OLARS		7 OVERNMENT APPROVED TEST	7 Spanner Tel: +2 Fax: +2 E-mail: <u>admin-mgr@</u> LABORATORY	
P	I TERMS OF ARP 0	108: "REGULATORY REQUIREMENTS FOR E	XPLOSION PROTECTED APPAF	RATUS"
APPIOLARS			Date Issued: *Expiry date:	26 Jul 2017 26 Jul 2027 Page 1 of 3 Issue: 0
	e Examination			
Equipment Model / Ty Applicant:	:	M-XPL/16.0844 X Squirrel Cage Induction Motor VARKIE S55X Amandla Pumps (Pty) Ltd 10 Venda Road, Sebenza, Edenva	1600	Annonak Annonak
Manufactu Serial No:	rer:	Amandla Pumps (Pty) Ltd All serial numbers of equipment product certification mark.		or acceptable
Protected"		in Explolabs File Number XPL/176 aving been tested, examined and ir an Standards:		
IEC 60079- SANS 6007 IEC 60079-	'9-0: 2012 Ed 5 0: 2011 Ed 6 '9-1: 2015 Ed 5 1: 2014 Ed 7 ion provided:	Explosive atmospheres Part 0: Equ Explosive atmospheres Part 1: enclosures "d"		
Protection afforded	Equipment Protection Level (EPL) Group	Performance of protection	Conditions of operation	T class or Max Surface Temp (°C)
High	Mb Group I	Suitable for normal operation and severe operating conditions	Equipment de-energized when explosive atmosphere present	Temp (°C) 150 ℃
This certification that the apparatu i) SANS ii) Any c	is is used as relevant in S 10086 and IEC/SANS conditions mentioned in relevant requirements	S 61241-14 requirements as applicable; the above report; and codes of practice enforced in terms of the Mine H	ealth and Safety Act or Occupational	d Safety Act, provided
	FLOLARS (BPLOLAR	ons enforced by the Chief Inspector of Mines or the Press all previous version of the certificate. mported between the "Issued" and "Expire" dates. lity Assurance Notification) Certificate for your equipmer equipment) and a new certificate is not submitted the ass submit the updated and valid QAN certificate(s) to be any sub any sub any submit the updated any submit the updated	ation System (SANAS) is a member of (ILAC) Mutual Recognition Arrangen ecognition of technical test and calibra ide. For more information on the Arra 0105 RELEASE DATE: 31/07/20 NES CELLOURS CELOURS	the International nent (MRA). This tion data by the ngement please 15 REV : 5 FLOLMS CEPTOLMS

ANNEX TO CERTIFICATE NO M-XPL/16.0844 x

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DESCRIPTION OF EQUIPMENT

The type VARKIE S55X squirrel cage induction motors are manufactured from Grade 260 Grey Iron (Cast iron) and comprise of a stator casing, DE endshield, NDE endshield, and connection box. The motor had a general length of ± 399mm and an internal free volume of approximately 2.0*l*. The motor has a connection box which is fabricated to the motor casing. The connection box made provision for one cable gland which formed part of the connection box housing. The motor stator casing and connection box was separated by means of epoxy resin. The connection box had an internal free volume of approximately 0.5*l*.

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The motor incorporated the following flameproof joints:

Location of joint	Type of joint	Seals
Motor casing & Oil Box (DE endshield) Drawing # VARKIE S55X Flameproof assy Detail C	Spigot	Nitrile O-ring type seal fitted into a groove on the oil box (DE End-shield).
Oil box (DE endshield) & Inner Bearing cover Drawing # VARKIE S55X Flameproof assy Detail E	Flange joint	N/A
DE Inner bearing cover & DE shaft Drawing # VARKIE S55X Flameproof assy Detail E	Cylindrical	N/A
Motor Casing & NDE Endshield Drawing # VARKIE S55X Flameproof assy Detail C	Spigot	Nitrile O-ring type seal fitted into a groove on the flameproof cover.
Connection Box & Motor Casing Drawing # VARKIE S55X Flameproof assy Detail F	Flange	FKM O-ring type seal fitted into a groove on the cover.
Connection Box & Packing gland assembly Drawing # VARKIE S55X Flameproof assy Detail G	Cable Gland	Polycast 1001/1022/0457 type packing gland seal fitted.
Connection Box & Lead through Seal Drawing # VARKIE S55X Flameproof assy Detail F	Cemented	N/A

Fasteners

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

Location	Qty	Size & Length	Pitch	Class
Motor Casing & oil box (DE Endshield)	8	HTS Capscrews M10 x 30	1.5	SS304
Oil box (DE Endshield) & Inner Bearing Cover	4	HTS Capscrews M8 x 25	1.25	SS304
Motor Casing & NDE Endshield	8	HTS Capscrews M10 x 30	1.5	SS304
Connection Box & Motor Casing	6	HTS Capscrews M10x25	1.25	SS304
Connection Box & Cable Gland	4	HTS Capscrews M8 x 25	1.25	SS304
Gland Clamp	2	HTS Capscrews M8x25	1.25	SS304

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)

DOCUMENT No: XPL0105

RELEASE DATE:

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The product temperature displaced by the pump may not exceed a temperature of 55°C.

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3 .			supply installation instructions with se 30.	each unit offered for
4.		CERTIFICATION	by a QAN (Quality Assurance No	otification). Product N
-	Scheme or batch			,,
5.			ve to be clearly and permanently ma	arked on all units:
-	Supplier Manufacturer	: Amandla Pumps (P : Amandla Pumps (P	ty) Ltd	
STATION AND	Equipment Model/Type	: Squirrel Cage Induc : VARKIE S55X	tion Motor	
P	Serial No. Ex Rating	: : Ex db I Mb		
County in the second se		: M-XPL/16.0844 X		
	Responsible Te	esting Officer:	Reviewed by:	
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