

LIMIT SWITCH, K SERIES, ADJUSTABLE ROLLER LEVER, 2 SIDE CABLE ENTRY. DIMENSIONS COMPATIBLE TO EN 50047, PLASTIC BODY, CONTACTS 2NC SLOW ACTION. RUBBER ROLLER



KCF4L02

| Product designation      | Adjustable roller<br>lever |
|--------------------------|----------------------------|
| Product type designation | KCF                        |
| General characteristics  |                            |

| Material |
|----------|
|----------|

| Roller         Rubber           Type of contact         2NC Slow action           Thermal current lth         A         10           EC/EN 60947-5-1 designation         A600 Q600           Rated insulation voltage U         V         690           Rated insulation voltage U         V         690           Rated insulation voltage Uimp         kV         6           Insulation class         II         10 gG/SC QUICK FUSE           Switching speed         min         m/s         0.5           max         m/s         1.5         15           IEC Conventional free air thermal current lth         A         10         0           Resistance per pole (average value)         mΩ         <10         0           Mechanical features         Uccking bayonet insert         0         0           Operating head fixing         Locking bayonet insert         0         0           Operating torque         Nrm         3         0         2.5           Tightening torque (Max)         Switch fixing         Nrm         2.5         1           Contact terminals         Nm         0.8         1         1           Body lid screw fixing         Nm         0.8         1  |                          |                         | Housing |         | Polymer                   |
|--|--------------------------|-------------------------|---------|---------|---------------------------|
| Contact characteristics         2NC Slow action           Type of contact         A         10           Thermal current th         A         10           IEC/EN 60947-5-1 designation         A600 Q600           Rated insulation voltage Ui         V         690           Rated insulation voltage Uimp         kV         6           Insulation class         II         10           Short-circuit protection with fuse         Class/A         10 gG/SC           Switching speed         min         m/s         0.5           max         m/s         1.5         1.5           IEC Conventional free air thermal current Ith         A         10         0           Resistance per pole (average value)         mQ         <10  |                          |                         | -       |         | thermoplastic             |
| Type of contact         2NC Slow action           Thermal current lth         A         10           IEC/EN 60947-5-1 designation         A 600 Q600           Rated insulation voltage Ui         V         690           Rated insulation voltage Ui         V         6           Insulation class         II         II           Short-circuit protection with fuse         Class/A         10 gG/SC QUICK FUSE           Switching speed         min         m/s         0.5           Switching speed         max         m/s         1.5           IEC Conventional free air thermal current lth         A         10         Resistance per pole (average value)           Mechanical features         Uccking bayonet insert         Locking bayonet insert         Insert           Operating head fixing         Ncm         3         ozin         4.25           Tightening torque (Max)         Switch fixing         Nm         2.5         lbin         7           Contact terminals         Nm         0.8         lbin         7           Conductor section         AWG/Kcmil         Min         0.8         lbin         7           Resistance per pole (average value)         Nm         2.5         lbin         7         1 </td <td></td> <td></td> <td>Roller</td> <td></td> <td>Rubber</td> |                          |                         | Roller  |         | Rubber                    |
| Thermal current lth         A         10           IEC/EN 60947-5-1 designation         A600 Q600           Rated insulation voltage Ui         V         690           Rated insulation voltage Uimp         kV         6           Insulation class         II         10 gG/SC QUICK FUSE           Switching speed         min         m/s         0.5           Switching speed         min         m/s         1.5           IEC Conventional free air thermal current lth         A         10           Resistance per pole (average value)         mQ         <10   |                          | 8                       |         |         |                           |
| IEC/EN 60947-5-1 designation A600 Q600<br>Rated insulation voltage Ui V 690<br>Rated insulation class II<br>Short-circuit protection with fuse Class/A 10 gG/SC<br>QUICK FUSE<br>Switching speed min m/s 0.5<br>max m/s 1.5<br>IEC Conventional free air thermal current lth A 10<br>Resistance per pole (average value) mΩ <10<br>Mechanical features<br>Operating head fixing Locking bayonet<br>insert<br>Operating torque (Max)<br>Tightening torque (Max)<br>Switch fixing Nm 2.5<br>Ibin 22.1<br>Contact terminals Nm 0.8<br>Ibin 7<br>Conductor section<br>AWG/Kcmil MWG/Kcmil MWG/Kcmil Nm 16<br>max 14<br>IEC min mm² 1or 2   |                          |                         |         |         |                           |
| Rated insulation voltage Ui       V       690         Rated impulse withstand voltage Uimp       kV       6         Insulation class       II       10 gG/SC QUICK FUSE         Short-circuit protection with fuse       Class/A       10 gG/SC QUICK FUSE         Switching speed       min       m/s       0.5         max       m/s       1.5         IEC Conventional free air thermal current lth       A       10         Resistance per pole (average value)       mQ       <10   |                          |                         |         | A       |                           |
| Rated impulse withstand voltage Uimp       kV       6         Insulation class       II         Short-circuit protection with fuse       Class/A       10 gG/SC QUICK FUSE         Switching speed       min       m/s       0.5         max       m/s       1.5         IEC Conventional free air thermal current lth       A       10         Resistance per pole (average value)       mQ<<10   |                          |                         |         |         |                           |
| Insulation class II I 0 GG/SC QUICK FUSE Switching speed min m/s 0.5 max n/s 1.5 IEC Conventional free air thermal current lth A 10 Resistance per pole (average value) Mechanical features Operating head fixing Operating head fixing Operating torque Ncm 3 ozin 4.25 Tightening torque (Max) Switch fixing Nm 2.5 Ibin 22.1 Contact terminals Nm 0.8 Ibin 7 Body lid screw fixing Nm 0.8 Ibin 7 Conductor section AWG/Kcmil MKG/Kcmil Min 16 max 14 II   |                          |                         |         | -       |                           |
| Short-circuit protection with fuse       Class/A       10 gG/SC<br>QUICK FUSE         Switching speed       min<br>mx       m/s       0.5<br>max         Second Structure       max       m/s       1.5         IEC Conventional free air thermal current lth       A       10         Resistance per pole (average value)       mΩ       <10  |                          | nd voltage Uimp         |         | kV      |                           |
| Sition conclusion protection with russ Outsof A QUICK FUSE<br>Switching speed min m/s 0.5 max m/s 1.5 IEC Conventional free air thermal current lth A 10 Resistance per pole (average value) mΩ <10 Mechanical features Operating head fixing Operating torque Ncm 3 ozin 4.25 Tightening torque (Max) Switch fixing Nm 2.5 Ibin 22.1 Contact terminals Nm 0.8 Ibin 7 Body lid screw fixing Nm 0.8 Ibin 7 Conductor section AWG/Kcmil Min 16 max 14 IEC min mm² 1or 2  | Insulation class         |                         |         |         |                           |
| min     m/s     0.5       max     m/s     1.5       IEC Conventional free air thermal current lth     A     10       Resistance per pole (average value)     mQ     <10  | Short-circuit protection | n with fuse             |         | Class/A |                           |
| max         m/s         1.5           IEC Conventional free air thermal current lth         A         10           Resistance per pole (average value)         mΩ         <10  | Switching speed          |                         |         |         |                           |
| IEC Conventional free air thermal current Ith A 10<br>Resistance per pole (average value) mΩ <10<br>Mechanical features Locking bayonet<br>insert insert<br>Operating head fixing Locking bayonet<br>insert insert<br>Operating torque (Max)<br>Tightening torque (Max)<br>Switch fixing Nm 2.5<br>Ibin 22.1<br>Contact terminals Nm 0.8<br>Ibin 7<br>Body lid screw fixing Nm 0.8<br>Ibin 7<br>Conductor section AWG/Kcmil<br>IEC min mm² 1 or 2  |                          |                         | min     | m/s     | 0.5                       |
| Resistance per pole (average value)       mΩ       <10   |                          |                         | max     | m/s     | 1.5                       |
| Mechanical features       Locking bayonet insert         Operating head fixing       Ncm 3 ozin 4.25         Tightening torque (Max)       Switch fixing         Switch fixing       Nm 2.5         Ibin 22.1       Ibin 22.1         Contact terminals       Nm 0.8         Ibin 7       Body lid screw fixing         Operating torque (Max)       Nm 0.8         Ibin 7       Ibin 7         Body lid screw fixing       Nm 0.8         Ibin 7       Ibin 7         Ibin 7       Ibin 7 <td>IEC Conventional free</td> <td>air thermal current Ith</td> <td></td> <td>А</td> <td>10</td>  | IEC Conventional free    | air thermal current Ith |         | А       | 10                        |
| Operating head fixing     Locking bayonet insert       Operating torque     Ncm     3       Operating torque (Max)     Ncm     4.25       Tightening torque (Max)     Switch fixing     Nm     2.5       Ibin     22.1     Ibin     22.1       Contact terminals     Nm     0.8       Ibin     7       Body lid screw fixing     Nm     0.8       Ibin     7       Conductor section     NMG/Kcmil     Ibin       AWG/Kcmil     min     16       IEC     min     14  | Resistance per pole (a   | average value)          |         | mΩ      | <10                       |
| Operating field fixing insert Operating torque Ncm 3 ozin 4.25 Tightening torque (Max) Switch fixing Nm 2.5 Ibin 22.1 Contact terminals Nm 0.8 Ibin 7 Body lid screw fixing Nm 0.8 Ibin 7 Conductor section AWG/Kcmil IEC min mm² 1or 2  | Mechanical features      |                         |         |         |                           |
| Ncm         3           Tightening torque (Max)         Switch fixing         Nm         2.5           Ibin         22.1         Ibin         22.1           Contact terminals         Nm         0.8           Ibin         7         Ibin         7           Body lid screw fixing         Nm         0.8         Ibin         7           Conductor section         AWG/Kcmil         min         16         14           IEC         min         14         14  | Operating head fixing    |                         |         |         | Locking bayonet<br>insert |
| Tightening torque (Max)     Switch fixing     Nm     2.5       Ibin     22.1       Contact terminals     Nm     0.8       Ibin     7       Body lid screw fixing     Nm     0.8       Ibin     7       Conductor section     AWG/Kcmil     16       Max     14       IEC     min     mm  | Operating torque         |                         |         |         |                           |
| Tightening torque (Max)       Switch fixing       Nm       2.5         Ibin       22.1         Contact terminals       Nm       0.8         Ibin       7         Body lid screw fixing       Nm       0.8         Ibin       7         Conductor section       AWG/Kcmil       min         AWG/Kcmil       min       16         IEC       min       14   |                          |                         |         | Ncm     | 3                         |
| Switch fixing Nm 2.5 Ibin 22.1 Contact terminals Nm 0.8 Ibin 7 Body lid screw fixing Nm 0.8 Ibin 7 Conductor section AWG/Kcmil min 16 max 14 IEC min mm <sup>2</sup> 1 or 2  |                          |                         |         | ozin    | 4.25                      |
| Nm         2.5           Ibin         22.1           Contact terminals         Nm         0.8           Ibin         7           Body lid screw fixing         Nm         0.8           Ibin         7           Conductor section         Nm         0.8           AWG/Kcmil         min         16           IEC         min         14  | Tightening torque (Max   | x)                      |         |         |                           |
| Ibin       22.1         Contact terminals       Nm       0.8         Ibin       7         Body lid screw fixing       Nm       0.8         Ibin       7         Conductor section       Nm       0.8         AWG/Kcmil       min       16         max       14         IEC       min       mm  |                          | Switch fixing           |         |         |                           |
| Contact terminals Nm 0.8 Ibin 7 Body lid screw fixing Nm 0.8 Ibin 7 Conductor section AWG/Kcmil min 16 max 14 IEC min mm² 1 or 2   |                          |                         |         | Nm      | 2.5                       |
| Nm       0.8         Ibin       7         Body lid screw fixing       Nm       0.8         Ibin       7         Conductor section       AWG/Kcmil       7         AWG/Kcmil       16         IEC       14         IEC       101 2  |                          |                         |         | lbin    | 22.1                      |
| Ibin     7       Body lid screw fixing     Nm     0.8       Ibin     7       Conductor section     AWG/Kcmil     16       Min     16     14       IEC     min     mm²  |                          | Contact terminals       |         |         |                           |
| Body lid screw fixing Nm 0.8 lbin 7 Conductor section AWG/Kcmil min 16 max 14 IEC min mm <sup>2</sup> 1 or 2   |                          |                         |         | Nm      | 0.8                       |
| Nm 0.8<br>Ibin 7<br>Conductor section<br>AWG/Kcmil<br>min 16<br>max 14<br>IEC<br>min mm <sup>2</sup> 1 or 2  |                          |                         |         | lbin    | 7                         |
| Ibin     7       Conductor section     AWG/Kcmil       min     16       max     14       IEC     min       min     mm  |                          | Body lid screw fixing   |         |         |                           |
| Conductor section<br>AWG/Kcmil<br>   |                          |                         |         | Nm      | 0.8                       |
| AWG/Kcmil<br>min 16<br>max 14<br>IEC<br>min mm <sup>2</sup> 1 or 2   |                          |                         |         | lbin    | 7                         |
| min         16           max         14           IEC         min         mm²         1 or 2   | Conductor section        |                         |         |         |                           |
| IEC min mm <sup>2</sup> 1or 2  |                          | AWG/Kcmil               |         |         |                           |
| IEC min mm <sup>2</sup> 1 or 2   |                          |                         | min     |         | 16                        |
| min mm² 1or 2  |                          |                         | max     |         | 14                        |
|  |                          | IEC                     |         |         |                           |
| max mm <sup>2</sup> 2.5  |                          |                         | min     | mm²     | 1or 2                     |
|  |                          |                         | max     | mm²     | 2.5                       |

KCF4L02



LIMIT SWITCH, K SERIES, ADJUSTABLE ROLLER LEVER, 2 SIDE CABLE ENTRY. DIMENSIONS COMPATIBLE TO EN 50047, PLASTIC BODY, CONTACTS 2NC SLOW ACTION. RUBBER ROLLER

| Cable connection  |  |                      |          | Self-releasing screw terminal |
|---|--|----------------------|----------|-------------------------------|
| Cable entry   |  |                      |          | M20 on the sides              |
| Operations  |  |                      |          |                               |
| Mechanical life   |  |                      | cycles   | <1000000                      |
| Mechanical operation<br>Ambient conditions                              |  |                      | cycles/h | 3600                          |
| Temperature   |  |                      |          |                               |
| remperature   | Operating temperature                  |                      |          |                               |
|   | Operating temperature                  | min                  | °C       | -25                           |
|   |  | max                  | °Č       | +70                           |
|   | Storage temperature                    |                      | -        |                               |
|   |  | min                  | °C       | -40                           |
|   |  | max                  | °C       | +70                           |
| Resistance & Protection   | on                                     |                      |          |                               |
| IP degree   |  |                      |          |                               |
|   |  | Terminals            |          | IP20                          |
|   |  | Body housing         |          | IP65                          |
| Pollution degree  |  |                      |          | 3                             |
| Dimensions  |  |                      |          |                               |
| Ø50x10-<br>(1.97"x0.39")<br>22(0.86")<br>20 (0.78")<br>Ø4.3-<br>(0.16") | 42 (1.57")<br>50 (1.97")<br>50 (1.97") | 51.566.5 (2.02"2.61" |          |                               |

## Wiring diagrams

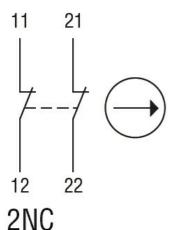
KCF4L02

**KCF4L02** 



LIMIT SWITCH, K SERIES, ADJUSTABLE ROLLER LEVER, 2 SIDE CABLE ENTRY. DIMENSIONS COMPATIBLE TO EN 50047, PLASTIC BODY, CONTACTS 2NC SLOW ACTION. RUBBER ROLLER

## Slow action



## Certifications and compliance Compliance CSA C22.2 n° 14 EN 50047 EC/EN 60204-1 IEC/EN 60204-1 IEC/EN 60947-5.1 UL508 UL508 Certificates CCC cULus EAC ETIM classification EC000020 - End

ETIM 8.0

EC000030 - End switch

KCF4L02