Reg No: 1999/027771/07

(Pty) Ltd

7 Spanner Rd / PO Box 467 Olifantsfontein 1665

> Tel: +27 (11) 316 4601 Fax: +27 (11) 316 5670

E-mail: admin-mgr@explolabs.co.za

GOVERNMENT APPROVED TEST LABORATORY

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

IA CERTIFICATE

Date Issued: 06 Mar 2018 *Expiry date: 06 Mar 2028

Page 1 of 3

Issue: 0

Ex - Type Examination Certificate

M-XPL/17.1628 X Certificate Number:

Equipment: **Dewatering Submersible Pump**

Model / Type: Jenny J37HX/J37MX Amandla Pump (Pty) Ltd Applicant:

> PO Box 26468 **East Rand** 1462

Manufacturer: Amandla Pump (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/19145/17.1628 is hereby certified "Explosion and the relevant of the control of the con Protected" Ex d I Mb, 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

Explosive atmospheres Part 1: Equipment protection by flameproof SANS 60079-1: 2009 Ed 4

IEC 60079-1: 2007 Ed 6 enclosures "d"

Risk of ignition provided:

iv)

	Protection afforded	Equipment Protection Level (EPL) Group	Performance of protection Conditions of o		T class or Max Surface Temp (°C)
ALIGINAS A	High	Mb Group I	Suitable for normal operation and severe operating conditions	Equipment de-energized when explosive atmosphere present	150°C

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:

SANS 10086 and IEC/SANS 61241-14 requirements as applicable;

Any conditions mentioned in the above report;

Any relevant requirements and codes of practice enforced in terms of the Mine Health and Safety Act or Occupational Health and Safety Act;

Any restrictions and conditions enforced by the Chief Inspector of Mines or the Principal Inspector or the Chief Inspector: Occupational Health and Safety.

A revision certificate replaces all previous version of the certificate.

Only covers equipment Imported between the "Issued" and "Expire" dates.

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











ANNEX TO CERTIFICATE NO M-XPL/17.1628

PAGE 2 OF 3

DESCRIPTION OF EQUIPMENT 1.

The type Jenny J37HX/J37MX pump motor was manufactured from SG60 cast iron and comprises of a stator casing, DE shield, NDE shield and junction box. The pump had a general length of ±905 mm and an internal volume of approximately ± 16%

The pump has a connection box which is fabricated to the submersible pump housing. The junction box made provision for one cable gland which formed part of the NDE shield. The junction box had an internal free volume of approximately ±4.2l.

The pump incorporated the following flameproof joints:

S STATIO	Location of joint	Type of joint	Seals
	Junction Box and Stator Housing Drawing # JENNY J378X Flameproof Ass'y Detail 1	Spigot	O-ring type seal fitted into a groove on the oil box (NDE shield).
	Stator Housing & Oil Box Drawing# JENNY J378X Flameproof Ass'y Detail 2	Spigot	O-ring type seal fitted into a groove on the oil box (DE shield).
10 (S)	DE bearing cover & Oil Box Drawing # JENNY J378X Flameproof Ass'y Detail 3	Spigot	O-ring type seal fitted into a groove on the flameproof cover.
SI MUSS	Bearing Housing & Bearing Cover Drawing # JENNY J378X Flameproof Ass'y Detail 4	Spigot	N/A
	Bearing Cover & Shaft Drawing # JENNY J378X Flameproof Ass'y Detail 5	Flange	N/A
(O) M : KS	Connection Box Cover & Cable gland Drawing # JENNY J378X Flameproof Ass'y Detail 8	Cable Gland	Flame path was sealed Polyurethane Gland plug
100	Connection Box & Junction Box Cover Drawing # JENNY J378X Flameproof Ass'y Detail 9	Cemented	N/A

Fasteners

The following fasteners were used in the assembly of the motor:

Location	Qty	Size & Length	Pitch	Class
Junction Box and Stator Housing	6	HTS Stud/ Nut M12x 85	1.5	ss304-A-70
Stator Housing & Oil Box	12	HTS Stud/ Nut M12x 65	1.5	ss304-A-70
DE bearing cover & Oil Box	6	HTS Capscrews M12 x 30	1.5	ss304-A-70
Connection Box Cover & Cable gland	8	HTS Capscrews M8 x 30	1.25	ss304-A-70
Bearing Housing & Bearing Cover	6	HTS Capscrews M8 x 30	1.25	ss304-A-70
Connection Box Cover & Cable gland	8	HTS Capscrews M8 x 30	1.25	ss304-A-70

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

- Some flamepath dimensions are different than the relevant values given in Table 1 of SANS 60079-
- 1. For repair work the Original Equipment Manufacturer must be consulted for information regarding the flamepath lengths. (Refer to Operation Manual AP/PM550/0616)
- The pump shall only operate when submerged in a fluid product as per the manufacture Operations Manual and must be monitored.

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.

	DOCUMENT No: XPL010	5	RELEASE DATE: 31/07/2015			REV:5	
VIII.	COMPANDE CONTRACTOR	-	DOTE OF A DAY	TOTAL OIL	a most	TOTAL OIL DE	

ANNEX TO CERTIFICATE NO M-XPL/17.1628

PAGE 3 OF 3

4. CONDITIONS OF CERTIFICATION

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

MARKING 5.

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

: Amandla Pump (Pty) Ltd Manufacturer : Amandla Pump (Pty) Ltd Equipment : Dewatering Submersible Pump

Model/Type : Jenny J37HX/J37MX

Serial No.

Ex Rating : Ex d I Mb

IA Certificate No : M-XPL/17.1628 X

Responsible Testing Officer:

Reviewed by:

D Maree

Senior Testing Officer

K Malibe **Testing Officer**

EXPLOLABS EXPLOSION PREVENTION SERVICES

This report/certificate shall not be reproduced except in full without the written approval of the company Explolabs (Pty) Ltd shall not be liable for any losses or damages sustained on account of any failure or omission to properly perform our duties in terms of any contract undertaken by us. This disclaimer is immutable and automatically incorporated in any contract undertaken by us; notwithstanding anything to the contrary, save for the express written waiver of our managing director. By marking the equipment in accordance with the documentation/standard, the manufacturer attests on his own responsibility that the equipment has been constructed in accordance with the applicable requirements of the relevant standards and that the routine verifications and tests have been successfully completed and that the product complies with the documentation and standard(s). The contents of electronic reports/certificates cannot be guaranteed. Original certification documents will be kept on file at Explolabs (Pty) Ltd

DOCUMENT No: XPL0105

RELEASE DATE: 31/07/2015

EPIOLAIS EPIOLAIS EPIOLAIS EPIOLAIS EPIOLAIS