

Type: E-FLC3/R

Floatless Level Controller with Alarm Output

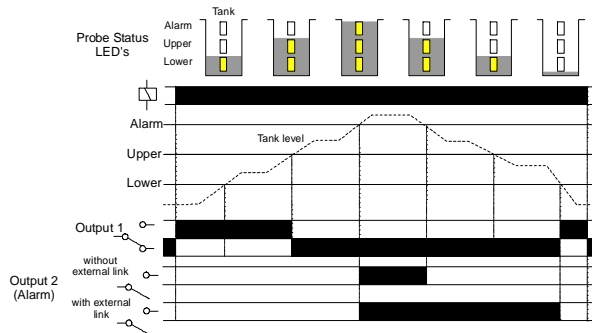
- Designed to monitor the level of a liquid within a tank or container
- 3 levels of monitoring - Low, High and Alarm levels
- Reverse acting relay - Output 1 relay de-energises when Low and High probes are covered
- Fixed Operate and Release Resistance
- Up to 1km distance between controller and probes
- Built in Surge Arrestors protect each probe input against lightning strikes
- Unique LED indication of probe/tank level status
- Additional LED indication for supply and relay output status
- 1 x SPDT relay output (Output 1) and 1 x SPNO relay output (Output 2 - Alarm)

Dims:
W. 70mm



Terminal Protection to IP20

FUNCTION DIAGRAM



INSTALLATION AND SETTING



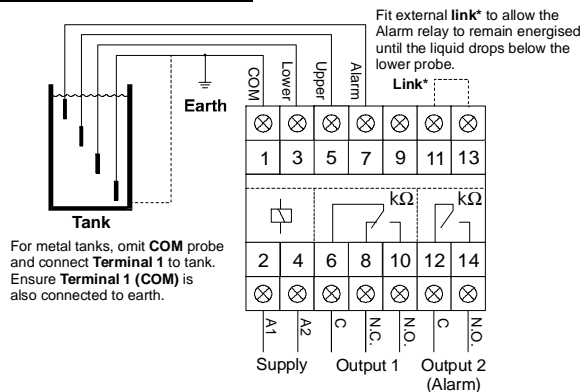
Installation work must be carried out by qualified personnel.

- BEFORE INSTALLATION, ISOLATE THE SUPPLY.
- Connect the unit as shown in the diagram below. For metal tanks, the COM probe can be connected to the tank itself. For non-metallic tanks, ensure the COM probe is located below the other probes (i.e., at the bottom).
- NOTE: Terminal 1 (COM) must be connected to Earth at all times.
- Apply power and the green "power on" LED will illuminate.
- The LED's on the front of the controller will illuminate according to the level of the liquid within the tank.
- When the Lower and Upper probes are covered by the liquid, both yellow LED's will illuminate and "output 1" relay will de-energise. The relay will remain de-energised until both probes are uncovered. Both yellow LED's will extinguish. A red LED is provided to indicate the status of this relay (illuminated when relay is energised).
- If the Alarm probe is also covered by the same liquid, the yellow "Alarm covered" LED will illuminate and "output 2" relay will energise. This will remain energised until:
 - the Alarm probe is uncovered, (terminals 11 and 13 NOT linked), or
 - the liquid drops below the Lower probe (terminals 11 and 13 linked).
 A red LED illuminates when this relay is energised.

Note: For testing purposes only (and with the tank empty), it is possible to de-energise the "output 1" relay by connecting a N.O. push button between COM and Upper probe. The relay will re-energise when the push button is released.

This unit should be installed in conjunction with the latest wiring regulations and practices (IEE, etc)

CONNECTION DIAGRAM



TECHNICAL SPECIFICATION

Supply voltage Un:	230V AC 48 - 63Hz
Supply variation:	85 - 115% of Un
Isolation:	Over voltage cat. III
Rated impulse withstand voltage:	4kV (1.2/50μs) IEC 60664
Power consumption:	≈ 3VA @ Un. ≈ 8VA @ 1.15 x Un.
Interelectrode voltage:	≈ 8 V AC @ Un
Maximum current:	≈ 5mA AC
Function resistance	
Operate:	≈ 4kΩ min.
Release:	≈ 15kΩ max.
Time delay	
Operate:	≤ 80mS
Release:	≤ 160mS
Distance between probes and relay:	1km max.
Surge Protection (applied to each probe input when referenced to COM)	
Spark-over voltage:	90V DC ±20V
Impulse discharge current:	10kA (8/20μs waveform)
Ambient temp:	-20 to +60°C
Relative humidity:	+ 95%
Output:	1 x SPDT (Output 1), 1 x SPNO (Output 2 - Alarm)
Output rating:	AC 1 250V AC 8A (2000VA) AC 15 250V AC 2.5A DC 1 25V DC 8A (200W)
Electrical life:	≥ 150,000 ops at rated load
Dielectric voltage:	2kV AC (rms) IEC 60947-1
Rated impulse withstand voltage:	4kV (1.2/50μs) IEC 60664
Housing:	Grey flame retardant Lexan UL94 VO
Weight:	≈ 300g
Mounting option:	On to 35mm symmetric DIN rail to BS5584:1978 (EN50 002, DIN 46277-3)
Terminal conductor size:	≤ 2.5mm ² stranded ≤ 4mm ² solid
Approvals:	Conforms to IEC, CE and Compliant.

OPTIONS

- The operation of the "output 1" relay can be inverted such that the relay energises when the lower and the upper probes are covered by the liquid. Please order as E-FLC3 when this option is required.
- For other supply voltages, please contact Sales.

ACCESSORIES

Please refer to latest catalogue for probes, probe holders, etc

MOUNTING DETAILS

