SRI LANKA STANDARD 1223 : PART 1 : 2001
IEC 60439-1 : 1999

LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR ASSEMBLIES

PART 1 : TYPE -TESTED AND PARTIALLY TYPE - TESTED ASSEMBLIES

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SLS 1223 : PART 1 : 2001
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Sri Lanka Standards are subject to periodical revision in order to accommodate the progress made by industry. Suggestions for improvement will be recorded and brought to the notice of the Committees to which the revisions are entrusted.

This standard does not purport to include all the necessary provisions of a contract.

SRI LANKA STANDARD
LOW –VOLTAGE SWITCHGEAR AND CONTROLGEAR ASSEMBLIES
PART 1 : TYPE -TESTED AND PARTIALLY TYPE –TESTED ASSEMBLIES

NATIONAL FOREWORD

This standard was approved by the Sectoral Committee on Electrical Appliances and Accessories on 2001-04-05 and was authorized for adoption and publication as a Sri Lanka Standard by the Council of the Sri Lanka Standards Institution on 2001– 07 - 24

This Sri Lanka Standard is identical with IEC 60439, Low-voltage switchgears and controlgear assemblies, Part 1 : Type-tested and partially type-tested assemblies, published by International Electrotechnical Commission.

Terminology and conventions

The text of the International Standard has been accepted as suitable for publication with the additional information given in the National Appendix. However, certain terminology and conventions are not identical with those used in Sri Lanka Standards, attention is therefore drawn to the following :

a) Wherever the words “International Standard” appear, referring to this standard they should be interpreted as “Sri Lanka Standard””.

b) The comma has been used throughout as decimal marker. In Sri Lanka Standards it is the current practice to use a full point on the baseline as the decimal marker.

c) Whenever standard value of rated frequency appears it shall be taken as 50 Hz.

Cross references

International Standards	Corresponding Sri Lanka Standards
IEC 60038 : IEC standard voltages	SLS 574 : 1982 Voltage current and frequency ratings
IEC 60050 (441) : 1984, International Electrotechnical Vocabulary (IEV) – Chapter 441 : Switchgear, controllgear and fuses.	___

IEC 60050 (471) : 1984, International Electrotechnical Vocabulary (IEV) – Chapter 471 : Insulators	SLS 982 : 1992 Electrotechnical Vocabulary Part 26 : Insulators
IEC 60050 (604) : 1987, International Electrotechnical Vocabulary (IEV) - Chapter 604 : Generation, transmission and distribution of electricity – Operation	___
IEC 60050 (826) : 1982, International Electrotechnical Vocabulary (IEV) – Chapter 826 : Electrical installations of Buildings	___
IEC 60060, High-voltage test techniques	___
IEC 60071-1 : 1976, Insulation co-ordination – Part 1 : Terms, definitions, principles and rules	___
IEC 60073 : 1996, Basic and safety principles for man-machine interface, marking and identification - Coding principles for indication devices and actuators	___
IEC 60099-1 : 1991, Surge arresters – Part 1 : Non-linear resistor type gapped surge arresters for a.c. systems	___
IEC 60112 : 1979, Method for determining the comparative and the proof-tracking indices of solid insulating materials under moist conditions	___
IEC 60146-2:1974 Semiconductor convertors Part 2 : Semiconductor self-commutated convertors	___
IEC 60158-2:1982, Low-voltage controlgear Part 2: Semiconductor contactors (solid state contactors)	___
IEC 60227-3:1993, Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V Part 3 : Non-sheathed cables for fixed wiring	SLS 733 : 1995 PVC insulated cables with copper conductors for electric power and lighting

IEC 60227-4:1992, Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V – Part 4 : Sheathed cables for fixed wiring	SLS 733 PVC insulated cables with copper conductors for electric power and lighting
IEC 60245-3:1994, Rubber insulated cables of rated voltages up to and including 450/750 V Part 3 : Heat resistant silicone insulated cables	___
IEC 60245-4:1994, Rubber insulated cables of rated voltages up to and including 4550/750 V Part 4 : Cords and flexible cables	SLS 1143 insulated cables Part 2 : 1996 Requirements for rubber Insulated flexible cord
IEC 60269, Low-voltage fuses	___
IEC 60364-3:1993, Electrical installations of Building Part 3: Assessment of general Characteristics	___
IEC 60364-4-41 : 1992. Electrical Installations of buildings Part 4: Protection for safety Chapter 41 : Protection against electric shock	___
IEC 60364-4-443 : 1995. Electrical installations of buildings Part 4 : Protection for safety Chapter 44: Protection against over voltages – Section 443 : Protection against over voltages of atmospheric origin or due to switching	___
IEC 60364-4-46:1981, Electrical installations of buildings – Part 4 : Protection for safety – Chapter 46 : Isolation and switches	___
IEC 60364-5-54 :1980, Electrical installations of buildings – Part 5: Selection and erection of electrical equipment – Chapter 54 : Earthing arrangements and protective conductors	___
IEC 60417 (all parts), Graphical symbols for use On equipment. Index, survey and compilation Of the single sheets	SLS 690 : 1985 Graphical symbols used in electrotechnology
IEC 60445:1988, Identification equipment terminals and of terminations of certain designated conductors, including general rules for and alphanumeric system	___

IEC 60446 : 1989, Identification of conductors by colours or numerals	___
IEC 60447 : 1993, Man-machine interface (MMI) – Actuating principles	___
IEC 60502:1994, Extruded solid dielectric insulated power cables for rated voltages from 1 kV to 30 kV	___
IEC 60529 : 1989, Degrees of protection provided by enclosures (IP Code)	SLS 963 : 1992 Classification for degrees of protection provided by enclosures (IP code)
IEC 60664-1:1992, Insulation coordination for equipment within low-voltage systems - Part 1: Principles, requirements and tests	___
IEC 60750:1983, Item designation in electro technology	___
IEC 60865 (all parts), Short-circuit currents Calculation of effects	___
IEC 60890:1987, A method of temperature-rise assessment by extrapolation for partially type tested assemblies (PTTA) of low-voltage switchgear and controlgear	___
IEC 60947-1:1988 Low voltage switchgear and controlgear – Part 1: General rules	___
IEC 60947-3:1999, Low-voltage switchgear and Controlgear – Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units	___
IEC 60947-4-1:1990, Low voltage switchgear and controlgear – Part 4: Contactors and motor starters – Section 1 : Electromechanical contactors and motor-starters.	___
IEC 61000-4-2:1995, Electromagnetic compatibility (EMC) – Part 4 : Testing and measurement techniques Section 2 : Electrostatic discharge immunity test – Basic EMC Publication	___

IEC 61000-4-3:1995, Electromagnetic compatibility (EMC) – Part 4 : Testing and measurement techniques Section 3. Radiated, radio-frequency, electromagnetic field immunity test	___
IEC 61000-4-4:1995, Electromagnetic compatibility (EMC) – Part 4: Testing and measurement techniques Section 4: Electrical fast transient burst immunity test - Basic EMC Publication	___
IEC 61000-4-5:1995, Electromagnetic compatibility (EMC) Part 4: Testing and measurement techniques Section 5 : Surge immunity tests	___
IEC 61117:1992, A method for assesting the short-Circuit withstand strength of partially typetested assemblies (PTTA)	___
CISPR 11:1990, Limits and methods of measurement if electromagnetic disturbance characteristics of Industrial, scientific snd medical (ISM) radio frequency equipment	___

NATIONAL APPENDIX

1. Add the following NOTE at the end of 1st paragraph of Clause **8.3.1**.

NOTE

Refer Annex A for proper laying and mounting.

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