



Intrinsic Safety Evaluation No. 18-ISA120004-0
A&CC PAR No. 100315

September 25, 2012

Trolex Ltd
Attention: Kevin Stockwell
Newby Road, Hazel Grove
Stockport. SK7 5DY
United Kingdom

Dear Mr. Stockwell:

The review of your application dated 27 October 2011, your assigned Code No. 271011, for the Model TX2121 RS485 Serial Communications Line Isolator, is complete.

The design of this Model TX2121 RS485 Serial Communications Line Isolator meets the applicable requirements of Title 30 Code of Federal Regulations, Part 18.68 (30 CFR Part 18.68). We assign Intrinsic Safety Evaluation No. 18-ISA120004-0 to this design.

The following apply to Intrinsic Safety Evaluation No. 18-ISA120004-0:

1. You must build each Model TX2121 RS485 Serial Communications Line Isolator bearing this Intrinsic Safety Evaluation number according to the drawings and specifications on file at the MSHA Approval and Certification Center. A list of these drawings and specifications is enclosed.
2. The Model TX2121 RS485 Serial Communications Line Isolator shall be conspicuously labeled to show your company's name, model or type number, and the assigned MSHA Intrinsic Safety Evaluation number.
3. You are not permitted to make changes to the design of this Model TX2121 RS485 Serial Communications Line Isolator without our approval.
4. We may require you to make changes to the design, or to modify the Model TX2121 RS485 Serial Communications Line Isolator in the field, in the interest of safety.
5. We have the right to revoke this Intrinsic Safety Evaluation, for cause, at any time.

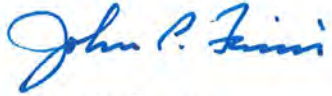


6. This letter does not authorize you to advertise the Model TX2121 RS485 Serial Communications Line Isolator as permissible for use in underground gassy mines or as being approved or certified by the Mine Safety and Health Administration (MSHA). This Model TX2121 RS485 Serial Communications Line Isolator must be evaluated and accepted as part of an MSHA approved permissible system or machine.
7. You must make the Model TX2121 RS485 Serial Communications Line Isolator available upon request by MSHA, but not more than once a year, except for cause, for post-approval audit at a mutually agreeable site at no cost to MSHA.
8. You must notify MSHA of all product defects of which you become aware.
9. The following requirements apply to this Model TX2121 RS485 Serial Communications Line Isolator:
 - a. If the Model TX2121 RS485 Serial Communications Line Isolator is located in areas where permissibility is required, it must be housed in a suitable MSHA-certified explosion-proof enclosure.
 - b. If the Model TX2121 RS485 Serial Communications Line Isolator is located in areas where permissibility is not required, the Model TX2121 RS485 Serial Communications Line Isolator must be housed in a dust-tight enclosure in accordance with ACRI2001 and must be de-energized under loss of mine ventilation.
 - c. The equipment connected to the Non-Hazardous Area Terminals of Model TX2121 RS485 Serial Communications Line Isolator must not use or generate greater than 250Vrms.
 - d. The power to the Hazardous Area Terminals of the Model TX2121 RS485 Serial Communications Line Isolator must be derived from a supply previously evaluated by MSHA, with a maximum output of 14.4 Vdc open-circuit voltage and 3.3 A short-circuit current.
10. You are required to inform your customers, distributors, and end users of these requirements.

You will receive an invoice for the cost to process your application.

If you have any comments or questions relative to this letter, please contact Kevin Hedrick at 304-547-2018 or hedrick.kevin@dol.gov.

Sincerely,



John P. Faini
Chief, Approval and Certification Center

Enclosures

Data Sheet 6
By: KLHedrick
Date: 09-25-12

INVESTIGATION NO. IA-25530

DRAWING LIST

Trolex Ltd.
Model TX2121 RS485 Serial Communications Line Isolator
Built According to Drawing No. P5554-16-M
Approval No. 18-ISA120004-0

<u>TITLE</u>	<u>DRAWING NO.</u>	<u>REVISION</u>
Circuit Diagram, Main PCB	P5554.02-M (2 Shts.)	A
Circuit Diagram, LED PCB	P5554.04-M	A
PCB, Main	P5554.14-M (5 Shts.)	A
General Arrangement	P5554-16-M	A
PCB, LED	P5554.24-M	A
Label Details	P5554.29-M	A
IS Entity Parameters	P5554-40-M	A
MSHA Drawing List for TX2121	P5554.39-M	A

Factory Inspection Form: See Mr. Ian Boroughs' certified statement dated 30 May 2012, submitted in lieu of a Factory Inspection Form.