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GROUP SAFETY PUBLICATION

**Safety requirements for electrical equipment for measurement, control, and laboratory use –
Part 2-030: Particular requirements for equipment having testing or measuring circuits**

[IEC 61010-2-030:2023](#)

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Part 2-030: Particular requirements for equipment having testing or measuring circuits**

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**SAFETY REQUIREMENTS FOR ELECTRICAL EQUIPMENT
FOR MEASUREMENT, CONTROL, AND LABORATORY USE –**

Part 1: General requirements

INTERPRETATION SHEET 1

This interpretation sheet has been prepared by IEC technical committee 66: Safety of measuring, control and laboratory equipment.

The text of this interpretation sheet is based on the following documents:

ISH	Report on voting
66/497A/ISH	66/505/RVD

Full information on the voting for the approval of this interpretation sheet can be found in the report on voting indicated in the above table.

IEC 61010-1:2010 contains a requirement in 6.8.3.1 pertaining to voltage testers for type tests as follows:

“The generator shall be able to supply a power of at least 500 VA.”

This has given rise to the following questions:

How does one interpret the requirement for voltage testers in 6.8.3.1 of IEC 61010-1:2010? Specifically, this subclause requires that “The generator shall be able to supply a power of at least 500 VA.” Does this requirement apply throughout the rated output range of the voltage tester? What is meant by the word “generator”? Is the “generator” the power supply within the voltage tester, or the voltage tester output, or something else?

Interpretation:

“A voltage tester used for type tests must be able to deliver at least 500 VA at its full-rated output voltage. It does not necessarily need to deliver 500 VA if set for lower voltages.

For example, a voltage tester that can deliver 100 mA at any test output voltage up to 5 000 V (and a current corresponding to 500 VA above 5 000 V) would meet the requirement.

The requirements for voltage testers used for routine (production line) tests are included in Annex F. The requirements of 6.8.3.1 do not apply to these voltage testers.”

CONTENTS

FOREWORD.....	10
INTRODUCTION to IEC 61010-1:2010 and IEC 61010-1:2010/AMD1:2016.....	14
INTRODUCTION.....	15
1 Scope and object.....	16
1.1 Scope.....	16
1.1.1 Equipment included in scope	16
1.1.2 Equipment excluded from scope	16
1.1.3 Computing equipment.....	17
1.2 Object	17
1.2.1 Aspects included in scope	17
1.2.2 Aspects excluded from scope	17
1.3 Verification	17
1.4 Environmental conditions	18
1.4.1 Normal environmental conditions	18
1.4.2 Extended environmental conditions	18
2 Normative references	18
3 Terms and definitions	21
3.1 Equipment and states of equipment.....	21
3.2 Parts and accessories	21
3.3 Quantities	22
3.4 Tests	22
3.5 Safety terms	23
3.6 Insulation	24
4 Tests	26
4.1 General	26
4.2 Sequence of tests.....	26
4.3 Reference test conditions	26
4.3.1 Environmental conditions.....	26
4.3.2 State of equipment	27
4.4 Testing in SINGLE FAULT CONDITION	28
4.4.1 General	28
4.4.2 Application of fault conditions	29
4.4.3 Duration of tests	31
4.4.4 Conformity after application of fault conditions.....	31
5 Marking and documentation.....	32
5.1 Marking	32
5.1.1 General	32
5.1.2 Identification.....	32
5.1.3 MAINS supply	33
5.1.4 Fuses	34
5.1.5 TERMINALS, connections and operating devices.....	35
5.1.6 Switches and circuit-breakers	37
5.1.7 Equipment protected by DOUBLE INSULATION or REINFORCED INSULATION.....	37
5.1.8 Field-wiring TERMINAL boxes	37
5.2 Warning markings	37

5.3	Durability of markings.....	38
5.4	Documentation	38
5.4.1	General	38
5.4.2	Equipment RATINGS.....	39
5.4.3	Equipment installation	40
5.4.4	Equipment operation.....	40
5.4.5	Equipment maintenance and service	41
5.4.6	Integration into systems or effects resulting from special conditions	41
6	Protection against electric shock	41
6.1	General	41
6.1.1	Requirements	41
6.1.2	Exceptions.....	42
6.2	Determination of ACCESSIBLE parts.....	42
6.2.1	General	42
6.2.2	Examination.....	42
6.2.3	Openings above parts that are HAZARDOUS LIVE.....	43
6.2.4	Openings for pre-set controls.....	43
6.3	Limit values for ACCESSIBLE parts.....	43
6.3.1	Levels in NORMAL CONDITION.....	43
6.3.2	Levels in SINGLE FAULT CONDITION.....	44
6.4	Primary means of protection	47
6.4.1	General	47
6.4.2	ENCLOSURES and PROTECTIVE BARRIERS.....	47
6.4.3	BASIC INSULATION	47
6.4.4	Impedance.....	47
6.5	Additional means of protection in case of SINGLE FAULT CONDITIONS	47
6.5.1	General	47
6.5.2	PROTECTIVE BONDING.....	48
6.5.3	SUPPLEMENTARY INSULATION and REINFORCED INSULATION	52
6.5.4	PROTECTIVE IMPEDANCE	53
6.5.5	Automatic disconnection of the supply	53
6.5.6	Current- or voltage-limiting device	53
6.6	Connections to external circuits.....	54
6.6.1	General	54
6.6.2	TERMINALS for external circuits.....	54
6.6.3	Circuits with TERMINALS which are HAZARDOUS LIVE.....	54
6.6.4	TERMINALS for stranded conductors	54
6.6.101	Measuring circuit TERMINALS.....	55
6.7	Insulation requirements	57
6.7.1	The nature of insulation	57
6.7.2	Insulation for MAINS CIRCUITS of OVERVOLTAGE CATEGORY II with a nominal supply voltage up to 300 V	60
6.7.3	Insulation for secondary circuits derived from MAINS CIRCUITS of OVERVOLTAGE CATEGORY II up to 300 V	63
6.8	Procedure for voltage tests.....	69
6.8.1	General	69
6.8.2	Humidity preconditioning	70
6.8.3	Test procedures	71
6.9	Constructional requirements for protection against electric shock.....	72

6.9.1	General	72
6.9.2	Insulating materials	72
6.9.3	Colour coding	72
6.10	Connection to the MAINS supply source and connections between parts of equipment	72
6.10.1	MAINS supply cords	72
6.10.2	Fitting of non-detachable MAINS supply cords	73
6.10.3	Plugs and connectors	75
6.11	Disconnection from supply source	75
6.11.1	General	75
6.11.2	Exceptions	75
6.11.3	Requirements according to type of equipment	76
6.11.4	Disconnecting devices	76
7	Protection against mechanical HAZARDS	77
7.1	General	77
7.2	Sharp edges	77
7.3	Moving parts	77
7.3.1	General	77
7.3.2	Exceptions	78
7.3.3	RISK assessment for mechanical HAZARDS to body parts	78
7.3.4	Limitation of force and pressure	79
7.3.5	Gap limitations between moving parts	80
7.4	Stability	82
7.5	Provisions for lifting and carrying	83
7.5.1	General	83
7.5.2	Handles and grips	83
7.5.3	Lifting devices and supporting parts	83
7.6	Wall mounting	83
7.7	Expelled parts	84
8	Resistance to mechanical stresses	84
8.1	General	84
8.2	ENCLOSURE rigidity tests	85
8.2.1	Static test	85
8.2.2	Impact test	85
8.3	Drop test	86
8.3.1	Equipment other than HAND-HELD EQUIPMENT and DIRECT PLUG-IN EQUIPMENT	86
8.3.2	HAND-HELD EQUIPMENT and DIRECT PLUG-IN EQUIPMENT	87
9	Protection against the spread of fire and arc flash	87
9.1	General	87
9.2	Eliminating or reducing the sources of ignition within the equipment	89
9.3	Containment of fire within the equipment, should it occur	89
9.3.1	General	89
9.3.2	Constructional requirements	89
9.4	Limited-energy circuit	92
9.5	Requirements for equipment containing or using flammable liquids	93
9.6	Overcurrent protection	93
9.6.1	General	93
9.6.2	PERMANENTLY CONNECTED EQUIPMENT	94

9.6.3	Other equipment.....	94
9.101	Protection of measuring circuits.....	94
9.101.1	General.....	94
9.101.2	Protection against mismatches of inputs and ranges.....	94
9.101.3	Protection against MAINS overvoltages.....	97
10	Equipment temperature limits and resistance to heat.....	98
10.1	Surface temperature limits for protection against burns.....	98
10.2	Temperatures of windings.....	99
10.3	Other temperature measurements.....	99
10.4	Conduct of temperature tests.....	100
10.4.1	General.....	100
10.4.2	Temperature measurement of heating equipment.....	100
10.4.3	Equipment intended for installation in a cabinet or a wall.....	100
10.5	Resistance to heat.....	101
10.5.1	Integrity of CLEARANCES and CREEPAGE DISTANCES.....	101
10.5.2	Non-metallic ENCLOSURES.....	101
10.5.3	Insulating material.....	101
11	Protection against HAZARDS from fluids and solid foreign objects.....	102
11.1	General.....	102
11.2	Cleaning.....	102
11.3	Spillage.....	103
11.4	Overflow.....	103
11.5	Battery electrolyte.....	103
11.6	Equipment RATED with a degree of ingress protection (IP code).....	103
11.6.1	General.....	103
11.6.2	Conditions for testing.....	104
11.6.3	Protection against solid foreign objects (including dust).....	104
11.6.4	Protection against water.....	104
11.7	Fluid pressure and leakage.....	105
11.7.1	Maximum pressure.....	105
11.7.2	Leakage and rupture at high pressure.....	105
11.7.3	Leakage from low-pressure parts.....	106
11.7.4	Overpressure safety device.....	106
12	Protection against radiation, including laser sources, and against sonic and ultrasonic pressure.....	107
12.1	General.....	107
12.2	Equipment producing ionizing radiation.....	107
12.2.1	Ionizing radiation.....	107
12.2.2	Accelerated electrons.....	108
12.3	Optical radiation.....	108
12.4	Microwave radiation.....	109
12.5	Sonic and ultrasonic pressure.....	109
12.5.1	Sound level.....	109
12.5.2	Ultrasonic pressure.....	110
12.6	Laser sources.....	110
13	Protection against liberated gases and substances, explosion and implosion.....	111
13.1	Poisonous and injurious gases and substances.....	111
13.2	Explosion and implosion.....	111
13.2.1	Components.....	111

13.2.2	Batteries and battery charging	111
13.2.3	Implosion of cathode ray tubes	112
14	Components and subassemblies	112
14.1	General	112
14.2	Motors	113
14.2.1	Motor temperatures	113
14.2.2	Series excitation motors	113
14.3	Overtemperature protection devices	114
14.4	Fuse holders	114
14.5	MAINS voltage selection devices	114
14.6	MAINS transformers tested outside equipment.....	114
14.7	Printed wiring boards.....	115
14.8	Circuits used to limit TRANSIENT OVERVOLTAGES.....	115
14.101	Probe assemblies and accessories	115
15	Protection by interlocks	116
15.1	General	116
15.2	Prevention of reactivating	116
15.3	Reliability	116
16	HAZARDS resulting from application	116
16.1	REASONABLY FORESEEABLE MISUSE.....	116
16.2	Ergonomic aspects	116
17	RISK assessment	117
101	Measuring circuits	117
101.1	General	117
101.2	Current measuring circuits.....	118
101.3	Indicating devices.....	118
101.3.1	General	118
101.3.2	Battery level	118
101.3.3	Over-range indication	119
101.3.4	Permanent overvoltages	119
Annex A (normative)	Measuring circuits for touch current (see 6.3).....	121
Annex B (normative)	Standard test fingers (see 6.2)	124
Annex C (normative)	Measurement of CLEARANCES and CREEPAGE DISTANCES	126
Annex D (normative)	Parts between which insulation requirements are specified (see 6.4 and 6.5.3)	130
Annex E (informative)	Guideline for reduction of POLLUTION DEGREES	133
Annex F (normative)	ROUTINE TESTS.....	134
Annex G (informative)	Leakage and rupture from fluids under pressure	136
Annex H (normative)	Qualification of conformal coatings for protection against POLLUTION	141
Annex I (informative)	Line-to-neutral voltages for common MAINS supply systems	144
Annex J (informative)	RISK assessment	146
Annex K (normative)	Insulation requirements not covered by 6.7	149
Annex L (informative)	Index of defined terms	176
Annex AA (normative)	MEASUREMENT CATEGORIES	178
Annex BB (informative)	HAZARDS pertaining to measurements performed in certain environments	181

Annex CC (informative) 4 mm "banana" TERMINALS	184
Annex DD (informative) Flowchart for insulation according to the type of circuit	186
Annex EE (informative) Determination of CLEARANCES for Table 101	189
Bibliography.....	190
Figure 1 – Measurements through openings in ENCLOSURES.....	43
Figure 2 – Maximum duration of short-term ACCESSIBLE voltages in SINGLE FAULT CONDITION (see 6.3.2 a))	45
Figure 3 – Capacitance level versus voltage in NORMAL CONDITION and SINGLE FAULT CONDITION (see 6.3.1 c) and 6.3.2 c))	46
Figure 4 – Acceptable arrangement of protective means against electric shock	48
Figure 5 – Examples of binding screw assemblies	50
Figure 101 – Duration of current flow versus body current for a.c. and d.c. currents.....	52
Figure 6 – Distance between conductors on an interface between two layers.....	61
Figure 7 – Distance between adjacent conductors along an interface of two inner layers.....	62
Figure 8 – Distance between adjacent conductors located between the same two layers.....	63
Figure 9 – Detachable MAINS supply cords and connections	73
Figure 10 – Impact test using a sphere	86
Figure 11 – Flow chart to explain the requirements for protection against the spread of fire	88
Figure 12 – Baffle	91
Figure 13 – Area of the bottom of an ENCLOSURE to be constructed as specified in 9.3.2 c) 1)	91
Figure 14 – Ball-pressure test apparatus.....	102
Figure 16 – Ratio between test pressure and maximum working pressure.....	106
Figure 15 – Flow chart for conformity options 14.1 a), b), c) and d).....	113
Figure A.1 – Measuring circuit for a.c. with frequencies up to 1 MHz and for d.c.	121
Figure A.2 – Measuring circuits for sinusoidal a.c. with frequencies up to 100 Hz and for d.c.	122
Figure A.3 – Current measuring circuit for electrical burns	123
Figure A.4 – Current measuring circuit for wet contact	123
Figure B.1 – Rigid test finger	124
Figure B.2 – Jointed test finger	125
Figure C.1 – Examples of methods of measuring CLEARANCES and CREEPAGE DISTANCES.....	129
Figures D.1a) to d) – Protection between HAZARDOUS LIVE circuits and ACCESSIBLE parts.....	131
Figures D.1e) to h) – Protection between HAZARDOUS LIVE circuits and circuits with ACCESSIBLE external TERMINALS	131
Figures D.2 a) and D.2 b) – Protection between a HAZARDOUS LIVE internal circuit and an ACCESSIBLE part which is not bonded to other ACCESSIBLE parts.....	132
Figures D.2 c) and D.2 d) – Protection between a HAZARDOUS LIVE primary circuit and circuits which have ACCESSIBLE external TERMINALS.....	132
Figure D.3 – Protection of external ACCESSIBLE TERMINALS of two HAZARDOUS LIVE circuits.....	132
Figure G.1 – Conformity verification process (see G.2).....	137

Figure H.1 – Test sequence and conformity	143
Figure J.1 – Iterative process of RISK assessment and RISK reduction	146
Figure J.2 – RISK reduction	147
Figure K.1 – Distance between conductors on an interface between two layers	153
Figure K.2 – Distance between adjacent conductors along an interface of an inner layer	154
Figure K.3 – Distance between adjacent conductors located between the same two layers.....	155
Figure K.4 – Example of recurring peak voltage	167
Figure K.101 – Test circuit for evaluation of TRANSIENT OVERVOLTAGE attenuation.....	170
Figure AA.1 – Example to identify the locations of MEASUREMENT CATEGORIES	179
Figure CC.1 – Recommended dimensions of 4 mm TERMINALS	185
Figure DD.1 – Requirements for CLEARANCE, CREEPAGE DISTANCE and solid insulation.....	188
Table 1 – Symbols	34
Table 2 – Tightening torque for binding screw assemblies	50
Table 101 – CLEARANCES for unmated measuring circuit TERMINALS.....	56
Table 3 – Multiplication factors for CLEARANCES of equipment RATED for operation at altitudes up to 5 000 m	58
TABLE 4 – CLEARANCES and CREEPAGE DISTANCES for MAINS CIRCUITS of OVERVOLTAGE CATEGORY II up to 300 V	60
Table 5 – Test voltages for solid insulation in MAINS CIRCUITS of OVERVOLTAGE CATEGORY II up to 300 V.....	61
Table 6 – CLEARANCES and test voltages for secondary circuits derived from MAINS CIRCUITS of OVERVOLTAGE CATEGORY II up to 300 V.....	65
Table 7 – CREEPAGE DISTANCES for secondary circuits	66
Table 8 – Minimum values for distance or thickness (see 6.7.3.4.2 to 6.7.3.4.4)	68
Table 9 – Distances between TERMINALS and foil.....	69
Table 10 – Correction factors according to test site altitude for test voltages for CLEARANCES	70
Table 11 – Values for physical tests on cord anchorages	74
Table 12 – Protective measures against mechanical HAZARDS to body parts.....	79
Table 13 – Minimum maintained gaps to prevent crushing for different body parts	81
Table 14 – Maximum gaps to prevent access for different body parts.....	81
Table 15 – Impact energy levels, test height and corresponding IK codes	86
Table 16 – Acceptable perforation of the bottom of an ENCLOSURE	90
Table 17 – Limits of maximum available current.....	92
Table 18 – Values for overcurrent protection devices	93
Table 19 – Surface temperature limits in NORMAL CONDITION.....	99
Table 20 – Maximum temperatures for insulation material of windings	99
Table 22 – Lamp or lamp systems considered photobiologically safe	109
Table 23 – Lamp or lamp systems considered photobiologically safe under certain conditions	109
Table 21 – Impulse voltages for OVERVOLTAGECATEGORY II.....	115
Table C.1 – Dimensions of X.....	126

Table E.1 – Environmental situations	133
Table E.2 – Reduction of POLLUTION DEGREES	133
Table F.1 – Test voltages for ROUTINE TESTS of MAINS CIRCUITS	135
Table G.1 – Test pressures for equipment with pressures above 14 Mpa	139
Table H.1 – Test parameters, test conditions and test procedures	142
Table I.1 – Line-to-neutral voltages for common MAINS supply systems	144
Table J.1 – Severity of harm	148
Table J.2 – Probability of harm	148
Table J.3 – Risk category	148
Table K.1 – Multiplication factors for CLEARANCES for equipment RATED for operation at altitudes up to 5 000 m	150
Table K.2 – CLEARANCES and CREEPAGE DISTANCES for MAINS CIRCUITS of OVERVOLTAGE CATEGORY II above 300 V	150
Table K.3 – CLEARANCES and CREEPAGE DISTANCES for MAINS CIRCUITS of OVERVOLTAGE CATEGORY III	151
Table K.4 – CLEARANCES and CREEPAGE DISTANCES for MAINS CIRCUITS of OVERVOLTAGE CATEGORY IV	151
Table K.5 – Test voltages for solid insulation in MAINS CIRCUITS of OVERVOLTAGE CATEGORY II above 300 V	152
Table K.6 – Test voltages for solid insulation in MAINS CIRCUITS of OVERVOLTAGE CATEGORY III	152
Table K.7 – Test voltages for solid insulation in MAINS CIRCUITS of OVERVOLTAGE CATEGORY IV	152
Table K.8 – Test voltages for long-term stress of solid insulation in MAINS CIRCUITS	153
Table K.9 – Minimum values for distance or thickness of solid insulation	154
Table K.10 – CLEARANCES and test voltages for secondary circuits derived from MAINS CIRCUITS of OVERVOLTAGE CATEGORY II above 300 V	157
Table K.11 – CLEARANCES and test voltages for secondary circuits derived from MAINS CIRCUITS of OVERVOLTAGE CATEGORY III	158
Table K.12 – CLEARANCES and test voltages for secondary circuits derived from MAINS CIRCUITS of OVERVOLTAGE CATEGORY IV	159
Table K.13 – CREEPAGE DISTANCES for secondary circuits	160
Table K.14 – Minimum values for distance or thickness (see K.2.4.2 to K.2.4.4)	162
Table K.15 – CLEARANCE values for the calculation of K.3.2	165
Table K.16 – Test voltages based on CLEARANCES	165
Table K.17 – CLEARANCES for BASIC INSULATION in circuits having recurring peak voltages or WORKING VOLTAGES with frequencies above 30 kHz	168
Table K.101 – Impulse voltages for circuits connected to MAINS	170
Table K.102 – CLEARANCES for measuring circuits RATED for MEASUREMENT CATEGORIES	171
Table K.103 – Impulse test voltages for testing electric strength of solid insulation for measuring circuits RATED for MEASUREMENT CATEGORIES	172
Table K.104 – a.c. test voltages for testing electric strength of solid insulation for measuring circuits RATED for MEASUREMENT CATEGORIES	173
Table K.105 – Minimum values for distance or thickness of solid insulation for measuring circuits RATED for MEASUREMENT CATEGORIES	174
Table AA.1 – Characteristics of MEASUREMENT CATEGORIES	180
Table EE.1 – CLEARANCE values for Table 101	189

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SAFETY REQUIREMENTS FOR ELECTRICAL EQUIPMENT FOR MEASUREMENT, CONTROL, AND LABORATORY USE –

Part 1: General requirements

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