

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:	alar		Tested by:	Nazmus Sakib	Test date:	2016-09-26
Sample # :	signatu 7169001570	ure -S1	Instrument C	print Code / Range:	See individua	al tests
Ambient Tem	perature:	23.1°C	Ambier	t 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):

6.3.2 TABLE: Values in single fault condition Form A.6 P Item Subclause and Voltage and Transient (see NOTE) Current Capacitance (see note) Comments (see fault No. V V V see NOTE) Test (circuit A1/A2/A3) mA mA µF (see Form r.m.s. peak d.c. V s Circuit A1/A2/A3 r.m.s. peak d.c. (see note) A1/A2/A3 A.4) A.1) - - 0 - - A1 - 0.58 - - 275Vac, 60Hz. Open Ground, Normal polarity Normal polarity - - - 0 - - A1 - 0.60 - - 275Vac, 60Hz. Open Ground, Normal polarity 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: Supplementary information: Vure	Clause	Requirement — Test Result — Remark									Verdict			
6.3.2 TABLE: Values in single fault condition Form A.6 P Item Subclause and Voltage and Transient (see NOTE) Current Capacitance (see note) Comments (see fault No. V V V see NOTE) Test circuit and n' mA														
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Image: Strain of the second formation: Image: Strain of													Grou	ind,
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limits from figure 3 of IEC 61010-1. Supplementary information:	NOTE Transient veltages must be below the limits given from Figure 2 and the especitance below the													
Supplementary information:	limite from figure 2 of IEC 61010.1													
Supplementary momation.	Supplementary information:													
onder single fault conditions, levels specified in clause 0.5.2 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):

Pollu	Pollution degree: 2 Overvoltage category : II								
Area	Location	Insulation type	Workin	g voltag	е	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			
NOT BI = I DI =	E 1 – Type of insulation: N Basic Insulation P Double Insulation	OTE 2 - Types of voltage NOT eak impulse test voltage (pulse) or po r.m.s. shou "Com				E 3 - overvolt ollution degree Id be shown u nments"	age categories es which differ under		
PI = RI = SI = 3 see a Supp	Protective Impedance Reinforced Insulation Supplementary Insulation Iso Form A.15 for further details Iementary Information:	d.c. peał	κ						

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							
TABLE: Bonding impedance of plug connected equipment Form A.9											
accessible part under testTest currentVoltage attained after 1 minCalculated resistance (Maximum 0,1 or 0,2 Ω)[A][V][Ω] (NOTE 1)											
From: Inlet ground pin40 (Note 1)0.420.01P											
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