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## DESCRIPTION

The device is used to signal the presence of voltage in a three-phase supply system. It is realized by means of three LEDs (L1, L2, L3). There are four colours of the LED diode available (red, green, yellow and mixed). LKM-01 power supply indicator can be used in the TN-C supply system (together with point zero).

## FEATURES

- ↳ Optical voltage presence signalling,
- ↳ LED diodes with increased light emission,
- ↳ long durability of lighting elements,
- ↳ easy adaptation for special use,
- ↳ monomodular casing,
- ↳ TH-35 DIN rail installation.



The device is designed for three-phase installation and must be installed in accordance with standards valid in a particular country.

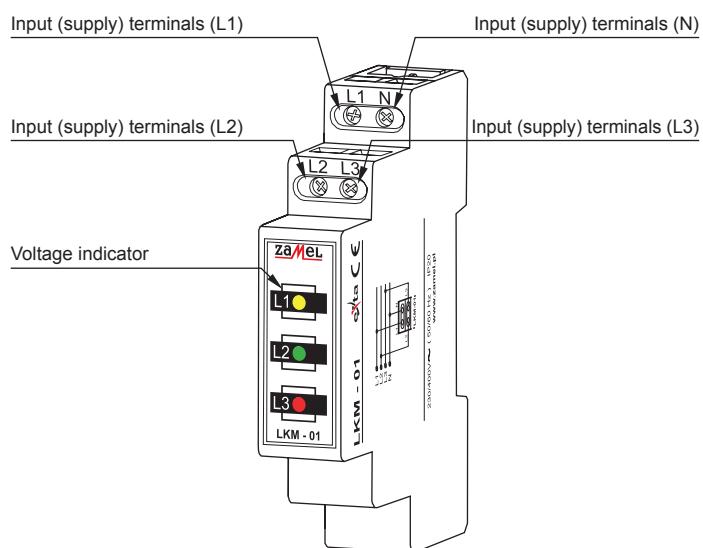
**CAUTION**  
 The device should be connected according to the details included in this operating manual. Installation, connection and control should be carried out by a qualified electrician staff, who act in accordance with the service manual and the device functions. Disassembling of the device is 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 3,5 mm should be used to instal the device. Improper transport, storage, and use of the device influence its wrong functioning. It is not advisable to instal 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.

## TECHNICAL PARAMETERS

### LKM - 01

Input (supply) terminals :	L1, L2, L3, N
Input rated voltage:	230/400 V~
Input voltage tolerance:	from -15 to +10 %
Rated frequency:	50 / 60 Hz
Rated power consumption (type 10, 20, 30, 40):	1,5 / 6 / 0,9 / 2,8 mA
Power supply indicator:	3x LED
Number of terminal clamps:	4
Section of connecting cables:	from 0,2 to 2,5 mm <sup>2</sup>
Ambient temperature range:	from -20 to +45 °C
Operating position:	free
Mounting:	TH35 rail (PN-EN 60715)
Protection degree:	IP20 (PN-EN 60529)
Protection class:	II
Overvoltage category:	II
Pollution degree:	2
Rated impulse withstand voltage:	1 kV (PN-EN 61000-4-5)
Dimensions (height / width / depth):	monomodular (17,5 mm) 90x17,5x66 mm
Weight:	47 g
Reference standards :	PN-EN 62094-1 PN-EN 61000-4-2,3,4,5,6,11

## APPEARANCE



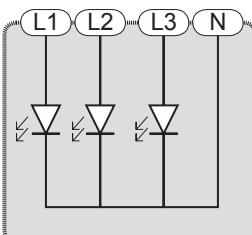
## MOUNTING

1. Disconnect the power supply from the mains by the phase fuse, the circuit-breaker or the switch-disconnector that are joined to the proper circuit,
2. **Check if there is no voltage on connection cables by means of a special measure equipment,**
3. Install LKM-01 device in the switchboard on TH-35 DIN rail,
4. Connect the cables with the terminals according to installing diagram,
5. Switch on the power supply from the mains.

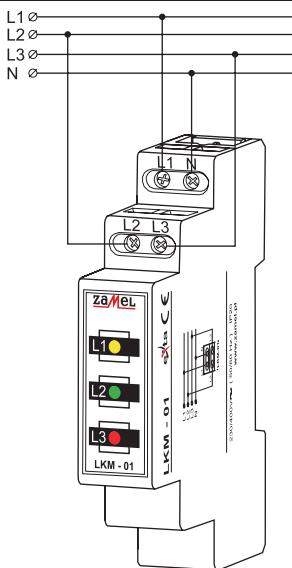
## FUNCTIONING

The appropriate LED diode is on if there is power supply on a particular phase wire. The LED diode is off if there is no power supply. **For proper device functioning it is necessary to connect neutral wire.**

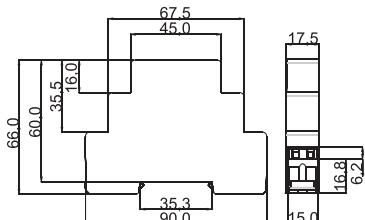
## INNER DIAGRAM



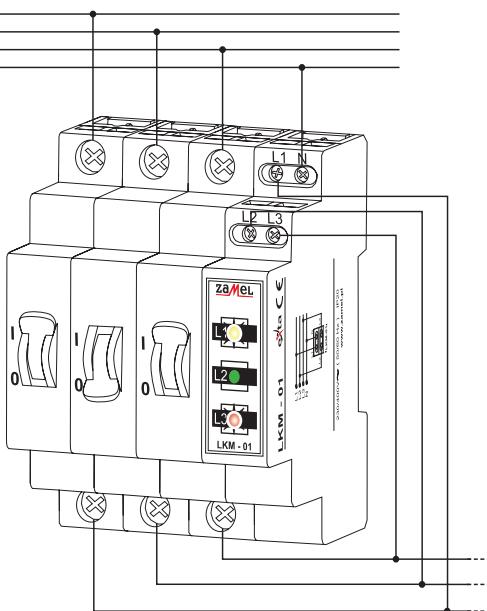
## CONNECTING



## DIMENSIONS



## EXAMPLE OF INSTALLATION



## PRODUCT FAMILY

LKM-01 power supply indicator belongs to LKM voltage indicators family.

**LKM - XX - XX**

Colour option:  
10 - 3x LED red  
20 - 3x LED green  
30 - 3x LED yellow  
40 - 1x LED (yellow, green, red)

Type:  
01 - neutral cable supply  
02 - cable supply without a neutral

Symbol

### Typical use:

LKM-01 power supply indicator signals the voltage presence or its absence on every phase of a three-phase supply system:

- ↳ L1, L3 diodes in ON position signal voltage presence,
- ↳ L2 diode in OFF position signals voltage absence on L2 phase (fuse is switched off).

## GUARANTEE CARD

There is 24 months guarantee on the product

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.

Salesman stamp and signature, date of sale