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**Initial Order No**

**Type Code** OC25G16PNBN00NST44

**Order Code** 1SCA138368R1001

**EAN Code** 6417019667379

**Customer Reference**

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## Cam switch configuration

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Configuration type	Cam switch configuration
Ampere type	IEC / cULus
Current rating (Ith)	25

### Mounting type & Handle type

Chamber System	Normal
Switch Mounting	Door
Handle Mounting	Snap-on
Handle Type	Nose handle
Front Plate	51x51mm / 2.01x2.01in
Handle Colour	Black
Handle IP-protection	IP66

### Connections & Options

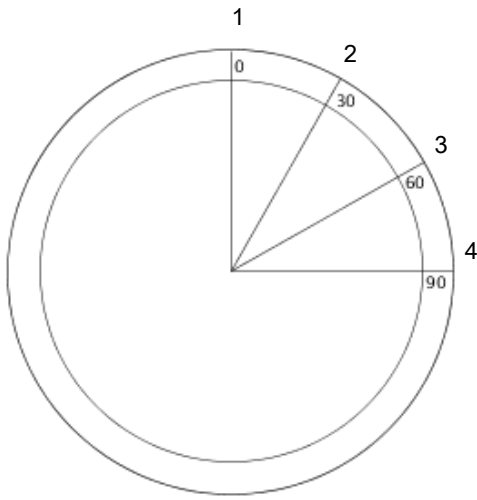
Connections	Standard box (tunnel) terminals
Gold plated contacts	-
Contact chambers rotated 90 degrees	No
Additional front lettering plate	-
Metallic handle shaft	-

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### Front plate

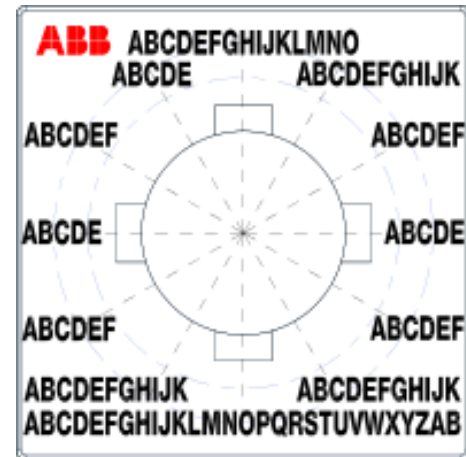
Spring Return Function	-
First position	0
Last position	90
Total number of steps	4
Angle system	30 degrees
Stop at last position	Yes

### Front plate texts & locking



### Text layout

Single line  
English letters  
With ABB logo





### Contact diagram (1)

Number of contacts (1) 16

Use late break / early make -

1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31  
/ / / / / / / / / / / / / / / /  
2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32

<b>0</b>	1	X				X				X				X			
<b>30</b>	2		X				X				X				X		
<b>60</b>	3			X				X				X				X	
<b>90</b>	4				X				X				X				X

### Connection between

- 2-4
- 6-8
- 4-8
- 10-12
- 14-16
- 12-16
- 18-20
- 22-24
- 20-24
- 26-28
- 28-32
- 30-32

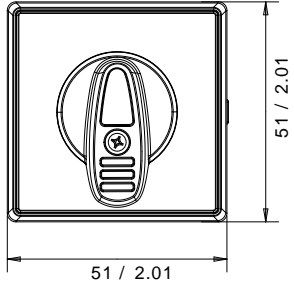


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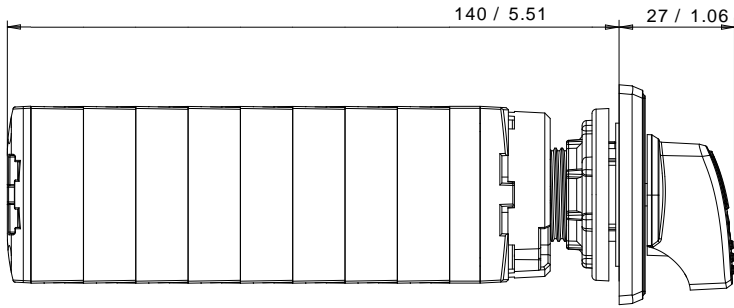
## Dimension images

mm / in      Millimeters [mm]  
Inches [in]

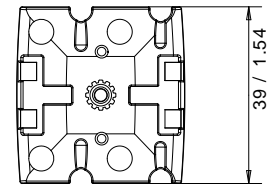
Front view



Side view



Bottom view



Mounting instructions

<p><b>OC 25 Snap on mounting</b> mm</p>	
<p><b>OCGNST!</b> <b>OCGADR</b></p>	<p>OR</p> <p>with accessory <b>OCGADR</b></p>
<p><b>Terminal Tightening Torque</b> OC 25 1,2Nm(PH1) <b>Wire Range-No 16 - 12AWG</b> 1.5 - 4mm<sup>2</sup></p>	<p>Door thickness 0,5 - 5,5 mm</p>



## Technical data, Rotary cam switches OC 10...25 Amperes

### Ratings according to IEC60947-3

				OC10	OC25	
Rated insulation voltage	$U_i$	Pollution degree 3	V	500	690	
Rated impulse withstand voltage	$U_{imp}$		kV	2,5	4	
Rated thermal current	$I_{th}$		A	10	25	
Rated conditional short circuit current	$I_p$ (r.m.s.)		kA	1 <sup>1)</sup>	7 <sup>1)</sup>	
Max back-up fuse link			A	10	25	
Rated short time withstand current	r.m.s. -value $I_{sw}$	1s	A	120	300	
		3s	A	70	173	
Conditional short circuit current	$I_q$	500 V	kA	3	-	
		690 V	kA	-	7	
Rated operational current	AC-21A 1 and 3-phase	400 V	A	10	25	
		Up to 500V	A	10	20	
	500...690 V	A	-	20		
	AC-23A 3-phase	230 V	A	7,6	15	
		400 V	A	6,5	15	
		500 V	A	-	8,1	
		690 V	A	-	5,9	
	AC-23A 1-phase	230 V	A	7,2	8,7	
		400 V	A	6,1	8,3	
	AC-3 3-phase	230 V	A	7,6	12	
		400 V	A	4,9	12	
		500 V	A	-	6,8	
		690 V	A	-	4,9	
	AC-3 1-phase	230 V	A	5,3	7,2	
		400 V	A	4,2	7,2	
	AC-4 3-phase	380...440 V	A	1,4	7,7	
		660...690 V	A	-	3,8	
	Rated operational power <sup>4)</sup>	AC-23A 3-phase	230 V	kW	1,8	2,6
			400 V	kW	3	7,5
			500 V	kW	-	4,8
690 V			kW	-	4,8	
AC-23A 1-phase		230 V	kW	0,8	0,9	
		400 V	kW	1,1	1,5	
AC-3 3-phase		230 V	kW	1,8	2,2	
		400 V	kW	2,2	5,5	
		500 V	kW	-	4	
		690 V	kW	-	4	
AC-3 1-phase		230 V	kW	0,6	0,8	
		400 V	kW	0,8	1,3	
AC-4 3-phase		380...440 V	kW	0,55	4	
		660...690 V	kW	-	3	
Rated operational current, DC-21A		1-contact in series	48 V	A	10	25
Time constant 0...1ms		1-contact in series	110 V	A	0,7	1,5
		1-contact in series	220 V	A	0,3	0,5
		2-contact in series	60 V	A	10	20
		3-contact in series	110 V	A	10	20
		5-contact in series	220 V	A	10	20
	9-contact in series	440 V	A	10	20	
	10-contact in series	600 V	A	-	16	
Rated operational current, DC-22A	1-contact in series	24 V	A	6	10	
Time constant 1...50ms	1-contact in series	30 V	A	3	4,5	
	1-contact in series	40 V	A	3	4,5	
	2-contact in series	60 V	A	3	4,5	
	3-contact in series	110 V	A	3	4,5	
	5-contact in series	220 V	A	3	4,5	



Rated operational current, DC-13	1 contact in series	48 V	A	-	3
	1 contact in series	110 V	A	-	0,8
	1 contact in series	220 V	A	-	0,4
Rated operational current, according to IEC60947-5-1	AC-15	220...240 V	A	2,5	5,5
		380...440 V	A	1,5	3,5
Power loss per contact - at rated $I_{th}$	Standard contacts		W	≤ 0.6	≤ 1.8
Contact resistance	Standard contacts		Ohms	≤ 0.004	≤ 0.003
Power loss per contact - at rated $I_{th}$	Gold contacts		W	0,4	≤ 1.8
Contact resistance	Gold contacts		Ohms	≤ 0.006	≤ 0.003
Minimum switching capacity	Gold contacts		mA	5	5
	Gold contacts		V AC/DC	5	5
Terminals	Max cable cross section, solid/stranded <sup>3)</sup>		mm <sup>2</sup>	0.5...1.5	1.5...4
Mechanical endurance <sup>5)</sup>	8 Contacts and less		Number	500 000	500 000
	9 to 14 Contacts		of	300 000	300 000
	15-24 Contacts		operations	100 000	100 000
Temperature	Storing and operational <sup>2)</sup> temperature		°C	-40...+80	-40...+85

<sup>1)</sup> 400 V

<sup>2)</sup> At 40°C, derating 0%. Current peaks up to 60°C, derating 0%.

<sup>3)</sup> Use copper wire only

<sup>4)</sup> These values are given for guidance and may vary acc. to the motor manufacturer

<sup>5)</sup> The mechanical endurance ratings are dependent on the switching angles and the number of contacts. The ratings shown represent the minimum values achieved. Higher ratings may be available upon request..

## Ratings according to UL 60947-4-1

Standards UL 60947-1, UL 60947-4-1, CSA C22.2 no. 60947-1-13, CSA C22.2 no. 60947-4-1-14.

Model designation		OC10	OC25	
<b>Maximum general use ratings:</b>				
Pilot duty, V ac	V ac	A300	A600	
General rating, A	A	10	25	
Voltage rating, 50/60 Hz, V ac	V ac	300	600	
<b>Single phase horsepower ratings</b>				
Voltage, V ac, 50/60 Hz	120 V	HP	0,33	0,75
		FLA	7,2	13,8
	240 V	HP	1	2
		FLA	8	12
	480 V	HP	-	3
		FLA	-	8,5
	600 V	HP	-	3
		FLA	-	6,8
<b>Three phase horsepower ratings</b>				
Voltage, V ac, 50/60 Hz	120 V	HP	1	2
		FLA	8,4	13,6
	240 V	HP	1	3
		FLA	4,2	9,6
	480 V	HP	-	5
		FLA	-	7,6
	600 V	HP	-	7,5
		FLA	-	9
<b>Short circuit ratings, manual motor controllers</b>				
Short circuit ratings		1 kA rms, 300 Vac	5 kA rms, 600 Vac	
Maximum fuse size (Fuse class)		30 A (RK5)	35 A (RK5)	
<b>Cabling</b>				
Wire range	AWG	14**	14-10**	

\*\* Solid or stranded copper conductors only

The standard for Industrial Control Equipment UL 508 has been harmonized with the relevant product standards of the IEC standard for Low-Voltage Switchgear and Controlgear IEC 60947.