

TESTING AND MEASURING EQUIPMENT/ALLOWED SUBCONTRACTING
IEC 62271-107:2012-05 Edition 2.0
High-voltage switchgear and controlgear –
Part 107: Alternating current fused circuit-switchers
for rated voltages above 1 kV up to and including 52 kV
PROVISIONAL

“R”	Required
“S”	May be subcontracted, see OD 2012
“SPTL”	Specialized Facility, see IECEE 02-2
“W”	Witness testing in the categories “MED” and “MEAS”
“3PPS”	Three Phase Power Supply required

Clause	Measurement/testing	Testing / measuring equipment / material needed	Subcontracting
6.2.6.1	Power-frequency voltage tests	Power-frequency voltage source Voltage measurement system	R
6.2.6.2	Lightning impulse voltage tests	Impulse voltage source Voltage measurement system	R
6.2.8	Artificial pollution tests for outdoor insulators	Power-frequency voltage source Voltage measurement system Test chamber with fog spray or steam-fog generator	S
6.2.10	Dielectric tests on auxiliary and control circuits	Withstanding voltage tester	R
6.2.11	Voltage test as condition check	Power-frequency voltage source Voltage measurement system	R
6.4	Measurement of the resistance of circuits	Circuit resistance measurement instrument	R
6.5	Temperature-rise tests	Current/voltage source Current measuring instruments The temperature data acquisition system Power analyzer	R
6.7	Verification of the protection	Test-finger, test-rod, test-wire	R

Clause	Measurement/testing	Testing / measuring equipment / material needed	Subcontracting
		Dust chamber Raining test facility Spring hammer Pendulum hammer	
6.8	Tightness tests	Leak detector Pressure meter	R
6.9.1	Emission tests	Anechoic chamber EMI Receiver Artificial Mains Network(AMN) Antenna	S
6.9.2	Immunity tests on auxiliary and control circuits	The generator of power voltage dips The generator of lightning surge test The generator of electrical fast transient/burser test The generator of damped oscillatory wave test The generator of static electricity discharges test The generator of power frequency magnetic field test The generator of pulse magnetic field test Shielding Room	S
6.9.3	Additional EMC tests on auxiliary and control circuits	The generator of power voltage dips The generator of lightning surge test The generator of electrical fast transient/burser test The generator of damped oscillatory wave test The generator of static electricity discharges test The generator of power frequency magnetic field test The generator of pulse magnetic field test Shielding Room	S
6.10	Additional tests on auxiliary and control circuits		
6.10.3/ 6.10.4	Electrical continuity of earthed metallic parts test/ Verification of the operational characteristics of auxiliary contacts	Low voltage direct current generator set	R
6.10.5	Environmental tests	Environmental test chamber	S

Clause	Measurement/testing	Testing / measuring equipment / material needed	Subcontracting
		Vibration response test device Seismic tests device	
6.10.6	Dielectric test	Withstanding voltage tester	R
6.11	X-radiation test procedure for vacuum interrupters	X-ray inspection instrument	R
6.101	Making and breaking tests	Short circuit current generating system Voltage generating system Measurement control system Load system	R
6.102	Mechanical operation tests	Mechanical characteristic testing instrument Dynamometer Mechanical endurance test equipment Simulated fuse striker	R
6.103	Extension of validity of type tests	Power-frequency voltage source Voltage measurement system Impulse voltage source Voltage measurement system Current/voltage source Current measuring system The temperature data acquisition system Power analyzer Short circuit current generating system Voltage generating system Measurement control system Load system	R