

UNIT STANDARD, PENGUJIAN & MAKMAL AKREDITASI CAWANGAN KEJURUTERAAN ELEKTRIK

1 April 2016

		STANDARD TE	RKINI		
		hingga Mac 2016. Bel kan pada muka surat be	-		yang telah
TINDAKAN	***************************************				
Terbitan Umum	[✓]	Kegunaan Dalaman	[]	Perlu Tindakan	[]
PENTADBIRAN					
Disediakan				Tandatangan	
Disemak				d d	
Disahkan				A	
-					

KANDUNGAN

- 1. Low-voltage Electrical Installations
- 2. Switchboards
- 3. Lighting
- 4. Lamps/LED-lamps
- 5. Lampholders
- 6. Switchgears (ACB, MCCB, Fused Switchgears, Isolating Switches, Contactors and ATS)
- 7. Surge Protective Devices
- 8. Road Lighting Luminaires
- 9. Transformers
- 10. High-Voltage Switchgear and Controlgear
- 11. Lightning Protection System
- 12. Electromagnetic Campatibility (EMC)
- 13. Safety
- 14. Power Cables & Cable Glands
- 15. Medical Electrical Equipment
- 16. Testing
- 17. Switches
- 18. Protection Relays
- 19. Residual Current Device
- 20. Powertrack Systems
- 21. Electrical Accessories
- 22. Insulation Monitoring
- 23. Design
- 24. Withdrawn Standards
- 25. Replaced Standards

STANDARD NO.	DESCRIPTION		
1. Low-voltage Electrical Installations			
IEC 60364-5 53:2001 + AM1:2002 + AM2:2015 CSV	Electrical installations of buildings - Part 5-53: Selection and erection of electrical equipment - Isolation, switching and control		
IEC 60364-8-1 ed1.0 (2014-10)	Low-voltage electrical installations - Part 8-1: Energy efficiency		
IEC 60364-7-753 ed2.0 (2014-05)	Low-voltage electrical installations - Part 7-753: Requirements for special installations or locations – Heating cables and embedded heating systems		
IEC/TR 61200-52 ed2.0 (2013-07)	Electrical installation guide - Part 52: Selection and erection of electrical equipment - Wiring systems		
IEC 60364-7-714 ed2.0 (2011-12)	Low-voltage electrical installations - Part 7-714: Requirements for special installations or locations - External lighting installations		
IEC 60364-5-54 ed3.0 (2011-03)	Low-voltage electrical installations - Part 5-54: Selection and erection of electrical equipment - Earthing arrangements and protective conductors		
2. Switchboards			
IEC 61439-5 ed2.0 (2015-03)	Corrigendum 1 - Low-voltage switchgear and controlgear assemblies - Part 5: Assemblies for power distribution in public networks		
IEC 61439-3 ed1.0 (2012-02)	Low-voltage switchgear and controlgear assemblies – Part 3: Distribution board intended to be operated by ordinary persons (DBO)		
IEC 61439-1 ed2.0 (2011-08)	Low-voltage switchgear and controlgear assemblies - Part 1: General rules		
IEC 61439-2 ed2.0 (2011-08)	Low-voltage switchgear and controlgear assemblies - Part 2: Power switchgear and controlgear assemblies		
IEC 62208 ed2.0 (2011-08)	Empty enclosures for low-voltage switchgear and controlgear assemblies - General requirements		
3. Lighting			
IEC 60598-1:2014/COR1:2015	Corrigendum 1 - Luminaires - Part 1: General requirements and tests		
IEC 62493 ed2.0 (2015-03)	Assessment of lighting equipment related to human exposure to electromagnetic fields		

STANDARD NO.	DESCRIPTION
IEC 60598-2-22 ed4.0 (2015-03)	Corrigendum 1 - Luminaires - Part 2-22: Particular requirements - Luminaires for emergency lighting
IEC 60901-1-am6 ed2.0 (2014-12)	Amendment 6 – Single-capped fluorescent lamps – Performance specifications
IEC 61195 ed2.2 (2014-09)	Double-capped fluorescent lamps – Safety specifications
IEC 61195-am2 ed2.0 (2014-09)	Amendment 2 – Double-capped fluorescent lamps – Safety specifications
IEC 62722-1 ed1.0 (2014-09)	Luminaires performance – Part 1 : General requirements
IEC 60598-1 ed8.0 (2014-05)	Luminaires - Part 1 : General requirements and tests
IEC 60598-2-2 ed3.0 (2011-11)	Luminaires - Part 2-2: Particular requirements - Recessed luminaires
4. Lamps / LED-lamps	
IEC 60929:2011+AMD1:2015 CSV	AC and/or DC-supplied electronic control gear for tubular fluorescent lamps - Performance requirement
IEC 62717:2014 + AM1:2015 CSV	LED modules for general lighting - Performance requirements
IEC 62560:2011 + AM1:2015 CSV	Self-ballasted LED-lamps for general lighting services by voltage > 50 V - Safety specifications
IEC 62776 ed1.0 (2015-03)	Corrigendum 1 - Double-capped LED lamps designed to retrofit linear fluorescent lamps - Safety specifications
IEC 60968 ed3.0 (2015-03)	Corrigendum 1 - Self-ballasted fluorescent lamps for general lighting services - Safety requirements
IEC 61347-1 ed3.0 (2015-02)	Lamp controlgear - Part 1: General and safety requirements
IEC 62717 ed1.0 (2014-12)	LED modules for general lighting – Performance requirements
IEC 62776 ed1.0 (2014-12)	Double-capped LED lamps designed to retrofit linear fluorescent lamps - Safety specifications
IEC 61347-2-13 ed2.0 (2014-09)	Lamp controlgear – Part 2-13 : Particular requirements for d.c or a.c supplied electronic controlgear for LED modules.

STANDARD NO.	DESCRIPTION	
IEC 62031 ed1.2 (2014-09)	LED modules for general lighting – Safety specifications	
IEC 62031-am2 ed1.0 (2014-09)	Amendment 2 - LED modules for general lighting – Safety specifications	
IEC 62504 ed1.0 (2014-06)	General lighting - Light emitting diode (LED) products and related equipment - Terms and definitions	
IEC/TR 62696 ed1.0 (2011-04)	Luminaires - Application of the IK code IEC 62262	
5. Lampholders		
IEC 60400 ed7.2 (2014-06)	Lampholders for tubular fluorescent lamps and starterholders	
IEC 60838-1 ed4.2 (2011-06)	Miscellaneous lampholders - Part 1: General requirements and tests	
IEC 60400-am1 ed7.1 (2011-08)	Lampholders for tubular fluorescent lamps and starterholders	
6. Switchgears (ACB, MCCB, Fu	used Switchgears, Isolating Switches, Contactors	
IEC 60947-1 ed5.2 (2014-09)	Low-voltage switchgear and controlgear - Part 1: General rules	
IEC 60947-1-am2 ed5.0 (2014-09)	Amendment 2 - Low-voltage switchgear and controlgear - Part 1 : General rules	
7. Surge Protective Devices		
IEC 61643-22 ed2.0 (2015-06)	Low-voltage surge protective devices - Part 22: Surge protective devices connected to telecommunications and signalling networks - Selection and application principles	
IEC 61643-11 ed1.0 (2011-03)	Low-voltage surge protective devices - Part 11: Surge protective devices connected to low-voltage power systems - Requirements and test methods	
MS IEC 61643-12:2012	Low-voltage surge protective devices - Part 12: Surge protective devices connected to low-voltage power distribution systems - Selection and application principles	
8. Road Lighting Luminaires		
IEC 62384 ed1.1 (2011-03)	DC or AC supplied electronic controlgear for LED modules - Performance requirements	

STANDARD NO.	DESCRIPTION	
IEC 60598-2-3 ed3.1 (2011-11)	Luminaires - Part 2-3: Particular requirements - Luminaires for road and street lighting	
9. Transformers		
IEC 60076-1 ed3.0 (2011-04)	Power transformers - Part 1: General	
IEC 60076-3 ed3.0 (2013-07)	Power transformers – Part 3 : Insulation levels, dielectric tests and external clearances in air	
MS IEC 60076-12:2012	Power Transformers - Part 12: Loading Guide For Dry- Type Power Transformers (IEC 60076-12:2008, IDT)	
MS 60076-11:2012	Power Transformers - Part 11: Dry-Type Transformers (IEC 60076-11:2004, MOD)	
10. High-Voltage Switchgear and	Controlgear	
IEC 62271-200 ed2.0 (2015-06)	Corrigendum 1 - High-voltage switchgear and controlgear - Part 200: AC metal-enclosed switchgear and controlgear for rated voltages above 1 kV and up to and including 52 kV	
IEC 62271-102 ed1.0 (2014-06)	Corrigendum 4 - High voltage switchgear and controlgear – Part 102 : Alternating current disconnectors and earthing switches	
IEC 62271-106 ed1.0 (2014-02)	Corrigendum 1 – High-voltage switchgear and controlgear – Part 106: Alternating current contactors, contactor-based controller and motor-starters.	
IEC 62271-103 ed1.0 (2013-10)	Corrigendum 1 – High-voltage switchgear and controlgear – Part 103 : Switches for related voltages above 1 kV up to and including 52 kV	
IEC 62271-200 ed2.0 (2011-10)	High-voltage switchgear and controlgear - Part 200: AC metal-enclosed switchgear and controlgear for rated voltages above 1 kV and up to and including 52 kV	
IEC 62271-1 ed1.1 (2011-08)	High-voltage switchgear and controlgear - Part 1: Common specifications	
11. Lightning Protection System		
IEC 62305-1 ed2.0 (2010-12)	Protection against lightning – Part 1 : General principles	
IEC 62305-2 ed2.0 (2010-12)	Protection against lightning – Part 2 : Risk management	

STANDARD NO.	DESCRIPTION	
IEC 62305-3 ed2.0 (2010-12)	Protection against lightning – Part 3 : Physical damage to structures and life hazard	
IEC 62305-4 ed2.0 (2010-12)	Protection against lightning – Part 4 : Electrical and electronic systems within structures	
IEC 62561-1 ed1.0 (2012-02)	Lightning protection system components (LPSC) – Part 1: Requirements for connection components	
IEC 62561-2 ed1.0 (2012-02)	Lightning protection system components (LPSC) – Part 2: Requirements for conductors and earth electrodes	
IEC 62561-3 ed1.0 (2012-02)	Lightning protection system components (LPSC) – Part 3: Requirements for isolating spark gaps (ISG)	
IEC 62561-5 ed1.0 (2011-06)	Lightning protection system components (LPSC) - Part 5: Requirements for earth electrode inspection housings and earth electrode seals	
IEC 62561-6 ed1.0 (2011-06)	Lightning protection system components (LPSC) - Part 6: Requirements for lightning strike counters (LSC)	
IEC 62561-7 ed1.0 (2011-11)	Lightning protection system components (LPSC) - Part 7: Requirements for earthing enhancing	
12. Electromagnetic compatibility (EMC)		
IEC 60364-4-44:2007 + AM1:2015 CSV	Low-voltage electrical installations - Part 4-44: Protection for safety - Protection against voltage disturbances and electromagnetic disturbances	
IEC TR 61000-1-7:2016	Electromagnetic compatibility (EMC) - Part 1-7: General - Power factor in single-phase systems under non-sinusoidal conditions	
IEC 61000-4-6 ed4.0 (2015-06)	Corrigendum 1 - Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields	
IEC 61000-4-30 ed3.0 (2015-02)	Electromagnetic compatibility (EMC) - Part 4-30: Testing and measurement techniques - Power quality measurement methods	

STANDARD NO.	DESCRIPTION
IEC 61000-6-5:2015	Electromagnetic compatibility (EMC) - Part 6-5: Generic standards - Immunity for equipment used in power station and substation environment
IEC 60050-161-am5 ed1.0 (2015-02)	Amendment 5 - International Electrotechnical Vocabulary - Chapter 161: Electromagnetic compatibility
IEC 61000-1-6 ed1.0 (2014-10)	Corrigendum 1 – Electromagnetic compatibility (EMC) – Part 1-6 : General – Guide to the assessment of measurement uncertainty
IEC 61000-4-19 ed1.0 (2014-05)	Electromagnetic compatibility (EMC) – Part 4-19: Testing and measurement techniques – Test for immunity to conducted, differential mode disturbances and signalling in the frequency range 2 kHz to 150 kHz at a.c. power ports.
IEC 61000-4-5 ed3.0 (2014-05)	Electromagnetic compatibility (EMC) – Part 4-5 : Testing and measurement techniques – Surge immunity test
IEC 61000-3-2 ed4.0 (2014-05)	Electromagnetic compatibility (EMC) – Part 3-2 : Limits – Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)
IEC 61000-4-6 ed4.0 (2013-10)	Electromagnetic compatibility (EMC) – Part 4-6: Testing and measurement techniques – Immunity to conducted disturbances, induced by radio-frequency fields.
IEC 61000-3-3 ed3.0 (2013-05)	Electromagnetic compatibility (EMC) – Part 3-3: Limits – Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection.
IEC/TR 61000-3-14 ed1.0 (2011-10)	Electromagnetic compatibility (EMC) - Part 3-14: Assessment of emission limits for harmonics, inter- harmonics, voltage fluctuations and unbalance for the connection of disturbing installations to LV power systems

STANDARD NO.	DESCRIPTION
13. Safety	
IEC 61140:2001+AMD1:2004 CSV	Protection against electric shock - Common aspects for installation and equipment
IEC 60903 ed3.0 (2014-07)	Live working – Electrical insulating gloves
IEC 60529 ed2.2 (2013-10)	Corrigendum 1 – Degrees of protection provided by enclosures (IP Code)
IEC/TR 60479-4 ed2.0 (2011-10)	Effects of current on human beings and livestock - Part 4: Effects of lightning strokes
IEC/TR 60479-5 ed1.0 (2007-11)	Effects of current on human beings and livestock - Part 5: Touch voltage threshold values for physiological effects
14. Power Cables & Cable Gland	/s
IEC 61914:2015 RLV	Cable cleats for electrical installations
IEC 60702-1 ed3.1 Consol. with am1 (2015-01)	Mineral insulated cables and their terminations with a rated voltage not exceeding 750 V - Part 1: Cables
IEC 60702-2 ed2.1 Consol. with am1 (2015-01)	Mineral insulated cables and their terminations with a rated voltage not exceeding 750 V - Part 2: Terminations
IEC 60840 ed4.0 (2011-11)	Power cables with extruded insulation and their accessories for rated voltages above 30 kV (U_m = 36 kV) up to 150 kV (U_m = 170 kV) - Test methods and requirements
IEC 62444 ed1.0 (2010-08)	Cable glands for electrical installations
15. Medical Electrical Equipmen	t
IEC 61558-2-15 ed2.0 (2011-11)	Safety of transformers, reactors, power supply units and combinations thereof - Part 2-15: Particular requirements and tests for isolating transformers for the supply of medical locations

STANDARD NO.	DESCRIPTION		
16. Testing			
IEC 61010-2-010 ed3.0 (2014-09)	Safety requirements for electrical equipment for measurement, control and laboratory use – Part 2-010 : Particular requirements for laboratory equipment for the heating of materials.		
Project IEC 61010-2-033 ed1.0 (2012-01)	Safety requirements for electrical equipment for measurement, control and laboratory use – Part 2-033: Particular requirements for hand-held multi meters and other hand-held meters, for domestic and professional use, capable of measuring mains voltage.		
17. Switches			
IEC 60669-2-5 ed1.0 (2013-10)	Switches for household and similar fixed electrical installations – Part 2-5: Particular requirements – Switches and related accessories for use in home and building electronic systems (HBES)		
IEC 60669-1 ed3.0 (2012-02)	Interpretation sheet 2 – Switches for household and similar fixed-electrical installations – Part 1 : General requirements		
IEC 60669-2-6 ed1.0 (2012-01)	Switches for household and similar fixed electrical installation – Part 2-6: Particular requirements – Fireman's switches for exterior and interior signs and luminaries.		
18. Protection Relays			
IEC 60255-27 ed2.0 (2013-10)	Measuring relays and protection equipment – Part 27: Product safety requirements		
IEC 60255-26 ed3.0 (2013-05)	Measuring relays and protection equipment – Part 26 : Electromagnetic compatibility requirements		
19. Residual Current Device			
IEC 62640 ed1.0 (2015-05)	Amendment 1 - Residual current devices with or without overcurrent protection for socket-outlets for household and similar uses		
IEC 61008-1-am2 ed3.0 (2014-01)	Corrigendum 1 – Amendment 2 – Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs) – Part 1: General rules		

STANDARD NO.	DESCRIPTION		
IEC 61009-1-am2 ed3.0 (2014-01)	Corrigendum 1 – Amendment 2 – Residual current operated circuit-breakers with integral overcurrent protection for household and similar uses (RCBOs) – Part 1 : General rules		
20. Powertrack Systems			
IEC 61543-1 ed2.1 (2014-06)	Powertrack systems – Part 1 : General requirements		
IEC 61543-1-am1 ed2.0 (2014-06)	Amendment 1 - Powertrack systems – Part 1 : General requirements		
IEC 61543-21 ed2.0 (2014-06)	Powertrack systems – Part 21 : Particular requirements for powertrack systems intended for wall and ceiling mounting		
IEC 61543-22 ed2.0 (2014-06)	Powertrack systems – Part 22 : Particular requirements for powertrack systems intended for onfloor or underfloor installation		
21. Electrical Accessories			
IEC 60898-1:2015	Electrical accessories - Circuit-breakers for overcurrent protection for household and similar installations - Part 1: Circuit-breakers for a.c. operation		
IEC 60898-1 ed2.0 (2015-03)	Electrical accessories - Circuit-breakers for overcurrent protection for household and similar installations - Part 1: Circuit-breakers for a.c. operation		
IEC 60670-22 ed1.1 (2015-03)	Boxes and enclosures for electrical accessories for household and similar fixed electrical installations - Part 22: Particular requirements for connecting boxes and enclosures.		
IEC 60670-1 ed2.0 (2015-03)	Boxes and enclosures for electrical accessories for household and similar fixed electrical installations - Part 1: General requirements		
22. Insulation Monitoring			
IEC 61557-9 ed3.0 (2014-12)	Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c Equipment for testing, measuring or monitoring of protective measures - Part 9: Equipment for insulation fault location in IT systems		

STANDARD NO.	DESCRIPTION
IEC 61557-8 ed3.0 (2014-12)	Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c Equipment for testing, measuring or monitoring of protective measures - Part 8: Insulation monitoring devices for IT systems
23. Design	
IEC 60909-0:2016	Short-circuit currents in three-phase a.c. systems - Part 0: Calculation of currents

24. WITHDRAWN	25. REPLACED BY
IEC/PAS 62722-1 ed1.0 (2011-06) - Luminaire performance - Part 1: General requirements	IEC 62722-1 ed1.0 (2014-09) - Luminaire performance - Part 1: General requirements
IEC 60034-2A ed1.0 (1974-01) — Rotating electrical machines - Part 2: Methods for determining losses and efficiency of rotating electrical machinery form tests (excluding machines for traction vehicles) - Measurement of losses by the calorimetric method	IEC 60034-2-1 ed2.0 (2014-06) - Rotating electrical machines - Part 2-1: Standard methods for determining losses and efficiency from tests (excluding machines for traction vehicles)
IEC 60255-5 ed2.0 (2000-12) - Electrical Relays - Part 5: Insulation coordination for measuring relays and protection equipment - Requirements and tests	IEC 60255-27 ed2.0 (2013-10) - Measuring relays and protection equipment - Part 27: Product safety requirements
IEC 60255-22-1 ed3.0 (2007-10) - Measuring relays and protection equipment - Part 22-1: Electrical disturbance tests - 1 MHz burst immunity tests.	
IEC 60255-22-2 ed3.0 (2008-04) - Measuring relays and protection equipment - Part 22-2: Electrical disturbance tests - Electrostatic discharge tests	IEC 60255-26 ed3.0 (2013-05) - Measuring relays and protection equipment – Part 26 :
IEC 60255-22-3 ed3.0 (2007-07) - Measuring relays and protection equipment - Part 22-3: Electrical disturbance tests - Radiated electromagnetic field immunity	Electromagnetic compatibility requirements
IEC 60255-22-4 ed3.0 (2008-04) - Measuring relays and protection equipment - Part 22-4: Electrical disturbance tests - Electrical fast transient/burst immunity test	

24. WITHDRAWN	25. REPLACED BY
IEC 60255-22-5 ed3.0 (2008-11) - Measuring relays and protection equipment - Part 22-5: Electrical disturbance tests - Surge immunity test	
IEC 60255-22-6 ed3.0 (2001-04) - Electrical relays - Part 22-6: Electrical disturbance tests for measuring relays and protection equipment - Immunity to conducted disturbances induced by radio frequency fields	
IEC 60255-22-7 ed3.0 (2003-04) - Electrical relays - Part 22-7: Electrical disturbance tests for measuring relays and protection equipment - Power frequency immunity tests	
IEC 60255-25 ed1.0 (2000-03) - Electrical relays - Part 22-7: Electrical disturbance tests for measuring relays and protection equipment - Power frequency immunity tests	
IEC 60439-3 am1 ed1.0 (1993-10) - Amendment 1 - Low-voltage switchgear and controlgear assemblies. Part 3: Particular requirements for low-voltage switchgear and controlgear assemblies intended to be installed in places where unskilled persons have access for their use - Distribution boards IEC 60439-3 am2 ed1.0 (2001-02) - Amendment 2 - Low-voltage switchgear and controlgear assemblies. Part 3: Particular requirements for low-voltage switchgear and controlgear assemblies intended to be installed in places where unskilled persons have access for their use - Distribution boards IEC 60439-3 ed1.0 (1990-12) - Low-voltage switchgear and controlgear assemblies. Part 3: Particular requirements for low-voltage switchgear and controlgear assemblies intended to be installed in places where unskilled persons have access for their use - Distribution boards	IEC 61439-3 ed1.0 (2012- 02) – Low-voltage switchgear and controlgear assemblies - Part 3: Distribution boards intended to be operated by ordinary persons (DBO)

24 WITHDRAWN	25. REPLACED BY
IEC 60439-3 ed1.2 (2001-05) - Low-voltage switchgear and controlgear assemblies - Part 3: Particular requirements for low-voltage switchgear and controlgear assemblies intended to be installed in places where unskilled persons have access for their use - Distribution boards	
IEC 61643-1:2005 - Surge Protective Devices Connected to Low-Voltage Power Distribution Systems- Part 1: Performance Requirements and Testing Methods	IEC 61643-11:2011 - Low-Voltage Surge Protective Devices-Part 11: Surge Protective Devices Connected to Low-Voltage Power Systems- Requirements and Test Methods
IEC 60265-1:1998 - High-voltage switches - Part 1: Switches for rated voltages above 1 kV and less than 52 kV	IEC 62271-103:2011 - High-voltage switchgear and controlgear - Part 103: Switches for rated voltages above 1 kV up to and including 52 kV