

# S5F Changeover switch base mounting 3P - 3P+N

Size 0  
A 125|160|200



3P	CODE-125A	CODE-160A	CODE-200A
3P+N	SSF01253PS0 SSF01253NS0	SSF01603PS0 SSF01603NS0	SSF02003PS0 SSF02003NS0



## Technical information



According to IEC 60947-3

		125	160	200
Rated thermal current Ith in ambient at 40°C	A	125	160	200
Rated insulation voltage	V	1000	1000	1000
Rated dielectric strength	V	4000	4000	4000
Rated impulse withstand voltage	kV	8	8	8
AC Rated operational current (Rated operational frequency 50/60 Hz)	Ue 400V AC21A A	125	160	200
	Ue 400V AC22A A	125	160	200
	Ue 500V AC21A A	125	160	200
AC Rated operational power	Pe 3x400V AC23A kW	69,2	88,6	88,6
	3x500V AC23A kW	69,2	88,6	88,6
	3x690V AC23A kW	76,4	76,4	76,4

<sup>\*)</sup> Other voltages and / or utilization categories. Please consult  
<sup>\*\*)</sup> Indicative values, value cos φ=0,8  
<sup>\*\*\*)</sup> Without limiting protective device (short-circuit maintained 50 ms - 100 ms)  
<sup>\*\*\*\*)</sup> Please consult us for more operations

		125	160	200
Rated capacitor power	400V, sen φ=0,65 kVA	56,2	72	90
Rated breaking capacity	400V AC22A A	375	480	600
Rated making capacity	400V AC22A A	375	480	600
<b>Short - circuit behaviour</b>				
Short - circuit making capacity <sup>*)</sup>	Icm kA (peak)	13	13	13
Short - time withstand current (1 sec) <sup>*)</sup>	Icw kA rms	7	7	7
Number of mechanical operations <sup>**)</sup>	Cycles	10000	10000	10000
Number of electrical operations	Cycles	1000	1000	1000
Maximum weight (3/4 poles)	Kg	1,8/2,1	1,8/2,1	1,9/2,2



There are versions of changeover switches without OFF position: SSF (I - II) = SSD ..... please consult

Also available 4P changeover switches under request, please consult

tests:



## Accessories



Direct handle  
CODE DSL501



External handle included shaft <sup>\*)</sup>  
IP65  
CODE DSLA01



Shafts  
Standard shaft included <sup>\*)</sup>  
L (mm) P (mm) CODE  
177 163...250,5  
Shaft extensions  
Type 1 CODE DS-EP04  
L (mm) P (mm) 250 163...323,5  
Type 2 CODE DS-EP05  
L (mm) P (mm) 387 163...460,5



Auxiliary contacts  
1NO+1NC CODE SSF DS-AU11  
2NO+2NC CODE SSF DS-AU12  
Ie = 16A (resistive loads)  
4A (inductive loads) at 250 Vac.



Terminal shrouds <sup>\*)</sup>  
UP 3P (1 unit) DS-CU02  
DOWN 3P (1 unit) DS-CU03  
UP/DOWN 4P (1 unit) DS-CU04  
DS-CU05 DS-CU06 DS-CU07  
(Only frontal side)



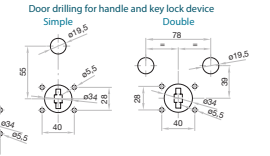
Phase barrier <sup>\*)</sup>  
DS-PB01 DS-PB02  
DS-PB04 DS-PB03  
(1 kit for input or output)



Bridging links  
CODE DSLPC03 (4 units)

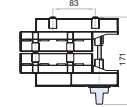
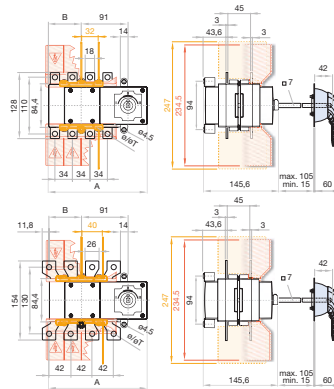


Safety key lock devices  
Simple CODE DSLCBB1  
Double CODE DSLCBB1  
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked



## Dimensions (mm)

Door drilling for external handle



	A	B	Ø T	S max (Cu)	H max (Cu)	L max (Cu)	M
125A	181	192	53	64	10	M8	
160A	181	192	53	64	10	M8	



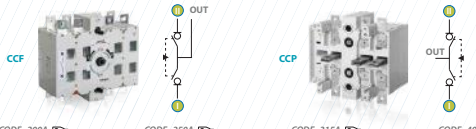
	A	B	Ø T	S max (Cu)	H max (Cu)	L max (Cu)	M
200A	181	192	53	64	10	M10	
3P	181	192	53	64	10	M10	
4P	181	192	53	64	10	M10	



# CCF | CCP

## Changeover switch base mounting 3P - 3P+N

Size 1  
A 200|250|315|400



CCF	3P	CODE-200A	CODE-250A	CODE-315A	CODE-400A
		CCF02003P50	CCF02503P50	CCF03153P50	CCF04003P50
	3P+N	CCF02003N50	CCF02503N50	CCF03153N50	CCF04003N50
CCP	3P	CODE-200A	CODE-250A	CODE-315A	CODE-400A
		CCP02003P50	CCP02503P50	CCP03153P50	CCP04003P50
	3P+N	CCP02003N50	CCP02503N50	CCP03153N50	CCP04003N50



### Technical information



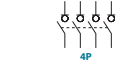
According to IEC 60947-3

		200	250	315	400	
Rated thermal current	Ith in ambient at 40°C	A 200	250	315	400	
Rated insulation voltage	Ui	V 1000	1000	1000	1000	
Rated dielectric strength	50 Hz, 1 min.	V 6000	6000	6000	6000	
Rated impulse withstand voltage	Uimp	kV 8	8	8	8	
AC Rated operational current <sup>(*)</sup>	Ie	Ue 400V AC21A	A 200	250	315	400
(Rated operational frequency 50/60 Hz)		Ue 500V AC21A	A 200	250	315	400
		Ue 690V AC22A	A 200	250	315 <sup>(**)</sup>	400 <sup>(**)</sup>
		Ue 690V AC22A	A 200	250	315	400
		Ue 800V AC20A	A 200	250	315	400
		Ue 1000V AC20A	A 200	250	315	400
AC Rated operational power <sup>(**)</sup>	Pe	3x400V AC23A	kW 80	90	100	125
		3x500V AC23A	kW 78	94	100	125
		3x690V AC23A	kW 69	86	108	138

		200	250	315	400	
Rated capacitor power	400V, sen φ=0,65 kVA	90	104	131	166	
Rated breaking capacity	400V AC22A	A 600	750	945	1200	
Rated making capacity	400V AC22A	A 600	750	945	1200	
Short-circuit making capacity <sup>(**)</sup>	Icm	kA (peak) 12	12	12	12	
Short-time withstand current (1 sec)	Icw	kA rms 8	8	8	8	
Number of mechanical operations <sup>(**)</sup>	Cycles	10000	10000	10000	10000	
Number of electrical operations	400V AC22A	Cycles 1000	1000	1000	1000	
Maximum weight (3/4 poles)		CCF	Kg 4,8/5,3	4,8/5,3	5/5,5	5/5,5
		CCP	Kg 5,3/5,9	5,3/5,9	5,5/6	5,5/6



There are versions of changeover switches without OFF position: "overlapped contacts". CCF (I - II) = CCS, please consult



Also available 4P changeover switches under request, please consult

<sup>(\*)</sup> Other voltages and / or utilization categories; please consult  
<sup>(\*\*)</sup> Indicative values, value cos φ=0,8  
<sup>(\*\*\*)</sup> Without limiting protective device (short-circuit maintained 50 ms - 100 ms.)  
<sup>(\*\*\*\*)</sup> Please consult us for more operations  
<sup>(\*\*\*)</sup> AC228

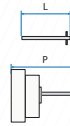
### Accessories



Direct handle  
CODE DCCU11



External handle included shaft <sup>(\*\*\*)</sup>  
IP65  
CODE DCCLA11



Shafts  
Standard shaft included <sup>(\*\*\*)</sup>  
L (mm) | P (mm) | CODE  
227 | 166...293 |  
Type 1  
L (mm) | P (mm) | CODE  
375 | 166...442 | DS-EP14  
Shaft extensions  
Type 2  
L (mm) | P (mm) | CODE  
536 | 166...602 | DS-EP15



Rear protective plate  
3P DCCP11 | 4P DCCP12



Terminal shrouds  
Inputs POS. I | POS. II | POS. III | Common output  
3P | 3P | 3P+N | 3P | 3P+N  
DM2CU12 | DM2CU11 | DM2CU13 | DCCCU11 | DCCCU12



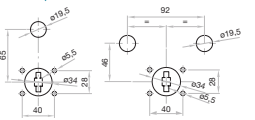
Auxiliary contacts  
Simple CODE DSLAU01  
2NO+2NC CODE DSLAU02  
Ie = 16A (resistive loads)  
4A (inductive loads) at 250Vac.



Safety key lock device  
Simple CODE DSLCB11  
Double CODE DSLCF11

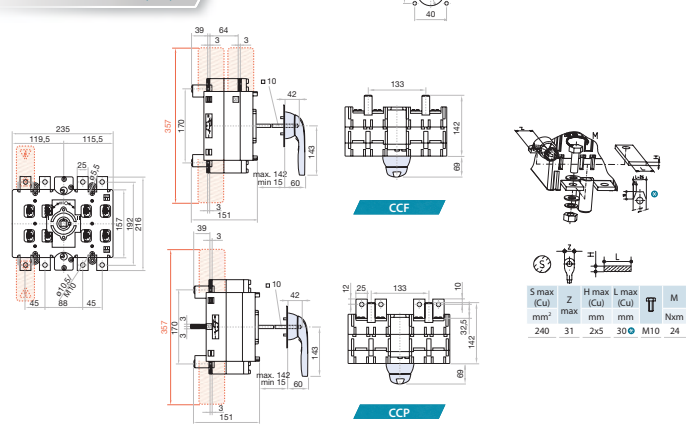
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON", the key can only be removed with the handle locked)

Door drilling for handle and key lock device



### Dimensions (mm)

Door drilling for external handle



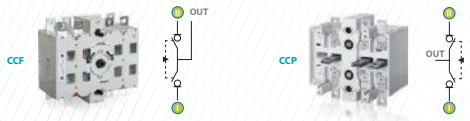
S max (Cu)	Z max (mm)	H max (Cu)	L max (Cu)	M	T
240	21	2x5	30	M10	24



# CCF | CCP

## Changeover switch base mounting 3P - 3P+N

Size 2  
A 500|630|800



CCF	3P	CODE-500A	CCF05003PS0	CODE-630A	CCF06303PS0	CODE-800A	CCF08003PS0
	3P+N		CCF05003NS0		CCF06303NS0		CCF08003NS0
CCP	3P		CCP05003PS0		CCP06303PS0		CCP08003PS0
	3P+N		CCP05003NS0		CCP06303NS0		CCP08003NS0



### Technical information



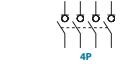
According to IEC 60947-3

			500	630	800
Rated thermal current	Ith	in ambient at 40°C	A 500	630	800
Rated insulation voltage	Ui	V	1000	1000	1000
Rated dielectric strength		50 Hz, 1 min. V	8000	8000	8000
Rated impulse withstand voltage	Uimp	kV	12	12	12
AC Rated operational current <sup>(*)</sup>	Ie	Ue 400V AC21A A	500	630	800
(Rated operational frequency 50/60 Hz)		Ue 500V AC21A A	500	630	800 <sup>(**)</sup>
		Ue 690V AC21A A	500	630	800 <sup>(**)</sup>
		Ue 690V AC22A A	400	500	630 <sup>(**)</sup>
		Ue 800V AC20A A	500	630	800
		Ue 1000V AC20A A	500	630	800
AC Rated operational power <sup>(**)</sup>	Pe	3x400V AC23A kW	200	250	315
		3x500V AC23A kW	156	197	250
		3x690V AC23A kW	173	216	272

			500	630	800
Rated capacitor power		400V, sen φ=0,65 kVar	208	262	333
Rated breaking capacity		400V AC22A A	1500	1890	2400
Rated making capacity		400V AC22A A	1500	1890	2400
<b>Short-circuit behaviour</b>					
Short-circuit making capacity <sup>(**)</sup>	Icm	kA (peak)	20	20	20
Short-time withstand current (1 sec) <sup>(**)</sup>	Icw	kA rms	13	13	13
Number of mechanical operations <sup>(**)</sup>		Cycles	10000	10000	10000
Number of electrical operations		Cycles	1000	1000	100 <sup>(**)</sup>
Maximum weight (3/4 poles)		Kg	11,5/12,6/11,5/12,6/11,9/13,2		
		Kg	12,8/14,3/12,8/14,3	13/14,6	



There are versions of changeover switches without OFF position "overlapped contacts":  
CCF (I-I+II-II) = CCS, please consult



Also available 4P changeover switches under request, please consult

<sup>(\*)</sup> Other voltages and / or utilization categories, please consult  
<sup>(\*\*)</sup> Indicative values, value cos φ=0,8  
<sup>(\*\*)</sup> Without limiting protective device (short-circuit maintained 50 ms - 100 ms.)  
<sup>(\*\*)</sup> Please consult us for more operations  
<sup>(\*\*)</sup> AC228

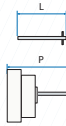
### Accessories



Direct handle  
CODE DCCLU21



External handle included shaft <sup>(\*\*\*)</sup>  
IP65  
CODE DCCLA21



Shafts  
Standard shaft included <sup>(\*\*\*)</sup>  
L (mm) | P (mm) | CODE  
195 | 195...272

#### Shaft extensions

Type 1			CODE
L (mm)	P (mm)		DS-EP23
345	195...422		
Type 2			CODE
L (mm)	P (mm)		DS-EP24
535	195...612		



Rear protective plate  
3P DCCPP21 | 4P DCCPP22



### Terminal shrouds

Inputs	Common output
POS. I 3P   POS. II 3P   POS. III 3P+N	3P   3P+N
DM2CU22   DM2CU21   DM2CU23	DCCCU21   DCCCU22



### Auxiliary contacts

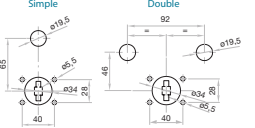
1NO+1NC CODE DSLAU01  
2NO+2NC CODE DSLAU02  
Ie = 16A (resistive loads)  
4A (inductive loads) at 250Vac.



### Safety key lock device

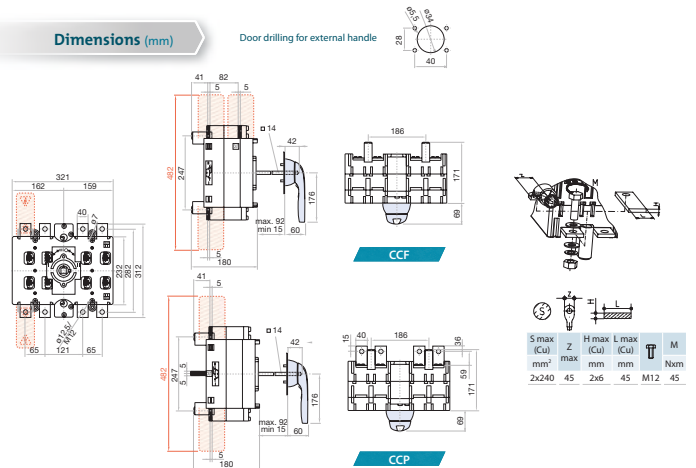
Simple CODE DSLCB21  
Double CODE DSLCF21  
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON", the key can only be removed with the handle locked)

#### Door drilling for handle and key lock device



### Dimensions (mm)

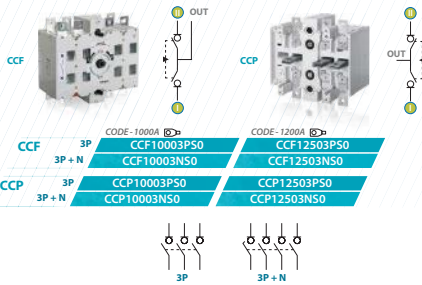
Door drilling for external handle



# CCF | CCP

## Changeover switch base mounting 3P - 3P+N

Size 3  
A 1000 | 1250



### Technical information



According to IEC 60947-3

			1000	1250
Rated thermal current	Ith	in ambient at 40°C	A	1000 1250
Rated insulation voltage	Ui		V	1000 1000
Rated dielectric strength	50 Hz, 1 min.		V	8000 8000
Rated impulse withstand voltage	Uimp		kV	12 12
AC Rated operational current <sup>(1)</sup>	Ie	Ue 400V AC21A A	1000 1250	1000 1250
(Rated operational frequency 50/60 Hz)		Ue 400V AC22A A	1000 1250	1250 <sup>(2)</sup> 1250
		Ue 500V AC21A A	1000 1250	1000 1250
		Ue 500V AC22A A	1000 1250	1250 <sup>(2)</sup> 1250
		Ue 690V AC21A A	1000 1250	1000 1250
		Ue 690V AC22A A	800 1000 <sup>(2)</sup>	800 1000
		Ue 800V AC20A A	1000 1250	1000 1250
		Ue 1000V AC20A A	1000 1250	1000 1250
AC Rated operational power <sup>(3)</sup>	Pe	3x400V AC23A kW	501 626	501 626
		3x500V AC23A kW	501 626	501 626
		3x690V AC23A kW	544 691	544 691

			1000	1250
Rated capacitor power	400V, sen φ=0,65	kVA <sub>r</sub>	416	520
Rated breaking capacity	400V AC22A	A	3000	3750
Rated making capacity	400V AC22A	A	3000	3750
<b>Short-circuit behaviour</b>				
Short-circuit making capacity <sup>(4)</sup>	Icm	kA (peak)	32	32
Short-time withstand current (1 sec)	Icw	kA rms	25	25
Number of mechanical operations <sup>(5)</sup>		Cycles	10000	10000
Number of electrical operations	400V AC22A	Cycles	500	100 <sup>(6)</sup>
Maximum weight (3/4 poles)	CCF	Kg	22,5 / 25	24,3 / 27,3
	CCP	Kg	25 / 28,3	26 / 29,7



There are versions of changeover switches without OFF position: "overlapped contacts": CCF (I-IH-II) = CCS, please consult



Also available 4P changeover switches under request, please consult

<sup>(1)</sup> Other voltages and / or utilization categories; please consult  
<sup>(2)</sup> Indicative values, value cos φ=0,8  
<sup>(3)</sup> Without limiting protective device (short-circuit maintained 50 ms. - 100 ms.)  
<sup>(4)</sup> Please consult us for more operations  
<sup>(5)</sup> AC228

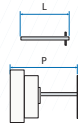
### Accessories



Direct handle  
CODE: DCCU31



External handle included shaft <sup>(1)</sup>  
CODE: DCCLA31



Standard shaft included <sup>(1)</sup>  
L (mm) | P (mm) | CODE  
186 | 223...298

Shaft extensions  
Type 1  
L (mm) | P (mm) | CODE  
345 | 223...457 | DS-EP23

Type 2  
L (mm) | P (mm) | CODE  
535 | 223...645 | DS-EP24



Rear protective plate  
3P DCCPP31 | 4P DCCPP32



Terminal shrouds

Inputs	Common output
POS. I 3P   POS. II 3P   POS. III 3P+N	3P   3P+N
DM2CU32   DM2CU31   DM2CU33	DCCCU31   DCCCU32



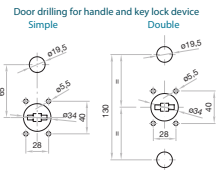
Auxiliary contacts

1NO+1NC CODE: DSLAU01  
2NO+2NC CODE: DSLAU02  
Ie = 16A (resistive loads)  
4A (inductive loads) at 250Vac.



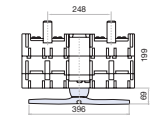
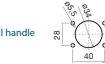
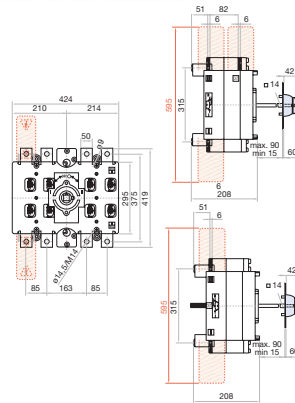
Safety key lock device

Simple CODE: DSLCB31  
Double CODE: DSLCF31  
For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON", the key can only be removed with the handle locked)

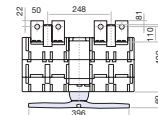


### Dimensions (mm)

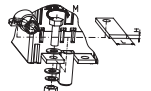
Door drilling for external handle



CCF



CCP

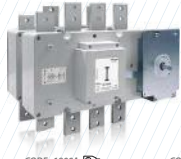


H max	L max	M
(C4)	(C4)	Nm
mm	mm	mm
2x10	60	M14 55



# S5F Changeover switch base mounting 3P - 3P+N

Size 4  
A 1600|1800|2000



3P	CODE-1600A  SSF16003PS0	CODE-1800A  SSF18003PS0	CODE-2000A  SSF20003PDS0
3P+N	SSF16003NS0	SSF18003NS0	SSF20003NDS0



## Technical information



According to IEC 60947-3

	1600	1800	2000
Rated thermal current Ith in ambient at 40°C	A 1600	1800	2000
Rated insulation voltage Ui	V 1000	1000	1000
Rated dielectric strength	50 Hz, 1 min. V 10000	10000	10000
Rated impulse withstand voltage Uimp	kV 12	12	12
AC Rated operational current <sup>*)</sup>	Ie Ue 400V AC21A A 1600	1800	2000
(Rated operational frequency 50/60 Hz)	Ue 400V AC22A A 1600	1800	2000
AC Rated operational power <sup>*)</sup>	Pe 3x400V AC23A kW 554,2	692,8	692,8
	3x500V AC23A kW 623,5	692,8	692,8
	3x690V AC23A kW 602,3	764,8	764,8

	1600	1800	2000
Rated capacitor power	400V, sen φ=0,65 kVar 450,03	562,9	562,9
Rated breaking capacity	400V AC22A A 4800	5400	6000
Rated making capacity	400V AC22A A 4800	5400	6000
<b>Short - circuit behaviour</b>			
Short - circuit making capacity <sup>*)</sup>	Icm kA (peak) 75	75	75
Short - time withstand current (1 sec) Icw	kA rms 50	50	50
Number of mechanical operations <sup>*)</sup>	Cycles 3000	3000	3000
Number of electrical operations	400V AC22A A 500	500	500
Maximum weight (3/4 poles) (without bridging links)	Kg 42,9/47,342,9/47,342,9/47,3		



There are versions of changeover switches without OFF position: SSF (I+II) = SSD....., please consult



Also available 4P changeover switches under request, please consult

<sup>\*)</sup> Other voltages and/or utilization categories; please consult  
<sup>\*)</sup> Indicative values, value cos φ=0,8  
<sup>\*)</sup> Without limiting protective device (short - circuit maintained 50 ms - 100 ms)  
<sup>\*)</sup> Please consult us for more operations

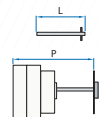
## Accessories



Direct handle  
CODE DSLU32



External handle included shaft <sup>\*)</sup>  
IP65  
CODE DSLA31



Shafts  
Standard shaft included <sup>\*)</sup>  
L (mm) 239 | P (mm) 418...573  
Shaft extensions  
Consult



Terminal shrouds  
CODE DS-CLU41  
(1 kit for input or output, only front side)



Bridging links <sup>\*)</sup>  
CODE DSLPC42 (4 units)



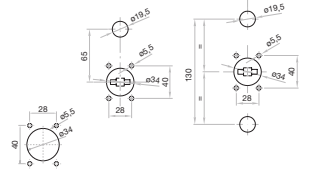
Auxiliary contacts  
1NO+1NC CODE DS-AU11  
2NO+2NC CODE DS-AU12  
Ie = 16A (resistive loads)  
4A (inductive loads) at 250Vac.



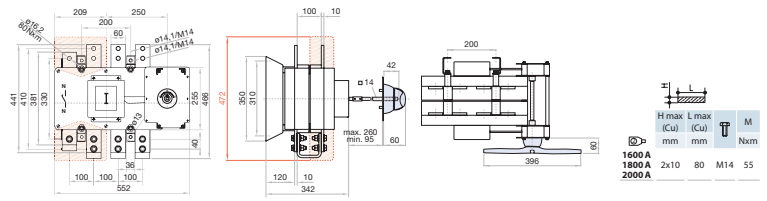
Safety key lock device  
Simple CODE DSLCB41  
Double CODE DSLCF41

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON"), the key can only be removed with the handle locked

Door drilling for handle and key lock device



## Dimensions (mm)

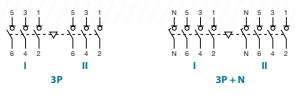


# S5F Changeover switch base mounting 3P - 3P+N

Size 5  
A 2000|2500|3150



CODE-2000A SSF20003PP0 SSF20003NP0  
CODE-2500A SSF25003PP0 SSF25003NP0  
CODE-3150A SSF31503PP0 SSF31503NP0



## Technical information



According to IEC 60947-3

			2000	2500	3150
Rated thermal current	Ith	in ambient at 40°C	A 2000	2500	3150
Rated insulation voltage	Ui		V 1000	1000	1000
Rated dielectric strength		50 Hz, 1 min.	V 10000	10000	10000
Rated impulse withstand voltage	Uimp		kV 8	8	8
AC Rated operational current <sup>(1)</sup> (Rated operational frequency 50/60 Hz)	Ie	Ue 400V AC21A	A 2000	2500	3150
		Ue 400V AC22A	A 2000	2500	2500 <sup>(2)</sup>
		Ue 500V AC21A	A 2000	2500	3150
		Ue 500V AC22A	A 2000 <sup>(2)</sup>	2000 <sup>(2)</sup>	2200 <sup>(2)</sup>
		Ue 690V AC21A	A 2000	2500	2500
	Ue 690V AC22A	A 2000 <sup>(2)</sup>	2000 <sup>(2)</sup>	2000 <sup>(2)</sup>	
	Ue 800V AC20A	A 2000	2500	3150	
	Ue 1000V AC20A	A 2000	2500	3150	
AC Rated operational power <sup>(3)</sup>	Pe	3x400V AC23A	kW 886,8	997,6	1108,5
		3x500V AC23A	kW 866	1108,5	1108,5
		3x690V AC23A	kW 956	956	956

			2000	2500	3150
Rated capacitor power		400V, sen φ=0,65	kVar 720,5	810,5	900,6
Rated breaking capacity		400V AC22A	A 6000	7500	9450
Rated making capacity		400V AC22A	A 6000	7500	9450
<b>Short-circuit behaviour</b>					
Short-circuit making capacity <sup>(4)</sup>	Icm	kA (peak)	100	100	100
Short-time withstand current (1 sec)	Icw	kA rms	50	50	50
<b>Number of electrical operations <sup>(5)</sup></b>					
Number of mechanical operations <sup>(6)</sup>		Cycles	2500	2500	2500
Number of electrical operations	400V AC22A	Cycles	500	500	500
<b>Maximum weight (3/4 poles)</b>					
		Kg	Consult		



There are versions of changeover switches without OFF 0 position: SSF (I=III) = SSD, please consult

Also available 4P changeover switches under request, please consult

<sup>(1)</sup> Other voltages and / or utilization categories; please consult  
<sup>(2)</sup> Indicative values, value cos φ=0,8  
<sup>(3)</sup> Without limiting protective device (short-circuit maintained 50 ms. - 100 ms.)  
<sup>(4)</sup> Please consult us for more operations  
<sup>(5)</sup> AC22B

## Accessories

**Direct handle**  
(Slide bar)  
CODE DS-EI61

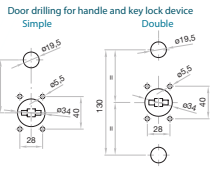
**External handle** included shaft <sup>(1)</sup>  
(Slide bar)  
CODE DSLENS1

**Shafts**  
Standard shaft included <sup>(1)</sup>  
L (mm) 333 P (mm) 788...938  
Shaft extensions  
Consult

**Auxiliary contacts**  
1NO+1NC CODE DS-AU11  
2NO+2NC CODE DS-AU12  
Ie = 16 A (resistive loads)  
4 A (inductive loads) at 250 Vac.

**Safety key lock device**  
Simple CODE DSLCB41  
Double CODE DSLCF41

For external handle, lock the handle by means of a key in position "OFF" (under request, in "ON", the key can only be removed with the handle locked)



## Dimensions (mm)

