## MAIN REFERENCE STANDARDS

## **CEI UNEL TABLES (INTERNATIONAL EQUIVALENT IN BRACKETS)**

CEI UNEL 00721 Identification colours for the sheath of electrical cables.

CEI UNEL 00722 (HD 308 - NF C 32-081 - DIN VDE 0293) Identification colours for the insulation of cable cores.

CEI UNEL 35011
Power and signalling cables: designation codes.

CEI UNEL 35024/1 (IEC 60364-5-523) Current rating in continous regime for electrical cables laid in air with voltages up to 1000 V a.c. and 1500 V d.c.

CEI UNEL 35026 Current rating in continous regime for electrical cables laid underground with voltages up to 1000 V a.c. and 1500 V d.c.

CEI UNEL 35368
Constructional and dimensional requirements for cables type N07G9-K.

**CEI UNEL 35369** 

Constructional and dimensional requirements for power cables type FG100M1.

**CEI UNEL 35375** 

al and dimensional requirements for power cables type FG7R, FG7OR, FG7OH1R, FG7OH2R.

CEI UNEL 35376 Constructional and dimensional requirements for power cables type U/RG7R, U/RG7OR, U/RG7OH1R.

CEI UNEL 35377
Constructional and dimensional requirements for signalling and control cables type FG7OR, FG7OH1R, FG7OH2R.

CELUNEL 35382

Constructional and dimensional requirements for power cables type FG7M1, FG7OM1, FG7OH1M1, FG7OH2M1.

CEI UNEL 35384

Constructional and dimensional requirements for signalling and control cables type FG7OM1, FG7OH1M1, FG7OH2M1.

CEI UNEL 35752 Constructional and dimensional requirements for cables type N07V-K.

CEI UNEL 35755
Constructional and dimensional requirements for signalling and control cables type N1VV-K, N1VC7V-K, N1VC4V-K.

CELUNEL 35756

Constructional and dimensional requirements for power cables type N1VV-K, N1VC7V-K, N1VC4V-K.

CEI UNEL 35756
Constructional and dimensional requirements for power single-core cables type N1VV-K.

## NATIONAL AND EXPORT CABLES REFERENCE STANDARDS (INTERNATIONAL EQUIVALENT IN BRACKETS)

CEI 20-11 - CEI EN 50363

Technical characteristics and test requirements of the compounds used as insulation and sheath for power cables.

CEI 20-13 (IEC 60502 where applicable) Rubber insulated cables for rated voltages from 1 to 30 kV.

CEI 20-14 (IEC 60502 where applicable)
PVC insulated cables for rated voltages from 1 to 3 kV.

CEI 20-21 (IEC 60364-5-523)
Calculation of current rating for electrical cables in continous regime.

CEI 20-22/2 Test for fire propagation of electric cables.

CEI 20-22/3 - CEI-EN 60332-3-24 (IEC 60332-3-24) Test for fire propagation of bunched cables (category C).

CEI 20-27 (HD 361) Designation system for electrical power and signalling cables.

CEI 20-29 - CEI EN 60228 (IEC 60228-228A - HD 383 - NBN C 30-228 - DIN VDE 0295) Conductors for insulated cables.

CEI 20-35/1-2 - CEI EN 60332-1-2 (IEC 60332-1 where applicable)
Procedures and requirements for testing of not propagating flame electrical cables.

CEI 20-36/4-0 - CEI EN 50200 Procedures and requirements for testing of fire resistant electrical cables Procedures and requirement with diameter up to 20 mm.

CEI 20-36/5-0 - CEI EN 50362 Procedures and requirements for testing of fire resistant electrical cables with diameter upper than 20 mm.

CEI 20-37/2-1 - CEI EN 50267-2-1 (IEC 60754-1 where applicable)
Procedures and requirements for the determination of halogen acid gases emitted during combustion of electrical cables.

CEI 20-37/2-2 - CEI EN 50267-2-2 (IEC 60754-2 where applicable)
Determination of acidity (corrosivity) of gases by measuring pH and conductivity.

CEI 20-37/4-0
Tests for the determination of toxicity index of gases emitted during combustion of electrical cables.

CEI 20-37/3-1 - CEI EN 61034-2 Tests for the determination of smoke density emitted during combustion of electrical cables.

CEI 20-38

Not propagating fire cables insulated with rubber and with low emission of smoke and toxic and corrosive gases.

CEI 20-40 (HD 516 S1)
Guide for the use of low voltage cables.

CEI 20-45 Fire resistant cables insulated with elastomeric mixture and with nominal voltage not greater than 0,6/1 kV.

CEI 20-91 Cables for uses in photovoltaic systems (PV).

CEI 20-107 (EN 50525) - (ex CEI 20-19/CEI 20-20/HD 21/HD 22) Low voltage energy cables or rated voltages up to and including 450/750 V.

CEI EN 60811 (HD 505)

CENELEC HD 603
Power distribution cables for rated voltage 0,6/1 kV.

ENEL DV 201
Power cables, PVC insulated, not propagating fire and single-core cables without sheath, with flexible conductors, for rated voltage 450/750 V.

ENEL DV 203
Power cables, PVC insulated, not propagating fire and multi-core rigid cables without screen, under PVC sheath, for rated voltage 0,6/1 kV.

ENEL DV 204
Power cables, PVC insulated, not propagating fire and multi-core screened cables for fixed installation, with flexible conductors, under PVC sheath, for rated voltage 0,6/1 kV.

ENEL DV 205
Signalling and control cables, PVC insulated, not propagating fire and multi-core cables for fixed installation, with flexible conductors, without screen, under PVC sheath, for rated voltage 0,6/1 kV.

ENEL DV 206 Signalling and control cables, PVC insulated, not propagating fire and multi-core screened cobles for fixed installation, with flexible conductors, under PVC sheath, for rated voltage  $0.6/1~\rm kV$ .

ENEL DC 4908
General requirements for the construction, printing and delivery of low voltage energy cables for distribution.

Two-core low voltage cables with aluminum core and concentric copper conductor, insulated with HEPR or XLPE and with PVC sheath.

Four-core low voltage cables with aluminium phase and copper neutral concentric conductors, insulated with HEPR or XLPE and with PVC sheath.

ENEL DC 4146
Four-core low voltage visible helix assembled cables with aluminium conductors, insulated with HEPR or XLPE and with PVC sheath.

ENEL DC 4152 Single-core low voltage cables with aluminium conductor, insulated with HEPR or XLPE and with PVC sheath.

ENEL DC 4182
Four-core cable visible helix assembled for aerial installation, XLPE insulated, with self-supporting neutral central conductor made of aluminium alloy without sheath, and with phase aluminium conductors XLPE sheathed.

ENEL DC 4183
Two and four-core self-supporting cables visible helix assembled for aerial installation, with aluminium conductors XLPE insulated, with XLPE sheath.

ENEL - ENDESA NCDC 4147 Low voltage cables for underground laying single-core or four-core visible helix assembled with aluminium conductor, insulated with cross-linked polyethylene, with thermoplastic polyolefin sheath.

OVE/ONORM E 8241-55
Flexible cables for low temperature applications.

OVE/ONORM E 50395 Electric tests on power cables.

NBN IEC 502 NAD Flexible power cables for rated voltage 0,6/1 kV.

NBN C 30-004 Fire compliance characteristics of electric cables.

NF C 32-321 Cross-linked polyethylene insulated cables covered with PVC sheath.

NF C 32-323 Cross-linked polyethylene insulated cables covered with halogen-free sheath. NF C 32070-C1 Classification of tests on conductors and cables under fire conditions.

DIN VDE 0207 Insulating and sheating materials for cables and flexible cords.

DIN VDE 0245 General requirements for cables and cords for power installation.

DIN VDE 0250 Cables, wires and flexible cords for power installations. General requirements.

UNE 21123-2 Cross-linked polyethylene insulated cables with PVC sheath.

UNE 21123-4 Cross-linked polyethylene insulated cables with polyolefin sheath.

