

## RWANDA STANDARDS IN ELECTRICAL AND ELECTRONICS ENGINEERING

SNo	RS Number	Title	Scope
1	RS IEC 60950 – 1	IT equipment safety	<p>This standard is applicable to mains-powered or battery –powered information technology equipment ,including electrical business equipment and associated equipment, with a rated voltage not exceeding 600 V.Is also applicable to such information technology equipment:</p> <ul style="list-style-type: none"> <li>- designed for use as telecommunication terminal equipment and telecommunication network infrastructure equipment, regardless of the source of power;</li> <li>-designed and intended to be connected directly to, or used as infrastructure equipment in, a cable distribution system, regardless of the source of the power</li> <li>-designed to use the AC mains supply as communication transmission medium.</li> </ul> <p>The standard also specifies requirements intended to reduce risks of fire, electric shock or injury for the operator and layman who may come into contact with the requirement and, where specifically stated, for a service person.</p>
2	RS IEC 60227 - 1	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750V – Part 1: General requirements.	The standard applies to rigid and flexible cables with insulation, and sheath if any, based on polyvinyl chloride, of rated voltages $U_0/U$ up to and including 450/750 V used in power installations of nominal voltage not exceeding 450/750 V a.c.
3	RS IEC 60227 – 2	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750V – Part 2: Test methods.	The standard details the particular specifications for both circular and flat lift cables and cables for flexible connections of rated voltages up to and including 450/750 V.
4	RS IEC 60227 – 3	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750V – Part 3: Non – sheathed cables for fixed wiring.	<p>The standard details the particular specifications for polyvinyl chloride insulated single-core non-sheathed cables for fixed wiring of related voltages up to and including 450/750 V.</p> <p>All cables shall comply with the appropriate requirements given in IEC 60227-1 and the individual types of cables shall each comply</p>

			with the particular requirements of this part.
5	RS IEC 60227 – 4	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750V – Part 4: Sheathed cables for fixed wiring.	The standard details the particular specifications for light polyvinyl chloride sheathed cables of rated voltage of 300/500 V.
6	RS IEC 60227 – 5	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750V – Part 5: Flexible cables(cords).	The standard details the particular specifications for polyvinyl chloride insulated flexible cables (cords),of rated voltages up to and including 300/500 V. Each cable shall comply with the appropriate requirements given in IEC 60227-1 and the particular requirements of this part.
7	RS IEC 60227 – 6	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750V – Part 6: Lift cables and cables for flexible connections fixed wiring.	This part of IEC 60227 details the particular specifications for both circular and flat lift cables and cables for flexible connections of rated voltages up to and including 405/750 V.
8	RS IEC 60227 - 7	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750V – Part 7: Flexible cables screened and unscreened with two or more conductors.	This part of IEC 60227 details the particular specifications Flexible cables screened and unscreened with two or more conductors . All cables shall comply with the appropriate requirements given in IEC 60227-1 and the individual types of cables shall each comply with the particular requirements of this part.
9	RS IEC 60228	Conductors of insulated cables	This standard specifies the nominal cross-sectional areas, in the range 0,5mm <sup>2</sup> to 2500mm <sup>2</sup> , for conductor in electric power cables and cords of wide range of types. Requirements for numbers and sizes of wires and resistance values are also included. These conductors include solid and stranded copper, aluminium alloy conductors in cables for fixed installations and flexible copper conductors. The standard does not apply to conductors for telecommunication purposes.
10	RS IEC 60884 – 1	Plugs, Socket –outlets for house hold	This standard applies to plugs and fixed or portable socket –

		and similar purposes –Part1:General requirements	<p>outlets for a.c. only, with or without earthing contact, with a rated voltage greater than 50 V but not exceeding 440 V and a rated current not exceeding 32 A, intended for household and similar purposes, either indoors or outdoors.</p> <p>The rated current is limited to 16 A maximum for fixed socket-outlets provided with screwless terminals.</p> <p>Does not cover requirements for flush mounting boxes: however, it covers only those requirements for surface-type mounting boxes which are necessary for the tests on the socket-outlet.</p> <p>This standard also applies to plugs incorporated in cord sets, to plugs and portable socket-outlets incorporated in cord extension sets and to plugs and socket-outlets which are a component of an appliance, unless otherwise stated in the standard for the relevant appliance.</p> <p>The standard does not apply to plugs, socket-outlets and couplers for industrial purposes; appliance couplers; plugs, fixed and portable socket-outlets for ELV; fixed socket-outlets combined with fuses, automatic switches.</p>
11	RS IEC 60884 – 2 - 1	Plugs, Socket –outlets for house hold and similar purposes – Part2-1:Particular requirements for fused plugs	This standard applies where fuses are primarily intended to protect the flexible cable or cord (e.g. with ring circuits)These fuses are not intended to protect appliances or parts of them against overload.
12	RS IEC 60884 – 2 -2	Plugs, Socket –outlets for house hold and similar purposes – Part2-2:Particular requirements socket outlets for appliances	This part applies to socket-outlets for a.c. only, with or without earthing contact, with a rated voltage not exceeding 250 V and a rated current not exceeding 16 A, which are integrated or intended to be incorporated in or fixed to appliances, hereafter referred to as socket-outlets for appliances.
13	RS IEC 60884 – 2 –3	Plugs, Socket –outlets for house hold and similar purposes – Part2-3:Particular requirements for switched socket outlets without interlock	This standard applies to fixed switched socket –outlets for a.c. only, with or without earthing contact, with a rated voltage not exceeding 440V and a rated current not exceeding 32 A, intended for household and similar purposes, either indoors or outdoors.

		for fixed installations	
14	RS IEC 60884 – 2 - 4	Plugs, Socket –outlets for house hold and similar purposes – Part2 - 4:Particular requirements for plugs and socket outlets for SELV	<p>This standard applies to plugs, fixed or portable socket-outlets, and to socket-outlets for appliances from 6 V up to and including 48 V d.c. or a.c.(50/60 Hz) SELV with rated current of 16 A, intended for household and similar purposes, either indoors or outdoors.</p> <p>This standard does not cover requirements for flush mounting boxes: however, it covers only those requirements for surface-type mounting boxes which are necessary for the tests on the socket-outlet. It also applies to plugs and socket-outlets incorporated in cord sets integrated or incorporated in appliances or intended to be fixed to them.</p> <p>This standard does not apply to: plugs, socket-outlets and couplers for industrial purposes; appliance couplers; fixed socket-outlets combined with fuses, automatic switches, etc.</p>
15	RS IEC 60884 – 2 - 5	Plugs, Socket –outlets for house hold and similar purposes – Part2-5:Particular requirements for adapters	This standard applies to shuttered and non- shuttered, fused and non fused adaptors for a.c. only.
16	RS IEC 60884 – 2 - 6	Plugs, Socket –outlets for house hold and similar purposes – Part2-6:Particular requirements for switched socket outlets interlock for fixed installations	<p>This standard applies to switched socket – outlets with interlock for a.c. only, for fixed electrical installations, with or without earthing contact, with rated voltage above 50 V but not exceeding 440 V and a rated current not exceeding 32 A, intended for household and similar purposes, either indoors or outdoors.</p> <p>The rated current is limited to 16 A maximum for fixed socket-outlets provided with screwless terminals.</p> <p>Does not cover requirements for flush mounting boxes. However, it covers those requirements for surface –type mounting boxes which are necessary for the tests on socket-outlets.</p> <p>Does not apply also to interlocked socket-outlets for industrial purposes and interlocked socket-outlets for SELV.</p>
17	RS IEC 60998 - 1	Connecting devices for low voltage circuits for household and similar	This standard applies to connecting devices as separate entities for the connection of two or more electrical copper conductors

		purposes- Part 1:General requirements	(complying with IEC 60228 or IEC 60344) rigid (solid or stranded) or flexible, having a cross-sectional area of 0.2mm <sup>2</sup> up to and including 35mm <sup>2</sup> and equivalent AWG conductors with a rated voltage not exceeding 1000 V a.c. up to and including 1000 Hz and 1500 V d.c. where electrical energy is used for household and similar purposes. Connecting devices that require the use of special tools other than for twist-on connecting devices and insulation piercing connecting devices do not comply with this standard.
18	RS IEC 60998 – 2- 1	Connecting devices for low voltage circuits for household and similar purposes- Part 2- 1:Particular requirements for connecting devices as separate entities with screw -type clamping units	The standard applies to connecting devices with screw-type clamping units primarily suitable for connecting unprepared conductors.
19	RS IEC 60998 – 2 - 2	Connecting devices for low voltage circuits for household and similar purposes- Part 2-2:Particular requirements for connecting devices as separate entities with screwless clamping units	This standard applies to connecting devices with screw less-type clamping units primarily suitable for connecting unprepared conductors.
20	RS IEC 60998 – 2 – 3	Connecting devices for low voltage circuits for household and similar purposes- Part 2-3:Particular requirements for connecting devices as separate entities with insulation piercing clamping units	This standard applies to connecting devices with insulation piercing clamping units primarily suitable for connecting insulated unprepared conductors.
21	RS IEC 60998 – 2 - 4	Connecting devices for low voltage circuits for household and similar purposes- Part 2-4:Particular requirements for twist on connecting devices	This standard applies to twist-on connecting devices for connecting two or more unprepared rigid and/or flexible copper conductors having a cross –sectional area of 0.5 mm <sup>2</sup> up to and include 16mm <sup>2</sup> and complying with IEC 60228,the total cross-sectional area of the connected conductors not exceeding 35mm <sup>2</sup> .It covers low-voltage up to 1000 V a.c. and

			1500 V d.c. where electrical energy is utilized for household and similar purposes.
22	RS IEC 60086 - 1	Primary batteries – Part 1:General	The purpose of this part of IEC 60086 is to standardize primary batteries with respect t to their electromechanical system, dimensions, nomenclature, terminal configurations, markings, test methods, typical performance, safety and environment aspects.
23	RS IEC 60086 - 2	Primary batteries – Part 2:Physical and electrical specification	This part is applicable to primary batteries based on standardized electrochemical system. It specifies:- The physical dimensions -The discharge test conditions and discharge performance requirements.
24	RS IEC 60086 - 3	Primary batteries – Part 3:Watch batteries - Specification	Specifies dimensions, designation, methods of tests and requirements for primary batteries for watches. In several cases, a menu of test methods is given. When presenting battery electrical characteristics and/or performance data, the manufacturer specifies which test method was used.
25	RS IEC 60086 - 4	Primary batteries – Part 4: Safety of lithium batteries	This International Standard specifies tests and requirements for primary lithium batteries to ensure their safe operation under intended use and reasonably foreseeable misuse.
26	RS IEC 60086 - 5	Primary batteries – Part 5: Safety of batteries with aqueous electrolyte	This part specifies tests and requirements for primary batteries with aqueous electrolyte to ensure their safe operation under normal use and reasonably foreseeable misuse.
27	RS IEC 60095 - 1	Lead acid starter batteries – Part 1:General requirements and methods of test	This part is applicable to lead-acid batteries with a nominal voltage of 12 V, used primarily as a power source for the starting and igniting of internal combustion engines, lighting and for auxiliary equipment of internal combustion engine vehicles. These batteries are commonly called” starter batteries”. This standard is not applicable to batteries for other purpose, such as the starting of railcar internal combustion engines.

28	RS IEC 60095 - 2	Lead acid starter batteries - Part 2: Dimensions of batteries and dimensions and marking of terminals	This standard is applicable to lead-acid batteries used for starting, lighting and ignition of passenger automobiles and light commercial vehicles with nominal voltage of 12 V fastened to the vehicles by means of ledges on the long sides of the battery case (standard fastening).
29	RS IEC 61427	Secondary cells and batteries for photovoltaic energy systems(PVES) – General requirements and methods of test	This standard gives general information relating to the requirements of the secondary batteries used in photovoltaic (PV) solar energy systems and to the typically methods of test used for the verification of battery performances. Does not include specific information relating to battery sizing, method of charge or PV system design.
30	RS IEC 60335 – 1	Household and similar electrical appliances – Safety :General requirements	This standard deals with the safety of electrical appliances for household and similar purposes, their rated voltage being not more than 250 V for single-phase appliances and 480 V for other appliances. Appliances not intended for normal household use but which nevertheless may be a source of danger to the public, such as appliances intended to be used by laymen shops, in light industry and on farms, are within the scope of this standard.
31	RS IEC 60335 – 2 - 15	Household and similar appliances – Safety: Particular requirements for appliances for heating liquids	This standard deals with the safety of electrical appliances for heating liquids for household and similar purposes, their rated voltages being not more than 250 V
32	RS IEC 60335 – 2 - 35	Household and similar electrical appliances – Safety: Particular requirements for instantaneous water heaters	This standard deals with the safety of electric instantaneous water heaters for household and similar purposes and intended for heating water below boiling temperature, their rated voltage not being more than 250 V for single-phase appliances and 480 V for other appliances. Instantaneous water heaters incorporating bare heating elements are within the scope of this standard. Appliances not intended for normal household use but which nevertheless may be a source of danger to the

			public, such as appliances intended for use by laymen in shops, in light industry and on farms are within the scope of this standard.
33	RS IEC 60335 – 2 - 13	Household and similar electrical appliances – Safety: Particular requirements for deep fat fryers, frying pans and similar appliances	This standard deals with the safety of electric deep fat fryers having a recommended maximum quantity of oil not exceeding 5 l, frying Pans, woks and other appliances in which oil is used for cooking, and intended for household use only, their rated voltage being not more than 250 V.
34	RS IEC 60335 – 2 – 14	Household and similar electrical appliances – Safety :Particular requirements for Kitchen machines	This standard deals with the safety of electric kitchen machines for household and similar purposes, their rated voltages being not more than 250 V.

35	RS IEC 60335 – 2 – 3	Household and similar electrical appliances – Safety: Particular requirements for electric irons	This standard deals with the safety of electric dry irons and steam irons including those with a separate water reservoir or boiler having a capacity not exceeding 5 l, for household and similar purposes, their rated voltages being not more than 250 V. Appliances not intended for normal household use but which nevertheless may be a source of danger to the public, such as appliances intended for use by laymen in shops, in light industry and on farms are within the scope of this standard.
36	RS IEC 60335 – 2 – 24	Household and similar electrical appliances – Safety: Particular requirements for refrigerating appliances and ice – cream appliances and ice - makers	This standard deals with the safety of refrigerating appliances for household and similar, ice makers for all types and compression-type appliances, their rated voltages being not more than 250 V for single phase appliances and 480 V for other appliances and 24 V d.c. for appliances when battery operated.
37	RS IEC 60335 – 2 - 25	Household and similar electrical appliances – Safety – Part 25:Particular requirements for microwave ovens, including combination microwave ovens	This standard deals with the safety of microwave ovens for household use, their rated voltage being not more than 250 V. It also deals with combination microwave ovens, for which Annex AA is applicable. As far as is applicable, this standard deals with the common hazards presented by appliances that are encountered by all persons in and around the home. However, in general it does not take into account the use of appliances by young children or infirm persons without supervision; playing with the appliance by young children.
38	RS IEC 60502 - 1	Power cables with extruded insulation and their accessories for rated voltages from 1 kV(U <sub>m</sub> = 1,2 kV) up to 30 kV(U <sub>m</sub> = 36kV)	The standard specifies the construction , dimensions and tests requirements of power cables with extruded solid insulation for rated voltages of 1 kV (U <sub>m</sub> = 1,2kV) and 3 kV (U <sub>m</sub> = 3,6kV) for fixed installations such as distributio0n networks or

		Part 1:Cables for rated voltages of 1 kV(Um=1,2kV) and 3 kV(Um=3,6kV)	<p>industrial installations.</p> <p>The standard includes cables which exhibit properties of reduced flame spread, low levels of smoke emission and halogen-free gas emission when exposed to fire.</p> <p>Cables for special installation and service conditions are not included, for example cables for overhead networks, the mining industry, nuclear power plants (in and around the containment area), submarine use or shipboard application.</p>
39	RS IEC 60598 - 1	Luminaires – Part 1:General requirements and tests	This part 1 specifies general requirements for luminaires, incorporating electric light sources for operation from supply voltages up to 1000 V. The requirements and related tests of this standard cover: classification, marking, mechanical construction and electrical construction.
40	RS IEC 60598 – 2 - 17	Luminaires.Part 2: Particular requirements. Section Seventeen – Luminaries for stage lighting, television and film studios (outdoor and indoor)	It specifies requirements for stage, television and film studio luminaires (including spot and floodlighting projectors),for use with tungsten filament, tubular fluorescent and other discharge lamps on supply voltages not exceeding 1000 V.
41	RSIEC 60598 – 2 - 1	Luminaires. Part 2: Particular requirements. Section one: Fixed general purpose luminaires	This part specifies requirements for fixed general purpose luminaires for use with tungsten filament, tubular fluorescent and other discharge lamps on supply voltages not exceeding 1000 V.
42	RS IEC 60598 – 2 - 3	Luminaires. Part 2 - 3: Particular requirements – Luminaires for road and street lighting	This standard specifies requirements for :luminaires for road, street lighting and other public outdoor lighting application; tunnel lighting; column-integrated luminaires with a minimum total height above normal ground level of 2,5 m; and for use with electrical lighting sources on supply voltages not exceeding 1000 V.
43	RS IEC 60598 – 2 - 4	Luminaires. Part 2 : Particular requirements – Section 4:Portable general purpose luminaires	This standard specifies requirements for portable general purpose luminaires , other than handlamps, for use with tungsten filament, tubular fluorescent and other discharge lamps on supply voltages not exceeding 250 V
44	RS IEC 60598 – 2 - 8	Luminaires. Part 2 - 8 : Particular	This standard specifies requirements for handlamps and

		requirements – Handlamps	similar portable luminaires which are held in the hand when used ,for use with tungsten filament and tubular fluorescent lamps on supply voltages not exceeding 250 V.
45	RS IEC 60598 – 2 - 9	Luminaires. Part 2: Particular requirements. Section Nine :Photo and Film luminaires (non – professional)	This standard specifies requirements for photo and film luminaires(non-professional)for use with tungsten filament lamps on supply voltages not exceeding 250 V, including low-pressure tungsten halogen lamps specified in IEC Publication 357 with the reference 357-IEC-3155.

46	RS IEC 60670 - 22	Boxes and enclosures for electrical accessories for household and similar fixed electrical installations – Part 22:Particular requirements for connecting boxes and enclosures	The standard applies to boxes ,enclosures and parts of enclosures(hereafter called’ boxes’ and ‘enclosures’) for electrical accessories with rated voltage not exceeding 1000 V a.c. and 1500 V d.c. intended for household or similar fixed electrical installations, either indoors or outdoors. This standard applies to connecting boxes for junction(s) and/or tapping(s)
47	RS IEC 61959	Secondary cells and batteries containing alkaline or other non- acid electrolytes – Mechanical test for sealed portable secondary cells and batteries	The standard specifies tests and requirements for verifying the mechanical behavior of sealed portable secondary cells and batteries during handling and normal use. It provides test objectives, methods of test and acceptance criteria relevant to sealed portable secondary cells and batteries of different electrochemical systems(Ni-Cd, Ni-MH and Lithium)sizes and shapes (cylindrical, prismatic and button).
48	RS IEC 61960	Secondary cells and batteries containing alkaline or other non-acid electrolytes - Secondary lithium cells and batteries for portable applications	This standards specifies performance tests, designations, markings, dimensions and other requirements for secondary lithium single cells and batteries for portable applications

49	RS IEC 62133	Secondary cells and batteries containing alkaline or other non- acid electrolytes – Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications	This standards specifies requirements and tests for the safe operation of portable sealed secondary cells and batteries(other than button)containing alkaline or other non-acid electrolyte, under intended use and reasonably foreseeable misuse
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