

Product data sheet

Characteristics

K1F013NZ2

cam stepping switch - 2-pole - 60 ° - 12 A -
front mounting - red handle



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	6 screws Ø 5.2 mm
Cam switch head type	With front plate 55 x 100 mm
Type of operator	Red handle
Rotary handle padlocking	With
Presentation of legend	With metallic legend, 1 - 2 - 3 black marking
Cam switch function	Stepping switch
Return	Without
Off position	Without Off position
Poles description	2P
Switching positions	Right: 0° - 60° - 120°
IP degree of protection	IP40 conforming to NF C 20-010 IP40 conforming to IEC 529

Complementary

Number of steps	3
Switching angle	60 °
[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	8300 W AC-21 / 400 V 3 phases conforming to IEC 60947-3 600 W AC-3 / 230 V 1 phase conforming to IEC 60947-3 4800 W AC-21 / 230 V 3 phases conforming to IEC 60947-3 2200 W AC-23A / 690 V 3 phases conforming to IEC 60947-3 2200 W AC-23A / 500 V 3 phases conforming to IEC 60947-3 2200 W AC-23A / 400 V 3 phases conforming to IEC 60947-3 1500 W AC-3 / 690 V 3 phases conforming to IEC 60947-3 1500 W AC-3 / 500 V 3 phases conforming to IEC 60947-3 1500 W AC-3 / 400 V 3 phases conforming to IEC 60947-3 1500 W AC-3 / 400 V 1 phase conforming to IEC 60947-3 1500 W AC-23A / 230 V 3 phases conforming to IEC 60947-3 1100 W AC-3 / 230 V 3 phases conforming to IEC 60947-3 10500 W AC-21 / 500...660 V 3 phases conforming to IEC 60947-3
[I _e] rated operational current AC	5.6 A at 230 V AC-23A 3 phases conforming to IEC 60947-3 4.8 A at 400 V AC-23A 3 phases conforming to IEC 60947-3 4.6 A at 230 V AC-3 3 phases conforming to IEC 60947-3 3.8 A at 500 V AC-23A 3 phases conforming to IEC 60947-3 3.3 A at 400 V AC-3 3 phases conforming to IEC 60947-3 2.8 A at 690 V AC-23A 3 phases conforming to IEC 60947-3 2.8 A at 500 V AC-3 3 phases conforming to IEC 60947-3 1.8 A at 690 V AC-3 3 phases conforming to IEC 60947-3 3 A at 230 V AC-15 conforming to IEC 60947-5-1 2 A at 400 V AC-15 conforming to IEC 60947-5-1 1 A at 500 V AC-15 conforming to IEC 60947-5-1
Electrical durability	500000 cycles AC-3 500000 cycles AC-23 1000000 cycles AC-21 1000000 cycles AC-15

Operating rate	8.333 cyc/mn AC-15 2.5 cyc/mn AC-3 2.5 cyc/mn AC-23 2.5 cyc/mn AC-21
Short-circuit current	10000 A
Short circuit protection	16 A by cartridge fuse, type gG
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947-1 4 kV in isolating function
Contacts operation	Slow-break
Positive opening	With
Electrical connection	Captive screw clamp terminals solid, 1 x 2.5 mm ² Captive screw clamp terminals flexible, 2 x 1.5 mm ²
Mechanical durability	1000000 cycles
CAD overall width	55 mm
CAD overall height	100 mm
CAD overall depth	73 mm
Product weight	0.17 kg

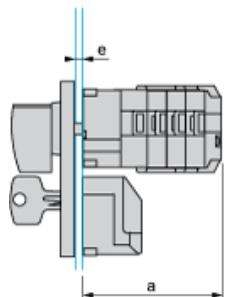
Environment

Standards	EN/IEC 60947-5-1 for control circuit EN/IEC 60947-3 for power circuit CENELEC EN 50013
Product certifications	UL 240 V 0.33 hp 1 phase 2 -pole(s) UL 240 V 1 hp 3 phases CSA 240 V 3 hp 3 phases 2 -pole(s) CSA 240 V 1 hp 1 phase
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 NF C 20-030 Class II conforming to IEC 536

Operating Head and Body with Plastic Base and Key Locking

Front Mounting by 6 Screws

55 mm x 100 mm / 2.17 in. x 3.94 in. front plate

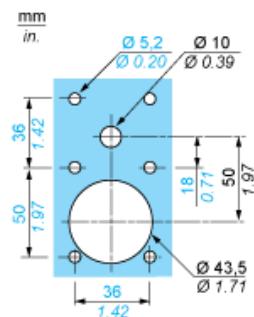


a 73 mm/2.87 in.

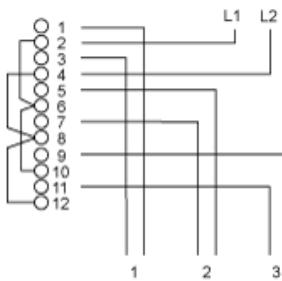
e support panel thickness 1 mm to 6 mm./0.039 in. to 0.24 in.

Operating Head and Body with Plastic Base and Key Locking

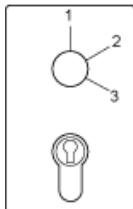
Panel Cut-out



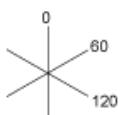
Link Positions (Factory Mounted)



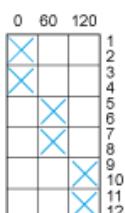
Marking



Angular Position of Switch



Switching Program



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:

