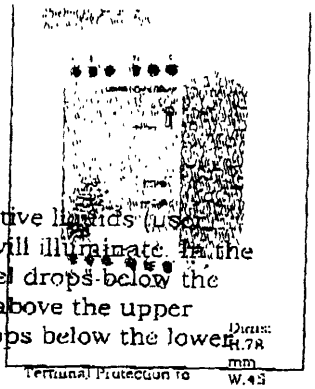
321 3109.

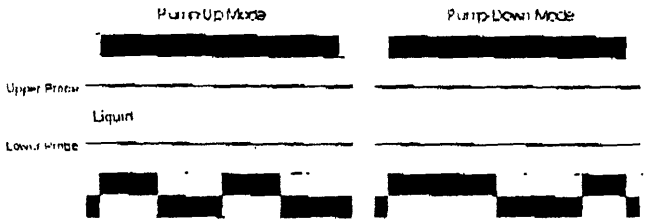
Type: 45225

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.

- TIMING DIAGRAM



- INSTALLATION AND SETTING

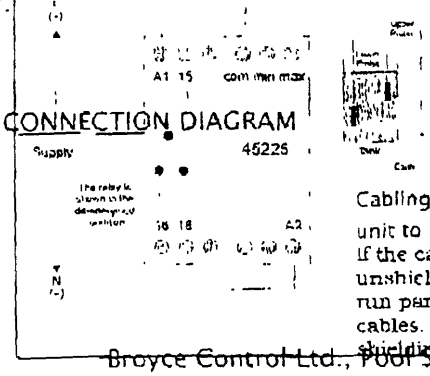
BEFORE INSTALLATION, ISOLATE THE SUPPLY. Connect the supply and the probes as shown in the diagram below. Set the 'sensitivity' adjustment to minimum. Immerse both probes in the liquid to be monitored then apply power and the green 'supply on' LED should illuminate. Rotate the 'sensitivity' adjustment 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



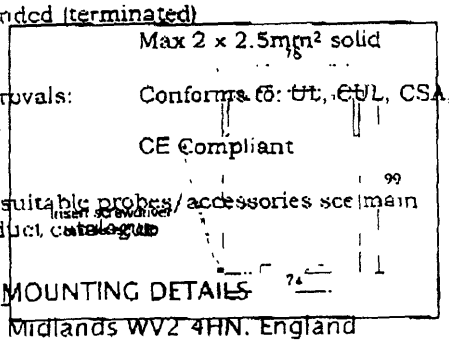
Cabling from control unit to probes: If the cable is unshielded, DO NOT run parallel to power cables. If shielded, the shielding should be

- TECHNICAL SPECIFICATION

Supply Voltage Un: AC 48 - 63Hz	24, 110, 230, 400V
Supply Variation:	85 - 115% of Un
Isolation: (IEC 664)	Over voltage cat III
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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