Specifications





Cam stepping switch, Harmony K, 22mm, plastic, 1 pole, 4 steps, 45°, 12A, 45x45mm, metallic legend, marked 1 2 3 4, 35mm black handle

K1D004NCH

#### Main

| Range Of Product   Harmony K     Product Or Component Type   Complete cam switch     Component Name   K1     Lith] Conventional Free Air   12 A     Thermal Current   12 A     Mounting Location   Front     Fixing Mode   Ø 22 mm hole     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 - 3 - 4 black marking     Cam Switch Function   Stepping switch     Return   Without     Off Position   Without Off position     Poles Description   1P     Switching Positions   Right: 0° - 45° - 90° - 135°     Ip Degree Of Protection   IP65 conforming to IEC 60529 |                           |   |  |
|--|---------------------------|---|--|
| Component Name   K1     [Ith] Conventional Free Air   12 A     Thermal Current   12 A     Mounting Location   Front     Fixing Mode   Ø 22 mm hole     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 - 3 - 4 black marking     Cam Switch Function   Stepping switch     Return   Without     Off Position   Without Off position     Poles Description   1P     Switching Positions   Right: 0° - 45° - 90° - 135°   | Range Of Product          | Harmony K   |  |
| [Ith] Conventional Free Air   12 A     Mounting Location   Front     Fixing Mode   Ø 22 mm hole     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 - 3 - 4 black marking     Cam Switch Function   Stepping switch     Return   Without     Off Position   Without Off position     Poles Description   1P     Switching Positions   Right: 0° - 45° - 90° - 135°  | Product Or Component Type | Complete cam switch                               |  |
| Thermal CurrentFrontMounting LocationFrontFixing ModeØ 22 mm holeCam Switch Head TypeWith front plate 45 x 45 mmType Of OperatorBlack handle, length = 35 mmRotary Handle PadlockingWithoutPresentation Of LegendWith metallic legend, 1 - 2 - 3 - 4 black markingCam Switch FunctionStepping switchReturnWithoutOff PositionWithoutPoles Description1PSwitching PositionsRight: 0° - 45° - 90° - 135°   | Component Name            | К1  |  |
| Fixing ModeØ 22 mm holeCam Switch Head TypeWith front plate 45 x 45 mmType Of OperatorBlack handle, length = 35 mmRotary Handle PadlockingWithoutPresentation Of LegendWith metallic legend, 1 - 2 - 3 - 4 black markingCam Switch FunctionStepping switchReturnWithoutOff PositionWithout Off positionPoles Description1PSwitching PositionsRight: 0° - 45° - 90° - 135°  |                           | 12 A  |  |
| Cam Switch Head TypeWith front plate 45 x 45 mmType Of OperatorBlack handle, length = 35 mmRotary Handle PadlockingWithoutPresentation Of LegendWith metallic legend, 1 - 2 - 3 - 4 black markingCam Switch FunctionStepping switchReturnWithoutOff PositionWithout Off positionPoles Description1PSwitching PositionsRight: 0° - 45° - 90° - 135°   | Mounting Location         | Front   |  |
| Type Of Operator   Black handle, length = 35 mm     Rotary Handle Padlocking   Without     Presentation Of Legend   With metallic legend, 1 - 2 - 3 - 4 black marking     Cam Switch Function   Stepping switch     Return   Without     Off Position   Without Off position     Poles Description   1P     Switching Positions   Right: 0° - 45° - 90° - 135°   | Fixing Mode               | Ø 22 mm hole                                      |  |
| Rotary Handle Padlocking Without   Presentation Of Legend With metallic legend, 1 - 2 - 3 - 4 black marking   Cam Switch Function Stepping switch   Return Without   Off Position Without Off position   Poles Description 1P   Switching Positions Right: 0° - 45° - 90° - 135°   | Cam Switch Head Type      | With front plate 45 x 45 mm                       |  |
| Presentation Of Legend   With metallic legend, 1 - 2 - 3 - 4 black marking     Cam Switch Function   Stepping switch     Return   Without     Off Position   Without Off position     Poles Description   1P     Switching Positions   Right: 0° - 45° - 90° - 135°  | Type Of Operator          | Black handle, length = 35 mm                      |  |
| Cam Switch Function Stepping switch   Return Without   Off Position Without Off position   Poles Description 1P   Switching Positions Right: 0° - 45° - 90° - 135°   | Rotary Handle Padlocking  | Without   |  |
| Return Without   Off Position Without Off position   Poles Description 1P   Switching Positions Right: 0° - 45° - 90° - 135°   | Presentation Of Legend    | With metallic legend, 1 - 2 - 3 - 4 black marking |  |
| Off Position Without Off position   Poles Description 1P   Switching Positions Right: 0° - 45° - 90° - 135°  | Cam Switch Function       | Stepping switch                                   |  |
| Poles Description 1P   Switching Positions Right: 0° - 45° - 90° - 135°  | Return                    | Without   |  |
| Switching Positions Right: 0° - 45° - 90° - 135°   | Off Position              | Without Off position                              |  |
|  | Poles Description         | 1P  |  |
| Ip Degree Of Protection IP65 conforming to IEC 60529   | Switching Positions       | Right: 0° - 45° - 90° - 135°                      |  |
|  | Ip Degree Of Protection   | IP65 conforming to IEC 60529                      |  |

## Complementary

| Number Of Steps                                 | 4   |  |
|---|---|--|
| Switching Angle                                 | 45 °  |  |
| [Ui] Rated Insulation Voltage                   | 690 V (pollution degree 3) conforming to IEC 60947-1  |  |
| [Ithe] Conventional Enclosed<br>Thermal Current | 10 A  |  |
| Rated Operational Power In W                    | 10500 W AC-21, 500660 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, 500 V 3 phases conforming to IEC 947-3<br>2200 W AC-23A, 690 V 3 phases conforming to IEC 947-3<br>600 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 |  |

| [le] Rated Operational Current Ac | 1.8 A at 690 V AC-3 3 phases conforming to IEC 947-3                               |
|-----------------------------------|--|
| ·                                 | 2.8 A at 500 V AC-3 3 phases conforming to IEC 947-3                               |
|                                   | 2.8 A at 690 V AC-23A 3 phases conforming to IEC 947-3                             |
|                                   | 3.3 A at 400 V AC-3 3 phases conforming to IEC 947-3                               |
|                                   | 3.8 A at 500 V AC-23A 3 phases conforming to IEC 947-3                             |
|                                   | 4.6 A at 230 V AC-3 3 phases conforming to IEC 947-3                               |
|                                   |  |
|                                   | 4.8 A at 400 V AC-23A 3 phases conforming to IEC 947-3                             |
|                                   | 5.6 A at 230 V AC-23A 3 phases conforming to IEC 947-3                             |
|                                   | 1 A at 500 V AC-15 conforming to IEC 947-5-1                                       |
|                                   | 2 A at 400 V AC-15 conforming to IEC 947-5-1                                       |
|                                   | 3 A at 230 V AC-15 conforming to IEC 947-5-1                                       |
| Electrical Durability             | 1000000 cycles AC-15   |
| -                                 | 1000000 cycles AC-21   |
|                                   | 500000 cycles AC-23  |
|                                   | 500000 cycles AC-3   |
|                                   | SUUUUU Cycles AC-S   |
| Maximum Operating Rate            | 2.5 cyc/mn AC-21   |
|                                   | 2.5 cyc/mn AC-23   |
|                                   | 2.5 cyc/mn AC-3  |
|                                   | 8.333 cyc/mn AC-15   |
|                                   |  |
| Short-Circuit Current             | 10000 A  |
| Short-Circuit Protection          | 16 A cartridge fuse, type gG   |
| [Uimp] Rated Impulse Withstand    | 4 kV in isolating function   |
| Voltage                           | 6 kV conforming to IEC 947-1   |
|                                   |  |
| Contact Operation                 | Slow-break   |
| Positive Opening                  | With   |
| Electrical Connection             | Captive screw clamp terminals flexible, clamping capacity: 2 x 1.5 mm <sup>2</sup> |
|                                   |  |
|                                   | Captive screw clamp terminals solid, clamping capacity: 1 x 2.5 mm <sup>2</sup>    |
| Mechanical Durability             | 1000000 cycles   |
|                                   |  |
| Cad Overall Width                 | 45 mm  |
| Cad Overall Height                | 50 mm  |
|                                   |  |
| Cad Overall Depth                 | 59 mm  |
|                                   |  |
| Net Weight                        | 0.16 kg  |
|                                   |  |

#### Environment

| Standards                                | IEC 60947-3 for power circuit<br>IEC 60947-5-1 for control circuit<br>CENELEC EN 50013  |  |
|--|---|--|
| Product Certifications                   | 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 |  |
| Protective Treatment                     | тс  |  |
| Ambient Air Temperature For<br>Operation | -2555 °C  |  |
| Ambient Air Temperature For<br>Storage   | -4070 °C  |  |
| Shock Resistance                         | 30 gn conforming to IEC 68-2-27   |  |
| Vibration Resistance                     | 5 gn conforming to IEC 68-2-6 (f = 10150 Hz)  |  |
| Overvoltage Category                     | Class II conforming to IEC 536<br>Class II conforming to NF C 20-030  |  |

# **Packing Units**

| Unit Type Of Package 1       | PCE    |
|------------------------------|--------|
| Number Of Units In Package 1 | 1      |
| Package 1 Height             | 6.5 cm |

| Package 1 Width              | 6.7 cm  |
|------------------------------|---------|
| Package 1 Length             | 11.0 cm |
| Package 1 Weight             | 171.0 g |
| Unit Type Of Package 2       | S01     |
| Number Of Units In Package 2 | 10      |
| Package 2 Height             | 15.0 cm |
| Package 2 Width              | 15.0 cm |
| Package 2 Length             | 40.0 cm |
| Package 2 Weight             | 1.88 kg |

### **Contractual warranty**

Warranty

18 months

# Sustainability Screen Premium

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass 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.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

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

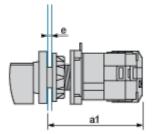
#### **Certifications & Standards**

| Reach Regulation         | REACh Declaration   |
|--------------------------|---|
| Eu Rohs Directive        | Pro-active compliance (Product out of EU RoHS legal scope)<br>EU RoHS Declaration   |
| China Rohs Regulation    | China RoHS declaration  |
| Environmental Disclosure | Product Environmental Profile   |
| 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  |

**Dimensions Drawings** 

Operating Head and Body with Plastic Base

#### Front Mounting by Ø 22 mm/0.87 in. Hole



a1 80.5 mm/3.17 in.

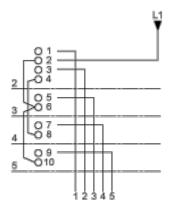
e support panel thickness 1 mm to 6 mm./0.039 in. to 0.24 in.

**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



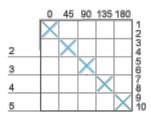
#### Angular Position of Switch



#### 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:

