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BS EN 60214-1:2014



BSI Standards Publication

Tap-changers

Part 1: Performance requirements
and test methods

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This British Standard is the UK implementation of EN 60214-1:2014. It is identical to IEC 60214-1:2014. It supersedes BS EN 60214-1:2003 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PEL/14, Power transformers.

A list of organizations represented on this committee can be obtained on request to its secretary.

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Tap-changers - Part 1: Performance requirements and test methods (IEC 60214-1:2014)

Changeurs de prises - Partie 1: Prescriptions de performances et méthodes d'essai
(CEI 60214-1:2014)

Stufenschalter - Teil 1: Leistungsanforderungen und Prüfverfahren
(IEC 60214-1:2014)

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Foreword

The text of document 14/746/CDV, future edition 2 of IEC 60214-1, prepared by IEC/TC 14 "Power transformers" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60214-1:2014.

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- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2017-06-26

This document supersedes EN 60214-1:2003.

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Endorsement notice

The text of the International Standard IEC 60214-1:2014 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60076-1:2011	NOTE	Harmonized in EN 60076-1:2011.
IEC 60076-11	NOTE	Harmonized as EN 60076-11.
IEC 60376	NOTE	Harmonized as EN 60376.
IEC 60599	NOTE	Harmonized as EN 60599.

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Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year series</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year series</u>
IEC 60050		International Electrotechnical Vocabulary -- Electrical and electronic measurements and measuring		
IEC 60060-1	-	High-voltage test techniques -- Part 1:EN 60060-1 General definitions and test requirements		-
IEC 60076-3	2013	Power transformers -- Part 3: Insulation levels, dielectric tests and external clearances in air	EN 60076-3	2013
IEC 60076-7	2005	Power transformers -- Part 7: Loading- guide for oil-immersed power transformers		-
IEC 60076-21	2011		-	-
IEC 60137	2008	Insulated bushings for alternating voltages above 1 000 V	EN 60137	2008
IEC 60214-2	2004	Tap changers -- Part 2: Application guide	-	-
IEC 60270	-	High-voltage test techniques - Partial discharge measurements	EN 60270	-
IEC 60296	-	Fluids for electrotechnical applications - Unused mineral insulating oils for transformers and switchgear	EN 60296	-
IEC 60529	-	Degrees of protection provided by- enclosures (IP Code)		-

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CONTENTS

1	Scope	8
2	Normative references	8
3	Terms and definitions	9
4	Service conditions	15
4.1	Temperature of tap-changer environment.....	15
4.2	Temperature of motor-drive mechanism environment.....	16
4.3	Overload conditions	16
5	Requirements for on-load tap-changers	16
5.1	General requirements	16
5.1.1	Rating.....	16
5.1.2	Compartments for diverter and selector switches	17
5.1.3	Liquid-level gauges and gas monitoring devices	17
5.1.4	Safety requirements for protection against internal failure.....	17
5.1.5	Limiting devices for the protection against transient overvoltages	18
5.1.6	Change-over selector recovery voltages	18
5.1.7	Leakage inductance in coarse fine regulation arrangements	18
5.2	Type tests	18
5.2.1	General	18
5.2.2	Temperature rise of contacts	19
5.2.3	Switching tests	20
5.2.4	Short-circuit current test	25
5.2.5	Transition impedance test.....	26
5.2.6	Mechanical tests.....	27
5.2.7	Tightness test.....	29
5.2.8	Dielectric tests.....	30
5.2.9	Type-test certificate	35
5.3	Routine tests	35
5.3.1	General	35
5.3.2	Mechanical test	35
5.3.3	Sequence test	35
5.3.4	Auxiliary circuits insulation test.....	35
5.3.5	Pressure and vacuum tests.....	35
6	Requirements for motor-drive mechanisms for on-load tap-changers	35
6.1	General requirements	35
6.1.1	Compliance of component parts.....	35
6.1.2	Permissible variation of auxiliary supply	36
6.1.3	Step-by-step control	36
6.1.4	Tap position indicator	36
6.1.5	Tap-change in progress indication	36
6.1.6	Limiting devices.....	36
6.1.7	Parallel control devices.....	36
6.1.8	Direction of rotation protection.....	36
6.1.9	Overcurrent blocking device	36
6.1.10	Restarting device.....	37
6.1.11	Operation counter.....	37

This is a preview of "BS EN 60214-1:2014". [Click here to purchase the full version from the ANSI store.](#)

6.1.12	Manual operation of the motor-drive mechanism	37
6.1.13	Motor-drive cubicle	37
6.1.14	Protective device against running-through	37
6.1.15	Protection against access to hazardous parts	37
6.2	Type tests	37
6.2.1	Mechanical load test	37
6.2.2	Overrun test	38
6.2.3	Degree of protection of motor-drive cubicle.....	38
6.3	Routine tests	38
6.3.1	Mechanical tests.....	38
6.3.2	Auxiliary circuits insulation test.....	38
7	Requirements for de-energized tap-changers	38
7.1	General requirements	38
7.1.1	Rated characteristics	38
7.1.2	Types	39
7.1.3	Handles and drives	39
7.1.4	Glands.....	39
7.1.5	Interlocks.....	39
7.1.6	Mechanical end stops	39
7.2	Type tests	40
7.2.1	General	40
7.2.2	Temperature rise of contacts	40
7.2.3	Short-circuit current test	41
7.2.4	Mechanical tests.....	41
7.2.5	Dielectric tests.....	42
7.2.6	Type test certificate	47
7.3	Routine tests	47
7.3.1	Mechanical tests.....	47
7.3.2	Pressure and vacuum tests.....	47
8	Requirements for motor-drive mechanisms for de-energized tap-changers	47
8.1	General requirements	47
8.1.1	General	47
8.1.2	Compliance of component parts.....	47
8.1.3	Permissible variation of auxiliary supply	47
8.1.4	Tap position indicator	47
8.1.5	Limiting devices.....	48
8.1.6	Operation counter.....	48
8.1.7	Manual operation of the motor-drive mechanism	48
8.1.8	Motor-drive cubicle	48
8.1.9	Protection against access to hazardous parts	48
8.2	Type tests	48
8.2.1	Mechanical load test.....	48
8.2.2	Overrun test	49
8.2.3	Degree of protection of motor-drive cubicle.....	49
8.3	Routine tests	49
8.3.1	Mechanical tests.....	49
8.3.2	Auxiliary circuits insulation test.....	49
9	Nameplate	49
9.1	Tap-changers (on-load and de-energized).....	49

This is a preview of "BS EN 60214-1:2014". [Click here to purchase the full version from the ANSI store.](#)

9.2	Motor-drive mechanisms	50
10	De-energized tap-changer warning label.....	50
11	Manufacturers operating instructions	51
	Annex A (normative) Supplementary information on switching duty on main and transition contacts relating to resistor type tap-changers.....	52
	Annex B (normative) Supplementary information on switching duty relating to reactor type tap-changers	58
	B.1 Additional test parameters	58
	B.1.1 Service duty test.....	58
	B.1.2 Breaking capacity test	58
	B.2 Duty of switching contacts	58
	Annex C (normative) Method for determining the equivalent temperature of the transition resistor using power pulse current	69
	Annex D (informative) Simulated a.c. circuits for service duty and breaking capacity tests	70
	D.1 General.....	70
	D.2 Transformer method.....	70
	D.3 Resistance method	71
	Annex E (informative) Example of a synthetic test circuit for service duty test of vacuum type tap-changers	73
	E.1 Definitions with relevance to the synthetic test circuit.....	73
	E.1.1 Synthetic test circuit	73
	E.1.2 Simulated a.c. test circuit.....	73
	E.1.3 Pre-arc	73
	E.1.4 Making voltage	73
	E.2 Example for the test setup of a synthetic test circuit.....	73
	E.3 Example for the breaking/making condition during a switching operation.....	74
	Bibliography.....	76
	Figure 1 – Short-circuit test current (r.m.s. value) as a multiple of the maximum rated through-current (on-load tap-changer)	25
	Figure 2 – Time sequence for the application of test voltage (on-load tap-changer).....	34
	Figure 3 – Short-circuit test current (r.m.s. value) as a multiple of the maximum rated through-current (de-energized tap-changer).....	41
	Figure 4 – Time sequence for the application of test voltage (de-energized tap-changer)	46
	Figure 5 – Warning label (example)	50
	Figure A.1 – Examples of current and voltage vectors for resistor type tap-changers	53
	Figure B.1 – Operating sequence of reactor type tap-changers with selector switch.....	59
	Figure B.2 – Current and voltage vectors for reactor type tap-changers with selector switch	60
	Figure B.3 – Operating sequence of reactor type tap-changers with selector switch and equalizer windings	61
	Figure B.4 – Current and voltage vectors for reactor type tap-changers with selector switch and equalizer windings.....	62
	Figure B.5 – Operating sequence of a reactor type tap-changer with diverter switch and tap selector	64
	Figure B.6 – Current and voltage vectors for reactor type tap-changers with diverter switch and tap selector	65

This is a preview of "BS EN 60214-1:2014". [Click here to purchase the full version from the ANSI store.](#)

Figure B.7 – Operating sequence of a reactor type tap-changer with vacuum interrupter and tap selector	67
Figure B.8 – Current and voltage vectors for reactor type tap-changers with vacuum interrupter and tap selector	68
Figure D.1 – Simulated test circuit – Transformer method	70
Figure D.2 – Simulated test circuit – Resistance method	71
Figure E.1 – Synthetic test circuit for service duty test of vacuum type tap-changers	73
Figure E.2 – Currents of the synthetic test circuit	74
Figure E.3 – Example of the synthetic test for a switching operation with equal voltages for breaking and making duty	74
Table 1 – Temperature of tap-changer environment	16
Table 2 – Contact temperature-rise limits for on-load tap-changers	19
Table 3 – Test voltage levels for on-load tap-changers	30
Table 4 – Contact temperature-rise limits for de-energized tap-changers	40
Table 5 – Test voltage levels for de-energized tap-changers	43
Table A.1 – Duty of main and transition contacts for resistor type tap-changers (non-vacuum type)	54
Table A.2 – Effect of load power-factor on circuit-breaking duty for resistor type tap-changers (non-vacuum type)	55
Table A.3 – Duty of main and transition contacts for resistor type tap-changers (vacuum type) (1 of 2)	56
Table B.1 – Duty of switching contacts for reactor type tap-changers with selector switch – Switching direction from P1 to P5	59
Table B.2 – Duty of switching contacts for reactor type tap-changers with selector switch and equalizer windings – Switching direction from P1 to P5	61
Table B.3 – Duty of switching contacts for reactor type tap-changers with diverter switch and tap selector – Switching direction from P1 to P7	63
Table B.4 – Duty of switching contacts for reactor type tap-changers with vacuum interrupter and tap selector – Switching direction from P1 to P11	66

This is a preview of "BS EN 60214-1:2014". [Click here to purchase the full version from the ANSI store.](#)

TAP-CHANGERS –

Part 1: Performance requirements and test methods

1 Scope

This part of IEC 60214 applies to on-load tap-changers of both resistor and reactor types, de-energized tap-changers, and their motor-drive mechanisms.

It applies mainly to tap-changers immersed in mineral insulating oil according to IEC 60296 but may also be used for tap-changers with air or gas insulation or immersed in other insulating liquids insofar as conditions are applicable.

It applies mainly to tap-changers with arcing contacts but may also be used for arcing-free on-load tap-changers (such as electronic switching) insofar as conditions are applicable.

This part of IEC 60214 applies to power and distribution transformers of all types and also to reactors.

It does not apply to transformers and reactors mounted on railway rolling stock.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60050 (all parts), *International Electrotechnical Vocabulary* (available at <http://www.electropedia.org>)

IEC 60050-421, *International Electrotechnical Vocabulary – Chapter 421: Power transformers and reactors*

IEC 60060-1, *High voltage test techniques – Part 1: General definitions and test requirements*

IEC 60076-3:2013, *Power transformers – Part 3: Insulation levels, dielectric tests and external clearances in air*

IEC 60076-7:2005, *Power transformers – Part 7: Loading guide for oil-immersed power transformers*

IEC 60076-21:2011, *Power transformers – Part 21: Standard requirements, terminology, and test code for step-voltage regulators*

IEC 60137:2008, *Insulated bushings for alternating voltages above 1 000 V*

IEC 60214-2:2004, *Tap-changers – Part 2: Application guide*

IEC 60270, *High-voltage test techniques – Partial discharge measurements*