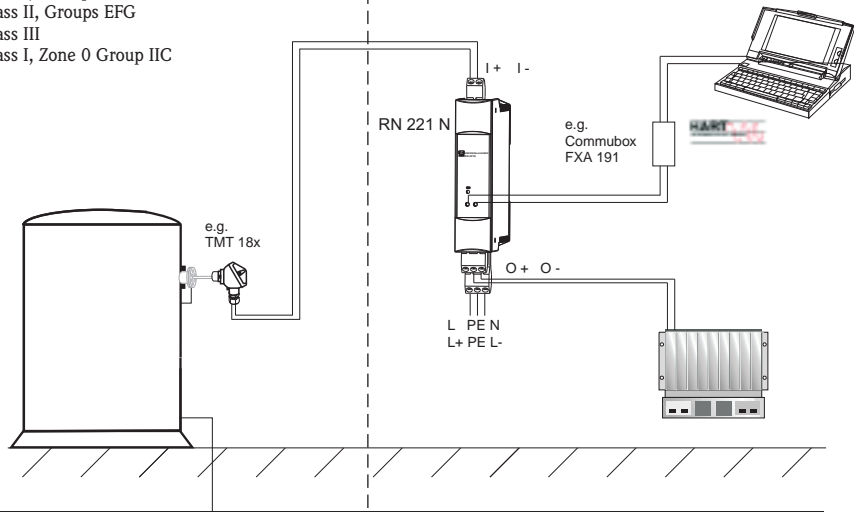


Hazardous (Classified) Locations  
 Class I, Groups ABCD  
 Class II, Groups EFG  
 Class III  
 Class I, Zone 0 Group IIC



Nonhazardous Locations



### Installation Notes RN 221 N

- CSA Approved Apparatus must be installed in accordance with manufacturer's instructions.
- Depending on location install per National Electrical Code (CEC) using wiring methods.
- Use supply wires suitable for 5°C above surroundings.
- Install the device of Protection Ratings of least IP20, NEMA 1, Type 1.
- The active Barrier must be connected to a suitable ground.



### INTRINSICALLY SAFE

Class I / Groups ABCD

- The device is an Associated intrinsically safe equipment and must be installed only in nonhazardous locations.
- Installation should be in accordance with the Canadian Electrical Code (CEC).
- For entity installations use certified equipment that satisfy the following condition  
 $U_o/V_{oc} \leq V_{max}/U_i$     $I_o/I_{sc} \leq I_{max}/I_i$     $P_o \leq P_i$     $C_o/C_a \geq C_i + C_{cable}$     $L_o/L_a \geq L_i + L_{cable}$
- The Terminal of the intrinsically safe circuit must be placed at a distances of least 50mm from terminals of the non intrinsically safe circuits, or adequate separators (e.g. ground metal partitions) must be used.

### NONINCENDIVE Field WIRING INSTALLATION

Class I / Div. 2 / Groups ABCD

- The device is an Associated Nonincendive safe equipment and must be installed only in nonhazardous locations.
- The Nonincendive Field Wiring Circuit Concept allows interconnection of Nonincendive Field Wiring Apparatus with Associated Nonincendive Field Wiring Apparatus or Associated Intrinsically Safe Apparatus or Associated Apparatus not specifically examined in combination as a system using any of the wiring methods permitted for unclassified locations, when  $V_{oc} \leq V_{max}$ ,  $C_a \geq C_i + C_{cable}$ ,  $L_a \geq L_i + L_{cable}$ .
- For entity installations use certified equipment that satisfy the following condition  
 $U_o/V_{oc} \leq V_{max}/U_i$     $I_o/I_{sc} \leq I_{max}/I_i$     $P_o \leq P_i$     $C_o/C_a \geq C_i + C_{cable}$     $L_o/L_a \geq L_i + L_{cable}$

### Temperature range

Ta -20°C ... +50°C

### ASSOCIATED INTRINSICALLY SAFE

Class I, II, III/ Div. 1+2 / Groups ABCDEFG  
 Class I, Zone 0 [Ex ia] IIC

### ASSOCIATED NONINCENDIVE

Class I / Div. 2 / Groups ABCD

Supply L/L+ N/L 20 ... 250VDC/AC 50/60Hz

Ground PE

Output O+ O- 4 ... 20mA

(HART Communication) OH

Output (Terminals +I and -I)

Uo or Voc = 27.3 V Io or Isc = 87.6 mA Po = 597 mW

Group A, B resp. [Ex ia] IIC Co or Ca = 86 nF Lo or La = 2.9 mH

Group C resp. [Ex ia] IIB Co or Ca = 681 nF Lo or La = 9.9 mH

Group D resp. [Ex ia] IIA Co or Ca = 2278 nF Lo or La = 19.9 mH

	Approved Kellermann	Date (yyyy-mm-dd) 2001-12-14	Drawing No. 02 02 00 112	Dwg.rev. A	Revision no.	Revision date (yyyy-mm-dd) 2005-01-07	Name MP	Material 51001933 ZD 013R/09/en/05.02	<b>Endress+Hauser</b>
Volume (mm³)	Designed Kellermann	Date (yyyy-mm-dd) 2001-12-14	Unit RN 221 N	Scale 1:1	Title CONTROL DRAWING CSA IS, NI		Series		
Refer to protection notice ISO 16016	Edge of working parts ISO 13715	Geometrical tolerancing ISO 2768-mH-E	Part No. -	Format A4	Objekt version	Sheet 1 of 1	Endress + Hauser Wetzlar GmbH+Co. KG Nesselwang / Germany		