



Product Service

Documentation Guidance Notes for Safety Critical Components & Materials

These guidance notes are intended to explain what information is required to show that a safety critical component holds suitable approval.

For IEC & EN Investigations

This should be in the form of a current test certificate / report to a relevant IEC / EN standard. The documents shall be in English from a CB, CCA; LVD accredited test laboratory (e.g. TÜV Product Service, VDE). The test certificate must be current (some have expiry dates) and must detail all relevant information i.e. some certificates are made up of many pages, all should be supplied.

If the test certificate does not give all of the required details then a copy of the test report may be required. This is generally the case, for example, with power supply units where more detailed information is required i.e. maximum rated ambient, classification of outputs, method of mains isolation.

Self-declaration in the form of a Certificate of Conformity, component marking or manufacturer's datasheet may also be accepted. However, the responsibility that the component is suitably approved remains with you (this would be stated in any test report issued).

Note: Where Third Party Certification of your product is being sought self-declaration is not acceptable (e.g. TÜV Product Service, UL, CB, BEAB).

X and Y class capacitors (including discrete components or within filters) - must comply with IEC 60384-14 2nd Ed.

Mains switches / circuit breakers – the approval documentation must clearly state the voltage and current ratings.

Where transformers, motors or inductor windings are to be assessed then we require details of the thermal classification of the winding in accordance with IEC 60085. The thermal classification of winding insulation is as follows:

Class and Maximum allowed temperature (°C) under normal operating conditions.

A 100°C; E 115°C; B 120°C; F 140°C; H 165°C



Flammability of materials

This refers to plastic or non-metallic materials used in the construction of the unit. Compliance may be based on self-declaration, and/or suitable documentary evidence of compliance with the UL 94 (or equivalent) standard for flammability.

In order for the suitability of the materials used to be assessed the following information is required:

- i) The name of the company that holds the UL approval (usually the manufacturer)
- ii) The name and part number of the material (e.g. Lexan; LX437)
- iii) The UL File Number (e.g. E143678).
- iv) The flammability rating (e.g. V-1, V-2, HB, HF2).

The name of the approval holder and material is the most important information required in order for us to confirm compliance.

The easiest method of obtaining the information is to obtain a copy of the UL Listing (Yellow Card), which can be obtained from the approval holder, the manufacturer of the material, or from UL's website at <http://www.ul.com/database/>.

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Where Third Party Certification of your product is being sought self-declaration is not acceptable (e.g. TÜV Product Service, UL, CB, BEAB).

For UL / NRTL Investigations (North America)

All safety critical components must have current UL Recognition; in order to verify this the following information is required:-

- i) The name of the company that holds the UL approval (usually manufacturer)
- ii) The type or model number of the component
- iii) The UL File Number (e.g. E143678).

The easiest method of obtaining the information is to obtain a copy of the UL Listing (Yellow Card), which can be obtained from the approval holder, the manufacturer of the component/part, or from UL's website at <http://www.ul.com/database/>.












Where transformers are to be assessed and an insulation Class higher than Class A is to be used, a UL Recognised insulation system (OBJY2) must be employed. (A recognised insulation system is a combination of materials that have been tested together for suitability of use in prolonged high temperature conditions).



Product Service

Common Product Safety Certification Databases

Click on the links below for each Certification Body to access the certification database:

Certification Body		Link
TÜV Product Service	 Product Service	TÜV Product Service
VDE		VDE
CSA		CSA
UL		UL
SEMKO		SEMKO
IMQ		IMO
TÜV Rheinland		TÜV Rheinland
ÖVE		OVE
KEMA KEUR		KEMA KEUR
ETL		ETL
ASTA BEAB		ASTA BEAB