Type: 45225

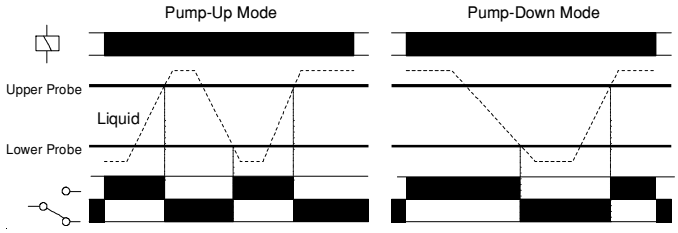
Level Control Relay (Pump Up, Pump Down)

The unit is designed to control the maximum and/or minimum levels of conductive liquids (user selectable via front switch). When power is applied, the green "supply on" LED will illuminate. In the "Pump-Up" mode, the relay energises and the red LED illuminates when the level drops below the lower level probe then de-energises (red LED extinguishes) when the level rises above the upper level probe. In the "Pump-down" mode, the relay de-energises when the level drops below the lower level probe then re-energises when the level rises above the upper level probe.

Terminal Protection to IP20

Dims:
H.78 mm
W.45 mm
L.99 mm

▪ TIMING DIAGRAM



▪ INSTALLATION AND SETTING

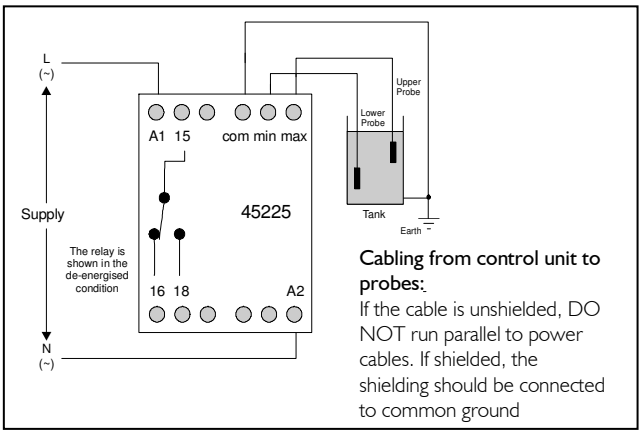
BEFORE INSTALLATION, ISOLATE THE SUPPLY. Connect the supply and the probes as shown in the diagram below. Set the **'sensitivity'** adjustment to minimum. Immerse both probes in the liquid to be monitored then apply power and the green **'supply on'** LED should illuminate. Rotate the **'sensitivity'** adjustment until the relay changes state. Remove the probes from the liquid and the relay should change state again. Now set the **'sensitivity'** adjustment midway between the setting obtained and maximum. This should now be the correct setting for the liquid. Finally, set the switch to **'pump-up'** or **'pump-down'** as required.

Note 1: If using a metal tank, connect terminal **'com'** and earth to the tank

Note 2: If the supply is interrupted for ≤ 0.5S in the 'pump-up' mode, the relay will energise immediately. In the 'pump-down' mode, the relay will remain de-energised.

Note 3: For single probe operation, link terminals **'com'** and **'max'**.

▪ CONNECTION DIAGRAM



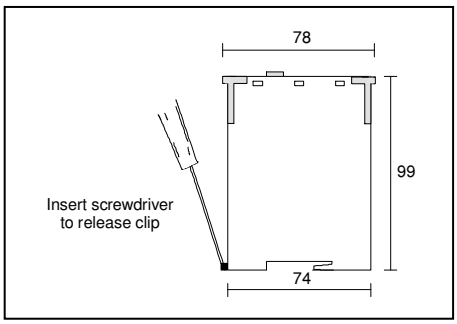
Cabling from control unit to probes:
If the cable is unshielded, DO NOT run parallel to power cables. If shielded, the shielding should be connected to common ground

▪ TECHNICAL SPECIFICATION

Supply Voltage Un:	24, 110, 230, 400V AC 48 - 63Hz
Supply Variation:	85 - 115% of Un
Isolation:	Over voltage cat. III (IEC 664)
Power Consumption:	1.5VA
Inter-Electrode Voltage:	≈ 17V AC
Operate Resistance:	5 to 100KΩ
Release Resistance:	≈ 7.5KΩ
Response Time:	High Level - 100mS Low Level - 500mS
Maximum Cable Length:	100 metres (control unit to probes see note with connection diagram)
Ambient Temperature:	-20 to +60°C
Relative Humidity:	+95%
Contact Rating:	SPDT AC 1 250V AC 10A (2500VA) AC 15 250V AC 6A DC 1 25V DC 10A (250W)
Electrical Life:	Minimum 150,000 ops at rated load
Housing:	Orange flame retardant UL94 VO
Weight:	224g approx.
Mounting Option:	Onto 35mm symmetric DIN rail to BS5584:1978 (ENSO 002, DIN 46277-3)
Terminal Conductor Size:	Max 2 x 1.5mm² stranded (terminated) Max 2 x 2.5mm² solid
Approvals:	Conforms to: UL, CUL, CSA, IEC. CE Compliant

For suitable probes/accessories see main product catalogue

▪ MOUNTING DETAILS



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