

Internal Technical Norms

List of internal technical norms (ITN) from Transelectrica

No.	Name of the ITN	ITN code	Endorsement of CTES
1	Regulation for preventive maintenance to the electricity transmission grid (ETG) installations and equipment	ITN-TEL-R-001-2007-00	135/2007
2	Tests and measurements to electric equipment in the ETG	ITN-TEL-R-002-2007-00	50/2007
3	Technical specification for the 400/400/80 MVA 400/232/22 kV autotransformer, control included	ITN-TEL-E-001-2007-00	123/2007
4	Technical specification for the 250/250/80 MVA 400/121/20 kV transformer, control included	ITN-TEL-E-002-2007-00	123/2007
5	Technical specification for the 200/200/60 MVA 231/121/10.5 kV autotransformer, control included	ITN-TEL-E-003-2007-00	123/2007
6	Technical specification for the 16/16 MVA 110/22 kV transformer	ITN-TEL-E-004-2007-00	123/2007
7	Technical specification for the 110 kV mobile bay	ITN-TEL-E-005-2007-00	204/2007
8	Technical specification for the 220 kV mobile bay	ITN-TEL-E-006-2007-00	204/2007
9	Technical specification for the 400 kV mobile bay	ITN-TEL-E-007-2007-00	204/2007
10	Technical conditions to select and install the grounding installations made of copper	ITN-TEL-S-001-2008-00	120/2008
11	Internal technical norm- Guidelines to select the circuit breakers and Technical specification for 123 kV circuit breakers	ITN-TEL-E-008-2008-00	191/2008
12	Internal technical norm- Guidelines to select the circuit breakers and Technical specification for 245 kV circuit breakers	ITN-TEL-E-009-2008-00	191/2008
13	Internal technical norm- Guidelines to select the circuit breakers and Technical specification for 420 kV circuit breakers	ITN-TEL-E-010-2008-00	191/2008
14	Internal technical norm- Guidelines to select the circuit breakers and Technical specification for 750 kV circuit breakers	ITN-TEL-E-011-2008-00	191/2008
15	Operational and technical framework documentation for the tele management centres, intervention teams and refurbished electric transformer substations	ITN-TEL-R-003-2008-00	245/2008
16	Technical specification for 110 kV current transformers	ITN-TEL-E-012-2008-00	253/2008
17	Technical specification for 220 kV current transformers	ITN-TEL-E-013-2008-00	253/2008
18	Technical specification for 400 kV current transformers	ITN-TEL-E-014-2008-00	253/2008

19	Technical specification for 750 kV current transformers	ITN-TEL-E-015-2008-00	253/2008
20	Technical specification for 110 kV disconnectors and grounding disconnectors	ITN-TEL-E-016-2008-00	307/2008
21	Technical specification for 220 kV disconnectors and grounding disconnectors	ITN-TEL-E-017-2008-00	307/2008
22	Technical specification for 400 kV disconnectors and grounding disconnectors	ITN-TEL-E-018-2008-00	307/2008
23	Technical specification for 750 kV disconnectors and grounding disconnectors	ITN-TEL-E-019-2008-00	307/2008
24	Selection guidelines and Technical specification for the 110 kV arresters with metallic oxides	ITN-TEL-E-020-2008-00	317/2008
25	Selection guidelines and Technical specification for the 220 kV arresters with metallic oxides	ITN-TEL-E-021-2008-00	317/2008
26	Selection guidelines and Technical specification for the 400 kV arresters with metallic oxides	ITN-TEL-E-022-2008-00	317/2008
27	Selection guidelines and Technical specification for the 750 kV arresters with metallic oxides	ITN-TEL-E-023-2008-00	317/2008
28	Technical specification for power transformer oils	ITN-TEL-E-024-2008-00	356/2008
29	Technical specification for lightning rods of 750, 400, 220 and 110 kV	ITN-TEL-S-002-2008-00	352/2008
30	Technical specification for 110 kV capacitive voltage transformers	ITN-TEL-E-025-2009-00	30/2009
31	Technical specification for 220 kV capacitive voltage transformers	ITN-TEL-E-026-2009-00	30/2009
32	Technical specification for 400 kV capacitive voltage transformers	ITN-TEL-E-027-2009-00	30/2009
33	Technical specification for 750 kV capacitive voltage transformers	ITN-TEL-E-028-2009-00	30/2009
34	Technical specification for the 7.2 kV bays	ITN-TEL-E-029-2009-00	141/2009
35	Technical specification for the 12 kV bays	ITN-TEL-E-030-2009-00	141/2009
36	Technical specification for the 24 kV bays	ITN-TEL-E-031-2009-00	141/2009
37	Technical specification for 110-400 kV composite insulators and insulator chains	ITN-TEL-E-032-2009-00	144/2009
38	Technical specification for 110-400 kV bell rod insulators and insulator chains	ITN-TEL-E-033-2009-00	144/2009
39	Technical specification for 110 kV mixed metering transformers	ITN-TEL-E-034-2009-00	207/2009
40	Technical specification for the 110 kV bus bars	ITN-TEL-E-035-2009-00	241/2009
41	Technical specification for the 220 kV bus bars	ITN-TEL-E-036-2009-00	241/2009
42	Technical specification for the 400 kV bus bars	ITN-TEL-E-037-2009-00	241/2009
43	Technical specification for the 750 kV bus bars	ITN-TEL-E-038-2009-00	241/2009
44	Internal technical norm Equipment details and specifications to achieve the control, protection and automation system for the level of 400 kV OHL / OHL / couplers from the refurbished electric substations by types of primary diagrams	ITN-TEL-E-003-2009-00	148/2009

45	Internal technical norm for the 110 kV / medium voltage (20, 10, 6 kV) transformers in the power range 16 ÷ 40 MVA	ITN-TEL-E-039-2009-00	303/2009
46	Internal technical norm for the 20(10)(6) / 0.4 kV 250÷1600 kVA dry auxiliary service transformers	ITN-TEL-E-040-2009-00	302/2009
47	Internal technical norm for 400/110 kV 400 MVA transformers	ITN-TEL-E-041-2009-00	332/2009
48	Internal technical norm Equipment details and specifications to achieve the control, protection and automation system for the level of 220 kV OHL / underground lines / couplers from the refurbished electric substations by types of primary diagrams	ITN-TEL-S-004-2009-00	240/2009
49	Internal technical norm Equipment details and specifications to achieve the control, protection and automation system for the level of 110 kV OHL / underground lines / couplers from the refurbished electric substations by types of primary diagrams	ITN-TEL-S-005-2009-00	289/2009
50	Internal technical norm Equipment details and specifications to achieve the control, protection and automation system, including the protection required for the treatment system of network neutral to the medium voltage level OHL / underground lines / couplers from the refurbished electric substations by types of primary diagrams	ITN-TEL-S-006-2009-00	290/2009
51	Internal technical norm Equipment details and specifications to achieve the control, protection and automation system for transformers, autotransformers and buckling coils	ITN-TEL-S-007-2010-00	19/2010
52	Internal technical norm Equipment details and specifications to achieve the bus bar differential protection, the breaker failure protection and automations at substation level, by types of primary diagrams	ITN-TEL-S-008-2010-00	20/2010
53	Internal technical norm Equipment details and specifications for the control and protection system at the refurbished / upgraded electric substation level	ITN-TEL-S-009-2010-00	92/2010
54	Internal technical norm Technical conditions for the OHL components in view of LST	ITN-TEL-S-010-2010-00	66/2010
55	Internal technical norm Equipment details and specifications for the auxiliary service cabinets of the main dc and ac distribution, including the requirements to achieve the 0.4 kV switch-over equipment and its integration into the substation control system	ITN-TEL-S-011-2010-00	93/2010