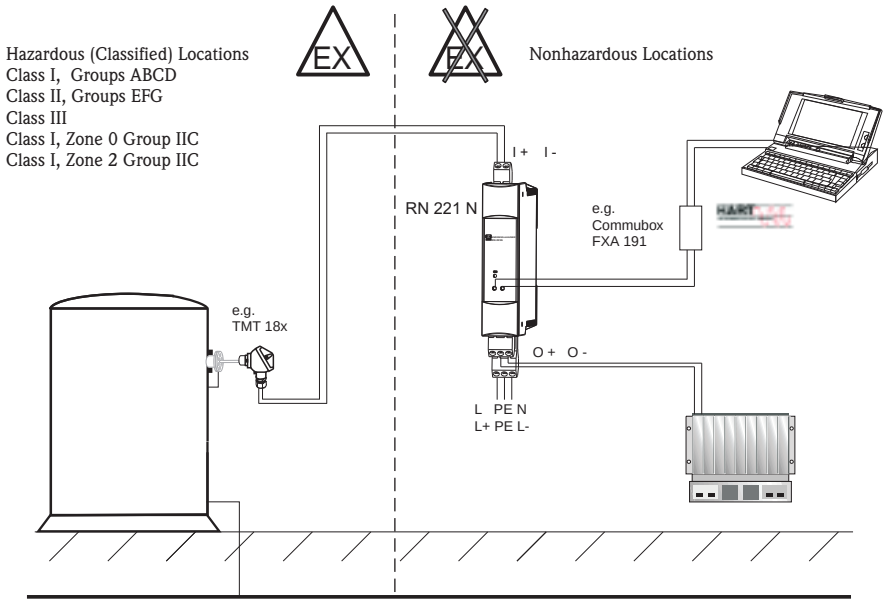

Temperature range

Ta -20°C ... +50°C

AIS	Class I, II, III, Div. 1+2, Groups ABCDEFG Cl. I, Zone 0 [AEx ia] IIC		
ANI	Class I, II, III, Div. 2, Groups ABCDEFG		
Supply Ground PE	L/L+	N/L	20 ... 250VDC/AC 50/60Hz
Output (HART Communication)	O+ OH	O–	4 ... 20mA

Output (Terminals +I and –I)

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

Group A, B	resp.	[AEx ia] IIC	Co or Ca = 86 nF	Lo or La = 2.9 mH
Group C	resp.	[AEx ia] IIB	Co or Ca = 681nF	Lo or La = 9.9 mH
Group D	resp.	[AEx ia] IIA	Co or Ca = 2278 nF	Lo or La = 19.9 mH

Installation Notes RN 221 N

FM APPROVED

- FM Approved Apparatus must be installed in accordance with manufacturer's instructions.
- 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.
- 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 CONNECTION TO Class I, II, III / Div. 1+2 / Groups ABCDEFG

- The device is an Associated intrinsically safe equipment and must be installed only in nonhazardous locations.
- Installation should be in accordance with ANSI/ISA RP 12.6.01 "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
  Uo/Voc ≤ Vmax/Ui Io/Isc ≤ Imax/Ii Po ≤ Pi Co/Ca ≥ Ci + Ccable Lo/ La ≥ Li + Lcable
- 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 CONNNECTION TO Class I, II, III / Div. 2 / Groups ABCDEFG

- 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 Voc ≤ Vmax, Ca ≥ Ci + Ccable, La ≥ Li + Lcable.
- For entity installations use certified equipment that satisfy the following condition
  Uo/Voc ≤ Vmax/Ui Io/Isc ≤ Imax/Ii Po ≤ Pi Co/Ca ≥ Ci + Ccable Lo/ La ≥ Li + Lcable

	Approved	Date (yyyy-mm-dd)	Drawing No.	Dwg.rev.	Revision no.	Revision date (yyyy-mm-dd)	Name	Material	
	Pfanzelt	2002-01-15	02 02 00 111	A	K05502	2005-01-07	MP	51001934 ZD 019R/09/en/10.02	Endress+Hauser
Volume (mm³)	Designed	Date (yyyy-mm-dd)	Unit	Scale	Title			Series	
	Pfanzelt	2002-01-15	RN 221 N	1:1	CONTROL DRAWING FM				
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 Wetzer GmbH+Co. KG Nesselwang / Germany