IEC 62368-1 Annex D.3 Impulse Test Generator

Model: KP-1066S

For GB4943.1 safety testing of AV/ICT equipment

Top angle

Front view

The KP-1066S is designed in accordance with IEC 62368-1 Annex D.3 and used as the Annex D.3 electronic pulse generator circuit for GB4943.1 safety testing. It provides repeatable 0.5-5 kV pulse output for AV/ICT equipment and related electronic products.

KEY FEATURES

- 0.5-5 kV adjustable high-voltage output
- 0.42 uF test capacitance (5 kV rated)
- 1-99 s adjustable discharge time
- 1-999 programmable test cycles
- PLC control with touchscreen operation
- Built-in overvoltage protection
- Parameter memory after power failure

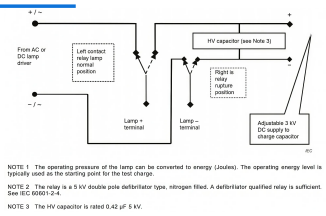
KEY INFORMATION

Applicable Standard:	IEC 62368-1 Annex D.3 / GB4943.1
Product Model:	KP-1066S
Test Circuit:	Annex D.3 electronic pulse generator circuit
Typical DUT:	AV equipment, IT equipment, communication equipment, adapters and power supplies

TYPICAL APPLICATIONS

- Audio/Video (AV) equipment safety tests
- Information technology (IT) equipment testing
- Communication equipment safety tests
- Adapters, chargers and power supplies

REFERENCE CIRCUIT (Annex D.3)



NOTE 1 The operating pressure of the lamp can be converted to energy (Joules). The operating energy level is typically used as the starting point for the test charge.

NOTE 2 The relay is a 5 kV double pole defibrillator type, nitrogen filled. A defibrillator qualified relay is sufficient. See IEC 60601-2-4.

NOTE 3 The HV capacitor is rated 0.42 µF 5 kV.

Annex D.3 electronic pulse generator circuit reference.

Detailed Technical Specifications

IEC 62368-1 Annex D.3

TECHNICAL SPECIFICATION TABLE

Product Model:	KP-1066S
Applicable Standards:	GB4943.1, IEC 62368-1 Annex D.3
Test Circuit:	Annex D.3 electronic pulse generator circuit
Output Voltage:	0.5-5 kV
Voltage Resolution:	0.01 kV
Output Waveform Voltage Accuracy:	+/-5% +/-3 digits
Capacitance:	0.42 uF
Discharge Time:	1-99 s adjustable
Number of Tests:	1-999 times
Test Count Accuracy:	+/-1 count
Control System:	PLC programmable controller
Operation Interface:	Color touchscreen
Protection Function:	Built-in overvoltage protection
Memory Function:	Parameter memory after power failure
Input Power:	AC 220 V +/-10%, 50/60 Hz
Dimensions:	480 x 460 x 200 mm
Weight:	Approx. 10 kg

Configuration Note

Confirm the applicable standard clause, required voltage level, DUT connection method and documentation needs before ordering.

Compliance, Operation & Support

Practical guidance for IEC 62368-1 Annex D.3 / GB4943.1 testing projects

COMPLIANCE & REGULATORY ASSURANCE

The KP-1066S supports IEC 62368-1 Annex D.3 and GB4943.1 related safety testing for AV, IT and communication equipment. It helps laboratories and manufacturers perform standard-based pulse verification during R&D, pre-compliance checks and routine quality control.

Calibration-related documents, technical datasheets and configuration confirmation can be provided according to project requirements.

TYPICAL OPERATION WORKFLOW

1. Confirm the applicable standard clause and voltage level.
2. Prepare the DUT according to laboratory procedure.
3. Set output voltage, discharge time and test cycles.
4. Connect the DUT and verify grounding and safety conditions.
5. Run the programmed test sequence and record results.
6. Discharge safely before handling the DUT.

SAFETY NOTE

Only trained personnel should operate this equipment. Follow the applicable standard, equipment manual and internal safety procedure.

TECHNICAL INQUIRY & EXPERT SUPPORT

Applicable standard	IEC 62368-1 or GB4943.1
Required clause or annex	Annex D.3
DUT type	AV equipment, adapter, power supply, communication device
Required voltage range	0.5-5 kV or specific test point
Documentation needs	Datasheet, calibration document, inspection record

Product page

Scan to view details or request support.

REFERENCE CIRCUIT NOTE

The Annex D.3 electronic pulse generator circuit should be checked against the applicable standard version and laboratory test plan before configuration.