

SCFA2 Pure Water Level Detector with cable break alarm O&M/Data sheet

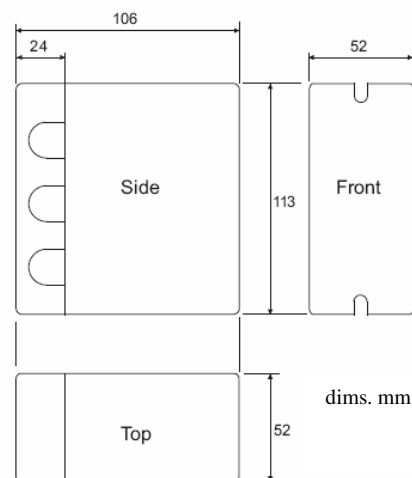
Description

A high sensitivity liquid level alarm circuit. The detector is fail-safe high thus providing two volt free set of change over contacts that de-energise under liquid present or cable break condition. A green LED is included to give visual indication of the relay state and a red LED indicates power present. In order to utilise the cable break function a 4.7M Ohm must be fitted across the electrodes which is always done at the furthest point i.e. in the holder. DC is used on the electrodes making it suitable for high level alarm applications. Push buttons are fitted to the enclosure facia which allow the user to simulate a cable break and liquid alarm condition. The SCFA2 can be used with the extensive range of electrode holders, electrodes and mounting brackets (see data sheets 241, 260 & 282).

Enclosure Base wiring connections

1. +VDC Power Supply Input
2. -VDC Power Supply Input
3. Not Used
4. to 'G' ground electrode in vessel
5. to 'P1' active electrode in vessel
6. Not Used
7. Relay contact 1 N/C (Normally Closed)
8. Relay contact 1 C (Common)
9. Relay contact 1 N/O (Normally Open)
10. Relay contact 2 N/O (Normally Open)
11. Relay contact 2 C (Common)
12. Relay contact 2 N/C (Normally Closed)

Enclosure Details



Supply

Volts	24VDC Reverse polarity protected (range 20 to 28VDC)
Current (@24VDC)	27mA Standby, 17mA Alarm
Power (@24VDC)	0.65W Standby, 0.4W Alarm

Electrode

Volts	12.5V max open electrodes with terminating resistor fitted
Current	10 μ A
Sensing Resistor	Cable break 4.7M Ohm (terminated in holder)

Sensitivity Relay de-energise approx <25M Ohm

Inputs NC push switch for cable test, NO push switch for liquid test

Cable Length Recommended 100m, resistance not to exceed 5MOhms including terminating resistor, Capacitance 500nF max

Output

Relay Energised in normal conditions, de-energises under cable break and liquid present condition, DPCO contacts, maximum switching 5A 250VAC/30VDC, Electrical Ops 1x10⁵, Mechanical Ops 1x10⁷

LED Green ON when the relay is energised

Power Red ON when power available

Operating Temp -20°C to +50°C

Weight 240g, inc base.

Enclosure IP40, see dimensions above, DIN mounting clip adaptor available separately
Base ABS-gF, Cover Polystyrol Polystyrene, Intermediate plate ABS