



## Main

|                                             |                               |
|---------------------------------------------|-------------------------------|
| Range of product                            | Harmony K                     |
| Product or component type                   | Cam switch body               |
| Component name                              | K2                            |
| [Ith] conventional free air thermal current | 20 A                          |
| Sub-assembly composition                    | Contact blocks + fixing plate |
| Cam switch function                         | Star-delta switch             |
| Off position                                | With Off position             |
| Poles description                           | 3P                            |
| Switching positions                         | Right: 0° - 60° - 120°        |
| Product mounting                            | Front mounting                |
| Fixing mode                                 | Ø 22 mm hole                  |
| Bezel material                              | Plastic                       |

## Complementary

|                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Switching angle                              | 60 °                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| [Ui] rated insulation voltage                | 690 V (pollution degree 3) conforming to IEC 60947-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| [Ithe] conventional enclosed thermal current | 16 A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Rated operational power in W                 | 1300 W AC-3, 230 V 1 phase conforming to IEC 947-3<br>14000 W AC-21, 400 V 3 phases conforming to IEC 947-3<br>17000 W AC-21, 500 - 660 V 3 phases conforming to IEC 947-3<br>2200 W AC-3, 230 V 3 phases conforming to IEC 947-3<br>2200 W AC-3, 400 V 1 phase conforming to IEC 947-3<br>4000 W AC-23A, 230 V 3 phases conforming to IEC 947-3<br>4000 W AC-3, 400 V 3 phases conforming to IEC 947-3<br>4000 W AC-3, 500 V 3 phases conforming to IEC 947-3<br>4000 W AC-3, 690 V 3 phases conforming to IEC 947-3<br>5500 W AC-23A, 400 V 3 phases conforming to IEC 947-3<br>5500 W AC-23A, 500 V 3 phases conforming to IEC 947-3<br>5500 W AC-23A, 690 V 3 phases conforming to IEC 947-3 |

|                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                        | 8000 W AC-21, 230 V 3 phases conforming to IEC 947-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| [Ie] rated operational current AC      | 8 A at 400 V AC-3 3 phases conforming to IEC 947-3<br>10.8 A at 400 V AC-23A 3 phases conforming to IEC 947-3<br>14.6 A at 230 V AC-23A 3 phases conforming to IEC 947-3<br>4.7 A at 690 V AC-3 3 phases conforming to IEC 947-3<br>6.4 A at 690 V AC-23A 3 phases conforming to IEC 947-3<br>6.5 A at 500 V AC-3 3 phases conforming to IEC 947-3<br>8.3 A at 230 V AC-3 3 phases conforming to IEC 947-3<br>8.9 A at 500 V AC-23A 3 phases conforming to IEC 947-3<br>2 A at 500 V AC-15 conforming to IEC 947-5-1<br>3 A at 400 V AC-15 conforming to IEC 947-5-1<br>4 A at 230 V AC-15 conforming to IEC 947-5-1 |
| Electrical durability                  | 200000 cycles AC-23<br>200000 cycles AC-3<br>600000 cycles AC-15<br>600000 cycles AC-21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 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               | 20 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Product weight                         | 0.165 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)                                                                                                            |
| Electrical shock protection class     | Class II conforming to IEC 536<br>Class II conforming to NF C 20-030                                                                                       |

## Offer Sustainability

|                            |                                                                                                   |
|----------------------------|---------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                             |
| REACH free of SVHC         | Yes                                                                                               |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)<br><a href="#">EU RoHS Declaration</a> |
| Toxic heavy metal free     | Yes                                                                                               |
| Mercury free               | Yes                                                                                               |
| RoHS exemption information | <a href="#">Yes</a>                                                                               |
| China RoHS Regulation      | <a href="#">China RoHS declaration</a>                                                            |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>                                                     |
| Circularity Profile        | No need of specific recycling operations                                                          |

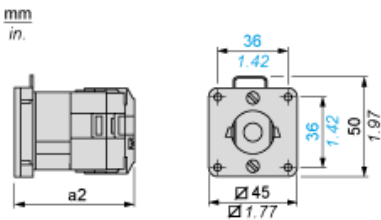
|      |                                                                                                                             |
|------|-----------------------------------------------------------------------------------------------------------------------------|
| WEEE | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |
|------|-----------------------------------------------------------------------------------------------------------------------------|

### Contractual warranty

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

Body with Plastic Base

Front Mounting by Ø 22 mm/0.87 in. Hole

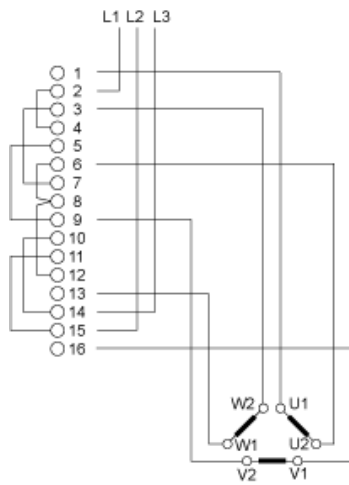


a2      79 mm/3.11 in.

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Link Positions (Factory Mounted)

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Angular Position of Switch



Switching Program

|   |    |     |    |
|---|----|-----|----|
| 0 | 60 | 120 | 1  |
|   |    |     | 2  |
|   |    |     | 3  |
|   |    |     | 4  |
|   |    |     | 5  |
|   |    |     | 6  |
|   |    |     | 7  |
|   |    |     | 8  |
|   |    |     | 9  |
|   |    |     | 10 |
|   |    |     | 11 |
|   |    |     | 12 |
|   |    |     | 13 |
|   |    |     | 14 |
|   |    |     | 15 |
|   |    |     | 16 |

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### Convention Used for Switching Program Representation

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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  $90^\circ$ , spring return is over  $30^\circ$  after the last position (for a maximum of 3 simultaneous contacts).

Example:

