

Electrical Equipment Maintenance Frequencies - Based on CSA Z463-18 Guideline on Maintenance of Electrical Systems

Table M.3 Cable							
<b>Legend:</b> x = a test or inspection should be performed y = factory testing should be performed - = factory testing not required n/s = not specified; testing frequency is at the discretion of user n/a = not applicable a/n = as needed							
	Type of equipment — Tests to be performed			Maintenance priority level, months			
	Low - voltage cable	Medium - voltage XLPE cable	Medium - voltage PILC cable	Minimal Frequency	Good electrical practice	Optimized program for critical or severe-duty applications	Factory testing
<b>Maintenance activities</b>							
Visual inspection for physical damage	x	x	x	12	12	12	-
Inspection for overheating	x	x	x	12	12	12	-
Inspection for loose screws, nuts, and bolts	x	x	x	12	12	12	-
Inspection for shield grounding and cable support	x	x	x	12	12	12	-
Inspection of terminations and splices	x	x	x	12	12	12	-
Inspection for discoloured, cracked, or brittle insulation or jacket	x	x	x	12	12	12	-
Inspection for signs of corrosion, discoloration, and oxidation of metallic shield	x	x	x	12	12	12	-
Inspecting compression-applied or mechanical connections for correct cable match and indentation	x	x	x	12	12	12	-
<b>Requiring specialized training, equipment, and safety precautions</b>							
Continuity testing to confirm shield continuity and phasing		x	x	36	24	12	-
Sheath integrity test		x	x	36	24	12	y
Insulation resistance — dielectric absorption ratio (DAR) or polarization index (PI)		x	x	36	24	12	y
Contact resistance test for cablebus		x	x	36	24	12	y
Torque connections		x	x	36	24	12	y
Direct current (dc) hi-pot test		x	x	a/n	a/n	a/n	-
Tan delta test		x	x	36	24	12	y
Partial discharge (PD) test		x	x	36	24	12	y
Dielectric spectroscopy		x	x	a/n	a/n	a/n	-
Thermography	x	x	x	12	12	6	-
Fault location	x	x	x	a/n	a/n	a/n	-
(1) Prior to testing ensure that all requirements for safe access to the equipment are met [e.g., permits, safety hazard and risk analysis]							
(2) The information shown above is based on: CSA Z463-18 Guideline on Maintenance of Electrical Systems and is not necessarily identical to the source.							