

Small craft - Electrical devices - Lightning-protection systems (ISO 10134:2003,IDT)

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- ISO 10134:2003,IDT

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Preview

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**Small craft — Electrical devices —  
Lightning-protection systems**

*Petits navires — Dispositifs électriques — Dispositifs de protection  
contre la foudre*



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## Foreword

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ISO 10134 was prepared by Technical Committee ISO/TC 188, *Small craft*.

This second edition cancels and replaces the first edition (ISO 10134:1993), which has been technically revised.

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# Small craft — Electrical devices — Lightning-protection systems

## 1 Scope

This International Standard establishes guidelines for the design, construction and installation of lightning-protection systems fitted on small craft of hull length up to 24 m.

**NOTE** The probability of a lightning strike varies with geographic location and time of year, but when the conditions that create an electrical discharge between clouds and the earth exist, there is nothing that can be done to prevent the lightning discharge. Craft can be struck in open water or when tied to the dock. The presence of a lightning-protection system on a craft cannot provide complete protection from equipment damage or personal injury and such protection is not implied in this International Standard.

## 2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

### 2.1

#### **air gap**

interruption of a conductive path by a small air space not exceeding 2 mm in order to prevent the passage of low-voltage current without interrupting the flow of lightning current

### 2.2

#### **air terminal**

uppermost part of the lightning-protection system, intended to dissipate the charge or start the lightning ground process

### 2.3

#### **lightning ground plate**

#### **lightning ground strip**

means to conduct the electrical current from a boat's conductive elements to the water in which the boat floats

### 2.4

#### **lightning-protective mast**

conductive structure or means for electrical connection of an air terminal to the lightning ground plate

### 2.5

#### **side flash**

an arc-over discharge that occurs from the lightning-protection system to any metal object

### 2.6

#### **lightning bonding conductor**

conductor intended to be used for potential equalization between metal bodies and the lightning-protection system

### 2.7

#### **lightning grounding conductor**

conductor installed to connect the air terminal or the lightning-protective mast to the lightning ground plate

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