

**Simtars**  
**Engineering, Testing and Certification Centre**

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**Test Report**

**To**

**AS 60529-2004**  
**(IEC 60529:2001)**

**Degrees of protection provided by enclosures**  
**(IP Code)**

**Report No:** NE16/0029

**Date(s) Tested:** Refer to Section 2.0

**Job No.:** 16/0109

**Applicant/Customer Name:** B & R Enclosures Pty Ltd  
51 Stradbroke Street  
HEATHWOOD QLD 4110

**Equipment Details:** Special Heavy Duty Enclosure Range

**Degree of Protection:** IP66

**Approved Signatory:**   
Ewan Paton

**Date:** 1 November 2016



Accredited for compliance with ISO/IEC 17025.  
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NATA Accredited Laboratory Number: 2681.

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Test Report No: NE16/0029

## 1.0 Description of Apparatus

The B & R Enclosures, Special Heavy Duty Enclosure Range is constructed in 2 mm or 2.5 mm Stainless Steel with powder-coat or N4 finish. The enclosures are fully welded throughout the range.

The enclosure door has a 90 ° inward return around the perimeter, return folds are fully welded in each corner. The door seal is a formed-in-place polyurethane foam seal approximately 18 mm wide x 9 mm thick adhered to the inner perimeter of the door providing sealing against the door via an approximately 10 mm wide lip formed around the body aperture.

The Special Heavy Duty Enclosure Range doors are mounted to the vertical edge of the enclosure via bolted stainless steel hinges mounted at a maximum pitch of 425 mm.

Opposite the door hinges, (depending on door height) a number of quarter turn locks are spaced a maximum pitch of 425 mm. The quarter turn locks secure the door seal against a 10 mm lip around the body perimeter when the door is latched to the body in the closed position.

A Stainless Steel 316/ Brass/ Aluminium gland plate with maximum dimensions of 650 mm x 440 mm is secured to the floor via M6 P/H screws at a pitch of 110 mm around the gland-plate perimeter with S/S shake proof washers and part numbered "O" rings. A part numbered single-piece neoprene gasket seals the gland plate to the enclosure floor.

A 3 mm thick Stainless Steel plinth is fully welded to the floor.

The Special Heavy Duty Enclosure Range also has the option of a bolted plinth, secured and sealed to the bottom of the enclosure via part numbered M8 x 16 stainless steel set screws, stainless steel flat washers and M8 Nylon washers.

The B&R, Special Heavy Duty Enclosure Range has an Ex breather drain separately certified IP66 fitted in the floor.

## 2.0 Test Specification

The B & R Enclosures, Special Heavy Duty Enclosures Range were assessed and tested to AS 60529-2004 (IEC 60529:2001) for degree of protection IP66.

The following clauses of AS 60529-2004 were applied:

1, 2, 3, 4, 5, 6, 11, 12.1, 12.2, 12.3, 12.3.1, 13.1, 13.2, 13.3, 13.4 13.6.1, 13.6.2, 14.1, 14.2, 14.2.6, 14.3.

The first numeral test was conducted on 13<sup>th</sup> October 2016.

The second numeral test was conducted on 14<sup>th</sup> October 2016.

## 3.0 Summary of Test Results

The B & R Enclosures, Heavy Duty Enclosures Range comply with the relevant requirements of the standard listed in Section 2.0 of this report and achieved a degree of protection of IP66, category 1.



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## 4.0 Conditions

The B & R Enclosures, Heavy Duty Enclosures Range are to be mounted and maintained in accordance with the manufacturer's instructions.

All gaskets and seals are to be fitted and maintained in accordance with the manufacturer's specifications.

To maintain IP66 rating, cable glands must be at least IP66.

## 5.0 Drawings

The drawings listed below were assessed in the course of the preparation of this report and detail the degree of protection characteristics of the B & R Enclosures, Special Heavy Duty Enclosure Range in accordance with the standard listed in Section 2.0.

Drawing No	Drawing Title	Rev	Date
LBS12392 Sheet 1 of 7	HEAVY DUTY ENCL. C/W MULTI. LOCKS 3200W	1-A	20/10/16
LBS12392 Sheet 2 of 7	HEAVY DUTY ENCL. C/W MULTI. LOCKS 2200W	1-A	20/10/16
LBS12392 Sheet 3 of 7	HEAVY DUTY ENCL. C/W MULTI. LOCKS 1200W	1-A	20/10/16
LBS12392 Sheet 4 of 7	HEAVY DUTY ENCL. C/W MULTI. LOCKS 1000W	1-A	20/10/16
LBS12392 Sheet 5 of 7	DOOR ASSEMBLY & GLAND PLATE ASSY DETAILS	1-A	20/10/16
LBS12392 Sheet 6 of 7	BOLTED REAR PANEL ASSEMBLY & FIXING DETAILS	1-A	20/10/16
LBS12392 Sheet 7 of 7	HEAVY DUTY ENCL. FINAL ASSEMBLY DETAIL	1-A	20/10/16



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Drawing No	Drawing Title	Rev	Date
LBS11998 Sheet 1 of 3	FINAL ASSEMBLY ENCL. 1882x1500X636 XB-453244/3	5-B	15/09/16
LBS11998 Sheet 2 of 3	FINAL ASSEMBLY ENCL. 1882x1500X636 XB-453244/3	5-B	15/09/16
LBS11998 Sheet 3 of 3	FINAL ASSEMBLY ENCL. 1882x1500X636 XB-453244/3	5-B	15/09/16
LBS11999 Sheet 1 of 3	FINAL ASSEMBLY ENCL. 1882x1830X636 XB-453244/2	7-C	15/09/16
LBS11999 Sheet 2 of 3	FINAL ASSEMBLY ENCL. 1882x1830X636 XB-453244/2	7-C	15/09/16
LBS11999 Sheet 3 of 3	FINAL ASSEMBLY ENCL. 1882x1830X636 XB-453244/2	7-C	15/09/16
LBS12000 Sheet 1 of 3	FINAL ASSEMBLY ENCL. 1882x2760X636 XB-453244/1	5-B	14/09/16
LBS12000 Sheet 2 of 3	FINAL ASSEMBLY ENCL. 1882x2760X636 XB-453244/1	5-B	14/09/16
LBS12000 Sheet 3 of 3	FINAL ASSEMBLY ENCL. 1882x2760X636 XB-453244/1	5-B	14/09/16



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