



**62067-
2011**

150 ($U_m = 170$) 500 ($U_m = 550$)

IEC 62067:2001

**Power cables with extruded insulation and their accessories for rated voltages
above 150 kV ($U_m = 170$ kV) up to 500 kV ($U_m = 550$ kV) —
Test methods and requirements
(IDT)**



2012

62067—2011

27 2002 . 184- « — 1.0—2004 « », .
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 (« »)

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4 62067:2001 « 150
 { U_m - 170 } 500 (U_m - 550). » (IEC 62067:2001 «Power
 cables with extruded insulation and their accessories for rated voltages above 150 kV (U_m - 170 kV) up to
 500 kV [U_m - 550 kV) — Test methods and requirements» A.1.2006).
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| 10.4 | | 7 |
| 10.5 | | 7 |
| 10.6 | | 7 |
| 10.7 | | 8 |
| 10.8 | | 8 |
| 10.9 | | 9 |
| (XLPE) | | |
| (EPR) | | |
| 10.10 | | 9 |
| 10.11 | | 9 |
| (HDPE) | | |
| 10.12 | | 9 |
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| 12 | | 9 |
| 12.1 | | 9 |
| 12.2 | | 9 |
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150 ($U_m * 170$) 500 ($U_m * 550$)

Power cables with extruded insulation and their accessories for rated voltages above
150 kV ($U_m * 170$ kV) up to 500 kV ($U_m * 550$ kV).
Test methods and requirements

— 2012—07—01

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150 ($U_m - 170$) 500 (= 550)

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60060-1:1989¹> 1. -
(IEC 60060-1:1989. High-voltage test techniques» Part 1: General definitions and test requirements)

60183:1984 no (IEC 60183:1984. Guide to the selection of high-voltage cables)

60228:1978*¹ (IEC 60228:1978. Conductors of insulated cables)

60229:1982³ -
(IEC 60229:1982. Tests on cable oversheaths which have a special protective function and are applied by extrusion)

60230:1966 (IEC 60230:1966. Impulse tests on cables and their accessories)

" 60060-1:2010.

n 60228:2004

*¹ 60229:2007

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|---|----------------|---|----------------------|
| 60332-1:1993* | | | 1. |
| Tests on electric cables under fire conditions — Part 1: Test on a single vertical insulated wire or cable) | | {(| 60332-1:1993. |
| 60611-1-1:1993 | | | |
| 1. | | 1. | |
| | | (IEC 60811-1-1:1993. Common test methods for | |
| insulating and sheathing materials of electric cables — Part 1: Methods for general application — Section 1: | | Measurement of thickness and overall dimensions — Tests for determining the mechanical properties) | |
| 60811-1-2:1985 | | | |
| 1. | | 2. | (IEC 60811-1-2:1985. |
| Common test methods for insulating and sheathing materials of electric cables — Part 1: Methods for general | | application — Section Two: Thermal ageing methods) | |
| 60811-1-3:1993 | | | |
| 1. | | 3. | |
| | | (IEC 60811-1-3:1993. Insulating and sheathing materials of electric | |
| cables — Common test methods — Part 1: General application — Section 3: Methods for determining the | | density — Water absorption tests — Shrinkage test) | |
| 60811-1-4:1985 | | | |
| 1. | | 4. | |
| (IEC 60811 -1 *4:1985, Common test methods for insulating and sheathing materials of electric cables — Part 1: | | Methods for general application — Section Four: Tests at low temperature) | |
| 60811-2-1:1998 | | | |
| 2-1. | | | |
| | | (IEC 60811-2-1:1998. Insulating and sheathing | |
| materials of electric and optical cables — Common test methods — Part 2-1: Methods specific to elastomeric | | compounds — Ozone resistance, hot set and mineral oil immersion tests) | |
| 60811-3-1:1985 | | | |
| 3. | | 1. | |
| | | (IEC 60811-3-1:1985. | |
| Common test methods for insulating and sheathing materials of electric cables — Part 3: Methods specific to PVC | | compounds — Section One: Pressure test at high temperature — Tests for resistance to cracking) | |
| 60811-3-2:1985 | | | |
| 3. | | 2. | |
| | | (IEC 60811-3-2:1985. Common test | |
| methods for insulating and sheathing materials of electric cables — Part 3: Methods specific to PVC | | compounds — Section Two: Loss of mass test — Thermal stability test) | |
| 60811-4-1:1985 ² | | | |
| 4. | | | |
| 1. | | | |
| | | (IEC 60811-4-1:1965, Common test methods for insulating and | |
| sheathing materials of electric cables — Part 4: Methods specific to polyethylene and polypropylene | | compounds — Section One: Resistance to environmental stress cracking — Wrapping test after thermal ageing | |
| in air — Measurement of the melt flow index — Carbon black and/or mineral content measurement in PE) | | | |
| 60332-1-1:2004 | | | |
| 1-1. | | | |
| | | 60332-1-2:2004 | |
| | | 1-2. | |
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| | | 60332-1-3:2004 | |
| | | 1-3. | |
| 3> | 60811-4-1:2004 | | |
| | 4-1. | | |

60840:2004

30 ($U_m - 36$) 150 ($U_m = 170$).

(IEC 60840:2004. Power cables with extruded insulation and their accessories for rated voltages above 30 kV - 36 kV up to 150 kV ($U_m - 170$ kV) — Test methods and requirements)

60885-3:1988

3.

(IEC 60865-3:1988. Electrical test methods for electric cables — Part 3: Test methods for partial discharge measurements on lengths of extruded power cables)

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3.1

3.1.1

(nominal value):

3.1.2

(median value):

3.2

3.2.1

(routine tests):

3.2.2

(sample tests):

3.2.3

(type tests):

3.2.4

(prequalification test):

3.2.5

(electrical tests after installation):

3.3

(cable system):

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4.1

U_0 , U , U_m

60183.

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4.2

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4.3

ST, ST₂—
ST_J ST₇—

60640.

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12.5.14.

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6.1

6.2

U_0, U, U_m (.4.1 8.5).

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60228.

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(.4.2).

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D. *d.*

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7.1

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60230

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(50 ± 10) .

60060-1.

8.4

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60060-1

(250 ± 50)

(250011500) .

8.5

$U_{0>}$

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U_0

3.

U_0

U_m

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3.

3.

$U_{0>}$

U .

V3.

60183.

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b)

c)

9.2.

9.3.

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10.4

10.5

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10.6

10.6.1

10.6.2

t_{max} —

f_{min} —

t_n —

— f_{mit}

10.6.3

0,1 + 15%

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$$mm^{2 0.85 f, - 0.1,}$$

f_{min} —
 t_n —

0.1

10.7

10.7.1

0.1 5 %

$$* mm^{0.95 - 0.1.}$$

10.7.1.1

± 0.01

4—6

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10.7.1.2

0.8

2,4

± 0.01

10.7.2

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± 0.01

0,1 + 10%

0.1 15%

$$?_{min}^{2 0.85 f, - 0.1.}$$

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10.8

8.3 60811-1-1.

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| | 12.4.2 | | | | | | | | - |
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12.4.2

a) 12.4.4

b) 12.4.5;

c) 12.4.6;

d) 12.4.7;

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e) f);

f) (1 12.4.8);

g) 12.4.9;

h) d);

D.

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i) 12.4.10.

12.4.3

) 12.4.2

12.4.2.

12.4.4

(,)

180®

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$36 \{d * D\} + 5\% -$

$25 \{d + \} 5\% -$

)

$20 \{d * D\} + 5\% -$

d—

D— (.6.8):

(.6.9).

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| 12.4.11.1 | | | | | - |
| 12.4.11.2 | | 12 [®] | | | - |
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| 12.5 | | | | | |
| | | | 12.5.1—12.5.14. | | |
| 12.5.1 | | | | | - |
| | 10.4,10.6 | 10.7. | | | |
| 12.5.2 | | | | | |
| 12.5.2.1 | | | | | |
| | | 9.1 | 60811-1-1. | | |
| 12.5.2.2 | | | | | |
| | | 8.1 | 60811-1-2 | | |
| 5. | | | | | |
| 12.5.2.3 | | | | | |
| | | | | 9.1 | 60811-1-1. |
| 12.5.2.4 | | | | | |
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| 12.5.3 | | | | | |
| 12.5.3.1 | | | | | |
| | | 9.2 | 60811-1-1. | | |
| 12.5.3.2 | | | | | |
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| 12.5.3.3 | | | | 9.2 | 60811-1-1. |

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| 12.5.3.4 | | | | | | | | | |
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| 12.5.4 | | | | | | | | | |
| 12.5.4.1 | | | | | | | | | |
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| 12.5.4.2 | | | | | | | | | 8.1.4 |
| 60811-1-2. | | | | | | | | | |
| 12.5.4.3 | | | | | | | | | 8.1.4 |
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| 12.5.4.4 | | | | | | | | | |
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| 60811-1-2. | | | | | | | | | |
| 12.5.4.5 | | | | | | | | | |
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| 12.5.5 | | | | | | | (PVC) | | ST ₂ |
| 12.5.5.1 | | | | | | | | | |
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| 60811-3-2 | | | | 9. | | | | | |
| 12.5.5.2 | | | | | | | | | |
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| 12.5.6 | | | | | | | | | |
| 12.5.6.1 | | | | | | | | | |
| | 8.2 | 60811-3-1 | | ST ₁ , ST ₂ | ST ₇ | | | | |
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| 12.5.6.2 | | | | | | 8.2 | 60811-3-1. | | |
| 12.5.7 | | | | | | | | (PVC) | ST _t |
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| 12.5.7.1 | | | | | | | | | |
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| 60811-1-4. | | | | — | 9. | | | | |
| 12.5.7.2 | | | | | | | | | |
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| 12.5.8 | | | | | | | | (PVC) | ST _t |
| ST ₂ | | | | | | | | | |
| 12.5.8.1 | | | | | | | | | |
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| 12.5.8.2 | | | | | | 9. | | | |
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| 330 345 | 362 | 190 | 420 | 60 | 285 | 380 | 1175 | 380 | 950 | |
| 380 400 | 420 | 220 | 440 | 60 | 330 | 440 | 1425 | 440 | 1050 | |
| 500 | 550 | 290 | 580 | 60 | 435 | 580 | 1550 | 580 | 1175 | |

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| | | % | 300 | 350 | | |
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| 8.2 | 60811-1-2: | (65 2) / ² | | | | |
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| (. 4.3) | | | ST, | STj | ST, | ST, |
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| 9.2 | 60811-1-1: | / ² % | 12.5 150 | 12.5 150 | 10.0 300 | 12.5 300 |
| 8.1 | 60811-1-2: | * • | 100 2 7 | 100 X 2 7 | 100 t 2 10 | 100 ±2 10 |
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| | | % | 150 | 150 | 300 | 300 |
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7.6 5. () ; 9.8.

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$$\frac{RMO^* \cdot T')T_t}{\text{-----} \text{£} \text{-----}}$$

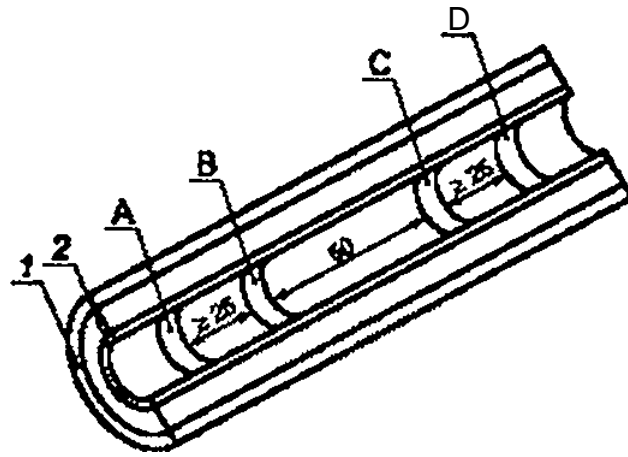
—
R_c—
L_t—

$$\frac{RMD. -)T_t}{L_t}$$

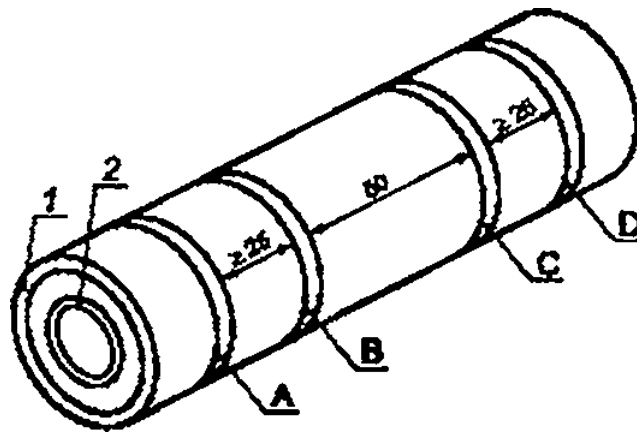
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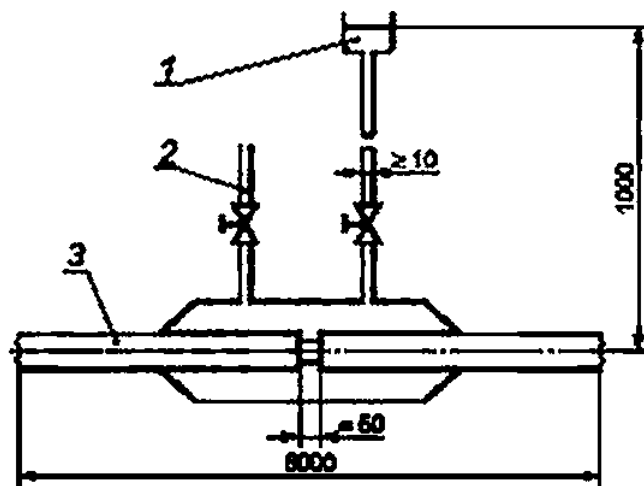


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| 60332-1:1993 | IDT | 60332-1-1—2007 « | - 1-1. - |
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| 60811-1-1:1993 | IDT | 60611-1-1—98 « | - 1-1. - |
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| 60811-1-4:1985 | IDT | 60811-1-4—2008 « | - 1-4. » |
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