File E230865 Project 04CA50404

December 8, 2005

REPORT

on

PROCESS CONTROL EQUIPMENT FOR USE IN HAZARDOUS LOCATIONS (QUZW)

Turck Minneapolis, MN

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DESCRIPTION

PRODUCT COVERED:

USL Analog Proximity Sensors, Model Nos. Bi 8-M18-Li/Exi and Bi 15-M30-Li/Exi, intrinsically safe for use in Class I, Division 1, Groups A, B, C and D Hazardous Locations when installed in accordance with Turck Control Drawing No. IS-3.100.

GENERAL:

The products covered by this report are intrinsically safe proximity sensors intended to be powered by an associated apparatus.

ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

USL indicates investigation to U.S. Standard UL 913, Seventh Edition.

The devices are intended for use in a 70° C maximum ambient temperature. The temperature code of these devices is T4.

RATINGS:

The devices have the following intrinsic safety entity parameters:

Vmax = 30.0 V Imax = 120 mA Ci = 0 uF Li = 86 uH (Model Bi 8-M18-Li/Exi); 170 uH (Model Bi 15-M30-Li/Exi) Pi = 900 mW

MARKINGS:

An adhesive marking label will be attached to the cable as a flag, not greater than 12 inches from the device. See ILLS. 5 and 16 for label details for the Model Bi 8-M18-Li/Exi and Model Bi 15-M30-Li/Exi, respectively.

CONTROL DRAWING:

Each device is provided with a copy of Turck control drawing No. IS-3.100 as shown in ILL. 1.