



# HAWKER

# LEVEL CONTROL SYSTEMS

## P7/IS

### *Intrinsically Safe Conductive Level Control System*

- **Cat 1G/0 Approved**
  
- **Adjustable Sensitivity**
  
- **Ignores Electrode Fouling & Foam**
  
- **Suitable for Conducting Liquids**
  
- **Galvanically Isolated**
  
- **Wide Selection of Electrodes and Mounting Accessories Available**



#### **Principle of Operation**

Relies on the conducting properties of liquids to complete an electrical circuit between an active electrode and an earth electrode. Level sensing electrodes are normally mounted vertically and the controller switching action occurs as the liquid touches or leaves the electrode. Pressure tight electrodes are available if required. A low voltage A.C. signal is used on the electrodes to prevent electrolysis.

#### **Switching Differential**

Better than 5% of set sensitivity i.e. 50 ohms at 1000 ohms. This is necessary to avoid relay hold-on at the lower electrode caused by material clinging to the probe, electrode wetting, and viscous liquids such as sludge. The close switching differential allows high level electrodes to ignore foam layers.

#### **Fail to Safe Feature**

Two versions of the controller are available. The Fail to Safe HIGH for filling applications and High Alarms and the Fail to Safe LOW for emptying applications and low Alarms LED status indication is provided.

#### **Sensitivity**

The input switching point is adjustable between 300 and 20,000 ohms which suits most applications.

#### **Mounting Details**

The controller is DIN mounted with wiring to the front of the module

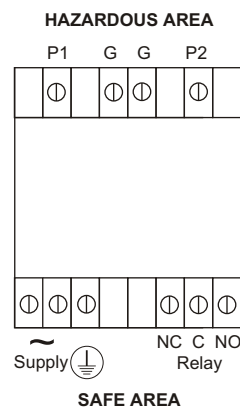
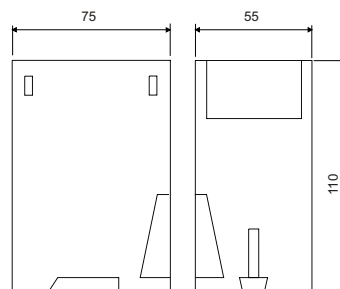


# HAWKER TECHNICAL SPECIFICATIONS

## Technical Specification

Mounting:	DIN Rail
Supply:	230Vac, 110Vac, 24Vac 50Hz $\pm 10\%$
Consumption:	5 V/A
Electrode Voltage:	8.0Vac max (open circuit)
Electrode Current:	8mA short circuit
Sensitivity:	300 - 20,000 ohms approx
Fail to Safe:	'Low' or 'High' state with order
Ambient Operating Temp:	-20 to +40°C
Relay Contact Rating:	5 amps @ 240Vac Volt free contact S P C O
LED:	Red LED 'ON' when relay energised
Enclosure Material:	Polycarbonate
Weight:	325g

## Enclosure Dimensions



## Certified Electrode Holders Available

### Category 1G/0 (Zones 0,1 & 2)

Ex Stock

#### Heavy Duty Single

1G/0HPE8, 1G/0HPE8/P, 1G/0HPE12, 1G/0HPE12/P

#### Light Duty Single

1G/0HPE7, 1G/0HPE7/P, 1G/0HPE7/PA, 1G/0HPE7/F  
1G/0HPE14

#### Heavy Duty Multi

1G/0HPE13, 1G/0HPE13/P

#### Borehole

1G/0HPE5

By Special Order

#### Medium Duty Single

1G/0HPE22, 1G/0HPE22/P, 1G/0HPE22/PA

**1G/0HPExxxx/IS Electrode Holders** are suitable for use in Zone 0, 1 and 2 applications. When installing equipment please check the category for installation as certain Zones have restrictions. Please read the installation manual for full details.

## Certification Details

P7/IS Controller

Sira 03 ATEX 2160

[EEExia] IIC

Ⓔ II (1) G

Cat 1 Holders

Sira 03 ATEX 2159X

EEExia IIC T4

EEExia IIC T6 (1G/0 HPE5 Only)

Ⓔ II 1G

## Ordering Information

P7/IS/X/Y/Z

X = Fail Safe High H  
Fail Safe Low L

Y = 20K or 7K (Sensitivity)

Z = Voltage Vac 230  
110  
24

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

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