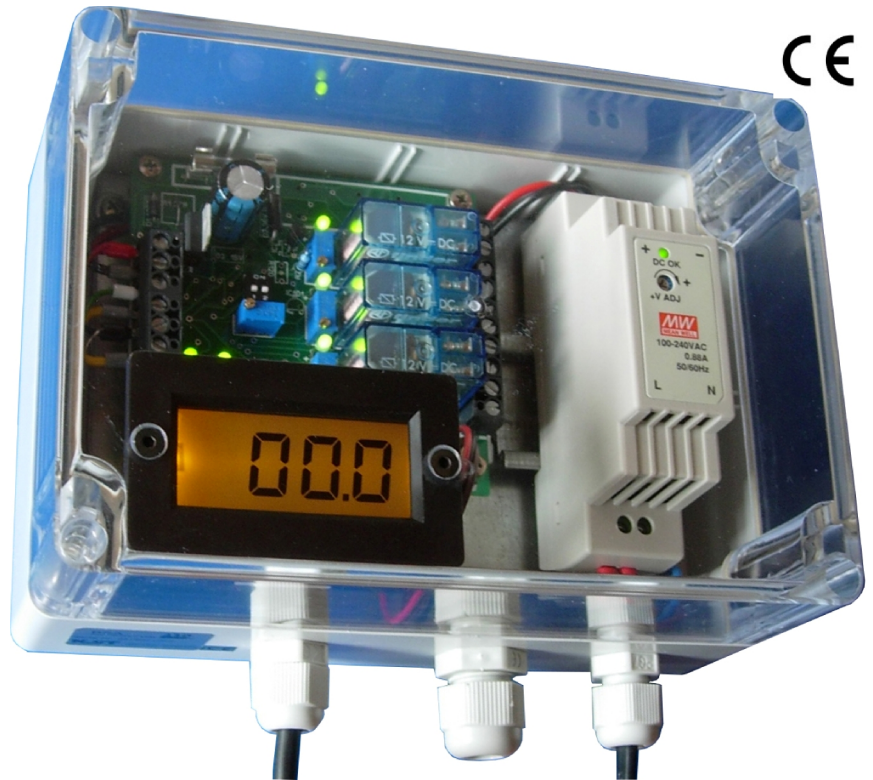




BSA LCD

Basic Switching Amplifier with LCD-Load Display

To protect Cranes and other Lifting Equipment against Overloading and Damage

When signals from either one or two sensors have to be detected and supervised, the Basic Switching Amplifier (BSA), with its high safety, accuracy but very moderate price, is the best choice.

Either one or two inputs, with voltage or current signals, which can be set to any range, will allow the choice of different sensors. The sensor signals are fed to switchpoints, which will control three relays, that are capable to switch high-power 250V devices. All three potential-free contacts of each relay are available (root, open and close). An analogue output (0,5...8V or 4...20mA) is available for the average sum of sensor inputs 1 and 2.

All inputs, outputs and the supply voltage are connected by screw contacts to use open-end wires. The installation is very easy with a small screwdriver used as the only tool; following the easy-to-understand manual.

The integrated 3 ½ digit LCD Load display shows the load lifted and can be adjusted very simple by means of 2 potmeters (zero / endpoint). The decimal point can be set so that any load-range is displayed between -199.9 ... + 199.9 Tons or -1.999 ... 1.999 Tons. It has a smooth amber backlight to enable readout also in the darkness. Letter height is 13 mm.

Working modes of BSA LCD:

Three limit switch-points can be set by trimmers. Switchpoint A offers the possibility to set hysteresis and time delay manually. For Switchpoints B and C, the delay is zero and the hysteresis set to a suitable fixed value. The Switchpoint C can be set either to overload or underload function.

The allocation of switchpoints to the inputs is very flexible.

1st mode: All three switchpoints allocated to sensor input 1 (single input mode)

2nd mode: All three switchpoints allocated to the sum of sensor input 1 and 2 (dual input mode)

3rd mode: Switchpoint A to sensor input 1, Switchpoint C to sensor input 2 and Switchpoint B to the sum of sensor inputs 1 and 2 (dual channel mode)

The Sensor Watchdog will take care that all relays will cut out in case of sensor error. Internal LEDs are showing the status of each sensor input and each relay.

Specification	
Supply Voltage / Currentconsumption	110...230 VAC
Relay contactrating	3 x 250Vac 8A
Analogue inputs	2 x 4..20mA or 0,5...8 V
Analogue output	4...20 mA or 0..8 V
Accuracy of Load Display	0,5%
Working temperature / (max Rating)	-10.....+ 35°C / (+ 50°C)
Protection Class	IP 65
Size of Box	170 x 120 x 80 mm
Size of LCD Display / Letter height	70 x 40 mm / 13 mm