

Qty.	Description
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1	<p>LC 231</p>  <p style="text-align: center;">Note! Product picture may differ from actual product</p> <p>Product No.: On request</p> <p>The LC 231 level controllers offer a comprehensive range of features for control and monitoring of pumps in wastewater, water supply and drainage systems.</p> <p>The LC 231 pump controllers are designed for level control, monitoring and protection of Grundfos pumping systems one pumps or two pumps starting direct-on-line.</p> <p>The LC 231 pump controllers can be used in various type of empty application e.g. waste water transport, drainage or tank filling in water supply.</p> <p>The set-up of the control is easily done either by the predefined application settings or via the step-by-step start-up wizard in the intuitive Grundfos GO app, using Bluetooth Smart technology.</p> <p>With the Grundfos GO app, all detailed pump settings can be easily being configured, monitored and commissioned.</p> <p>Even without using the app, you have the option directly from display to change the operation mode from auto to manual start/stop and adjusting the level setting.</p> <p>The controller is equipped with configurable input/output terminals, giving full flexibility for all applications. Daily control, supervision and commissioning is straightforward with the intuitive and easy- to-use user interface. This saves you valuable time when getting started, and in your daily interaction with pumps and the controller.</p> <p>The controller integrates seamlessly into the Grundfos range of communication modules, ensuring an easy fit into any supervisory system such as SCADA or Grundfos CLOUD.</p> <p>With the built-in certified motor protection, and the current measurement, the LC 231 pump controller provide a service indicator function hat helps keep track of when service is needed.</p> <p>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 CLOUD. You can also use Grundfos GO to inspect the logs in localized, translated text for easy troubleshooting and remedial measures at the pumping station.</p> <p>The LC 231 controller enable:</p> <ul style="list-style-type: none"> • Control of 1 or 2 pumps based on signals from sensor input (analog, 0-5 V, 0.5-3.5V, 0-10 V, 0-20 mA, 4-20 mA or digital, float switch) • Support up to five control levels for both analogue level transmitter or float switch operation • Supports simple application where only one float switch is present - single float switch operation. • Configurable input/output terminals that can be used as digital input/output, analogue input and Pt 100/1000 inputs for flexible use in the actual application • Prevent the pumps with anti-seizing from choking or seizing due to limestone build-up or other deposits • Prevent the mains load when several pumping stations are started up at the same time with power-on delay. • Protection against water hammer as quick restart/simultaneous start is blocked and delayed • Selection of automatic alarm resetting • Setting of stop delays matching the actual operating conditions • Shows the actual liquid level • Alarm indication via a build in buzzer <p>Alarm indication of:</p> <ul style="list-style-type: none"> • Power/current overload • Dry running • High water level
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Product No.: On request

The LC 231 level controllers offer a comprehensive range of features for control and monitoring of pumps in wastewater, water supply and drainage systems.

The LC 231 pump controllers are designed for level control, monitoring and protection of Grundfos pumping systems one pumps or two pumps starting direct-on-line.

The LC 231 pump controllers can be used in various type of empty application e.g. waste water transport, drainage or tank filling in water supply.

The set-up of the control is easily done either by the predefined application settings or via the step-by-step start-up wizard in the intuitive Grundfos GO app, using Bluetooth Smart technology.

With the Grundfos GO app, all detailed pump settings can be easily being configured, monitored and commissioned.

Even without using the app, you have the option directly from display to change the operation mode from auto to manual start/stop and adjusting the level setting.

The controller is equipped with configurable input/output terminals, giving full flexibility for all applications.

Daily control, supervision and commissioning is straightforward with the intuitive and easy- to-use user interface.

This saves you valuable time when getting started, and in your daily interaction with pumps and the controller.

The controller integrates seamlessly into the Grundfos range of communication modules, ensuring an easy fit into any supervisory system such as SCADA or Grundfos CLOUD.

With the built-in certified motor protection, and the current measurement, the LC 231 pump controller provide a service indicator function

hat helps keep track of when service is needed.

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 CLOUD. You can also use Grundfos GO to inspect the logs in localized,

translated text for easy troubleshooting and remedial measures at the pumping station.

The LC 231 controller enable:

- Control of 1 or 2 pumps based on signals from sensor input (analog, 0-5 V, 0.5-3.5V, 0-10 V, 0-20 mA, 4-20 mA or digital, float switch)
- Support up to five control levels for both analogue level transmitter or float switch operation
- Supports simple application where only one float switch is present - single float switch operation.
- Configurable input/output terminals that can be used as digital input/output, analogue input and Pt 100/1000 inputs for flexible use in the actual application
- Prevent the pumps with anti-seizing from choking or seizing due to limestone build-up or other deposits
- Prevent the mains load when several pumping stations are started up at the same time with power-on delay.
- Protection against water hammer as quick restart/simultaneous start is blocked and delayed
- Selection of automatic alarm resetting
- Setting of stop delays matching the actual operating conditions
- Shows the actual liquid level
- Alarm indication via a build in buzzer

Alarm indication of:

- Power/current overload
- Dry running
- High water level

Qty. Description

- Incorrect phase sequences or missing phase
- Sensor inconsistency or failure
- Intrusion detection
- Water on floor
- Too many restarts
- Pump overheating and moisture detection

As standard, the LC 231 controller has two alarm relays that can be configured using Grundfos GO to show a variety of status information on a supervisory system or PLC.

Controls:

Current measurement (Yes/No): Y

Technical:

Approvals: CE,EAC,UKCA,MOROCCO,RCM

Number of pumps: 1

Materials:

Cabinet: Plastic

Installation:

Range of ambient temperature: -25 .. 45 °C

Cabinet mounting: Wall mounting

Earth connection: N, PE

Electrical data:

Mains frequency: 50 / 60 Hz

Rated voltage 2.nd value: 1 x 110-240 V [3 x 200-460 V]

Rated current: 1-12 A

Capacitor size - run capacitor: N/A µF

Capacitor size - starting capacitor: N/A µF

Method of start: Direct-on-line (DOL)

Enclosure class (IEC 34-5): IP54

Back-up fuse required: 16 A

Required Cos phi full load: 0.86-1.00

Others:

Net weight: 1.78 kg

Gross weight: 2.56 kg

Shipping volume: 0.015 m³

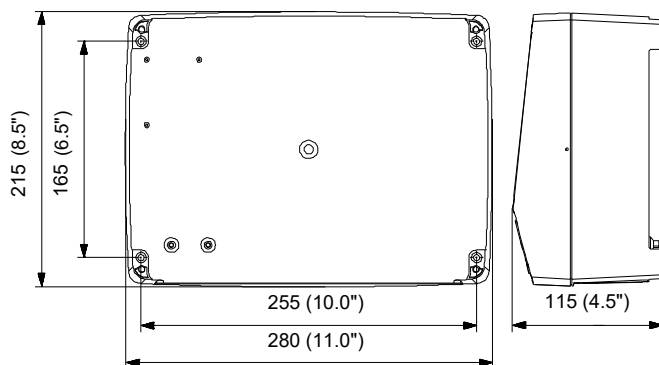
Danish VVS No.: 391378571

Swedish RSK No.: 5886183

Country of origin: TH

Custom tariff no.: 85371098

Description	Value
General information:	
Product name:	LC 231 1 x 1-12 DOL PI
Product No:	On request
EAN number:	On request
Technical:	
Approvals:	CE, EAC, UKCA, MOROCCO, RCM
Number of pumps:	1
Materials:	
Cabinet:	Plastic
Installation:	
Range of ambient temperature:	-25 .. 45 °C
Cabinet mounting:	Wall mounting
Earth connection:	N, PE
Electrical data:	
Mains frequency:	50 / 60 Hz
Rated voltage 2.nd value:	1 x 110-240 V [3 x 200-460 V]
Rated current:	1-12 A
Capacitor size - run capacitor:	N/A µF
Capacitor size - starting capacitor:	N/A µF
Method of start:	Direct-on-line (DOL)
Enclosure class (IEC 34-5):	IP54
Back-up fuse required:	16 A
Required Cos phi full load:	0.86-1.00
Controls:	
Current measurement (Yes/No):	Y
Others:	
Net weight:	1.78 kg
Gross weight:	2.56 kg
Shipping volume:	0.015 m ³
Danish VVS No.:	391378571
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Country of origin:	TH
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