Product datasheet
Characteristics

K50F003UP

cam changeover switch - 3-pole - 60° - 50 A - screw mounting

Main

Range of product	Harmony K
Product or component type	Complete cam switch
Component name	K50
[Ith] conventional free air thermal current	50 A
Mounting location	Front
Fixing mode	4 holes
Cam switch head type	With front plate 64 x 64 mm
Type of operator	Black handle
Rotary handle padlocking	Without
Presentation of legend	With metallic legend, 1 - 0 - 2 black marking
Cam switch function	Changeover switch
Return	Without
Off position	With Off position
Poles description	3P
Switching positions	Left: 0° - 300° Right: 0° - 60°
IP degree of protection	IP40 conforming to IEC 529 IP40 conforming to NF C 20-010

Complementary

Switching angle	60 °
[Ui] rated insulation voltage	690 V degree of pollution 3 conforming to EN 60947-1 690 V degree of pollution 3 conforming to IEC 60947-1
Short-circuit current	5000 A
Short-circuit protection	63 A by cartridge fuse, type gG
[Uimp] rated impulse withstand voltage	6 kV conforming to EN 947-1 6 kV conforming to IEC 947-1
Contact operation	Slow-break
Positive opening	With
Electrical connection	Captive screw clamp terminals flexible, 2 x 6 mm² Captive screw clamp terminals solid, 2 x 10 mm²
Tightening torque	2 N.m
Switching capacity in mA	15000 mA DC at 120 V 2 contact(s) for inductive load (T = 50 ms) 15000 mA DC at 180 V 3 contact(s) for inductive load (T = 50 ms) 15000 mA DC at 60 V 1 contact(s) for inductive load (T = 50 ms) 20000 mA DC at 140 V 3 contact(s) for inductive load (T = 50 ms) 20000 mA DC at 48 V 1 contact(s) for inductive load (T = 50 ms) 20000 mA DC at 95 V 2 contact(s) for inductive load (T = 50 ms) 30000 mA DC at 30 V 1 contact(s) for inductive load (T = 50 ms) 30000 mA DC at 60 V 2 contact(s) for inductive load (T = 50 ms) 30000 mA DC at 90 V 3 contact(s) for inductive load (T = 50 ms) 3500 mA DC at 110 V 1 contact(s) for inductive load (T = 50 ms) 3500 mA DC at 220 V 2 contact(s) for inductive load (T = 50 ms) 3500 mA DC at 330 V 3 contact(s) for inductive load (T = 50 ms) 37000 mA DC at 120 V 2 contact(s) for resistive load (T = 1 ms) 37000 mA DC at 180 V 3 contact(s) for resistive load (T = 1 ms) 37000 mA DC at 60 V 1 contact(s) for resistive load (T = 1 ms) 40000 mA DC at 140 V 3 contact(s) for resistive load (T = 1 ms) 40000 mA DC at 24 V 1 contact(s) for inductive load (T = 50 ms) 40000 mA DC at 48 V 1 contact(s) for resistive load (T = 1 ms) 40000 mA DC at 48 V 2 contact(s) for inductive load (T = 50 ms) 40000 mA DC at 70 V 3 contact(s) for inductive load (T = 50 ms) 40000 mA DC at 95 V 2 contact(s) for resistive load (T = 1 ms) 50000 mA DC at 24 V 1 contact(s) for resistive load (T = 1 ms) 50000 mA DC at 48 V 2 contact(s) for resistive load (T = 1 ms)

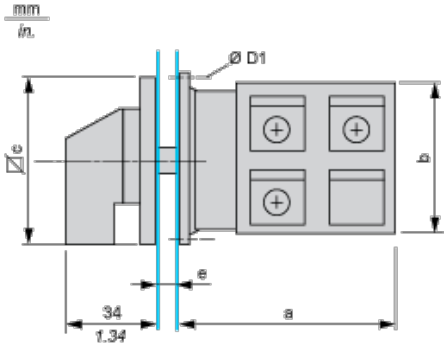
	50000 mA DC at 70 V 3 contact(s) for resistive load (T = 1 ms)
Mechanical durability	300000 cycles
CAD overall width	64 mm
CAD overall height	64 mm
CAD overall depth	120 mm
Product weight	0.53 kg

Environment

standards	EN/IEC 60947-3
product certifications	CULus 120 V 3 hp 1 phase CULus 480 V 25 hp 3 phases CULus 240 V 7.5 hp 1 phase CULus 240 V 7.5 hp 3 phases
protective treatment	TC
ambient air temperature for operation	-25...55 °C
ambient air temperature for storage	-40...70 °C
overvoltage category	Class II conforming to IEC 60536 Class II conforming to NF C 20-030

Dimensions

Front Mounting

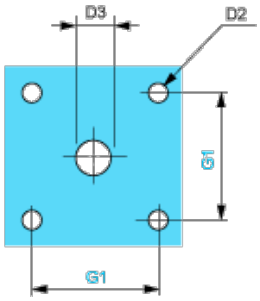


e support panel thickness 0.5 to 5.5 mm / 0.02 to 0.22 in.

a		b		c		D1	
mm	in.	mm	in.	mm	in.	mm	in.
80.8	3.18	60	2.36	64	2.52	4.1	0.16

Panel Cut-Out

Front Mounting

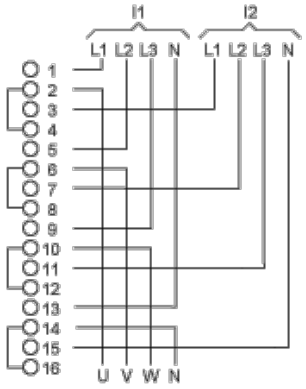


D2		D3		G1	
mm	in.	mm	in.	mm	in.
4.5	0.18	10	0.39	48	1.89

Link Positions (Factory Mounted)

Diagram for 1 to 4-pole Switches

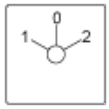
Select the number of poles according to the product characteristics



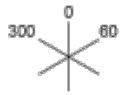
I1 Input 1

I2 Input 2

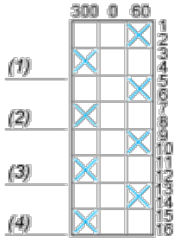
Marking



Angular Position of Switch



Switching Program



(1) 1-pole

(2) 2-pole

(3) 3-pole

(4) 4-pole

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: