

SPECIFICATION		Specification No.	S-211500C11~14			
		Drawing No.	S-211500C11	Revision		Page
Product Name	Coax Guard Model: CX-E-60(R)	Enactment Date	April 17, 2023	Revision Date		
		Drawing Section	Product Development Department			

1. General

This product is SPD to protect the equipment such as Surveillance cameras, Coaxial-LAN converter and other devices which is connected with coaxial cable from abnormal voltage such as lightning surge. Since the outer conductor of the coaxial cable is insulated from the ground, it is also compatible with lines where the outer conductor of the coaxial cable is not grounded.

This product can perform deterioration diagnosis by connecting a Specialized tester to the connector on the top of the main unit.

2. Environmental characteristic

- 2.1 Location : Indoor
- 2.2 Rated and storage temperature : -40 °C ~ +85 °C
- 2.3 Rated and storage humidity : 90 % or less (no condensation)

3. Structure

3.1 Appearance, Structure and Dimension

Appearance, Structure and Dimensions are figured by S-211500A11

3.2 Marking

The following display is marked on the product.

- (1) Product name (2) Manufacturer name
- (3) Production lot number (4) Maximum Continuous operating Voltage

4. Applicable Standards

Applicable Standards of this product is Table.1

Table. 1 Applicable Standards

Item	Standard name
Surge protection performance	IEC61643-21:2009 / JIS C 5381-21:2014
	IEC61000-4-5:2014 / JIS C 61000-4-5:2018

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5. Electrical Characteristics

The Electrical Characteristics of this product is Table.2

Table. 2 Electrical Characteristics

No.	Item	Condition	Performance	Remarks
1	Connector	—	BNC	LINE and EQUIP
2	Transmission band	—	DC ~ 50 MHz	
3	Impedance	—	50 Ω · 75 Ω	
4	Insertion loss	DC ~ 50 MHz	≦ 1.0 dB	
5	Maximum Continuous operating Voltage (Uc)	—	DC 70 V	Between the inner conductor and outer conductor
6	Current rating	—	1 A	
7	Breakdown Voltage	1 mA	≦ 90 V	Between the inner conductor and outer conductor
		100 V/s Peak hold	≦ 280 V	Between the conductor and ground
8	Voltage Protection Level (Up)	1.2/50 μs 10 kV	≦ 250 V	Between the inner conductor and outer conductor
			≦ 500 V	Between the conductor and ground
9	Impulse Durability	8/20 μs	10 kA	Category C2
		10/350 μs	2 kA	Category D1
10	Insulation resistance	DC 100 V	≧ 100 MΩ	Between the conductor and ground
		DC 70 V	≧ 35 MΩ	Between the inner conductor and outer conductor
11	AC Durability	50 Hz 0.5 A 1 sec.	5 times	
12	DC resistance	1 A	1 Ω ± 20 %	Between the inner conductor LINE-EQUIP
13	Overstressed failure mode	—	Mode 3	
14	Deterioration Diagnosis	Specialized tester	LED on : Normal LED off : Replace	

Note1) Test conditions

Temperature 20 ± 15 °C, Humidity 65 ± 20 % (IEC Publication 160 (normal condition of test place))

Note2) Item 5,6,8,9,10,11,12 shall have the test based on IEC61643-21 stipulation.

Note3) Overload failure mode is according to the failure mode under overload in IEC61643-21.

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6. Inspection

The inspection of electrical characteristics, mechanical characteristics and exterior shall be held as following Table.3

Table.3

Item	Inspection Type	Judgment Standard
Insertion loss	Model Inspection	It depends on clause 5.
Breakdown Voltage	Total Inspection	
Voltage Protection Level (Up)	Model Inspection	
Impulse Durability	Model Inspection	
Insulation resistance	Total Inspection	
AC Durability	Model Inspection	
DC resistance	Total Inspection	
Overload failure mode	Model Inspection	
Deterioration Diagnosis	Total Inspection	
Appearance	Total Inspection	
Dimension	Sampling Inspection	It depends on clause 3.

Note1) The sampling Inspection of dimensions, I assume it n=5,Ac=0,Re=1

Note2) Model Inspection; This inspection is executed more than one about the first lot that was able to expand in a production process. However, the item from which the performance is confirmed by the same type of product might be omitted.

7. Packaging and marking of wrapping box

7.1 Packaging

The product is packed in wrapping box.

7.2 Marking of wrapping box

Following particulars are marking on wrapping box.

(1) Product Name (2) Manufacturer's name or its abbreviation (3) Production lot number

8. Quality assurance and warranty period

The warranty period is for one year from the delivery date. Your product will be replaced with a product in good condition if a problem that occurs during this period is determined to be the responsibility of Sankosha. Replacement is limited to the actual product only. Any expenses incurred by the replacement will be charged to the customer.

This product was shipped after a strict inspection. If a problem arises due to a manufacturing deficiency or if you believe the product was damaged during shipment, please inquire with your distributor or local Sankosha branch office.

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9. Environmental correspondence (RoHS compliant)

This product does not contain more than specified provisions for substances subject to regulation (10 substances) in the EU RoHS Directive (*), except for exemptions.

10 substances: Lead, Mercury, Cadmium, Hexavalent Chromium, PBB, PBDE, DEHP, BBP, DBP, DIBP.

* European Parliament / Council Directive 2011/65 / EU, (EU) 2015/863

10. Deterioration diagnosis of this product

Deterioration diagnosis of this product can be performed by connecting a dedicated tester to the top surface connector of this product. As a result of deterioration diagnosis, if the LED does not light up please replace this product with a new one.

When diagnosing deterioration, disconnect the coaxial cable on the LINE side and the EQUIP side. If there is a lightning strike nearby, please do not perform deterioration diagnosis because it is dangerous.