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परीक्षण प्रकोष्ठ स्थापित - १९५६ TESTING CELL ESTD. 1956

CSIR-CENTRAL INSTITUTE OF MINING AND FUEL RESEARCH

ISO 9001:2008 REGISTERED

FORMERLY : CENTRAL MINING RESEARCH INSTITUTE
(COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH)
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परीक्षण प्रमाण पत्र – *TEST CERTIFICATE*

[FORM NO.: CIMFR: DQM: FLP02: F-02]
(Flame & Explosion Lab.)

I.D No. 656/12

CODE NO FLP/256A/12-13

FIRST SCHEDULE

[For association with the report of test sent (under cover of this office Letter No CIMFR/TC/P/H796 Dated 11* March, 2013) to M/s. Trolex Ltd., Newby road, Hazel Grove, Stockport., SK7 5 DY, UK, in respect of testing as regards to intrinsic safety of the equipment mentioned below submitted by them for testing]

NAME & DESCRIPTION OF THE APPARATUS: The name of the apparatus is **TX6023, TX6024 Liquid Flow Sensor.**

The TX6023 and TX 6024 are liquid flow sensors with 4-20mA outputs for pressure and flow. TX 6023 and TX 6024 are identical in build but have different software. The software of the TX 6023 generates an output linear to differential pressure and software of the TX 6024 generates an output linear to flow. They consists of a certified IS pressure sensor TX6114 (Baseefa 03ATEX0021X and Sira 02ATEX2387X) and a separately certified IS differential pressure sensor TX6145/ TX6146/ TX6147/ TX6148 (Baseefa 05ATEX0193U) connected to a metal venture.

Differential pressure sensors TX6145/ TX6146/ TX6147/ TX6148, all are having a 3051S Series Pressure Transmitter which is designed to convert a process pressure measurement into a 4-20mA electrical signal. The component consists of a 3051S-C coplanar or 3051S-T In-line super module.

The Input Parameters of 3051S Series Pressure Transmitter is as follows:

I.S. Power/Loop: Ui= 30V, Ii= 300mA, Pi= 1.0W, Ci= 30nF, Li= 0

Pressure Sensor TX6114 is a pressure transmitter designed to produce an output signal proportional to the pressure in a fluid. The output signal is configured as a 2 wire 4-20mA output. The apparatus comprises a pressure sensor assembly, an amplifier board, and an RFI board, all housed in a stainless steel enclosure. External connections are made by means of an integral cable with a maximum length of 150m, or by a plug and socket arrangement.

Input Parameters are as follows:

IS Power U_i = 16.5V, C_i= 0.05µF, L_i = 0.35mH, L_i/R_i = 5µH/ohm.

APPLICANT: M/s. Trolex Ltd.,
Newby Road, Hazel Grove,
Stockport., SK7 5 DY
UK.

MANUFATURER: Same as above