

## Connections

### HAZARDOUS LOCATION

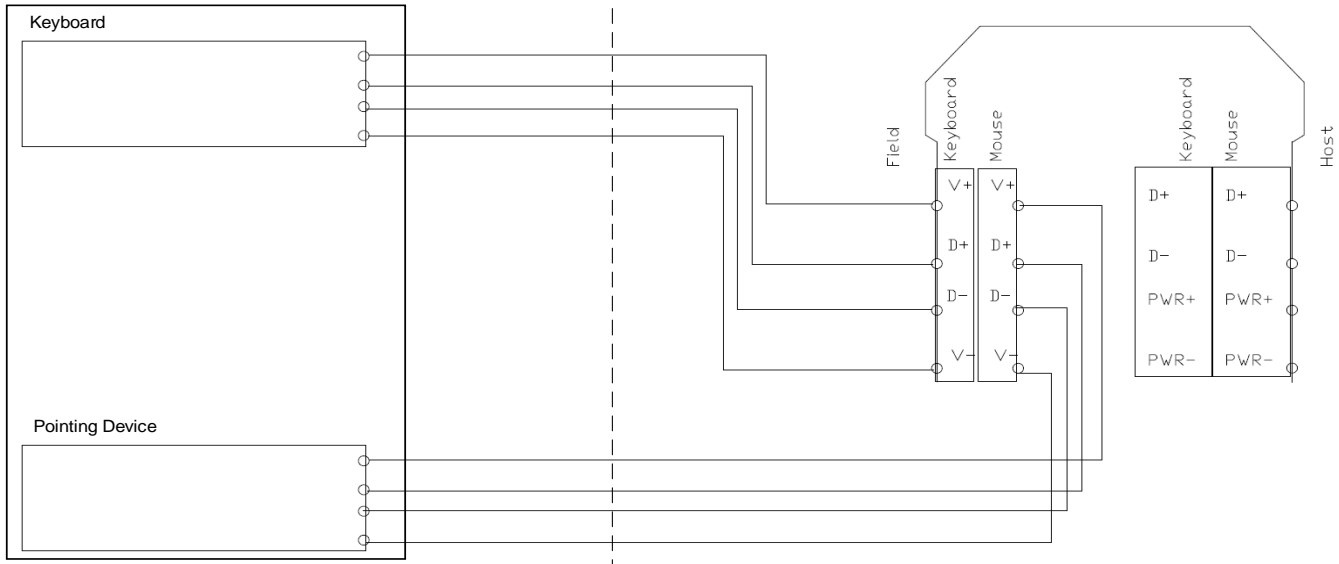
EXTA\*-J-N\* and EXTA\*-K-N\*  
 EXTA\*-L-N\* and EXTA\*-M-N\*  
 EXTA\*-D4-N\* and EXTA\*-D4-T\*  
 Cl. I Div. 2 Grps. A, B, C, D  
 Cl. II Div. 2 Grps. F, G  
 Cl. III

EXTA\*-J-F\* and EXTA\*-K-F\*  
 EXTA\*-L-F\* and EXTA\*-M-F\*  
 EXTA\*-J-T\* and EXTA\*-K-T\*  
 EXTA\*-L-T\* and EXTA\*-M-T\*  
 EXTA\*-D2-T\* and EXTA\*-D2-N\*  
 Cl. I Div. 2 Grps. A, B, C, D

### NON-HAZARDOUS LOCATION or less HAZARDOUS LOCATION

Associated Apparatus suitable for:  
 Cl. I Div. 2 Grps. A, B, C, D  
 Cl. II Div. 2 Grps. F, G  
 Cl. III  
 For example P+F SK Barrier

EXTA Series Keyboard



## Notes

- The Entity Concept allows interconnection of a non-incendive apparatus with a non-incendive associated apparatus not specifically examined in combination as a system. The capacitance and inductance of the system must be less than the marked capacitance,  $C_o$  (or  $C_a$ ), shown on any associated apparatus. The same applies for inductance ( $L_{cable}$ ,  $L_i$  and  $L_o$  or  $L_a$ , respectively). Where the cable capacitance and inductance per foot are not known, the following values shall be used:  $C_{cable} = 60 \text{ pF/ft. (197 pF/m)}$ ,  $L_{cable} = 0.2 \text{ }\mu\text{H/ft. (0.66 }\mu\text{H/m)}$ .

### I.S. Equipment                      Associated Apparatus

$U_i$ (or $V_{max}$ )	$\geq$	$U_o$ (or $V_{oc}$ or $V_t$ )
$l_i$ (or $I_{max}$ )	$\geq$	$l_i$ (or $I_{sc}$ or $I_t$ )
$C_i + C_{cable}$	$\leq$	$C_o$ (or $C_a$ )
$L_i + L_{cable}$	$\leq$	$L_o$ (or $L_a$ )

- The provided cable's specifications are:  $C_{cable} = 49 \text{ pF/ft. (160 pF/m)}$ ,  $L_{cable} = 0.16 \text{ }\mu\text{H/ft. (0.5 }\mu\text{H/m)}$ .
- Wiring methods must be in accordance with all applicable installation requirements of the country in use. For US, this is NFPA 70 (NEC) article 504 with additional information in ANSI-ISA –RP12.06.01. For Canada this is CSA 22.1-12 (CEC) section 18 and appendix F.
- WARNING: Substitution of components may impair intrinsic safety and suitability for hazardous (classified) locations.

*AVERTISSEMENT: le remplacement des composants peut altérer la sécurité intrinsèque et l'adéquation à une utilisation dans des zones dangereuses (classées).*

## Entity Parameters

The EXTA series keyboard may consist of up to two individual devices, i.e. the keyboard and the pointing device. Each device has its own set of entity parameters shown in the table below.

Device	$U_i$ (Vmax)	$l_i$ (Imax)	$C_i$	$L_i$
Keyboard	5.4 V	240 mA	24 $\mu\text{F}$	1.8 $\mu\text{H}$
Pointing Device	5.4 V	240 mA	24 $\mu\text{F}$	1.8 $\mu\text{H}$

This document contains safety-relevant information. It must not be altered without the authorization of a NE EX		
Only valid as long as released in EDM		date: 03-Aug-2022
	Control Drawing	116-0357D
	NI Keyboard EXTA SeriesKeyboards	
Global		sheet 1 of 1