## **VA Flowmeter Alarm Unit – Single Channel**

**BU191** 

Function: The BU191 is a universally powered Alarm Unit suitable for use with a number of different VA Flowmeters. It can be configured for use as a Low or a High Flow Alarm, as required. Each different VA Flowmeter will require a different sensor head for mechanical reasons but in all cases the operation of the Alarm Unit is the same. The sensor heads, which have to be ordered separately, come with 5M of cable for connection to the Alarm Unit. The BU191 has an "Instrument Fault" indication LED (Amber) which is triggered following loss of power or loss of connection to the Head. This LED can only be cleared by restoring power or replacing the head, passing the float from the Alarm State to the Healthy State and pressing the RESET button to initiate the "Stable" condition. The BU191 incorporates a sensitivity adjustment to cater for different VA Flowmeters.

**Please note:** VA Flowmeters are not supplied with the Alarm Unit.

## Data Sheet Issue 12.0



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# **SPECIFICATIONS**

#### **INPUTS:**

# From BH19-??? Sensing Heads suitable for:

VA Flow Meters Emerson 1100 Emerson 1300 Yokogawa RAGK Series with K6, K7, M6 and M7 tubes And others to be advised

# **Sensitivity Pots**

1 per channel For minimum sensitivity wind sensitivity potentiometer fully anti-clockwise

#### Installation

BU191/BH19-???? have been designed to be easily retrofitted to existing VA Flowmeters

#### **OUTPUTS:**

## Alarm Relay

Type: G7SA3A1B Omron EN50205 Class A approved 4 Pole Single Throw Relay 3 x Normally Open 1 x Normally Closed

#### **Contact Ratings:**

Rated Load:
6A at 230 Volt AC
6A at 30 Volt DC
Rate Carry Current: 6A
Max Switching Voltage:
250 Volt AC, 125 Volt DC
Max Switching Current: 6A
Max Switching Capacity:
1,500 VA, 180 W

#### SUPPLY:

#### **Universal Power Supplies**

Wire into appropriate terminals 115 +15%/-10% Volt AC 230 +15%/-10% Volt AC 50/60 Hz and 22 to 28 Volt DC

#### **Power Required**

3.0 VA Maximum (AC) 40mA (DC)

#### **PANEL INDICATIONS:**

#### Pilot Light

White LED indicates Power ON

#### **Instrument Fault Light**

Amber LED

#### Flow Alarm State Light

Green = Healthy Red = Alarm

#### **GENERAL:**

# Enclosure IP Rating IP65

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### Operating / Storage Temperature Range 0 to +45°C / -20 to +60°C

## Operating & Storage Humidity Range

0 to 95% RH non-condensing

#### EMC

EN 61000-6-2:2001 Industrial EN 61000-6-4:2001 Industrial

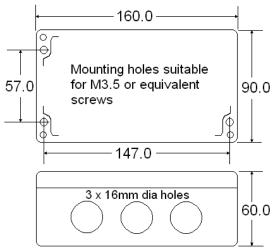
#### Weight

485 gms

## IEC 61508 - SIL Rating

SIL 2 or better

#### **MECHANICAL and INSTALLATION DETAILS**



#### **TERMINATION DETAILS**

Terminal

#### **Connector 1 POWER SUPPLY**

- 1 230 Volt AC Live
- 2 115 Volt AC Live
- 3 Neutral
- 4 Earth
- 5 -ve DC
- 6 +ve DC

# Connector 2 SENSOR HEAD

1 Light Source Red 2 Sensor 2 Green 3 Sensor 1 Yellow

5 Screen

Common

# Terminal

# **Connector 3 RELAY OUTPUT**

- 1 Normally
- 2 Open Pair 1
- 3 Normally
- 4 Open Pair 2
- 5 Normally
- 6 Open Pair 3
- 7 Normally
- 8 Closed Pair 1

# All dimensions in mm

**ORDERING DETAILS** 

- a) Give identification code, i.e. BU191 and BH19-1100
- b) Give all details of VA Flowmeter with which it is to be used
- c) State if the Alarm is to be a High Flow or a Low Flow alarm

#### **DOCUMENTATION**

- a) O & M Manual
- b) Independent EMC Testing Report

Blue

c) FMEDA SIL Rating Report