

TEST REPORT

 CTK Co., Ltd. The Power Leader of Global Regulatory Certification	CTK Co., Ltd. (Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-shi Gyeonggi-do KOREA, REPUBLIC OF Tel: +82-31-339-9970 Fax: +82-31-624-9501	REPORT No.: CTK-2017-01714 Page (1) / (8) pages	
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1. Applicant

- Name : Hanwha Techwin Co., Ltd.
- Address : Hanwha Techwin R&D center, 6 Pangyo-ro 319Beon-gil,
Bundang-gu, Seongnam-si, Gyeonggi-do, 13488 KOREA
- Date of Receipt..... : 2017-08-03

2. Manufacturer

- Name : HANWHA TECHWIN (TIANJIN) CO.,LTD.
- Address..... : No.11 Weiliu Rd, Micro-Electronic Industrial
Park, TEDA, Tianjin, 300385, People's Republic of China

3. Use of Report : Quality control

4. Test sample / Model..... : CCTV CAMERA / HCV-6070R* (*N:NT/P:PAL)

5. Date(s) of test : 2017-08-30

6. Test Standard (Method) used .. : Requested Test Specification of Applicant

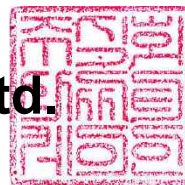
7. Testing Environment : Temperature : (25.0 ± 10.0) °C, Humidity : (50 ± 25) %R.H.
Air Pressure: (99.0 ± 2) kPa

8. Results : Reference test results

The results shown in this test report refer only to the sample(s) tested unless otherwise stated.
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Approval	Tested by: WonHyeon. Choi.  (Signature)	Technical Manager: KwangWon Lee.  (Signature)
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CTK Co., Ltd.

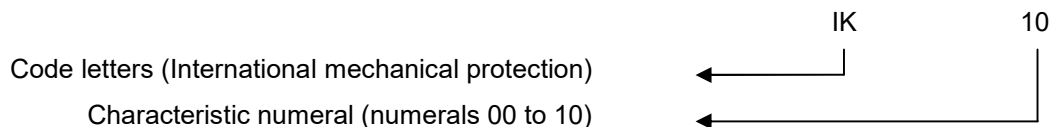


2017-09-14

1. Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)

1.1 Test standard: KS C IEC 62262: 2005

1.2 Arrangement of the IK code



1.3 Vertical Hammer

1.3.1 Test equipment

Equipment	Model	Manufacturer	Serial	Application
Vertical Hammer	5J	Kingpo	TX028-1	☒

1.3.2 Test condition

IK code	Impact Energy (J)	Equivalent mass (kg)	Drop height (mm ± 1%)	Application
00	Non-protected	-	-	☐
01	0.14	0.25	56	☐
02	0.20	0.25	80	☐
03	0.35	0.25	140	☐
04	0.50	0.25	200	☐
05	0.70	0.25	280	☐
06	1.00	0.25	400	☐
07	2.00	0.50	400	☐
08	5.00	1.70	300	☐
09	10.00	5.00	200	☐
10	20.00	5.00	400	☒

- Impact times: five times for each of the exposed surface. (Do not impact more than 3 times in the same spot)

1.3.3 Check Item

- Check the separation of the component.
- Check the visual damage of the product outside.

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1.3.5 Test Result

Characteristic numeral	Remark
IK 10	The enclosure is deformed. The product operates normally.

Model description

Basic Model	HCV-6070R* (*N:NT/P:PAL)
Series model	HCV-6080R* (*N:NT/P:PAL)
Model differences	Use of the same external shape and materials (case, finishing material, PCB, cable, etc.), differences in electronic parts inside the product.

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2. Attachment

2.1 Products



2.2 Test photos

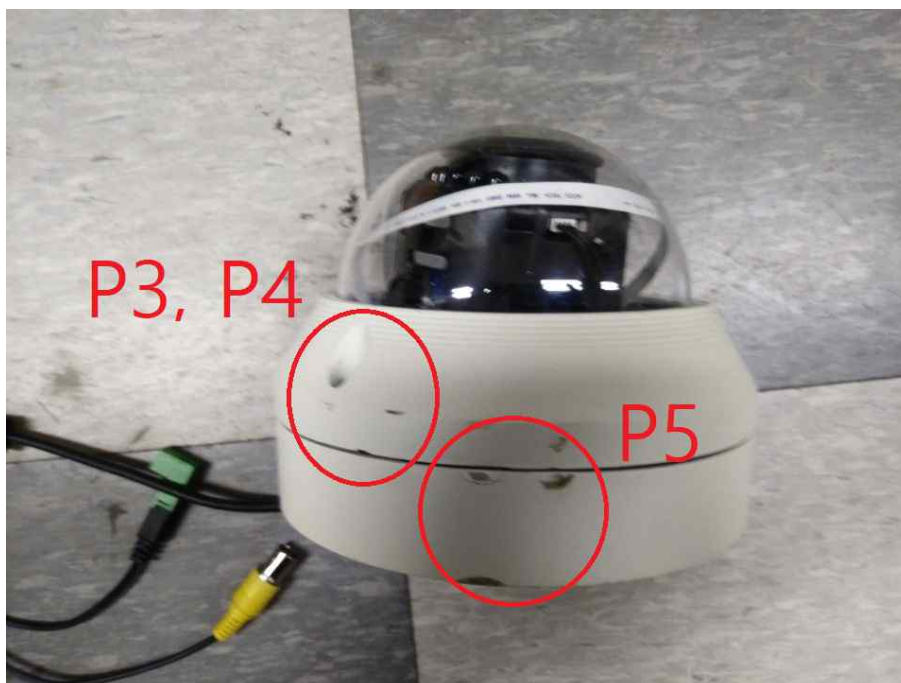


2.3 Photos after test

[P1, P2]



[P3, P4, P5]



2.4 Enclosure Dimensions or Impact point (Unit: mm)

