



## MICROCOMPUTER BASED LEVEL CONTROLLER BLC100/101

- Up to 3 levels and 3 relay outputs (independent)
- Variant for 2 dependent levels plus alarm
- Input from conductivity cell electrodes
- Drainage and supply control
- Output activation threshold adjustment
- Indication for reached level
- Low cost

### DESCRIPTION

The BLC10X controllers are low-cost electronic level controllers / indicators available for DIN-rail and panel mounting. They employ measurement of electrical conductivity of the liquid between electrodes or between electrode and metal vessel case. BLC10X are applicable for liquids with relatively high conductivity that are normally used in chemical, paper, food, wine, biotechnological industries, etc. The level indicator BLC10X allows monitoring 1 or 2 fixed levels, and BLC10X allows monitoring 1, 2, or 3 fixed levels. When each level is reached, the corresponding relay is activated or deactivated (drainage / supply control). BLC101 is also available as a drainage or supply level controller with alarm relay (see model BLC105). The BLC10X level indicator / controller is based on a high-tech microprocessor circuit, guaranteeing accuracy and stability, preventing electrolytic polarization, and ensuring stable operation. The direction of relay action at level reach as well as the connection (dependence) between levels is programmable. Output relays may be used for signaling reached level or controlling electrical actuators. The possibility to adjust output activation threshold as well as the LED indication makes the BLC10X level indicator a solution for a wide range of level related problems.

### SPECIFICATIONS GENERAL

**Construction** : Panel mount to DIN or DIN-rail  
**Wiring** : Screw terminals  
**Housing material** : Plastic

### INPUT

**Resistive** : Conductive cell electrodes  
**Activation threshold** :  $\leq 1$  to 500 k $\Omega$   
**Release threshold** :  $> 1$  to 10M $\Omega$   
**Threshold adjustment**: By trimmers on front panel  
**Operation modes** : Selected by jumpers  
**Independent levels** : Each level controls a relay  
**Dependent levels** : 1 relay, controlled by 2 levels  
**Probe voltage** : 18 VAC

### INDICATION

**Indication power on** : LED  
**Indication operation** : 3 LEDs for reached levels

### OUTPUT

**Relay** : 6A/250VAC NO/NC contact  
**Solid state** : SSR 1A/250VAC  
**Transistor gate** : Open collector 40mA/40V  
**Extern SSR** : 24V/50mA  
**Output action** : Selected by jumpers  
**Drainage vessel emptying**: Activates above the level  
**Supply vessel filling** : deactivates above the level



### INSTALLATION

**Supply** : 230,115 or 24VAC, 90 to 250VAC  
**Consumption** : Max 2VA  
**Ambient temp** : -20 to 65°C  
**Humidity** : 0-85%  
**Dimension** : W48 x H96 x D120mm or W69 x H115 x D53mm (DIN-rail)  
**Weight** : 500g  
**Protection class** : IP44 front/IP65 DIN-rail terminals IP20  
**EMC** : EN 50081-1, EN 50082-2, EN 61010-1, 73/23/EEC & 89/336/EEC



### ORDER INFORMATION

| BLC10X- | TYPE (X) | MOUNTING   | SUPPLY       | OUTPUT               | INPUT  |
|---------|----------|------------|--------------|----------------------|--------|
| 0       | 2 levels | V Panel    | X Specify    | X None               | A None |
| 1       | 3 levels | R DIN-rail | A 230VAC     | C Relay              | B Cond |
|         |          |            | B 115VAC     | D SSR                |        |
|         |          |            | C 90-250 VAC | E NPN                |        |
|         |          |            | E 24VAC      | J Ext.SSR            |        |
|         |          |            |              | <b>ADJUSTMENT</b>    |        |
|         |          |            |              | X None               |        |
|         |          |            |              | A Sensity adjustment |        |

Example: BLC101-RACCCBBB  
 3 levels-DIN-rail, 230VAC, 3 x Relay, 3 x Conductive



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