

# K1D031B

Cam switch body for BCD encoded without output switch, Harmony K, Ø 22mm, plastic, 1 pole, 11 positions without 0 position, 45°, 12A



## Main

Range of product	Harmony K
Product or component type	Cam switch body
Component name	K1
[Ith] conventional free air thermal current	12 A
Sub-assembly composition	Contact blocks + fixing plate
Cam switch function	BCD encoded output switch
Off position	Without Off position
Switching positions	Right: 0° - 30° - 60° - 90° - 120° - 150° - 180° - 210° - 240° - 270° - 300°
Mounting location	Front
Fixing mode	Ø 22 mm hole
Bezel material	Plastic

## Complementary

Number of decimal	11
Switching angle	30 °
[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 <sup>2</sup> Captive screw clamp terminals solid, clamping capacity: 1 x 2.5 mm <sup>2</sup>
Mechanical durability	1000000 cycles
Net weight	0.11 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	7.8 cm
Package 1 Width	6.5 cm
Package 1 Length	6.5 cm
Package 1 Weight	110.0 g

## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	 <a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)  <a href="#">EU RoHS Declaration</a>
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	 <a href="#">China RoHS Declaration</a>
RoHS exemption information	 <a href="#">Yes</a>
Environmental Disclosure	 <a href="#">Product Environmental Profile</a>
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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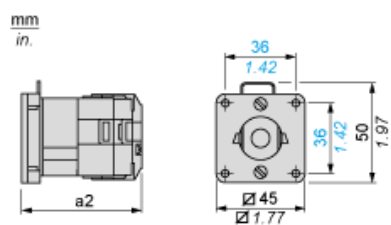


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Body with Plastic Base

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Front Mounting by Ø 22 mm/0.87 in. Hole



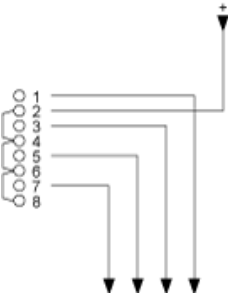
a2 59 mm/2.32 in.



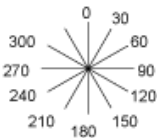
Link Positions (Factory Mounted)

Diagram for 1 to 12-decimal BCD Encoded Ouput Switches

Select the maximum number of decimals according to the product characteristics.



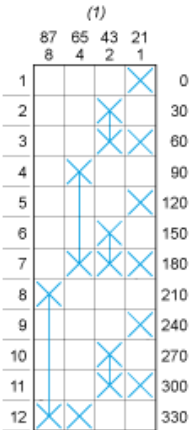
Angular Position of Switch



Switching Program

Diagram for 1 to 12-decimal BCD Encoded Ouput Switches

Select the maximum number of decimals according to the product characteristics.




(1) Contact marking value

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  $90^\circ$ , spring return is over  $30^\circ$  after the last position (for a maximum of 3 simultaneous contacts).

Example:

