



# **TECHNICAL MANUAL** Overvoltage and undervoltage

release RMM-47 EKF PROXIMA

## **1 DESCRIPTION**

The overvoltage and undervoltage release RMM-47 EKF PROXIMA is designed to trip circuit breakers by invalid over- or undervoltage. The release complies with IEC 60947-5-1.

# 2 TECHNICAL DATA

Characteristics	Value
Current type	AC
Rated voltage Un, V	180-260
Frequency, Hz	40-60
Min. non-operating voltage, V	170
Max. operating voltage, V	270
Degree of protection	IP20
Operating temperature, °C	from -25 to +50
Weight, kg	0,098
Max. cross-section of connected wires, mm <sup>2</sup>	16
Max. tightening torque, N•m	2,5

## **3 OVERALL DIMENSIONS**

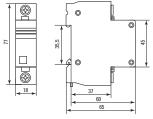


Figure 1

#### **4 INSTALLATION AND CONNECTION**

The release is an electronic threshold switch that connects to the electrical circuit controlled. A solenoid is connected to the output of the threshold switch to actuate the free-release mechanism of circuit breakers. When the overvoltage and undervoltage release trips, the «RETURN» button on the front panel releases. To reclose a tripped circuit breaker, press the «RETURN» button until it snaps. With this feature, the cause of the circuit breaker tripping can be found easily: either overcurrent in the protected circuit or invalid voltage.



Figure 2. Wiring diagram

The shunt releases shall be installed and connected by qualified electrical personnel. The release handle shall be engaged with the reclosing mechanism of the device the release is connected to. The overvoltage and undervoltage release RMM-47 EKF PROXIMA shall be installed to the right of the device and is supported by miniature circuit breakers VA 47-63 (4,5kA), VA 47-63 DC, VA 47-63M, VA 47-100, VA 47-100M; residual current circuit breaker with overcurrent protection AD-32; and modular switch disconnector VN-63.

#### **5 OPERATION CONDITIONS**

Operating temperature: from -25 °C to +50 °C. Altitude above sea level: max. 2000 m. Position in space: vertical or horizontal on a vertical plane.

## 6 DELIVERY SCOPE

The releases are supplied in a group package (10pcs.). For all available documentation, scan the QR-code on the insert or on the inside of the package.

#### **7 SAFETY REQUIREMENTS**

Do not operate releases with visual mechanical damage. By protection method against electric shock, the releases belong to protection class "0" according to IEC 61140 and shall be installed in distribution enclosures with protection class "1" and higher.

#### 8 MAINTENANCE

For release maintenance, follow national safety rules for operation of electrical Installations. Under normal operating conditions, visually inspect releases and tighten screw terminals every 6 months. Do not operate the releases, if visual damage to the release housing is found.

#### 9 TRANSPORTATION AND STORAGE

The overvoltage and undervoltage releases can be transported by any means of enclosed transport that ensures protection of packed products from mechanical and atmospheric impacts. The releases shall be stored indoors in the original package at the ambient temperature from -40 °C to +55 °C and relative humidity of max. 80% at +25°C.

#### 10 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 national and local laws and regulations in force.

#### 11 MANUFACTURER'S WARRANTY

Warranty period: 7 years from the date of sale specified in the sales receipt. Shelf life: 7 years from the date of manufacture specified on the product package or housing. Service life: 20 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 of the Republic of Kazakhstan: TOO «Energoresheniya Kazakhstan», Kazakhstan, Almaty, Bostandyk district, Turgut Ozal st., 247, apt 4.

# **12 CERTIFICATE OF ACCEPTANCE**

The overvoltage and undervoltage release RMM-47 EKF PROXIMA has been approved for operation.

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

Quality control stamp





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