LIGHTING SAFETY TEST EQUIPMENT

65 °C

IEC 61347-1 ANNEX D

PID CONTROL

IEC 61347-1 ANNEX D

Thermally Protected Ballast Heating Test Chamber

PRODUCT CATALOGUE

Purpose-built heating enclosure for controlled thermal protection tests on ballasts and lamp controlgear in laboratory, certification and manufacturing environments.

STANDARD
IEC 61347-1 Annex D

TEST OBJECT
Thermally protected ballast

TEST SPACE
610 x 610 x 610 mm

HEATING
4 x 300 W strip heaters

Specifications are based on the published product configuration.

Product Overview and Enclosure Construction

A dedicated enclosure layout supports repeatable heating tests while controlling sample position, heater location and natural airflow.

The Thermally Protected Ballast Heating Test Chamber is designed for evaluating thermally protected ballasts and lamp controlgear under elevated ambient conditions. Its Annex D-oriented construction combines a cubic test compartment, a separated heater zone, a controlled lower opening, specimen supports and PID temperature control in one laboratory enclosure.

Standard-specific Geometry

Internal chamber geometry, floor clearance and the shielded lower opening follow the Annex D test enclosure concept.

Controlled Heating

Four strip heaters operate in the separated lower heater compartment under PID and thermocouple control.

Defined Sample Position

The ballast or controlgear is centered in its normal operating position on the internal support arrangement.

Natural Air Circulation

The raised test floor and perimeter clearance allow heated air to circulate without a forced-air test pattern.

Complete enclosure - authentic product view

Typical Test Flow

1. Condition sample
2. Position controlgear
3. Connect rated load
4. Set 65 °C
5. Monitor temperatures
6. Record protection

Detailed Technical Specifications

Confirmed catalogue values for the IEC 61347-1 Annex D heating enclosure and its temperature-control configuration.

PARAMETER	SPECIFICATION
Applicable standard	IEC 61347-1 Annex D
Test object	Thermally protected ballasts and lamp controlgear
Internal test compartment	610 x 610 x 610 mm
Outer dimensions	660 x 660 x 760 mm
Test floor platform	560 x 560 mm
Air clearance around platform	25 mm
Lower shielded opening	150 x 150 mm
Heat-resistant wall thickness	25 mm

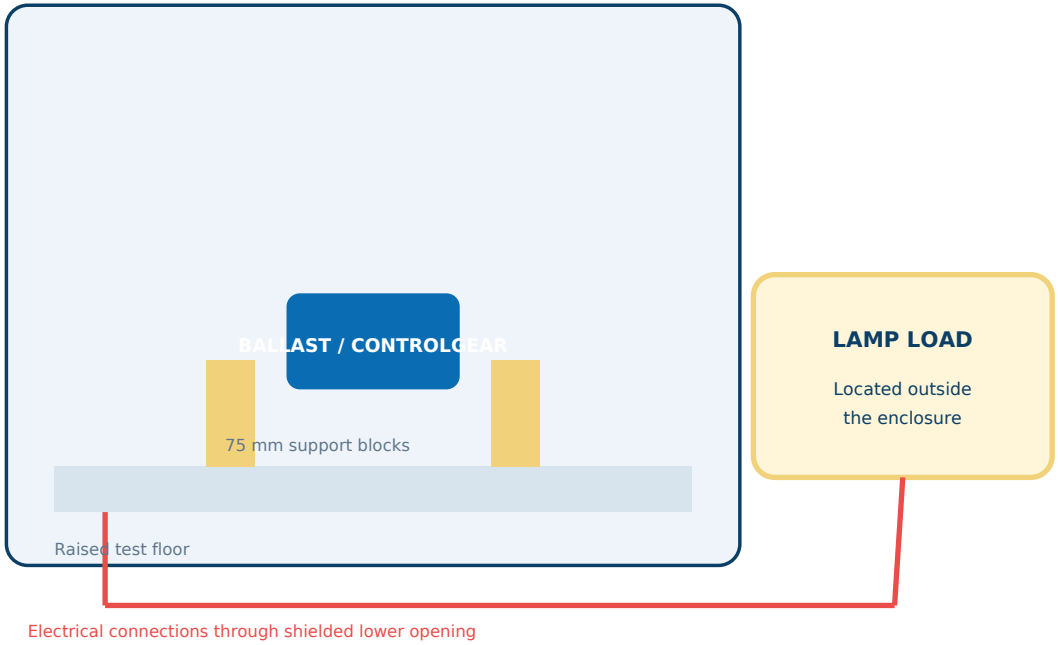
PARAMETER	SPECIFICATION
Heater compartment height	75 mm below the test floor
Heating elements	4 sets x 300 W strip heaters
Temperature control	PID controller + thermocouple
Catalogue test temperature	65 °C
Specimen support	Arrangement based on Figure D.1
Airflow approach	Natural circulation through the lower opening
Brand	KingPo
Place of origin	China

i Configuration note: The chamber provides the controlled enclosure and specimen-support environment. Rated power supply, matching lamp load and any external temperature-acquisition system should be arranged according to the laboratory test plan.

Test Arrangement and Temperature Measurement

Conceptual Annex D Test Arrangement

Catalogue illustration - not a replacement for the applicable standard



Laboratory Setup Notes

- Sample position: Mount the ballast in its normal operating position, centrally located within the test compartment.
- Support height: Use two 75 mm wooden blocks to support the sample 75 mm above the test floor.
- Electrical load: Connect the ballast to its rated supply and intended lamp load; lamps remain outside the enclosure.
- Temperature setting: Operate the chamber at the catalogue test temperature of 65 °C.
- Ambient sensor: Position the sensor at least 76 mm from the nearest wall and level with the sample center.
- Case measurement: Attach thermocouples to the required controlgear surface locations and record the thermal response.
- Airflow: Keep the shielded opening away from drafts and rapid air currents during testing.

1. **Pre-condition**
2. **Install sample**
3. **Connect load**
4. **Set 65 °C**
5. **Monitor**
6. **Record result**

Applications, Users and Procurement Value

A compact standard-oriented chamber for laboratories and manufacturers working with thermally protected lighting controlgear.

Typical Users

Certification and Third-party Laboratories

Supports Annex D-oriented heating tests for conformity assessment, technical evaluation and documented laboratory procedures.

Ballast and Controlgear Manufacturers

Useful for product development, thermal protection verification, design comparison and pre-compliance investigation.

Lighting Quality and R&D Teams

Provides a controlled enclosure for evaluating thermal behavior before controlgear is integrated into finished lighting products.

Internal platform, specimen supports and temperature-measurement brackets

Procurement Value

- Standard-specific construction: Reduces the need to fabricate an Annex D-style enclosure and internal fixture in-house.
- Integrated thermal control: PID regulation and thermocouple feedback support consistent chamber operation.
- Defined test geometry: Fixed internal dimensions, floor clearance and specimen supports improve setup repeatability.
- Practical laboratory integration: The shielded opening permits electrical connection while maintaining the intended airflow path.
- Compact enclosure format: Suitable for lighting laboratories, manufacturer R&D rooms and quality-control environments.

Product Details and Contact

Open chamber and integrated control panel

Close-up of the internal Annex D-oriented fixture

Thermally Protected Ballast Heating Test Chamber

IEC 61347-1 Annex D laboratory heating enclosure

SCAN PRODUCT PAGE

KingPo Technology Development Limited

Factory Address
No.9 University Road, Songshan Lake,
Dongguan City, Guangdong Province
523770, China

Tel
+86-769-81627526

Email
sales@kingpo.hk

Website
www.dgkingpo.com

Scan the QR code to view the corresponding product page, review updated information and access the online enquiry channel.