

Product data sheet

Specifications



Harmony K1, K2, Cam voltmeter switch, 3L and 3LN, 45°, 12 A for Ø22 mm

K1F027MCH

Main

Range of product	Harmony K
Product or component type	Complete cam switch
Component name	K1
[lth] conventional free air thermal current	12 A
Mounting location	Front
Fixing mode	Ø 22 mm hole
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	Right: 0° - 45° - 90° - 135° Left: 0° - 315° - 270° - 225°
IP degree of protection	IP65 conforming to IEC 529 IP65 conforming to NF C 20-010

Complementary

Switching angle	45 °
[Ui] rated insulation voltage	690 V (pollution degree 3) conforming to IEC 60947-1
[lthe] 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 mm² Captive screw clamp terminals solid, clamping capacity: 1 x 2.5 mm²
Mechanical durability	1000000 cycles
CAD overall width	45 mm
CAD overall height	50 mm
CAD overall depth	69 mm
Net weight	0.19 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	6.5 cm
Package 1 Width	6.5 cm

Package 1 Length	16.5 cm
Package 1 Weight	203.0 g
Unit Type of Package 2	S01
Number of Units in Package 2	8
Package 2 Height	15.0 cm
Package 2 Width	15.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	1.848 kg

Offer Sustainability

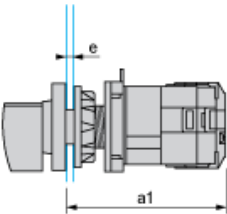
Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	China RoHS declaration
RoHS exemption 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
California proposition 65	WARNING: This product can expose you to chemicals including: Nickel compounds, which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Contractual warranty

Warranty	18 months
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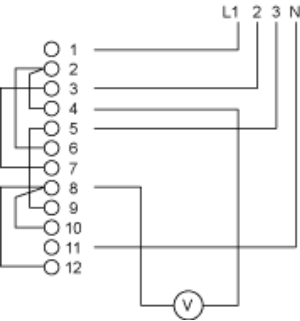
Operating Head and Body with Plastic Base

Front Mounting by Ø 22 mm/0.87 in. Hole



- a190.5 mm/3.53 in.
- e support panel thickness 1 mm to 6 mm./0.039 in. to 0.24 in.

Link Positions (Factory Mounted)



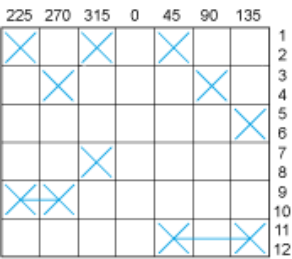
Marking



Angular Position of Switch

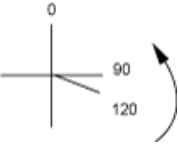


Switching Program



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)