



Client: DOMINION VOTING
215 SPADINA AVE., SUITE 200, TORONTO, ON M5T 2C7 CANADA

Test subject: Product:
Filter

Test specification: Ground Continuity test
Leakage Test
Dielectric strength test


Purpose of examination: Manufacturer-defined test program.

Test result: Measurements only, see test data.

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Test Data

Tested by:  Tested by: Nazmus Sakib Test date: 2016-09-26
signature print
Sample #: 7169001570 -S1 Instrument Code / Range: See individual tests
Ambient Temperature: 23.1°C Ambient Humidity: 42.6%

PHOTOS:

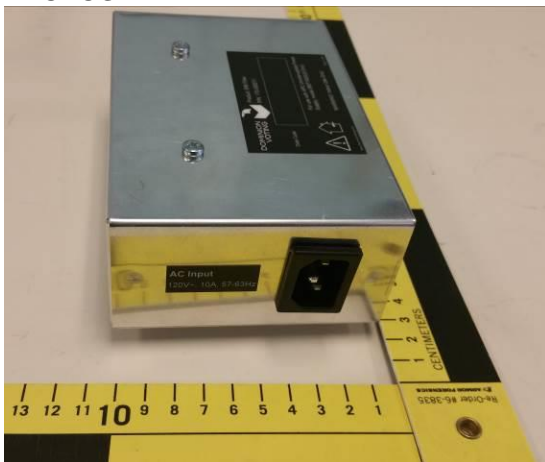


Figure 1: Top-front Enclosure

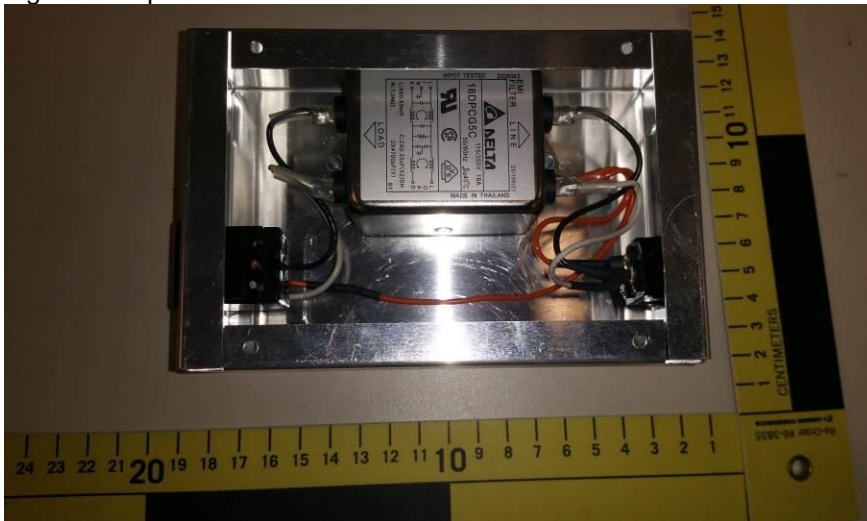


Figure 2: Internal components (Filter)



LEAKAGE TEST: (CUSTOM TEST PLAN)

Standard IEC 61010 (cl 6.3.2) and IEC 60950 (cl 5.1):

Clause	Requirement — Test										Result — Remark	Verdict		
6.3.2	TABLE: Values in single fault condition Form A.6											P		
(see Form A.4)	Item	Subclause and			Voltage			Transient (see NOTE)		Current			Capacitance	Comments
	fault No. (see Form A.1)	V r.m.s.	V peak	V d.c.	V	s	Test circuit A1/A2/A3	mA r.m.s.	mA peak	mA d.c.	µF (see note)			
	—	—	—	0	—	—	A1	—	0.58	—	—	275Vac, 60Hz. Open Ground, Normal polarity		
	—	—	—	0	—	—	A1	—	0.60	—	—	275Vac, 60Hz. Open Ground, Reverse polarity		
NOTE – Transient voltages must be below the limits given from Figure 2 and the capacitance below the limits from figure 3 of IEC 61010-1.														
Supplementary information: Under single fault conditions, levels specified in clause 6.3.2 were not exceeded.														

Test equipment: CANE00008, 14, 108, 77



DIELECTRIC STRENGTH TEST: (CUSTOM TEST PLAN)

Standard IEC 61010 (cl 6.7.2.2) and IEC 60950 (cl 5.2):

Pollution degree: 2		Overvoltage category : II					
Area	Location	Insulation type	Working voltage			Test voltage	Comments (NOTE 3)
		(NOTE 1)	RMS [V]	Peak [V]	Frequency [kHz]	(note 2) [V]	
	From: Mains cord (line & neutral) To: Ground	BI	275	389	0.06	1500 Vac	
NOTE 1 – Type of insulation: BI = Basic Insulation DI = Double Insulation PI = Protective Impedance RI = Reinforced Insulation SI = Supplementary Insulation see also Form A.15 for further details		NOTE 2 - Types of voltage Peak impulse test voltage (pulse) r.m.s. d.c. peak			NOTE 3 - overvoltage categories or pollution degrees which differ should be shown under "Comments"		
Supplementary Information:							

Test equipment: CANE00002, 166



GROUND CONTINUITY TEST: (CUSTOM TEST PLAN)

Standard IEC 61010 (cl 6.5.2.4) and IEC 60950 (cl 2.6):

Clause	Requirement — Test	Result — Remark	Verdict
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TABLE: Bonding impedance of plug connected equipment Form A.9				P
accessible part under test	Test current [A]	Voltage attained after 1 min [V]	Calculated resistance (Maximum 0,1 or 0,2 Ω) [Ω] (NOTE 1)	Verdict
From: Inlet ground pin To: metal enclosure	40 (Note 1)	0.42	0.01	P
NOTE 1 – For none-detachable power cord the impedance between protective conductor plug pin of mains cord and each accessible part shall not exceed 0,2 Ohm.				
Supplementary information: Note 1: 40A for 2 minutes was applied in accordance with CSA C22.2 No. 0.4				

Test equipment: CANE00184, 166