

# 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.



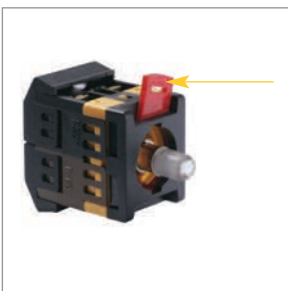
Using different color variants of dismountable light filters provides for more efficient panel and board assembly.



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.

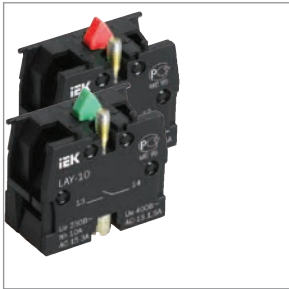
## Design Features



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.



	Name	Color	Amount, pcs.		Product ID
			in package	in transp. box	
	SB-7 "Start" d22 mm/230 V	green	10	500	BBT40-SB7-K06
	SB-7 "Start" d22 mm/230 V	red	10	500	BBT40-SB7-K04
	PPBB-30N "I-O" d30 mm neon/230 V 1NO+1NC	red, green	10	200	BBD20-PPBB-K51
	PPBB-30N "ON-OFF" d30 mm neon/230 V 1NO+1NC	red, green	10	200	BBD21-PPBB-K51
	LAY5-BA21 without bias lighting 1NO	black	20	200	BBT60-BA-K02
	LAY5-BA31 without bias lighting 1NO	green	20	200	BBT60-BA-K06
	LAY5-BA41 without bias lighting 1NO	red	20	200	BBT60-BA-K04
	LAY5-BA42 without bias lighting 1NC	red	20	200	BBT61-BA-K04
	LAY5-BA51 without bias lighting 1NO	yellow	20	200	BBT60-BA-K05
	LAY5-BA61 without bias lighting 1NO	blue	20	200	BBT60-BA-K07
	LAY5-BC21 without bias lighting 1NO	black	20	200	BBG70-BC-K02
	LAY5- BC31 without bias lighting 1NO	green	20	200	BBG70-BC-K06
	LAY5-BC41 without bias lighting 1NO	red	20	200	BBG70-BC-K04
	LAY5-BC42 without bias lighting 1NC	red	20	200	BBG71-BC-K04
	LAY5-BC51 without bias lighting 1NO	yellow	20	200	BBG70-BC-K05
	LAY5-BC61 without bias lighting 1NO	blue	20	200	BBG70-BC-K07
	LAY5-BL21 without bias lighting 1NO	black	20	200	BBT70-BL-K02
	LAY5-BL31 without bias lighting 1NO	green	20	200	BBT70-BL-K06
	LAY5-BL41 without bias lighting 1NO	red	20	200	BBT70-BL-K05
	LAY5-BL42 without bias lighting 1NC	red	20	200	BBT71-BL-K04
	LAY5-BL51 without bias lighting 1NO	yellow	20	200	BBT71-BL-K05
	LAY5-BL61 without bias lighting 1NO	blue	20	200	BBT70-BL-K07
	LAY5-BS542 "Mushroom" turn alarm with fixation	red	20	200	BBG90-BS-K04
	LAY5-VT42 "Mushroom" turn alarm with fixation	red	20	200	BBG80-BT-K04
	LAY5-BW3361 with bias lighting 1NO	green	20	200	BBT50-BW-K06
	LAY5-BW3461 with bias lighting 1NO	red	20	200	BBT50-BW-K04
	LAY5-BW3561 with bias lighting 1NO	yellow	20	200	BBT50-BW-K05
	LAY5-BW8465 "I-O" double with bias lighting	red/green	20	200	BBD40-BW-K51