

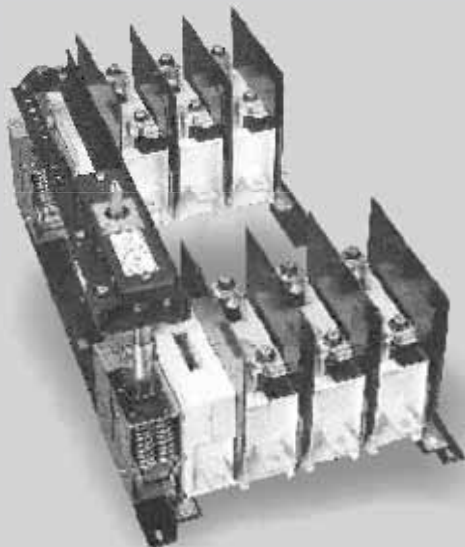
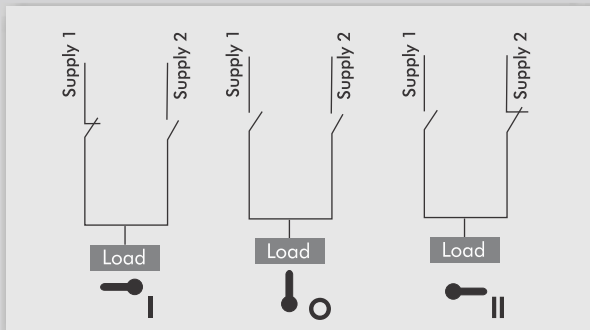
We touch your **electricity** everyday!



CE RoHS  
Compliant



**Changeover &  
Bypass Switches**



## On Load Changeover Switches (with & without Fuses)

### Salient Features

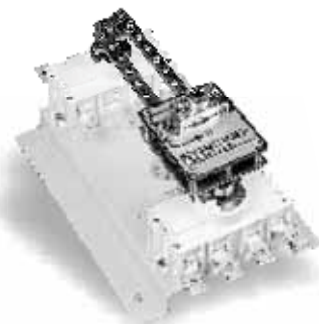
- Modular design in 3 & 4 pole (63A ~3150A), suitable for utilization category AC-23A
- Easy maintenance as each pole can be replaced easily due to modular construction, saving cost of entire switch in case of single pole being burnt or damaged.
- Available in open execution & in sheet steel enclosure. Complies with the latest requirements of IS/IEC 60947-1 & 3 standards.
- Unique self cleaning contact construction with special knife type (200A~1800A), double break switching contacts (63A~160A & 1000~1800A) & single break (200A~800A). Positive opening operation, with quick make - break and effective arc splitting plates guarantee reliability and long electrical life of the Switch.
- Excellent tracking resistance of isolation material in switch frame prevents flashover between phases even in the most trying & difficult locations.
- Adjustable telescopic shaft
- Compact construction
- Window for visual contact inspection
- Suitable for capacitor switching and as a Main switch
- Handle with in-built padlockable facility in-off position
- Provision for defeating door interlock
- Individual phase barrier can be incorporated without tools, between two terminals. Fully protected frame for safe operation in case of (200A~800A)

### Function

- These products are manually operated changeover switches
- They are used to switching, transfer of sources on loads and their safety disconnections

### Accessories

- Auxillary contact (early break type) 1NO + 1NC or 2NO + 2NC is available
- Key & Castle lock facility



## Compact On-Load By Pass Switch

### Salient Features

- Range 63A ~ 1800A, 4 Pole.
- Complies with the latest requirement of IS/IEC 60947-1 & 3 Standard
- AC23A utilization ratings available.
- By-pass Switch is designed to customers specific need in IT industries and sites where UPS and Servo stabilizer provides main source of supply
- All other features are same as of On Load Changeover Switches

### Operation

C&S Compact On-Load By-pass switch is operated manually with single handle comfortably. It provides three stable positions:

Position	Operation
O	Loads are open circuited
I	Loads are connected to the stabilized supply
II	Loads are connected to the normal supply

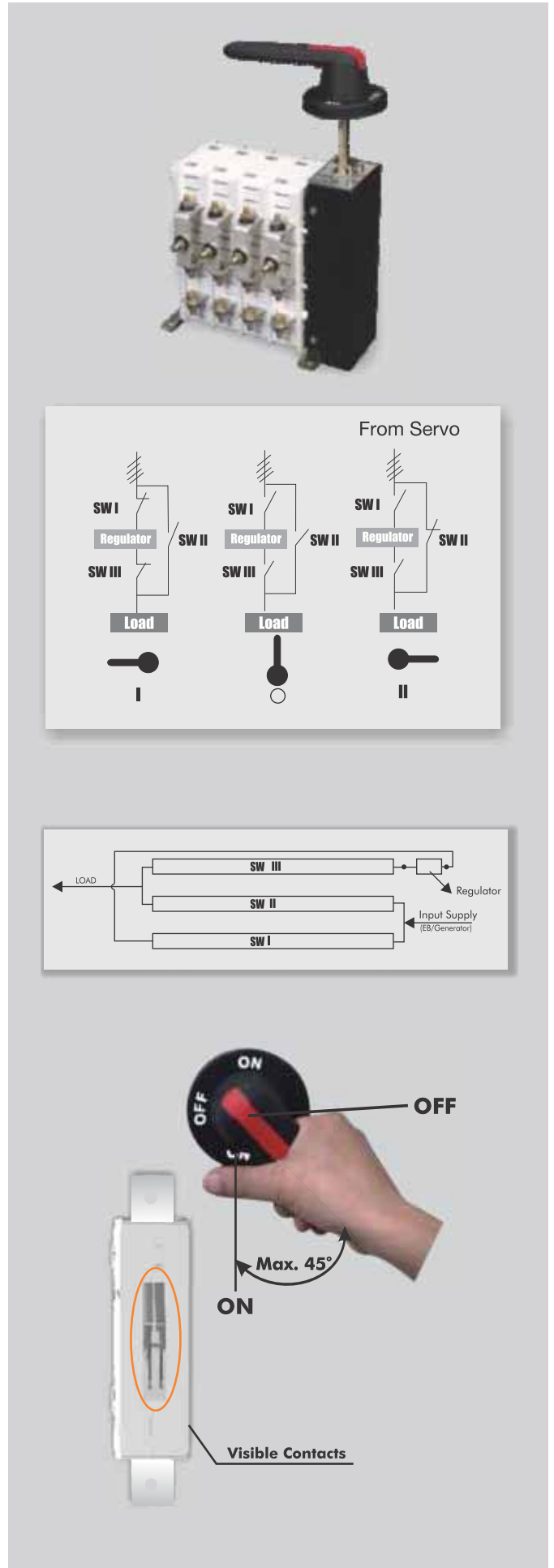
### Auxiliary Contacts

Auxiliary contact (early break type) 1NO + 1NC or 2NO + 2NC

### Single Line Diagram

When By-pass switch is selected at position 'O' all the contacts of isolator are open circuited and provide total isolation.

In position 'I' both isolator I & III are closed and stabilized supply is connected to the load. At position II only isolator II is closed & isolators I & II are open thus bypassing UPS & connecting normal supply directly to load



### Switch Construction

### Safety Built-in

C&S pioneered the concept of positive isolation in case of welding of contacts. In the event of extremely high current leading to welding of contacts, the handle will not turn beyond 45° from the ON position, clearly indicates that the supply is ON and contacts get welded.

Convenience of easy contacts visibility, permits contact inspection, without removing the switch from installation, thus saving down time.

Self extinguishing fibre glass re-inforced insulating body of poles has very high tracking index. Large gap between fixed and moving contacts in OFF position, make them suitable for isolation function.

Door interlocking prevents opening in the ON position, guarding the operator against any accidental mishap. As a standard upto 3 padlocks are provided in the OFF position to prevent closing the circuit during maintenance work. They can also be provided in the ON position. Using a suitable gasket alongwith handle enhances ingress protection level to IP 54.

# Technical Parameters

Common Characteristics		
Conformity to Standards	-	IS/IEC 60947-3
No. of Poles	-	3P / 4P
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 Temperature	°C	40
IP Level after mounting	-	IP 54

## Technical Parameters Compact On Load Changeover Switch / Compact On-Load By Pass Switch

Charateristics				63
Rated insulation and operational voltage AC-20 & DC-20	Pollution degree 3	50 / 60 Hz	V	1000
Dielectric strength			kV	3.5
Rated impulse withstand voltage			kV	8
Rated thermal current in ambient 40°C	In open air	-	A	63
	In Enclosure	-	A	63
Min. cable cross section	-	Cu	mm <sup>2</sup>	16
Rated operational current AC -21 A		upto 415V	A	63
		440-690V	A	63
		1000V	A	-
Rated operational current AC -22 A		upto 415V	A	63
		440-500V	A	63
		690V	A	63
		1000V	A	-
Rated operational current AC -23 A		upto 415V	A	63
		440V	A	63
		500V	A	63
		690V	A	50
		1000V	A	-
Rated operational current/poles in series DC - 21 A		48V	A	63/2
		110	A	63/3
		220	A	63/3
		440	A	-
		750	A	-
Rated operational current/poles in series DC - 22 A		48V	A	63/2
		110V	A	63/3
		220V	A	63/3
		440V	A	-
		750V	A	-
Rated operational current/poles in series DC - 23 A		48V	A	63/2
		110V	A	63/3
		220V	A	63/3
		440V	A	-
		750V	A	-
Rated operational power AC- 23	The KW - ratings are accurate for three-phase 1500 R.P.M. standard asynchronous motors	220-240V	kW	15
		400-415	kW	25
		440V	kW	25
		500 V	kW	25
		690 V	kW	-
Rated breaking capacity in category AC -23		upto 415V	A	504
		440V	A	504
		500V	A	504
		690V	A	400
Rated breaking capacity/poles in series in category DC -23		upto 48 V	A	250/2
		110V	A	250/3
		220V	A	250/3
		440V	A	-
		750V	A	-
Rated conditional Short Circuit current r.m.s		690V/500V	kA	-
Rated conditional short circuit current r.m.s and corresponding cut off current of the fuse in single phase test according to IEC 269	Cut Off/Back up fuse Rating	50KA/415V	kA	8/63
		50KA/500V	kA	8/63
		50KA/690V	kA	8/63
		80KA/500V	kA	10/63
Rated short time withstand current	r.m.s. value I <sub>cw</sub>	690V 0.2 sec	kA	-
		690V 1 sec	kA	5
Rated short circuit making capacity	Peak value I <sub>cm</sub>	690/500 V	kA	10
Rated capacitor power	The capacitor rating are limited by the fuse link	400~415 V	kVAr	50
Power loss/ pole	at rated operational current		W	4
Mechanical endurance	Divided by two for operational cycle		Oprs.	20000
Electrical Endurance	At 0.65pf		Oprs.	5000
Weight without accessories	with handle and shaft	3 pole	kg	0.6
		4 pole	kg	1
Terminal bolt size	Metric thread diameter x length		mm	M8x25
Terminal tightening torque	counter torque required		Nm	8
Operating Torque	3-pole switch disconnecter		Nm	2.5

1. Ambient Temperature 60° C derating 20%. Mounting on "ceiling" derating 10%. Mounting on wall, horizontal fuses : derating 8%

2. Utilization category B



		DM type						
80	100	125	160	200	250	315	400	
1000	1000	1000	1000	1000	1000	1000	1000	
3.5	3.5	6	6	10	10	10	10	
8	8	8	8	12	12	12	12	
80	100	125	160	200	250	315	400	
80	100	125	160	200	250	315	400	
25	35	50	70	95	120	185	240	
80	100	125	160	200	250	315	400	
80	100	125	160	200	250	315	400	
-	-	-	-	200	250	315	400	
80	100	125	160	200	250	315	400	
80	100	125	160	200	250	315	400	
80	100	125	160	200	250	315	400	
-	-	-	-	200	250	250	250	
80	100	125	160	200	250	315	400	
70	70	70	100	200	250	315	400	
70	70	70	100	200	250	315	400	
50	50	50	63	200	250	315	315	
-	-	-	-	125	125	125	125	
80/2	100/2	125/2	160/2	200/2	250/2	315/2	400/2	
80/3	100/3	125/3	160/3	200/2	250/2	315/2	400/2	
80/3	100/3	125/3	160/3	200/2	250/2	315/2	400/2	
-	-	-	-	200/3	250/3	315/3	400/3	
-	-	-	-	-	-	-	-	
80/2	100/2	125/2	160/2	200/2	250/2	315/2	400/2	
80/3	100/3	125/3	160/3	200/2	250/2	315/2	400/2	
80/3	100/3	125/3	160/3	200/2	250/2	315/2	400/2	
-	-	-	-	200/3	250/3	315/3	-	
-	-	-	-	-	-	-	-	
80/2	100/2	125/2	160/2	200/2	250/2	315/2	400/2	
80/3	100/3	125/3	160/3	200/2	250/2	315/2	400/2	
80/3	100/3	125/3	160/3	200/2	250/2	315/2	400/2	
-	-	-	-	200/3	250/3	315/3	400/3	
-	-	-	-	200/4	250/4	315/4	-	
15	18	22	45	55	75	90	132	
25	25	37	75	110	132	160	200	
25	25	37	75	110	132	160	315	
25	25	37	75	132	160	200	315	
		45	75	170	200	250	315	
640	800	1000	1280	1600	2000	2520	3200	
560	560	560	800	1600	2000	2520	3200	
560	560	560	800	1600	2000	2520	3200	
400	400	400	504	1600	2000	2520	2520	
320/2	400/2	500/2	640/2	800/2	1000/2	1260/2		
320/3	400/3	500/3	640/3	800/2	1000/2	1260/2		
320/3	400/3	500/3	640/3	800/2	1000/2	1260/2		
				800/3	1000/3	1260/3		
				800/4	1000/4	1260/4		
8/80	10/100	13/125	18/160	25/200	27/250	30/315	36/400	
8/80	10/100	13/125	18/160	25/200	27/250	30/315	36/400	
12/80	12/100	10/125	10/160	25/200	27/250	30/315	36/400	
60/630	14/100	15/125	20/160	-	-	-	-	
				17.5	17.5	17.5	17.5	
5	5	5	5	8	8	8	12	
10	10	10	10	35	35	35	35	
50	50	50	60	90	110	140	180	
5	5	6.3	9	3.5	5.5	8.5	12	
20000	20000	20000	20000	16000	16000	16000	10000	
5000	5000	5000	500	5000	1000	1000	1000	
0.6	0.6	1.6	1.68	3	3	3	3.3	
1	1	2	2.25	3.7	3.7	3.7	4	
M8x25	M8x25	M8x25	M8x25	M8x25	M10x30	M10x30	M10x40	
8	8	8	8	30..44	30..44	30..44	30..44	
2.5	2.5	2.5	2.5	8.2	8.2	8.2	8.2	

# Technical Parameters

Common Characteristics		
Conformity to Standards	-	IS/IEC 60947-3
No. of Poles	-	3P / 4P
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 Temperature	°C	40
IP Level after mounting	-	IP 54

## Technical Parameters Compact On Load Changeover Switch / Compact On-Load By Pass Switch

Characteristic					400	
Rated insulation and operational voltage AC-20 & DC-20	pollution degree 3	50 /60 Hz	V	1000		
Dielectric strength			kV	10		
Rated impulse withstand voltage			kV	12		
Rated thermal current in ambient 40°C	In open air		A	400		
	In Enclosure		A	400		
Min. cable cross section		Cu	mm <sup>2</sup>	240		
Rated operational current AC -21 A		upto 415V	A	400		
		440-690V	A	400		
		1000V	A	400		
Rated operational current AC -22 A		upto 415V	A	400		
		440-500V	A	400		
		690V	A	400		
		1000V	A	400		
Rated operational current AC -23 A		upto 415V	A	400		
		440V	A	400		
		500V	A	400		
		690V	A	350		
		1000V	A	125		
Rated operational current/poles in series DC - 21 A		48V	A	63/2		
		110	A	63/3		
		220	A	63/3		
		440	A	-		
		750	A	-		
Rated operational current/poles in series DC - 22 A		48V	A	400/1		
		110V	A	400/2		
		220V	A	400/2		
		440V	A	400/3		
		750V	A	-		
Rated operational current/poles in series DC - 23 A		48V	A	400/1		
		110V	A	400/2		
		220V	A	400/2		
		440V	A	400/3		
		750V	A	-		
Rated operational power AC- 23	The KW - ratings are accurate for three-phase 1500 R.P.M. standard asynchronous motors	220-240V	kW	132		
		400-415	kW	200		
		440V	kW	315		
		500 V	kW	315		
		690 V	kW	315		
Rated breaking capacity in category AC -23		upto 415V	A	3200		
		440V	A	3200		
		500V	A	3200		
		690V	A	3200		
Rated breaking capacity/poles in series in category DC -23		upto 48 V	A	-		
		110V	A	-		
		220V	A	-		
		440V	A	-		
Rated conditional Short Circuit current r.m.s		690V/500V	kA	-		
Rated conditional short circuit current r.m.s and corresponding cut off current of the fuse in single phase test according to IEC 269	Cut Off/Back up fuse Rating	50KA/415V	kA	36/400		
		50KA/500V	kA	36/400		
		50KA/690V	kA	36/400		
		80KA/800V		42/400		
Rated short time withstand current	r.m.s. value I <sub>cw</sub>	690V 0.2 sec	kA			
		690V 1 sec	kA	17		
Rated short circuit making capacity	Peak value I <sub>cm</sub>	690/500 V	kA	65		
Rated capacitor power	The capacitor rating are limited by the fuse link	400-415 V	kVAr	250		
		-				
Power loss/ pole	at rated operational current		W	13		
Mechanical endurance	Divided by two for operational cycle	Oprs.	10000	10000		
Electrical Endurance	At 0.65pf		Oprs.	1000		
Weight without accessories	with handle and shaft	3 pole	kg	5.2		
		4 pole	kg	6.4		
Terminal bolt size	Metric thread diameter x length		mm	M10x40		
Terminal tightening torque	counter torque required		Nm	30..44		
Operating Torque	3-pole switch disconnecter		Nm	17		

1. Ambient Temperature 60° C derating 20%. Mounting on "ceiling" derating 10%. Mounting on wall, horizontal fuses : derating 8%

2. Utilization category B



K type		P/K type					
	630	800	1000	1250	1600	2500	3150
	1000	1000	1000	1000	1000	1000	1000
	10	10	8	8	8	8	8
	12	12	8	8	8	8	8
	630	800	1000	1250	1600	2500	3150
	630	720	1000	1250	1600	2300	2600
	2x185	2x240	2x(60x5)	2x(80x5)	2x(100x5)	4x(100x5)	3x(100x10)
	630	800	1000	1250	1600	2500 <sup>2)</sup>	3150 <sup>2)</sup>
	630	800	1000	1250	1600	2500 <sup>2)</sup>	3150 <sup>2)</sup>
	630	630	1000	1250	1600	1000 <sup>2)</sup>	1000 <sup>2)</sup>
	630	800	1000	1250	1600	1600 <sup>2)</sup>	1600 <sup>2)</sup>
	630	800	1000	1250	1600	1600 <sup>2)</sup>	1600 <sup>2)</sup>
	630	800	-	-	-	-	-
	630	630	-	-	-	-	-
	630	720	1000	1000	1000	1000	1000
	590	670					
	580	600					
	350	350					
	150	150					
	400/1	630/1	800/1	1000/1	1250/1	1600/1	
	400/2	630/2	800/2	1000/2	1250/2	1600/2	
	400/2	630/2	800/2	1000/3	1250/3	1600/3	
	400/3	630/3	800/3				
	-	-	-	-	200/4	250/4	315/4
	630/1	800/1					
	630/2	800/2					
	630/2	800/2					
	630/3	800/3					
	-	-	-	-	-	-	-
	630/1	800/1					
	630/2	800/2					
	630/2	800/2					
	400/3	400/3					
	-	-	-	-	-	-	-
	180	200	250	250	250	250	250
	315	355	400	400	400	400	400
	355	355	400	400	400	400	400
	355	355	450	450	450	450	450
	355	355					
	5040	5760	8000	8000	8000	8000	8000
	4720	5360					
	4640	4800					
	2800	2800					
			50	50	50	50/63	50/63
	54/630	63/800	105	105	105	140	140
	54/630	63/800	105	105	105	140	140
	54/630	63/800	105	105	105	105	105
	60/630	70/800					
	38	38					
	17	17	50 <sup>3)</sup>	50 <sup>3)</sup>	50 <sup>3)</sup>	80 <sup>3)</sup>	80 <sup>3)</sup>
	80	80	105	105	105	105/140	105/140
	300	330	-	-	-	-	-
	22	40	27	40	67	90	140
	10000	6000	6000	6000	1200	1200	
	500	500	500	500	500	100	100
	6.2	6.2	16.3	16.3	17.5	37	37
	7.6	7.6	20.5	20.5	22.5	47	47
	M12x40	M12x40	M12x60	M12x60	M12x60	M12x60	12x60
	50..75	50..75	50..75	50..75	50..75	50..75	50..75
	21	21	21	21	21	50	50

## Compact On Load Switch Disconnecter Fuse Changeover

### Salient Features

- Suitable for utilization category AC-23A & comply to IS/ IEC 60947- 1 & 3 standard
- Protection against over load & short circuit faults by HRC fuse links
- Compact & standardized size for range 125A~800A & space saving for panel builders
- Protection for two modes with backup fuse

### Function

- C&S Compact On Load Changeover is manually operated 4 Pole switch disconnecter fuse with position I-O-II with backup HRC fuses fitted in phases. The switch offers protection in position-I as well as in position-II to the load connected through common outgoing.

## Technical Parameters Compact On-Load Switch Disconnecter Fuse Changeover

Parameters		125A	160A	200A	250A
On-Load Switch Disconnecter Fuse C/o without fuse		CSCF 125B4CO	CSCF 160B4CO	CSCF 200B4CO	CSCF 250B4CO
On-Load Switch Disconnecter Fuse C/o with fuse		CSCF 125B4COF	CSCF 160B4COF	CSCF 200B4COF	CSCF 250B4COF
Number of poles		4	4	4	4
Current rating at 40° C	Ith ( A )	125	160	200	250
Rated insulation voltage Ui	V	1000	1000	1000	1000
Max. Rated Operational Voltage (Ue) max	V	690	690	690	690
Rated operational voltage Ue	V	415	415	415	415
Dielectric strength at 50Hz for 1 min.	KV	3.5	3.5	3.5	3.5
Rated impulse voltage Uimp	KV	8	8	12	12
Rated operational current Ie at 415 V					
AC 22A	A	125	160	200	250
AC 23A	A	125	160	200	250
Rated making capacity at 415V, 0.35 pf					
AC 23A	A	1250	1600	2000	2500
Rated breaking capacity at 415V, 0.35 pf					
AC 23A	A	1000	1280	1600	2000
Capacitor rating at 415V, 3ph	kVAr	50	60	90	110
Short circuit current with fuses	kA r.m.s	80	80	80	80
Rated short circuit making capacity (peak)	kA	10	10	30	30
Short time current for 1 sec.	kA r.m.s	5	5	8	8
Electrical Endurance	Operations	1000	1000	1000	1000
#Mechanical Endurance	Operations	10000	10000	10000	10000
Fuse Type BS Pattern		B2	B2	B2	B3

# Mechanical Endurance also includes Electrical Endurance

1. Ambient Temperature 60 C derating 20%. Mounting on "ceiling" derating 10%. Mounting on wall, horizontal fuses : derating 8%

2. Utilization category B

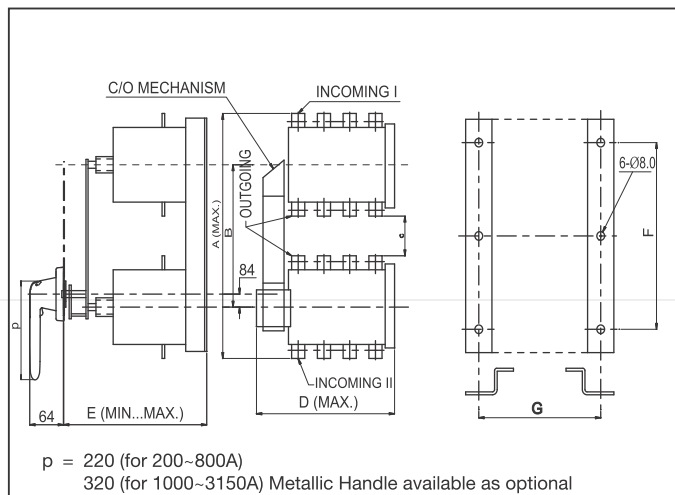
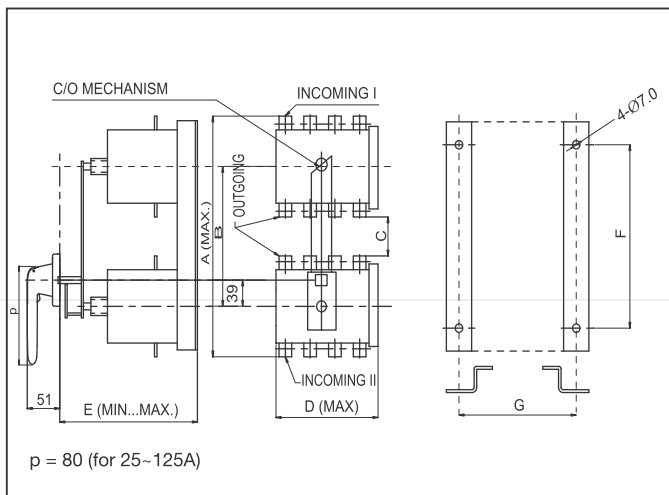


## Technical Parameters Compact On-Load Switch Disconnecter Fuse Changeover

Parameters		315A	400A	630A	800A
On-Load Switch Disconnecter Fuse C/o without fuse		CSCF 315B4CO	CSCF 400B4CO	CSCF 630B4CO	CSCF 800B4CO
On-Load Switch Disconnecter Fuse C/o with fuse		CSCF 315B4COF	CSCF 400B4COF	CSCF 630B4COF	CSCF 800B4COF
Number of poles		4	4	4	4
Current rating at 40° C	Ith (A)	315	400	630	800
Rated insulation voltage Ui	V	1000	1000	1000	1000
Max. Rated Operational Voltage (Ue) max	V	690	690	690	690
Rated operational voltage Ue	V	415	415	415	415
Dielectric strength at 50Hz for 1 min.	KV	3.5	3.5	3.5	3.5
Rated impulse voltage Uimp	KV	12	12	12	12
Rated operational current Ie at 415 V					
AC 22A	A	315	400	630	800
AC 23A	A	315	400	630	720
Rated making capacity at 415V, 0.35 pf					
AC 23A	A	3150	4000	6300	7200
Rated breaking capacity at 415V, 0.35 pf					
AC 23A	A	2520	3200	5040	5760
Capacitor rating at 415V, 3ph	kVAr	140	250	270	330
Short circuit current with fuses	kA r.m.s	80	80	80	80
Rated short circuit making capacity (peak)	kA	30	40	50	50
Short time current for 1 sec.	kA r.m.s	8	20	20	24
Electrical Endurance	Operations	1000	1000	1000	500
#Mechanical Endurance	Operations	10000	10000	10000	10000
Fuse Type BS Pattern		B3	B4	C2	C3

# Mechanical Endurance also includes Electrical Endurance

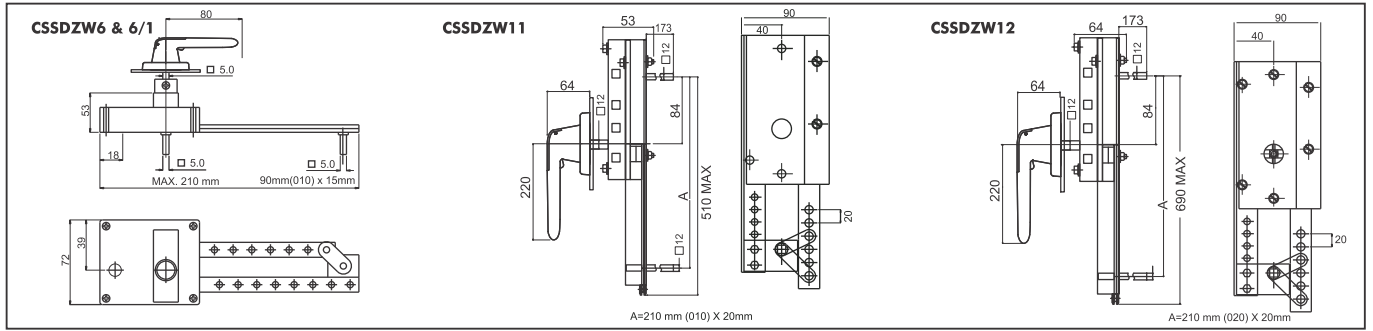
### Dimensional detail for Conventional Changeover Switch Disconnecter



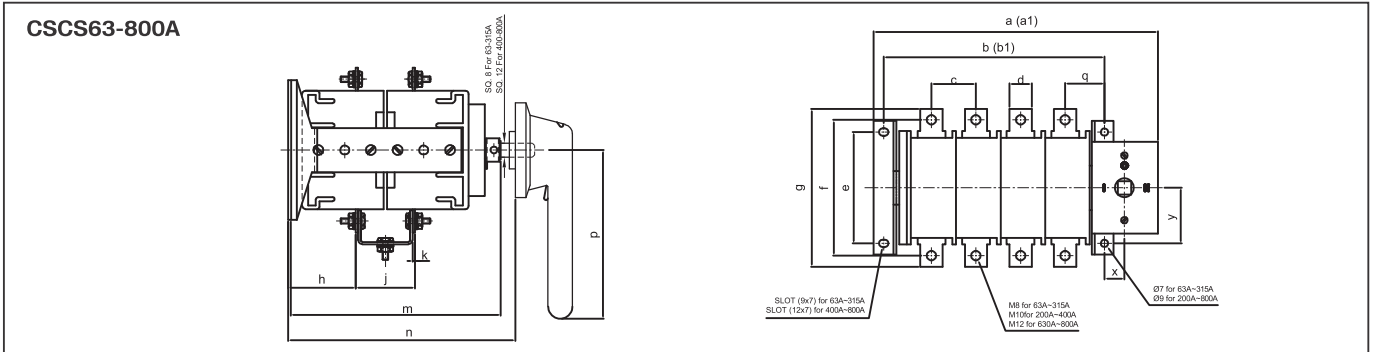
Type of C/o Switches	Dimension							Type of C/o Mechanism
	A	B	C	D	E	F	G	
CSSD25D4CO	187	120	52	95	180...210	120	86	CSSDZW 6
CSSD40D4CO	187	120	52	95	180...210	120	86	CSSDZW 6
CSSD63D4CO	277	180	83	145	180...210	180	145	CSSDZW 6/1
CSSD125D4CO	277	180	83	145	180...210	180	145	CSSDZW 6/1

Type of C/o Switches	Dimension							Type of C/o Mechanism
	A	B	C	D	E	F	G	
CSSD200~400DM4CO	605	430	267	318	250~325	540	251	CSSDZW 11
CSSD400K4CO	635	430	225	335	250...325	580	251	CSSDZW 11
CSSD630K4CO	653	430	207	360	250...325	580	299	CSSDZW 11
CSSD800K4CO	653	430	207	384	250...325	580	323	CSSDZW 11
CSSD1000/1250K4CO	964	610	240	457	300...350	800	412	CSSDZW 12
CSSD1600/1800K4CO	964	610	240	635	300...350	800	590	CSSDZW 12
CSSD2500/3150K4CO	964	610	240	800	445...495	769	624	CSSDZW 12

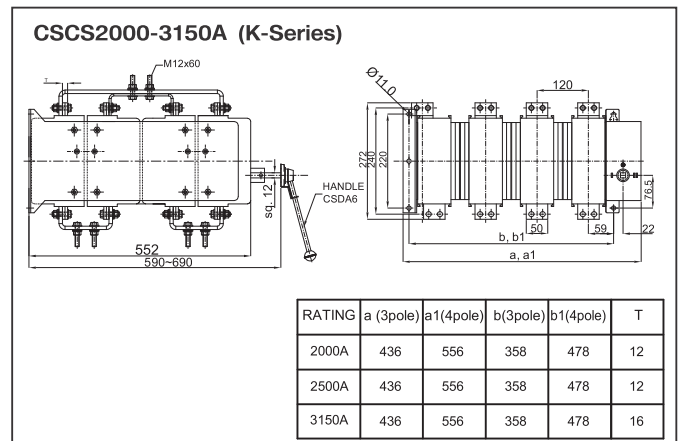
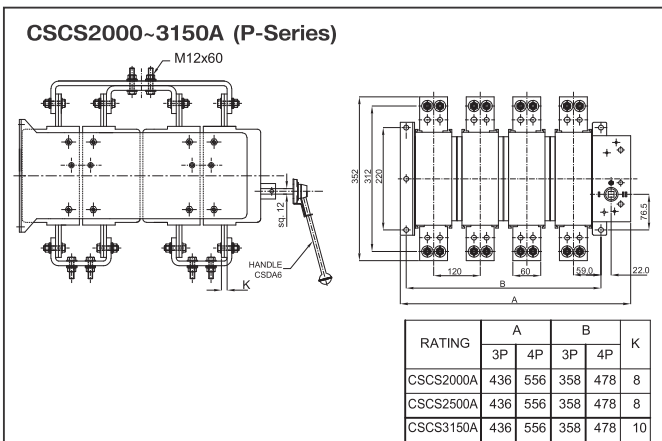
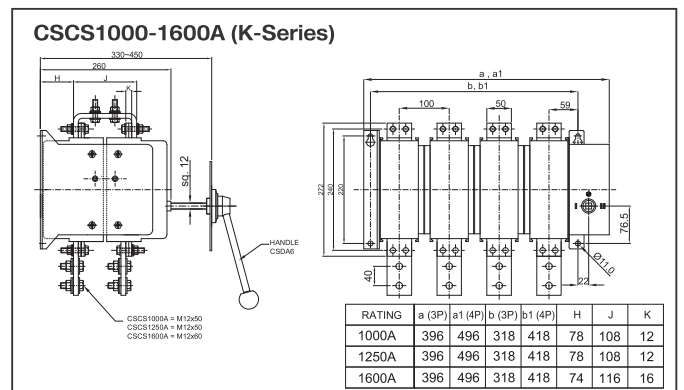
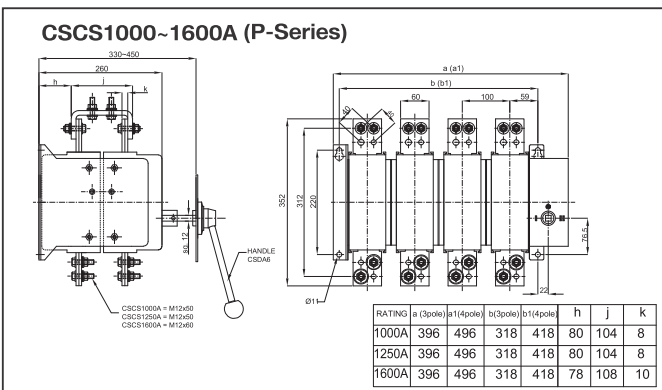
# Dimensions



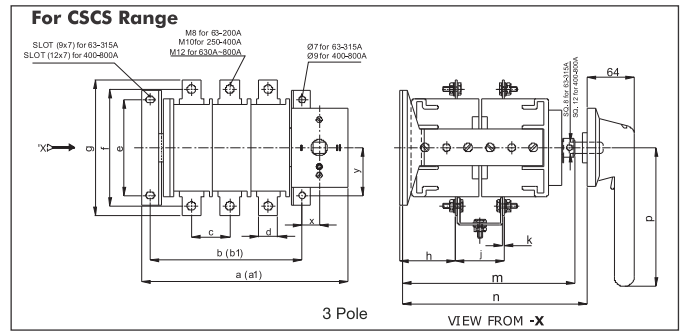
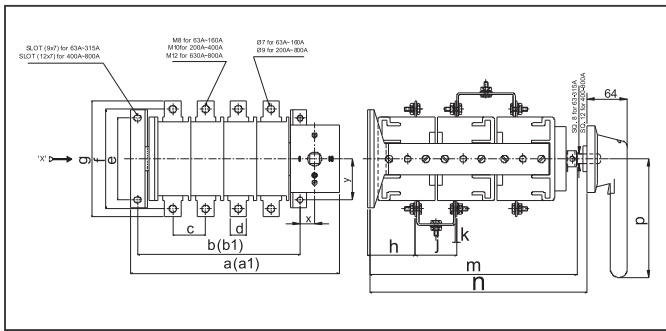
## Dimensional detail for Compact On Load Changeover Switches



Rating	a (3Pole)	a1(4Pole)	b(3Pole)	b1(4Pole)	c	d	e	f	g	h	j	k	m	n	p	x	y	q
63A	215.5	255.5	158.5	198.5	40	20	100	122	142	58	51	2.0	182.5	195 ~ 295	145	18	43	35.5
80A	215.5	255.5	158.5	198.5	40	20	100	122	142	58	51	2.0	182.5	195 ~ 295	145	18	43	35.5
100A	215.5	255.5	158.5	198.5	40	20	100	122	142	58	51	2.0	182.5	195 ~ 295	145	18	43	35.5
125A	215.5	255.5	158.5	198.5	40	20	100	122	142	58	51	2.0	182.5	195 ~ 295	145	18	43	35.5
160A	215.5	255.5	158.5	198.5	40	20	100	122	142	58	51	2.0	182.5	195 ~ 295	145	18	43	35.5
200A	248.5	309.5	191	252	61	20	124	138	163	65.5	81	4.0	242	255 ~ 355	145	18	43	34
250A	248.5	309.5	191	252	61	25	124	138	163	65.5	81	4.0	242	255 ~ 355	145	18	43	34
315A	248.5	309.5	191	252	61	25	124	138	163	65.5	81	4.0	242	255 ~ 355	145	18	43	34
400A-DM	248.5	309.5	191	252	61	30	124	150	175	65.5	81	4.0	242	255 ~ 355	145	18	43	34
400A-K	282	352	206	276	70	25	150	180	205	85	96	4.0	262	300 ~ 400	220	26	47	34
630A	282	352	206	276	70	40	150	180	223	85	96	4.0	262	300 ~ 400	220	26	47	34
800A	282	352	206	276	70	40	150	180	223	85	98	5.0	262	300 ~ 400	220	26	47	34



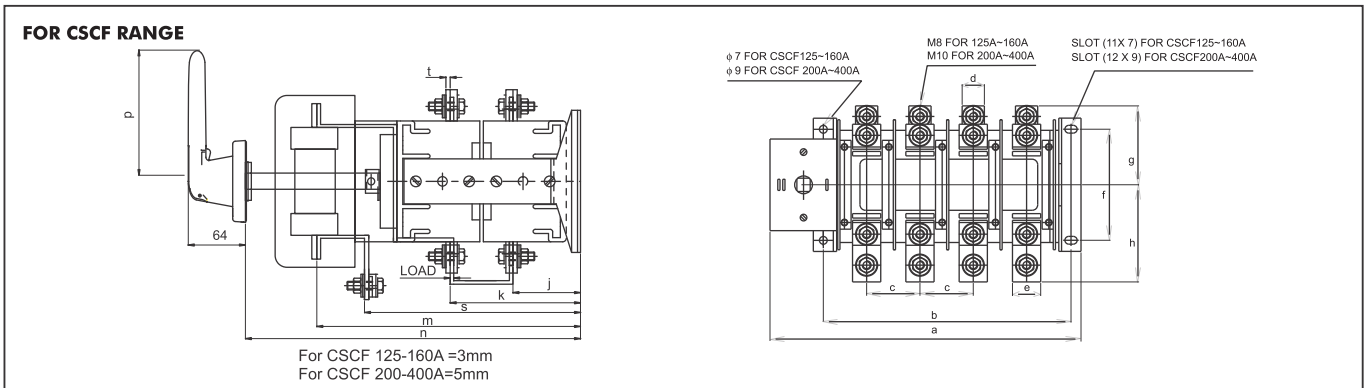
## Dimensional detail for Bypass Switches



Rating	a (3Pole)	a1(4Pole)	b(3Pole)	b1(4Pole)	c	d	e	f	g	h	j	k	m	n	p	x	y
63A	215.5	255.5	158.5	198.5	40	20	100	122	142	58	51	2.0	255.5	268-368	145	18	43
80A	215.5	255.5	158.5	198.5	40	20	100	122	142	58	51	2.0	255.5	268-368	145	18	43
100A	215.5	255.5	158.5	198.5	40	20	100	122	142	58	51	2.0	255.5	268-368	145	18	43
125A	215.5	255.5	158.5	198.5	40	20	100	122	142	58	51	2.0	255.5	268-368	145	18	43
160A	215.5	255.5	158.5	198.5	40	20	100	122	142	58	51	2.0	255.5	268-368	145	18	43
200A	248.5	309.5	191	252	61	20	124	138	163	65.5	81	4.0	345	358-458	145	18	43
250A	248.5	309.5	191	252	61	25	124	138	163	65.5	81	4.0	345	358-458	145	18	43
315A	248.5	309.5	191	252	61	25	124	138	163	65.5	81	4.0	345	358-458	145	18	43
400A-DM	248.5	309.5	191	252	61	30	124	150	175	65.5	81	4.0	345	358-458	145	18	43
400A	282	352	206	276	70	25	150	180	205	85	96	4.0	392	430-530	220	26	47
630A	282	352	206	276	70	40	150	180	205	85	96	4.0	392	430-530	220	26	47
800A	282	352	206	276	70	40	150	180	205	85	98	5.0	392	430-530	220	26	47
1000A	396	496	318	418	100	60	220	312	352	80	104	8	390	460-580	205*	22	76.5
1250A	396	496	318	418	100	60	220	312	352	80	104	8	390	460-580	205*	22	76.5
1600A	396	496	318	418	100	60	220	312	352	78	108	10	390	460-580	205*	22	76.5

\* Metallic Handle

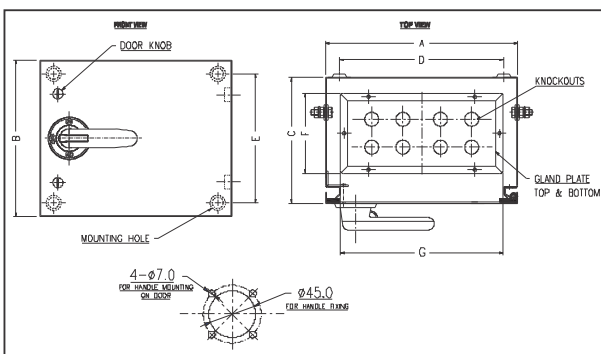
## Dimensional detail for Compact Switch Disconnecter Fuse Changeover Switches



Rating	a	b	c	d	e	f	g	h	j	k	m	n	p	s	t
125A	280	223	48	20	25.4	100	71	87.5	57	113	217	290~310	145	170	2.0
160A	280	223	48	20	25.4	100	71	87.5	57	113	217	290~310	145	170	2.0
200A	310	252	61	25	30	124	81.5	99	65.5	151.5	284.5	340~370	145	226.5	4.0
250A	310	252	61	25	30	124	81.5	99	65.5	151.5	284.5	340~370	145	226.5	4.0
315A	310	252	61	25	30	124	81.5	99	65.5	151.5	284.5	340~370	145	226.5	4.0
400A	360	287	70	25	30	150	102.5	114	87	182	338	400~500	220	279	4.0
630A	478	402	100	40	40	150	111.5	117	85	186	350	400~500	220	282	4.0
800A	478	402	100	40	40	150	111.5	117	85	186	350	400~500	220	282	5.0

**NOTE:** • Dimensions of Changeover Switches with enclosure are available on request • Dimensions of Conventional Switch Disconnecter Fuse Changeover are available on request

## Dimensional detail for Enclosures



Size	Rating	A	B	C	D	E	F	G	Knockout Dia Numbers/Side
<b>Enclosure CSCS Compact Onload Changeover</b>									
B	CSCS 63-160A	325	275	220	285	235	155	283	Ø38(8)
D2	CSCS 200-315A	400	350	275	360	310	210	358	Ø38(8)
E	CSCS 400-800A	500	400	300	460	360	235	458	Ø38(8)
I	CSCS 1000-1800A	600	550	300	560	510	235	558	Ø38(8)
K	CSCS 2000-3150A	800	600	700	760	560	635	758	Ø38(16)
<b>Enclosure for CSBS Bypass Switches</b>									
B	CSBS 63-160A	350	300	325	310	260	260	308	Ø38(8)
D2	CSBS 200-315A	400	350	375	360	310	310	358	Ø38(8)
I	CSBS 400-800A	500	400	425	460	360	360	458	Ø38(8)
K	CSBS 1000-1600A	600	550	425	560	510	360	558	Ø38(8)
<b>Enclosure for CSCF Fuse Changeover Switches</b>									
B	CSCF 125-160A	350	300	325	310	260	260	308	Ø38(8)
D2	CSCF 200-315A	500	350	375	460	310	310	458	-
E	CSCF 400-800A	600	400	500	560	360	435	558	-

## Marketing Offices spread all over India

### CENTRAL MARKETING OFFICE

222, Okhla Industrial Estate, Phase - III, New Delhi - 110 020

Ph. : (+91 11) 3384 9000 - 09 • Fax : (+91 11) 26847342 • E-Mail : cmo@cselectric.co.in

### CUSTOMER CARE

Toll Free Number: 1800 3010 2012

#### NORTHERN REGION

##### DELHI

Ph. : (+91 11) 3384 9000 - 09

Fax : (+91 11) 26847342

E-Mail : cmo@cselectric.co.in

##### CHANDIGARH

Ph. : (+91 172) 3021144

Fax : (+91 172) 2631059-3201144

E-Mail : chandigarh@cselectric.co.in

##### LUDHIANA

Ph. : (+91 161) 2541900, 2541800

Fax : (+91 161) 2541900, 2541800

E-Mail : ludhiana@cselectric.co.in

##### LUCKNOW

Ph. : (+91 522) 3917843, 4102044

E-Mail : lucknow@cselectric.co.in

##### KANPUR

Ph. : (+91 522) 3917843, 4102044

E-Mail : kanpur@cselectric.co.in

##### INDORE

Ph. : (+91 731) 4035761, 3918020

E-Mail : indore@cselectric.co.in

##### RAIPUR

Ph. : (+91 771) 4061404

E-Mail : raipur@cselectric.co.in

##### NAGPUR

Ph. : (+91 712) 2565215 , 2547295

Fax : (+91 712) 2528923

E-Mail : nagpur@cselectric.co.in

#### EASTERN REGION

##### KOLKATA

Ph. : (+91 33) 39212100-01

Fax : (+91 33) 22275849

E-Mail : kolkata@cselectric.co.in

##### GUWAHATI

Ph. : (+91 361) 2469950

E-Mail : guwahati@cselectric.co.in

##### RANCHI

Ph. : (+91 651) 2242202, 2242224

E-Mail : ranchi@cselectric.co.in

##### BHUBANESWAR

Ph. : (+91 674) 2580788, 9778070465

E-Mail : bhubaneswar@cselectric.co.in

#### WESTERN REGION

##### MUMBAI

Ph. : (+91 22) 24114727-28, 30484071-73

Fax : (+91 22) 24126631

E-Mail : mumbai@cselectric.co.in

##### AHMEDABAD

Ph. : (+91 79) 30653015

Fax : (+91 79) 30074519

E-Mail : ahmedabad@cselectric.co.in

##### BARODA

Ph. : (+91 265) 2339479, 2356293

Fax : (+91 265) 2338754

E-Mail : baroda@cselectric.co.in

##### PUNE

Ph. : (+91 20) 30283239 - 40

Fax : (+91 20) 30283239

E-Mail : pune@cselectric.co.in

##### SURAT

Ph. : (+91 261) 6544024-28

E-Mail : surat@cselectric.co.in

##### JAIPUR

Ph. : (+91 141) 4037651

Fax : (+91 141) 4033954

E-Mail : jaipur@cselectric.co.in

#### SOUTHERN REGION

##### CHENNAI

Ph. : (+91 44) 33534500-01

Fax : (+91 44) 39180514

E-Mail : chennai@cselectric.co.in

##### COIMBATORE

Ph. : (+91 422) 3048406 - 20

Fax : (+91 422) 3048412

E-Mail : coimbatore@cselectric.co.in

##### KOCHI

Ph. : (+91 484) 3071715 (10 LINES)

Fax : (+91 484) 3071716

E-Mail : cochin@cselectric.co.in

##### MADURAI

E-Mail : commercial.madurai@cselectric.co.in

##### BENGALURU

Ph. : (+91 80) 3065 9400

Fax : (+91 80) 25594939

E-Mail : bangalore@cselectric.co.in

##### SECUNDERABAD

Ph. : (+91 40) 48534080

Fax : (+91 40) 27812987

E-Mail : hyderabad@cselectric.co.in

##### VIJAYAWADA

Ph. : (+91 866) 2496265 / 67

E-Mail : vijayawada@cselectric.co.in

### RESIDENT ENGINEERS

Agra | Allahabad | Aurangabad | Bareilly | Bhopal | Dehradun | Goa | Gorakhpur | Haridwar | Hubli | Jabalpur | Jammu | Kolhapur | Kollam | Mangalore | Mehsana | Nashik | Patna | Rajkot | Rourkela | Siliguri | Srinagar | Tirupathi | Trichey | Udaipur | Una | Vapi | Visakhapatnam

### WAREHOUSES

#### NATIONAL WAREHOUSE

NOIDA - A-7 & 8, Sector-VIII, Noida -201 301, Distt. Gautam Budh Nagar, (UP) Ph.: (+91 120) 3914301-02 Fax: (+ 91 120) 3914303

#### REGIONAL WAREHOUSES

DELHI	Khasra No. 915 & 916, 2nd Floor, Near Rice Mill, Village Rithala, Delhi-85 Ph.: (+91 11) 27049211
LUCKNOW	3rd Floor, E-143, Phase-I, Transport Nagar, Kanpur Road, Lucknow - 17 Ph.: (+91 522) 4103460
INDORE	Liberty Agencies 53, Udyog Nagar, Near Musakhedi Square, Ring Road, Indore-452001 Ph.: (+91) 88780-62000 / 64000
KOLKATA	113, Chetla Road, New Alipur, Kolkata - 700 053, Ph.: (+91 33) 22275849 - 51
RANCHI	Plot No. 145/C, Mandir Marg-D, Road No. 4, Ashok Nagar, Distt. Ranchi, Jharkhand - 834002 Ph.: (91 651) 2242202, 2242224
BHUBANESWAR	Rasharaj Geetikonj, Plot No. 224/A, Sec-A, Zone-B, Mancheswar Industrial Estate, Bhubaneswar-751 010 Ph.: (+91 674) 2580788
MUMBAI	E-5, Parasnath Complex. Gala No.8, Village 'VAL' Dapode Road, Taluka Bhiwandi, District, Thane - 421302 Ph.: (+91 2522) 314830
AHMEDABAD	B-25-B/C Meldi Industrial Estate, Opp. West Coast Pharmaceutical, Nr. Gota Over Bridge, Gota, Ahmedabad - 382481 Ph.: (+91 79) 65453044
BENGALURU	No. 17, 1st Main Road, Sampangiram Nagar, Bengaluru - 560 027 Ph.: (+91 80) 41125467

