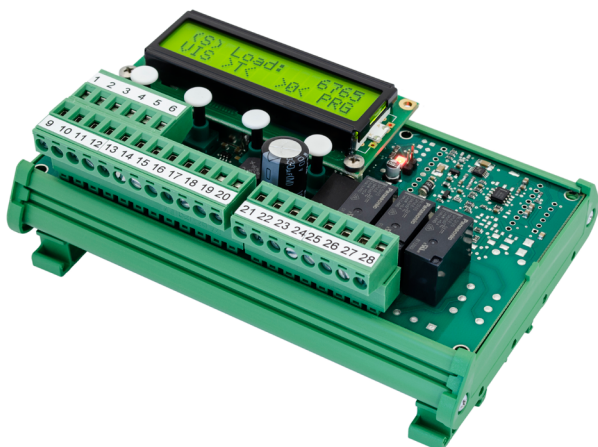


LCD3 - LCD3PL

DIGITAL LOAD LIMITER/TRANSMITTER FOR LIFTING SYSTEMS

LAUMAS®



LCD3

1 instrument	load limiters in single weighing systems
2 instruments	load limiters in multi-weighing systems
3 instruments	load limiters in multi-weighing systems
4 instruments	load limiters in multi-weighing systems

LCD3PL

1 instrument	load limiters with dual load cell input for safety systems
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DESCRIPTION

- Digital load limiter/transmitter for lifting systems.
- Mounting on Omega/DIN rail for back panel or junction box.
- Dimensions: 140x93x65 mm (terminal blocks included).
- Set-up and calibration via keyboard and LCD display (two-line by 16-digit, 5 mm height).
- Connecting multiple units with load limiting and summing function.
- Alarm signal following load cell connection failure.
- LED indicators showing the status of the relay outputs.
- 4-key keyboard.

LCD3 SPECIFICATIONS

- Load limitation detected by the intervention of alarm and pre-alarm thresholds.
- Load limitation (single and sum) for systems with up to 4 weighing points, by connecting multiple units.
- Connecting multiple units with load limiting and summing function.
- Availability of lifting operation counters.

INPUTS/OUTPUTS AND COMMUNICATION

- RS485/RS232 serial ports for communication via ASCII continuous one way transmission.
- 2 digital inputs: status reading via serial communication protocols.
- LCD3:
 - 3 exchange relay outputs.
 - 1 load cell dedicated input.
 - Integrated RF interface for connecting multiple units (option on request).
- LCD3PL:
 - 4 relay outputs: three exchange relay outputs + one safety exchange relay output with guided contacts.
 - 2 independent load cell inputs.

LCD3PL SPECIFICATIONS

- Dual channel input system for double bridge load cells, in accordance with category 2 as per EN13849-1, PL d (comparable to SIL2 level, EN62061 standard).
- Load limitation via safety relay with guided contacts, monitored in real time.
- Independent general alarm relay.
- 2 relays for general threshold intervention (e.g. pre-alarm/discharge system).

MAIN FUNCTIONS

- Connections to:
 - PC/PLC via RS485/RS232;
 - remote display via RS485/RS232;
 - up to 8 load cells in parallel by junction box;
 - other units for summing function via RS485 or RF (option on request).
- Continuous load cell connection integrity check.
- Digital filter to reduce the effects of weight oscillation.
- Theoretical calibration (via keyboard) and real calibration (with sample weights).
- Tare weight zero setting.
- Automatic zero setting at power-on.
- Gross weight zero tracking.

CERTIFICATIONS



Equivalent of the CE marking for the United Kingdom (LCD3)



Category 2 as per EN13849-1, PL d (comparable to SIL2 level, EN62061 standard) (LCD3PL)

TECHNICAL FEATURES

Power supply and consumption	24 ÷ 48 VDC/VAC; 6 VA
Number of load cells • Load cells supply	up to 8 (350 Ω) • 4 VDC
Linearity	<0.01% full scale
Thermal drift	<0.002% full scale/°C
A/D Converter	24 bit
Measure range	±3.9 mV
Conversion per second	3
Decimals • Display increments	0 ÷ 4 • x1 x2 x5 x10 x20 x50
Digital filter	0.25 ÷ 3 Hz
Relay outputs	LCD3: n. 3 exchange relay outputs - 30 VDC/250 VAC; 2 A LCD3PL: n. 4, 3 exchange relay outputs + 1 safety exchange relay output with guided contacts - 30 VDC/250 VAC; 2 A
Optoisolated digital inputs	n. 2
Serial ports	RS485, RS232
Baud rate	1200, 2400, 9600, 19200, 38400, 57600, 115200 (bit/s)
Humidity (condensate free)	85%
Storage temperature	-20 °C +60 °C
Working temperature	-10 °C +50 °C

OPTIONS ON REQUEST

DESCRIPTION



IP67 CASTL series polycarbonate box; dimensions: 170x140x95 mm (four fixing holes Ø4 mm; centre distance: 152x122 mm).

- transparent cover
- transparent cover; 4+2 M16x1.5 cable glands - plugs
- transparent cover; 4+2 PVC end-fittings for sheath



Only for LCD3
Integrated RF (radio) interface for connecting multiple units
RF frequency 868 MHz (7 channels)
Average range of coverage 50 metres

The Company reserves the right to make changes to the technical data, drawings and images without notice.