



## Main

|                                                          |                                                              |
|----------------------------------------------------------|--------------------------------------------------------------|
| Range of product                                         | Harmony K                                                    |
| Product or component type                                | Complete cam switch                                          |
| Component name                                           | K50                                                          |
| [I <sub>th</sub> ] conventional free air thermal current | 50 A                                                         |
| Product mounting                                         | Front mounting                                               |
| 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                                      | Reversing switch                                             |
| Return                                                   | Without                                                      |
| Off position                                             | With Off position                                            |
| Poles description                                        | 2P                                                           |
| Switching positions                                      | Left: 0° - 300°<br>Right: 0° - 60°                           |
| IP degree of protection                                  | IP40 conforming to NF C 20-010<br>IP40 conforming to IEC 529 |

## Complementary

|                                                     |                                                                                                                              |
|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Switching angle                                     | 60 °                                                                                                                         |
| [U <sub>i</sub> ] rated insulation voltage          | 690 V degree of pollution 3 conforming to IEC 60947-1<br>690 V degree of pollution 3 conforming to EN 60947-1                |
| Short-circuit current                               | 5000 A                                                                                                                       |
| Short circuit protection                            | 63 A by cartridge fuse, type gG                                                                                              |
| [U <sub>imp</sub> ] rated impulse withstand voltage | 6 kV conforming to IEC 947-1<br>6 kV conforming to EN 947-1                                                                  |
| Contacts operation                                  | Slow-break                                                                                                                   |
| Positive opening                                    | With                                                                                                                         |
| Electrical connection                               | Captive screw clamp terminals solid, 2 x 10 mm <sup>2</sup><br>Captive screw clamp terminals flexible, 2 x 6 mm <sup>2</sup> |
| Tightening torque                                   | 2 N.m                                                                                                                        |

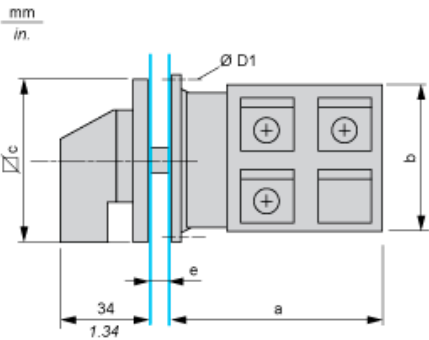
|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Switching capacity in mA | 50000 mA DC at 70 V 3 contact(s) for resistive load (T = 1 ms)<br>50000 mA DC at 48 V 2 contact(s) for resistive load (T = 1 ms)<br>50000 mA DC at 24 V 1 contact(s) for resistive load (T = 1 ms)<br>40000 mA DC at 95 V 2 contact(s) for resistive load (T = 1 ms)<br>40000 mA DC at 70 V 3 contact(s) for inductive load (T = 50 ms)<br>40000 mA DC at 48 V 2 contact(s) for inductive load (T = 50 ms)<br>40000 mA DC at 48 V 1 contact(s) for resistive load (T = 1 ms)<br>40000 mA DC at 24 V 1 contact(s) for inductive load (T = 50 ms)<br>40000 mA DC at 140 V 3 contact(s) for resistive load (T = 1 ms)<br>37000 mA DC at 60 V 1 contact(s) for resistive load (T = 1 ms)<br>37000 mA DC at 180 V 3 contact(s) for resistive load (T = 1 ms)<br>37000 mA DC at 120 V 2 contact(s) for resistive load (T = 1 ms)<br>3500 mA DC at 330 V 3 contact(s) for inductive load (T = 50 ms)<br>3500 mA DC at 220 V 2 contact(s) for inductive load (T = 50 ms)<br>3500 mA DC at 110 V 1 contact(s) for inductive load (T = 50 ms)<br>30000 mA DC at 90 V 3 contact(s) for inductive load (T = 50 ms)<br>30000 mA DC at 60 V 2 contact(s) for inductive load (T = 50 ms)<br>30000 mA DC at 30 V 1 contact(s) for inductive load (T = 50 ms)<br>20000 mA DC at 95 V 2 contact(s) for inductive load (T = 50 ms)<br>20000 mA DC at 48 V 1 contact(s) for inductive load (T = 50 ms)<br>20000 mA DC at 140 V 3 contact(s) for inductive load (T = 50 ms)<br>15000 mA DC at 60 V 1 contact(s) for inductive load (T = 50 ms)<br>15000 mA DC at 180 V 3 contact(s) for inductive load (T = 50 ms)<br>15000 mA DC at 120 V 2 contact(s) for inductive load (T = 50 ms) |
| Mechanical durability    | 300000 cycles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| CAD overall width        | 64 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| CAD overall height       | 64 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| CAD overall depth        | 103 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Product weight           | 0.305 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

## Environment

|                                            |                                                                                                                     |
|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Standards                                  | EN/IEC 60947-3                                                                                                      |
| Product certifications                     | CULus 240 V 7.5 hp 3 phases<br>CULus 240 V 7.5 hp 1 phase<br>CULus 480 V 25 hp 3 phases<br>CULus 120 V 3 hp 1 phase |
| Protective treatment                       | TC                                                                                                                  |
| Ambient air temperature for operation      | -25...55 °C                                                                                                         |
| Ambient air temperature for storage        | -40...70 °C                                                                                                         |
| Class of protection against electric shock | Class II conforming to NF C 20-030<br>Class II conforming to IEC 60536                                              |

Dimensions

Rear Mounting

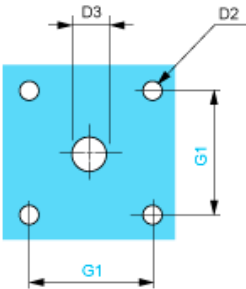


e support panel thickness 0.5 to 5.5 mm / 0.02 to 0.22 in.

| a    |      | b  |      | c  |      | D1  |      |
|------|------|----|------|----|------|-----|------|
| mm   | in.  | mm | in.  | mm | in.  | mm  | in.  |
| 63.3 | 2.49 | 60 | 2.36 | 64 | 2.52 | 4.1 | 0.16 |

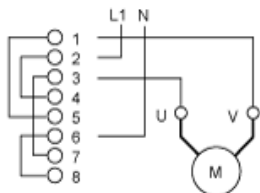
Panel Cut-Out

Front Mounting

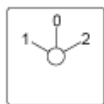


| D2  |      | D3 |      | G1 |      |
|-----|------|----|------|----|------|
| mm  | in.  | mm | in.  | mm | in.  |
| 4.5 | 0.18 | 10 | 0.39 | 48 | 1.89 |

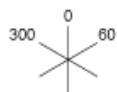
## Link Positions (Factory Mounted)



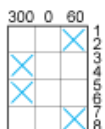
## Marking



## 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:

