



Main

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|--|--|
| Range of product | Harmony K |
| Product or component type | Complete cam switch |
| Component name | K1 |
| [I _{th}] 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, 0 - 1 - 2 - 3 - 4 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° |
| IP degree of protection | IP40 conforming to IEC 529 IP40 conforming to NF C 20-010 |

Complementary

| | |
|---|--|
| Number of steps | 4 |
| Switching angle | 45 ° |
| [U _i] rated insulation voltage | 690 V degree of pollution 3 conforming to IEC 60947-1 |
| [I _{the}] conventional enclosed thermal current | 10 A |
| Rated operational power in W | 600 W AC-3 / 230 V 1 phase conforming to IEC 947-3 1500 W AC-3 / 400 V 1 phase conforming to IEC 947-3 1100 W AC-3 / 230 V 3 phases conforming to IEC 947-3 8300 W AC-21 / 400 V 3 phases conforming to IEC 947-3 1500 W AC-3 / 690 V 3 phases conforming to IEC 947-3 2200 W AC-23A / 400 V 3 phases conforming to IEC 947-3 1500 W AC-3 / 500 V 3 phases conforming to IEC 947-3 2200 W AC-23A / 500 V 3 phases conforming to IEC 947-3 1500 W AC-3 / 400 V 3 phases conforming to IEC 947-3 1500 W AC-23A / 230 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

2200 W AC-23A / 690 V 3 phases conforming to IEC 947-3
 4800 W AC-21 / 230 V 3 phases conforming to IEC 947-3
 10500 W AC-21 / 500...660 V 3 phases conforming to IEC 947-3

| | |
|---|--|
| [I _e] rated operational current AC | 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 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 |
| Electrical durability | 1000000 cycles AC-15 1000000 cycles AC-21 500000 cycles AC-23 500000 cycles AC-3 |
| 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 by cartridge fuse, type gG |
| [U _{imp}] rated impulse withstand voltage | 4 kV in isolating function 6 kV conforming to IEC 947-1 |
| Contact operation | Slow-break |
| Positive opening | With |
| Electrical connection | Captive screw clamp terminals flexible, 2 x 1.5 mm ² Captive screw clamp terminals solid, 1 x 2.5 mm ² |
| Mechanical durability | 1000000 cycles |
| CAD overall width | 45 mm |
| CAD overall height | 45 mm |
| CAD overall depth | 87 mm |
| Product weight | 0.14 kg |

Environment

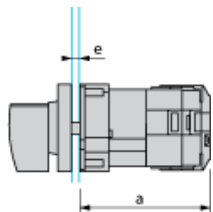
| | |
|---------------------------------------|--|
| Standards | CENELEC EN 50013 EN 60947-3 for power circuit EN 60947-5-1 for control circuit IEC 60947-3 for power circuit IEC 60947-5-1 for control circuit |
| Product certifications | CSA 240 V 1 hp 1 phase CSA 240 V 3 hp 3 phases 2 -pole(s) UL 240 V 1 hp 3 phases UL 240 V 0.33 hp 1 phase 2 -pole(s) |
| 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, 10...150 Hz conforming to IEC 68-2-6 |
| Overvoltage category | Class II conforming to IEC 536 Class II conforming to NF C 20-030 |

Contractual warranty

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

Operating Head and Body

Front Mounting "Multi-Fixing"

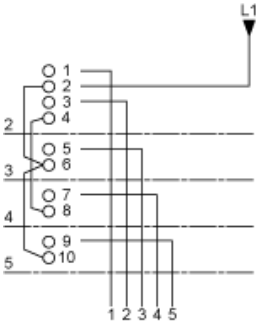


- a 63 mm/2.48 in.
- e support panel thickness 1 mm to 6 mm./0.039 in. to 0.24 in.

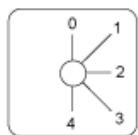
Link Positions (Factory Mounted)

Diagram for 2 to 5-step Stepping Switches

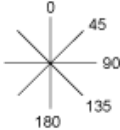
Select the number of steps according to the product characteristics.



Marking



Angular Position of Switch



Switching Program

| | 0 | 45 | 90 | 135 | 180 | 225 | |
|---|---|----|----|-----|-----|-----|---|
| 1 | | X | | | | | 1 |
| 2 | | | X | | | | 2 |
| 3 | | | | X | | | 3 |
| 4 | | | | | X | | 4 |
| 5 | | | | | | X | 5 |

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:

