

Cam switches

Complete switches, 32 to 150 A

Catalog
April
2004



Cam switches

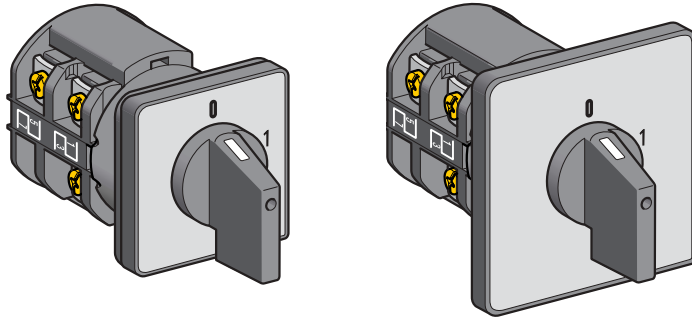
Complete switches, 32 to 150 A

The range of K30 to K150 cam switches (32 to 150 A ratings) comprises only complete switches. These products are more specifically designed for direct control of simple machines.

Complete switches

- OFF-ON switches
- starter switches
- changeover switches

Front mounting

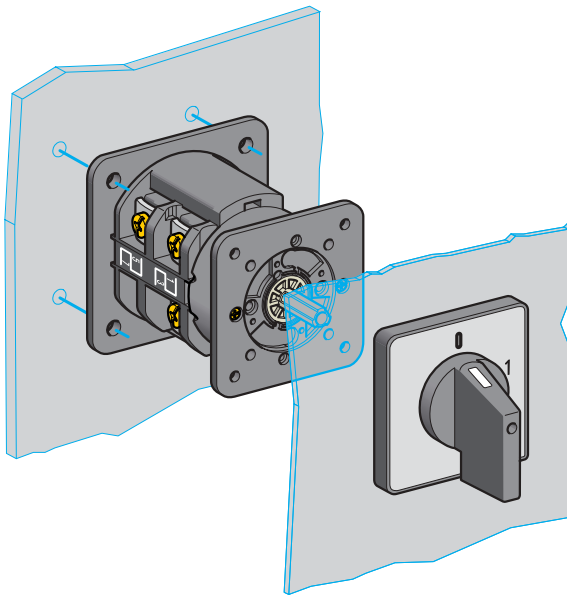


By 4 holes
with 64 x 64 mm front plate
32 to 63 A ratings
K30, K50 and K63

By 4 holes
with 88 x 88 mm front plate
115 to 150 A ratings
K115 and K150

"Multifixing" mounting method

Rear mounting



By 4 holes on 48 mm centres
32 to 63 A ratings
K30, K50 and K63

By 4 holes on 68 mm centres
115 to 150 A ratings
K115 and K150

Cam switches

Complete switches, 32 to 150 A

Type		K30	K50	K63	K115	K150				
Environment										
Conforming to standards	IEC/EN 60947-3									
Approvals	cULus	120 V - 1-phase	2 hp	3 hp	3 hp	5 hp	7.5 hp			
		240 V - 1-phase	5 hp	7.5 hp	7.5 hp	10 hp	15 hp			
		240 V - 3-phase	5 ph	7.5 ph	10 hp	20 hp	25 hp			
		480 V - 3-phase	20 hp	25 hp	25 hp	30 hp	40 hp			
Protective treatment	Standard version: "TC"									
Ambient air temperature	Operation	- 25...+ 55 °C								
	Storage	- 40...+ 70 °C								
Electric shock protection	Class II, conforming to IEC 536 and NF C 20-030									
Degree of protection conforming to IEC 529 and NF C 20-010	IP 40									
Mechanical durability	300 000 operating cycles									
Contact block characteristics										
Rated insulation voltage	Ui = 690 V conforming to IEC/EN 60947-1 - Degree of pollution 3									
Conventional thermal current	Screw clamp connections	In open air	Ith = 32 A	Ith = 50 A	Ith = 63 A	Ith = 115 A	Ith = 150 A			
Rated operational characteristics	to IEC/EN 60947-5-1	~ AC-15	220...240 V	14 A	16 A	–	–	–		
			380...440 V	6 A	7 A	–	–	–		
	to IEC/EN 60947-3	~ AC-3	3-phase	220...240 V	5.5 KW	7.5 KW	11 KW	15 KW	22 KW	
				3-pole	380...440 V	11 KW	15 KW	18.5 KW	30 KW	37 KW
			1-phase	110 V	2.2 KW	2.5 KW	3 KW	3.7 KW	5.5 KW	
				2-pole	220...240 V	4 KW	5.5 KW	6 KW	7.5 KW	11 KW
			~ AC-23 A	3-phase	380...440 V	5.5 KW	7.5 KW	11 KW	13 KW	18.5 KW
					3-pole	220...240 V	7.5 KW	11 KW	15 KW	30 KW
		1-phase		380...440 V	15 KW	22 KW	30 KW	45 KW	75 KW	
				2-pole	660...690 V	15 KW	22 KW	55 KW	65 KW	65 KW
		~ AC-21 A		1-phase	110 V	2.2 KW	2.5 KW	4 KW	5.5 KW	11 KW
					2-pole	220...240 V	4 KW	5.5 KW	10 KW	15 KW
					380...440 V	7.5 KW	11 KW	18.5 KW	22 KW	37 KW
						32 A	40 A	63 A	100 A	150 A
Rated conditional short-circuit current	Power: kA	5	5	10	15	25				
Short-circuit protection	gG cartridge fuse, A	50	63	80	125	200				
Rated impulse withstand voltage	U imp = 6 kV conforming to IEC/EN 947-1									
Contact operation	Slow break (with positive opening operation)									
Cabling	Screw and captive cable clamp terminals (For 2 x 2.8 x 0.8 mm push-on connectors, please consult your Regional Sales Office)									
	Solid cable		2 x 6 mm ²	2 x 10 mm ²	2 x 16 mm ²	1 x 35 mm ²	1 x 70 mm ²			
	Flexible cable with or without cable end		2 x 4 mm ²	2 x 6 mm ²	2 x 10 mm ²	1 x 25 mm ²	1 x 50 mm ²			
	Tightening torque		1.2 N.m	2 N.m	2.5 N.m	2.5 N.m	2.5 N.m			
Switching capacity ---	Number of contacts in series	1	2	3						
	Resistive load V T ≤ 1 ms	24	48	70	32 A	50 A	63 A	115 A	150 A	
		48	95	140	32 A	40 A	63 A	100 A	150 A	
		60	120	180	23 A	37 A	30 A	–	–	
		110	220	330	6.5 A	–	–	–	–	
		220	440	660	1.2 A	–	–	–	–	
		440	660	–	0.4 A	–	–	–	–	
	Inductive load V T = 50 ms	24	48	70	32 A	40 A	63 A	100 A	150 A	
		30	60	90	25 A	30 A	55 A	33 A	50 A	
		48	95	140	16 A	20 A	20 A	–	–	
		60	120	180	11 A	15 A	–	–	–	
		110	220	330	3.2 A	3.5 A	–	–	–	

Cam switches

Complete switches, 32 to 150 A

With 64 x 64 mm front plate (ratings 32 to 63 A)

and 88 x 88 mm front plate (ratings 115 and 150 A)

OFF-ON switches

Front mounting



K30-C003AP



K50-C003AP

Connection scheme and switching scheme	Marking & switch position	Number of poles	Thermal current (Ith)	Reference	Weight
			A		
		1	32	K30-A001AP	0.130
			50	K50-A001AP	0.175
		2	32	K30-B002AP	0.170
			50	K50-B002AP	0.215
		3	32	K30-C003AP	0.224
			50	K50-C003AP	0.275
		6	32	K30-F006AP	0.425
			50	K50-F006AP	0.530
		6	63	K63-F006AP	0.590

Cam switches

Complete switches, 32 to 150 A
 With 64 x 64 mm front plate (32 to 63 A ratings)
 and 88 x 88 mm front plate (115 and 150 A ratings)



K63-C003HP



K150-D004HP

ON-OFF switches

Front mounting

Connection scheme and switching scheme	Marking & switch position	Number of poles	Thermal current	Reference	Weight
			(I _{th}) A		
		3	32	K30-C003HP	0.170
			50	K50-C003HP	0.275
			63	K63-C003HP	0.345
			115	K115-C003HP	0.680
			150	K150-C003HP	0.790
		4	32	K30-D004HP	0.250
			50	K50-D004HP	0.305
			63	K63-D004HP	0.390
			115	K115-D004HP	0.745
			150	K150-D004HP	0.880

Rear mounting

		3	32	K30-C503HP	0.250
			50	K50-C503HP	0.300
			63	K63-C503HP	0.370
			115	K115-C503HP	0.720
			150	K150-C503HP	0.830
		4	32	K30-D504HP	0.280
			50	K50-D504HP	0.350
			63	K63-D504HP	0.440
			115	K115-D504HP	0.790
			150	K150-D504HP	0.930

Cam switches

Complete switches, 32 to 150 A
 With 64 x 64 mm front plate (32 to 63 A ratings)
 and 88 x 88 mm front plate (115 and 150 A ratings)

Changeover switches with "O" position

Front mounting

Connection scheme and switching scheme	Marking & switch position	Number of poles	Thermal current	Reference	Weight				
			(I _{th})						
			A		kg				
		1	32	K30-B001UP	0.170				
			50	K50-B001UP	0.215				
			150	K150-B001UP	0.790				
		2		32		K30-D002UP	0.250		
					50		K50-D002UP	0.305	
				3		32		K30-F003UP	0.425
							50		K50-F003UP
						63		K63-F003UP	0.590
							115		K115-F003UP
		4		32		K30-H004UP	0.485		
					50		K50-H004UP	0.610	
				63		K63-H004UP	0.680		
					115		K115-H004UP	0.750	
				150		K150-H004UP	0.880		



K50-B001UP

Changeover switches without "O" position

Front mounting

		3	32	K30-F013UP	0.425		
			50	K50-F013UP	0.530		
			63	K63-F013UP	0.590		
		115		K115-F013UP	0.645		
			150		K150-F013UP	0.760	
		4		32		K30-H014UP	0.485
					50		K50-H014UP
				63		K63-H014UP	0.680
					115		K115-H014UP
				150			K150-H014UP



K63-F013UP

Cam switches

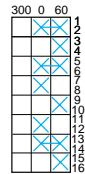
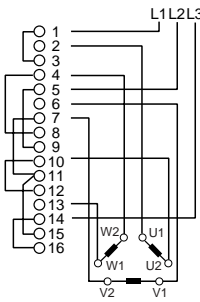
Complete switches, 32 to 150 A
 With 64 x 64 mm front plate (32 to 63 A ratings)
 and 88 x 88 mm front plate (115 and 150 A ratings)

Star-delta switches

Front mounting



K50-H001YP



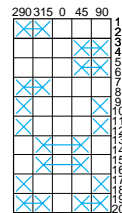
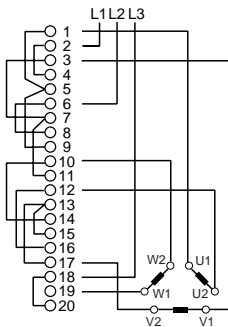
Connection scheme and switching scheme	Marking & switch position	Number of poles	Thermal current (Ith) A	Reference	Weight kg
		3	32	<u>K30-H001YP</u>	0.485
			50	<u>K50-H001YP</u>	0.610
			63	<u>K63-H001YP</u>	0.680
			115	<u>K115-H001YP</u>	0.750
			150	<u>K150-H001YP</u>	0.880

Reversing star-delta switches

Front mounting



K115-K006YP



Connection scheme and switching scheme	Marking & switch position	Number of poles	Thermal current (Ith) A	Reference	Weight kg
		3	32	<u>K30-K006YP</u>	0.560
			50	<u>K50-K006YP</u>	0.690
			63	<u>K63-K006YP</u>	0.770
			115	<u>K115-K006YP</u>	0.880
			150	<u>K150-K006YP</u>	0.990

Cam switches

Complete switches, 32 to 150 A
 With 64 x 64 mm front plate (32 to 63 A ratings)
 and 88 x 88 mm front plate (115 and 150 A ratings)
 Accessories

Pole change switches for 2-speed motors (for motors with tapped "Dahlander" windings)

Front mounting



K63-H004PP

Connection scheme	Marking & switch position	Number of poles	Thermal current A	Reference	Weight kg
		3	32	K30-H004PP	0.485
			50	K50-H004PP	0.610
			63	K63-H004PP	0.680

Reversing switches with "O" position

Front mounting



K150-D002WP

Connection scheme	Marking & switch position	Number of poles	Thermal current A	Reference	Weight kg
		2	32	K30-D002WP	0.250
			50	K50-D002WP	0.305
			63	K63-D002WP	0.390
			115	K115-D002WP	0.745
			150	K150-D002WP	0.880
		3	32	K30-E003WP	0.385
			50	K50-E003WP	0.485
			63	K63-E003WP	0.540
			115	K115-E003WP	0.590
			150	K150-E003WP	0.710

Accessories

Description	For use with	Sold in lots of	Unit reference	Weight kg
Legend holders With blank legend,	Square heads 64 x 64 mm	5	KZN-15	0.020
	Square heads 88 x 88 mm	5	KZN-103	0.040
Blank legends for legend holder	KZN-15	5	KZ-77N	0.025
	KZN-103	5	KZ-100N	0.040
Blank legends for metallic finish front plate	64 x 64	5	KZN-21	0.035
	88 x 88	5	KZN-24	0.045

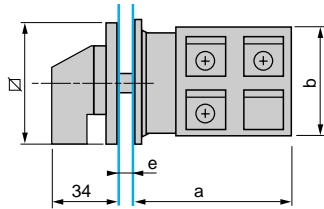
Cam switches

Complete switches, 32 to 150 A

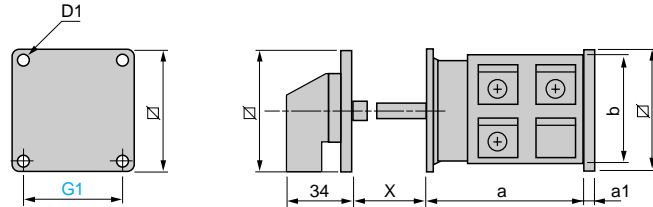
With 64 x 64 mm front plate (32 to 63 A ratings)
and 88 x 88 mm front plate (115 and 150 A ratings)

Cam switches from 32 to 150 A

Front mounting



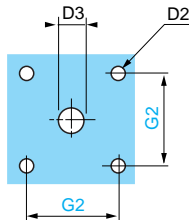
Rear mounting



	K30-A K30-B	K30-C K30-D	K30-E K30-F	K30-H	K30-K	K50-A K50-B	K50-C, K50-D	K50-E K50-F	K50-H	K50-K	K63-A K63-B	K63-C K63-D	K63-E K63-F	K63-H	K63-K
a	41	53.7	66.4	79.1	104.5	45.8	63.3	80.8	98.3	133.3	49.8	71.3	92.8	114.3	157.3
a1	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
b	58	58	58	58	58	60	60	60	60	60	66	66	66	66	66
∅	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64
D1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	5.4	5.4	5.4	5.4	5.4
G1	-	48	-	-	-	-	48	-	-	-	-	48	-	-	-
X	-	78 to 97	-	-	-	-	78 to 97	-	-	-	-	78 to 97	-	-	-
	K115-A K115-B	K115-C K115-D	K115-E K115-F	K115-H	K115-K	K150-A K150-B	K150-C K150-D	K150-E K150-F	K150-H	K150-K					
a	61.5	88	114.5	141	194	67.5	100	132.5	165	230					
a1	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9					
b	84	84	84	84	84	88	88	88	88	88					
∅	88	88	88	88	88	88	88	88	88	88					
D1	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4					
G1	-	68	-	-	-	-	68	-	-	-					
X	-	12...150	-	-	-	-	12...150	-	-	-					

e : thickness of support 0.5 to 5.5 mm.

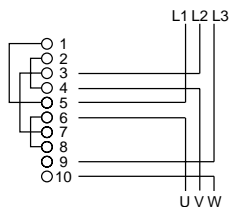
Support drilling



	K30/K50/K63	K115/K150
D2	4.5	6
D3	10	13
G2	48	68

Contact functions: how to understand the conventions used

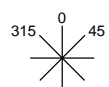
Link positions (factory mounted)



Graphic representation of switching positions and spring return to "O" position



Angular position of switch



Schneider Electric Industries SAS

Headquarters

89, bd Franklin Roosevelt
F - 92506 Rueil Malmaison Cedex

<http://www.schneider-electric.com>

Owing to changes in standards and equipment, the characteristics given in the text and images in this document are not binding until they have been confirmed with us.

Production : Schneider Electric Industries
Photos : Schneider Electric Industries
Printed by : CCI



9003CT0402

April 2004