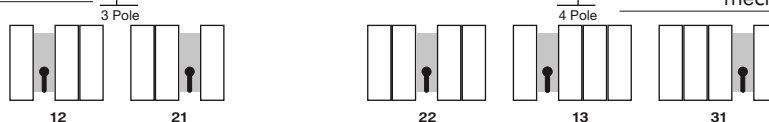
D	Old Series, 25A, 40A, 63A, 100A & 125A
DM	Compact Series, 100 ~ 400A
K	63A, 400A - 3150A, 3 pole
C	Toggle Type 25A - 125A



### No. of Poles

3	3 Pole
4	4 Pole

Combination available with central mechanism



### Mechanism Type

Blank	Front Operated
SO	Side Operated, 63 - 800A (not applicable for combinations with central mechanism)

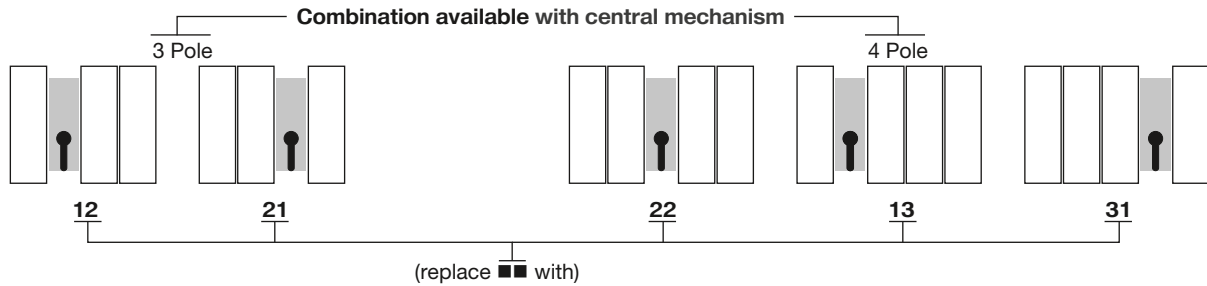
## Common Characteristics

Conformity to Standards	-	IEC 60947-3 / IS 13947-3
Rated Operational Voltage (Ue)	V	415
Rated Operational Frequency	Hz	50 / 60
Suitability for Isolation	-	YES
Pollution Degree as per IEC / IS	-	3
Ambient / Cubicle Service Temp.	°C	55
IP Level after mounting	-	IP 54
Number of Poles (4th Pole always 100% rated in 4 Pole switches) *Other Pole configuration available on request	-	3P / 4P*

Replace '●' with 3 in case of 3 pole or with 4 in case of 4 pole

Parameters			250A	315A
Type - CSSD with side mechanism			CSSD250DM●	CSSD315DM●
Type - CSSD with central mechanism, 3 pole			CSSD250DM■	CSSD315DM■
Type - CSSD with central mechanism, 4 pole			CSSD250DM■	CSSD315DM■
Rated insulation and rated operational voltage AC20 / DC20	50 Hz 1min.	V	1000	1000
Dielectric strength		KV	10	10
Rated impulse withstand voltage		KV	12	12
Rated thermal current and rated operational current AC20/DC20 / ambient 40°C	Open Execution	A	315	350
/ ambient 40°C	Enclosure	A	270	315
/ ambient 60°C	Enclosure	A	220	260
with minimum conductor cross section	Cu	mm <sup>2</sup>	120	185
Rated operational current, AC-21A	up to 415V	A	250	315
	440-690V	A	250	315
	1000V	A	250	315
Rated operational current, AC-22A	up to 415V	A	250	315
	440-500V	A	250	315
	690V	A	250	315
	1000V	A	250	315
Rated operational current, AC-23A	up to 415V	A	250	315
	440V	A	250	315
	500V	A	250	315
	690V	A	250	315
	1000V	A	125	125
Rated operational current / poles in series, DC-21A	up to 48V	A	250/2	315/2
	110V	A	250/2	315/2
	220V	A	250/2	315/2
	440V	A	250/3	315/3
	750V	A	250/4	315/4
Rated operational current / poles in series, DC-22A	up to 48V	A	250/2	315/2
	110V	A	250/2	315/2
	220V	A	250/2	315/2
	440V	A	250/3	315/3
	750V	A	250/4	315/4
Rated operational current / poles in series, DC-23A	up to 48V	A	250/2	315/2
	110V	A	250/2	315/2
	220V	A	250/2	315/2
	440V	A	250/3	315/3
	750V	A	250/4	315/4

2) IEC-947-3, utilization category B, infrequent operation



400A	400A	630A	800A	1000A	1250A	1600A	1800A	2500A	3150A
CSSD400DM●	CSSD400K●	CSSD630K●	CSSD800K●	CSSD1000K●	CSSD1250K●	CSSD1600K●	CSSD1800K●	CSSD2500K●	CSSD3150K●
CSSD400DM■	CSSD400K■	CSSD630K■	CSSD800K■	CSSD1000K■	CSSD1250K■	CSSD1600K■	CSSD1800K■	CSSD2500K■	CSSD3150K■
CSSD400DM■	CSSD400K■	CSSD630K■	CSSD800K■	CSSD1000K■	CSSD1250K■	CSSD1600K■	CSSD1800K■	CSSD2500K■	CSSD3150K■
1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
10	10	10	10	8	8	8	8	8	8
12	12	12	12	8	8	8	8	8	8
400	500	630	800	1000	1250	1600	1800	2500	3150
400	500	630	720	1000	1250	1600	1800	2300	2600
320	410	500	600	900	1000	1250	1600	1950	2300
2x150	2x150	2x185	2x240	2x(60x5)	2x(80x5)	2x(100x5)	-	4x(100x5)	3x(100x10)
400	400	630	800	1000	1250	1600	1800	2500 <sup>2)</sup>	3150 <sup>2)</sup>
400	400	630	800	1000	1250	1600	1800	2500 <sup>2)</sup>	3150 <sup>2)</sup>
400	400	630	630	1000	1000	1000	1000	1000 <sup>2)</sup>	1000 <sup>2)</sup>
400	400	630	800	1000	1250	1600	1600	1600 <sup>2)</sup>	1600 <sup>2)</sup>
400	400	630	800	1000	1250	1600	1600	1600 <sup>2)</sup>	1600 <sup>2)</sup>
400	400	630	800	-	-	-	-	-	-
400	400	630	630	-	-	-	-	-	-
400	400	630	720	-	-	-	-	-	-
400	400	590	670	-	-	-	-	-	-
400	400	580	600	-	-	-	-	-	-
350	350	350	350	-	-	-	-	-	-
125 <sup>2)</sup>	125 <sup>2)</sup>	150 <sup>2)</sup>	150 <sup>2)</sup>	-	-	-	-	-	-
400/2	400/2	630/1	800/1	1000/1	1250/1	1600/1	1800/1	-	-
400/2	400/2	630/2	800/2	1000/2	1250/2	1600/2	1800/2	-	-
400/2	400/2	630/2	800/2	1000/3	1250/3	1600/3	1800/3	-	-
400/3	400/3	630/3	800/3	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
400/1	400/1	630/1	800/1	-	-	-	-	-	-
400/2	400/2	630/2	800/2	-	-	-	-	-	-
400/2	400/2	630/2	800/2	-	-	-	-	-	-
400/3	400/3	630/3	800/3	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
400/1	400/1	630/1	800/1	-	-	-	-	-	-
400/2	400/2	630/2	800/2	-	-	-	-	-	-
400/2	400/2	630/2	630/2	-	-	-	-	-	-
400/3	400/3	400/3	400/3	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-

# Technical Data

Parameters				250A	315A
Rated operational power, AC-23A	The kW-ratings are accurate for 3 phase 1500 R.P.M. standard asynchronous motors.	220-240V	kW	75	90
		400-415V	kW	132	160
		440V	kW	132	160
		500V	kW	160	200
		690V	kW	200	250
Rated breaking capacity, AC-23A		up to 415V	A	2000	2520
		440V	A	2000	2520
		500V	A	2000	2520
		690V	A	2000	2520
Rated breaking capacity/poles in series, DC-23A		up to 48V	A	1000/2	1260/2
		110V	A	1000/2	1260/2
		220V	A	1000/2	1260/2
		440V	A	1000/3	1260/3
		750V	A	1000/4	1260/4
Rated conditional(fused) short-circuit current r.m.s. and corresponding cut-off current of the fuse in single-phase test according IEC 269	Cut-off /Back up fuse Rating	50kA	kA	36	36
		415V		400/400	400/400
		50kA	kA	36	36
		500V		400/400	400/400
		50kA	kA	48	48
		690V		400/400	400/400
		100kA	kA	48	48
		500V		400/400	400/400
Rated short-time withstand current	R.M.S. -value I <sub>cw</sub>	690V,0.2s	kA	17.5	17.5
		690V,0.25s	kA	-	-
		690V,1s	kA	8	8
Rated short circuit making capacity	Peak value I <sub>cm</sub>	690V/500V	kA	35	35
Rated capacitor power	The capacitor ratings are limited by the fuse link	400V	kVAR	110	140
		415V	kVAR	110	140
Power loss / pole	at rated operational current		w	5.5	8.5
Mechanical Endurance	Divide by two for operation cycles		Operations	16 000	16 000
Electrical Endurance	At 0.65 pf	415V	Operations	1000	1000
Weight without accessories	With handle and shaft	3-Pole	kg	3	3
		4-Pole	kg	3.7	3.7
Terminal suitable for cable lug size	Cu- wire suitable for terminal clamp		Sq mm	10x30	10x30
Terminal tightening torque	Counter torque required		Nm	30...44	30...44
Operating torque	3-pole switch-disconnector		Nm	8.2	8.2

Ratings	25 - 40 Type D	63 Type K/D	100-125 Type D
Handle	CSSDZX 104	CSSDZX 104	CSSDZX 104
Handle Shaft	CSP5X70	CSP5X70	CSP5X70
Handle Mounting Kit	-	-	-
Door Mounting Kit, 3P / 4P	DMK1/1A	DMK1/3	DMK2/3
Changover Mechanism	CSSDZW 6	CSSDZW 6/1	CSSDZW 6/1
Auxiliary Contact - 1NO + 1NC, 3P-4P	CSSDZX 49/87	CSSDZX 79/55	CSSDZX 52/55
Auxiliary Contact - 2NO + 2NC, 3P-4P	CSSDZX 50/88	CSSDZX 80/56	CSSDZX 53/56
Terminal Shrouds	-	-	SF701
Extended Terminals, 3P/4P	-	-	ET325/ET326
Key Interlock	CSSDZW-16	CSSDZW-16	CSSDZW-16
Castle Lock	CSSDZW-15	CSSDZW-15	CSSDZW-15
Neutral Link	-	-	-

3) PF 0.95    4) PF 0.65    5) Max. Distance between busbar support and switch terminal shall be 70 mm    6) Metallic Handle (CSDA 8) for 2500 -3150A available on request.

400A	400A	630A	800A	1000A	1250A	1600A	1800A	2500A	3150A
132	132	180	200	250	250	250	250	250	250
200	200	315	355	400	400	400	400	400	400
315	315	355	355	400	400	400	400	400	400
315	355	400	450	450	450	450	450	450	
315	315	355	355	-	-	-	-	-	-
3200	4000	5040	5760	-	-	-	-	6400	6400
3200	4000	4720	5360	-	-	-	-	6400	6400
3200	4000	4640	4800	-	-	-	-	6400	6400
2800	2800	2800	2800	2500 <sup>3)</sup>	2500 <sup>3)</sup>	2500 <sup>3)</sup>	-	4800 <sup>4)</sup>	4800 <sup>4)</sup>
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
40	42	63	63	105	105	105	105	140	140
400/400	500/500	630/800	630/800	-	-	-	-	-	-
40	42	63	63	105	105	105	105	140	140
400/400	500/500	500/500	630/800	-	-	-	-	-	-
40	54	70	70	105	105	105	105	140	140
400/400	500/500	630/800	630/800	-	-	-	-	-	-
48	54	70	70	105	105	105	105	105	105
400/400	500/500	630/800	630/800	-	-	-	-	-	-
-	-	38	38	-	-	-	-	-	-
-	31	-	-	56 <sup>5)</sup>	56 <sup>5)</sup>	56 <sup>5)</sup>	56 <sup>5)</sup>	-	-
12	17	17	17	50 <sup>5)</sup>	50 <sup>5)</sup>	50 <sup>5)</sup>	50 <sup>5)</sup>	80 <sup>5)</sup>	80 <sup>5)</sup>
35	65	80	80	105	105	105	105	105/140	105/140
180	250	300	330	-	-	-	-	-	-
180	250	300	330	-	-	-	-	-	-
12	13	22	40	27	40	67	-	90	140
10 000	10 000	10 000	10 000	6 000	6 000	6000	6000	1200	1200
1000	1000	500	500	500	500	500	500	100	100
3.3	5.2	6.2	6.2	16.3	16.3	17.5	17.5	37	37
4	6.4	7.6	7.6	20.5	20.5	22.5	22.5	47	47
10x40	10x40	12x40	12x40	12x60	12x60	12x60	12x60	12x60	12x60
30...44	30...44	50...75	50...75	50...75	50...75	50...75	50...75	50...75	50...75
9	17	21	21	21	21	21	21	50	50

100 - 160 Type DM	200 - 400 Type DM	400 - 800 Type D/K	1000 - 1800 Type K	2500 - 3150 Type K
CSWH 80 S6	CSWH 80 S8	CSWH 145 S12	CSWH 220 S12	CSWH 220 S12/CSDA 8 <sup>6)</sup>
CSP6X165	CSP8X240	CSP12X255	CSP12X255	CSP12X325
-	HMK-2	HMK-1-1	HMK-3-1	-
-	-	-	-	-
CSSDZW 6/1	CSSDZW 6/1	CSSDZW 11	CSSDZW 12	CSSDZW 12
CSSDZX 1	CSSDZX 37	CSSDZX 33	CSSDZX 35	CSSDZX 35
CSSDZX 16	CSSDZX 38	CSSDZX 34	CSSDZX 36	CSSDZX 36
SF702	SF703	SF703(200-400)/SF704(630-800)	-	-
ET327/ET328	ET329/ET330	ET329/ET330(upto 400A)	-	-
CSSDZW-16	CSSDZW-5	CSSDZW-5	CSSDZW-5	CSSDZW-5
CSSDZW-15	CSSDZW-4	CSSDZW-4	CSSDZW-4	CSSDZW-4
-	-	CSSDFZX85	CSSDZX159	CSSDZX159(2Nos.)

## Mounting Instruction for Accessories

### Auxiliary Contact

#### For CSSD25-125A

- Unscrew the two grub screws and remove the bush from the switch.
- Fit the auxiliary bracket onto the switch and place the locking bush on it.
- Fit the cam and screw it with the locking bush.
- Fit auxiliary contact at the corner and screw it diagonally.
- Fit the two NO/NC auxiliary at the other corner and screw it properly, if required.

#### For CSSD100- 160A Compact (ZX1, ZX16)

- Place the auxiliary and name plate at rear end (opposite to mechanism) by ensuring name plate between auxiliary and switch and screw them properly.
- Fit the cam on the main shaft and screw it on the flat surface of the shaft.

#### For CSSD200-400A Compact (ZX 37, ZX38)

- Fit the auxiliary contact on the top of mechanism and screw it diagonally at the provided holes properly.
- Fit the two NO/NC auxiliary at the top of the auxiliary and screw it diagonally, if required.

#### For CSSD 400-800A (ZX33, ZX34)

- Fit the auxiliary contact on the top of mechanism and screw it diagonally on the provided thread.
- Fit the two NO/NC auxiliary at the top of the auxiliary and screw it diagonally, if required.

#### For CSSD1000-3150A (ZX 35, ZX36)

- Fit the cam on the tubular shaft with the square bush .
- Fit the auxiliary contact along with the bracket (Z type) by screwing diagonally, if provided separately.
- Place and screw the auxiliary contact onto the mechanism by matching of bracket hole and tubular shaft.

### Auxiliary Contacts ratings

- Thermal Rating 10A
- AC 15 @ 415V - 4A
- DC 13 @ 220V - 1A



Auxiliary Contacts - 200A & above

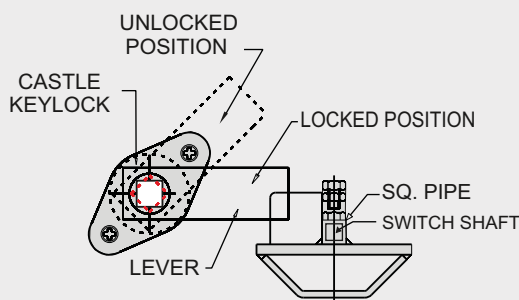


Auxiliary Contacts - 100A to 160A



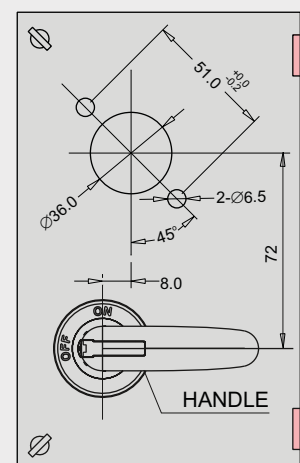
Door Mounting Kit  
(25A - 125A Type D)

## Castle Lock



Panel Drilling Plan

Catalogue No.	Type of Switch
CSSDZW15	CSSD 25~160A
CSSDZW4	CSSD 200~3150A



### Castle Lock

- Make a hole in panel door for fitment of castle lock as per given drawing.
- Fit the castle lock onto the panel door from front.
- Fit the lever onto the lock shaft in unlock position from back and tighten the lever by providing U clamp and screw.
- Fit the Square pipe assembly with the switch main shaft and adjust the position so that the lever can lock it from behind of this assembly and tighten the screw.



Castle Lock

### Key Interlock

- Make a hole in the panel door for castle lock fitment as per given drawing.
- Fit the key lock onto the panel door from front.
- Fit the lever onto the lock shaft and circlip it in unlock position.
- Fit the square pipe assembly with the switch main shaft and adjust the position so that the lever can lock it in groove provided and tighten the screw.



Key Lock

### Door Mounting Kit (25-125A)

- Fit the switch at the rear using din rail mounting channel.
- Mount the channel using hole provided for screwing on the door.

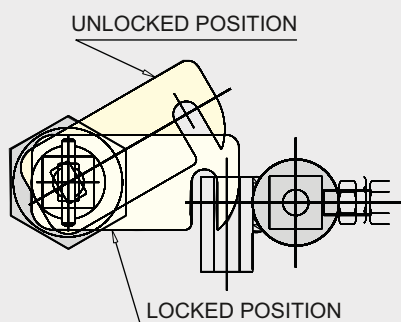


Handle Mounting Kit  
(200A - 1800A)

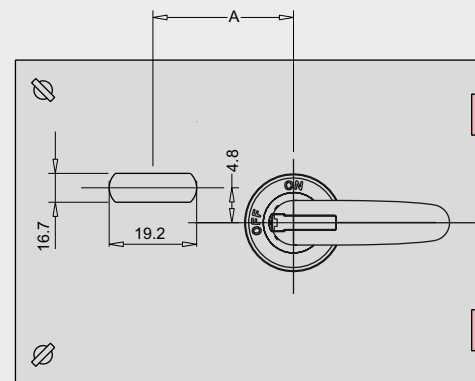
### Handle mounting Kit (200A-1800A)

- Unscrew the bolt (provided for earthing on mechanism) and Philips head screw (given below the earth bolt) as shown in model.
- Fit the handle mounting bracket and tighten the bolt and screw.
- Fit the handle assembly on given profile of the mounting kit.

### Key Interlock



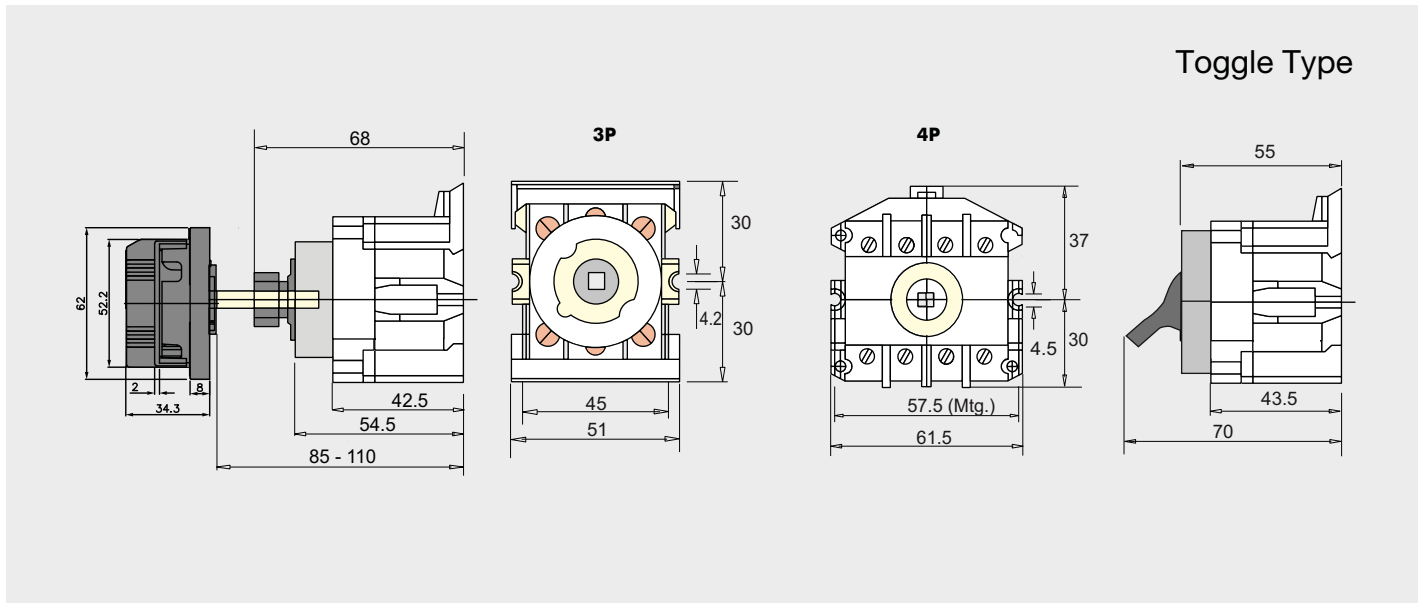
Panel Punching Plan



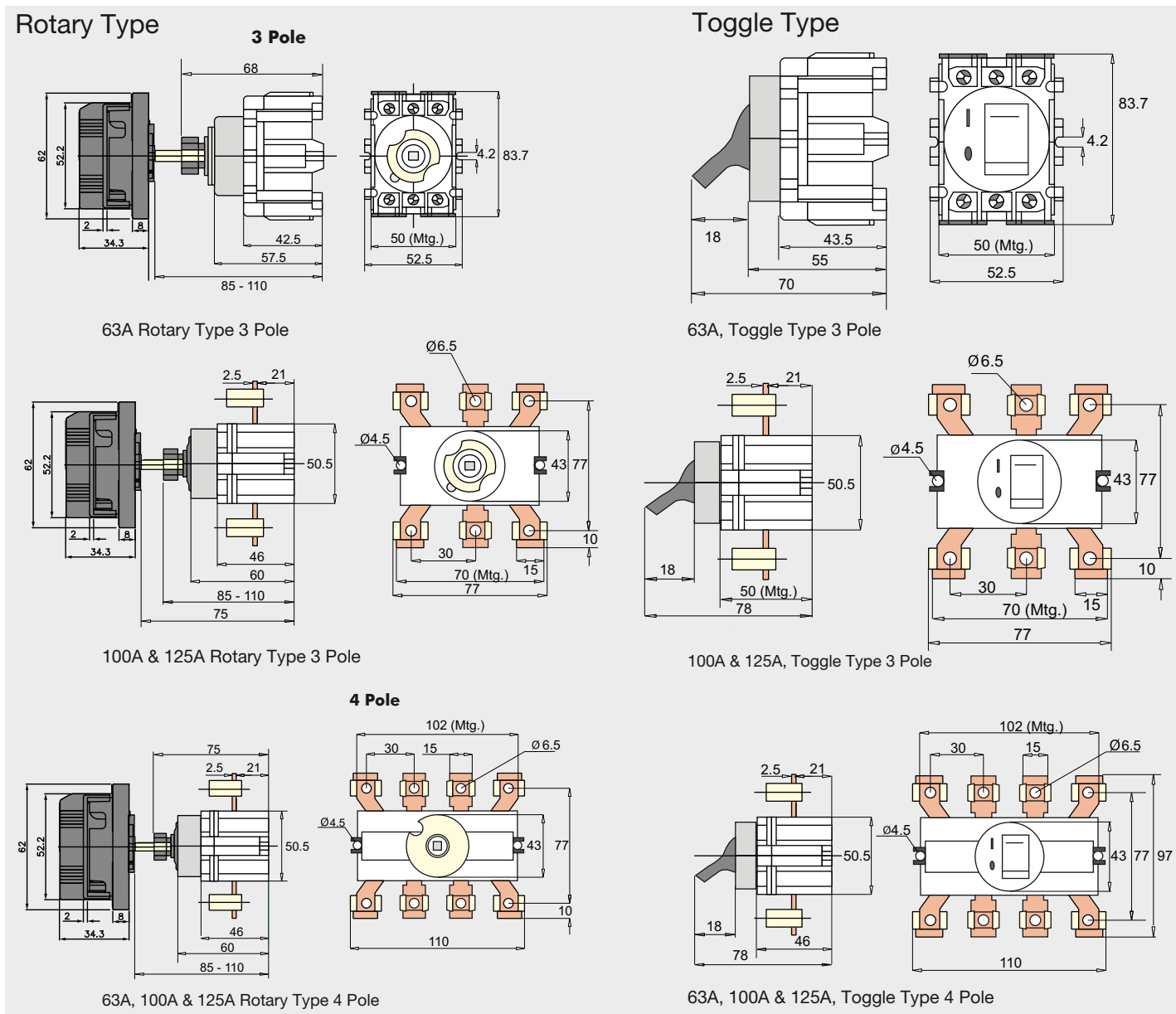
Catalogue No.	Type of Switch	'A'
CSSDZW16	CSSD 25~160A	47.7 ±0.3
CSSDZW5	CSSD 200~3150A	53.0 ±0.3

# Dimensional Details

## 25A & 40A



## 63A, 100A & 125A (Type D/K)



ILLUSTRATIONS NOT TO SCALE

## Enclosures CSSD25A - 125A

For 25A-40A 3P/4P & 63A 3P

**Plastic Enclosures**

For 25A-40A 3P/4P & 63A 3P

**Metallic Enclosures**

For 125A 3P/4P & 63A 4P

**Metallic Enclosures**

For 16A - 125A 3P/4P

**Aluminum Enclosures**

	CSSD16D3/D4 CSSD40D3/D4	CSSD63K3/K4 125D3
A	110	147
B	92	123
C	112	179
D	130	203
E	82	94
F	42	42

Dimensions are in mm.

## 100A - 160A (DM)

**Dimensions Front Operated**

Rating	A		L		S
	3P	4P	3P	4P	
100A, 125A, 160A	190	230	160	200	2

**Dimensions Side Operated**

Rating	A		L		S
	3P	4P	3P	4P	
100A, 125A, 160A	205	245	158	198	2

## 200A - 400A (DM)

**Dimensions Front Operated**

Rating	A		L		S	X	Y
	3P	4P	3P	4P			
200A	195	240	155.5	200.5	4	8.5	20
250-315A	195	240	155.5	200.5	4	11	25
400A	230	292	190.5	252.5	4	11	25

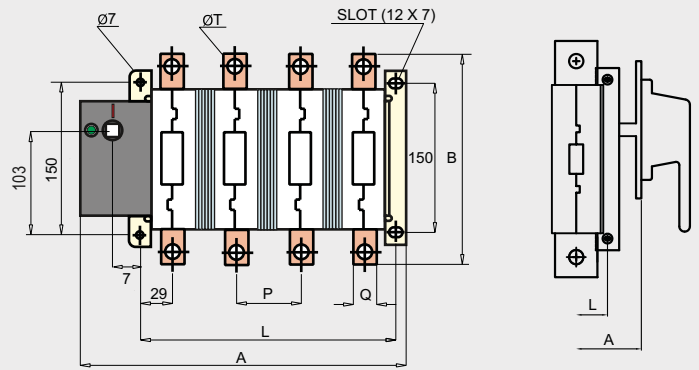
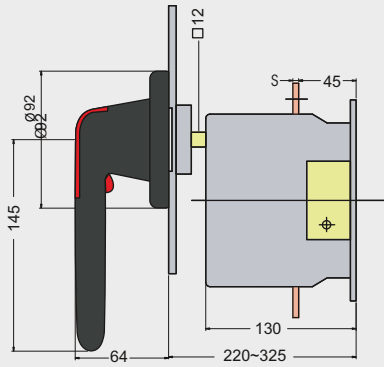
**Dimensions Side Operated**

Rating	A		L		S
	3P	4P	3P	4P	
200-315A	217	262	155.5	200.5	4

ILLUSTRATIONS NOT TO SCALE

# Dimensional Details

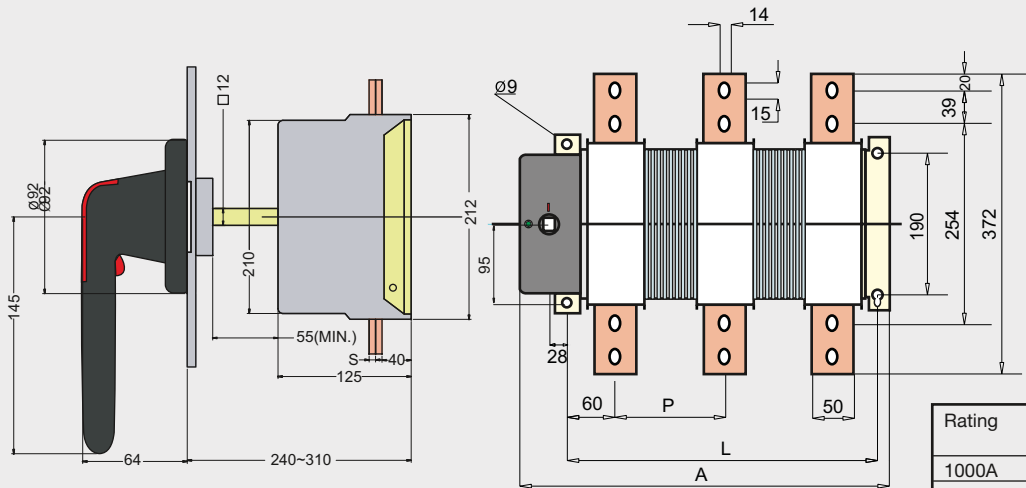
## 400A - 800A



Rating	A		L		P	Q	S	T	
	3P	4P	3P	4P					
400A	211	257	205	151	197	46	25	4	11
630A	244	306	223	183	245	62	40	4	13.5
800A	260	330	223	199	269	70	40	5	13.5

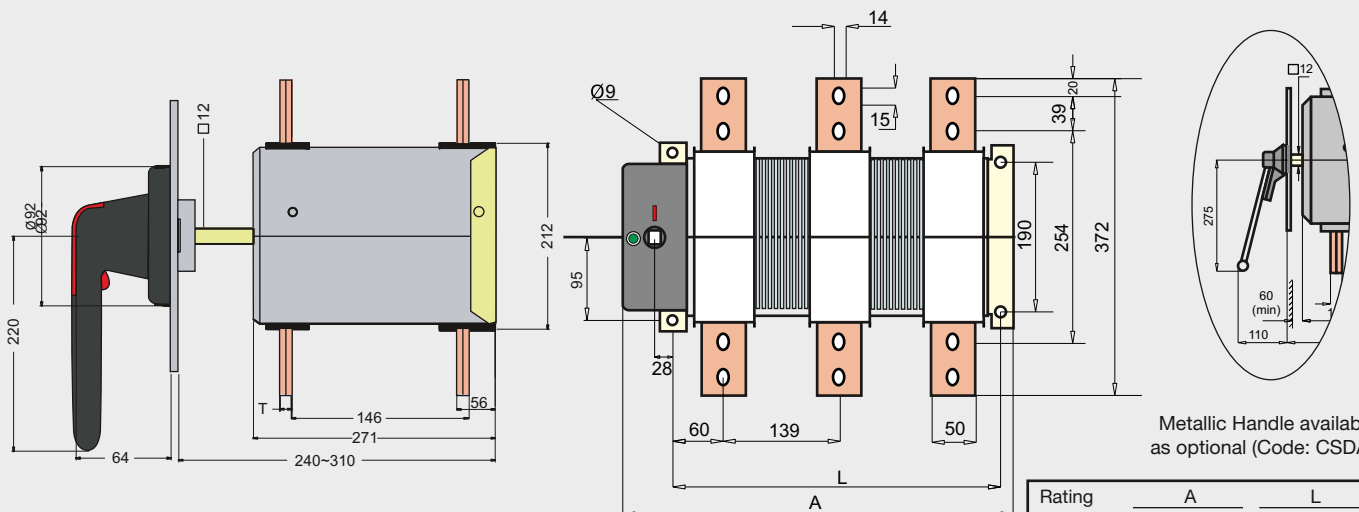
Rating	A		L	
	3P	4P	3P	4P
400A	265	311	151	197
630A	298	360	183	245
800A	314	384	199	269

## 1000A - 1800A



Rating	A		L		P	S
	3P	4P	3P	4P		
1000A	343	423	278	358	80	12
1250A	343	423	278	358	80	12
1600A	461	600	396	535	139	16
1800A	461	600	396	535	139	16

## 2500A - 3150A



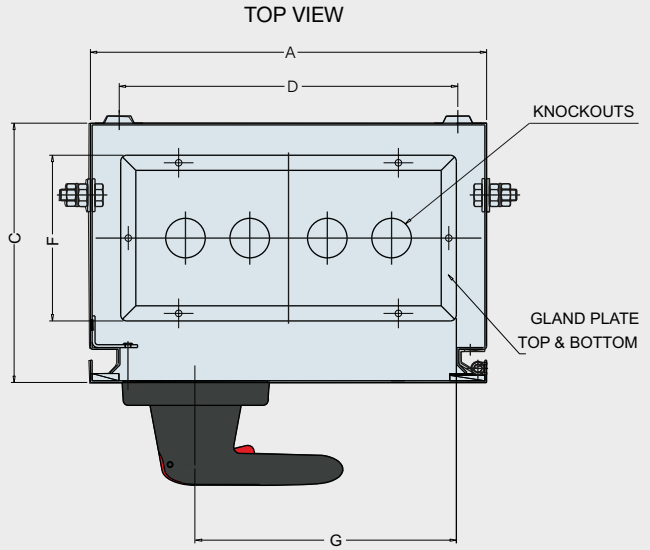
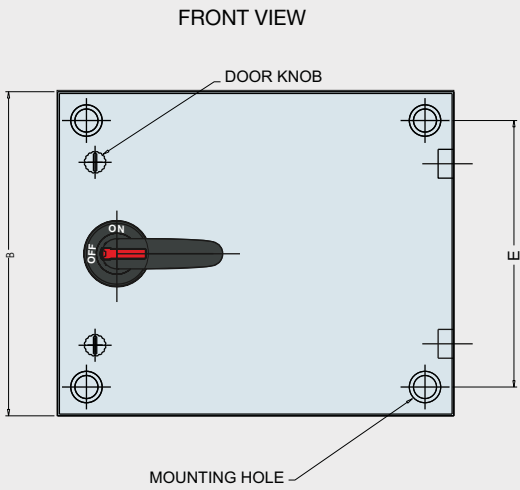
Metallic Handle available as optional (Code: CSDA8)

Rating	A		L		T
	3P	4P	3P	4P	
2500A	468	607	403	542	12
3150A	468	607	403	542	16

LINKS ARE NOT IN STANDARD SCOPE OF SUPPLY.

ILLUSTRATIONS NOT TO SCALE.

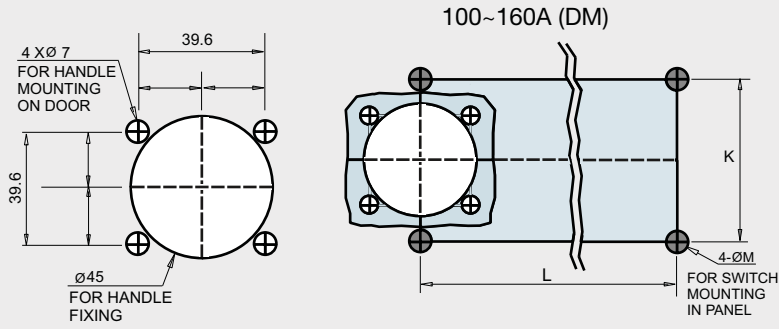
# SS Enclosure 63A - 315A (DM) & 200A - 3150A



Rating	A	B	C	D	E	F	G
125 - 160A (DM)	275	275	180	235	235	115	233
200 - 315A (DM)							
400A (D3P/4P)	325	400	220	285	360	155	283
630 - 800A (3P)							
630 - 800A (4P)	400	400	220	360	360	155	358
1000 - 1800A (3P)	600	500	275	560	460	210	558
1000 - 1250A (4P) & 2500 - 3150A (3P)	600	600	350	560	560	285	483
1600 - 3150A (4P)	700	600	350	660	560	285	658

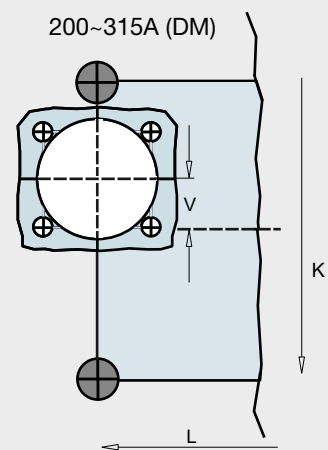
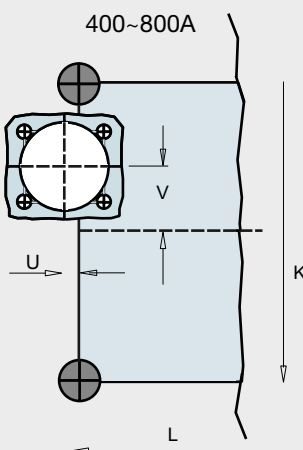
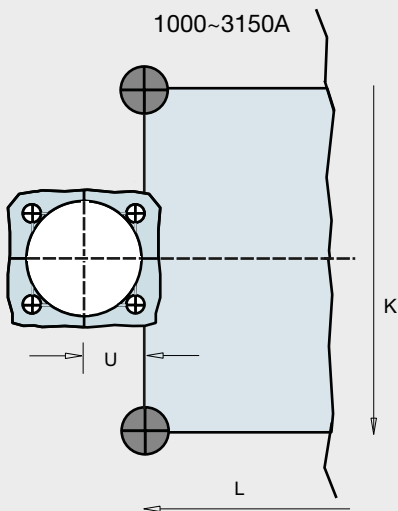
SS Enclosure Details	
Gasket Type	EPDM Sponge Rubber
Cover Sheet Thickness	18 SWG
Gland Sheet Thickness	16 SWG
Enclosure Paint Shade	Basalt Gray RAL 7012
Door Paint Shade	Light Gray RAL 7035
IP Level	IP54
Door Hinge Degree	120°
Earthing Studs	2

## Mounting Details, 100A - 315A (DM) & 200A - 3150A



### For Mounting Details

Rating	K	L		M	U	V
		TPN	4P			
100A - 160A	60	200	160	7	-	-
400A	150	151	197	7	7	28
630A	150	183	245	7	7	28
800A	150	199	269	7	7	28
1000A - 1250A	190	278	358	9	24.5	-
1600A - 1800A	190	396	535	9	24.5	-
2500A - 3150A	190	403	542	9	24.5	-



## Switch Disconnectors

### State of the art Manufacturing Facilities



Haridwar, Noida Ph-I  
& Noida Ph-II Plant



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