

POWER INDICATOR WITH FUSE PROTECTION

LKM-09

MANUAL INSTRUCTION

exta

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DESCRIPTION

Power indicator module with fuse protection LKM-09 intended for is used to present the presence of supply voltage on each phase. It can also be applied to protect electrical receivers against the effects of increasing current over permissible value, limited by fuses used. The device will work perfectly even in the case of pre-meter security exceeding 25A. Fuse damaged fuse will cut off the receiver from the supply voltage and extinguishing the appropriate one LED diodes, thanks to which there is no supply voltage of a given phase will be immediately visible. Makes it easier initial diagnosis of the installation condition. After removing possible failure and replacing the fuse to a new one - the system returns to normal operation.

Please remember the maximum protection current not exceeding 6A.

The device can be used in this configuration as additional protection for control and measurement equipment, e.g. sections of bistable relays, controllers roller shutters or the MEW-21 energy monitor. After removing the fuse, the device ensures visible break in the circuit.

FEATURES

- 3-phase power indicator with built-in security,
- 3 fuse modules in a single-module housing,
- maximum protection current should not exceed a total of 6.3 A,
- after removing or blowing a fuse provides a visible break in the circuit.
- lift connectors enable connection cables with a maximum cross-section of 2.5 mm².



CAUTION!

The device is designed for three-phase installation and must be installed in accordance with standards valid in a particular country. The device should be connected according to the details included in this operating manual. Installation, connection and control should be carried out by a qualified electrician staff, who act in accordance with the service manual and the device functions. Disassembling of the device is equal with a loss of guarantee and can cause electric shock. Before installation make sure the connection cables are not under voltage. The cruciform head screwdriver 4 mm should be used to install the device. Improper transport, storage, and use of the device influence its wrong functioning. It is not advisable to install the device in the following cases: if any device part is missing or the device is damaged or deformed. In case of improper functioning of the device contact the producer.

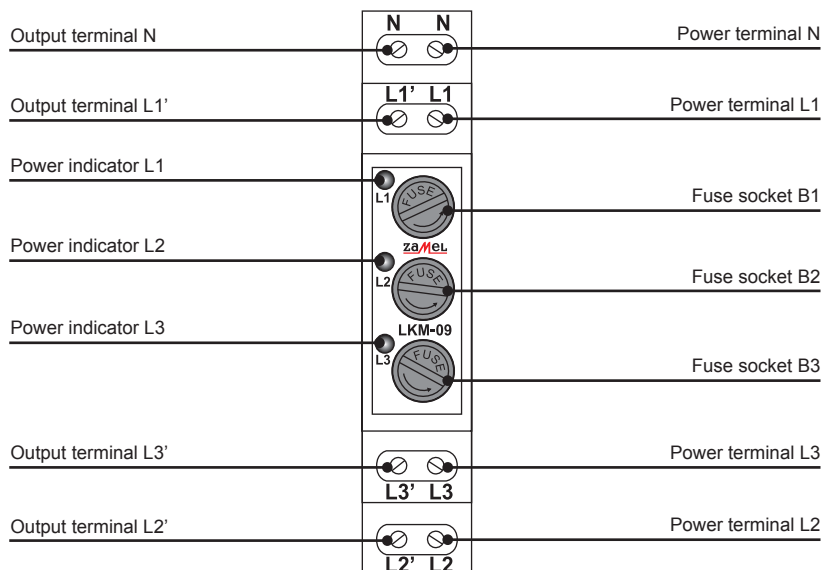


Do not dispose of this device with other waste! In order to avoid harmful effects on the environment and human health, the used device should be stored in designated areas. For this purpose, you can dispose of household waste free of charge and in any quantity to a collection point set up, as well as to the shop when you buy new equipment.

TECHNICAL DATA

Power terminals:	L1-L1' – first fuse (B1) L2-L2' – second fuse (B2) L3-L3' – third fuse (B3) N – neutral wire
Protection base:	fuse insert Ø 5 x 20 mm
Permissible voltage:	230-400 V AC/DC
Maximum insert current:	6.3 A at 400V AC
Maximum device current:	total for all 3 phases should not exceed 6.3 A
Rated current consumption:	2.8 mA
Power indicator:	3 x color LED
Number of connection terminals:	8
Cross-section of connection cables:	0,2 ÷ 2,5 mm ²
Tightening torque:	0,4 Nm
Operating temperature:	-25 ÷ +50 °C
Working position:	any
Housing mounting:	TH 35 rail
Housing protection level:	IP20
Overvoltage category:	II
Pollution degree:	2
Dimensions:	single-module 90x17.5x66 mm
Weight:	0.047 kg

APPEARANCE



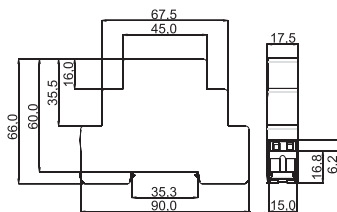
MOUNTING

1. Disconnect the power supply circuit with the fuse, overcurrent switch or switch disconnector connected to the appropriate circuit.
2. Check the condition with a suitable device voltage-free on power supply cables.
3. Install the LKM-09 device in the switch-board on TH 35 rail.
4. Connect the wires to the terminals accordingly with connection diagram.
5. Install into socket holder(s). fuse links of the desired value.
6. Turn on the power circuit.

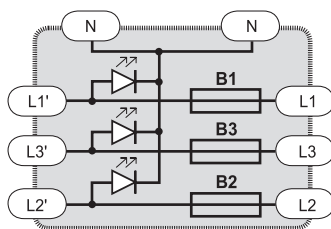
FUNCTIONING

The device protects circuits against effects current increases above the permissible value. Thanks to replaceable inserts it can offer stable operation and adaptation to the requirements of the protected person circuit.

DIMENSIONS



INNER DIAGRAM

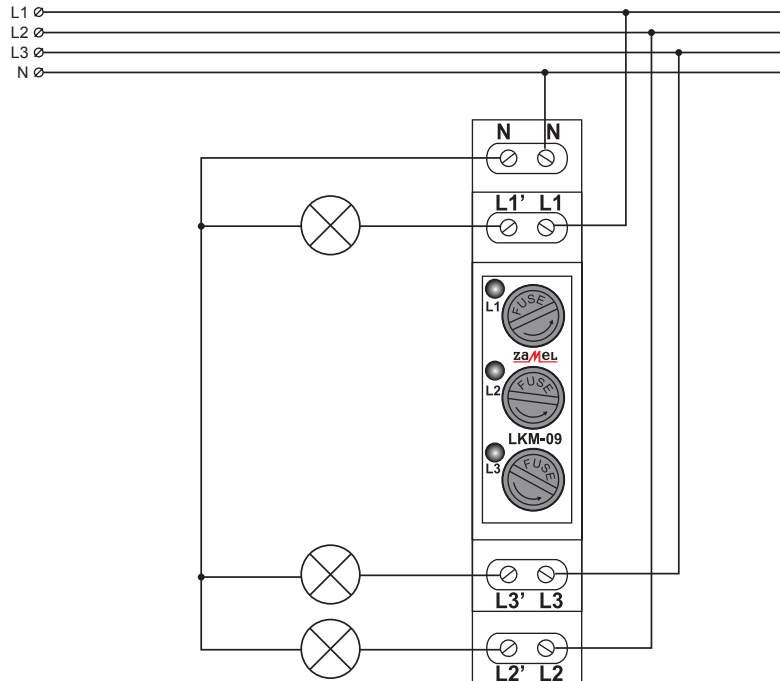


WARRANTY CARD

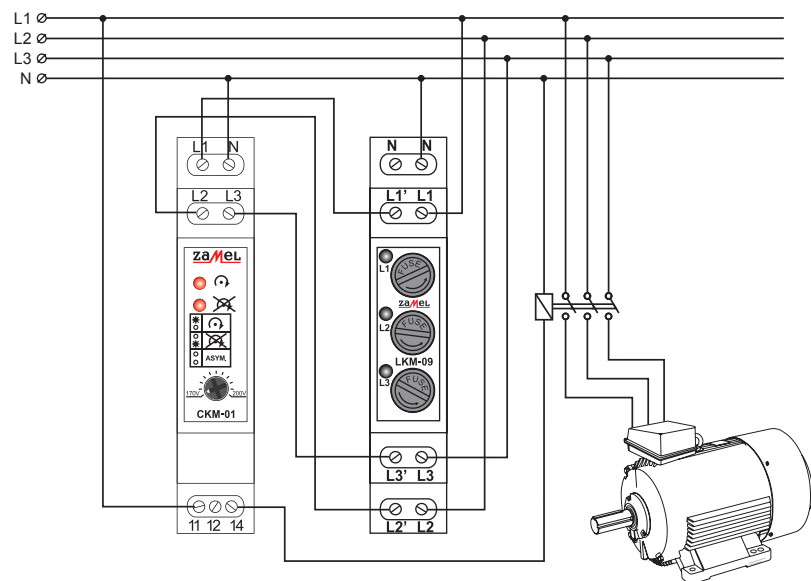
There is 24 months guarantee on the product

Salesman stamp and signature, date of sale

CONNECTION



APPLICATION



The LKM-09 fuse module protects the CKM-01 phase sequence sensor. The device is monitoring voltage status for each phase indicating the location of the failure. The indicator in the fuse unit contains fuses limiting the current to a maximum of 6.3 A. The phase sensor protects the motor against damage in the event of phase failure or change in the sequence of power supply phases drive. Phase loss will be observed on the LKM-09 power indicator.

1. ZAMEL provides a two-year warranty for its products.
2. The ZAMEL warranty does not cover:
 - a) mechanical defects resulting from transport, loading / unloading or other circumstances;
 - b) defects resulting from incorrect installation or operation of ZAMEL products;
 - c) defects resulting from any changes made by CUSTOMERS or third parties, to products sold or equipment necessary for the correct operation of products sold;
 - d) defects resulting from force majeure or other aleatory events for which ZAMEL is not liable;
 - e) power supply (batteries) to be equipped with a device in the moment of sale (if they appear).
3. All complaints in relation to the warranty must be provided by the CUSTOMER in writing to the retailer after discovering a defect.
4. ZAMEL will review complaints in accordance with existing regulations.
5. The way a complaint is settled, e.g. replacement of the product, repair or refund, is left to the discretion of ZAMEL.
6. Guarantee does not exclude, does not limit, nor does it suspend the rights of the PURCHASER resulting from the discrepancy between the goods and the contract.