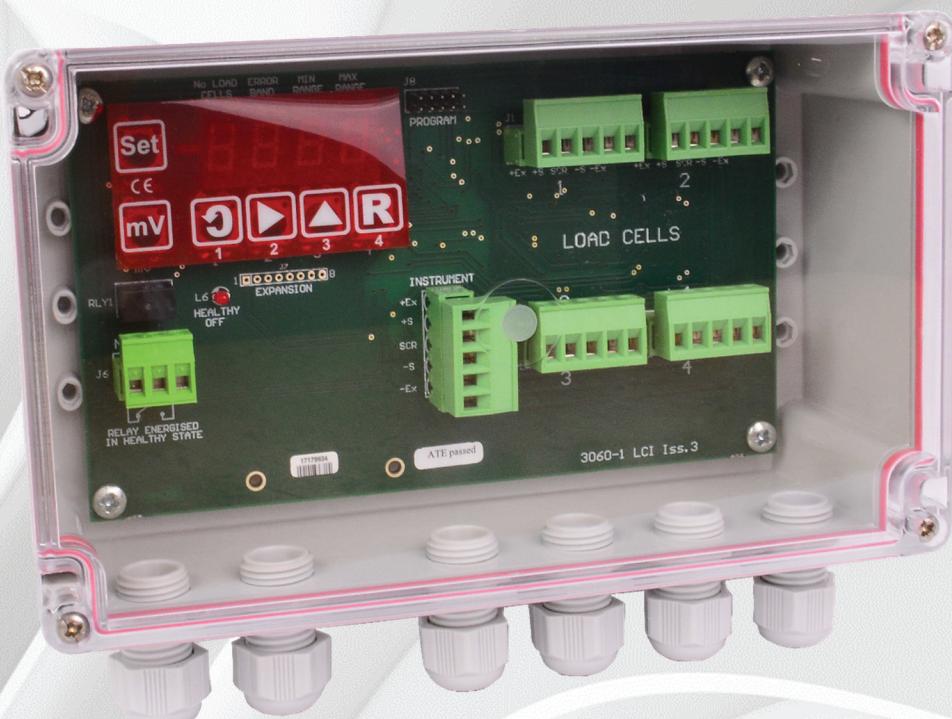

ABB MEASUREMENT & ANALYTICS | DATA SHEET

JBox-LCI

Smart junction box monitoring the load cells integrity



Measurement made easy

Smart junction box designed for parallel connecting of 2 to 4 load cells to a measurement electronics and ensuring the monitoring of their proper function.

Control of

- Load cell out of present balance range
- Load cell out of present operating range
- Low / high excitation
- Open circuit to any load cell on each connection
- Short circuit on any load cell connection
- Internal load cell fault (bridge imbalance)

Ensure the positive safety for load limitation systems based on multiple load cells parallel connected (hoisting devices).

Options

- ABS housing available with DIN rail mounting accessories
- PCB available without ABS housing

Applications

The JBox-LCI is perfectly designed to the following applications:

- Load limitation for hoisting equipment based on several load cells.
- Industrial weighing with improved reliability.

Functions

- Easy calibration by keys and 4 digits display.
- Indication of the signal (mV) of each sensor, the average signal an error message (number of sensor and type of error).
- Relay normally energized.
- Protection of parameters by secret code.

Specification

JBox-LCI	
Type	Smart junction box
Input range	1 to 5 mV/V
Sensor excitation	10 VCD ± 20 %*
Display	4 digits
Linearity error	<±0.0015 % F.S.
Temperature coefficient of the sensitivity	< ± 0.005 % F.S./10 °C
Temperature coefficient of zero signal	< ± 0.005 % F.S./10 °C
IP rating	IP65
Qty of relay	1
Relay type	SPCO relay
Temperature data	
Service temperature range	-40 to 85 °C (-40 to 185 °F)
Storage temperature range	-40 to 95 °C (-40 to 203 °F)
Electrical data	
Power supply	8.2 to 10 VDC
Contact rating	0.5 A / 50 VDC max.

* Provided by measurement electronics / 52 mA (except the consumption of the sensors).

Table 1: (F.S.: full scale)

Dimensions

Smart junction box model JBox-LCI

All specified dimensions are in mm (in.)

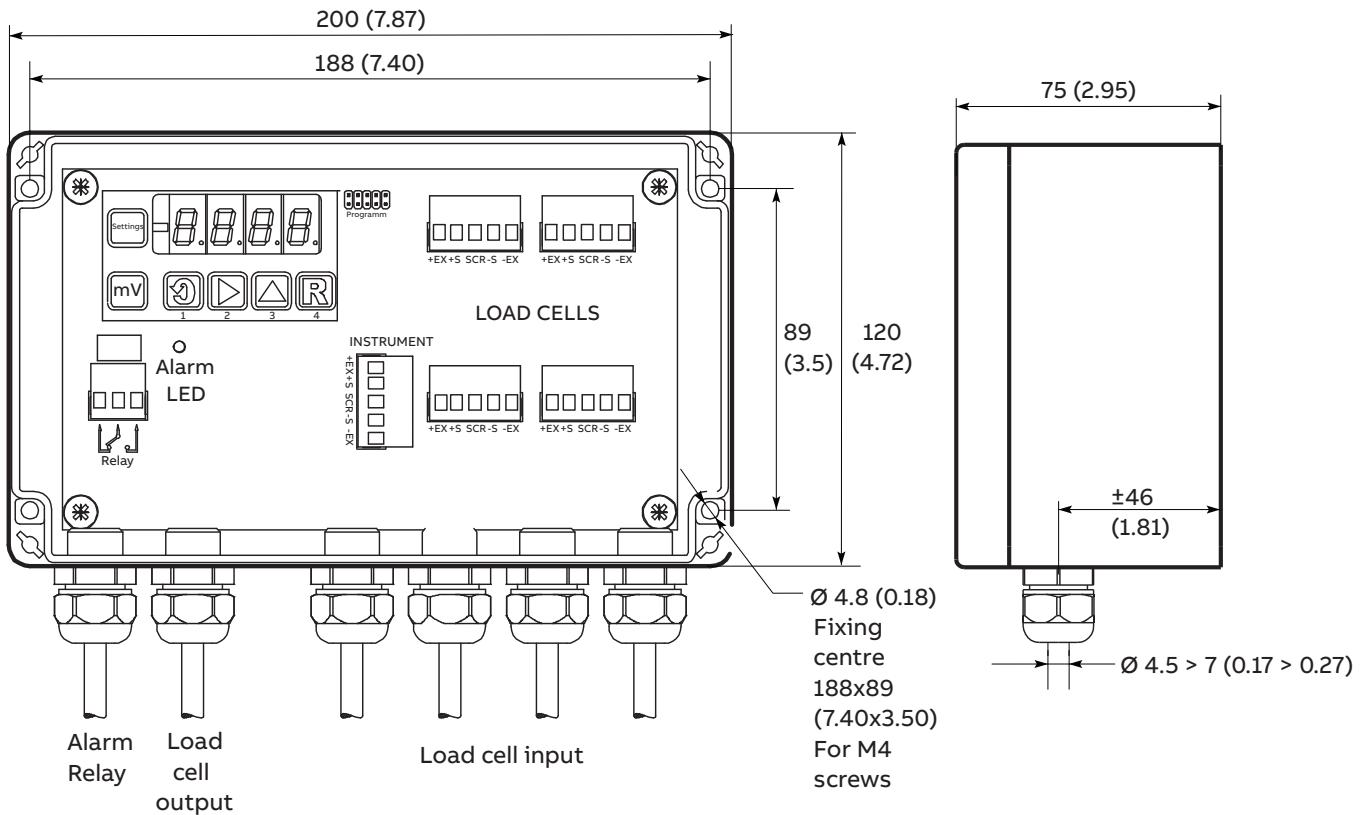
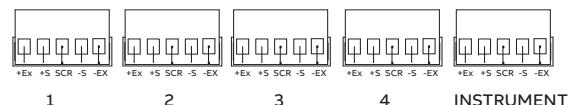


Figure 1: Dimensions

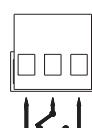
Terminals

Load cells

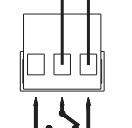


Relay

Default position

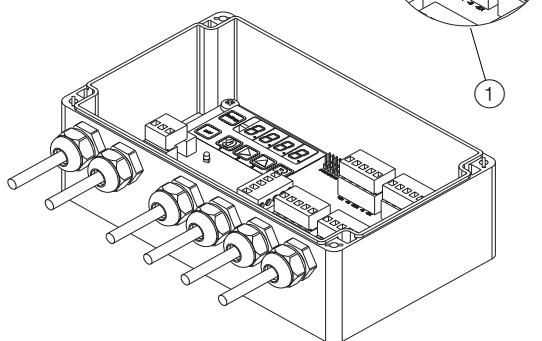


Positive security



Wiring:

- +Exc. (Brown)
- Exc. (Yellow)
- +Sig. (Green)
- Sig. (White)
- SCR (Screen cable)



(1) 2-part plug-in connectors wire max. 2,5mm²

Figure 2: Other view

Notes

Notes

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