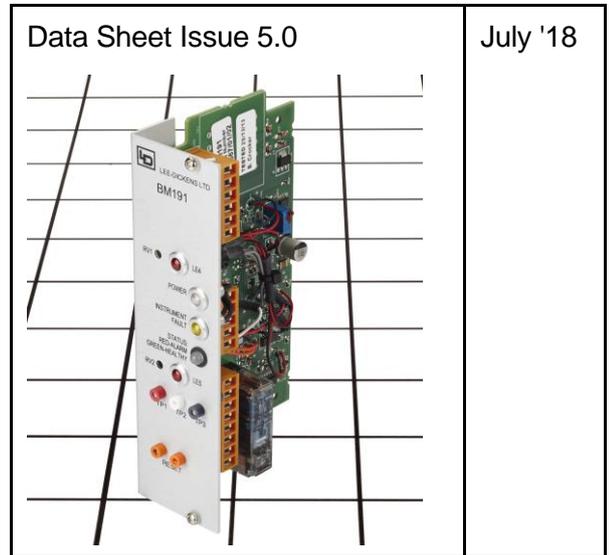


Function: The BM191 is a Flowmeter Alarm Unit module suitable for use with a number of different VA Flowmeters. These modules can be panel mounted or used with the **Lee-Dickens Multi-way enclosures** (please see BM191E). The BM191 can be configured for use as a Low or a High Flow Alarm, as required. 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 supplied come with 5M of cable for connection to the Alarm Unit. The BM191 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 (mounted separately) to initiate the "Stable" condition. The BM191 incorporates a sensitivity adjustment to cater for different VA Flowmeters. For enclosed standalone units please refer to the BU191.

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



SPECIFICATIONS

INPUTS:

VA Flow Meters

Emerson 1100
Emerson 1300
Yokogawa RAGK
And others to be advised

Sensitivity Pots

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

Installation

BM191 has been designed to be easily retro-fitted 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:

Power Supply

22 to 28 Volt DC

Power Required

40mA

PANEL INDICATIONS:

Pilot Light

White LED indicates Power ON

Instrument Fault Light

Amber LED

Flow Alarm State Light

Green = Healthy
Red = Alarm

GENERAL:

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

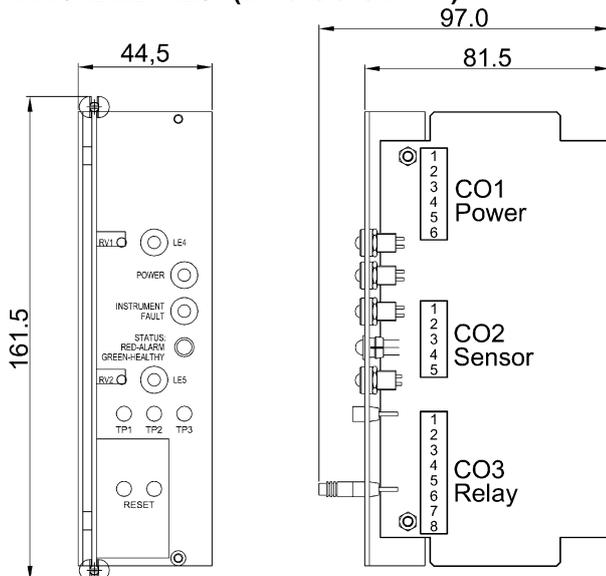
Weight

120 gms

IEC 61508 – SIL Rating

SIL 2 or better

MECHANICAL DETAILS (Dimensions in mm)



TERMINATION DETAILS

CO1 POWER SUPPLY

- 1 Unused
- 2 Unused
- 3 Unused
- 4 Earth
- 5 -ve DC
- 6 +ve DC

CO2 SENSOR HEAD

- 1 Light Source Red
- 2 Sensor 2 Green
- 3 Sensor 1 Yellow
- 4 Common Blue
- 5 Screen

CO3 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

ORDERING DETAILS

- a) Give identification code, i.e. BM191
- 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
- c) FMEDA SIL Rating Report