



TECHNICAL MANUAL

Motor mechanism VA-99M EKF

1 DESCRIPTION

The motor mechanism VA-99M EKF is designed to switch on/switch off the molded case circuit breakers (MCCB). The motor mechanism charges the reclosing spring. The energy saved during the MCCB tripping is used to reclose the MCCB.

Types and main technical performances are given in table 1.

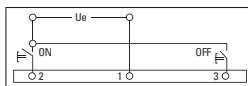
Table 1

Name	Item code	Net weight, kg	Rated operating voltage, V Ue	Range of operating voltages, V	Current type	Power, W	Electrical endurance, cycles
Motor mechanism 230V AC VA-99M 63 EKF	mccb99m-a-130	1	230		50-60 Hz	14	14 000
Motor mechanism 230V AC VA-99M 100 EKF	mccb99m-a-131	1,03					10 000
Motor mechanism 230V AC VA-99M 250 EKF	mccb99m-a-132	1,3					
Motor mechanism 230V AC VA-99M 400 EKF	mccb99m-a-133	1,3				35	5 000
Motor mechanism 230V AC VA-99M 630 EKF	mccb99m-a-134	1,3					
Motor mechanism 230V AC VA-99M 800 EKF	mccb99m-a-135	2,2					
Motor mechanism 100-220V DC VA-99M 63 EKF	mccb99m-a-142	1	100+220	(0,85 - 1,1) Ue	DC	14	14 000
Motor mechanism 100-220V DC VA-99M 100 EKF	mccb99m-a-143	1,03					10 000
Motor mechanism 100-220V DC VA-99M 250 EKF	mccb99m-a-144	1,3					
Motor mechanism 100-220V DC VA-99M 400 EKF	mccb99m-a-145	1,3				35	5 000
Motor mechanism 100-220V DC VA-99M 630 EKF	mccb99m-a-146	1,3					

Table 1 continued

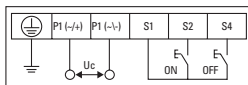
Motor mechanism 100+220V DC VA-99M 800 EKF	mccb99m-a-147	2,2	100+220	(0,85 - 1,1) Ue	DC	35	5 000
Motor mechanism VA-99M 63 EKF	mccb99m-a-148	1	24			14	14 000
Motor mechanism VA-99M 100 EKF	mccb99m-a-149	1,03					10 000
Motor mechanism VA-99M 250 EKF	mccb99m-a-150	1,3				35	5 000
Motor mechanism VA-99M 400 EKF	mccb99m-a-151	1,3					
Motor mechanism VA-99M 630 EKF	mccb99m-a-152	1,3					
Motor mechanism VA-99M 800 EKF	mccb99m-a-153	2,2					

Wiring diagrams



Motor
mechanism

Fig. 1 - Wiring diagram of VA-99M 63, 100, 250



Motor
mechanism

Fig. 2 - Wiring diagram of VA-99M 400, 630, 800

2 INSTALLATION AND OPERATION

The motor mechanism shall be mounted to the front panel of the MCCB. It has two operating modes: manual and automatic. The mode switch is located on the front of the motor mechanism.

In the manual mode the molded case circuit breaker shall be switched on with the operating handle.

In the automatic mode the MCCB is controlled remotely. The control circuits shall be connected to the terminals on the side of the motor mechanism. Use contacts P1 & P2 to connect power supply. Use contacts S2 & S4 to connect operation spring buttons. Contact S1 is a common-type contact.

The «ON» button is used to switch the MCCB to the «ON» position, while the «OFF» button – to the «OFF» position.

The indication window at the front panel serves for visual control of the MCCB and motor mechanism.

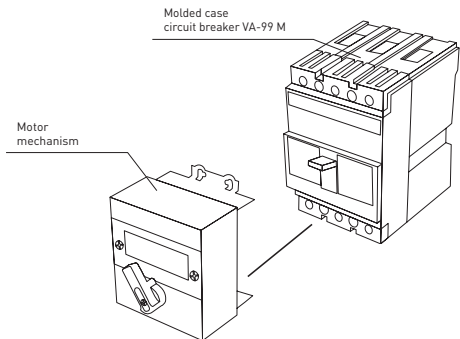


Fig. 3 - Wiring diagram of VA-99M 400, 630, 800

3 OVERALL DIMENSIONS

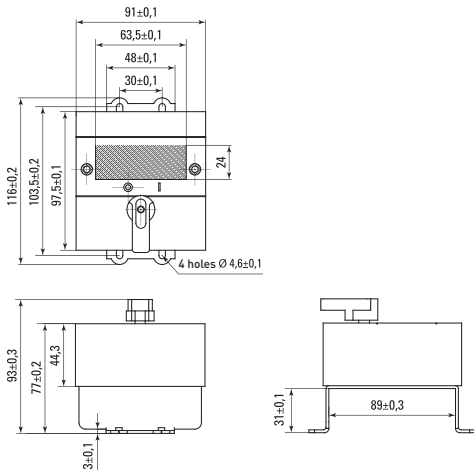


Fig. 4 - Overall dimensions of motor mechanism VA-99M 63

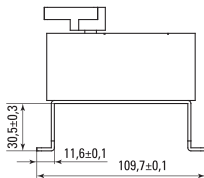
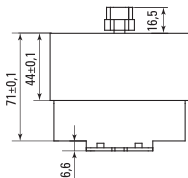
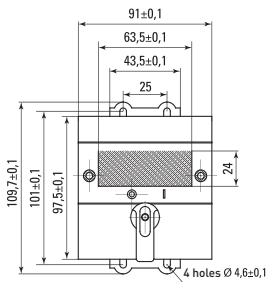


Fig. 5 - Overall dimensions of motor mechanism VA-99M 100

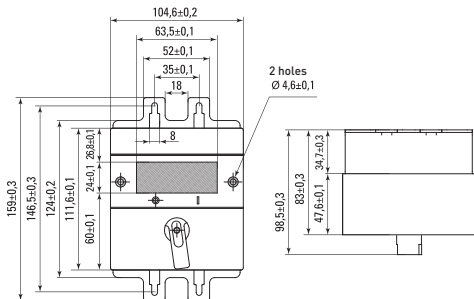


Fig. 6 - Overall dimensions of motor mechanism VA-99M 250

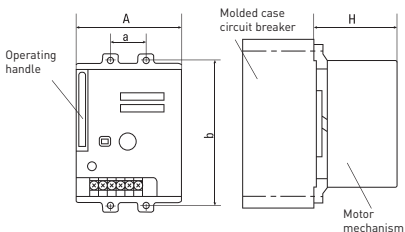


Fig. 7 - Overall dimensions of motor mechanism VA-99M 400, 630, 800

Table 2

Name	a, mm	b, mm	A, mm	H, mm
Motor mechanism VA-99M 400 EKF	44	194	130	142
Motor mechanism VA-99M 630 EKF	58	200		153
Motor mechanism VA-99M 800 EKF	70	243		146

4 DELIVERY SCOPE

The motor mechanisms are supplied in an individual package. For all available information, scan the QR-code on the insert or on the inside of the package.

5 SAFETY REQUIREMENTS

The motor mechanism VA-99M EKF complies with IEC 61140.

6 TRANSPORTATION AND STORAGE

The motor mechanisms can be transported by any means of enclosed transport that ensures the protection of packed products against moisture and mechanical impacts. The products shall be stored in the original package.

7 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.

8 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: 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:

ООО «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:

ТОО «Energoresheniya Kazakhstan», Kazakhstan, Almaty, Bostandyk district, Turgut Ozal st., 247, apt 4.

9 CERTIFICATE OF ACCEPTANCE

The motor mechanism VA-99M EKF has been approved for operation.

Date of manufacture:

For information, refer to the product package.

Technical control stamp.



EAC

v3



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EKFE