



SCHEDULE

EC TYPE-EXAMINATION CERTIFICATE

Sira 00ATEX2126X

13 DESCRIPTION OF EQUIPMENT

The 4-20 mA Incremental Shaft Encoder is used to indicate the angular movement of a shaft. Movement is detected optically by shining light produced by LEDs through a graduated disc that rotates with the shaft. The circuitry is contained on an assembly comprising three printed circuit boards housed in a non-conducting holder, which is installed in an outer metallic enclosure.

The encoder is intended to be powered from two galvanic isolators. The safety description is as follows:

Each of 2 channels with the following safety description:

U_i	=	28 V
I_i	=	47 mA
P_i	=	0.33 W
C_i	=	0
L_i	=	0

It is not necessary for the two supplies to be separate intrinsically safe circuits but they must be connected to the same zero reference point.

14 DESCRIPTIVE DOCUMENTS

Drawing No.	Sheet	Rev	Date	Title
GA-UH-PCB-001	1 of 1	2	25 Jul 00	General Assembly of Head, Housing and I.S. Head P
INC4_20-001-03-01	1 of 3	2.0	19 Jun 00	Circuit Diagram A
INC4_20-001-03-02	2 of 3	2.0	19 Jun 00	Circuit Diagram B
INC4_20-001-03-03	3 of 3	2.0	19 Jun 00	Circuit Diagram C
LB-INC-01	1 of 1	2	20 Jul 00	General Label Drawing for the 4-20mA Incremental

14.2 Report No. R52X5980A

15 SPECIAL CONDITIONS FOR SAFE USE (denoted by X after the certificate number)

The two supplies to the equipment shall be from shunt zener diode barriers that are connected to the same barrier earth. Galvanic isolators shall not be used unless the return lines are connected together.

6 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in Report No. R52X5980A.

17 CONDITIONS OF CERTIFICATION

17.1 The use of this certificate is subject to the Regulations Applicable to Holders of SCS Certificates.

17.2 Each completed Shaft Encoder shall be subjected to an electric strength test in accordance with EN 50020:1994 clause 10.6 with the test voltage applied between the circuit and the outer enclosure for a minimum of 60 s. The test voltage shall be 500 Vac (48-52 Hz) or 710 Vdc. The current shall not exceed 5 mA and there shall be no evidence of flashover or breakdown during the test.

Date 24 August 2000

This certificate and its schedules may only be reproduced in its entirety and without change

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