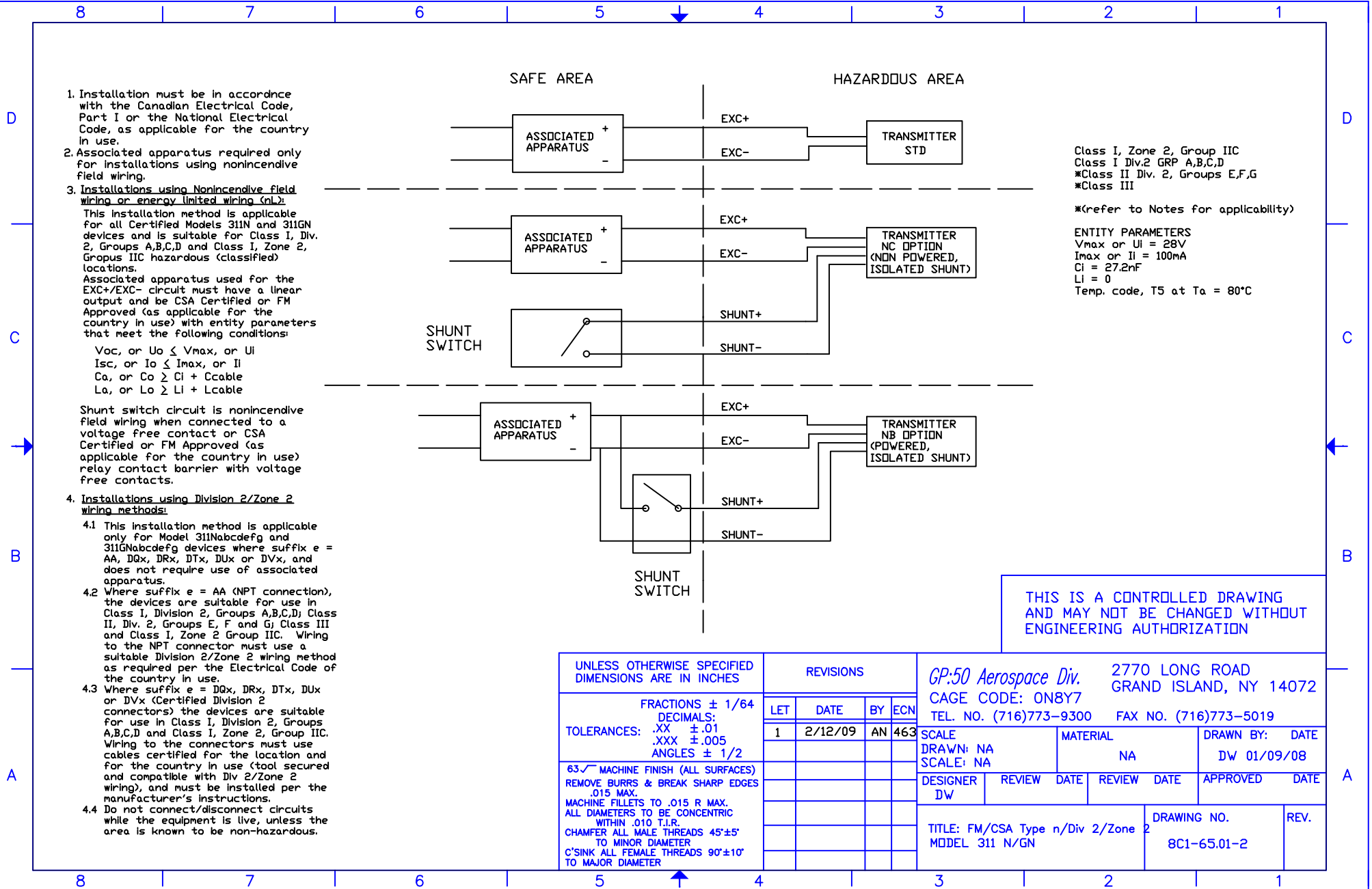


THIRD PARTY AGENCY APPROVAL CODE: N-S



1. Installation must be in accordance with the Canadian Electrical Code, Part I or the National Electrical Code, as applicable for the country in use.
2. Associated apparatus required only for installations using nonincendive field wiring.

3. Installations using Nonincendive field wiring or energy limited wiring (nL):
 This installation method is applicable for all Certified Models 311N and 311GN devices and is suitable for Class I, Div. 2, Groups A,B,C,D and Class I, Zone 2, Group IIC hazardous (classified) locations.

Associated apparatus used for the EXC+/EXC- circuit must have a linear output and be CSA Certified or FM Approved (as applicable for the country in use) with entity parameters that meet the following conditions:
 V_{oc} , or $U_o \leq V_{max}$, or U_i
 I_{sc} , or $I_o \leq I_{max}$, or I_l
 C_o , or $C_o \geq C_l + C_{cable}$
 L_a , or $L_o \geq L_l + L_{cable}$

Shunt switch circuit is nonincendive field wiring when connected to a voltage free contact or CSA Certified or FM Approved (as applicable for the country in use) relay contact barrier with voltage free contacts.

4. Installations using Division 2/Zone 2 wiring methods:

- 4.1 This installation method is applicable only for Model 311NabcdeFG and 311GNabcdeFG devices where suffix e = AA, DQx, DRx, DTx, DUX or DVx, and does not require use of associated apparatus.
- 4.2 Where suffix e = AA (NPT connection), the devices are suitable for use in Class I, Division 2, Groups A,B,C,D; Class II, Div. 2, Groups E, F and G; Class III and Class I, Zone 2 Group IIC. Wiring to the NPT connector must use a suitable Division 2/Zone 2 wiring method as required per the Electrical Code of the country in use.
- 4.3 Where suffix e = DQx, DRx, DTx, DUX or DVx (Certified Division 2 connectors) the devices are suitable for use in Class I, Division 2, Groups A,B,C,D and Class I, Zone 2, Group IIC. Wiring to the connectors must use cables certified for the location and for the country in use (tool secured and compatible with Div 2/Zone 2 wiring), and must be installed per the manufacturer's instructions.
- 4.4 Do not connect/disconnect circuits while the equipment is live, unless the area is known to be non-hazardous.

Class I, Zone 2, Group IIC
 Class I Div.2 GRP A,B,C,D
 *Class II Div. 2, Groups E,F,G
 *Class III
 *(refer to Notes for applicability)
 ENTITY PARAMETERS
 V_{max} or $U_i = 28V$
 I_{max} or $I_l = 100mA$
 $C_l = 27.2nF$
 $L_l = 0$
 Temp. code, T5 at $T_a = 80^\circ C$

THIS IS A CONTROLLED DRAWING AND MAY NOT BE CHANGED WITHOUT ENGINEERING AUTHORIZATION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	REVISIONS				GP:50 Aerospace Div. 2770 LONG ROAD	
	LET	DATE	BY	ECN	CAGE CODE: ON8Y7	GRAND ISLAND, NY 14072
FRACTIONS ± 1/64 DECIMALS: TOLERANCES: .XX ±.01 .XXX ±.005 ANGLES ± 1/2	1	2/12/09	AN	463	TEL. NO. (716)773-9300	FAX NO. (716)773-5019
63 ✓ MACHINE FINISH (ALL SURFACES) REMOVE BURRS & BREAK SHARP EDGES .015 MAX. MACHINE FILLETS TO .015 R MAX. ALL DIAMETERS TO BE CONCENTRIC WITHIN .010 T.I.R. CHAMFER ALL MALE THREADS 45°±5° TO MINOR DIAMETER C'SINK ALL FEMALE THREADS 90°±10° TO MAJOR DIAMETER	SCALE		MATERIAL		DRAWN BY: DATE	
	DRAWN: NA SCALE: NA		NA		DW 01/09/08	
DESIGNER		REVIEW DATE		REVIEW DATE		APPROVED DATE
DW						
TITLE: FM/CSA Type n/Div 2/Zone 2 MODEL 311 N/GN				DRAWING NO.		REV.
				8C1-65.01-2		