

# HAWKER LEVEL CONTROL SYSTEMS

# Universal Controller

- Use with any device with volt free contacts.
- Use for alarm or control.
- Single or dual switched inputs.
- Adjustable time delay for both On and Off.
- Built in diagnostic facilities.
- Can be powered by D.C. or A.C.
- Wall or panel mounted versions.
- Small and light weight.

## UC1







# **Principle of Operation**

A microprocessor based controller which accepts one or two voltage free contacts and provides single alarm or control function with adjustable timer controls. There is also facility for setting the fail safe according to filling or emptying applications. Examples of sensors having volt free contacts capacitance probes, float switches. thermocouples, pressure switches etc. On the front of the unit there are a series of switches which operate as follows:- Switch No 1 marked 'H fail L' sets the fail safe feature. In the L position, the relay is energised when the input has detected a contact closure, (generally for emptying applications). In the H position the relay is de-energised when the input has detected a contact closure, (generally for filling applications). Switch No 2 marked '1 sensor 2' allows the unit to operate either as a single point unit or as a dual unit with latching facility.

Switches 3 & 4 marked 'Sensor On Delay' allows an optional time delay to be set on input (e.g. to prevent unwanted triggering due to turbulence, splashing etc).Switches 5 & 6 marked 'Sensor Off Delay' allows an optional time delay to be set on output giving continued relay operation for a predetermined time (e.g. to allow a pump to continue pumping beyond the level set by its control probe). Delays are set by the switch positions and give delays of 0 sec's 5 sec's, 15 sec's and 120 sec's. The state of the input devices and the output relay, can be recognised by LED's and there is also a 'Power On' LED. Built-in diagnostic features utilise flashing LED's indicating incorrect connection, or the failure of input No 2 in the dual mode. Generally 3 core cable may be used for inter connections, but if isolation is required between input and controller, 4 core cable is necessary.

ÍÆ

**HAWKER** TECHNICAL SPECIFICATIONS

84

50

UUU

ႏွို္င္ပံ

# **Technical Data**

## Universal Controller (UC)

Supply:	230V/115V AC 50Hz 24V DC reversw polarity protected (selected at works)
Consumption:	0.35W @ 24V DC ( no load) 1W @ 24V DC ( under load) 5W @ 230V AC ( under load)
Input:	2, volt free or open collector
Max Input Resistance:	2,000 ohms
Dip Switch:	User adjustable
Input Timer: (On Delay)	0, 5, 15, 120sec's by dip switches
Ouput Timer: (Off Delay)	0, 5, 15, 120sec's by dip switches
Accuracy:	Better than +1sec or -1sec on 120sec's range
Repeatability:	100%
Fail to Safe:	High or Low
Modes:	Single or Dual switched inputs
Outputs:	Relay volt free SPCO contacts 5A @ 230V resistive LED's Yellow =Power On Red = Relay Energised Green = Sensor 1 Active Green = Sensor 2 Active
Aux Supply: (from mains unit)	15-20V DC @ 50mA unregulated (internal 100mA resettable fuse).
Operating Temp:	-10°C to +60°C
Weight UC1/P: UC1:	215 gms 850 gms
Diagnostic:	Flashing input L.E.D.'s
Protection UC1/P: UC1:	IP20 IP65

# UC1/P for Panel Mounting Base for UC1/P Provision for Conversion Kit for DIN Rail

37

27

0

ο

0

0

0



Diagnostic LED's

#### **UC1 for Wall Mounting**

Polycarbonate Enclosure with Clear Ltd



Because of continuing development we reserve the right to change the specifications without notice

## HAWKER ELECTRONICS LTD.

57 The Avenue, Rubery Industrial Estate, Birmingham B45 9AL, ENGLAND Telephone :+44 (0)121-453-8911 Fax : +44(0)121-453-3777 e.mail: info@hawker-electronics.co.uk www.hawker-electronics.co.uk

