# Product data sheet
## Characteristics

# K1F003UCH
Cam changeover switch, Harmony K, 22mm, plastic, 3 poles, position 0, 45 degree, 12A, 45x45mm, metallic legend, marked 2/0/1, 35mm black handle



## Main

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|---|---|
| Range of product | Harmony K |
| Product or component type | Complete cam switch |
| Component name | K1 |
| [Ith] conventional free air thermal current | 12 A |
| Product mounting | Front mounting |
| 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, 2 - 0 - 1 black marking |
| Cam switch function | Changeover switch |
| Return | Without |
| Off position | With Off position |
| Poles description | 3P |
| Switching positions | Left: 0° - 315°<br>Right: 0° - 45° |
| IP degree of protection | IP65 conforming to IEC 60529 |

## Complementary

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|---|---|
| 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 mm²<br>Captive screw clamp terminals solid, clamping capacity: 1 x 2.5 mm² |
| Mechanical durability | 1000000 Cycles |

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| CAD overall width | 45 Mm |
| CAD overall height | 50 Mm |
| CAD overall depth | 69 Mm |
| Net weight | 0.19 Kg |

## Environment

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|---|---|
| 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)[RETURN]UL 240 V 0.33 hp 1 phase 2 pole(s)[RETURN]CS |
| 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 |

## Packing Units

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|---|---|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 6.500 Cm |
| Package 1 Width | 6.500 Cm |
| Package 1 Length | 16.500 Cm |
| Package 1 Weight | 202.000 G |
| Unit Type of Package 2 | S01 |
| Number of Units in Package 2 | 8 |
| Package 2 Height | 15 Cm |
| Package 2 Width | 15 Cm |
| Package 2 Length | 40 Cm |
| Package 2 Weight | 1.771 Kg |
| Unit Type of Package 3 | P06 |
| Number of Units in Package 3 | 256 |
| Package 3 Height | 75.000 Cm |
| Package 3 Width | 80.000 Cm |
| Package 3 Length | 60.000 Cm |
| Package 3 Weight | 64.672 Kg |

## Offer Sustainability

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|---|---|
| Recyclability potential, in % | 39 |
| Total lifecycle Carbon footprint | 7 kg CO2 eq. |
| Carbon footprint of the manufacturing phase [A1 to A3] | 4.897805171335484 |
| Carbon footprint of the manufacturing phase [A1 to A3] | 5 kg CO2 eq. |
| Carbon footprint of the distribution phase [A4] | 0.1878548905715001 |
| Carbon footprint of the distribution phase [A4] | 0.2 kg CO2 eq. |
| Carbon footprint of the installation phase [A5] | 0.04612674090018717 |
| Carbon footprint of the installation phase [A5] | 0 kg CO2 eq. |
| Carbon footprint of the use phase [B2, B3, B4, B6] | 1.078484227940564 |
| REACh free of SVHC | Yes |
| Carbon footprint of the use phase [B2, B3, B4, B6] | 1 kg CO2 eq. |
| Toxic heavy metal free | Yes |
| Mercury free | Yes |
| Sustainable packaging | No |
| Carbon footprint of the end-of-life phase [C1 to C4] | 0.3272527255243381 |
| Carbon footprint of the end-of-life phase [C1 to C4] | 0.3 kg CO2 eq. |
| Environmental Disclosure | Product Environmental Profile |

| | |
|---|---|
| Total lifecycle Carbon footprint | 7 |
| Packaging made with recycled cardboard | No |
| Packaging without single use plastic | No |
| REACh Regulation | Free of Substances of Very High Concern above the threshold |
| EU RoHS Directive | Compliant |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Nickel compounds, which is know |
| End of life manual availability | No need of specific recycling operations |
| Take-back | No |
| WEEE Label | The product must be disposed on European Union markets following specific waste collection and |

## Contractual warranty

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|---|---|
| Warranty (in months) | 18 |

Product Life Status : Commercialised