

# Product data sheet

## Characteristics

# K1F027ML

body for voltmeter switch - 3L and 3L-N - 45° - 12 A - screw mounting



### Main

Range of product	Harmony K
Product or component type	Cam switch body
Component name	K1
[I <sub>th</sub> ] conventional free air thermal current	12 A
Sub-assembly composition	Contact blocks + fixing plate
Cam switch function	Voltmeter switch
Type of measurement	Between 3 phases and between each of the 3 phases and neutral
Off position	With Off position
Switching positions	Left: 0° - 315° - 270° - 225° Right: 0° - 45° - 90° - 135°
Product mounting	Front mounting
Fixing mode	Multifixing
Bezel material	Plastic

### Complementary

Switching angle	45 °
[Ui] rated insulation voltage	690 V degree of pollution 3 conforming to IEC 60947-1
[I <sub>the</sub> ] conventional enclosed thermal current	10 A
Rated operational power in W	8300 W AC-21 / 400 V 3 phases conforming to IEC 947-3 600 W AC-3 / 230 V 1 phase conforming to IEC 947-3 4800 W AC-21 / 230 V 3 phases conforming to IEC 947-3 2200 W AC-23A / 690 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 / 400 V 3 phases conforming to IEC 947-3 1500 W AC-3 / 690 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 / 400 V 3 phases conforming to IEC 947-3 1500 W AC-3 / 400 V 1 phase conforming to IEC 947-3 1500 W AC-23A / 230 V 3 phases conforming to IEC 947-3 1100 W AC-3 / 230 V 3 phases conforming to IEC 947-3 10500 W AC-21 / 500 - 660 V 3 phases conforming to IEC 947-3
[I <sub>e</sub> ] rated operational current AC	5.6 A at 230 V AC-23A 3 phases conforming to IEC 947-3 4.8 A at 400 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 3.8 A at 500 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 2.8 A at 690 V AC-23A 3 phases conforming to IEC 947-3 2.8 A at 500 V AC-3 3 phases conforming to IEC 947-3 1.8 A at 690 V AC-3 3 phases conforming to IEC 947-3 3 A at 230 V AC-15 conforming to IEC 947-5-1 2 A at 400 V AC-15 conforming to IEC 947-5-1 1 A at 500 V AC-15 conforming to IEC 947-5-1
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
[U <sub>imp</sub> ] rated impulse withstand voltage	6 kV conforming to IEC 947-1 4 kV in isolating function

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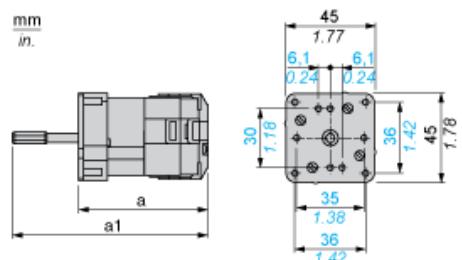
Contacts operation	Slow-break
Positive opening	With
Electrical connection	Captive screw clamp terminals solid, 1 x 2.5 mm <sup>2</sup> Captive screw clamp terminals flexible, 2 x 1.5 mm <sup>2</sup>
Mechanical durability	1000000 cycles
Product weight	0.126 kg

## Environment

Standards	IEC 60947-5-1 for control circuit IEC 60947-3 for power circuit EN 60947-5-1 for control circuit EN 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

## Body

### Front Mounting "Multi-Fixing", 2 or 4 Screws

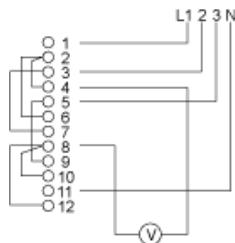


a 73 mm/2.87 in.  
a1 97 mm/3.82 in.

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Link Positions (Factory Mounted)

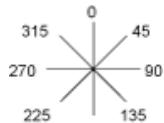
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Angular Position of Switch

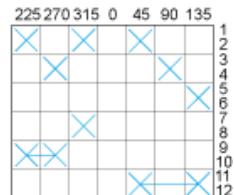
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Switching Program

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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°, spring return is over 30° after the last position (for a maximum of 3 simultaneous contacts).

Example:

