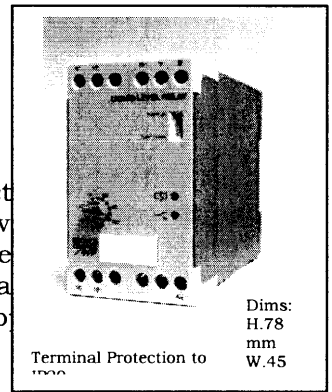


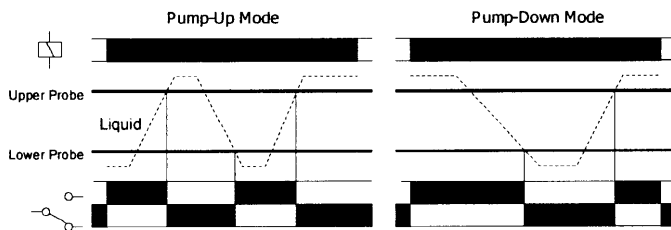
# Type: 45225

## Level Control Relay (Pump Up, Pump Down)

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



### TIMING DIAGRAM



### INSTALLATION AND SETTING

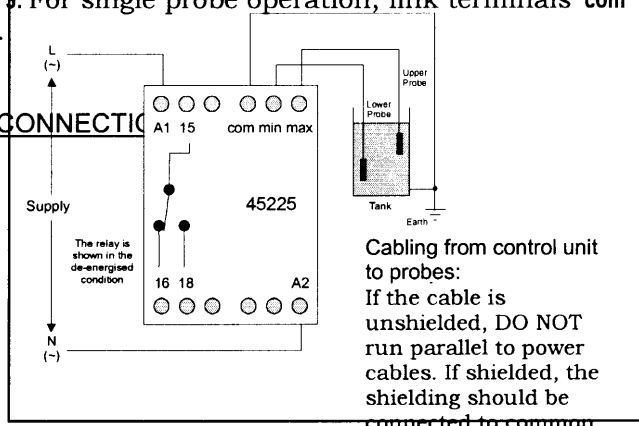
**BEFORE INSTALLATION, ISOLATE THE SUPPLY.** Connect the supply and the probes as shown in the diagram below. Set the 'sensitivity' adjustment to minimum. Immerse both probes in the liquid to be monitored then apply power and the green 'supply on' LED should illuminate. Rotate the 'sensitivity' adjustment 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  $\leq 0.5S$  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'.

### CONNECTING



### 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:	$\approx 17V$ AC
Operate	
Resistance:	5 to 100K $\Omega$
Release Resistance:	$\approx 7.5K\Omega$
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 1.5mm <sup>2</sup>
stranded (terminated)	

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