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**Installations électriques des bâtiments**

**Quatrième partie: Protection pour assurer la sécurité**

**Chapitre 45: Protection contre les baisses de tension**

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**Electrical installations of buildings**

**Part 4: Protection for safety**

**Chapter 45: Protection against undervoltage**

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## ELECTRICAL INSTALLATIONS OF BUILDINGS

## Part 4: Protection for safety

## Chapter 45: Protection against undervoltage

## FOREWORD

- 1) The formal decisions or agreements of the IEC on technical matters, prepared by Technical Committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 2) They have the form of recommendations for international use and they are accepted by the National Committees in that sense.
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## PREFACE

This standard has been prepared by IEC Technical Committee No. 64: Electrical Installations of Buildings.

The text of this standard is based upon the following documents:

Six Months' Rule	Report on Voting
64(CO)136	64(CO)145

Further information can be found in the Report on Voting indicated in the table above.

## **ELECTRICAL INSTALLATIONS OF BUILDINGS**

### **Part 4: Protection for safety**

#### **Chapter 45: Protection against undervoltage**

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#### **45. PROTECTION AGAINST UNDERVOLTAGE**

##### **451. General requirements**

451.1 Where a drop in voltage, or a loss and subsequent restoration of voltage could imply dangerous situations for persons or property, suitable precautions shall be taken. Also, precautions shall be taken where a part of the installation or current-using equipment may be damaged by a drop in voltage.

An undervoltage protective device is not required if damage to the installation or to current-using equipment is considered to be an acceptable risk, provided that no danger is caused to persons.

451.2 The operation of undervoltage protective devices may be delayed if the operation of the appliance protected allows without danger a brief interruption or loss of voltage.

451.3 If use is made of contactors, delay in their opening and reclosing shall not impede instantaneous disconnection by control or protective devices.

451.4 The characteristics of the undervoltage protective device shall be compatible with the requirements of the IEC standards for starting and use of equipment.

451.5 Where the reclosure of a protective device is likely to create a dangerous situation, the reclosure shall not be automatic.

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