

## Level Controller LC05

- ◆ Operates with conductive or non-conductive liquids
- ◆ Contact or resistive input
- ◆ Panel mounting
- ◆ Controls level between 2 electrodes with 1 relay output
- ◆ Tank supply or drainage control
- ◆ State indication
- ◆ Low cost



LC05 is a low-cost level controller for supply or drainage level control. Through its relay output, this device directly controls electrical pumps, valves, etc. and may be used either for tank emptying (drainage) or tank filling (supply). Two versions are available employing different methods for level measurement:

- LC05 with resistive input, i.e. measuring electrical conductivity of the liquid between electrodes or between electrode and metal tank body, applicable for liquids with relatively high conductivity that are normally used in chemical, paper, food, wine, biotechnological industries, etc;

- LC05 with electrical contact input, monitoring float state using magnetic or electromechanical float switches and applicable for various non-conductive liquids or cases of heavy condensation, vaporization, or foaming, such as in heating and water supply installations, etc.

LC05 level controller is based on high-tech specialized electronic circuits that guarantee accuracy and stability, prevent electrolytic polarization, and ensure stable operation.

### Technical specifications

#### Input

<b>Contact</b>	passive electrical contact
- <b>ON resistance</b>	≤ 50 Ω
- <b>OFF resistance</b>	≥ 500 kΩ
<b>Resistive <sup>(1)</sup></b>	conductive electrodes
- <b>activation threshold <sup>(2)</sup></b>	≤ 50 kΩ
- <b>release threshold <sup>(3)</sup></b>	≥ 1...10 MΩ
- <b>probe voltage</b>	18 VAC
<b>Input type</b>	as requested

#### Output

<b>Relay electromechanical</b>	5A/250V w/ NO/NC contact
<b>Solid state relay <sup>(4)</sup></b>	1A/250VAC
<b>MOS gate <sup>(4)</sup></b>	0.1A/60V, optically isolated
<b>Output for external SSR</b>	5...24 V, 30 mA
<b>Control algorithm</b>	ON/OFF

#### Indication

<b>LEDs</b>	LED for power ON, LED for output state
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#### Power supply

<b>Mains supply voltage</b>	230 VAC or 115 VAC
<b>SMPS voltage <sup>(4)</sup></b>	90...250 V
<b>Isolated low voltage</b>	12...24 V <sup>(4)</sup> or 24 VAC
<b>Consumption</b>	max. 2 VA

#### Operating conditions

<b>Ambient temperature</b>	-10...65 °C
<b>Ambient humidity</b>	0...85 %RH
<b>Storage temperature</b>	-20...65 °C
<b>Storage humidity</b>	0...95 %RH, non-condensing

#### Design and materials

<b>Case material</b>	plastic
<b>Mounting</b>	in 42x90 mm panel cut-out
<b>Wiring</b>	plug-in terminals
<b>Dimensions</b>	48x96(front)x107 mm
<b>Mounting depth</b>	98 mm
<b>Weight</b>	max. 400 g
<b>Protection, front/terminals</b>	IP54 / IP20
<b>Increased front IP (option)</b>	IP65

<sup>(1)</sup> Measures liquid resistance between measuring electrode and reference electrode (tank body)

<sup>(2)</sup> Maximum threshold resistance of activation at reaching (exceeding) the level

<sup>(3)</sup> Minimum threshold resistance of release at falling below the level

<sup>(4)</sup> Ask for availability!

### Ordering code LC05★ - G1.G5.G7 - #1

Code	Feature or option	Code values
★	Variant	<b>F</b> - for supply control, <b>E</b> - for drainage control
<b>G1</b>	Power supply	<b>A</b> - 230 VAC, <b>B</b> - 115 VAC, <b>C</b> - 90...250 V <sup>(4)</sup> , <b>Q</b> - 12...24 V, isolated <sup>(4)</sup> , <b>R</b> - 24 VAC
<b>G5</b>	Relay output	<b>C</b> - relay NO/NC, <b>D</b> - SSR <sup>(4)</sup> , <b>J</b> - for external SSR, <b>M</b> - isolated MOS gate <sup>(4)</sup>
<b>G7</b>	Input	<b>A</b> - contact (float), <b>B</b> - resistive (conductivity cell)
<b>#1</b>	Increased front protection	<b>X</b> - none, <b>P</b> - IP65 front protection