Megaton Systems (Pty) Ltd T/A
MTEx Laboratories

Unit 1 Wierda Place
17 Hilda Avenue
Centurion
0157

VAT/BTW No : 4830273027, Reg No: 2012/055110/07, T0749.

Ontploffingvoorkomingstegnologie
Explosion Prevention Technologies

ASSESSMENT AND TEST REPORT

Report Number: MTEx 1082/20.0263

POWER PROCESS SYSTEMS
P.O. BOX 4172
SOUTHGATE
2082

Date: 21 August 2020
Client Reference: COD
Revision: 0

1. Standard (s) used

Testing was conducted in accordance with the following standards:

NRS 032: 2012	Service distribution boxes- Pole mounted types for overhead single –phase AC service connections at 230V.
SANS 60695-11-10: 2004 **IEC 60695-11-10:2003**	Fire Hazard Testing Test Flames-50W horizontal and vertical flame test methods

2. APPARATUS PROPERTIES

Manufacturer : Power Process Systems
Type of product : Pole Mount Enclosure Polyethylene

The enclosure was manufactured from grey Linear Low-Density Polyethylene (**LLDPE**) moulded non-metallic material. The door of the enclosure was fitted to the enclosure without any hinges, and slide into the top part of the enclosure to stay in the open position. The enclosure made provision to be locked by means of a hexagon head bolt protruding through the bottom part of the door.

The enclosure had approximate dimensions of 470mm x 370mm x 200mm.
Test samples as per below procedure.

3. Test conducted

Test Method A- Horizontal burning test as per Clause 8 of the standard was followed.

Sample Conditioning as per Clause 8.2 of the standard was followed including:

Reviewed by + signature (ExTL):	J. Venter	
Approved by + signature (ExCB): (MTEx Laboratories Technical Signatory)	H. de Wet	

Tel : +27 12 030 1034 (Offices)
E- mail: info@mtexlab.co.za
Website: www.mtexlab.co.za

mineral resources
Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA
AIA Number: E1

employment & labour
Department:
Employment and Labour
REPUBLIC OF SOUTH AFRICA
AIA Number: CL016

Template Ref: MTExDOC009 Rev 1 (2017/11/27)
Print Date: 2020-08-21

Sets of three bar test specimens shall be conditioned for a minimum of 48 h at 23°C ± 2°C and 50% ± 5% relative humidity. Once removed from the conditioning chamber, the test specimens shall be tested within 1h.

All test specimens shall be tested in a laboratory atmosphere of 15°C to 35°C and 45% to 75% relative humidity.

Procedure as Clause 8.2 of the standard was followed.

Test results

The below calculation was used to calculate the linear burning rate:

$$V = \frac{60\ L}{t}$$

V is the linear burning rate, in millimetres per minute;
L is the damaged length, in millimetres, as recorded;
t is the time, in seconds, as recorded.

	L	t	V
Sample 1	75mm	200 Seconds	22.50mm/min
Sample 2	75mm	185 Seconds	24.30mm/min
Sample 3	75mm	221 Seconds	20.36mm/min
Sample 4	75mm	184 Seconds	24.45mm/min
Sample 5	75mm	198 Seconds	22.72mm/min
Sample 6	75mm	214 Seconds	21.02mm/min

The material was classified as **HB75**, the linear burning rate did not exceed 75mm/ min when it passed the 100mm mark.

Test conditions
Temperature : 17.8°C
Humidity : 43.95% RH

MTEx Laboratories

Tel : +27 12 030 1034 (MTEx Offices)
Fax mail: 086 416 6760
E- mail: info@mtexlab.co.za
Website: www.mtexlab.co.za