

# LVD Test Report

**Application No.** : TB-1K165169

**Applicant** : Shenzhen Keyu Co., Ltd

**Equipment Under Test (EUT)**

**EUT Name** : Metal keyboard

**Model No.** : KY-PC-D

**Serial No.** : KY-PC-XX series(XX stands for 0-9 or A-Z)

**Brand Name** : KEYU


**Receipt Date** : 2019-04-03


**Test Date** : 2019-04-03

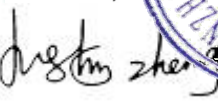
**Issue Date** : 2019-04-08


**Standards** : EN 62262 : 2002  
Degrees of Protection Provided by Enclosures for Electrical  
Equipment Against External Mechanical Impacts (ik code)  
**Complied**

**Conclusions** :

**Report by (Sarck Lew)** : 

**Checked by (Benny Xu)** : 

**Approved by (Justin Zhang)** : 



This test report is valid for above tested sample only and shall not be reproduced in part without written approval of the laboratory.



**TEST REPORT**  
**EN 62262 : 2002**  
**DEGREES OF PROTECTION PROVIDED BY ENCLOSURES FOR**  
**ELECTRICAL EQUIPMENT AGAINST EXTERNAL**  
**MECHANICAL IMPACTS (IK CODE)**

Testing laboratory-----:	Shenzhen Toby Technology Co., Ltd.
Address-----:	1A,F.,Bldg.6, Yusheng Industrial Zone,The National Road No.107 Xixiang Section 467,Xixiang,Bao'an Shenzhen, Guangdong,China
Testing location-----:	Shenzhen Toby Technology Co., Ltd.
Applicant-----:	Shenzhen Keyu Co., Ltd
Address-----:	2~3F/Bldg B, Hezhou south industrial zone, Hezhou community, Hangcheng street, BaoAn Dist. Shenzhen, China
Standard-----:	EN 62262: 2002
Test result-----:	Compliance with the requirements.
Procedure deviation-----:	N/A
Non-standard test method---	N/A
Trademark-----:	N/A
Type of test object-----:	Metal keyboard
Models,Type reference-----:	KY-PC-D
Rating-----:	Input: DC5V
Factory-----:	Shenzhen Keyu Co., Ltd
Address-----:	2~3F/Bldg B, Hezhou south industrial zone, Hezhou community, Hangcheng street, BaoAn Dist. Shenzhen, China

**Possible test case verdicts:**

Test case does not apply to the object-----: N  
Test object does meet the requirement -----: P  
Test object does not meet the requirement-----: F

**General product information:**

Unless otherwise specified , Temperature: 24 °C Relative Humidity: 56%

**General remarks:**

- 1.” (see remark #) ” refers to a remark appended to the report.
2. Throughout this report a point is used as the decimal separator.
3. The test results presented in this report relate only to the object tested.
4. All models are the same except model name and frame color.
5. This report shall not be reproduced except in full without the written approval of the Shenzhen TOBY.
6. If client has any objection to the testing results, please advise us within 15 working days after publish, otherwise claims will not be accepted.

## EN 62262 : 2002

CL.	Requirement of the test	Result--Remark	Verdict
<b>4</b>	<b>Designations</b>		---
	The degree of protection provided by an enclosure against		P
4.1	Arrangement of the code		P
	IK	07	P
	Codes letter ( International mechanical protection) Characteristic group numeral (00 to 10)		P
4.2	Characteristic group numerals of the IK code and their meanings		P
	Each characteristic group numeral represents a impact energy value as shown in table	See appended table 1	P
4.3	Application of the IK code		P
	The degree of protection applies to the complete enclosure.	All parts of the enclosure are same degree.	P
4.4	Marking		P
	- One part of an enclosure has a different degree of protection to that of another part of the same enclosure		N
	- the mounting position has an influence on the degree of protection.		P
<b>5</b>	<b>Enclosures under test</b>		P
5.1	Atmospheric conditions for tests		P
	Unless otherwise specified in the relevant product standard, the test shall be carried out under the standard atmospheric conditions for tests described in IEC 6068-1.		P
	- temperature rage:	25°C-30°C	P
	- air pressure	95kPa to 106kPa(950mbar to 1060mbar)	P

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CL.	Requirement of the test	Result--Remark	Verdict
	When the altitude at which the test is performed is higher than 2000m, the height of fall shall be adjusted where necessary to result in the specified impact energy		P
5.2	Enclosures under test		P
	Each enclosure under test shall be in a clean and new condition, complete with all its parts pace unless otherwise specified in the relevant product standard	Compliance with requirement	P
5.3	Specifications to be given in the relevant product standard		P
	The relevant product standard shall specify	See below	P
	- the definition of "enclosure" as it applies to the particular	Part providing protection of equipment against certain external influences an in any direction protection against contact	P
	- the test equipment (e.g. pendulum hammer, spring hammer or vertical hammer, see clause 7)	Vertical hammer	P
	- the number of samples to be tested;	2 PCS	P
	- the conditions for mounting, assembling and positioning the samples,	use of an artificial surface (ceiling, floor or wall )	P
	- the pre-conditioning, if any, which is to be used;		P
	- whether to e tested energized;	Energized	P
	- whether to be test with any moving parts in motion;	moving	P
	- the number of impacts and their points of application;	(See table 6.4)	P
	In the absence of such specifications in the relevant product standard, conditions of the standard shall apply.		P

## EN 62262 : 2002

CL.	Requirement of the test	Result--Remark	Verdict
<b>6</b>	<b>Test to verify the protection against mechanical impacts</b>		<b>P</b>
6.1	The test specified in the standard	Type test	P
6.2	In order to verify the protection against mechanical impacts, blows shall be applied to the enclosure to tested.	Test are described in clause 7.	P
6.3	During the test the enclosure is mounted on a rigid support.	According to the manufacturer's instructions for use	P
	A support is considered to be sufficiently rigid if its displacement is less than or equal to 0.1mm under the effect of an impact directly applied and whose energy corresponds to the degree of protection.		P
6.4	Impacts test	(See table 2)	P
	Each exposed face unless otherwise specified in the relevant product standard.	The number of impacts five	P
	The impacts shall are evenly distributed on the applied in the surroundings of the same point of the enclosure.	Evenly distributed	P
	The relevant product standard specify the points of application of impacts.		P
6.5	Test evaluation		P
	The relevant product standard shall specify the criteria upon which the acceptance or rejection of the enclosure is to be based, particularity		P
	- admissible damages,		P
	- verification criteria relative to the continuity of safety and reliability of the equipment		P
<b>7</b>	<b>Test apparatus</b>		<b>P</b>

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CL.	Requirement of the test	Result--Remark	Verdict
	<p>The test shall be done by using one of the test apparatus described in IEC 60068-2-75.</p> <p>The relevant product standard shall specify which types of test apparatus are appropriate</p>		P



EN 62262 : 2002			
CL.	Requirement of the test	Result--Remark	Verdict

**Table 1 – Relation between IK code and impact energy**

IK code	IK00	IK01	IK02	IK03	IK04	IK05	IK06	IK07	IK08	IK09	IK10
Impact energy, J	*	0,14	0,2	0,35	0,5	0,7	1	2	5	10	20
* Not protected according to this standard.											
NOTE 1 When higher impact energy is required, the value of 50 J is recommended.											
NOTE 2 A characteristic group numeral of two figures has been chosen to avoid confusion with some national standards which used a single numeral for a specific impact energy.											

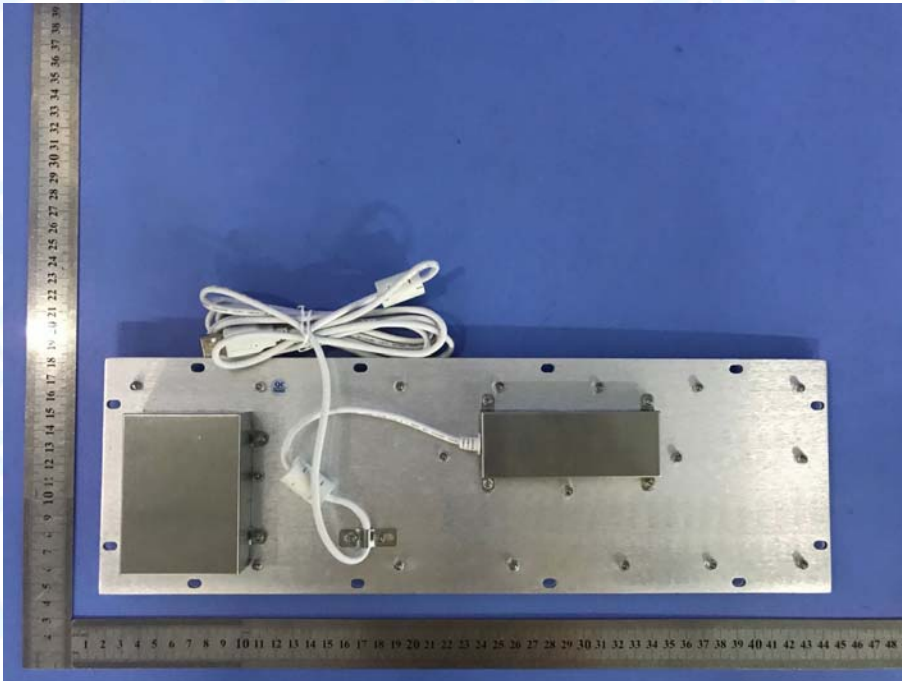
<b>Table 2</b>	<b>Relation between IK code and impact energy and test result</b>			<b>P</b>
IK code	IK07	IK07	IK07	IK07
Impact energy	2J	2J	2J	2J
Test location	Side	Bottom	Top	
Test result	No broken	No broken	No broken	
Note: The case have no broken after impact test				

### EUT Photos

Photo 1 View of EUT



Photo 2 View of EUT



END OF REPORT