

INTERNATIONAL STANDARD

NORME INTERNATIONALE



In-cable control and protection device (IC-CPD) for mode 2 charging of electric road vehicles

Dispositif de contrôle et de protection intégré au câble (IC-CPD) pour la charge en mode 2 des véhicules électriques



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CONTENTS

FOREWORD.....	10
INTRODUCTION.....	12
1 Scope.....	13
2 Normative references	14
3 Terms and definitions	16
3.1 Terms and definitions relating to plugs and socket-outlets	16
3.2 Terms and definitions relating to terminals.....	18
3.3 Terms and definitions relating to residual current functions	18
3.3.1 Terms and definitions relating to currents flowing from live parts to earth.....	18
3.3.2 Terms and definitions relating to the energization of the residual current function	19
3.3.3 Terms and definitions relating to the operation and to the functions of the IC-CPD	19
3.3.4 Terms and definitions relating to values and ranges of energizing quantities.....	21
3.3.5 Terms and definitions relating to values and ranges of influencing quantities.....	23
3.3.6 Terms and definitions relating to conditions of operation.....	23
3.3.7 Terms and definitions relating to control functions between electric vehicle and IC-CPD	23
3.4 Terms and definitions relating to tests.....	24
3.5 Terms and definitions relating to construction	24
4 Classification	24
4.1 According to the supply.....	24
4.1.1 General	24
4.1.2 IC-CPD supplied from one phase and neutral and from two phases (LNSE/LLSE or LNE/LLE)	24
4.1.3 IC-CPD supplied from three phases and neutral (LLLNSE or LLLNE).....	25
4.2 According to the construction.....	25
4.2.1 General	25
4.2.2 IC-CPD including the function box separated from the plug and vehicle connector	25
4.2.3 Modular IC-CPD	25
4.3 According to the method of connecting the cable(s)	25
4.3.1 General	25
4.3.2 Non-rewirable IC-CPDs	25
4.3.3 IC-CPDs wired by the manufacturer.....	25
4.3.4 Pluggable IC-CPD	25
4.4 Classification according to the protective conductor path	26
4.4.1 General	26
4.4.2 IC-CPDs with switched protective conductor.....	26
4.4.3 IC-CPDs with non-switched protective conductor	26
4.5 Classification according to the verification of availability of the upstream protective conductor	26
4.5.1 General	26
4.5.2 IC-CPD with verification of the availability of the upstream protective conductor	26

4.5.3	IC-CPD without verification of the availability of the upstream protective conductor	26
4.6	Classification according to the usage	26
4.6.1	IC-CPD for portable use	26
4.6.2	IC-CPD for wall mounting	26
4.6.3	IC-CPD for portable use and for wall mounting	26
5	Characteristics of IC-CPDs	27
5.1	Summary of characteristics	27
5.2	Rated quantities and other characteristics	27
5.2.1	Rated voltages	27
5.2.2	Rated current (I_n)	27
5.2.3	Rated residual operating current ($I_{\Delta n}$)	28
5.2.4	Rated residual non-operating current ($I_{\Delta no}$)	28
5.2.5	Rated frequency	28
5.2.6	Rated making and breaking capacity (I_m)	28
5.2.7	Rated residual making and breaking capacity ($I_{\Delta m}$)	28
5.2.8	Operating characteristics in case of residual currents comprising a DC component	28
5.2.9	Insulation coordination including creepage distances and clearances	28
5.2.10	Coordination with short-circuit protection devices (SCPDs)	28
5.3	Standard and preferred values	29
5.3.1	Preferred values of rated operational voltage (U_e)	29
5.3.2	Preferred values of rated current (I_n)	29
5.3.3	Standard values of rated residual operating current ($I_{\Delta n}$)	29
5.3.4	Standard value of rated residual non-operating current ($I_{\Delta no}$)	30
5.3.5	Standard minimum value of the non-operating overcurrent through the IC-CPD	30
5.3.6	Preferred values of rated frequency	30
5.3.7	Minimum value of the rated making and breaking capacity (I_m)	30
5.3.8	Minimum value of the rated residual making and breaking capacity ($I_{\Delta m}$)	30
5.3.9	Standard value of the rated conditional short-circuit current (I_{nc})	30
5.3.10	Standard value of the rated conditional residual short-circuit current ($I_{\Delta c}$)	30
5.3.11	Limit values of break time	30
6	Marking and other product information	31
6.1	Data to be marked on the IC-CPD	31
6.2	Information to be provided to the end-user	33
7	Standard conditions for operation in service and for installation	33
7.1	Standard conditions	33
7.2	Conditions for installations	34
8	Requirements for construction and operation	34
8.1	Mechanical design	34
8.2	Pluggable electrical connections of pluggable IC-CPDs according to 4.3.4	35
8.2.1	General	35
8.2.2	Degree of protection of pluggable electrical connection against solid foreign objects and against water for pluggable IC-CPD	36

8.2.3	Breaking capacity of pluggable electrical connection for pluggable IC-CPD	36
8.3	Construction	37
8.3.1	General	37
8.3.2	Terminations of IC-CPDs	38
8.3.3	Enclosure of IC-CPDs according to 4.3.3	38
8.3.4	Terminal screws or nuts of IC-CPDs according to 4.3.3	38
8.3.5	Strain on the conductors of IC-CPDs according to 4.3.3	38
8.3.6	Additional requirements for IC-CPDs according to 4.3.3.....	39
8.3.7	Insulating parts which retain live parts in position	39
8.3.8	Screws for IC-CPD according to 4.3.3.....	39
8.3.9	Means for suspension from a wall or other mounting surfaces	39
8.3.10	Plug as an integral part of direct plug-in equipment	39
8.3.11	Flexible cables and cords and their connection	40
8.4	Electrical performance	40
8.4.1	Protective conductor path	40
8.4.2	Contact mechanism	41
8.4.3	Clearances and creepage distances (see Annex C)	41
8.5	Protection against electric shock.....	44
8.5.1	General	44
8.5.2	Requirements relating to plugs, whether incorporated or not in integral items	44
8.5.3	Degree of protection of the function box	44
8.5.4	Requirements relating to vehicle connectors.....	45
8.6	Dielectric properties	45
8.7	Temperature rise	45
8.8	Operating characteristics	45
8.8.1	General	45
8.8.2	Safe connection operating characteristics.....	46
8.8.3	Operating characteristics with AC residual currents and residual currents having a DC component.....	46
8.8.4	Operating characteristics with smooth DC residual current	46
8.8.5	Behaviour of the IC-CPD after a residual current operation.....	46
8.8.6	Residual pulsating direct currents which may result from rectifying circuits supplied from two phases	46
8.8.7	Residual pulsating direct currents which may result from rectifying circuits supplied from three phases.....	47
8.9	Mechanical and electrical endurance	47
8.10	Performance at short-circuit currents	47
8.11	Resistance to mechanical shock and impact	47
8.12	Resistance to heat	47
8.13	Resistance to abnormal heat and to fire	47
8.14	Performance of the test function	48
8.15	Behaviour in the event of loss of the supply voltage.....	48
8.16	Resistance of IC-CPDs against unwanted tripping due to surge currents to earth resulting from impulse voltages.....	48
8.17	Control pilot function controller	48
8.18	Reliability.....	49
8.19	Resistance to tracking.....	49
8.20	Electromagnetic compatibility (EMC).....	49

8.21	Behaviour of the IC-CPD at low ambient air temperature.....	49
8.22	Operation with supply failure and hazardous live protective conductor conditions	49
8.23	Verification of a standing current in the protective conductor in normal service	49
8.24	Behaviour at specific environmental conditions	50
8.25	Resistance to vibration and shock.....	50
9	Tests	50
9.1	General.....	50
9.1.1	Opening and closing of contacts	50
9.1.2	Type tests.....	50
9.1.3	Test sequences	51
9.1.4	Routine tests	52
9.2	Test conditions	52
9.3	Test of indelibility of marking	52
9.4	Verification of protection against electric shock.....	53
9.5	Test of dielectric properties.....	53
9.5.1	Resistance to humidity.....	53
9.5.2	Insulation resistance of the main circuit	54
9.5.3	Dielectric strength of the main circuit	55
9.5.4	Secondary circuit of detection transformers	55
9.5.5	Verification of impulse withstand voltages (across clearances and across solid insulation) and of leakage current across open contacts.....	55
9.6	Temperature-rise test.....	58
9.6.1	Test conditions	58
9.6.2	Test procedure	59
9.6.3	Measurement of the temperature rise of different parts	59
9.6.4	Temperature rise of a part	59
9.7	Verification of the operating characteristics.....	59
9.7.1	Test circuit.....	59
9.7.2	Residual sinusoidal alternating currents tests	60
9.7.3	Verification of the correct operation with residual currents having a DC component.....	62
9.7.4	Verification of behaviour in the event of composite residual current	63
9.7.5	Verification of the correct operation in the event of smooth DC residual current.....	65
9.7.6	Miswiring and supply failure tests	65
9.7.7	Verification of protective conductor contact behaviour	69
9.7.8	Verification that the protective conductor is connected to the electric vehicle.....	69
9.7.9	Verification of standing current in the protective conductor connection in normal service	70
9.7.10	Verification of the correct operation in the event of residual direct currents which may result from rectifying circuits supplied from two phases.....	70
9.7.11	Verification of the correct operation in case of residual direct currents which may result from rectifying circuits supplied from three phases.....	70
9.8	Verification of mechanical and electrical endurance	71
9.8.1	Endurance of plug and vehicle connector part	71
9.8.2	Endurance of the residual current function of the IC-CPD	71
9.9	Verification of the behaviour of the IC-CPD under overcurrent conditions.....	73

9.9.1	List of the overcurrent tests	73
9.9.2	Short-circuit tests	73
9.9.3	Verification of the making and breaking capacity of the plug of the IC-CPD	78
9.10	Verification of resistance to mechanical shock and impact	78
9.10.1	General	78
9.10.2	Drop test	79
9.10.3	Test for screwed glands of IC-CPDs	79
9.10.4	Mechanical strength test on IC-CPDs provided with cords	80
9.10.5	Mechanical impact test and shock test.....	80
9.11	Test of resistance to heat.....	80
9.11.1	General	80
9.11.2	Temperature test in heating cabinet.....	80
9.11.3	Ball pressure test for insulating material necessary to retain in position current-carrying parts	81
9.11.4	Ball pressure test for insulating material not necessary to retain in position current-carrying parts	81
9.12	Resistance of insulating material to abnormal heat and to fire.....	82
9.13	Verification of the self-test	83
9.13.1	Test conditions	83
9.13.2	Verification of the self-test with IC-CPD in normal operation	83
9.13.3	Verification of the self-test with simulated welded contacts of IC-CPD	83
9.14	Verification of the behaviour of IC-CPDs in the event of loss of the supply voltage.....	84
9.14.1	Verification of correct operation at the minimum operating voltage (U_X).....	84
9.14.2	Verification of the automatic opening in the event of loss of the supply voltage	84
9.14.3	Verification of the reclosing function	84
9.15	Verification of the limiting values of the non-operating current under overcurrent conditions.....	85
9.16	Verification of resistance against unwanted tripping due to surge currents to earth resulting from impulse voltages	85
9.17	Verification of reliability.....	85
9.17.1	Climatic test.....	85
9.17.2	Test at a temperature of 45 °C.....	87
9.18	Resistance to ageing	87
9.19	Resistance to tracking.....	88
9.20	Test on pins provided with insulating sleeves.....	88
9.21	Verification of the effects of strain on the conductors	89
9.22	Checking of the torque exerted by IC-CPDs on fixed socket-outlets	89
9.23	Tests of the cord anchorage.....	89
9.24	Flexing test of non-rewirable IC-CPDs	90
9.25	Verification of the electromagnetic compatibility (EMC).....	91
9.25.1	Emission.....	91
9.25.2	Immunity.....	91
9.26	Tests replacing verifications of creepage distances and clearances	93
9.26.1	General	93
9.26.2	Abnormal conditions	93
9.26.3	Temperature rise resulting from fault conditions	93
9.27	Verifications for single electronic components used in IC-CPDs.....	96

9.27.1	General	96
9.27.2	Capacitors	96
9.27.3	Resistors and inductors	96
9.28	Chemical loads	96
9.29	Heat test under solar radiation	96
9.30	Resistance to ultra-violet (UV) radiation	97
9.31	Damp and salt mist test for marine and coastal environments	97
9.31.1	Test for external metallic parts only	97
9.31.2	Test criteria	98
9.32	Vehicle drive-over	98
9.32.1	General	98
9.32.2	Test at crushing force 5 000 N	98
9.32.3	Test at crushing force 11 000 N	98
9.32.4	Performance after the tests	98
9.33	Low storage temperature test	99
9.34	Vibration and shock test	99
9.35	Verification of insulating parts which keep live parts in position	100
9.36	Verification of the thermal control device	100
Annex A (normative) Test sequences and number of samples to be submitted for verification of conformity to this document		137
A.1	Verification of conformity	137
A.2	Test sequences	137
A.3	Number of samples to be submitted for full test procedure	139
A.4	Number of samples to be submitted for simplified test procedures in the case of submitting simultaneously a range of IC-CPDs of the same fundamental design	141
Annex B (normative) Routine tests		143
Annex C (normative) Determination of clearances and creepage distances		144
C.1	Overview	144
C.2	Orientation and location of a creepage distance	144
C.3	Creepage distances where more than one material is used	144
C.4	Creepage distances split by a floating conductive part	144
C.5	Measurement of creepage distances and clearances	144
Annex D (informative) Switched-protective conductor application		149
D.1	Explanation of switched-protective conductor (SPE) function and application	149
D.2	Examples of incorrect supply wiring	150
Annex E (informative) Example of IC-CPD for mode 2 charging		153
Annex F (informative) Types of IC-CPD according to construction and assembly		154
Annex G (informative) Methods for determination of short-circuit power factor		155
G.1	Overview	155
G.2	Method I – Determination from DC components	155
G.3	Method II – Determination with pilot generator	156
Bibliography		157
Figure 1 – Test circuit for the verification of operating characteristic (9.7.2)		102
Figure 2 – Verification of correct operation for hazardous live PE (see Table 14 and Table 15)		105
Figure 3 – Verification of temperature rise of the protective conductor		106

Figure 4 – Verification of open neutral for LNSE types, and open line for LLSE types	107
Figure 5 – Verification of a standing current in the protective conductor in normal service	108
Figure 6 – Test circuit for the verification of the making and breaking capacity and the short-circuit coordination with an SCPD (see 9.9.2)	111
Figure 7 – Standard test wire 1,0 mm	111
Figure 8 – Test circuit for the verification of the correct operation in the event of residual pulsating direct currents (see 9.7.3).....	113
Figure 9 – Test circuit for the verification of the correct operation in the event of residual pulsating direct currents superimposed by a smooth direct current (see 9.7.3.3).....	115
Figure 10 – Verification of open protective conductor (see 9.7.6.4)	116
Figure 11 – Arrangement for compression test for verification of protection against electric shock.....	117
Figure 12 – Ball-pressure test apparatus.....	117
Figure 13 – Test circuit for IC-CPD according to 4.1.2 to verify the correct operation in the event of residual pulsating direct currents which may result from rectifying circuits supplied from two phases	118
Figure 14 – Tests circuit for IC-CPD according to 4.1.3 to verify the correct operation in the event of residual pulsating direct currents which may result from rectifying circuits supplied from three phases.....	119
Figure 15 – Apparatus for testing the cord retention.....	120
Figure 16 – Apparatus for flexing test	121
Figure 17 – Arrangement for mechanical strength test on IC-CPDs provided with cords (9.10.4).....	121
Figure 18 – Stabilizing period for reliability test (9.17.1.3).....	122
Figure 19 – Reliability test cycle (9.17.1.3)	123
Figure 20 – Example for test circuit for verification of ageing of electronic components (9.18).....	124
Figure 21 – Current ring wave 0,5 μ s/100 kHz	124
Figure 22 – Example of test circuit for the verification of resistance to unwanted tripping	125
Figure 23 – Minimum creepage distances and clearances as a function of peak value of voltage (see 9.26.3 a).....	126
Figure 24 – Minimum creepage distances and clearances as a function of peak value of operating voltage (see 9.26.3 a)	127
Figure 25 – Test cycle for low temperature test.....	127
Figure 26 – Test circuit for verification of connection of protective conductor to the EV, according to 9.7.8	128
Figure 27 – Verification of correct operation in the event of smooth DC leakage current, according to 9.7.5	129
Figure 28 – Example of a test circuit for the verification of correct operation in the event of residual sinusoidal alternating currents composed of multi-frequency components	130
Figure 29 – Test circuit for endurance test according to 9.8	131
Figure 30 – The use of the IC-CPD	132
Figure 31 – Informative wave shape of inrush current for tests according to 9.8.2.....	132
Figure 32 – Standard test finger.....	133
Figure 33 – Small parts.....	134

Figure 34 – Test circuit for the verification of the self-test (9.13)	135
Figure 35 – Arrangement for verification of the thermal control device	136
Figure D.1 – Examples of incorrect supply wirings for LLSE types	151
Figure D.2 – Examples of incorrect supply wirings for LNSE types	152
Figure E.1 – Example for IC-CPD showing the different parts and functions	153
Figure F.1 – Example of IC-CPD including function box, cables, plug and connector in accordance with 4.2.2	154
Figure F.2 – Example of modular IC-CPD in accordance with 4.2.3 a)	154
Figure F.3 – Example of modular IC-CPD in accordance with 4.2.3 b)	154
Table 1 – Preferred values of rated current and corresponding preferred values of rated voltages	29
Table 2 – Limit values of break time for AC residual currents at rated frequency	30
Table 3 – Limit values of break time for smooth DC residual currents	31
Table 4 – Limit values of break time for residual pulsating direct currents which may result from rectifying circuits supplied from two or three phases	31
Table 5 – Standard conditions for operation in service	34
Table 6 – Minimum cross-sectional area of flexible cable or cord	40
Table 7 – Minimum clearances and creepage distances	42
Table 8 – Temperature-rise values	45
Table 9 – List of type tests	51
Table 10 – Test voltage for verification of impulse withstand voltage	57
Table 11 – Tripping current ranges for IC-CPDs in the event of pulsating DC current	62
Table 12 – Different frequency component values of test currents and starting current values ($I\Delta$) for verifying operation in the event of steady increased residual current	64
Table 13 – Operating current ranges for composite residual current	64
Table 14 – Supply failure and hazardous live protective conductor (PE) connections for test with reference to correct supply connections for LNSE/LLSE and LNE/LE types	66
Table 15 – Supply failure and hazardous live protective conductor (PE) connections for test with reference to correct supply connections for LLLNSE and LLLNE types	67
Table 16 – Tests to verify the behaviour of IC-CPDs under overcurrent conditions	73
Table 17 – Minimum values of I^2t and I_p	74
Table 18 – List of tests of resistance to mechanical shock and impact	79
Table 19 – Torque applied to the spanner for the test	80
Table 20 – EMC immunity tests	92
Table 21 – Maximum permissible temperatures under abnormal conditions	95
Table 22 – PSD value depending on frequency for vibration testing	99
Table A.1 – Test sequences	138
Table A.2 – Number of samples to be submitted for full test procedure	140
Table A.3 – Reduction of number of samples	142

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**IN-CABLE CONTROL AND PROTECTION DEVICE (IC-CPD) FOR MODE 2
CHARGING OF ELECTRIC ROAD VEHICLES**

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This second edition cancels and replaces the first edition published in 2016, and Amendment 1:2018. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- Subclause 8.3.1 revised to add requirements for a mandatory control device that detects the temperature of the current carrying parts in the household plug;
- Test requirements added in a new Subclause 9.36 for the temperature control device;
- Harmonization of EMC requirements with new edition of IEC 61543 and IEC 61851-21-2;
- General improvement of test and requirements.

The text of this International Standard is based on the following documents:

Draft	Report on voting
23E/1342/FDIS	23E/1346/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

In this document, the following print types are used:

- Requirements proper, in roman type;
- *Test specifications, in italic type;*
- NOTES, in smaller roman type.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

IMPORTANT – The "colour inside" logo on the cover page of this document indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INTRODUCTION

The essential purpose of this document is the safe and reliable access of electric vehicles to a supply system. The definition for "mode 2 charging of electric vehicle" is described in IEC 61851-1.

For all charging modes, protection against electric shock in case of failure of basic protection and/or fault protection is provided, at least by a type A residual current device (RCD) (see IEC 60364-7-722 and IEC 61851-1).

For mode 2 charging, including the situation where it cannot be guaranteed that the installation is equipped with RCDs, for example charging the electric vehicle at an unknown installation, a dedicated protection is used for the connected electric vehicle. The intention of this document is to describe the relevant requirements for an in-cable control and protection device (IC-CPD) to be used for mode 2 charging.

This version of IEC 62752 covers also the content of the former IEC 62335.