



### 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	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, L1N - L2N - L3N black marking
Cam switch function	Voltmeter switch
Return	Without
Type of measurement	Between 3 phases and neutral
Off position	Without Off position
Switching positions	Right: 0° - 45° - 90°
IP degree of protection	IP40 conforming to IEC 529 IP40 conforming to NF C 20-010

### Complementary

Switching angle	45 °
[Ui] rated insulation voltage	690 V degree of pollution 3 conforming to IEC 60947-1
[Ithe] 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 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

[I <sub>e</sub> ] 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 <sub>imp</sub> ] 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 <sup>2</sup> Captive screw clamp terminals solid, 1 x 2.5 mm <sup>2</sup>
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

## Contractual warranty

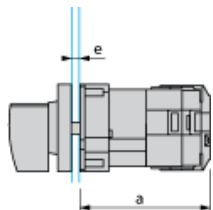
Warranty period	18 months
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Operating Head and Body

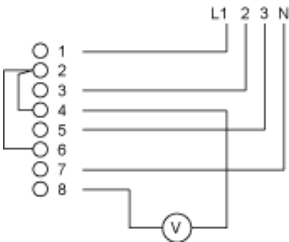
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Front Mounting "Multi-Fixing"



- 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)



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Marking

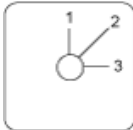
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Marking

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Switching Program

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0	45	90	
X			1
	X		2
			3
		X	4
			5
X		X	6
			7
X		X	8

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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:

