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## TECHNICAL MANUAL

 Limit switch TZ-8 EKF
## 1 DESCRIPTION

Limit switch TZ-8 EKF is an electromechanical device used to detect presence, passing, positioning, and end of travel of an object, by which motion it is operated.
All limit switches TZ-8 are listed in Table 1.
Limit switches TZ-8 EKF comply with IEC 60947-5-1:2016.

## 2 TECHNICAL DATA

## TZ-8 104



Table 1

| Item code | Name |
| :---: | :---: |
| tz8104 | Limit switch TZ-8104 EKF |
| tz8108 | Limit switch TZ-8108 EKF |
| tz8111 | Limit switch TZ-8111 EKF |
| tz8112 | Limit switch TZ-8112 EKF |
| tz8107 | Limit switch TZ-8107 EKF |
| tz8166 | Limit switch TZ-8166 EKF |
| tz8167 | Limit switch TZ-8167 EKF |
| tz8169 | Limit switch TZ-8168 EKF |

Main specifications are listed in Table 2.
Table 2

| Parameter | Value |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | tz8104 | tz8108 | tz8107 | tz8111 | tz8112 | tz8166 <br> tz8167 <br> tz8168 <br> tz8169 |
| Rated current $\ln , A$ | 5 |  |  |  |  |  |
| Rated insulation voltage, Ui, V | 660 |  |  |  |  |  |
| Rated frequency, Hz | 50 |  |  |  |  |  |
| Electrical endurance, cycles | 500000 |  |  |  |  |  |
| Actuator type | lever <br> with <br> roller | lever with lengthadjusted roller | lengthadjusted metal rod | pusher | pusher with roller | spring lever |
| Fixation | Lever self-return |  |  |  |  |  |
| Cross-section of connected wires, $\mathrm{mm}^{2}$ | Max. 2,5 |  |  |  |  |  |
| Degree of protection | IP65 |  |  |  |  |  |
| Operating temperature, ${ }^{\circ} \mathrm{C}$ Relative humidity at $+25^{\circ} \mathrm{C}$, $\%$ | $\begin{gathered} \text { from }-10 \text { to }+80 \\ \max .95 \end{gathered}$ |  |  |  |  |  |
| Contacts | $\mathrm{NO}+\mathrm{NC}$ |  |  |  |  |  |
| Actuation position | $20^{\circ}$ | $20^{\circ}$ | $20^{\circ}$ | 1,5 mm | 1.5 mm | 30 mm |
| Net weight, g | 140 | 145 | 170 | 135 | 135 | 140 |



Fig. 1 - TZ-8104 overall dimensions


Fig. 2 - TZ-8108 overall dimensions


Fig. 3 - TZ-8111 overall dimensions


Fig. 4 - TZ-8112 overall dimensions


Fig. 5 - TZ-8107 overall dimensions


Fig. 6-TZ-8166 overall dimensions


Fig. 7 - TZ-8167 overall dimensions


Fig. 8 - TZ-8168 overall dimensions


Fig. 9 - TZ-8169 overall dimensions

## 4 INSTALLATION AND OPERATION

Limit switches TZ-8 EKF shall be installed and connected by qualified electrical personnel.
WARNING! Make sure the power is off before installation, connection and setting!
Install the switch on the base, remove the lid, connect wires through the gland, close the lid. Check the rubber 0 -rings match the cross-section and grade of the connected cable, tighten all bolted flexible connections.
TZ-8 casing protects the switch from ingress of foreign objects, and accidental contact with live parts.

## 5 DELIVERY SCOPE

Limit switches TZ-8 EKF are supplied in a group package.
For all available documentation, scan the QR-code on the insert or on the inside of the package.

## 6 SAFETY REQUIREMENTS

The switches shall be repaired and serviced by qualified electrical personnel.
WARNING! Make sure the power is off before installation, connection and setting! Do not operate limit switches with visible mechanical damage.

## 7 MAINTENANCE

For maintenance, follow national safety rules for operation of electrical Installations. Under normal operating conditions, visually inspect the limit switches every 6 months.

## 8 TRANSPORTATION AND STORAGE

Limit switches TZ-8 can be transported by any means of enclosed transport that ensures protection of packed products from mechanical impacts and weather exposure.
Limit switches shall be stored indoors in the original package at the ambient temperature from $-25^{\circ} \mathrm{C}$ to $+50^{\circ} \mathrm{C}$ and relative humidity of max. $98 \%$ at $+25^{\circ} \mathrm{C}$.

## 9 DISPOSAL

Life-expired and failed products shall be disposed of in compliance with the national and local laws and regulations in force. To dispose of the product, send it to an authorized company for recycling in compliance with the effective national and local laws and regulations.

## 10 MANUFACTURER'S WARRANTY

The manufacturer guarantees that the limit switches comply with the requirements of IEC 60947-5-1:2016, provided that consumers follow the operation, transportation and storage conditions.
Warranty period: 7 years from the date of sale specified in the sales receipt. Shelf life: 7 years from the date of sale specified in the sales receipt.
Service life: 10 years.
Manufacturer: for information, refer to the product package.
Importer and EKF trademark service representative:
EKF ELECTRICAL SOLUTION - FZCO, Dubai Silicon Oasis, DDP, Building A2, Dubai, United Arab Emirates.
Importer and EKF trademark service representative on the territory of the Russian Federation: 000 «Electroresheniya», Otradnaya st., 2b bld. 9, 5th floor, 127273, Moscow, Russia. Tel.: +7 (495) 788-88-15.
Importer and EKF trademark service representative on the territory the Republic of Kazakhstan: TOO «Energoresheniya Kazakhstan», Kazakhstan, Almaty, Bostandyk district, Turgut Ozal st., 247, apt 4.

## 11 CERTIFICATE OF ACCEPTANCE

Limit switches TZ-8 EKF have been manufactured in compliance with laws and regulations in force and have been approved for operation.

Date of manufacture: for information, refer to the product package.
Quality control stamp



