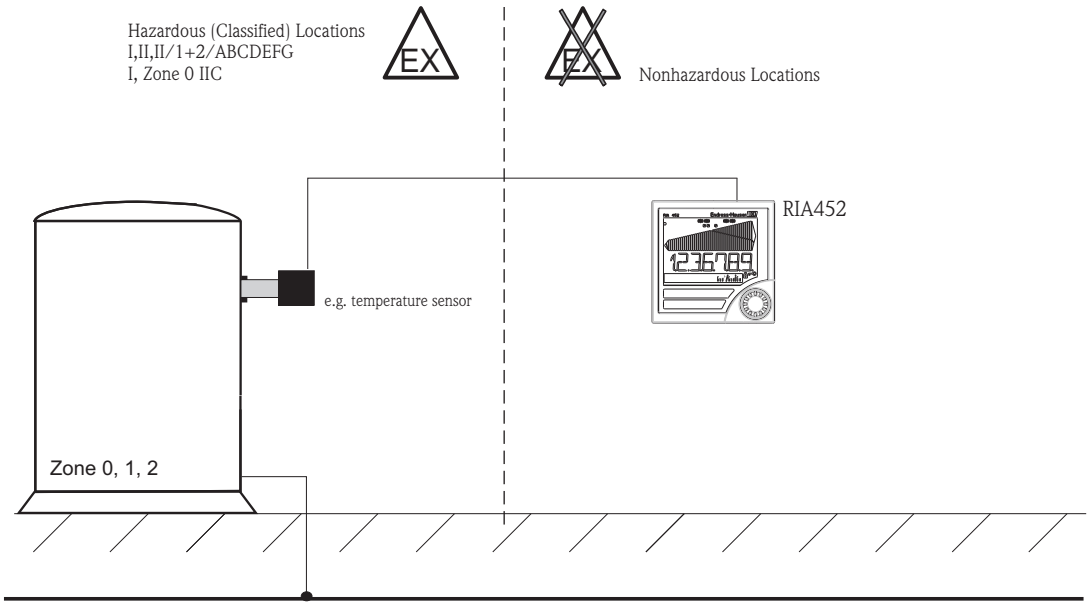

Installation Notes RIA 452

- CSA Approved apparatus must be installed in accordance with manufacturer instructions.
- The device is an Associated Intrinsically Safe Apparatus and Associated Nonincendive Field Wiring Apparatus, which must be installed only in nonhazardous locations.
- Install per Canadian Electrical Code.
- Use supply wires suitable for 5°C above surrounding.
- Degree of protection must be at least IP20, NEMA 1, Type 1.
- The terminals of the intrinsically safe circuit must be placed at a distances of least 50 mm from terminals of the non intrinsically safe circuits, or adequate separators (e.g. ground metal partitions) must be used.

Temperature range	Ta = -20°C ... +60°C
Power supply Terminal L/L+ N/L-	Um = 90...250 VAC 50/60 Hz Um = 20...28 VAC 50/60 Hz, 20...36 VDC

Transmitter supply Terminal 91, 92	U ≤ 24 VDC ± 15% I ≤ 250 mA	
Current output Terminal 31, 32	0/4…20 mA, 0…10 VDC	
Relays	Umax ≤ 250 VAC Imax ≤ 3A	
Terminals 41,42,43	44,45,46	Umax ≤ 30 VDC Imax ≤ 3A
51,52,53	54,55,56	
Terminals 141,142,143	144,145,146	
(as option) 151,152,153	154,155,156	
Digital output Terminal 33, 34	24 V, 200 mA	
Digital inputs Terminal 96, 97, 197, 297, 397	Umax = 24.5 V	

RS 232 and CDI interface for device configuration

ASSOCIATED INTRINSICALLY SAFE — Cl. I, Gps ABCD; Cl. II, Gps EFG, Cl. III; Cl. I, Zone 0, IIC

Voc ≤ Vmax	Isc ≤ Imax	Po ≤ Pi
Ca ≥ Ci + Ccable	La ≥ Li + Lcable	

ASSOCIATED NONINCENDIVE FIELD WIRING — I,II,III/2/ABCDEFG

Voc ≤ Vmax	Ca ≥ Ci + Ccable	La ≥ Li + Lcable

Current input active Terminal 81, 82	Voc ≤ 27.6 V Isc ≤ 88.6 mA Po = 612 mW		
Ci ≈ negligible small	Li ≈ negligible small		
Group A, B resp. IIC	Ca = 86 nF	La = 1.6 mH	
Group C, D resp. IIB, IIA	Ca = 86 nF	La = 1.6 mH	

Current input passive Terminal 11,12	Voc ≤ 27.6 V Isc ≤ 0.9 mA Po = 7 mW		
Ci ≈ negligible small	Li ≈ negligible small		
Group A, B resp. IIC	Ca = 86 nF	La = 100 mH	
Group C, D resp. IIB, IIA	Ca = 86 nF	La = 100 mH	

	Approved	Date (yyyy-mm-dd)	Drawing No.	Dwg.rev.	Revision no.	Revision date (yyyy-mm-dd)	Name	Material	
	Meroth	2004-11-03	02 14 00 112					510 09750 ZD 035R/09/en/04.05	Endress+Hauser
Volume (mm³)	Designed	Date (yyyy-mm-dd)	Unit	Scale	Title			Series	
	Meroth	2004-11-03	RIA452	1:1	CONTROL DRAWING CSA IS, NI				
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

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