

Title of TC9X: Electrical and electronic applications for railways

Scope of TC9X: Standardisation of electrical and electronic systems, equipment and associated software for use in all railway applications, whether on vehicles or fixed installations, including urban transport

Documents	Pages
Documents directly steered by TC 9X	2, 3, 4, 5
Documents steered by CLC / SC 9XA	6, 7
Documents steered by CLC / SC 9XB	8, 9, 10, 11
Documents steered by CLC / SC 9XC	12, 13, 14, 15
Documents steered by TC 256 (under Modes 4 & 5)	16
Documents steered by CLC / TC 20 (cables) and TC 21X (batteries)	17,18

Stage codes: 3020 : Secretariat enquiry launched
4000 : Draft ready for CLC enquiry
5000 : Draft ready for vote
5099 : Draft ratified

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Documents directly steered by TC 9X				Stage 3020	Stage 4000	Stage 5000	Stage. 5099	Comments	Links
	EN 50155 (2 nd edition) + AA EN 50155 revised	(RA) – Electronic equipment used on rolling stock	M/024+				X X X	Published (2001) Published (2002) Published (2007)	IEC 60571
	EN 50261	(RA) – Mounting of electronic equipment					X	Published (1999) Withdrawn	
	EN 50207 EN 61287-1	(RA) – Electronic power convertors for rolling stock	M/024				X X	Withdrawn Published (2006)	IEC 61287 Maintenance cycle
WG 9	EN 50121-1	(RA) – Electromagnetic compatibility (EMC) - Part 1: General	M/024+				X	Published (2000)	IEC 62236-1
	EN 50121-2	Part 2: Emission of the whole railway system to the outside world	M/024+				X	Published (2000)	IEC 62236-2
	EN 50121-3-1	Part 3: Rolling stock - Train and complete vehicle	M/024+				X	Published (2000)	IEC62236-3-1
	EN 50121-3-2	Rolling stock apparatus	M/024+				X	Published (2000)	IEC62236-3-2
	EN 50121-4	Part 4: Signalling, communications	M/024+				x	Published (2000)	IEC 62236-4
	EN 50121-5	Part 5: Fixed installations	M/024+				x	Published (2000)	IEC 62236-5
		Revision of the series					x	Published (2006)	
		All parts: Corrigenda to refer only to the latest EMC Directive 2004/108/EC					x	Published (2008)	
	R009-003 (ex 50127-1)	(RA) – Guide to the specification of a guided transport system					x	Published (1998) Withdrawn (2006)	
WG 8	EN 50126 (renumbering into EN 50126-1)	(RA) – The Specification and Demonstration of Reliability, Availability, Maintainability and Safety (RAMS)	M/024+				x	Published (1999)	
	TR 50126-2	Application guide for safety					x	Corrigendum published (2006) Published (2007)	
	EN 50163 (2 nd edition)	(RA) – Supply voltages of traction systems	M/275				x	Published (2004)	IEC 60850

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Documents directly steered by TC 9X (continuation)				Stage 3020	Stage 4000	Stage 5000	Stage. 5099	Comments	Links
EN 50124-1	(RA) – Insulation coordination - Part 1 – Basic requirements – Clearances and creepage distances for all electrical and electronic equipment	M/024+					x	Published (2001)	
EN 50124-1 / A1	Addition of an informative annex to EN (Application guide on insulation coordination and creepage distances)						x	Published (2003)	
EN 50124-1 / A2	Revision of Tables A.2, B.1 and D.1						x	Published (2005)	
EN 50124-1	Corrigendum							Published (2007)	
EN 50124-2	Part 2 – Overvoltages and related protections	M/024+					x	Published (2001)	
EN 50125-1	(RA) – Environmental conditions for equipment - Part 1 – Equipment on board rolling stock	M/275					x	Published (1999)	
EN 50125-2	Part 2 – Equipment in fixed installations	M/275					x	Published (2002)	
EN 50125-3	Part 3 – Equipment for signalling and communications	M/275					x	Published (2003)	
R009-002	(RA) – Guide for the use of the terminology for testing procedures						x	Published (1998) Withdrawn (2006)	
WG 10	EN 50500 (RA) – Human exposure to electromagnetic fields						x	Published (2008)	
WG 11	EN 50463 (RA) – Energy measurement on board trains Extension of scope decided						x	Published (2007)	
	prEN 50463-1 (RA) – Energy measurement on board trains Part 1 – General			x	10/09			Draft for vote in preparation	
	prEN 50463-2 (RA) – Energy measurement on board trains Part 2 – Energy meter			x	10/09			Draft for vote in preparation	
	prEN 50463-3 (RA) – Energy measurement on board trains Part 3 – Input/output interfaces			x	10/09			Draft for vote in preparation	
	prEN 50463-4 (RA) – Energy measurement on board trains Part 4 – Communication onboard/ground			x	10/09			Draft for vote in preparation	
	prEN 50463-5 (RA) – Energy measurement on board trains Part 5 – Conformance testing procedure			x	10/09			Draft for vote in preparation	
WG 12	TR 50542 (RA) – Communication means between safety equipment and man machine interface (MMI)						x	Published (2010)	
WG 13	prEN 50553 (RA) – Requirements to provide running capability in case of fire on board of rolling stock (PR=20779)					x		Draft sent for vote	

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Documents directly steered by TC 9X (continuation)			Stage 3020	Stage 4000	Stage 5000	Stage 5099	Comments	Links
WG 14	prEN 50126-1 prEN 50126-2 prEN 50126-4 prEN 50126-5	(RA) – The specification and Demonstration of Reliability, Availability, Maintainability and Safety (RAMS) Full revision according to SG14 results			13/03		Draft for secretariat enquiry expected for 2011-09	
WG 14	prEN 50155	(RA) – Electronic equipment used on rolling stock Revision to be consistent with revised EN 50126 series			13/03		Draft for secretariat enquiry expected for 2011-09	
SG 14		Extension of scope of safety related standards				x	Work finished	
Ad-hoc group	IEC 60077-3 IEC 60077-4	(RA) – Electric equipment for rolling stock – Electrotechnical components – Rules for d.c. (Part 3) and a.c. (Part 4) circuit-breakers To produce a contribution, based on Modtrain results, to IEC to be conveyed through a National Committee, for the maintenance of these Standards					Work item cancelled. Group disbanded	
	EN 62267	Railway applications - Automated urban guided transport (AUGT) - Safety requirements				x	Published (2009)	
	EN 62290-2	Railway applications - Urban guided transport management and command/control systems - Part 2: Functional requirements specification				x	Published (2011)	
WG15	prEN 61375-1	Electronic railway equipment - Train communication network - Part 1: TCN - Train Communication Network general architecture			x		FDIS ready for vote in IEC/TC9	
WG15	prEN 61375-2-1	Electronic railway equipment - Train communication network - Part 2-1: WTB - Wire Train Bus			x		FDIS ready for vote in IEC/TC9	
WG15	prEN 61375-2-2	Electronic railway equipment - Train communication network - Part 2-2: WTB - Wire Train Bus conformance testing			x		FDIS ready for vote in IEC/TC9	
WG15	prEN 61375-3-1	Electronic railway equipment - Train communication network - Part 3-1: MVB - Multipurpose Vehicle Bus			x		FDIS ready for vote in IEC/TC9	
WG15	prEN 61375-3-2	Electronic railway equipment - Train communication network - Part 3-2: MVB - Multipurpose Vehicle Bus conformance testing			x		FDIS ready for vote in IEC/TC9	
WG15	prEN 61375-3-3	Electronic railway equipment - Train communication network - Part 3-3: CCN - CANopen Consist Network bus			x		FDIS ready for vote in IEC/TC9	

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Documents directly steered by TC 9X (continuation)				Stage 3020	Stage 4000	Stage 5000	Stage. 5099	Comments	Links
WG15	TR 50XXX	(RA) – Rolling Stock – Functional Interface Specification (FIS) between the Train Control and Monitoring System (TCMS) and the pantograph						Pending BT approval	
WG15	TR 50XXX	(RA) – Rolling Stock – Functional Interface Specification (FIS) between the Train Control and Monitoring System (TCMS) and the doors						Pending BT approval	
	EN 62520	Railway applications - Electric traction - Short-primary type linear induction motors fed by power converters					x	Published (2011)	

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Documents steered by SC 9XA (Signalling)				Stage 3020	Stage 4000	Stage 5000	Stage. 5099	Comments	Links
WG A11	EN 50128 prEN 50128	(RA) – Communication, signalling and processing systems - Software for railway control and protection systems Revision decided	+			x	x	Published (2001) Published (2011)	IEC 62279 See EN 50126-5
	EN 50129	(RA) – Communication, signalling and processing systems - Safety related electronic systems for signalling Revision	+				x	Published (2003) See EN 50126-4	
WG A2-3		Application guide for EN 50129 split in two parts (see below)							
WG A2-3	TR 50506-1	Guide for cross-acceptance (former chapter 8)					x	Published (2007)	
WG A2-3	TR 50506-2	Guide for safety assurance (other chapters)					x	Published (2009)	
	EN 50159- 1	(RA) – Communication, signalling and processing systems - Safety related communication in closed transmission systems	M/275				x	Published (2001)	
WG A12	EN 50159- 2 EN 50159	Safety related communication in open transmission systems Revision of both parts to be merged in a single standard	M/275				x x	Published (2001) Published (2010)	
	EN 50238-1	(RA) – Communication, signalling and processing systems - Compatibility between rolling stock and train detection systems General	M/275				x	Published (2003)	
WG A4-2	TS50238-2	Compatibility with track circuits				x		Published (2011)	
	TS50238-3	Compatibility with axle counters				x		Published (2011)	
	TS50238-3	Revision to consider a comment from Croatian NC						In progress	
	TS 50xxx	Characteristics of trackside train detection systems				09/12		No input from ERA Cancelled	
	TR 50507	Interference limits of existing track circuits on European railways					x	Published (2007)	
	EN 50239	(RA) – Communication, signalling and processing systems - Radio remote control system of traction vehicle for freight traffic SE & RO corridendum to include their national conditions	M/024				x x	Published (1999) Published (2010)	
	EN 50121-4	see EMC in page 2							
	EN 50125-3	see environmental conditions for equipment in page 3							
WG A9-D	TS 50459-1 to 6	Functional aspects of driver-machine interface Revision to be decided in coordination with ERA	M/275				x	Published 2005	
WG A9-D	TR 50459-7	Part 7: Specific Transmission Modules					x	Published 2007	
WG A9-D	TR 50511	External signalling for lines equipped with ERTMS Level 2					x	Published 2007	
x	Pr EN 50517	Definition of track-side objects in addition to cab-signalling					x	Voted, ratification on hold	New ERA RfS transferred to CEN/TC256
	R009 004	Systematic allocation of safety integrity requirements					x	Published (2001)	
	TR 50451	Supersedes R009 004					x	Published (2007)	

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Documents steered by SC 9XA (Signalling) (continuation)				Stage 3020	Stage 4000	Stage 5000	Stage. 5099	Comments	Links
	TR 50452	Radio remote control system of traction vehicle for freight traffic in multiple traction operation					x	Published (2007)	
WG A13	prEN 50XXX	RA – Signalling relays (Conversion of UIC leaflet 736)				12-04			
	prEN 50XXX	RA - ETCS driver machine interface						Pending BT approval	

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Documents steered by SC 9XB (Rolling stock)				Stage 3020	Stage 4000	Stage 5000	Stage 5099	Comments	Links
EN 60310 Ed3	(RA) – Rolling stock – Traction transformers and inductors	M/024					x	EN following // vote. Published (2004)	IEC 60310 : 2004
EN 60322	(RA) – Electric equipment for rolling stock – Rules for power resistors of open construction						x	EN following // vote. Published (2001)	IEC 60322
EN 61373 Revision	(RA) – Rolling stock equipment – Shock and vibration tests					x	x	EN following // vote. Published (1999) Published (2010)	IEC 61373
EN 61881 EN 61881-1 EN 61881-2 EN 61881-3	(RA) – Rolling stock equipment – Capacitors for power electronics Part 1: Paper/plastic film capacitors Part 2: Aluminium electrolytic capacitors with non solid electrolyte Part 3: Electric double-layer capacitors					x	x	EN following // vote. Published (1999) Published (2011) Vote to be launched Vote to be launched	IEC 61881
EN 60349-1 + A1 Revision	(RA) – Rolling stock – Rotating electrical machines for rail and road vehicles - Part 1: Machines other than electronic convertor-fed a.c. motors						x x x	EN following // vote. Published (2000) Published (2002) Published (2010)	IEC 60349-1 IEC 60349-1
EN 60349- 2 Revision	Part 2: Electronic convertor fed a.c. motors	M/024					x x	Published (2001) Published (2010)	IEC 60349-2 : 1993, modified
TS 60349- 3 Revision	Part 3: Determination of the total losses of converter-fed alternating current motors by summation of the component losses						x	Published (2010)	IEC/TS 60349-3 : 2010
EN 60349- 4	Part 4: Permanent magnet synchronous electrical machines connected to an electronic converter					x		Pending BT approval Vote in progress	

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Documents steered by SC 9XB (Rolling stock) (continuation)				Stage 3020	Stage 4000	Stage 5000	Stage. 5099	Comments	Links
	EN 61377-1	(RA) – Rolling stock – Combined testing of inverter-fed alternating current motors and their controls					x	Published (2006)	IEC 61377-1
	EN 61377-2	(RA) – Rolling stock – Combined testing – Part 2 : Chopper-fed d.c. traction motors and their control					x	EN following // vote. Published (2002)	IEC 61377-2
	EN 61377-3	(RA) – Rolling stock – Combined testing – Part 2 : a.c. traction motors fed by an indirect convertor and their control					x	EN following // vote. Published (2002)	IEC 61377-3
WGB12	EN 50153 (2 nd Ed)	(RA) – Rolling stock – Protective provisions relating to electrical hazards					x	Published (2002)	IEC 61991
	(3 rd Ed)	Revision			12/12			Draft for CLC enquiry in progress	
WGB16	EN 50206-1	(RA) – Rolling stock – Pantographs : Characteristics and tests - Part 1: Pantographs for main line vehicles	M/024 +				x	Published (1998)	IEC 60494
	EN 50206-2	Maintenance Part 2: Pantographs for metros and light rail vehicles	M/024				x	Published (2010) Published (1999)	IEC 60494
WGB16	TS 50206-3	Maintenance Interface between pantograph and rolling stock for rail vehicles				x	x	Published (2010) Published (2010)	
WGB16		(RA) – Rolling stock – Interface between TCMS and Pantographs						Stage zero	
WG-B5	EN 50215	(RA) – Rolling stock – Testing of rolling stock after completion of construction and before entry into service	M/024 +				x	Published (1999)	TC256 IEC 61133
		Revision					x	Published (2009)	IEC 61133 revised
	EN 50311	(RA) – Rolling stock – D.C. supplied electronic ballasts for lighting fluorescent lamps for rolling stock					x	Published (2003)	IEC/SC34C CLC/TC34Z
WG B8	EN 50343 Revision	(RA) – Rolling stock – Rules for cabling of vehicles					x	Published (2003) Work in progress	TC20 / WG12
WG B9	EN 50439-x	(RA) – Rolling stock – Reliability tests for high power semiconductor devices – Part 1 : Standard base-plate modules Part 1 : Standard base-plate modules Part 2 : Integrated water-cooled modules Part 3 : Multi-chip Presspack						All parts stopped	

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WG B27	EN 50125-1 Revision	see Environmental conditions for equipment in page 3		x		11/10		Work in progress	
	EN 50121-3-1 EN 50121-3-2	see EMC in page 2 see EMC in page 2							
WG B10 disbanded	EN 50405	(RA) – Rolling Stock – Pantographs, testing methods for carbon contact strips					x	Published (2006)	
WG B11	TR 50126-3	(RA) – The specification and demonstration of Reliability, Availability, Maintainability and Safety (RAMS) – Part 3: Guide to the application of EN50126-1 for rolling stock RAM Revision decided					x	Published (2006)	TC 256, WG 5B
	EN 60077-1 EN 60077-2 EN 60077-3	(RA) – Rolling Stock – General service conditions and general rules (RA) – Rolling Stock – Electrotechnical components – General rules (RA) – Electric equipment for rolling stock – Part 3 : Rules for DC circuit-breakers	M/024				x x x	Published (2002) Published (2002) EN following // vote. Published (2002)	IEC 60077-1 IEC 60077-2 IEC 60077-3
	EN 60077-4	(RA) – Electric equipment for rolling stock – Part 4 : Rules for AC circuit-breakers					x	EN following // vote. Published (2003)	IEC 60077-4
	EN 60077-5	(RA) – Electric equipment for rolling stock – Part 5 : Electrotechnical components – Rules for HV fuses					x	EN following // vote. Published (2003)	IEC 60077-5
SG B17	TS 50467	(RA) – Rolling Stock – Electrical connectors Survey group to decide about a normative annexB and move to EN					x	Published (2008)	
WG B13	EN 50467	(RA) – Rolling Stock – Electrical connectors				x		Vote in progress	
WG B14	TR 50501-1	(RA) – Rolling Stock – Intercommunication between vehicles and train/wayside – Part 1 : Data dictionary and rules for functional standardisation					x	Published (2007)	
	TR 50501-2	(RA) – Rolling Stock – Intercommunication between vehicles and train/wayside – Part 2 : Technical contents of standardization work in the field of intercommunication						Vote to be launched	

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WG B15	TS 50502	(RA) – Rolling Stock – Requirements for electrical equipment on board trolleybuses and main characteristics of the connection system to the overhead contact line Revision decided to take into account German and Polish comments					x x	Published (2007) Published (2008)	
WG B18	EN 50533	(RA) – Rolling Stock – Three-phase train line voltage characteristics			x	09/12		Vote in progress	
WG B19	EN 50546	(RA) – Rolling Stock – Shore (external) supply system for rail vehicles				11/12		Draft for CLC enquiry in progress	
WG B20	EN 50547	(RA) – Rolling Stock – Batteries for auxiliary power supply systems.			x	11/12		CLC enquiry in progress	
	TS 50534	(RA) – Rolling Stock – Generic System Architecture for onboard electric supply systems.					x	Published (2010)	
WG B23	TS 50537-1	(RA) – Rolling Stock – Mounted parts of the traction transformer and cooling system Part 1 – HV bushing for traction transformers					x	Published (2010)	
WG B24	TS 50537-2	Part 2 – Pump for insulating liquid for traction transformers and reactors					x	Published (2010)	
WG B25	TS 50537-3	Part 3 – Coolant (water) pump for traction transformers					x	Published (2010)	
WG B26	TS 50537-4	Part 4 – Gas and oil actuated (Buchholz) relay for liquid immersed transformers and reactors with conservator for rail vehicles					x	Published (2010)	
WG B21	TS 50535	(RA) – Rolling Stock – Onboard auxiliary power converter systems.					x	Published (2010)	

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Documents steered by SC 9XC (Fixed installations)				Stage 3020	Stage 4000	Stage 5000	Stage. 5099	Comments	Links
WGC1	EN 50122- 1	(RA) – Fixed installations- Electrical safety, earthing and bonding - Part 1: Protective provisions relating to electrical safety and earthing	M/024+				x	Published (1997)	IEC 62128-1
	Rev part 1 EN 50122- 2	Part 1 : Protective provisions against electric shock Part 2: Protective provisions against the effects of stray currents caused by d.c. traction systems	M/024+				x x	Published (2011) Published (1998)	IEC 62128-2
WGC1	EN 50122-2/A1						x	Published (2002)	
WGC1	Rev part 2	Part 2 : Provisions against the effects of stray currents caused by d.c. traction systems				x		Published (2010)	
WGC1	EN 50122-3	Part 3: Mutual interaction of a.c. and d.c. traction systems				x		Published (2010)	
WG C13	EN 50119	(RA) – Fixed installations – Electric traction overhead contact lines	M/024+				x	Published (2001)	
	Rev Amendement	Revision of EN 50119				13/11	X	Published (2009) CLC enquiry to be launched	
WG-C13	EN 50149	(RA) – Fixed installations – Copper and copper-alloy grooved contact wires for overhead contact lines	M/024+				x	Published (2001)	
	Revision				x	11/09		Comments from CLC enquiry under consideration	
	EN 50151	(RA) – Fixed installations – Special requirements for composite insulators	M/024				x	Published (2003)	CLC / TC 36
WG C15	EN 50345	(RA) – Fixed installations – Insulating synthetic rope assemblies for support of overhead contact lines					x	Published (2004)	
		Revision decided					x	Published (2009)	

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Documents steered by SC 9XC (Fixed installations) (continuation)				Stage 3020	Stage 4000	Stage 5000	Stage 5099	Comments	Links			
WGC 18	EN 50152- 1 revision	(RA) – Fixed installations – a.c. switchgear – Particular requirements for a.c. switchgear - Part 1: Single phase circuit breakers with U_m above 1000V Full technical updating	M/024			12/06	x	Published (2007) CLC enquiry in progress				
	EN 50152- 2 revision	Part 2: Single phase disconnectors, earthing switches and switches with U_m above 1000V Full technical updating	M/024			12/06	x	Published (2007) CLC enquiry in progress				
WGC 18	EN 50152- 3	Part 3: Measurement, control and protection devices for specific use in a.c. traction systems - Part 3-1 : Application guide Part 3-2: single-phase current transformers Part 3-3: single-phase voltage transformers										
	EN 50152- 3- 1						x	Published (2003)				
	EN 50152- 3- 2						x	Published (2001)				
	EN 50152- 3- 3						x	Published (2001)				
WG C16	EN 50123- 1	(RA) – Fixed installations - d.c. switchgear - Part 1: General Part 2: d.c. circuit breakers Part 3: Indoor d.c. – disconnectors and switch disconnectors Part 4: Outdoor d.c. in-line switch-disconnectors and d.c. earthing switches Part 5: Surge arresters and low- voltage limiters for specific use in d.c. traction systems Revision decided	M/024+					x	Published (2003)	IEC 61992-1		
	EN 50123- 2		M/024					x	Published (2003)	IEC 61992-2		
	EN 50123- 3		M/024					x	Published (2003)	IEC 61992-3		
	EN 50123- 4		M/024					x	Published (2003)			
	EN 50123- 5							x	Published (2003)			
	EN 50123- 5									To be replaced by EN 50526-1		
WG C16	EN 50123- 6	Part 6: d.c. switchgear assemblies Part 7: Measurement, control and protection devices for specific use in d.c. traction systems Amendment Part 7-1: Application guide Part 7-2: Isolating current transducers and other current measuring devices Part 7-3: Isolating voltage transducers and other voltage measuring devices	M/024					x	Published (2003)			
	prA										BT to approve	
	EN 50123-7-1							x	Published (2003)			
	EN 50123-7-2							x	Published (2003)			
	EN 50123-7-3							x	Published (2003)			
WG C16	EN 50123- 8	Railway applications – Fixed installations – D.C. switchgear – Part 8: voltage limiting devices for the return circuit of railways							To be replaced by EN 50526-2			

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WG C16	prEN 50526-1 prEN 50526-2 prEN 50526-3	Railway Applications - Fixed Installations – d.c. surge arresters and voltage limiting devices: Part 1 - Surge arresters - to supersede EN 50123-5 Part 2 - Voltage limiting devices - to replace the proposed EN 50123-8 Part 3 – Application guide				11/01 11/09		Vote in progress Work in progress Work to start	
		(RA) - Fixed installations - d.c. switchgear -							
	EN 50121-5	see EMC in page 2							
	EN 50327 EN 50327 / A1	(RA) - Fixed installations – Harmonization of the rated values for converter groups and tests on converter groups Determination of the voltage drop and the short circuit currents of converter groups					x x	Published (2003) Published (2005)	
	EN 50328	(RA) - Fixed installations – Electronic power converters for substations Corrigendum					x	Published (2003) Published (2006)	
		(RA) - Fixed installations - Current collection systems -							
	EN 50318	Validation of simulation of the dynamic interaction between overhead contact line and pantograph	M/275				x	Published (2002)	
WG C9 WG C7	prA2 Revision	Requirements for and validation of measurements of the dynamic interaction between pantograph and overhead contact line Amendment A2	M/275		x	11/09	x	Published (2002) Published (2007) CLC enquiry to be considered	
	EN 50125-2	see Environmental conditons for equipment in page 3							
WG C9 WG C9 WG C9	EN 50367 EN 50367 prA1 EN 50367	(RA) - Technical criteria for the interaction between pantograph and overhead contact lines (to achieve free access) Amendment decided Revision	M/275		x	11/09	x	Published (2006) To be incorporated in the revision Analyse of comments from CLC enquiry in progress	

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Documents steered by SC 9XC (Fixed installations) (continuation)			Stage 3020	Stage 4000	Stage 5000	Stage 5099	Comments	Links
WG C10	EN 50329 PrA1	(RA) - Fixed installations - Traction transformers Corrigendum Amendment decided				x	Published (2003) Published (2006) Published (2010)	
WGC 17	PrTS 50562	(RA) – Fixed installation – Electrical safety Safety Management for Fixed Installations				x	Ratified	
WG C11	EN 50388 Revision Revision	(RA) - Power supply, and rolling stock - Technical criteria for the coordination between power supply and rolling stock to achieve interoperability - Amendment decided, to be incorporated in a new edition Revision of clause 10 on harmonics	M/275			12/12	Published (2005) Work in progress Back to PWI NWI to be approved by BT	
WG C11	EN 50163 prAA	(RA) – Supply voltages of traction systems , See in page 3 Amendment decided				x	Published (2007)	
JWG SC9XC TC210	prEN 50443 prEN 50443	(RA) - Fixed installations - Effects of electromagnetic interferences caused by a.c. railway lines on pipelines - Admissible values and protection measures (RA) - Fixed installations - Effects of electromagnetic interferences caused by a.c. railway lines on pipelines - Admissible values and protection measures				13/06	6MP results treated WGC12 disbanded UAP in progress due to resetting to PWI by BT	
WG C14	TR 50488	(RA) - Fixed installations - Electric traction – Safety measures for personnel working near Overhead Contact Lines				x	Published (2006)	
WG C19	EN 50xxx	(RA) - Fixed installations - Requirements and testing methods for Sectioning Devices in the view of Interoperability Constituent				13/11	WG merged with WG C13	
	prEN50xxx	(RA) - Fixed installations - Simulation tool for the validation of the design of power supply systems				13/06	Work started	
	prEN50xxx	(RA) - Fixed installations - Protection principles for electric traction systems				13/07	Work to start	

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July 2011

Documents steered by CEN / TC256 linked to TC9X under Mode 4 or Mode 5				Stage 3020	Stage 4000	Stage 5000	Stage. 5099	Comments	Links
JWG FSR	TS 45545-1	(RA) - Fire Safety - Part 1: General rules Part 2: Requirements for fire behaviour of materials and components Part 3: Fire resistance requirements for fire barriers and partitions Part 4: Fire safety requirements for railway rolling stock design Part 5: Fire safety requirements for electrical equipment including that of trolley busses Part 6: Fire control and management systems Part 7: Fire safety requirements for flammable liquid and gas installations	M/275				x	Published (2009)	TC9X, Mode 5
JWG FSR	TS 45545-2						x	Published (2009)	TC9X, Mode 5
JWG FSR	TS 45545-3						x	Published (2009)	TC9X, Mode 5
JWG FSR	TS 45545-4						x	Published (2009)	TC9X, Mode 5
JWG FSR	TS 45545-5						x	Published (2009)	TC9X, Mode 5
JWG FSR	TS 45545-6						x	Published (2009)	TC9X, Mode 5
JWG FSR (disbanded)	TS 45545-7						x	Published (2009)	TC9X, Mode 5
	EN 45545	Conversion of TS45545 series in an EN series			x			Draft for vote in preparation	
	EN 13146-5	(RA) - Fastening systems-Test methods for fastening systems - Part 5: Determination of electrical resistance	M/275				x	Published (2002)	TC 9X, Mode 4
WG 19	EN 15016-1 EN 15016-2 EN 15016-3 EN 15016-4	(RA) - Technical Drawings - Part 1: General principles Part 2: Parts lists Part 3: Modifications of technical documents Part 4: Exchange of data	M/024				x x x x	Published (2004) Published (2004) Published (2004) Published (2006)	TC 9X, Mode 4
	EN 13452-1 EN 13452-2	(RA) - Braking - Mass transit brake systems - Part 1: Performance requirements Part 2: Methods of test	M/024				x x	Published (2003) Published (2003)	TC 9X, Mode 4
	EN 14478	(RA) - Braking - Generic vocabulary	M/024				x	Published (2005)	
WG45		(RA) – Design and test for rolling stock in severe weather conditions							TC 9X, Mode 4
WG22		(RA) – Magnetic track brakes							TC 9X, Mode 4
WG22		(RA) – Eddy current brakes							TC 9X, Mode 4
WG37		(RA) – Driving cab							TC 9X, Mode 4
WG36		(RA) – Passenger Alarm							TC 9X, Mode 4

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Documents steered by CLC / TC20 (Cables)				Stage 3020	Stage 4000	Stage 5000	Stage. 5099	Comments	Links
		(RA) - Railway rolling stock cables having special fire performance -							
WG12		Standard Wall -							
	EN 50264-1	Part 1: General requirements					x	Published (2002)	
	EN 50264-2	Part 2: Single core cables					x	Published (2002)	
	EN 50264-3	Part 3: Multi core cables					x	Published (2002)	
	EN 50264	Revision of all parts					x	Published	
	EN 50355	Guide to use Revision following publication of EN 50382					x	Published (2003) Published	
	EN 50305	Test methods Revision to be decided					x x	Published (2002) Published	
WG 12		Thin Wall -							
	EN 50206 -1	Part 1: General requirements					x	Published (2002)	
	EN 50306-2	Part 2: Single core cables					x	Published (2002)	
	EN 50306-3	Part 3: Single core and multi core cables (Pairs, Triples and Quads) screened and Thin Wall Sheathed					x	Published (2002)	
	EN 50306-4	Part 4: Multicore and multipair cables, Standard Wall Sheathed					x	Published (2002)	
	EN 50382-1	High temperature power cables - Part 1 : General requirements					x	Published (2008)	
	EN 50382-2	High temperature power cables - Part 2 : Single core silicone rubber insulated cables for 120°C or 150°C					x	Published (2008)	
	EN 50382-3	Decision to create this new part to be taken					x	Published	

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Documents steered by IEC / TC21 or CLC / TC21X (Batteries)				Stage 3020	Stage 4000	Stage 5000	Stage. 5099	Comments	Links
IEC / TC 21		Lead- acid traction batteries -							
	HD 465- 1	Part 1: General requirements and methods of tests							
	HD 465- 2	Part 2: Dimensions of cells and terminals and marking of polarity on cell							
WG 1 of CLC/TC21X		Safety regulations for batteries and battery installations						- All means of transport (cars...) - Lead-acid and NiCd - Work in // with CEN and IEC	

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