# CONTROLLING YOUR PUMPS HAS NEVER BEEN EASIER

SIMPLEX AND DUPLEX CONTROL PANELS FOR EMPTYING AND FILLING APPLICATIONS



be think innovate



GRUNDFOS



## SET UP AND CONFIGURE WITH EASE

Designed for one-or two-pump control, the Grundfos LC panel line is ideal for a wide range of emptying and filling applications including: wastewater lift stations, stormwater stations, commercial building and industrial sumps, drainage and tank fill applications.

The controller is equipped with predefined settings for an easier and quicker start-up, and supports up to five control levels for analog level transmission or float switch operation.

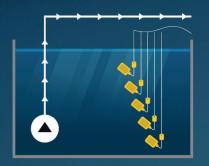
Start and stop signals are used for normal operation, and the optional dry run signal will protect the pumps from dry running. The controller has two modes: EMPTYING or FILLING.

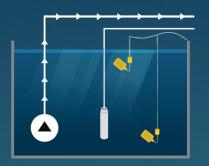
Grundfos LC panels are available in two variants:

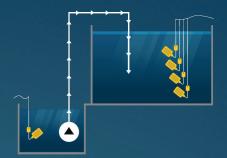
LC 231 – a compact solution with certified motor protection

LC 241 – a modular panel with a dead front offering options for customization

#### MANY FLOAT AND SUBMERSIBLE TRANSDUCER CONFIGURATIONS AVAILABLE







#### FLEXIBLE AND USER-FRIENDLY INTERFACE



Save valuable time with the intuitive and easy-to-use interface. The LC control system is equipped with configurable input/output terminals, offering flexibility for all applications. Daily control, supervision and commissioning is simple and straightforward.

Additionally, the controller is able to integrate into Supervisory Control and Data Acquisition (SCADA) systems.



## THE ONLY CONTROLLER FOR LIFE ON THE GO



## CONFIGURATION OVERVIEW

Grundfos LC level controllers are available in two variants.





### LC 231 A compact solution with certified motor protection

LC 241
A cabinet solution offering modularity and customization





Set up and configure your LC controller through the Grundfos GO mobile app. Using Bluetooth technology, Grundfos controllers offer easy and seamless integration so you don't have to be on site to connect, monitor or manage your pump station.

The simple and intuitive dashboard displays your installation status where you can monitor the pit and pumps at a glance. View priority areas faster with shortcuts to alarms and warnings, manual pump control and a detailed pump status.

You can also generate a complete report that shows the settings and status of the installation.

Optional features such as anti-seizing or power-on delay can be adjusted. Grundfos GO can also be used to store the complete settings for your pumping station or copy the settings for future installations, further minimizing workload.

One-and two-pump		
operation		
1-phase 110-240 VAC	•	•
(50/60 Hz)		
Start and run capacitors		•
for 1-phase systems		
3-phase 200-460 VAC	•	•
(50/60 Hz) Direct-on-line start		
method up to 9.6 A		
(Simplex), or 7.6A	•	
(Duplex)		
Direct-on-line start		
method up to 32 A		•
Customizable for other		
starting methods and		
higher current (greater		•
than 32A)		
Motor protection	Built-in	•
Overheat protection	•	•
Input/Output: IO 4xDI,		
1xAI/DI		
Additional Input/Output		Optional
Capability		Ориона
Inputs/Outputs: 2xDI,	•	
2xDI/DO, 2xCIO		
Supports Grundfos		
Communication	•	•
Interface Module (CIM)*		
Thermoplastic enclosure	•	•
Environmental rating	NEMA 3R	TYPE 4X
Current measurement	Built-in	•
Built-in buzzer	•	•
Grundfos GO support via		
Bluetooth smart device	•	•
Options available for		
customization		

#### LC CONTROLLER BENEFITS

Raising the bar for what you expect from a pump station controller, the Grundfos LC 231 and LC 241 level controllers offer a comprehensive range of features for complete pump station set up, monitoring and control.

#### **INTUITIVE USER INTERFACE**

The controller has a simple user interface that can be used for daily status monitoring and includes pit level, pump status and manual control of the pumps. In simple applications, the interface provides setup assistance for installation and commissioning. In the event of an alarm, the alarm code will be shown on the interface.

#### PUMP AND SYSTEM PROTECTION

The controller gives an alarm in the event of current overload, pump overheating, dry running, high water level, incorrect phase sequences or missing phase, sensor inconsistency or failure, intrusion detected, water on floor, too many restarts, or moisture in pump.

#### **EASY SCADA INTEGRATION**

The controller uses open protocols for connection to any SCADA system. This allows you to access your pumping stations or filling station remotely, to control the pumps, change settings and view alarms and operations data.

#### **ALARM AND WARNING LOG**

The controller maintains a detailed alarm and warning log with the last 20 alerts. The alarm log can be accessed remotely via SCADA or Grundfos GO for easy troubleshooting.







#### CONFIGURABLE INPUTS AND OUTPUTS (CIO)

The controller has a number of free inputs and outputs for extra sensors, such as outlet pressure from the pit. The Grundfos CIO ports (Configurable Input/Output) can be configured to fit almost any type of signal, including digital input/output, analog input and Pt 100/1000 inputs. The two relay outputs can be configured using Grundfos GO to show a variety of status information on a supervisory system or PLC.

#### ADDITIONAL LC 231 AND 241 FEATURES:

- Anti-seizing
- Max numbers of restarts
- Pump statistics and maintenance indicators
- PIN code security and protection
- · Historical functional data log

