

# Command and alarm devices

## Buttons, switches, indicating lights

Light signaling indicators are intended for indicating the state of electric circuits. They are applied in electric panels, industrial equipment and power supply objects.

Control buttons and switches are designed for an operative management of contactors (automatic tripping contactors) and automatics relay within AC electric circuits of 50 Hz and voltage limited to 600 V or DC circuits limited to 400 V and other technological processes.

Various color variants provide for the most efficient arrangement of panels and boards. All devices consist of two units: removable head and contact module.

Black NO contact block (1NO) and brown NC unit (1NC).



## Design Features



Removable head provides for fast changing of lamps and light filters.



Conductors are connected with screw clamps with disk spring washers ensuring stable fixation.



12, 24, 36 and 110 V indicators can be used in AC and DC circuits.



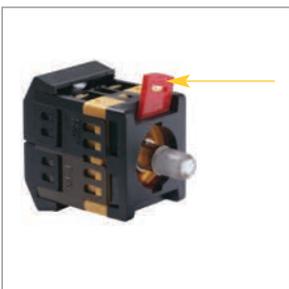
Using different color variants of dismountable light filters provides for more efficient panel and board assembly.



LED matrix employed in the indicators ensures more powerful light luminous flux as compared to a neon lamp and extended service life (6000 hours).



Removable neon lamp and LED matrix have different color arrangement. LED matrix is a universal solution for 12, 24, 36, 110 and 230 V both in AC and DC circuits. Neon lamp can be replaced with a LED matrix.



Convenient mounting of contact block that is connected to the button block at the expense of fixing by means of a plastic flag.



Supplementary making and breaking contacts allow expanding the capabilities of commutation processes.



Rubber O-rings ensure protection from foreign objects.



Simplified constructional solution provides for fast dismounting and installation of this device into a panel or board.

## Design Features



Auxiliary contact block are installed using a special mounting screws ensuring the stability of connection.



Using LED matrices as light sources. It has extended operating life and brighter light emission.



Availability of interchangeable making (1m) and breaking (1b) auxiliary contacts.



Rubber O-rings ensure protection from foreign objects.



Option of fast light source changing at the expense of using LED matrices with VA9s base.



Metal base ensures longer service life.



Upgraded press element construction excludes its spontaneous falling-out.



Marking holders ensure identification.



Stable and convenient system of fixation the device onto a mounting panel.


**Accessories for light signaling indicators, control buttons and switches**

|   | Name   | Color  | Amount, pcs. |                | Product ID         |
|---|--|--------|--------------|----------------|--------------------|
|   |  |        | in package   | in transp. box |                    |
|    | Auxiliary contact for light signaling hardware 1NC | brown  | 4            | 2000           | BDK10              |
|   | Auxiliary contact for light signaling hardware 1NO | black  | 4            | 2000           | BDK20              |
|    | Contact block 1m for LAY5 series IEK               | green  | 4            | 800            | BDK21              |
|   | Contact block 1b for LAY5 series IEK               | red    | 4            | 800            | BDK11              |
|    | Changeable lamp LED matrix/12 V AC/DC              | green  | 1            | 50             | BMS10-012-K06      |
|   | Changeable lamp LED matrix/12 V AC/DC              | red    | 1            | 50             | BMS10-012-K04      |
|   | Changeable lamp LED matrix/12 V AC/DC              | yellow | 1            | 50             | BMS10-012-K05      |
|   | Changeable lamp LED matrix/12 V AC/DC              | blue   | 1            | 50             | BMS10-012-K07      |
|   | Changeable lamp LED matrix/24 V AC/DC              | green  | 1            | 50             | BMS10-024-K06      |
|   | Changeable lamp LED matrix/24 V AC/DC              | red    | 1            | 50             | BMS10-024-K04      |
|   | Changeable lamp LED matrix/24 V AC/DC              | yellow | 1            | 50             | BMS10-024-K05      |
|   | Changeable lamp LED matrix/24 V AC/DC              | blue   | 1            | 50             | BMS10-024-K07      |
|   | Changeable lamp LED matrix/36 V AC/DC              | green  | 1            | 50             | BMS10-036-K06      |
|   | Changeable lamp LED matrix/36 V AC/DC              | red    | 1            | 50             | BMS10-036-K04      |
|   | Changeable lamp LED matrix/36 V AC/DC              | yellow | 1            | 50             | BMS10-036-K05      |
|   | Changeable lamp LED matrix/36 V AC/DC              | blue   | 1            | 50             | BMS10-036-K07      |
|   | Changeable lamp LED matrix/48 V AC/DC              | green  | 1            | 50             | BMS10-048-K06      |
|   | Changeable lamp LED matrix/48 V AC/DC              | red    | 1            | 50             | BMS10-048-K04      |
|   | Changeable lamp LED matrix/230 V AC/DC             | green  | 1            | 50             | BMS10-220-K06      |
|   | Changeable lamp LED matrix/230 V AC/DC             | red    | 1            | 50             | BMS10-220-K04      |
| Changeable lamp LED matrix/230 V AC/DC  | yellow   | 1      | 50           | BMS10-220-K05  |                    |
| Changeable lamp LED matrix/230 V AC/DC  | blue   | 1      | 50           | BMS10-220-K07  |                    |
|  | Changeable lamp neon/230 V                         | green  | 100          | 1000           | BMS20-240-K06      |
|   | Changeable lamp neon/230 V                         | red    | 100          | 1000           | BMS20-240-K04      |
|  | Changeable cap for AL-22                           | green  | 10           | 4000           | BLS20D-KS-AL-K06   |
|   | Changeable cap for AL-22                           | red    | 10           | 4000           | BLS20D-KS-AL-K04   |
|   | Changeable cap for AL-22TE                         | green  | 10           | 4000           | BLS30D-KS-ALTE-K06 |
|   | Changeable cap for AL-22TE                         | red    | 10           | 4000           | BLS30D-KS-ALTE-K04 |
|  | Marking holder DM 11×25                            | black  | 100          | 2500           | DM11x25            |
|   | Marking holder DM 18×25                            | black  | 100          | 2500           | DM18x25            |