Information

Information on fire behavior of the protectors of the PLATINUM® TLD series

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1 Introduction

1.1 About this information

This information describes the fire behavior of the protectors of the PLATINUM® TLD series. The material the protectors are made of is **Neopolen® P** from **BASF**.

Further reading

For further information please refer to website of the manufacturer www.basf.de.

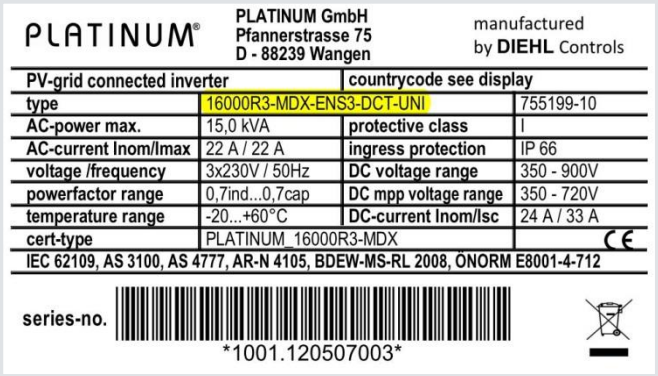
1.2 Scope of this information

This information is valid for the following PLATINUM® inverters:

- TLD (1 phase)
- TLD (3 phase)

Protectors are the removable cover of the series mentioned above.

1.2.1 Determination of inverter type by type label



2 Fire behavior

The manufacturer’s data are exclusively repeated in this information.

2.1 General information and classification to achieve

The standard DIN 4102 describes the fire behavior and the inflammableness of construction materials respectively and distinguish to classes:

- A: non-flammable
  - A1: without flammable components
  - A2: with flammable components to a minor degree
- B: inflammable
  - B1: lowly inflammable
  - B2: normally inflammable
  - B3: easily inflammable

The relevant test standard is the EN ISO 9239.

The American regulation UL94 for the inflammability of synthetic materials classifies three classes for foam:

- HF-1: self-extinguishing, no burning drops
- HF-2: self-extinguishing, burning drops accepted
- HBF: non self-extinguishing, burning speed max. 36 mm / min

Further there is the FMVSS 302 for the propagation speed of flames. This only has to be fulfilled.

2.2 Achieved classification

The material Neopolen® P is an expandable polypropylene and classified in the table below:

Test regulation	Thick	Concentration of the material after ISO 845 [kg/m³]		
		40	**50**	**60**
DIN 4102	10-40 mm	B1	B1	B1
UL 94	3,5 - 13 mm	HF-1	HF-1	HF-1
FMVSS 304		fulfilled	fulfilled	fulfilled

2.3 Explanation of the achieved classification

B1 after DIN 4102:

- Smoke gas temperature below 200 °C
- self-extinguishing after removing the fire source
- No burning drops

HF-1 after UL 94:

- self-extinguishing
- No afterflame longer than 2 seconds
- No afterglow longer than 30 seconds
- No burning drops

Fulfilled after FMVSS 302:

- Propagation speed of flames < 4 Inch / minute (101,6 mm / minute)

The material conforms high demands.

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