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ENGLISH

1CLRLE230DIN

Level regulator

Modular controller for conductive liquids, ideal for automating filling or emptying pumps in tanks, wells, or cisterns. Through the internal relay, the device starts or stops the pump based on the levels detected by the probes (configurable with 2 or 3 probes).It features adjustable sensitivity (5 kΩ ÷ 100 kΩ) to match the conductivity level of the liquid, and an intervention delay (up to 10 seconds) to prevent false activations caused by liquid fluctuations. LED indicators show the status of the power supply, relay, and minimum/maximum levels.DIN rail mounting.

INFORMATION AND SAFETY PRECAUTIONS

It is advisable to read the installation and user instructions carefully and to keep them for future reference. The manufacturer reserves the right to make all the technical and construction changes it deems necessary without prior notice.

Important: the installation, electrical connection and commissioning of devices and equipment must be performed by qualified personnel and in compliance with regulations and applicable laws.

Before starting the installation and maintenance of the device, disconnect the mains power supply.

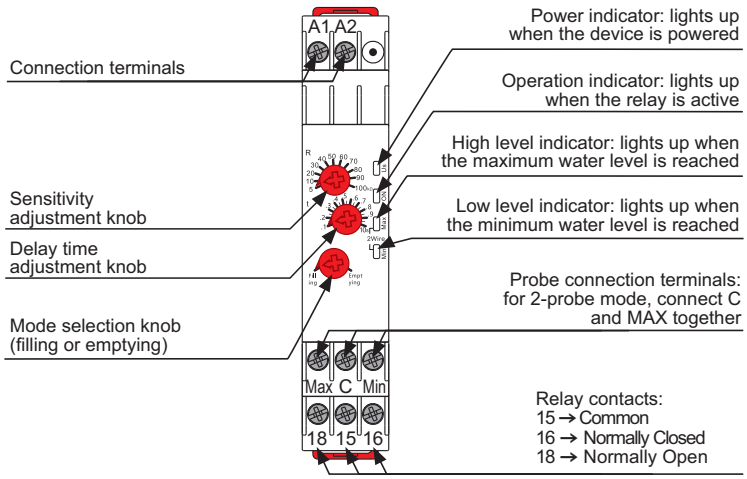
- Do not connect or power the unit if any part is visibly damaged.
- Once installation is complete, inaccessibility to the terminals without the use of special tools must be guaranteed.
- The manufacturer assumes no responsibility concerning the use of products that must comply with specific environmental and/or installation regulations.
- This unit must be intended only for the use for which it was built.
  Any other use must be considered improper and dangerous.

IMPORTANT

Device is constructed for connection in 1-phase 230V main alternating current voltage and must be installed according to norms valid in the state of application.
Connection according to the details in this direction. Installation, connection, setting and servicing should be installed by qualifi ed electrician staff only, who has learnt these instruction and functions of the device.
This device contains protection against overvoltage peaks and disturbancies in supply.
For correct function of the protection of this device there must be suitable protections of higher degree installed in front of them.
According to standards elimination of disturbancies must be ensured. Before installation the main switch must be in position “OFF” and the device should be de-energized.
Don´t install the device to sources of excessive electro-magnetic interference.
By correct installation ensure ideal air circulation so in case of permanent operation and higher ambient temperature the maximal operating temperature of the device is not exceeded.
The device is fully-electronic - installation should be carried out according to this fact.
Nonproblematic function depends also on the way of transportation, storing and handling.
In case of any signs of destruction, deformation, non-function or missing part, don´t install and claim at your seller.

DISPOSING OF OLD ELECTRICAL AND ELECTRONIC EQUIPMENT
This symbol on the product or on its packaging indicates that this product cannot be treated as household waste. On the contrary, it must be taken to a specific collection centre for recycling electrical and electronic equipment, such as: - outlets, if a similar product to the one being disposed of is being purchased - local collection centres (waste collection centres, local recycling centres, etc.). By making sure the product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inadequate disposal of this product. Recycling materials will help conserve natural resources. For more detailed information about recycling this product, please contact the local office in your area, the household waste disposal service in your area or the shop where you purchased this product.

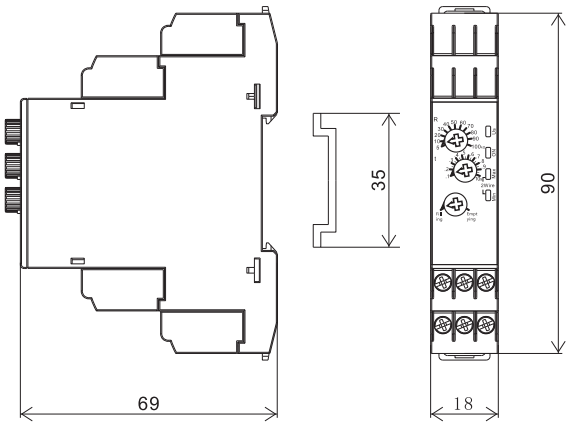
Description



Technical parameters

Rated supply voltage	230V 50/60Hz ±15%
Sensitivity adjustment range	5kΩ...100kΩ
Time delay adjustment range	0.1s...10s
Operating mode	2 or 3 probes
Cable length	<=100m
Rated insulation voltage	AC250V
Contact rating	AC-1 8A 250V AC-15 2A 250V
Pollution degree	2
Protection degree	IP20
Rated impulse voltage	4kV
Short-circuit protection device	Fuse 10A gL/gG
Power consumption	AC:<=1W
Storage temperature	from -35°C to +75°C
Permissible relative humidity	<=50%(40°C) (Senza condensa)
Operating temperature	from -25°C to +55°C
Altitude above sea level	<=2000m
Mounting	DIN rail
Standards	IEC EN 60255-27 IEC EN 61000-6-2 IEC EC 61000-6-3

Dimensions



Operating instructions

1. Sensitivity adjustment: Regardless of the selected mode, calibration is done by immersing the probes in the liquid. Set the knob to the minimum and gradually turn it to the right until contact between the probes is detected. Increase the adjustment by 10–20% to ensure greater reliability.

2. Configuration with 2 or 3 probes: Any change in configuration (from 2 to 3 probes or vice versa) requires restarting the device. Upon power-up, the device will automatically determine the configuration.

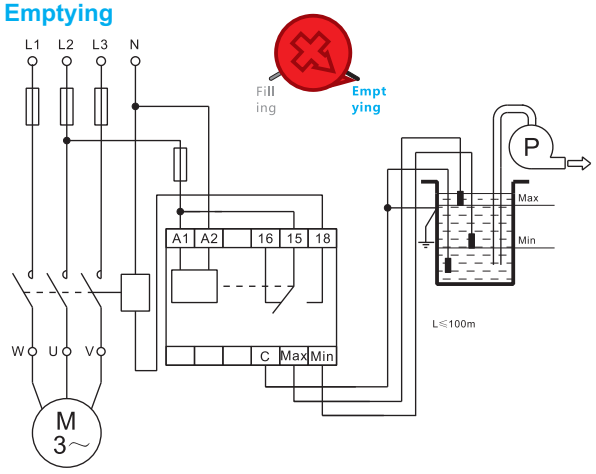
3. 3-Probe Mode: Manages the level between the MIN and MAX probes. Probe C is the reference for the bottom.
   - Emptying: The relay activates (ON) when the liquid touches the MAX probe after the set delay. During the decrease, the MAX LED turns off; when the liquid drops below the MIN probe, the corresponding LED lights up, and after the set delay, the relay deactivates (OFF).
   - Filling: The relay activates (ON) when the level drops below MIN after the set delay. During the rise, when the liquid reaches the MAX probe, the corresponding LED lights up, and after the set delay, the relay deactivates (OFF).

4. 2-Probe Mode: Connect terminals C and MAX together; probe C is the reference for the bottom. The MIN probe is positioned at the desired highest level.
   - Emptying: The relay activates (ON) when the liquid touches the MIN probe after the set delay. It deactivates (OFF) when the level drops below it, after the set delay.
   -Filling: The relay activates (ON) when the liquid drops below the MIN probe after the set delay. It deactivates (OFF) when the probe is wetted again, after the set delay.

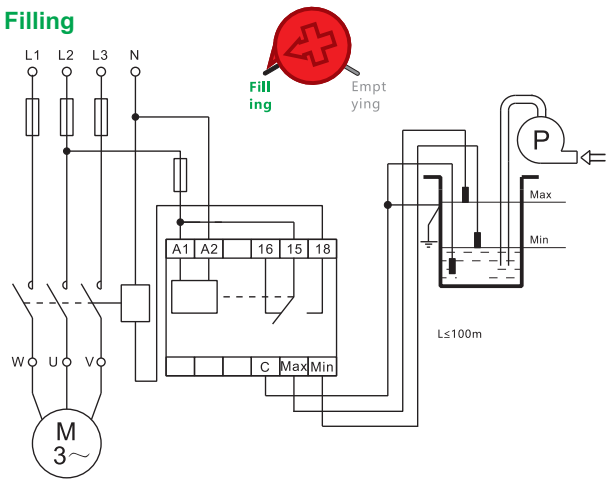
5. Usage Notes:
   Adjust the time delay (0.1s ÷ 10s) to avoid unintended switching due to waves or turbulence or to set the pump operating time.
   During filling operation, the system must have an adequate overflow drain.

   Do not use with flammable or explosive liquids.

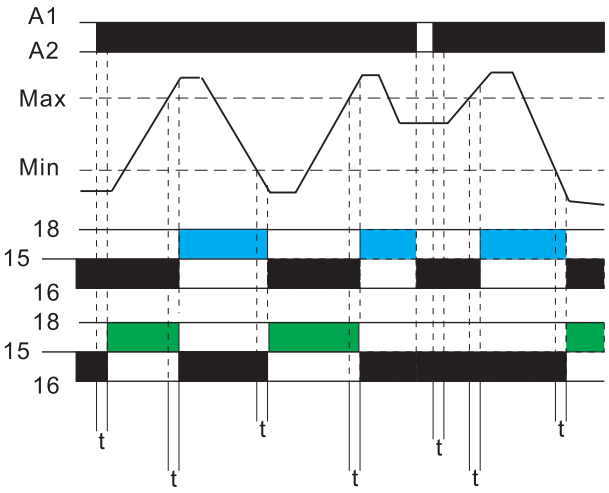
Emptying



Filling



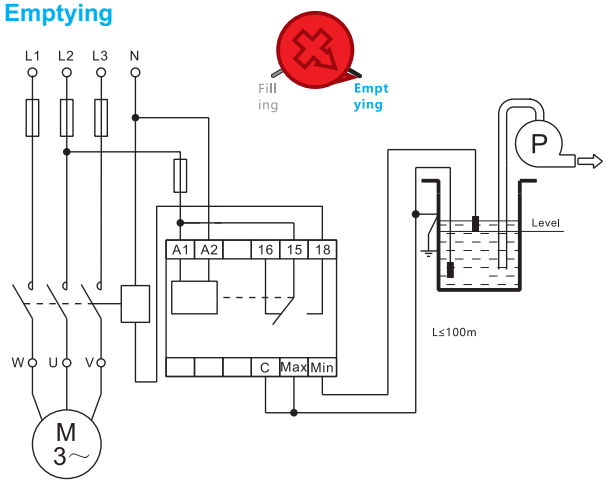
3 PROBES



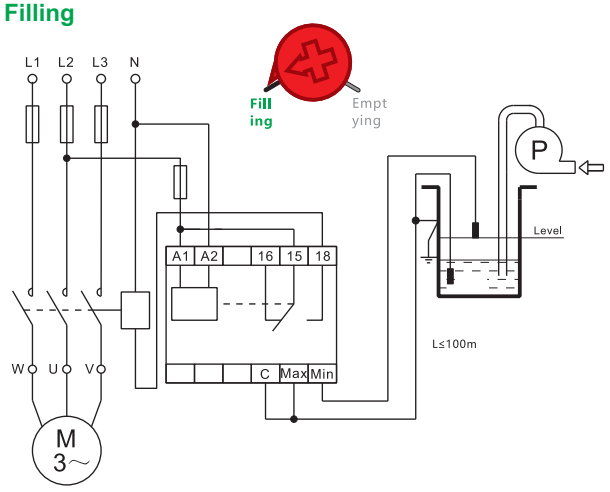
Emptying

Filling

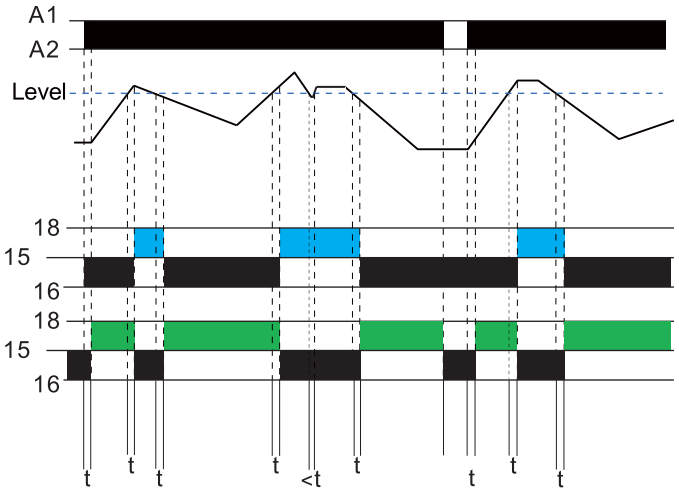
Emptying



Filling



2 PROBES



Emptying

Filling