



BSI Standards Publication

Direct current (DC) appliance couplers for information and communication technology (ICT) equipment installed in data centres and telecom central offices

Part 1: 2,6 kW system

National foreword

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

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**Direct current (DC) appliance couplers for information and communication technology (ICT) equipment installed in data centres and telecom central offices –
Part 1: 2,6 kW system**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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CONTENTS

FOREWORD.....	6
1 Scope.....	8
2 Normative references	9
3 Terms and definitions	10
4 General requirements	13
5 General notes on tests	14
5.1 General.....	14
5.2 Test samples	14
5.3 Failures	14
5.4 Routine tests.....	14
5.5 Test voltages	15
5.6 Grouping of samples	15
6 Standard ratings	15
7 Classification of appliance couplers	15
8 Marking	15
8.1 General.....	15
8.2 Additional markings	15
8.3 Symbols or alphanumeric notations.....	16
8.4 Legibility of markings	16
8.5 Terminal markings and wiring instructions.....	16
8.6 Durability	17
8.7 Test and inspection.....	17
9 Dimensions and compatibility	17
9.1 General.....	17
9.2 Single-pole connections	17
9.3 Compatibility	17
9.4 Dimensions for appliance couplers.....	17
10 Protection against electric shock	18
10.1 Accessibility of live parts.....	18
10.2 Protection against single pole connection	18
10.3 Protection against access to live parts	18
10.4 External parts	18
10.5 Shields	18
11 Provision for earthing	19
12 Terminals and terminations.....	19
12.1 General.....	19
12.2 Rewirable appliance couplers	19
12.3 Non-rewirable appliance couplers	19
13 Construction	20
13.1 Risk of accidental contact	20
13.2 Parts covering live parts	20
13.3 Pin construction	20
13.3.1 Prevention of rotation	20
13.3.2 Pin retention	20
13.3.3 Hollow pins.....	20

13.4	Contact pressure	21
13.5	Enclosure	21
13.5.1	General	21
13.5.2	Rewirable connectors	21
13.5.3	Non-rewirable connectors	21
13.6	Earth connection	22
13.7	Location of terminals and terminations	22
13.7.1	General	22
13.7.2	Free wire test for rewirable accessories	22
13.7.3	Free wire test for non-rewirable non-moulded-on accessories	23
13.7.4	Free wire verification for non-rewirable moulded-on accessories	23
14	Insulation resistance and electric strength	23
14.1	General	23
14.2	Insulation resistance	24
14.3	Dielectric strength	24
15	Forces necessary to insert and to withdraw the connector	24
15.1	General	24
15.2	Verification of the maximum withdrawal force	25
15.3	Verification of the minimum withdrawal force	26
16	Operation of contacts	26
17	Resistance to heating of appliance couplers	26
17.1	General	26
17.2	Heating test for connectors	26
17.3	Heating test for appliance inlets	27
18	Breaking capacity	27
19	Normal operation	29
20	Temperature rise	29
21	Cords and their connection	30
21.1	Cords for non-rewirable connectors	30
21.2	Cable anchorage	31
21.2.1	General	31
21.2.2	Additional requirements for rewirable connectors	31
21.2.3	Pull test for cable anchorage	31
21.3	Flexing test	33
22	Mechanical strength	35
22.1	General	35
22.2	Free fall test	35
22.3	Lateral pull test for contacts	36
22.4	Impact test	38
22.5	Pull tests for connectors with a separate front part	38
22.5.1	General	38
22.5.2	Straight pull test	38
22.5.3	Lateral pull test	38
23	Resistance to heat and ageing	39
23.1	Resistance to heat	39
23.2	Resistance to ageing	39
23.2.1	General	39
23.2.2	Ageing test for elastomeric materials	39

23.2.3	Ageing test for thermoplastic materials	40
23.2.4	Ageing test assessment.....	40
24	Screws, current-carrying parts and connections.....	40
24.1	General.....	40
24.2	Electrical connections	41
24.3	Securement of connections	41
24.4	Current-carrying parts	42
25	Creepage distances, clearances and distances through sealing compound.....	42
26	Resistance of insulating material to heat, fire and tracking	44
26.1	Resistance to heat and fire	44
26.1.1	General	44
26.1.2	Object of the test	44
26.1.3	General description of the test.....	44
26.1.4	Degree of severity	45
26.1.5	Evaluation of test results	45
26.2	Resistance to tracking.....	45
27	Resistance to rusting	45
28	Electromagnetic compatibility (EMC) requirements	46
28.1	General.....	46
28.2	Immunity – Accessories not incorporating electronic components	46
28.3	Emission – Accessories not incorporating electronic components	46
Annex A (normative) Safety-related routine tests for electrically-wired accessories (protection against electric shock and correct polarity).....		47
A.1	General remarks	47
A.2	Polarized systems, “+” and “-” : Correct connection	47
A.3	Earth continuity.....	48
A.4	Short-circuit/wrong connection and reduction of creepage distance and clearances between “+” and “-” to earth.....	48
A.4.1	Accessible surface safety check	48
A.4.2	Short-circuit/wrong connection.....	48
Annex B (normative) Test procedure.....		49
Annex C (informative) Alternative gripping tests.....		51
C.1	Gripping test C1.....	51
C.2	Gripping test C2.....	53
Annex D (normative) Standard sheets and gauges.....		54
D.1	Standard sheets.....	54
D.2	Gauges	58
D.2.1	Distance to the point of first contact.....	58
D.2.2	"GO" gauge for appliance inlets according to standard sheet 1 (Figure D.1).....	59
D.2.3	"GO" gauge for connectors according to standard sheet 2 (Figure D.2).....	60
D.2.4	Gauge for checking the maximum withdrawal force (see 15.2).....	62
D.2.5	Gauges for checking the minimum withdrawal force (see 15.3)	63
D.2.6	Position of switch cam of optional micro switches	63
Bibliography.....		65
Figure 1 – Intended use of appliance couplers		10
Figure 2 – Apparatus for checking the withdrawal force		25

Figure 3 – Circuit diagram for breaking capacity and normal operation tests	28
Figure 4 – Apparatus for testing the cable anchorage	32
Figure 5 – Apparatus for the flexing test	34
Figure 6 – Example of apparatus for pull test	37
Figure C.1 – Reference gauge for gripping test	52
Figure C.2 – Example of the test apparatus for connector gripping test	53
Figure D.1 – Appliance inlet	56
Figure D.2 – Connector	57
Figure D.3 – Positioning of the “+” and “–” pins/connector-contacts	58
Figure D.4 – Gauges for checking point of first contact	59
Figure D.5 – “GO” gauge for appliance inlets according to standard sheet 1 (Figure D.1)	60
Figure D.6 – “GO” gauge for connectors according to standard sheet 2 (Figure D.2)	61
Figure D.7 – Gauge representing the counterpart inlet for checking the maximum withdrawal force	62
Figure D.8 – Gauge for checking the minimum withdrawal force for “+” and “–” socket- contact	63
Figure D.9 – Gauge for checking the minimum withdrawal force for PE socket-contact	63
Figure D.10 – Area for positioning of actuator of optional micro switch	64
Figure D.11 – Minimum dimension of switch cam	64
Table 1 – Relationship between rated power and nominal cross-sectional areas or American Wire Gauge (AWG) size of copper conductors	19
Table 2 – Maximum diameters of the cords	24
Table 3 – Maximum and minimum withdrawal forces	25
Table 4 – Cords and conductors for the tests of Clause 16	30
Table 5 – Type and nominal cross-sectional area of cords	30
Table 6 – Types of cable for the rewirable connector test	32
Table 7 – Values for the lateral pulls applied	38
Table 8 – Values for torque and pull forces	39
Table 9 – Torque applied for the tightening and loosening test	41
Table 10 – Creepage distances, clearances and distances through insulating sealing compound	43
Table B.1 – Test schedule	49
Table D.1 – Dimension of contact gauge	59

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**DIRECT CURRENT (DC) APPLIANCE COUPLERS FOR INFORMATION
AND COMMUNICATION TECHNOLOGY (ICT) EQUIPMENT INSTALLED
IN DATA CENTRES AND TELECOM CENTRAL OFFICES –**

Part 1: 2,6 kW system

FOREWORD

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IEC TS 63236-1 has been prepared by IEC technical committee 23: Electrical accessories. It is a Technical Specification.

IEC TS 63236-1 is to be used in conjunction with the other parts of the IEC 63236 series, if applicable.

The text of this Technical Specification is based on the following documents:

DTS	Report on voting
23/915/DTS	23/957A/RVDTS

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 Technical Specification 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/standardsdev/publications.

In this document, the following print types are used:

- requirements proper: in roman type;
- *test specifications: in italic type;*
- notes: in small roman type.

A list of all parts in the IEC 63236 series, published under the general title *Direct current (DC) appliance couplers for information and communication technology (ICT) equipment installed in data centres and telecom central offices*, can be found on the IEC website.

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,
- replaced by a revised edition, or
- amended.

DIRECT CURRENT (DC) APPLIANCE COUPLERS FOR INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) EQUIPMENT INSTALLED IN DATA CENTRES AND TELECOM CENTRAL OFFICES –

Part 1: 2,6 kW system

1 Scope

This part of IEC 63236, which is a Technical Specification, applies to DC appliance couplers for class I equipment with two active contacts plus an earthing contact, a rated power of 2,6 kW and a rated voltage range from 294 V to 400 V DC. They are intended to power DC information and communication technology equipment only, as specified in IEC 62368-1.

The accessories according to this document are intended to be used by ordinary persons in data centres only where the value of the DC voltage distribution system is defined as follows:

- 380 V with a tolerance of ± 20 V for installations with no backup battery or with a voltage regulation system;
- 380 V with a voltage range of 294 V to 400 V for installations with a backup battery where voltage regulation is not guaranteed;
- the voltage value between each live conductor and earth does not exceed 200 V DC during normal operation;
- there are two abnormal voltage ranges (duration below 10 min):
 - 260 V up to 294 V, and
 - above 400 V to 410 V.

The maximum current of the appliance couplers is

- 6,5 A when the voltage between live contacts is 400 V DC,
- 8,8 A when the voltage between live contacts is 294 V DC,

and can rise up to 10 A when the voltage between live contacts decreases to 260 V DC for 10 min maximum.

The voltage between live conductors can fall down to 260 V DC when the voltage discharge value of the battery reaches the disconnecting level. The consequence is that the current increases accordingly.

The accessories according to this document do not require maintenance.

The accessories according to this document are intended for use in circuits where

- basic protection,
- an overcurrent protection (of 8,8 A or less for each socket-outlet or multiple socket-outlet),
- the fault protection (indirect contact protection), and
- additional protection

are already assured.

Appliance couplers complying with this document are suitable for normal use at ambient temperatures not normally exceeding $+60$ °C, with a lower limit of the ambient air temperature of -5 °C.