Health & Safety Executive

BASEEFA

British Approvals Service for Electrical Equipment in Flammable Atmospheres

1. # CERTIFICATE OF CONFORMITY

2. BAS No Ex 87B2372X

3. This certificate is issued for the electrical apparatus:

A MODEL 1181 LCD RTO INDICATOR

4. manufactured and submitted for certification by:

ROSEMOUNT ANALYTICAL UNILOC DIVISION
CALIFORNIA 92714
U.S.A.

5. This electrical apparatus and any acceptable variation thereto is specified in the Schedule to this Certificate and the documents therein referred to.

6. BASEEFA being an Approved Certification Body in accordance with Article 14 of the Council Directive of the European Communities of 18 December 1975 (76/117/EEC) confirms that the apparatus has been found to comply with harmonised European Standards

EN50 014 (1977) + A1 to 4
EN50 020 (1977) + A1

and has successfully met the examination and test requirements which are recorded in confidential Test Report

**No 87(i)205**

7. The apparatus marking shall include the code

**EEx ia IIC T4**

File No : EECS 0911/02/004

HEALTH AND SAFETY EXECUTIVE

I M CLEARE
DIRECTOR



31 December 1987

8. The supplier of the electrical apparatus referred to in this certificate, has the responsibility to ensure that the apparatus conforms to the specification laid down in the Schedule to this certificate and has satisfied routine verifications and tests specified therein.

9. This apparatus may be marked with the Distinctive Community Mark specified in Annex II to the Commission Directive of 16 January 1984 (Doc 84/47/EEC). A facsimile of this mark is printed on sheet 1 of this certificate.

# CERTIFICATE OF CONFORMITY SCHEDULE

**NUMBER** Ex 87B2372X

**DATED** 31 December 1987

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APPARATUS

A MODEL 1181 LCD RTO INDICATOR is a digital indicating meter designed to display loop currents in the range of 4-20 mA.

The indicator comprises two printed circuit boards interconnected by a flexible ribbon cable. A three and a half digit Liquid Crystal Display and the driver circuit is mounted on the upper board. The remaining circuit including the input terminals is mounted on the lower board. These are assembled into a plastic enclosure which is primarily designed for mounting within other unspecified equipment, but which provides a degree of protection of at least IP20 for the electrical circuit with the exception of the input terminals.

For Intrinsic Safety purposes the maximum input parameters are:-

$I_{max:in}$ = 200 mA $C_{eq}$ = 0

$W_{max:in}$ = 1W $L_{eq}$ = 0

DRAWINGS

| Number | Sheet | Issue | Date | Description |
|---|---|---|---|---|
| 2400228 | 1 | B | 9.8.87 | Circuit Diagram |
| 2312300 | 1 | B | 9.22.87 | General Assembly |
| 2311900 | 1 | A | 3.17.87 | Upper Board S. Assy |
| 3300500 | 1 of 5 | A | 3.13.87 | Gang Board Layout Upper |
| 3300500 | 2 of 5 | A | 3.13.87 | Upper Bd. Component Side |
| 3300500 | 3 of 5 | A | 3.13.87 | Upper Bd. Track Side |
| 2312000 | 1 | A | 3.18.87 | Lower Board S. Assy |
| 3300600 | 1 of 4 | B | 9.21.87 | Gang Board Layout Lower |
| 3300600 | 2 of 4 | B | 9.21.87 | Lower Board Component Side |
| 3300600 | 3 of 4 | B | 9.21.87 | Lower Board Track Side |
| 3281900 | 1 | C | 12.23.84 | Cover Lower Bd. |
| 3300700 | 1 | B | 9.22.87 | Marked Cover |
| 3300700 | 2 | B | 3.20.87 | Silk Screening |
| 2312100 | 1 | A | 3.19.87 | Sub Assy Boards |
| 2312200 | 1 | A | 3.19.87 | Sub Assy with Cover |

SPECIAL CONDITIONS FOR SAFE USE

The MODEL 1181 LCD RTO INDICATOR must be located within an outer enclosure which provides a degree of protection of at least IP20.