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**Initial Order No**

**Type Code** OC25G01MNGN00NA1

**Order Code** 1SCA126432R1001

**EAN Code** 6417019564036

**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         | Base                   |
| Switch Mounting details | Screw and DIN-mounting |
| Handle Mounting         | Modular                |
| Handle Type             | Modular handle         |
| Front Plate             | Modular                |
| Handle Colour           | Grey                   |

### Connections & Options

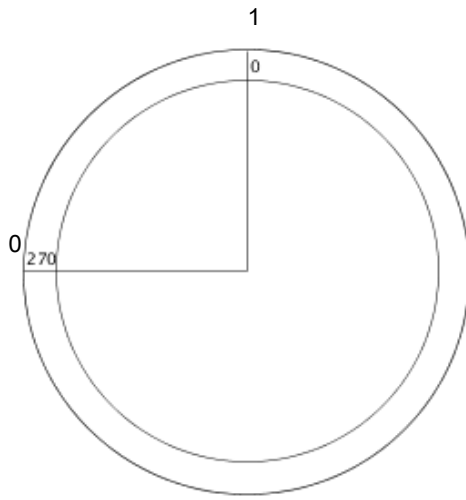
|                                     |                                 |
|-------------------------------------|---------------------------------|
| Connections                         | Standard box (tunnel) terminals |
| Gold plated contacts                | -                               |
| Contact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

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## Front plate

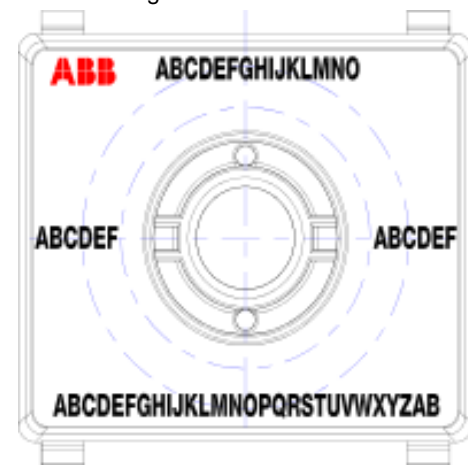
|                        |            |
|------------------------|------------|
| Spring Return Function | -          |
| First position         | 270        |
| Last position          | 0          |
| Total number of steps  | 2          |
| Angle system           | 90 degrees |
| Stop at last position  | Yes        |

## Front plate texts & locking



### Text layout

Single line  
English letters  
With ABB logo





### Contact diagram (1)

Number of contacts (1) 1  
Use late break / early make -

1  
/  
2

|     |   |   |
|-----|---|---|
| 270 | 0 |   |
| 0   | 1 | X |

Connection between

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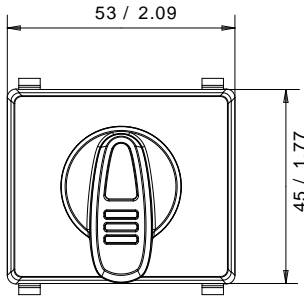


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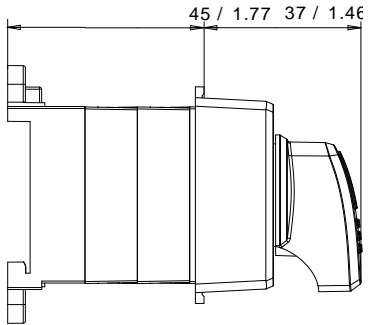
## Dimension images

mm / in      Millimeters [mm]  
Inches [in]

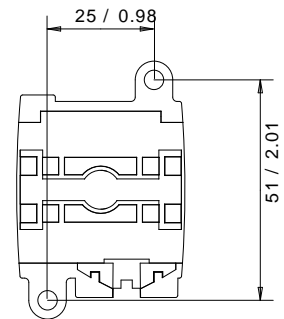
Front view



Side view



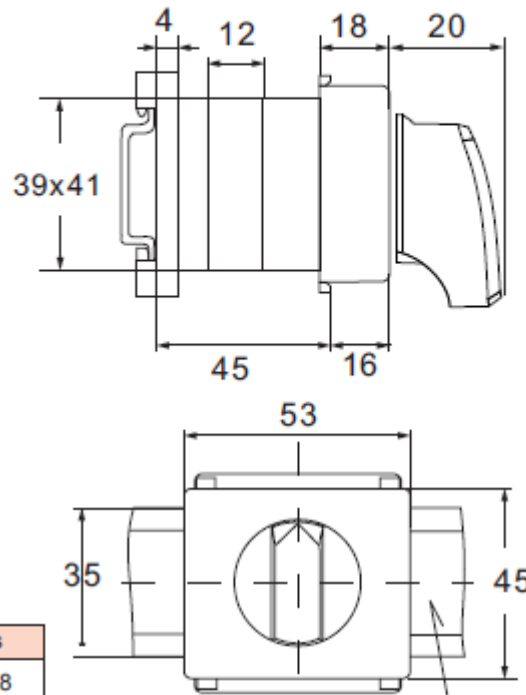
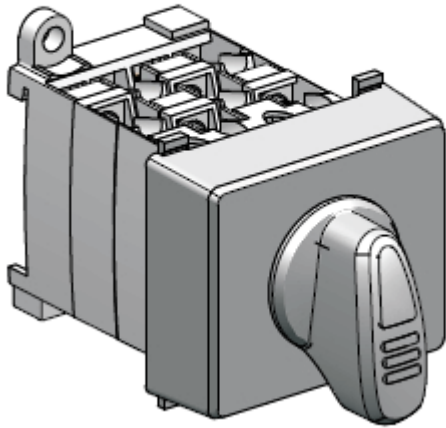
Bottom view



Mounting instructions

OC 25\_M, Mounting on DIN-rail or on base plate

mm



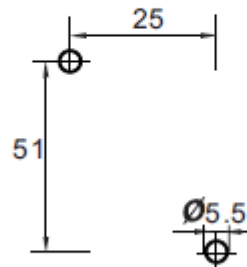
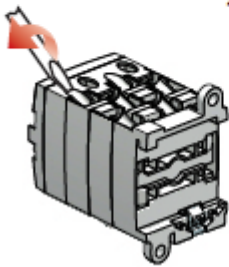
Non-modular: Number of contact chambers

| L | mm | 1  | 2  | 4  | 5  | 6  | 7  | 8   |
|---|----|----|----|----|----|----|----|-----|
|   |    | 11 | 23 | 57 | 69 | 81 | 93 | 105 |

DIN-Rail  
EN50022

Terminal Tightening Torque  
OC 25 1,2Nm(PH1)

Wire Range-No 16 - 12AWG  
1.5 - 4mm<sup>2</sup>





## 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,<br>300 Vac | 5 kA rms,<br>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.