

Product data sheet

Specifications



body for BCD encoded output switch - 1 pole - 30° - 12 A - screw mounting

K1D031BL

⚠ Discontinued on: Jan 29, 2021

⚠ Discontinued

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	Multifixing
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

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

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
Net Weight	0.126 kg

Environment

Standards	EN 60947-3 for power circuit EN 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

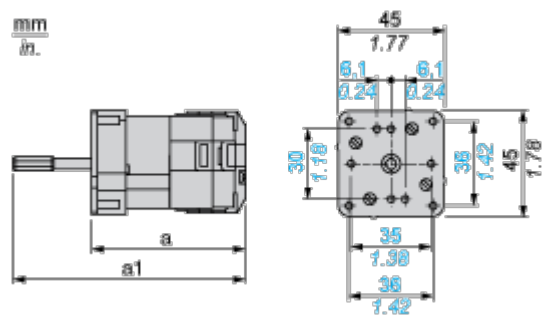
Contractual warranty

Warranty	18 months
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Dimensions Drawings

Body

Front Mounting “Multi-Fixing”, 2 or 4 Screws



a 63 mm/2.48 in.

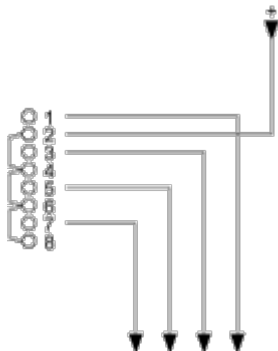
a1 87 mm/3.42 in.

Technical Description

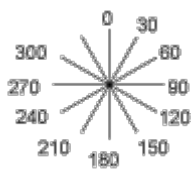
Link Positions (Factory Mounted)

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)

	87	65	43	21	
	8	4	2	1	
1				X	0
2			X		30
3			X	X	60
4		X			90
5				X	120
6			X		150
7		X	X	X	180
8	X				210
9				X	240
10			X		270
11			X	X	300
12	X	X			330

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

Example:

