



Health &
Safety
Executive



BASEEFA

British Approvals Service for Electrical Equipment in Flammable Atmospheres

1. **CERTIFICATE OF CONFORMITY**

2. BAS No Ex 87B2087X

3. This certificate is issued for the electrical apparatus:

MODEL 1181T CONDUCTIVITY TRANSMITTER

4. manufactured and submitted for certification by:

ROSEMOUNT ANALYTICAL, UNILOC DIVISION
of Irvine, California, USA

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

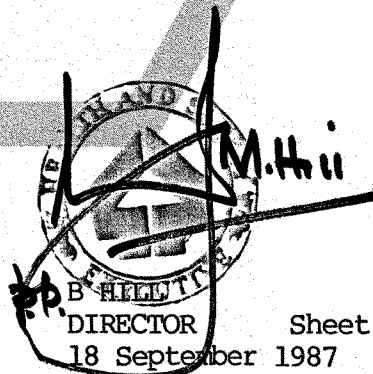
and has successfully met the examination and test requirements which are recorded in confidential Test Report

No 87(i)192 dated 24 August 1987

7. The apparatus marking shall include the code

EEx ia IIB T4
T_{amb} = 55°C

File No : EECS 0911/02/005



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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 87B2087X

DATED 18 September 1987

APPARATUS

A MODEL 1181T CONDUCTIVITY TRANSMITTER is designed to measure the conductivity of a liquid and provide a proportional output signal. The apparatus consists of a transmitter unit and a separate but interconnected sensor. The transmitter consists of four printed circuit boards namely transmitter, driver, temperature and signal input boards, and an optional moving coil meter. The aluminium enclosure meets the requirements of IP20.

The sensor consists of two toroidally wound coils placed around a tube through which the solution sample flows. The sensor enclosure also meets the requirements of IP20.

$U_{\max:\text{in}} = 30$ volts

$I_{\max:\text{in}} = 295$ mA

$W_{\max:\text{in}} = 0.93$ W

DRAWINGS

<u>Number</u>	<u>Issue</u>	<u>Date</u>	<u>Description</u>
2400204	F	7.85	Schematic
22931-01	F	7.10.85	Transmitter board assembly
32672-00 sheet 4	D	7.29.84	Track layout
22932-01	C	11.12.85	Driver board assembly
32673-00 sheet 4	C	7.26-84	Track layout
22933-01	D	10.17.85	Temperature board assembly
32674-00 sheet 4	D	9.24.84	Track layout
22934-01	E	4.8.87	Signal input board
32675-00 sheet 4	C	9.29.84	Track layout
9080075 sheets 1 & 2	B	8.14.85	Transformer assembly
1700186 sheet 1	A	4.7.87	General assembly
1700186 sheet 2	A	4.8.87	General assembly
32495 sheets 1-2	A	5.18.81	Housing (casting)
32496 sheets 1-2	A	5.18.81	Housing (machined)
9080077/80	C	8.8.85	Sensor coil assembly
11153-00	C	6.5.85	Sensor model 221
22955-00/01	D	4.6.87	Sensor model 222
11156-00	-	7.19.85	Sensor model 224
1700187	B	6.15.87	Wiring diagram
9240877 sheet 1	A	4.22.87	Label

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SPECIAL CONDITIONS FOR SAFE USE

- 1 The Model 1181T Conductivity Transmitter comprises two separate but inter-connected units. Neither unit must be connected to any other unit with the exception of a barrier device which has been approved for that purpose and which may be connected to terminal block TBI on the Transmitter Unit.
- 2 The Sensor Unit enclosure may be constructed of a plastic material which is not anti-static, in which case the enclosure must not be charged by rubbing nor cleaned with solvents.