

MODULE OF AUXILIARY CONTACTS OF ARMAT SERIES

Operation manual

Basic information about product

The module of auxiliary contacts of the ARMAT series of the IEK trademark (hereinafter referred to as – MVK) is designed for switching of the control circuits and signaling of AC and DC when the switching state of the main contacts changes. MVK is a module that is latched on the left side of the modular ARMAT series equipment.

The MVK correspond to the requirements LVD Directive No. 2014/35/EU and RoHS 2011/65/EU.

The state contact serves to obtain information about the state of the circuit breakers.

The emergency contact serves to signal the position of the circuit breaker cocking mechanism. Switching of contacts occurs only when the breaker operates from overloads or short circuits. To simulate an emergency operation, turn the test handle towards the control unit.

The switched contact is a two-in-one product: a mechanical switch allows selecting between two pairs of contacts, AS (alarm contact + state contact) – alarm contact + state contact or 2S (two state contacts) – two state contacts. To simulate emergency operation, turn the test handle towards the control.

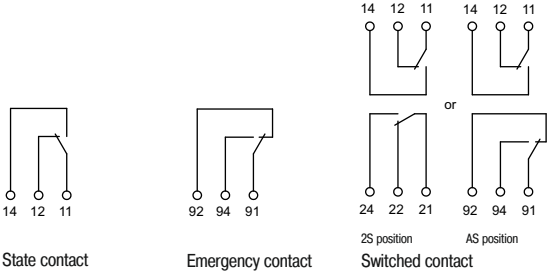
Record of MVK when ordering and in the documentation of another product:

Record of MVK when ordering and in the documentation of another product	Item
ARMAT state contact AR-AUX 240...415 V IEK	AR-AUX-SC-240-415
ARMAT emergency contact AR-AUX 240...415 V IEK	AR-AUX-AC-240-415
ARMAT switched contact AR-AUX 240...415 V IEK	AR-AUX-DC-240-415

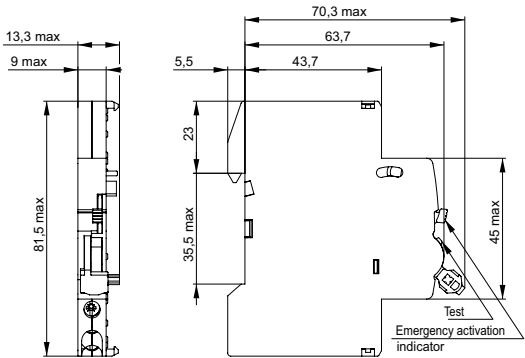
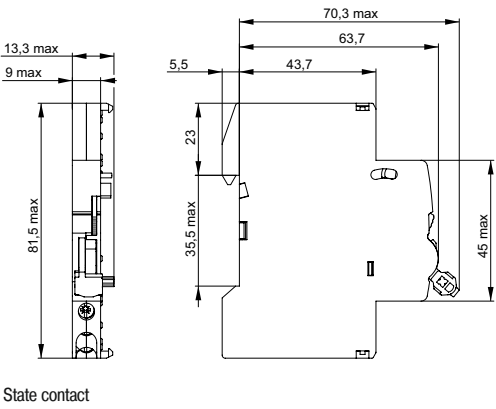
Specifications and operating conditions	
Parameters	Value
Rated voltage, Ue, V	240...415
– of AC with frequency of 50/60 Hz	24...130
– of DC	
Utilization category	DC-12, AC-12
Rated insulation voltage, V	415
Conventional thermal current Ith, A	
Rated impulse withstand voltage, kV	4
Degree of protection according to IEC 60529	IP20
Mechanical wear resistance, ON-OFF cycles	20000
Cross section of connected conductors, mm²	1–2,5
Types of compatible circuit breakers	ARMAT
Connection to the circuit breaker	left-handed
Repairability	none repairable
Operation mode	maintained
Tightening torque for terminal screws when using a screwdriver, N·m, maximum	0,8
Weight, kg, maximum	0,045
Operating temperature range, °C	From minus 40 up to plus 70
Relative air humidity, %:	
– at 20 °C	90
– at 40 °C	50
Base altitude, m	≤ 2000
Operation position	any

Switching mode of MVK			
Kind of current	Utilization category	Voltage, V	Current, A
AC	AC-12	240	6
		415	3
		130	1
DC	DC-12	48	2

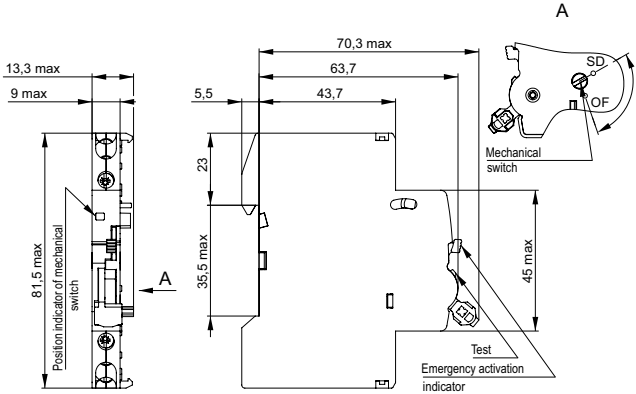
Electric schematic diagrams of MVK



Overall and mounting dimensions of MVK



Emergency contact



Switched contact

Completeness of set

- The delivery package includes:
- MVK – 1 pcs.;
 - passport – 1 copy.

Safety precautions

The operation of the MVK should be carried out in accordance with the «Rules on design of power electric installations», «Rules of technical operation of electric installations of consumers» and «Interindustry labor safety rules (safety rules) for the operation of electric installations».

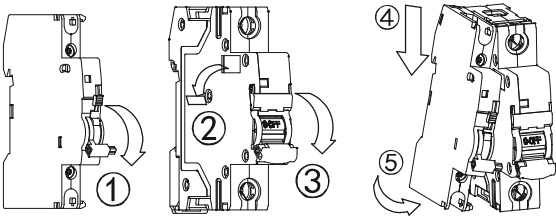
All installation and maintenance work should be carried out in de-energized state.

IT IS FORBIDDEN

To use MVK when formation of cracks or chips on the case during operation.

Installation

Before installation, you must familiarize yourself with the operation manual of the product with which the MVK will be docked.



Connect MVK to the circuit breaker, RCBO, RCCB, Shunt Release (hereinafter referred to as – the main device) in the following sequence:

- move the handles of all devices to the off position;
- insert the upper hook of the MVK into the upper groove of the main device;
- turn the MVK counterclockwise until the pin and protrusions in the handle and sidewall are aligned with the holes of the main device. Press the MVK firmly to the main device and the MVK latch, aligning with the upper groove of the main device, will fix in it;
- after connecting, turn on the main device. The handle should be clearly fixed in the on position "I", and the indicator of the circuit breaker, RCBO, RCCB should be red.

Docking of no more than two devices is allowed.

Maintenance

Under normal operating conditions, it is necessary to inspect the MVK once a year. Regardless of this, an inspection of the release should be carried out after each interruption of the short-circuit current by the circuit breaker.

When inspection, the following actions are carried out:

- removal of dust and dirt;
- checking the reliability of fastening to the switch;
- tightening the screws of the terminals;
- performance check as part of the equipment when checking it for functioning in operating modes.

Transportation, storage and disposal

Transportation of MVK is allowed by any type of covered transport in the manufacturer's packaging, ensuring the protection of the packed MVK from mechanical damage, pollution and moisture at temperatures from minus 40 °C to plus 55 °C.

Storage of MVK is carried out only in the manufacturer's packaging in rooms with natural ventilation at an ambient temperature of minus 25 °C to plus 55 °C and relative humidity of no more than 90 % at a temperature of 20 °C. Storage is allowed at 50 % relative humidity and 40 °C.

Disposal of products is carried out by transferring MVK to specialized organizations.

Service life and manufacturer's warranty

Service life of MVK – 15 years.

Warranty period of MVK – 10 years from the date of sale to the consumer, under observance of that the consumer meets the requirements of transportation, storage and operation.

If you have any claims during the warranty period, contact the seller or organization: