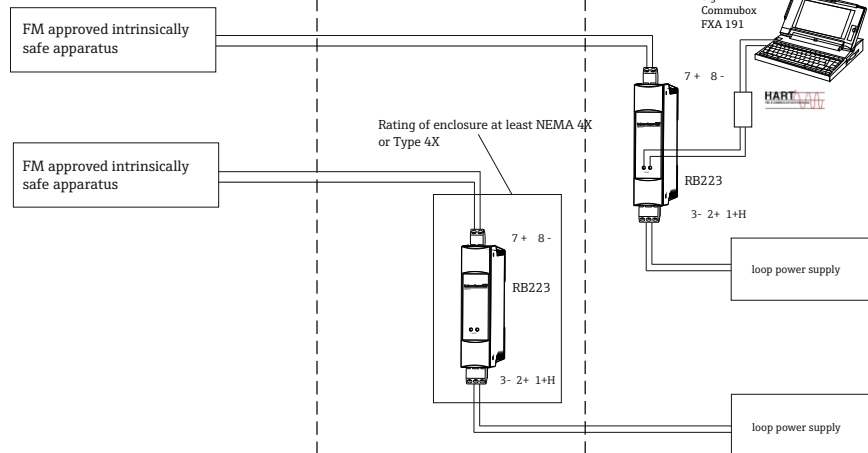


Hazardous (Classified) Locations

Class I, Groups ABCD
Class II, Groups EFG
Class III
Class I, Zone 0 Group IIC
Class I, Zone 2 Group IIC

Class I, Division 2, Groups ABCD
Class I, Zone 2 Group IIC

Non-hazardous area



Temperature range

Ta -20°C ... +60°C

AIS

Class I, II, III, Div. 1+2, Groups ABCDEFG

ANI

Cl. I, Zone 0 [AEx ia] IIC

NI

Class I, II, III, Div. 2, Groups ABCDEFG

T4

Class I, Div. 2, Groups ABCD

T4 -20°C ... +60°C

Transmission from Non-hazardous to hazardous (classified) area:

Supply (Terminals 1+ H, 2+, 3- and optionally 4+ H, 5+, 6-)

Um ≤ 30 VDC (loop powered) Im ≤ 100 mA

Output (Terminals 7 + 8 - and optionally 9+, 10-)

Uo or Voc = 28.2 V Io or Isc = 94.5 mA Po = 666 mW

Group A, B	resp.	[AEx ia] IIC	Co or Ca = 81 nF	Lo or La = 2 mH
Group C	resp.	[AEx ia] IIB	Co or Ca = 641 nF	Lo or La = 5 mH
Group D	resp.	[AEx ia] IIA	Co or Ca = 2110 nF	Lo or La = 5 mH

Transmission from hazardous (classified) to Non-hazardous area:

(Terminals 1+ H, 2+, 3- and optionally 4+ H, 5+, 6-)

Um ≤ 30 VDC (loop powered) Im ≤ 100 mA

(Terminals 7 + 8 - and optionally 9+, 10-)

Vmax or Ui = 30V Imax or li = 100mA Pi = 750mW Ci = 0 Li = 0

Installation Notes RB223

- FM Approved Apparatus must be installed in accordance with manufacturer's instructions and the control drawing.
- Depending on location install per National Electrical Code (NEC) using wiring methods described in article 500 through article 510.
- Use supply wires suitable for 5°C above surroundings.
- For Non-hazardous area install the device of Protection Ratings of least IP20, NEMA 1, Type 1.

INTRINSICALLY SAFE CONNECTION TO

Class I, II, III / Div. 1+2 / Groups ABCDEFG

- The device is an Associated intrinsically safe equipment and must be installed in Division 2 or nonhazardous locations only.
- Installation should be in accordance with ANSI/ISA RP 12.06.01 "Installation of Intrinsically safe systems for Hazardous (classified) locations" and the National Electrical Code (ANSI/NFPA 70).
- For entity installations use certified equipment that satisfy the following condition
 $U_o/V_o \leq V_{max}/U_i$ $I_o/I_{sc} \leq I_{max}/I_i$ $P_o \leq P_i$ $C_o/C_a \geq C_i + C_{cable}$ $L_o/L_a \geq L_i + L_{cable}$
- The Terminal of the intrinsically safe circuit must be placed at least a distance of 50mm from terminals of the non intrinsically safe circuits, or adequate separators (e.g. ground metal partitions) must be used.

NONINCENDIVE Field WIRING CONNNECTION TO Class I, II, III / Div. 2 / Groups ABCDEFG

- The device is an Associated Nonincendive safe equipment and must be installed in Division 2 or non-hazardous locations only.
- 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 $V_o \leq V_{max}$, $C_a \geq C_i + C_{cable}$, $L_a \geq L_i + L_{cable}$.

	Approved	Date (yyyy-mm-dd)	Drawing No.	Dwg.rev.	Revision no.	Revision date (yyyy-mm-dd)	Name	Material	Endress+Hauser	
	Pfanzelt	2006-09-05	02 20 00 111	-	-	-	-	71540262 XA02316R/09/EN/01.20		
Volume (mm³)	Designed	Date (yyyy-mm-dd)	Unit	Scale	CONTROL DRAWING FM			Series	Endress + Hauser Wetzer GmbH+Co. KG Nesselwang / Germany	
	Pfanzelt	2006-07-25	RB 223	1:1				Objekt version 1 of 1		
Refer to protection notice ISO 16016	Edge of working parts ISO 13715	Geometrical tolerancing ISO 2768-mH-E	Part No.	Format						
			-	A4						