



The Motor Control Warehouse

Commander SK Filter Selection (RFI/EMC) Document

MCW Hints & Tips 0014

All Commander SKs have an internal removable/replaceable RFI/EMC filter. This can be removed if a drive is to be fitted to a supply with an earth leakage circuit breaker.

Commander SK size A to D have low earth leakage filters which can be used where the drive is fitted to a supply with an earth leakage circuit breaker.

SKA to D

SK	Product Range
A,B,C,D	Frame Size
1,D, 3	Number of input phase – 1 (single phase), D (200V single or 3 phase – NOT 200 and/or 400V), 3, (Three phase)
1, 2, 4	Input voltage – 1 (110VAC), 2 (200VAC), 4 (400VAC)
00	Power ratings (00025 = 0.25KW, 00750 = 7.5KW)



Drive	Number of phases	Filter part numbers		Filter type		Mounting type		Max motor cable length (m)
		CT	Schaffner	Standard	Low leakage	Footprint	Side	
SKA1100025 SKA1100037 SKA1200025 SKA1200037	1	4200-6122	FS6512-12-07	Y		Y	Y	50
		4200-6123	FS6512-12-07-LL		Y	Y	Y	30
SKA1200025 SKA1200037	1	4200-6122	FS6512-12-07	Y		Y	Y	75
		4200-6123	FS6512-12-07-LL		Y	Y	Y	30
SKB1000075 SKB1100110	1	4200-6216	FS6513-27-07	Y		Y	Y	100
SKBD200110 SKBD200150	1	4200-6212	FS6513-20-07	Y		Y	Y	100
		4200-6214	FS6513-20-07-LL		Y	Y	Y	75
SKBD200110 SKBD200150	3	4200-6213	FS6513-10-07	Y		Y	Y	100
		4200-6215	FS6513-10-07-LL		Y	Y	Y	15
SKB3400037 SKB3400055 SKB3400075 SKB3400110 SKB3400150	3	4200-6213	FS6513-10-07	Y		Y	Y	100
		4200-6215	FS6513-10-07-LL		Y	Y	Y	15
SKCD200220	1	4200-6310	FS6514-24-07	Y		Y	Y	100
		4200-6312	FS6514-24-07-LL		Y	Y	Y	10
SKCD200220	3	4200-6311	FS6514-14-07	Y		Y	Y	100
		4200-6217	FS6514-14-07-LL		Y	Y	Y	50
SKC3400220 SKC3400300 SKC3400400	3	4200-6311	FS6514-14-07	Y		Y	Y	100
		4200-6217	FS6514-14-07-LL		Y	Y	Y	20
SKDD200300	1	4200-6409	FS6515-24-07	Y		Y	Y	100
		4200-6410	FS6515-24-07-LL		Y	Y	Y	10
SKDD200300	3	4200-6411	FS6515-16-07	Y		Y	Y	100
		4200-6412	FS6515-16-07-LL		Y	Y	Y	10
SKD3200400 SKD3400550 SKD3400750	3	4200-6411	FS6515-16-07	Y		Y	Y	100
		4200-6412	FS6515-16-07-LL		Y	Y	Y	10
SKDD200300	1	4200-6409	FS6515-24-07	Y		Y	Y	100
		4200-6410	FS6515-24-07-LL		Y	Y	Y	10

Footprint means the filter can be fitted underneath the drive

Side means the filter can be fitted by the side of the drive

SK2 to 6

Commander SK size 2 to 6 do not have low earth leakage filters as these drives are usually fitted to industrial supplies which don't tend to have earth leakage circuit breakers.

SK Product range

2, 3, 4, 5, 6 Frame size

2, 4, 5, 6 Input voltage 2 (200VAC), 4 (400VAC), 5 (525VAC), 6 (690VAC)

01, 02, 03 Model number in that frame size



Drive	Filter part number		Mounting		Max motor cable length (m)
	Schaffner	Epcos	footprint	Side	
SK2201 SK2202 SK2203	4200-6210	4200-6211	Y	Y	100
SK3201 SK3202	4200-6307	4200-6306	Y	Y	100
SK4201 SK4202 SK4203	4200-6406		Y	Y	100
		4200-6405	Y	N	
SK2401 SK2402 SK2403 SK2402	4200-6210	4200-6211	Y	Y	100
SK3401 SK3402 SK3403	4200-6305	4200-6306	Y	Y	100
SK4401 SK4402 SK4403	4200-6406	4200-6405	Y	N	100
SK5401 SK5402	4200-6503	4200-6501	Y	N	100
SK6401 SK6402	4200-6603	4200-6601	Y	N	100
SK3501 SK3502 SK3503 SK3504 SK3505 SK3506 SK3507	4200-6309	4200-6308	Y	Y	100
SK4601 SK4602 SK4603 SK4604 SK4605 SK4606	4200-6408	4200-6407	Y	N	
SK5601 SK5602	4200-6504	4200-6502	Y	N	100
SK6601 SK6602	4200-6604	4200-6602	Y	N	100

Schaffner and EPCOS are different suppliers, either can be used.

Further details for the above filters can be found in the Commander SK Technical Data Guide.

