



시험 성적서

(주)케이씨티엘

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성적서번호:

KR18-HVP0014

페이지 (1)/(총 10)

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1. 신청자

- 기 관 명 : 유호전기공업(주)
- 주 소 : 경기도 양주시 광적면 화합로 217
- 의뢰일자 : 2018년 02월 22일

2. 시험성적서의 용도 : 품질인증

3. 제품명 / 모델명 : 부상 누설 전류 센서 / CTL-24-S28-10Z

4. 제조사 / 제조국 : U.R.D. International Inc. / 일본

5. 시험기간 : 2018년 02월 22일

6. 시험방법 : 제시 규격

7. 환경조건 : 온도 (22 ± 2) °C, 상대습도 (39 ± 2) % R.H

8. 시험결과 : 불임 시험성적서 참조

확 인	시 험 원	기 술 책 임 자
	성 명 : 강 대 응 (서 명)	성 명 : 문 수 길 (서 명)

2018년 02월 23일

(주)케이씨티엘 대표이사 (인)



본 성적서의 시험결과는 상기 신청자로 부터 제공된 시험품에만 적용되며, (주)케이씨티엘의 사전서면승인 없이는 본 성적서의 전부 혹은 일부를 복사하여 사용할 수 없음.

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KCTL**Report issuance history**

Date	Publication history	Page
February 23, 2018	Issuance of test report	-

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neck car

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※ Attached data

- doesn't exist

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1.0 Testing laboratory





1.1 General status

Institution name	KCTL Co., Ltd.
CEO	Lee Kang-seok
main cow	65 Sinwon-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do (ZIP code) 16677
phone number	031-285-0894
fax number	0505-299-8311
home page	www.kctl.co.kr

1.2 Location of test site

main cow	28 Mosan-gil, Jeongnam-myeon, Hwaseong-si, Gyeonggi-do (ZIP code) 18516
phone number	031-286-5881
fax number	031-8059-1154

1.3 Testing agency designation

Recognized organizations and recognized ports		Address number	mark
National Radio Research Institute-designated testing agency Electromagnetic interference (Radiated & Conduc) Electromagnetic immunity (Radiated Immunity Radio Communication Part) Electromagnetic wave absorption rate (SAR) Telecom	(2016. 08. 29)	R0040	
Korean Accreditation Organization (KOLAS) Electromagnetic interference (Radiated & Conducted emission) Electromagnetic immunity (Radiated Immunity) Automotive electronics (EMC) Military products (MIL-STD-461D/E/F/G) Electrical safety (Safety)	KS Q ISO/IEC 17025:2006	No. KT231	
FCC Parts 15 & 18 electromagnetic interference (Radiated & Conducted emissions)	ANSI 63.4:2014	KR0040	
European Conformity EMC	2014/30/EU	-	

2.0 Test criteria and result summary

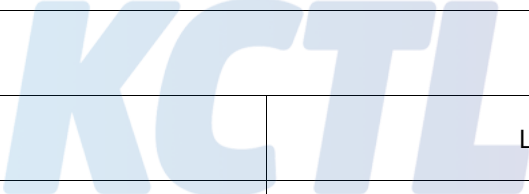
2.1 Test criteria and result summary

- Tested using the test method and test conditions suggested by the sponsor

Applicable standards	detail	Applicable?	Test result
Specifications presented by the company	performance test	<input checked="" type="checkbox"/>	See attached test results

3.0 Test equipment configuration and arrangement

3.1 Technical specifications

	
Model	L-24-S28-10Z
Primary current	1mA ~ 80Arms (50/60Hz)
Maximum primary current	330Arms continuous
Secondary windings(n)	1000 \pm 2 turns

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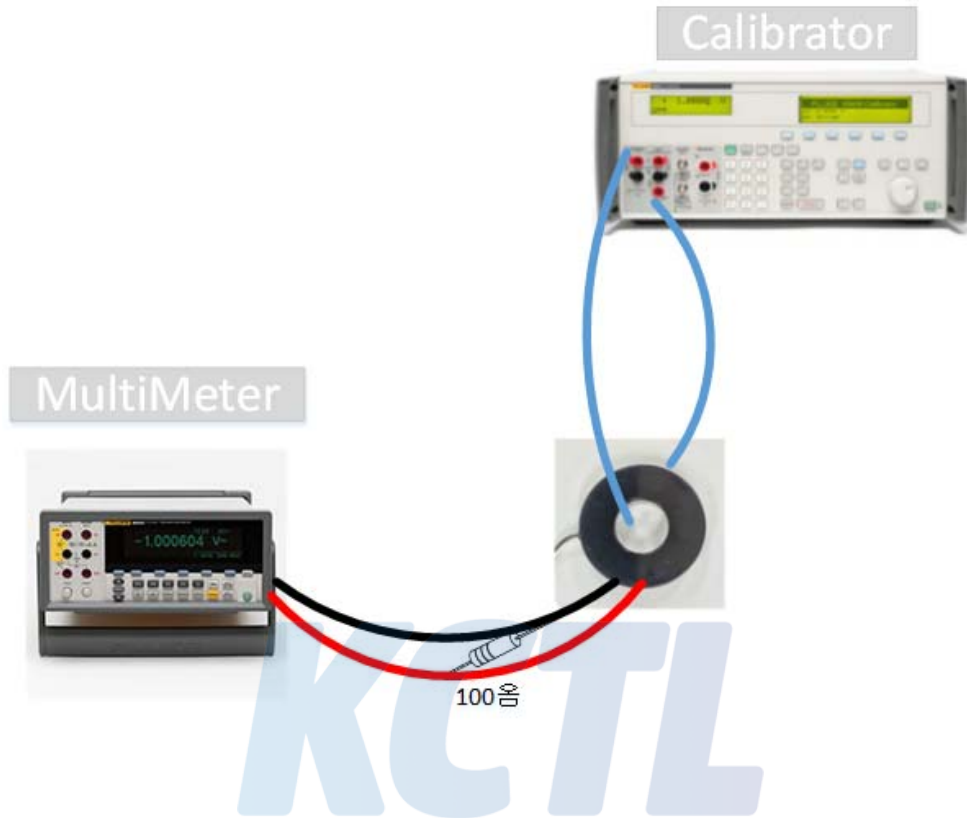
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3.2 Test structure



<Performance test>

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4.0 Test Summary and Results

4.1 Performance testing

4.1.1 Measuring equipment

Equipment used	model name	manufacturer	Manufacturing number	Next calibration date	Whether or not to use
CALIBRATOR	5080A	FLUKE	3793101	2019.02.20	<input checked="" type="checkbox"/>
MULTIMETER	45	FLUKE	7625056	2019.01.04	<input checked="" type="checkbox"/>
Resistor	variable resistance	-	-	-	<input checked="" type="checkbox"/>

4.1.2 Measurement date: February 22, 2018

4.1.3 Test method

- 1) 5 mA to 60 on calibrator
- 2) Via bushing leakage current sensor

4.1.4 Test results

Evaluation items		Test result
performance test	Error rate within 0.2% (0.2% of error 0.6 mA = 0.001 2 mA)	Satisfaction

- Measures

input Current (mA)	theory (calculation) Current (mA)	Measured value (mA) (CT ratio 100:1)	Error rate (%)	input Current (mA)	theory (calculation) Current (mA)	Measured value (mA) (CT ratio 100:1)	Error rate (%)
5	0.050 0	0.050 6	0.100 0	35	0.350 0	0.349 8	0.033 3
10	0.100 0	0.100 2	0.033 3	40	0.400 0	0.399 5	0.083 3
15	0.150 0	0.149 9	0.016 6	45	0.450 0	0.449 4	0.100 0
20	0.200 0	0.200 8	0.133 3	50	0.500 0	0.499 3	0.116 6
25	0.250 0	0.250 3	0.050 0	55	0.550 0	0.549 1	0.150 0
30	0.300 0	0.300 1	0.016 6	60	0.600 0	0.599 0	0.166 6

※ Measurement CT ratio = 100:1

- CT ratio = 1000:1

- Number of turns = 10

※ Error rate = |Theoretical value - Measured value| / Max theoretical value * 100 ※

Theoretical (calculated) current = calculated current value applying CT ratio

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- Measured resistance value



<100 ohm>

- Measured value (mV)



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5.0 Measurement scene photo

5.1 Performance test



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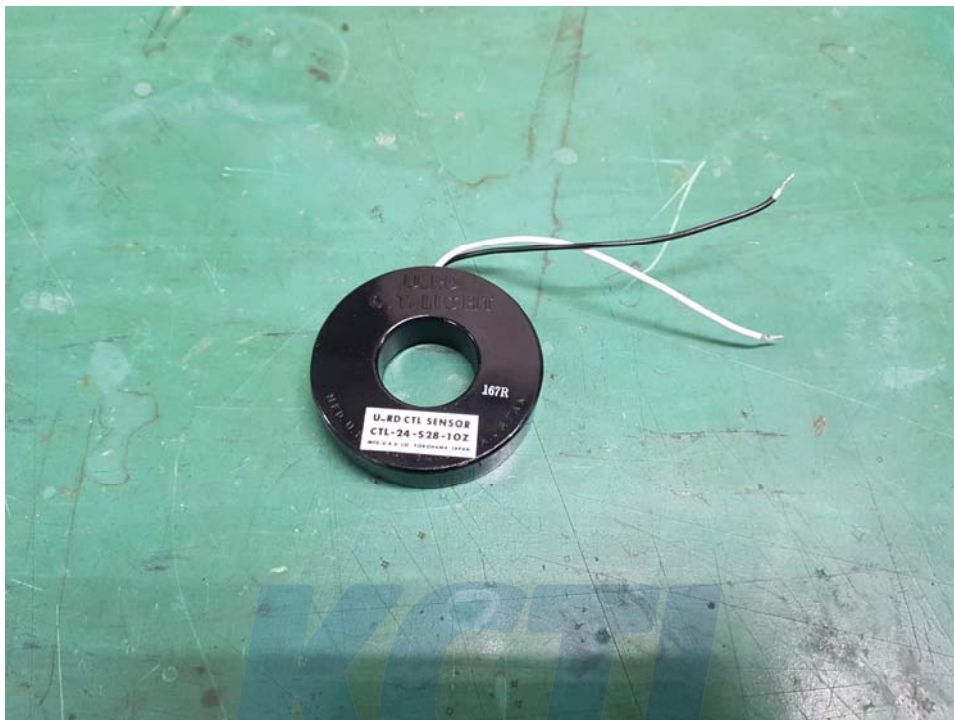
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6.0 Photo of examination equipment

6.1 Bushing leakage current sensor



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