

# Product data sheet

Specifications



## cam stepping switch - 1 pole - 45° - 12 A - screw mounting

K1B002NLH

 **Discontinued on:** Oct 20, 2020

 **Discontinued**

### Main

|   |   |
|---|---|
| Range Of Product                            | Harmony K                                 |
| Product Or Component Type                   | Complete cam switch                       |
| Component Name                              | K1  |
| [Ith] Conventional Free Air Thermal Current | 12 A                                      |
| Mounting Location                           | Front                                     |
| Fixing Mode                                 | Multifixing                               |
| Cam Switch Head Type                        | With front plate 45 x 45 mm               |
| Type Of Operator                            | Black handle, length = 35 mm              |
| Rotary Handle Padlocking                    | Without                                   |
| Presentation Of Legend                      | With metallic legend, 1 - 2 black marking |
| Cam Switch Function                         | Stepping switch                           |
| Return                                      | Without                                   |
| Off Position                                | Without Off position                      |
| Poles Description                           | 1P  |
| Switching Positions                         | Right: 0° - 45°                           |
| Ip Degree Of Protection                     | IP40 conforming to IEC 529                |

### Complementary

|  |  |
|--|--|
| Number Of Steps                              | 2  |
| Switching Angle                              | 45 °   |
| [Ui] Rated Insulation Voltage                | 690 V (pollution degree 3) conforming to IEC 60947-1   |
| [Ithe] Conventional Enclosed Thermal Current | 10 A   |
| Rated Operational Power In W                 | 10500 W AC-21, 500...660 V 3 phases conforming to IEC 947-3<br>1100 W AC-3, 230 V 3 phases conforming to IEC 947-3<br>1500 W AC-23A, 230 V 3 phases conforming to IEC 947-3<br>1500 W AC-3, 400 V 1 phase conforming to IEC 947-3<br>1500 W AC-3, 400 V 3 phases conforming to IEC 947-3<br>1500 W AC-3, 500 V 3 phases conforming to IEC 947-3<br>1500 W AC-3, 690 V 3 phases conforming to IEC 947-3<br>2200 W AC-23A, 400 V 3 phases conforming to IEC 947-3<br>2200 W AC-23A, 500 V 3 phases conforming to IEC 947-3<br>2200 W AC-23A, 690 V 3 phases conforming to IEC 947-3<br>4800 W AC-21, 230 V 3 phases conforming to IEC 947-3<br>600 W AC-3, 230 V 1 phase conforming to IEC 947-3<br>8300 W AC-21, 400 V 3 phases conforming to IEC 947-3 |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

|   |  |
|---|--|
| <b>[Ie] Rated Operational Current Ac</b>      | 1.8 A at 690 V AC-3 3 phases conforming to IEC 947-3<br>2.8 A at 500 V AC-3 3 phases conforming to IEC 947-3<br>2.8 A at 690 V AC-23A 3 phases conforming to IEC 947-3<br>3.3 A at 400 V AC-3 3 phases conforming to IEC 947-3<br>3.8 A at 500 V AC-23A 3 phases conforming to IEC 947-3<br>4.6 A at 230 V AC-3 3 phases conforming to IEC 947-3<br>4.8 A at 400 V AC-23A 3 phases conforming to IEC 947-3<br>5.6 A at 230 V AC-23A 3 phases conforming to IEC 947-3<br>1 A at 500 V AC-15 conforming to IEC 947-5-1<br>2 A at 400 V AC-15 conforming to IEC 947-5-1<br>3 A at 230 V AC-15 conforming to IEC 947-5-1 |
| <b>Electrical Durability</b>                  | 1000000 cycles AC-15<br>1000000 cycles AC-21<br>500000 cycles AC-23<br>500000 cycles AC-3  |
| <b>Maximum Operating Rate</b>                 | 8333 cyc/mn AC-15<br>2.5 cyc/mn AC-21<br>2.5 cyc/mn AC-23<br>2.5 cyc/mn AC-3   |
| <b>Short-Circuit Current</b>                  | 10000 A  |
| <b>Short-Circuit Protection</b>               | 16 A cartridge fuse, type gG   |
| <b>[Uimp] Rated Impulse Withstand Voltage</b> | 4 kV in isolating function<br>6 kV conforming to IEC 947-1   |
| <b>Contact Operation</b>                      | Slow-break   |
| <b>Positive Opening</b>                       | With   |
| <b>Electrical Connection</b>                  | Captive screw clamp terminals flexible, clamping capacity: 2 x 1.5 mm <sup>2</sup><br>Captive screw clamp terminals solid, clamping capacity: 1 x 2.5 mm <sup>2</sup>  |
| <b>Mechanical Durability</b>                  | 1000000 cycles   |
| <b>Cad Overall Width</b>                      | 45 mm  |
| <b>Cad Overall Height</b>                     | 45 mm  |
| <b>Cad Overall Depth</b>                      | 77 mm  |
| <b>Net Weight</b>                             | 0.115 kg   |

## Environment

|  |   |
|--|---|
| <b>Standards</b>                             | EN 60947-3 for power circuit<br>EN 60947-5-1 for control circuit<br>CENELEC EN 50013  |
| <b>Product Certifications</b>                | CSA 240 V 3 hp 3 phases 2 -pole(s)<br>UL 240 V 0.33 hp 1 phase 2 -pole(s)<br>CSA 240 V 1 hp 1 phase<br>UL 240 V 1 hp 3 phases |
| <b>Protective Treatment</b>                  | TC  |
| <b>Ambient Air Temperature For Operation</b> | -25...55 °C   |
| <b>Ambient Air Temperature For Storage</b>   | -40...70 °C   |
| <b>Shock Resistance</b>                      | 30 gn conforming to IEC 68-2-27   |
| <b>Vibration Resistance</b>                  | 5 gn conforming to IEC 68-2-6 (f = 10...150 Hz)   |
| <b>Overvoltage Category</b>                  | Class II conforming to IEC 536<br>Class II conforming to NF C 20-030  |

## Contractual warranty

|                 |           |
|-----------------|-----------|
| <b>Warranty</b> | 18 months |
|-----------------|-----------|

## Sustainability

**Green Premium™** label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

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[Guide to assess a product's sustainability >](#)



Transparency   RoHS/REACH

## Well-being performance

|   |                            |     |
|---|----------------------------|-----|
| ✓ | Reach Free Of Svhc         |     |
| ✓ | Toxic Heavy Metal Free     |     |
| ✓ | Mercury Free               |     |
| ✓ | Rohs Exemption Information | Yes |

## Certifications & Standards

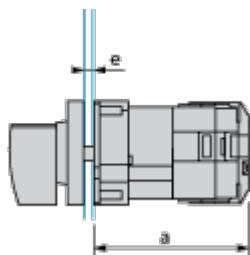
|                           |  |
|---------------------------|--|
| Reach Regulation          | <a href="#">REACH Declaration</a>  |
| Eu Rohs Directive         | Pro-active compliance (Product out of EU RoHS legal scope)<br><a href="#">EU RoHS Declaration</a>  |
| China Rohs Regulation     | <a href="#">China RoHS declaration</a>   |
| Environmental Disclosure  | <a href="#">Product Environmental Profile</a>  |
| Weee                      | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins  |
| Circularity Profile       | No need of specific recycling operations   |
| California Proposition 65 | WARNING: This product can expose you to chemicals including: Nickel compounds, which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |

Dimensions Drawings

Operating Head and Body

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Front Mounting "Multi-Fixing"



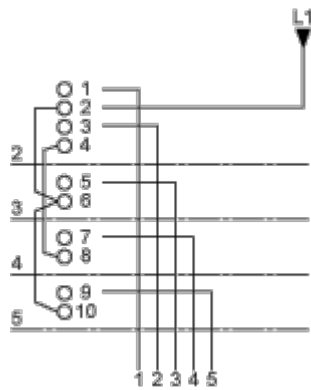
- a 53 mm/2.09 in.
- e support panel thickness 1 mm to 6 mm./0.039 in. to 0.24 in.

Technical Description

Link Positions (Factory Mounted)

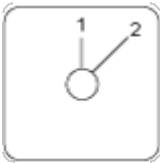
Diagram for 2 to 5-step Stepping Switches

Select the number of steps according to the product characteristics.



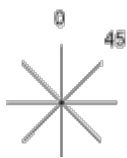
Marking

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Angular Position of Switch

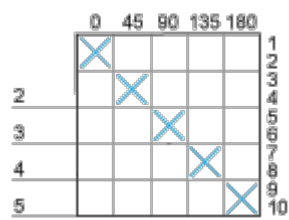
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Switching Program






Diagram for 2 to 5-step Stepping Switches

Select the number of steps according to the product characteristics.





Convention Used for Switching Program Representation

-  Contact closed
-  Contact closed in 2 positions and maintained between the 2 positions
-  Sealed assembly for auto-maintain control
-  Overlapping contacts
-  Spring return position: for a switching angle of 90°, spring return is over 30° after the last position (for a maximum of 3 simultaneous contacts).

Example:

