



Explosion Prevention Services (Pty) Ltd

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### GOVERNMENT APPROVED TEST LABORATORY

IN TERMS OF ARP 0108: "REGULATORY REQUIREMENTS FOR EXPLOSION PROTECTED APPARATUS"

## IA CERTIFICATE

Date Issued: **12 Aug 2016**

\*Expiry date: **12 Aug 2026**

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**Issue: 0**

### Ex – Type Examination Certificate

Certificate Number: **S-XPL/16.0786 X**  
Equipment: **10 Way Envirobox**  
Model / Type: **No 1**  
Applicant: **Pratley Manufacturing and Engineering (Pty) Ltd**  
**PO Box 3055**  
**Kenmare**  
**1745, South Africa**

Manufacturer: **Pratley Manufacturing and Engineering (Pty) Ltd**

Serial No: All serial numbers of equipment covered by a valid report or acceptable product certification mark.

The unit(s) as described in Explolabs File Number **XPL/17573/16.0786** is hereby certified "Explosion Protected" **Ex e IIC T6 Gb, Ex nA IIC T6 Gc and Ex t IIIC T6 Db**, having been tested, examined and inspected in accordance with the relevant requirements of South African Standards:

- SANS 60079-0: 2012 Ed 5** Explosive atmospheres Part 0: Equipment — General requirements
- IEC 60079-0: 2011 Ed 6**
- SANS 60079-7: 2007 Ed 3** Explosive atmospheres Part 7: Equipment protection by increased safety
- IEC 60079-7: 2006 Ed 4** "e"
- SANS 60079-15: 2010 Ed 4** Explosive atmospheres Part 15: Equipment protection by type of protection
- IEC 60079-15: 2010 Ed 4** "n"
- SANS 60079-31: 2014 Ed 2** Explosive atmospheres Part 31: Equipment dust ignition protection by enclosure "t"
- IEC 60079-31: 2013 Ed 2**

Risk of ignition provided:

Protection afforded	Equipment Protection Level (EPL)	Performance of protection	Conditions of operation	T class or Max Surface Temp (°C)
	Group			
High	Gb Group II	Suitable for normal operation and frequently occurring disturbances or equipment where faults are normally taken into account	Equipment remains functioning in zones 1 and 2	T6 (85 °C)
High	Db Group III		Equipment remains functioning in zones 21 and 22	T6 (85 °C)
Enhanced	Gc Group II	Suitable for normal operation	Equipment remains functioning in zone 2	T6 (85 °C)



T0104

The South African National Accreditation System (SANAS) is a member of the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA). This Arrangement allows for the mutual recognition of technical test and calibration data by the member accreditation bodies worldwide. For more information on the Arrangement please consult [www.ilac.org](http://www.ilac.org)

**1. DESCRIPTION OF EQUIPMENT**

The Envirobox comprises a moulded Nylon 66 housing that made provision for ten 20mm plain gland entries and two M20 conduit entries. The cover of the enclosure may be moulded from Nylon 66 or alternatively a clear Polycarbonate material may be used. The enviro box had the following approximate dimensions: 157mm x 129mm x 86mm had the following electrical rating:

Rated up to 550V (For Ex e application) and 1000V (for Ex nA application) with a maximum rated current of 121A (max) and a maximum dissipated power of 7.5W.

The Envirobox cover is secured onto the body by means of four M6x 20mm long stainless steel screws. The Envirobox was equipped with an earth harness permanently attached to the enclosure body by means of two M5 x 10mm long brass earth screws.

Cabling to the Envirobox is by means of ten 20mm plain holes that are blanked off by means of ten Nylon 66 blanking plugs. The enclosure also made provision for two M20 conduit entries.

**2. SPECIAL CONDITIONS FOR SAFE USE (denoted by X after certificate number)**

- a)....The enclosure has a maximum internal power dissipation of 7.5W
- b)....All unused entries must be blanked off by means of the Pratley blanking plugs.
- c)....The Envirobox may only be populated with previously certified Ex e terminals for use in an environment requiring a EPL of Gb or Gc.

**3. INSTALLATION INSTRUCTIONS**

It is the manufacturer's responsibility to supply installation instructions with each unit offered for sale as required by IEC/SANS 60079-0 Clause 30.

**4. CONDITIONS OF CERTIFICATION**

All production units must be covered by a QAN (Quality Assurance Notification), Product Mark Scheme or batch evaluation.

**5. MARKING**

The following (or similar) information have to be clearly and permanently marked on all units:

Supplier : Pratley Manufacturing and Engineering (Pty) Ltd  
 Manufacturer : Pratley Manufacturing and Engineering (Pty) Ltd  
 Equipment : 10 Way Envirobox  
 Model/Type : No 1  
 Serial No. : ---  
 Ex Rating : Ex e IIC T6 Gb, Ex nA IIC T6 Gc and Ex t IIIC T6 Db  
 IA Certificate No : S-XPL/16.0786 X

*This certification indicates compliance with R10.1 of the Mines Health and Safety Act and/or EMR 9(2) of the Occupational Health and Safety Act, provided that the apparatus is used as relevant in accordance with:*

- ii) SANS 10086 and IEC/SANS 61241-14 requirements as applicable;
- iii) Any conditions mentioned in the above report;
- iv) Any relevant requirements and codes of practice enforced in terms of the Mine Health and Safety Act or Occupational Health and Safety Act; and
- v) Any restrictions and conditions enforced by the Chief Inspector of Mines or the Principal Inspector or the Chief Inspector: Occupational Health and Safety.
- vi) A revision certificate replaces all previous version of the certificate.
- vii) \* - Only covers equipment Imported between the "Issued" and "Expire" dates.
- viii) If and when your QAN (Quality Assurance Notification) Certificate for your equipment manufacturer expires during the valid period of the IA Certification (issued for your equipment) and a new certificate is not submitted the existing IA Certification will then be cancelled. It is thus the client's responsibility to always submit the updated and valid QAN certificate(s) to Explolabs (Pty) Ltd

**Responsible Testing Officer:**


**D Maree**  
**Senior Testing Officer**

**Reviewed by:**


**H de Wet**  
**Testing Officer**

**EXPLOLABS EXPLOSION PREVENTION SERVICES**

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