IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEx BAS 10.0011X	issue No.:0	Certificate history:
Status:	**Current**		
Date of Issue:	**2010-02-17**	Page 1 of 3	

Applicant: **Trolex Limited**
10a Newby Road
Hazel Grove
Stockport
Cheshire
SK7 5DY
United Kingdom

Electrical Apparatus: **P5557 Pump Controller**
Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking: **Ex ia I Ma (-20°C ≤ +40°C)**

Approved for issue on behalf of the IECEx Certification Body: R S Sinclair

Position: Managing Director

Signature:
(for printed version)

Date: 18/2/10

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

Baseefa
Rockhead Business Park
Staden Lane
Buxton
Derbyshire
SK17 9RZ
United Kingdom

Baseefa

IECEx Certificate of Conformity

Certificate No.: IECEx BAS 10.0011X

Date of Issue: **2010-02-17** Issue No.: **0**

Manufacturer: **Trolex Limited**
10a Newby Road
Hazel Grove
Stockport
Cheshire
SK7 5DY
United Kingdom

Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:
The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2007-10 Edition: 5	Explosive atmospheres - Part 0:Equipment - General requirements
IEC 60079-11 : 2006 Edition: 5	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:
A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

GB/BAS/ExTR10.0019/00
GB/BAS/ExTR10.0033/00

Quality Assessment Report:
GB/SIR/QAR07.0017/00

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Schedule

EQUIPMENT:
Equipment and systems covered by this certificate are as follows:

The P5557 Pump Controller is designed to control a pair of pumps which draw methane off the methane drainage system in a coal mine.

The equipment comprises of two PCBs mounted in a plastic enclosure offering a degree of ingress protection of at least IP20. On the front of the enclosure are two toggle switches and two tri-coloured LED indicators used to indicate the status of the pump motor current. The enclosure measure approximately 110mm x 65mm x 75mm high (including toggle switches).

The incoming supply is connected to terminals 5 & 6 on one side of the enclosure whilst the pump motors are connected to terminals 7 & 8 and terminals 11 & 12 on the other side.

The pump controller must be mounted within a separate enclosure offering a degree of ingress protection of at least IP54.

The standards used in support of this certificate, and listed on the front sheet, are restricted in scope to atmospheres at normal atmospheric pressure and normal oxygen concentration. In considering the intended use of this equipment, where the pump and pump motors may be located in a sealed enclosure and subjected to pressures typically between 0.3 bar and 1.1 bar absolute and an oxygen concentration substantially below 21%. It is considered that no additional safety factors need to be applied to these parts.

CONDITIONS OF CERTIFICATION: YES as shown below:

1. The pump controller and pump must be mounted inside an enclosure that offers a degree of ingress protection of at least IP54 according to IEC 60529 and be suitable for a mining environment.

Annexe: Annex IECEx BAS 10.0011X.pdf

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SK17 9RZ
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Terminal parameters:

Power Connections: T5 w.r.t. T6 (0V)

U_i = 14.4V
C_i = 0
L_i = 0

Pump Motor 1 Connections: T7 w.r.t. T8 (0V)

U_o = 14.4V
I_o = 615mA
P_o = 2.22W
C_i = 10.34µF
L_i = 0

Pump Motor 2 Connections: T11 w.r.t. T12 (0V)

U_o = 14.4V
I_o = 615mW
P_o = 2.22W
C_i = 10.34µF
L_i = 0