

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

Low-voltage electrical installations –  
Part 7-718: Requirements for special installations or locations – Communal  
facilities and workplaces

Installations électriques à basse tension –  
Partie 7-718: Exigences pour les installations et emplacements spéciaux –  
Etablissements recevant du public et lieux de travail



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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## LOW-VOLTAGE ELECTRICAL INSTALLATIONS –

**Part 7-718: Requirements for special installations or locations –  
Communal facilities and workplaces**

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International Standard IEC 60364-7-718 has been prepared by IEC technical committee 64: Electrical installations and protection against electric shock.

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

FDIS	Report on voting
64/1752/FDIS	64/1765/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all the parts in the IEC 60364 series, published under the general title *Low-voltage electrical installations*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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## INTRODUCTION

The particular requirements of this part of IEC 60364 supplement, modify or replace certain of the general requirements contained in Parts 1 to 6 of IEC 60364.

The clause numbering appearing after 718 refers to the corresponding parts or clauses of IEC 60364, Parts 1 to 6<sup>1</sup>. Numbering of clauses does not, therefore, necessarily follow sequentially. Numbering of additional text is shown by the addition of “.101, etc.”. Numbering of figures and tables takes the number of this part followed by a sequential number. For annexes, the numbering of figures and tables takes the letter of the annex, the number of the part and a sequential number.

The absence of reference to a part or clause means that the general requirements contained in Parts 1 to 6 of IEC 60364 are applicable.

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<sup>1</sup> For historical reasons, IEC 60364-1:2005 numbering is as follows: 11 Scope; 12 Normative references; 20 Terms and definitions, etc.

## LOW-VOLTAGE ELECTRICAL INSTALLATIONS –

### Part 7-718: Requirements for special installations or locations – Communal facilities and workplaces

#### 718 Communal facilities and workplaces

##### 718.1 Scope

This part of IEC 60364 provides additional requirements for electrical installations applicable to communal facilities and workplaces.

Typical examples of communal facilities and workplaces are listed below:

- assembly halls, assembly rooms;
- exhibition halls;
- theatres, cinemas;
- sports arenas;
- sales areas;
- restaurants;
- hotels, guest houses, residential care homes,
- schools;
- enclosed car parks;
- meeting places, swimming halls, airports, railway stations, high-rise buildings;
- workshops, factories and industrial plants.

Access routes and escape routes are part of the above-mentioned examples.

The necessity of providing safety services in special buildings and areas may be governed by national regulations which may contain more stringent requirements.

NOTE For safety services see IEC 60364-5-56.

##### 718.2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60364-5-51:2005, *Electrical installations of buildings – Part 5-51: Selection and erection of electrical equipment – Common rules*



### 718.3 Terms and definitions

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

#### 718.3.1

##### **communal facility**

location, building or part of a building open to the public

#### 718.3.2

##### **workplace**

location, building or part of a building in which employees conduct activities relating to their employment

### 718.4 Protection for safety

#### 718.42 Protection against thermal effects

##### 718.422 Precautions where particular risks of fire exist

###### 718.422.2 Conditions of evacuation in an emergency

Add the following:

**718.422.2.101** For communal facilities and workplaces the appropriate condition (BD2, BD3 of BD4) shall be established and the appropriate clauses of Part 42 have to be taken into account.

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###### 718.422.3.7

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**718.422.3.7.101** Motors which are not supervised continuously shall be protected by a thermal protective device or shall be impedance protected motors.

This requirement does not apply to:

- motors in workplaces with a nominal power less than 500 W;
- motors which will not be overheated in the event of stalling.

### 718.5 Selection and erection of electrical equipment

#### 718.53 Isolation, switching and control

##### 718.536 Isolation and switching

Add the following:

**718.536.101** The distance between the means of switching off for the electrical installation and the place where the corresponding supply cables enter the building shall be as short as practicable.

NOTE National regulations may require that a means of switching off the electrical installation be provided. Such regulations may also prescribe its location and that it be either installed at an effectively locked location near the entrance to the building or directly accessible by authorized persons only from the outside.

**718.536.102** If there is equipment in the premises that must remain energized when the building is unoccupied, the electrical installation shall be designed accordingly.

NOTE Consideration should be given to the provision of separate circuits for such equipment.

## 718.55 Other equipment

### 718.559 Luminaires and lighting installations

Add the following:

#### 718.559.101 Maintenance of lighting circuits

**718.559.101.1** Maintenance of adequate levels of illumination shall be determined by a risk assessment of the premises taking account of the classification of Table 51A of IEC 60364-5-51:2005.

NOTE 1 In some countries legislation may impose additional requirements.

The different options are as follows:

- Locations with low risk: single normal lighting final circuit.  
NOTE 2 This is valid for code BD1 in Table 51A.
- Other locations: two or more normal lighting final circuits with luminaires supplied in such a way that failure of any one circuit will not leave any part of the location with an insufficient level of illumination.

If RCDs are used no RCD shall protect more than one final circuit..

NOTE 3 This is valid for codes BD2 to BD4 in Table 51A.

NOTE 4 Emergency lighting circuits as required can be added to either option.

**718.559.101.2** If the normal lighting of a location accessible to the public can be dimmed, means shall be provided to reinstate the full level of illumination by an appropriately located switch.

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NOTE In areas such as some places of entertainment it may be necessary to ensure lighting cannot be operated by unauthorized persons.

## Annex A (informative)

### List of notes concerning certain countries

Country	Clause	Text
IT	General	The requirements of this part are covered by the general requirements of the other parts of IEC 60364.
DK	718.421 (new)	<p>In communal facilities and workplaces the electrical equipment must not give increased life to a fire.</p> <p>No equipment shall contain flammable liquid.</p> <p>Meters, protective devices, time switches etc. shall be placed in an enclosure.</p> <p>If the total surface area of one or more enclosures mounted together is less than or equal to 1 m<sup>2</sup>, it shall be made of one of the following materials:</p> <p>Metal.</p> <p>An insulation material complying with the glow wire test in accordance with IEC 60695-2 series for 650 °C.</p> <p>If the total surface area of one or more enclosures mounted together is greater than 1 m<sup>2</sup>, it shall be made of one of the following materials:</p> <p>Metal.</p> <p>Another non- flammable material.</p> <p>An insulation material complying with the glow-wire test in accordance with IEC 60695-2 series for 750 °C.</p> <p>Enclosures of luminaires installed within arm's reach (e.g. lower than 2,5 m above floor level) in public access routes and escape routes indoors in dwelling houses shall comply with the needle flame test of 13.3.1, the flame being applied for 30 s.</p>
USA	718.422.3.7	In the USA, non-supervised motors are permitted to be impedance protected motors as a substitute for thermally protected motors.
DK	718.53 (new)	<p><b>Special requirements for rooms intended for more than 50 persons</b></p> <p>Switches and protective devices shall not be accessible to the public. This is not applicable for switches which can ease the evacuation in case of danger.</p> <p>NOTE This inaccessibility requirement is not applicable for areas where the locality is well known, e.g. in a school classroom.</p>
UK	718.559.101	In the UK, lighting levels shall comply with BS EN 12464-1.
DK	718.559 (new)	<p><b>Special requirements for public access routes</b></p> <p>Adjacent luminaires shall be mounted on different final circuits. A control device, if any, shall be mounted on its own final circuit.</p> <p>The lighting in a public access route shall be either</p> <ul style="list-style-type: none"> <li>– switched on by the help of a push button, or</li> <li>– switched on by the help of a time switch or light depending switch, or</li> <li>– constantly on.</li> </ul> <p>If push-buttons are used, they shall switch all the luminaires on at the same time.</p> <p>Push-buttons shall be placed near the entrance door on each staircase and by each elevator door. They shall have a pilot light which is on when the switch is off.</p> <p>In dwelling houses, a push-button shall be mounted near the entrance door of each apartment controlling the staircase light.</p> <p>Time switches shall be able to repeat the full period in the last half period of the on-time. It must not be possible to switch off the light manually.</p> <p>In public access routes without daylight, the light shall be permanently switched on. If there is daylight in the entrance area, the light shall be switched on in the night.</p> <p>Entrance areas are the areas from outside to the public access route.</p>