

SRI LANKA STANDARD 690 : PART I : 1985

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**GRAPHICAL SYMBOLS USED IN ELECTROTECHNOLOGY
PART I - ARCHITECTURAL AND
INSTALLATIONS DIAGRAMS**

SRI LANKA STANDARDS INSTITUTION

GRAPHICAL SYMBOLS USED IN ELECTROTECHNOLOGY
PART 1 : ARCHITECTURAL AND INSTALLATIONS DIAGRAMS

SLS 690:Part 1:1985

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SRI LANKA STANDARD
GRAPHICAL SYMBOLS USED IN ELECTROTECHNOLOGY
PART 1 : ARCHITECTURAL AND INSTALLATIONS DIAGRAMS

FOREWORD

This Sri Lanka Standard was authorized for adoption and publication by the Council of the Sri Lanka Standards Institution on 1985-04-02, after the draft, finalized by the Drafting Committee on Graphical Symbols, had been approved by the Electrical Engineering Divisional Committee.

This standard is one of the series of Sri Lanka Standards for Graphical Symbols used in electrotechnology.

It is a common practice to employ Graphical Symbols for various electrical fittings when preparing architectural diagrams, plans etc, of a building. It has therefore necessitated the need to standardize the basic symbols for various electrical fittings and appliances commonly used in a building in order to make these diagrams easy to understand and universal in meaning.

In selecting and devising these symbols the object has been to ensure that symbols, as far as possible, are self explanatory and easy to draw in general use. It may be necessary in detailed diagrams to indicate the physical structure of the apparatus, the actual position of the terminals and so forth, but where possible, the principle of the standard symbols should be followed.










In the preparation of this standard the assistance derived from the publications of the International Electrotechnical Commission, the British Standards Institution and the Indian Standards Institution is gratefully acknowledged.

1 SCOPE

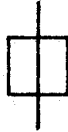
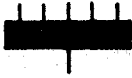
This standard covers Graphical Symbols for electrical installations in buildings for use in architectural diagrams.

2 WIRING


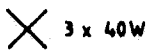





2.1 Routing of conductors


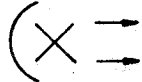


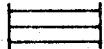





| No. | Description | Symbol |
|-------|---|---|
| 2.1.1 | Wiring: General Symbol |  |
| 2.1.2 | Wiring on the surface |  |
| 2.1.3 | Wiring under the surface |  |
| 2.1.4 | Wiring in conduit |  |
| 2.1.5 | Wiring in duct or trunking |  |
| 2.1.6 | Wiring going upwards (see Note). |  |
| 2.1.7 | Wiring going downwards (see Note). |  |
| 2.1.8 | Wiring passing vertically through a room |  |
| 2.1.9 | Joint or junction box Example with three outlets <i>NOTE - For a joint box the dot at the connection joint must be shown.</i> |  |

NOTE - "Upwards" and "downwards" apply only when the drawing is read the right way up.






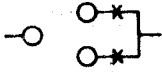
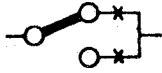
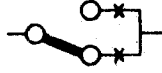

| No. | Description | Symbol |
|--------|---|---|
| 2.1.10 | Box for incoming main feeder |  |
| 2.1.11 | Distribution centre, for example, one incoming and five outgoing circuits |  |


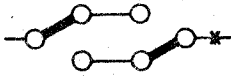
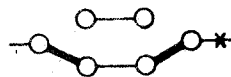
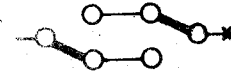
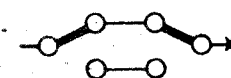




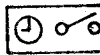

2.2 Lighting points or lamps





| No. | Description | Symbol |
|-------|---|--|
| 2.2.1 | Lighting point or lamp: General Symbol <i>NOTE - The number power and type of the light source should be specified.</i> |   |
| 2.2.2 | Lighting point or lamp: Wall mounted |  |
| 2.2.3 | Water-tight light fitting |  |
| 2.2.4 | Emergency (safety) lighting point |  |
| 2.2.5 | Lighting point with built in switch |  |
| 2.2.6 | Lamp fed from variable voltage supply |  |

| No. | Description | Symbol |
|--------|--|---|
| 2.2.7 | Projector or lamp with reflector |  |
| 2.2.8 | Spotlight |  |
| 2.2.9 | Flood light |  |
| 2.2.10 | Single fluorescent lamp |  |
| 2.2.11 | Group of three fluorescent lamps |  |
| 2.2.12 | Group of three fluorescent lamps: Alternate representation |  |
| 2.2.13 | Auxiliary apparatus for discharge lamp <i>NOTE - Only used when the auxiliary apparatus is separated from the lamp fixture.</i> |  |
| 2.2.14 | Illuminated sign (annotation as required) <i>NOTE - The annotation may include an arrow to indicate direction.</i> |  |
| 2.2.15 | Illuminated emergency or safety sign |  |
| 2.2.16 | Signal lamp |  |







2.3 Switches and switch outlets

| No. | Description | Symbol |
|-------|---|---|
| 2.3.1 | Single-pole, one-way switch <i>NOTE - Number of switches at one point may be indicated.</i> |  |
| 2.3.2 | Two-pole, one-way switch |  |
| 2.3.3 | Three-pole, one-way switch |  |
| 2.3.4 | Cord-operated single pole one-way switch |  |
| 2.3.5 | Multiposition switch for different degrees of lighting <i>NOTE - The function of the switch concerned is as shown.</i> |  <p>a. </p> <p>b. </p> <p>c. </p> <p>d. </p> |

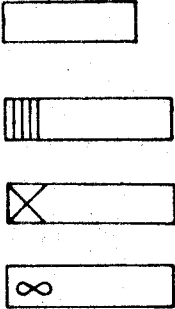





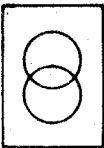

| No. | Description | Symbol |
|-------|--|--|
| 2.3.6 | Two-way switch <i>NOTE - The function of two combined switches may be as shown.</i> |  a.  b.  c.  d.  |
| 2.3.7 | Intermediate switch may be as shown |  a.  b.  c.  |
| 2.3.8 | Time switch |  |
| 2.3.9 | Switch with pilot lamp |  |

| No. | Description | Symbol |
|--------|--|---|
| 2.3.10 | Period limiting switch |  |
| 2.3.11 | Regulating switch Example: Dimmer, fan regulator |  |
| 2.3.12 | Push button |  |
| 2.3.13 | Luminous push button |  |

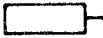











2.4 Socket outlets (Other than telecommunication)




| No. | Description | Symbol |
|-------|--|--|
| 2.4.1 | a) Socket outlet (mains), general symbol b) Socket outlet (mains 15A) <i>NOTE - In practice this general symbol normally implies the presence of an earthing contact. Exceptions to this rule should be indicated by a note, for example, shaver outlet.</i> |   |
| 2.4.2 | Switched socket outlet |  |
| 2.4.3 | Socket outlet with interlocking switch |  |
| 2.4.4 | Socket outlet with pilot lamp |  |
| 2.4.5 | Multiple socket outlet Example: for 3 plugs |  |

2.5 Control and distribution

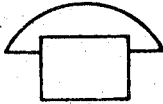
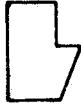


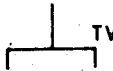


| No. | Description | Symbol |
|-------|---|---|
| 2.5.1 | Distribution board or point <i>NOTE - The circuits controlled by the distribution board may be shown by the addition of an appropriate qualifying symbol or reference.</i> |  |
| 2.5.2 | Main or sub-main switch |  |
| 2.5.3 | Contactor |  |
| 2.5.4 | Integrating meter |  |
| 2.5.5 | Starter |  |
| 2.5.6 | Changeover switch |  |
| 2.5.7 | Transformer |  |
| 2.5.8 | Consumer's earthing terminal |  |







2.6 Fixed apparatus and equipment including fire alarm and security devices.

| No. | Description | Symbol |
|--------|--|---|
| 2.6.1 | Electrical appliance: general symbol <i>NOTE - If necessary use designations to specify type.</i> |  |
| 2.6.2 | Fan |  |
| 2.6.3 | Heater |  |
| 2.6.4 | Motor |  |
| 2.6.5 | Generator |  |
| 2.6.6 | Thermostat: block symbol |  |
| 2.6.7 | Restricted access push button |  |
| 2.6.8 | Restricted access push button for fire alarm |  |
| 2.6.9 | Automatic fire detector |  |
| 2.6.10 | Watchman system device or key-operated switch |  |
| 2.6.11 | Bell |  |
| 2.6.12 | Buzzer |  |

| No. | Description | Symbol |
|--------|---------------------------------------|---|
| 2.6.13 | Siren |  |
| 2.6.14 | Indicator panel N = number of ways |  |
| 2.6.15 | Clock |  |

2.7 Telecommunication apparatus including radio and television

| No. | Description | Symbol |
|-------|---|--|
| 2.7.1 | Telephone set |  |
| 2.7.2 | Manual switchboard: general symbol |  |
| 2.7.3 | Automatic telephone exchange equipment |  |
| 2.7.4 | Socket outlet for telecommunication general symbol. Examples: Television Radio Sound |     |

| No. | Description | Symbol |
|--------|-------------|---|
| 2.7.5 | Teleprinter |  |
| 2.7.6 | Aerial |  |
| 2.7.7 | Earth |  |
| 2.7.8 | Amplifier |  |
| 2.7.9 | Microphone |  |
| 2.7.10 | Loudspeaker |  |

SRI LANKA STANDARDS INSTITUTION

The Sri Lanka Standards Institution (SLSI) is the National Standards Organization of Sri Lanka established under the Sri Lanka Standards Institution Act No. 6 of 1984 which repealed and replaced the Bureau of Ceylon Standards Act No. 38 of 1964. The Institution functions under the Ministry of Science & Technology.

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