



## 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                                 | 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, 0 - 1 - 2 - 3 - 4 - 5 black marking    |
| Cam switch function                         | Stepping switch                                              |
| Return                                      | Without                                                      |
| Off position                                | With Off position                                            |
| Poles description                           | 1P                                                           |
| Switching positions                         | Right: 0° - 45° - 90° - 135° - 180° - 225°                   |
| IP degree of protection                     | IP65 conforming to IEC 529<br>IP65 conforming to NF C 20-010 |

## Complementary

|                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Number of steps                              | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 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 |
| [Ie] rated operational current AC            | 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                                                                                                                                   |
| Electrical durability                        | 1000000 Cycles AC-15<br>1000000 Cycles AC-21<br>500000 Cycles AC-23<br>500000 cycles AC-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

|                                        |                                                                                                                                                                       |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Maximum operating rate                 | 2.5 Cyc/Mn AC-21<br>2.5 Cyc/Mn AC-23<br>2.5 Cyc/Mn AC-3<br>8.333 cyc/mn AC-15                                                                                         |
| Short-circuit current                  | 10000 A                                                                                                                                                               |
| Short-circuit protection               | 16 A cartridge fuse, type gG                                                                                                                                          |
| [Uimp] rated impulse withstand voltage | 4 kV in isolating function<br>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><br>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                      | 69 mm                                                                                                                                                                 |
| Net weight                             | 0.18 kg                                                                                                                                                               |

## Environment

|                                       |                                                                                                                                                            |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standards                             | EN 60947-3 for power circuit<br>EN 60947-5-1 for control circuit<br>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                  | TC                                                                                                                                                         |
| Ambient air temperature for operation | -25...55 °C                                                                                                                                                |
| Ambient air temperature for storage   | -40...70 °C                                                                                                                                                |
| Shock resistance                      | 30 gn conforming to IEC 68-2-27                                                                                                                            |
| Vibration resistance                  | 5 gn conforming to IEC 68-2-6 (f = 10...150 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 Weight             | 199 g    |
| Package 1 Height             | 6.5 cm   |
| Package 1 width              | 6.5 cm   |
| Package 1 Length             | 16.5 cm  |
| Unit Type of Package 2       | S01      |
| Number of Units in Package 2 | 8        |
| Package 2 Weight             | 1.812 kg |
| Package 2 Height             | 15 cm    |
| Package 2 width              | 15 cm    |
| Package 2 Length             | 40 cm    |

## Offer Sustainability

|                          |                                                                                                                                                                                      |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status | Green Premium product                                                                                                                                                                |
| REACH Regulation         |  <a href="#">REACH Declaration</a>                                                                |
| REACH free of SVHC       | Yes                                                                                                                                                                                  |
| EU RoHS Directive        | Pro-active compliance (Product out of EU RoHS legal scope)  <a href="#">EU RoHS Declaration</a> |
| Toxic heavy metal free   | Yes                                                                                                                                                                                  |
| Mercury free             | Yes                                                                                                                                                                                  |

|                            |                                                                                                                                 |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| RoHS exemption information |  Yes                                            |
| 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     |

### Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

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Operating Head and Body with Plastic Base

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Front Mounting by  $\varnothing 22$  mm/0.87 in. Hole



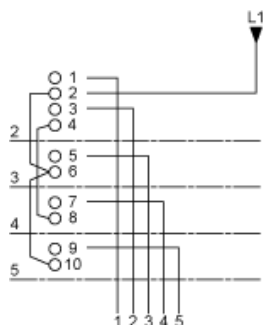
a1 90.5 mm/3.53 in.

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

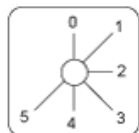
## Link Positions (Factory Mounted)

### Diagram for 2 to 5-step Stepping Switches

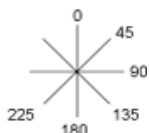
Select the number of steps according to the product characteristics.



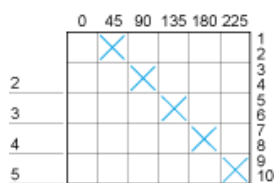
## Marking



## Angular Position of Switch



## Switching Program



## 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:

