

Gainta Industries Ltd.
Mr. Jacky Sung

1F., No. 30, Lane 54, Chung Cheng Road,
Hsin Tien City, Taipei Hsien,
Taiwan

Date: 10.08.2010
Our Ref: BLL-113135382
Your ref: 8293900888
(Taichung)

Issue of IP67 Test Report

Product : Sealed Enclosure
Type : HQ016S, HQ021S, HQ023S,
HQ025S, HQ027S, HQ029S,
HQ031S, HQ033S, HQ035S
Report : 11021669 001

Dear Mr. Sung,

Enclosed, please find your copy of the Test Report for the above mentioned technical equipment.

We appreciate your kind support and would like to offer our assistance and continuous services in the future.

Yours sincerely

TÜV RHEINLAND TAIWAN LTD.

Taichung Branch


Dipl.-Ing. Michael Kröger
Branch Manager


Julia Lai
Project Manager
EEP I / Luminaries

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Prüfbericht - Nr.: 11021669 001		Seite 1 von 1	
<i>Test Report No.:</i>		<i>Page 1 of 1</i>	
Auftraggeber: <i>Client:</i>	Gainta Industries Ltd. 1F., No. 30, Lane 54, Chung Cheng Road, Hsin Tien City, Taipei Hsien, Taiwan R.O.C.		
Gegenstand der Prüfung: <i>Test item:</i>	Sealed enclosure		
Bezeichnung: <i>Identification:</i>	HQ016S, HQ021S, HQ023S, HQ025S, HQ027S, HQ029S, HQ031S, HQ033S, HQ035S	Serien-Nr.: <i>Serial No.:</i>	Engineering sample
Wareneingangs-Nr.: <i>Receipt No.:</i>	TCH27931	Eingangsdatum: <i>Date of receipt:</i>	23.07.2010
Prüfört: <i>Testing location:</i>	TÜV Rheinland Taiwan Ltd., Taichung Laboratory No. 9, Ln. 36, Sec. 3, Minsheng Rd., Daya Township Taichung County, 428 Taichung, Taiwan		
Prüfgrundlage: <i>Test specification:</i>	IEC 60529: 2001		
Prüfergebnis: <i>Test Result:</i>	Der Prüfgegenstand entspricht oben genannter Prüfgrundlage(n). <i>The test item passed the test specification(s).</i>		
Prüflaboratorium: <i>Testing Laboratory:</i>	TÜV Rheinland Taiwan Ltd., Taichung Laboratory No. 9, Ln. 36, Sec. 3, Minsheng Rd., Daya Township Taichung County, 428 Taichung, Taiwan		
geprüft/ tested by:	kontrolliert/ reviewed by:		
 Julia Lai / Project Manager 09 Aug, 2010 (TÜV Rheinland Taiwan Ltd.) Datum Name/Stellung Unterschrift Date Name/Position Signature		 Jordan Wu / Assistant Manager 09. Aug, 2010 Datum Name/Stellung Unterschrift Date Name/Position Signature	
Sonstiges/ Other Aspects:			
This test report consists of : 2 pages to IP67 test according to IEC 60529			
Abkürzungen: P(ass) = entspricht Prüfgrundlage F(ail) = entspricht nicht Prüfgrundlage N/A = nicht anwendbar N/T = nicht getestet		Abbreviations: P(ass) = passed F(ail) = failed N/A = not applicable N/T = not tested	
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.</i>			

TEST REPORT IEC 60529 Degrees of protection provided by enclosures (Partially for IP67 test)	
Report reference No.	11021669 001
Compiled by (+ signature)	see cover sheet
Approved by (+ signature)	see cover sheet
Date of issue	see cover sheet
Testing laboratory	TÜV Rheinland Taiwan Ltd., Taichung Laboratory.
Address	No. 9, Ln. 36, Sec. 3, Minsheng Rd., Daya Township Taichung County, 428 Taichung, Taiwan
Testing location	as above
Applicant.....	Gainta Industries Ltd.
Address	1F., No. 30 , Lane 54 , Chung Cheng Road , Hsin Tien City , Taipei Hsien , Taiwan R.O.C.
Standard.....	IEC 60529: 2001
Test Report Form No.	T529B
TRF originator.	TÜV Rheinland Taiwan Ltd., Taichung Laboratory.
Master TRF	02.2002
Copyright blank test report.....	TÜV Rheinland Taiwan Ltd., Taichung Laboratory.
Test procedure	TÜV Rheinland-Partial Test Report
Procedure deviation	N.A.
Non-standard test method	N.A.
Type of test object.....	Sealed enclosure
Model/type reference	HQ016S, HQ021S, HQ023S, HQ025S, HQ027S, HQ029S, HQ031S, HQ033S, HQ035S
Possible test case verdicts:	
- test case does not apply to the test object.....: N(.A.)	
- test object does meet the requirement.....: P(ass)	
- test object does not meet the requirement	
: F(ail)	

Clause numbers between brackets refer to clauses in IEC 60529.

"(see remark #)" refers to a remark appended to the report.

"(see Annex #)" refers to an annex appended to the report.

Throughout this report a point is used as the decimal separator.

The test results presented in this report relate only to the object tested.

This report shall not be reproduced except in full without the written approval of the testing laboratory.

Difference among models HQ016S, HQ021S, HQ023S, HQ025S, HQ027S, HQ029S, HQ031S, HQ033S, HQ035S is that dimensions are different as follow.

No.	part no.	Dimension (mm)
1	HQ016S	200X150X28
2	HQ021S	152X112X30
3	HQ023S	152X112X55
4	HQ025S	162X162X55
5	HQ027S	162X162X80
6	HQ029S	202X142X55
7	HQ031S	202X142X80
8	HQ033S	262X182X55
9	HQ035S	262X182X90

HQ035S and HQ021S are the representative models for IP67 test.

The IP67 tests are based on IEC 60529 only, no any other product standard is referred.

Clause	Requirement-Test	Result – Remark	Verdict
4.	Designations:		P
4.1	Arrangement of the IP Code: IP67 degree defined by manufacturer		P
13.4	Test for first characteristic numeral 6 in dust chamber:		P
	Test condition: Dust chamber contain 2kg of talcum powder for per cubic metre of its volume. - Test duration : 8 hr	The enclosure is in category 1. After test, no deposit of talcum powder inside enclosure.	P
14.2.7	Test for second characteristic numeral 7: temporary immersion between 0.15m and 1m		P
	Test condition: sample completely immersed in water in its normal service position Dept of immersion: 1m (between lowest point of enclosure and surface of the water) Duration of test: 30 minutes	No water entered the enclosure.	P

Measuring and Test Equipment List for:

Customer:	Gainta Industries Ltd. 1F, No. 30
Description:	Sealed Enclosure, HQ016S, HQ021S, HQ023S, HQ025S, HQ027S,

Job Number:	0113135382	Report#:	11021669 001
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ID#	Type	Model	Calib. until
04-2005-0453	Dust-proof Tester	DU-80	24/05/2012
04-2005-0468	Water proof tester	N/A	28/03/2011
04-95-0105	TEMPERATURE HUMIDITY METER	CR-21	12/04/2011
1115	Stopwatch	108	12/03/2011



Product: Sealed Enclosure

Type Designation: HQ-016S, HQ-021S, HQ-023S, HQ-025S, HQ-027S, HQ-029S, HQ-031S, HQ-033S, HQ-035S



Picture 1 HQ-016S



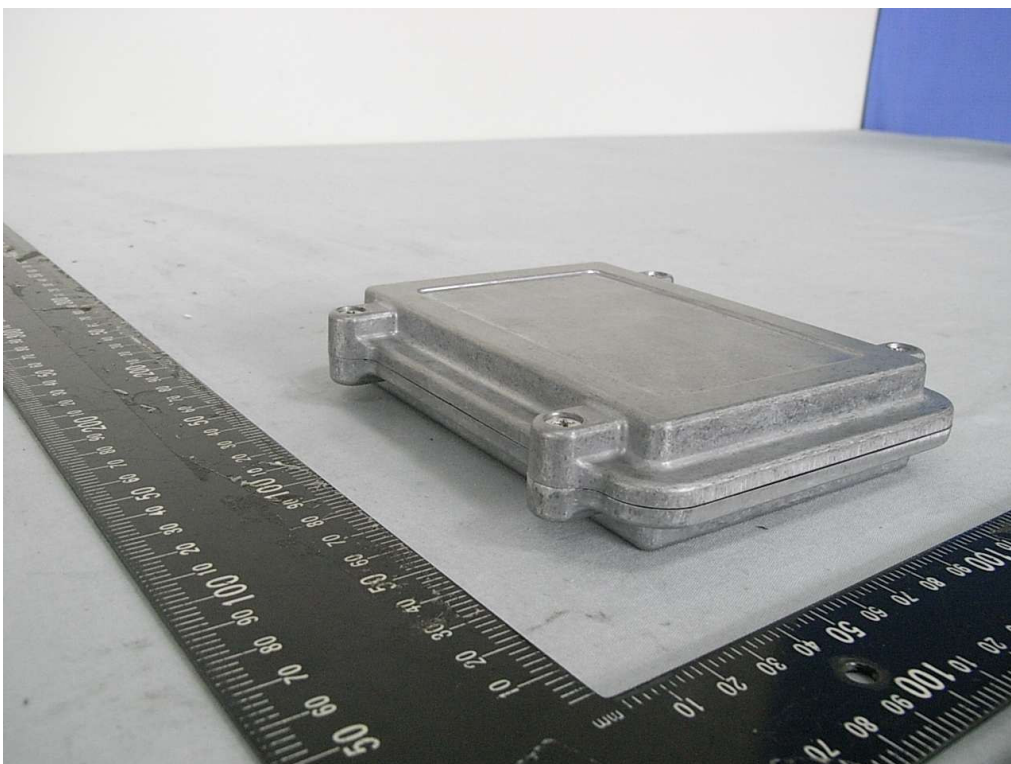
Picture 2 HQ-016S

Product: Sealed Enclosure

Type Designation: HQ-016S, HQ-021S, HQ-023S, HQ-025S, HQ-027S, HQ-029S, HQ-031S, HQ-033S, HQ-035S



Picture 3 HQ-016S



Picture 4 HQ-016S

Product: Sealed Enclosure

Type Designation: HQ-016S, HQ-021S, HQ-023S, HQ-025S, HQ-027S, HQ-029S, HQ-031S, HQ-033S, HQ-035S



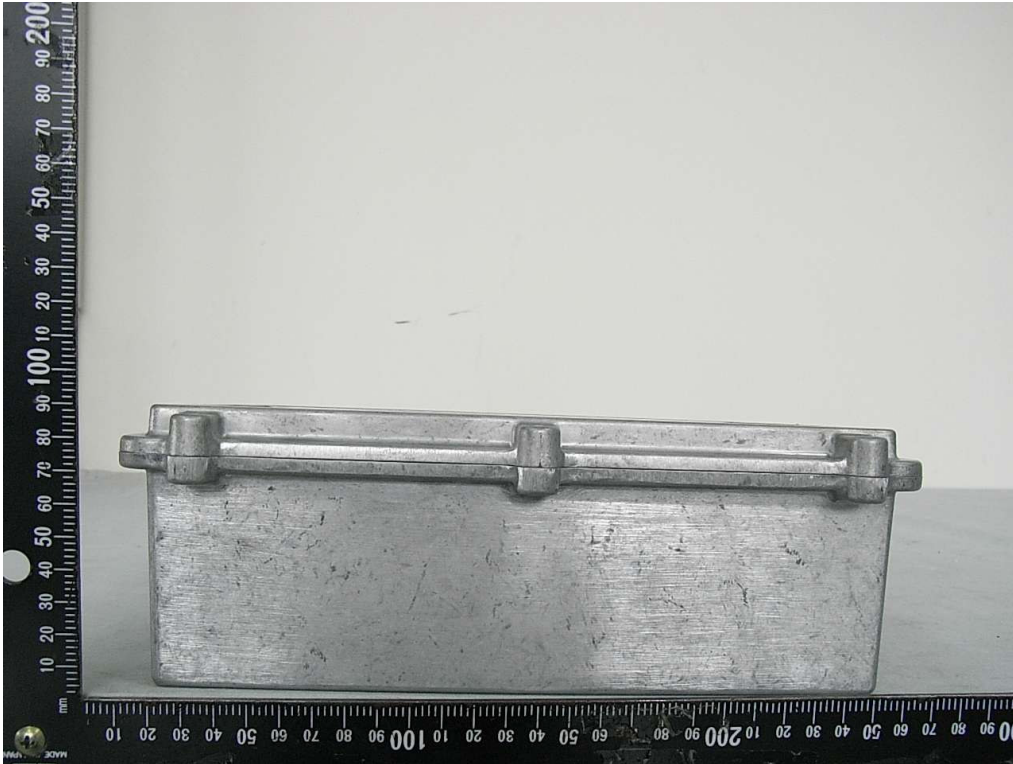
Picture 5 HQ-016S



Picture 6 HQ-035S

Product: Sealed Enclosure

Type Designation: HQ-016S, HQ-021S, HQ-023S, HQ-025S, HQ-027S, HQ-029S, HQ-031S, HQ-033S, HQ-035S



Picture 7 HQ-035S



Picture 8 HQ-035S

Product: Sealed Enclosure

Type Designation: HQ-016S, HQ-021S, HQ-023S, HQ-025S, HQ-027S, HQ-029S, HQ-031S, HQ-033S, HQ-035S



Picture 9 HQ-035S



Picture 10 HQ-035S

Product: Sealed Enclosure

Type Designation: HQ-016S, HQ-021S, HQ-023S, HQ-025S, HQ-027S, HQ-029S, HQ-031S,
HQ-033S, HQ-035S

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