

GOVERNMENT APPROVED TEST LABORATORY
IN TERMS OF ARP 0108: "REGULATORY REQUIREMENTS FOR EXPLOSION PROTECTED APPARATUS"

IA CERTIFICATE

Date Issued: **01 Mar 2016**
*Expiry date: **01 Mar 2026**
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Issue: 1

Ex – Type Examination Certificate

Certificate Number: **MS-XPL/16.0229 X**
Equipment: **Flameproof Enclosure**
Model / Type: **No 1, 2 & 4**
Applicant: **Pratley (Pty) Ltd**
PO Box 3055
Kenmare
1745, South Africa

Manufacturer: **Pratley Manufacturing (Pty) Ltd**
Serial No: All serial numbers imported between issued- and expire date and all serial numbers covered by a valid report or acceptable product certification mark.

Supplied by
Pratley (Pty) Ltd
Identified by Inspection Authority number
MS-XPL/16.0229 X

And as described in the Explolabs file number **XPL/17268/16.0229** is hereby certified "Explosion Protected Refer to Table 1 for Ex Rating", having been 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 60079-1: 2009 Ed 4** Explosive atmospheres Part 1: Equipment protection by flameproof enclosures "d"
- IEC 60079-1: 2007 Ed 6**
- 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	Mb Group I	Suitable for normal operation and severe operating conditions	Equipment de-energized when explosive atmosphere present	T6 (85 °C)
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)



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

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This report supersedes all previous documents bearing the reference no XPL/17268/16.0229.

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

1. GENERAL

The enclosure is cast from cast iron with approximate dimensions as below. The cylindrical enclosure has a flat cover fastened with four screws onto a flange / serrated flange in the base. Threaded entries are placed in the side of the base.

Table 1

Size	Ex rating	Max. Dia. / Max. height / Empty Vol.	Threaded entries	Cover flamepath	Fasteners
1	Ex d I Mb Ex d IIC Gb Ex tb IIIC T85°C Db IP 65	150.2mm x 77mm 408cm ³	Two to four entries M20 x 1.5 (6H)	Flange L = 13mm min l = 8mm min Gap = 0.04mm max	M5 X 0.8 x 14mm min (Grade 12.9) (fastener hole threaded through flange)
2	Ex d I T6 Mb Ex d IIB+H2 T6 Gb Ex tb IIIC T85°C Db IP 65	173mm x 80mm 747cm ³	Two to four entries M25 x 1.5 (6H)	Flange L = 15.8mm min l = 10.5mm min Gap = 0.04mm max	M6 X 1.0 x 14mm min (Grade 12.9) (fastener hole threaded through flange)
4	Ex d I/IIB T6 MbGb Ex tb IIIC T85°C Db IP 65	277mm x 134mm 3814cm ³	Two to four entries M40 x 1.5 (6H)	Flange L = 14.5mm min l = 9.3mm min Gap = 0.15mm max	M8 X 1.25 x 25mm min (Grade 12.9) (fastener hole threaded through flange)
2	Ex d I/IIC T6 MbGb Ex tb IIIC T85°C Db IP 65	173mm x 80mm 747cm ³	Two to four entries M25 x 1.5 (6H)	Serrated L = 10.5mm min serration Flange gap = 0.04mm max	M6 X 1.0 x 14mm min (Grade 12.9) (fastener hole threaded through flange)

The enclosure may be fitted with terminal blocks, end connectors, relays and / or circuit-breakers on a single rail.

Based on the following documentation:
IECEx ICS 15.0006X Issue No.: 0 and Test Report MASC MIC 14-007

2. 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.

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

- Suitably certified glands / adaptors / plugs shall be used to maintain the flameproof / Ex tb (including the IP rating) characteristics as applicable.
- The limitations for current, power, types of components that may be fitted, fitment method, position and size as indicated on Pratley instructions must be followed.
- The applicable flamepaths are listed on the Pratley instructions.

4. CONDITIONS OF CERTIFICATION

- All production units must be covered by a QAN (Quality Assurance Notification), Product Mark Scheme or batch evaluation.
- A copy of the certificate must be made available to the end user.
- The equipment must be routine hydraulic overpressure tested at 1370kPa (size 1 and 2) and 1150kPa (size 4).

