

Product datasheet

Specifications



Cam voltmeter switch, 3L and 3LN, 45°, 12 A, screw mounting

K1F027MLH

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, 0 - L1N - L2N - L3N - L1L2 - L2L3 - L3L1 black marking
Cam switch function	Voltmeter switch
Return	Without
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°
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 (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 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

[Ie] rated operational current AC	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 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
Electrical durability	1000000 cycles AC-15 1000000 cycles AC-21 500000 cycles AC-23 500000 cycles AC-3
Maximum 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 cartridge fuse, type gG
[Uimp] 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, clamping capacity: 2 x 1.5 mm ² Captive screw clamp terminals solid, clamping capacity: 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
Net weight	0.17 kg

Environment

Standards	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 CENELEC EN 50013
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 conforming to IEC 68-2-6 (f = 10...150 Hz)
Overvoltage category	Class II conforming to IEC 536 Class II conforming to NF C 20-030

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	6.700 cm
Package 1 Width	6.700 cm

Package 1 Length	11.000 cm
Package 1 Weight	179.000 g
Unit Type of Package 2	S03
Number of Units in Package 2	40
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	7.563 kg
Unit Type of Package 3	P06
Number of Units in Package 3	320
Package 3 Height	75.000 cm
Package 3 Width	60.000 cm
Package 3 Length	80.000 cm
Package 3 Weight	71.804 kg

Offer Sustainability

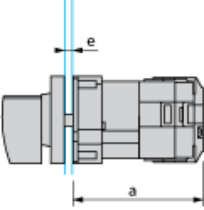
Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	China RoHS declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Contractual warranty

Warranty	18 months
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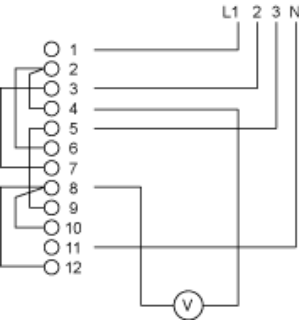
Operating Head and Body

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)



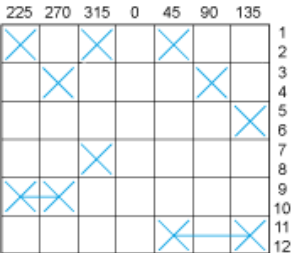
Marking



Angular Position of Switch



Switching Program



Convention Used for Switching Program Representation

Contact closed

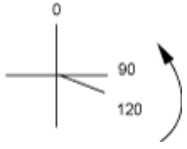
Contact closed in 2 positions and maintained between the 2 positions

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:



Recommended replacement(s)