



SGS Australia Pty Ltd



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TEST REPORT

NATA Accreditation No. 3637 Electrical Testing

REPORT NUMBER: S12051 **DATED:** 17/04/2012

TESTS ON: Switch or Socket Wall Box

CAT NO: 3650

SUBMITTED BY: LPJ Innovations
165 Waddell Road
Smytes Creek, Victoria 3351
Australia

NATURE OF TESTS: Electrical Safety Requirement Testing to
AS/NZS 3133:2008(+A2)
Approval and Test Specification
Air Break Switches

DETAILS OF TESTS: Part Tests at the Client's request, refer remarks
Variations, exclusions or additions to Standard as detailed herein

TESTS COMPLETED: 10/05/2012

CONCLUSION: Complied

This report consists of 9 pages

This Test Report is issued subject to the conditions stated in the General conditions relating to acceptance of testing. The results contained herein apply to the particular sample/s tested and to the specific tests carried out, as detailed in this Test Report. The issuing of this Test Report does not indicate any measure of Approval, Certification, Supervision, Control or Surveillance by SGS of any product. No extract, abridgement or abstraction from a Test Report may be published or used to advertise a product without the written consent of the Manager, SGS Testing, who reserves the absolute right to agree or reject all or any of the details of any items of publicity for which consent may be sought. This document is issued in accordance with NATA's accreditation requirements.

Checked by

Date: 22/05/2012

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DESCRIPTION:

Thermoplastic enclosure suitable for mounting of fixed wired switches/sockets
Conduit entry holes at either side

MARKINGS:

PURLMATE 3650
Pat. Pend.
AU2011901746
AU2011905455
Other Designs and Pat. Pending

REMARKS:

Testing below conduct at the client's request
Partial testing to AS/NZS 3133, Test 8 & 9
Partial testing to AS/NZS 3100, Clause 4.7, 4.10, 6, 7.1, 7.2 & 7.9
Full testing to AS/NZS 3121, Class 60 moulding

**AIR-BREAK SWITCHES
AS/NZS 3133:2008(+A2)**

| <u>CLAUSE</u> | | <u>RESULT</u> |
|---------------|--|---------------|
| 1 | SCOPE AND REFERENCE DOCUMENTS | Noted |
| 2 | DEFINITIONS | Noted |
| 3 | COMPLIANCE WITH STANDARDS | |
| 3.1 | General requirements of AS/NZS 3100 | Complied |
| | Clause 4.7, 4.10, 6, 7.1, 7.2 & 7.9 | Pass |
| 3.2 | Specific requirements of this standard | Complied |
| | Test 8 & 9 | Pass |
| 3.3 | Requirements of other Standards | Complied |
| | AS/NZS 3121 | Pass |
| 13 | TESTS | |
| 13.1 | General | |
| | Test report as per table 1 | |

TEST REPORT Tests conducted as per Table 1

TESTS APPLIED AND ORDER OF APPLICATION

| <u>TEST NO.</u> | | <u>RESULT</u> |
|-----------------|---|---------------|
| 8 | Determination of ignitability and combustion propagation | Complied |
| | AS/NZS 3100 Annex A with glow-wire test temperature of T750 | |
| 9 | Resistance to heat test | Complied |
| | AS/NZS 3100 Annex B resistance to heat test | |
| | Allowed: <2 mm | |
| | Enclosure, Temp °C 75, Indentation 1.0mm | Pass |

**GENERAL REQUIREMENTS FOR ELECTRICAL EQUIPMENT
AS/NZS 3100 -2009(+A1)**

CLAUSE **RESULT**

4 PROTECTION AGAINST MECHANICAL AND ELECTRICAL FAILURE

4.7 STRENGTH OF SCREW THREADS AND FIXINGS Complied

| SCREW | Diameter (mm) | Req'd ops | Torque Nm | P/F |
|-------------------------------|---------------|-----------|-----------|-----|
| Socket/Switch mounting screws | 3.3 | 5 | 0.8 | P |

4.10 MECHANICAL STRENGTH Complied

Impact hammer test: 3 blows @ 0.5Nm, No damage

6 RESISTANCE TO HEAT, FIRE AND TRACKING

6.1 GENERAL Noted

6.2 RESISTANCE TO HEAT Complied

See results in AS/NZS 3133

6.3 RESISTANCE TO FIRE Complied

Refer to attached glow-wire and needle flame reports

6.4 RESISTANCE TO TRACKING Complied

Normal Duty

7 MARKING

7.1 INFORMATION TO BE MARKED Complied

(a) PURLMATE
(d) 3650

7.2 METHOD OF MARKING Complied

Location of markings front of enclosure

7.9 LEGIBILITY OF MARKING Complied

Rub test: 15sec water / 15sec petroleum spirit Pass

GLOW WIRE TEST REPORT

Reporting to SA Specification No. AS/NZS 60695

TEST REMARKS: *These test results alone do not assess fire hazard of the material or product made from this material under actual fire conditions. Consequently, the results of this test alone shall not be quoted in support of claims with respect to the fire hazard of (material or product) under actual fire conditions.*

| Observation | Specimen | 1 Enclosure |
|---|----------|-------------|
| Material (TS/TP - Other) | | TP |
| Colour | | White |
| How Tested (CE, SA, SC) | | SA |
| Glow-wire Tip Temperature (°C) | | 750 |
| Time till ignition of specimen (NI/s) | | 0 |
| Time till any ignition of any surrounding material (tissue paper etc.) (NI/s) | | NI |
| Time from ignition of specimen or surrounding material till flaming/glowing ceased (NI/s) | | 30 |
| Maximum height of flames above Glow-wire tip (None/cm) | | 5 |
| Particle board scorching (Yes/No) | | No |
| Specimen distortion (Yes/No) | | Yes |
| Penetration of specimen wall (mm) | | 7 |
| Results: See Note 1 | | Pass |

Legend: CE-Complete Equip., SA-Sub Assembly, SC-Separate Component, NI-No Ignition, ME-Manually Extinguished, TP-Thermoplastic, TS-Thermosetting.

Note 1: For external mouldings. Fail result would mean overall non-compliance whereas internal mouldings would require mouldings within 50 mm and those contacted by the flame to be Needle-Flame tested.

NEEDLE-FLAME TEST REPORT

Reporting to SA Specification No. AS/NZS 60695

TEST REMARKS: *These test results alone do not assess fire hazard of the material or product made from this material under actual fire conditions. Consequently, the results of this test alone shall not be quoted in support of claims with respect to the fire hazard of (material or product) under actual fire conditions.*

| Observation | Specimen | 1 Enclosure |
|--|----------|-------------|
| Material (TS/TP - Other) | | TP |
| Colour | | White |
| How Tested (CE, SA, SC) | | SA |
| Application time of Needle Flame (s) | | 30 |
| Time of flaming or glowing, if any, of the test specimen (s) | | 0 |
| Time of flaming or glowing, if any, of the surrounding parts and particleboard (s) | | 0 |
| Any scorching of tissue paper or particleboard (Yes/No) | | No |
| Results: | | Pass |

Legend: CE-Complete Equip., SA-Sub Assembly, SC-Separate Component, NI-No Ignition, ME-Manually Extinguished, TP-Thermoplastic, TS-Thermosetting.

PHOTOGRAPHY:





