



Main

Range of product	Harmony K
Product or component type	Complete cam switch
Component name	K1
[I _{th}] conventional free air thermal current	12 A
Product mounting	Front mounting
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 black marking
Cam switch function	Stepping switch
Return	Without
Off position	With Off position
Poles description	2P
Switching positions	Right: 0° - 45° - 90° - 135°
IP degree of protection	IP40 conforming to IEC 529 IP40 conforming to NF C 20-010

Complementary

Number of steps	3
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	10500 W AC-21/500...660 V 3 phases conforming to IEC 947-3 1100 W AC-3/230 V 3 phases conforming to IEC 947-3 1500 W AC-23A/230 V 3 phases conforming to IEC 947-3 1500 W AC-3/400 V 1 phase conforming to IEC 947-3 1500 W AC-3/400 V 3 phases conforming to IEC 947-3 1500 W AC-3/500 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 2200 W AC-23A/500 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 947-3 600 W AC-3/230 V 1 phase conforming to IEC 947-3 8300 W AC-21/400 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

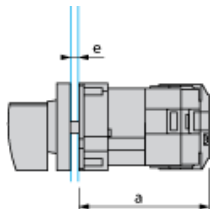
Operating rate	2.5 cyc/mn AC-21 2.5 cyc/mn AC-23 2.5 cyc/mn AC-3 8.333 cyc/mn AC-15
Short-circuit current	10000 A
Short circuit protection	16 A by cartridge fuse, type gG
[Uimp] rated impulse withstand voltage	4 kV in isolating function 6 kV conforming to IEC 947-1
Contacts operation	Slow-break
Positive 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	97 mm
Product weight	0.17 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
Class of protection against electric shock	Class II conforming to IEC 536 Class II conforming to NF C 20-030
RoHS EUR status	Compliant
RoHS EUR conformity date	0910

Operating Head and Body

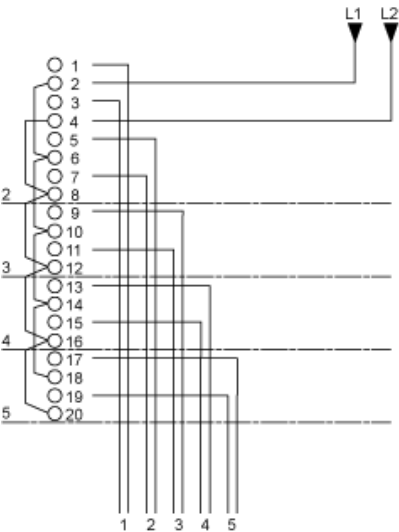
Front Mounting "Multi-Fixing"



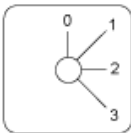
- a 73 mm/2.87 in.
- e support panel thickness 1 mm to 6 mm./0.039 in. to 0.24 in.

Link Positions (Factory Mounted)

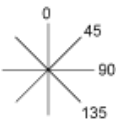
Diagram for 2 to 5-step Stepping Switches
Select the number of steps according to the product characteristics.



Marking

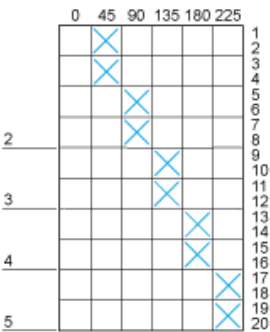


Angular Position of Switch



Switching Program

Diagram for 2 to 5-step Stepping Switches
Select the number of steps according to the product characteristics.



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:

