



**EKF**



## **REGISTRATION CERTIFICATE**

Differential current circuit breaker

AVDT-63M EKF PROxima

## 1. PURPOSE

Differential current circuit breaker AVDT-63M EKF PROxima is used in AC electrical circuits, rated voltage 230V and 50Hz.

AVDT-63M is designed to

- protect people from electric shock when accidental touching the exposed conductive parts of the electrical installation;
- protect the electrical equipment when the conductors insulation is damaged or defective;
- prevent ignition and fire resulting from the flow of leakage currents and short-circuits, chassis fault and earth fault;
- automatically shut off of the spot of electric circuit if there are overloads and short circuits.

Differential current circuit breaker AVDT-63M EKF PROxima should comply with GOST IEC 61009-1-2014.

## 2. TECHNICAL CHARACTERISTICS

Basic technical characteristics are given in Table 1.

Parameters	Values
Number of poles and number of protected poles	1P+N
Rated current, (A)	6 – 40
Rated differential current, $I_{\Delta n}$ , (A)	0,010; 0,030
Permanent differential current (A)	$0,5 \cdot I_{\Delta n}$
Rated voltage (V)	230
Rated frequency (Hz)	50
Maximum rated breaking capacity (A)	6000
Presence of selective delay, type S	With no delay
Response time without delay no more, s	0,3 при $I_{\Delta n}$ ; 0,04 при $5I_{\Delta n}$
Characteristics of instantaneous tripping currents	C
Conditions for functioning by current component	type AC & type A
Control mode	Functionally dependent of the supply voltage (electronic)

Parameters		Values
Rated impulse withstand voltage (kV)		2
Endurance (number of cycles B-O)	Electrical	4000
	Mechanical	10000
Protection degree		IP20
Climatic version		NF4
Tightening torque no more, N•m		1,2
Storage temperature		from -40 to + 50°C

Time-current characteristics are shown in Figure 1.

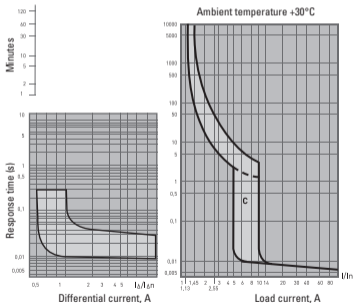


Fig. 1

### 3. OVERALL DIMENSIONS

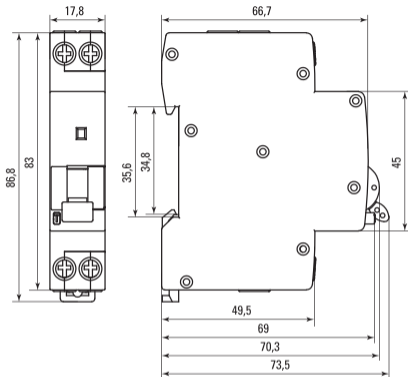


Fig.2 Overall dimensions AVDT-63M

### 4. MAINTENANCE AND INSTALLATION FEATURES

#### 4.1 Installation

Installation and startup of the device must be performed only by qualified electricians. The device is mounted on DIN-rail 35x7.5mm (standard EN 50022).

**CAUTION.** Installation of AVDT on DIN-rail must be carried out carefully, the casual handling may lead to the lock fastening damage.

Operating position of the device: vertical (position «OFF» when the control handle is down), with a deviation of up to  $5^\circ$  in any direction from the indicated plane.

Before installing the unit, make sure:

- in compliance of its parameters (marking of AVDT) with the required conditions;
- in the absence of external damage;
- in the efficiency of the mechanism (fixation when switching), by producing several switches.

The device is made for connecting by aluminum and copper wire. At the same time, simultaneous connection of copper and aluminum conductors to one terminal is not allowed.

For copper conductors of class no less than 2 (stranded), conductors have to be terminated by thin-walled copper sleeves.

For conductors with wires of 1 class (single-wire), the conductors have to be doubled to ensure better contact.

Voltage is supplied to the breaker terminals from the power source from above. Tighten the clamping screws with the force no more than  $1.7 \text{ N}\cdot\text{m}$  for copper wires, no more than  $1.7 \text{ N}\cdot\text{m}$  for current-conducting strands from aluminum alloys of 8000 series.

When installing the unit, make sure that the neutral conductor N in the protection zone of AVDT has no connection to the grounded elements and the protective neutral conductor PE.

Operability of the unit must be checked every month by pressing the test button «T». The unit is working properly if it actuates immediately. When the AVDT actuates (control arm moves to «OFF» position), you must carefully examine the condition of the insulation of conductors and consumers of the protected circuit and eliminate the causes of the leakage current. Then the unit should be tuned by moving the control arm to «ON» position.

4.2 Range of operating temperatures: +1 °C to +35 °C

4.3 Parameters of AVDT correspond to the altitude of no more than 2000 m.

4.4 Position in space : vertical on a vertical plane.

## **5. KITTING**

AVDT-63M is supplied in group package, with one registration certificate for each package.

## **6. SAFETY REQUIREMENTS**

6.1 Do not use AVDT-63M with external mechanical damage.

6.2 AVDT-63M should correspond to the protection class 0 according to GOST 12.2.007.0-75 by the method of protection against electric shock.

## **7. MAINTENANCE**

7.1 Maintenance of the differential current circuit breaker shall comply with «Safety and maintenance of electrical installations».

7.2 Operability of the unit must be checked every month by pressing the test button «T».

## **8. TRANSPORTATION AND STORAGE**

8.1 Differential current circuit breakers can be transported by all modes of enclosed transport ensuring protection of packaged products from mechanical effects and atmospheric precipitations.

8.2 Differential current circuit breakers must be stored in the original package indoors at ambient temperatures from -40 °C to +50 °C and relative humidity no more than 85% at +25 °C.

8.3 Dispose of with normal household waste.

## **9. MANUFACTURER'S GUARANTEE**

9.1 The manufacturer guarantees the differential current circuit breakers comply with requirements of GOST IEC 61009-1-2014 provided that all terms of use, transportation and storage are ensured.

9.2 Warranty service period: 7 years from the date of sale.

9.3 Guaranteed shelf life: 7 years

9.4 Service life: 10 years

**Manufacturer:** «CECF Electric Trading (Shanghai) Co.», LTD,  
1412, Suncome Cimic Tower, 800 Shang Cheng Road, Pudong  
New District, Shanghai, China.

**Importer and EKF trademark service representative:**  
«Electroresheniya», LTD, Otradnaya st., 2b bld. 9, 5th floor, 127273,  
Moscow, Russia.

Tel./fax: +7 (495) 788-88-15 (multi-line)

## 10. TEST CERTIFICATE

The differential current circuit breakers comply with requirements of GOST IEC 61009-1-2014 and tried-and-true.

Manufacturer's technical control stamp

## 11. NOTE OF SALE

Manufacture date « \_\_\_\_ » \_\_\_\_\_ 20\_\_ г.

Date of sale « \_\_\_\_ » \_\_\_\_\_ 20\_\_ г.

Seller's signature \_\_\_\_\_

Seller's stamp L.S.

**EAC**

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