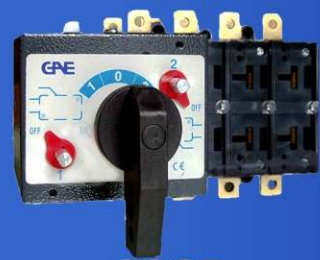


CMA Series



CS1P



CS2P



CS3P



CS4P



VC5P

General Information

MANUAL CHANGE-OVER SWITCHES TECHNICAL DATA

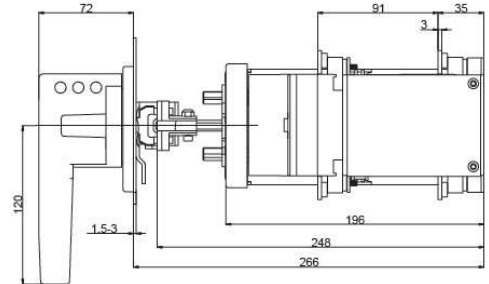
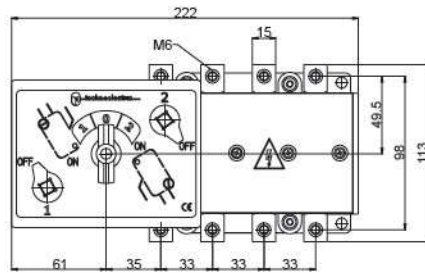
Type	CS1P	CS2P			CS3P		CS4P		CS5P					
Rated current (In)	160A	200A	250A	315A	400A	500A	630A	800A	1000A	1250A	1600A	2000A	2500A	3150A
Rat. insulation c.a./AC (Ui) (V)	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
voltage c.c./DC (Ui) (V)	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Impulse withstand voltage (Uimp)(kV)	8	12	12	12	12	12	12	12	12	12	12	12	12	12
Rated thermal current (Ith) (A)	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150
Rated operational current (Ie)														
400V (A)	125/160	200	250	250/315	400	400/500	630	630/800	1000	1250	1600	2000	2500	3150
AC-21A/B 500V (A)	125/160	200	250	250/315	400	400/500	630	630/800	1000	1250	1250	1600	2000	2500
690V (A)	125/160	200	250	250/315	400	400/500	630	630/800	1000	1250	1250	1250	1250	1250
400V (A)	125/160	200	250	250/315	400	400/500	630	630/800	1000	1250	1250	1250	-	-
AC-22A/B 500V (A)	125/160	200	250	250/250	400	400/400	630	630/800	1000	1250	-	-	-	-
690V (A)	125/160	200	250	250/250	400	400/400	630	630/800	1000	1250	-	-	-	-
400V (A)	125/160	200	250	250/250	400	400/400	630	630/800	1000	1250	-	-	-	-
AC-23A/B 500V (A)	100/100	160	200	200/200	315	315/315	500	500/500	800	1000	-	-	-	-
690V (A)	80/80	125	160	160/160	250	250/250	400	400/400	400	400	-	-	-	-
220V (A)	125/160	200	250	250/315	400	400/500	630	630/800	1000	1250	1600	2000	-	-
DC-21A/B (1) 420V (A)	-	200	250	250/315	400	400/500	630	630/800	-	-	-	-	-	-
560V (A)	-	-	-	-	400	400/500	630	630/800	-	-	-	-	-	-
220V (A)	125/125	200	250	250/315	400	400/500	630	630/800	1000	1250	-	-	-	-
DC-22A/B (1) 420V (A)	-	200	250	250/250	400	400/400	630	630/800	-	-	-	-	-	-
560V (A)	-	-	-	-	400	400/400	630	630/800	-	-	-	-	-	-
220V (A)	80/80	200	250	250/250	400	400/400	630	630/800	630	800	-	-	-	-
DC-23A/B (1) 420V (A)	-	200	250	250/250	400	400/400	630	630/800	-	-	-	-	-	-
560V (A)	-	-	-	-	400	400/400	630	630/800	-	-	-	-	-	-
Rated making capacity at 400V AC23 (A)	1250	2000	2500	2500	4000	5000	6300	6300	10000	12500	-	-	-	-
Rated breaking capacity at 400V AC23 (A)	1000	1600	2000	2000	3200	4000	5040	5040	8000	10000	-	-	-	-
Short-circuit withstand current 1 sec. (kA)	5	8	8	8	13	13	26,5	26,5	35	35	50	50	50	50
Short-circuit withstand current 0,25 sec (kA)	10	16	16	16	26	26	53	53	70	70	100	100	100	100
Short-circuit making capacity (400V) (kA)	7,5	13,5	13,5	13,5	26	26	30	30	73,5	73,5	105	105	105	105
Rated operational power AC-23A (400V) (kA)	65	105	130	130	210	210	330	330	525	630	630	630	-	-
Rated fuse short-circuit current														
Back up fuse (A)	160	200	250	315	400	500	630	800	1000	1250	-	-	-	-
R.M.S. value (kA)	50	50	50	50	50	50	50	50	100	100	-	-	-	-
Peak value (kA)	16	20	25	27	30	30	40	50	60	70	-	-	-	-
Mechanical endurance n°	10000	10000	10000	10000	8000	8000	8000	8000	7000	7000	4000	4000	2000	2500
Electrical endurance n°	2000	2000	2000	2000/200	1500	1500/200	1500	1500/200	1000	1000	500	500	500	500
Rated Power Capacitor at 400V (kVar)	50	90	110	110	180	180	300	300	475	600				
Power losses for pole (W)	2,7	2,4	3,8	6,1	9,4	14,8	15,6	25,7	27,3	42,7	38,3	61,3	91,7	145,5
Cable section mmq	70	120	120	185	2x150	2x150	2x185	2x240	-	-	-	-	-	-
Bars dimension mm	16x4	20x5	20x5	20x6	2x25x5	2x25x5	2x32x6	2x40x6	2x50x6	2x50x8	3x50x8	3x50x12	4x50x12	6x50x12
Net weight 3P Kg	5,5	5,5	5,5	5,5	17	17	22	22	37	37	51	51	70	70
4P Kg	6	6	6	6	18	18	24	24	37	37	53	53	74	74

MANUAL CHANGE-OVER SWITCHES

CS1P 4P



160A



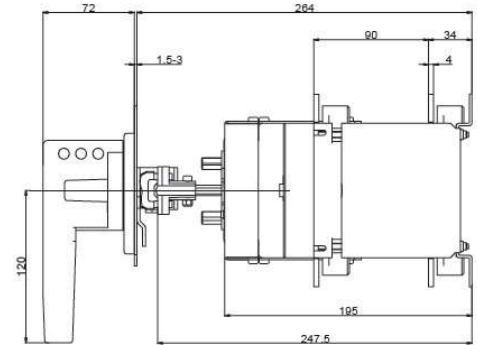
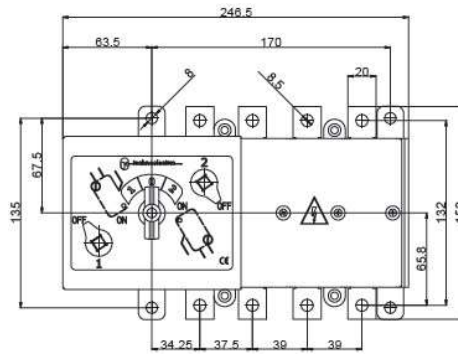
CS2P 4P



200A

250A

315A

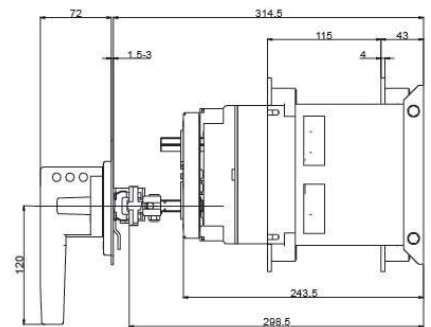
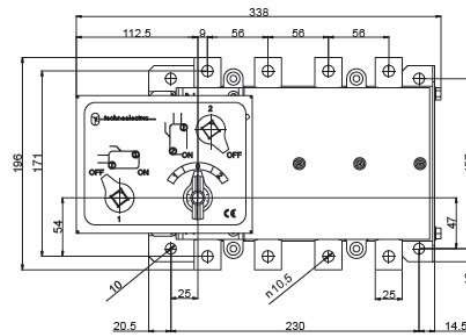


CS3P 4P



400A

500A

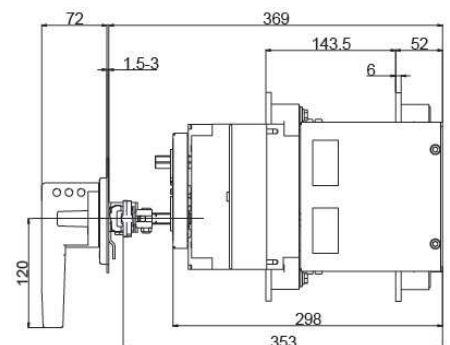
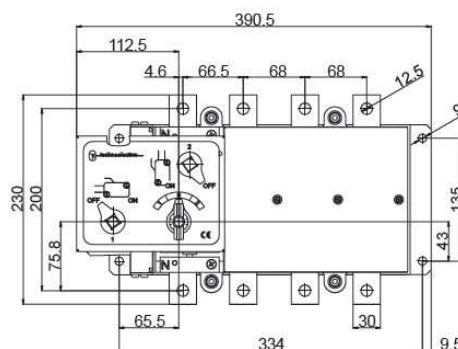


CS4P 4P



630A

800A

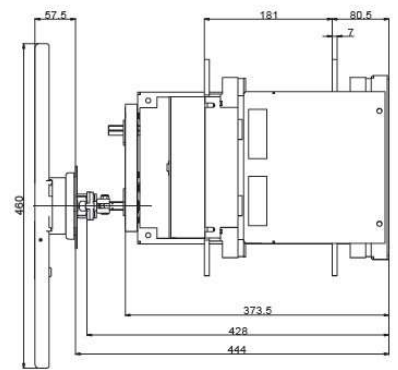
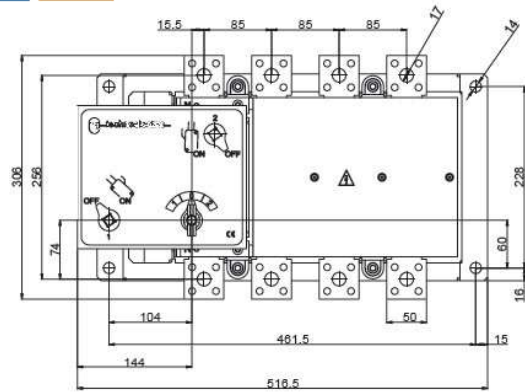


MANUAL CHANGE-OVER SWITCHES

CS5P 4P 35kA



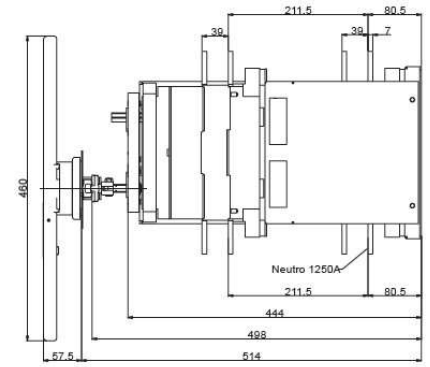
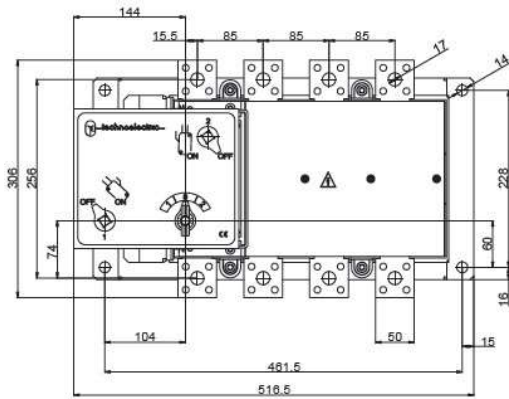
1000A
1250A



CS5P 4P 50kA



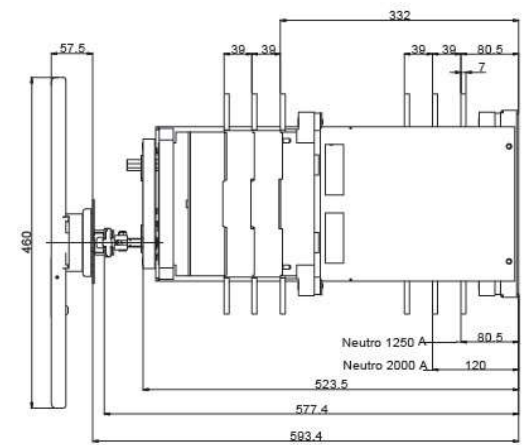
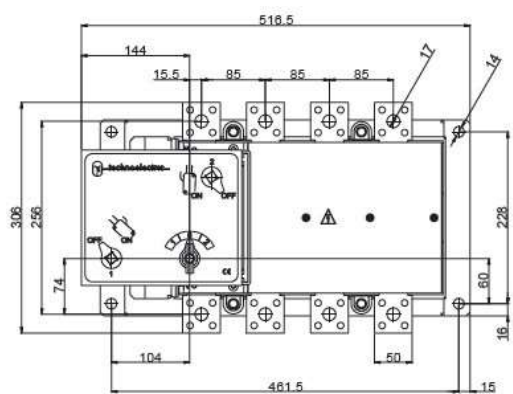
1600A
2000A



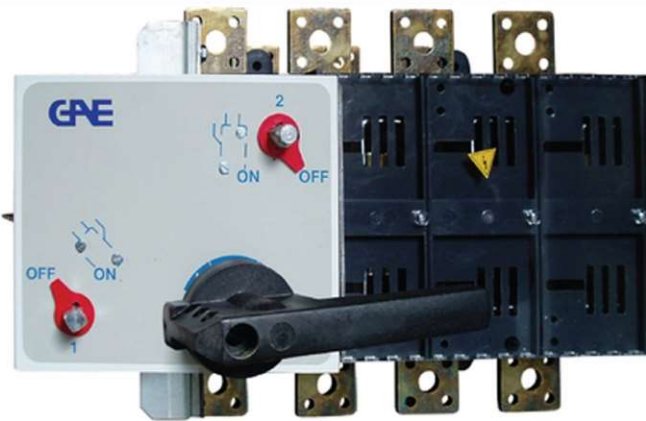
CS5P 4P 50kA



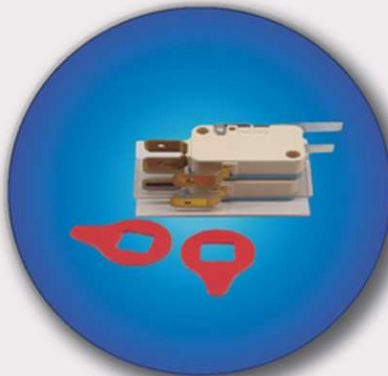
2500A
3150A



MANUAL CHANGE OVER SWITCHES ACCESSORIES



Auxiliary contacts 1C/O



Auxiliary contacts 2C/O



Direct double handle



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