Cert. No. LRQ 0963008

ISO 9001

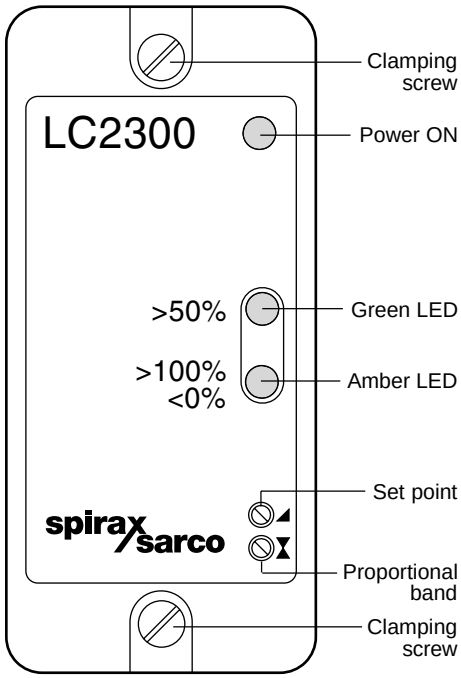
TI-P402-71
AB Issue 3

LC2300
Level Controller

- Proportional level controller for pneumatically actuated valves
- Three stage wave filter - wide turbulence tolerance
- 115 V or 230 V supply
- Output signal may be reversed

Description

The Spirax Sarco LC2300 is used to control the positioner of a pneumatic valve in response to a signal from a capacitance probe, providing proportional modulating control of liquid levels.
It can be used for level control of boilers, de-aerators, and tanks, where the 4 - 20 mA or 0 - 20 mA output from the controller is used as the input to the positioner on the pneumatically actuated feedwater valve.
The LC 2300 can also be used with any two-wire 4 - 20 mA transmitter, for example for pressure, temperature, or level control using a pressure or differential pressure transmitter.
A dc power supply for a two wire transmitter is included.
The LC2300 is set up before installation to suit the mains supply voltage and to provide the required functions, using internal switches.
Calibration of set point and proportional band is done using the potentiometers on the front panel, so calibration can be altered if required without removing or dismantling the unit.
The LC2300 is supplied set so that a rising level at the probe will give a falling output from the controller.
A rising controller output for a rising level at the probe may be selected if required.
The LC2300 has a three stage wave filter (input signal damping). This switch-selectable feature gives an averaged output, maintaining a stable signal under the very different turbulence conditions found in tanks and high output boilers.
A green LED at the top of the front panel indicates power on.
The green (>50%) LED indicates that the output current is greater than 50%. i.e. above the set point output current.
The amber (>100% / <0%) LED indicates that the output is greater than 20 mA or less than 0/4 mA.
This product complies with the requirements of the Electromagnetic Compatibility Directive 89/336/EEC by meeting the standards of:
- Emissions EN 61326: 1997 A1 and A2 Class B equipment Table 4.
- Immunity EN 61326: 1997 A1 and A2 Class A equipment Table 1.



Materials

Enclosure base and connector	NORYL SE1 GFN 2
Enclosure cover and intermediate plate	R - ABS 90.00

Limiting conditions

Enclosure protection rating	IP40
Maximum ambient temperature	55°C
Minimum ambient temperature	0°C
Maximum cable length (controller to probe)	100 m

Technical data

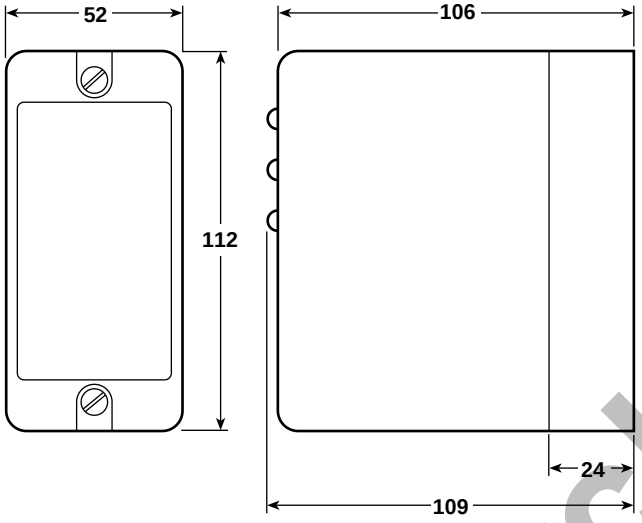
The supply voltage is selected during installation

Mains supply voltage	230 V setting	198 - 264V
	115 V setting	99 - 132 V
Frequency		50 - 60 Hz
Fuse type	20 mm cartridge, 100 mA anti-surge (T)	
For the UL version, replacement fuses must be UL recognised to maintain the integrity of the approval.		
Maximum power consumption		6 VA
Transducer supply	24 - 37 Vdc	20 mA maximum

Local regulations may restrict the use of this product to below the conditions quoted.
In the interests of development and improvement of the product, we reserve the right to change the specification.

Dimensions/weight (approximate) in millimetres and g

Weight	500



How to specify

Dual voltage proportional level controller with current output, adjustable set point, proportional band and wave filter.

How to order

Example: 1 off Spirax Sarco LC2300 level controller.

Safety information, installation and maintenance

This document does not contain sufficient information to install the product safely. See the Installation and Maintenance Instructions supplied with the product, which give full wiring, commissioning and operating instructions.

Warning:
Isolate the mains supply before unplugging the controller as live terminals at mains voltage will be exposed in the controller base.

Installation note:
The controller must be installed in an enclosure or control panel to provide environmental and impact protection.
Spirax Sarco can supply suitable enclosures. The controller may be mounted on a 'top hat' DIN rail using the mounting clip provided or the clip may be removed and the controller base screwed direct to a chassis plate.