

Safety Instruction

NRR262

Converter for Oil Leak Detector NAR300

IECEX FMG 14.0024X

FM 14 ATEX 0048X



Safety Instructions for Electrical Apparatus Certified for Use in Explosion-hazardous Areas

Designation according to IECEX 02

Equipment Protection Level (EPL): Installation in Non-hazardous Area

Designation according to Directive 94/9/EC: Installation in Non-hazardous Area

- Equipment Group _____ II

Hazardous Zone at Mounting Point		Category to Directive 94/9/EC	Ignition Protection Provided		
			Ga	Gb	Gc
Hazard due to explosive gas-air mixture	Zone 0	1G	○	×	×
Hazard due to explosive gas-air mixture	Zone 1	2G	○	○	×
Hazard due to explosive gas-air mixture	Zone 2	3G	○	○	○

○ : Applicable ×: Not Applicable

Designation of Explosion Protection

- Electrical Apparatus with Explosion Protection to European Standard _____ [Ex] _____ [ia] _____ IIB _____ Gb

- Type of Protection _____

- Gas Group _____

- Equipment Protection Level _____

Table of Contents

1	Wiring of NRR261	3
2	Guideline for Safety Use	4

1 Wiring of NRR261

Converter NRR262 wiring is shown as follows.

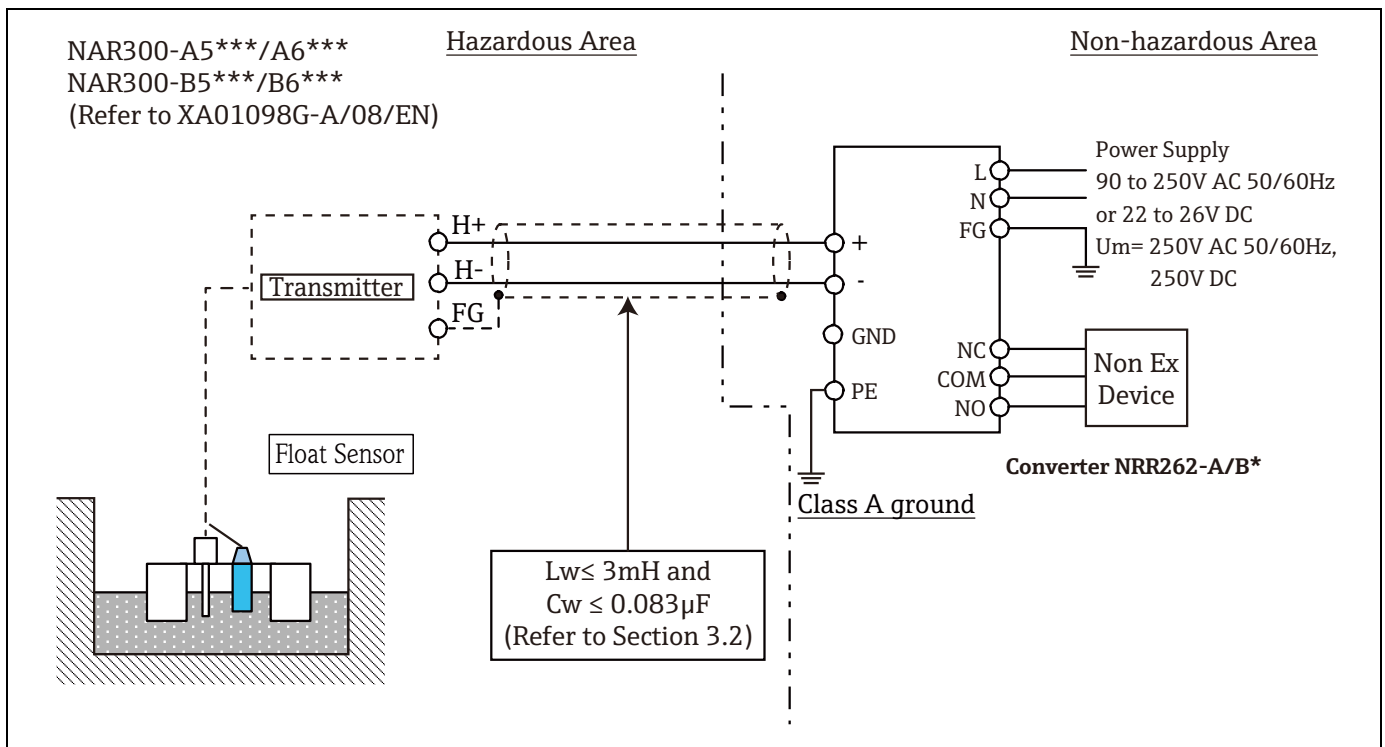


Figure 1: Wiring of NAR300-1

NOTICE

Detail of wiring are shown in Operating Instructions (BA00402G or BA00403G).

- between NAR300 system and associated equipment (NRR261 and NRR262).
- between NAR300 electronics and the sensor(s) with float.

2 Guideline for Safety Use

1. Ambient temperature for converter is rated for -20 to + 60°C.
2. Converter NRR262 must be placed in non-hazardous area.
3. Ground terminal of the safety barrier must connect from class A ground terminal (PE) in the converter to class A ground at non-hazardous area.
 - 3-1. Combination of NRR261 and NAR300 is shown below.

Transmitter	NAR300-				Remarks
	A5****	A6****	B5****	B6****	
Converter					
NRR262-A*	○	○	×	×	ATEX version
NRR262-B*	×	×	○	○	IECEx version

NOTICE

○ : Applicable × : Not applicable

- 3-2. Relationships between the Intrinsic safety circuit permissible Inductance (Lo) and Capacitance (Co), and the connected external wiring permissible Inductance (Lw) and Capacitance (Cw) are shown below.
 - $C_w < C_o - 0 \text{ nF (Ci)} = 0.083\mu\text{F}$ AND $L_w < L_o - 48\mu\text{H (Li)} = 3.0\text{mH}$

3-3. The oil leak detector listed in the table below satisfy the conditions of sections 3.1 above.

Converter	Approval No.	Safety Instructions	Remarks
NAR300-A**	FM 14 ATEX 0048X	XA01104G-*/08/EN	Hazardous area setting: float sensor; Ex d ia IIB T5 Ga Transmitter: Ex ia [ia Ga] IIB T4
NAR300-B*:	IECEx FMG 14.0024X		

NOTICE

Refer to the precautionary items in related device's Safety Instructions.

4. Use cable for connecting the oil leak detector and converter that is rated at >70°C.
5. The supplied power and internal voltage of non-ex device which connected to the converter must be less than 250V AC 50/60Hz or 250V DC in normal condition and abnormal condition.
6. Place converter (Associated Intrinsic Safety Device), oil leak detector (Intrinsically Safe Device) and connecting wiring such as to prevent electrical interference from current or voltage induction.
7. Do not modify the internal parts or wiring of the devices.
8. Install in conformance with local laws and regulations.

NOTICE

This document should be stored with operating instructions (BA00402G or BA00403G).

IECEx	ATEX
IEC 60079-0 IEC 60079-1 IEC 60079-11	EN 60079-0 EN 60079-1 EN 60079-11

www.addresses.endress.com
