

ASD-NIB Analog Signal & Discrete Non-Incendive Barrier interface

- Class 1, Division 2 Barrier
- Provides non-incendive isolation for analog and discrete signals
- Eliminates need for explosion proof enclosures
- Eliminates costly wiring
- DIN rail mountable housing
- Internal thermal fuse
- LED indicator warns of a fault condition
- CSA



MODEL

NIB-TA25mA-1X

Type
Wire Size
Voltage Output
Amperage Output
Width
Approvals

Analog Signal & Discrete NIB
24-12 AWG
24 VDC
35 mA
6.2 mm

1 channel ASD-NIB

Part Number Model Number	Std. Pack	Part Number Model Number	Std. Pack	Part Number Model Number	Std. Pack	Part Number Model Number	Std. Pack
34.243.0030.0	1						

Mechanical

Housing Material
Degree of Protection
Temperature Range
Temperature Code

Self-extinguishing polyamide
IP20
-40°C to +75°C
T3C (160°C)

Electrical

Input Voltage Range
Maximum Input Voltage
Maximum Output Voltage

5 - 30 VDC
36 VDC
24 VDC

Input Current
Nominal Output Current
Maximum Output Current
4..20mA insertion loss

5 - 37 mA
25 mA
35 mA
0.1 mA

Wire Gage
Internal Resistance

24 - 12 AWG
47 ohms

Field Wiring (Recommended)

Max. Cable Inductance
Max. Loop Capacitance

Group A — 25 µH/Ω | 0.27 µF
Group B — 25 µH/Ω | 0.27 µF
Group C — 60 µH/Ω | 0.81 µF
Group D — 200 µH/Ω | 2.16 µF

Indicators

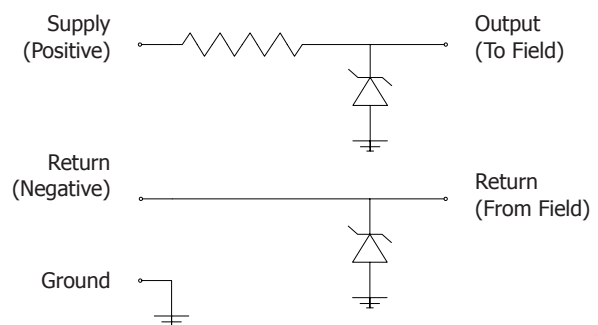
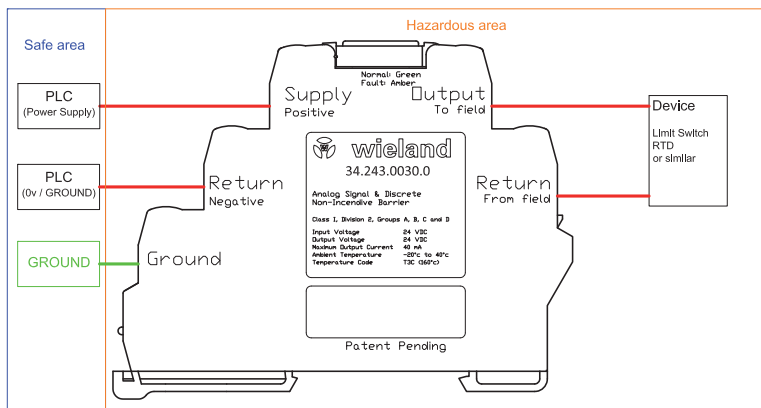
Green - Normal Operation
Amber - Fault Condition

Fault Condition

Amber light typically indicates a ground fault on the output.

At 45 VDC the fault light will illuminate (even with no output connected)

If the temperature rises above 75°C a thermal fuse will open the output.



NIB Non-Incendive Barriers

interface

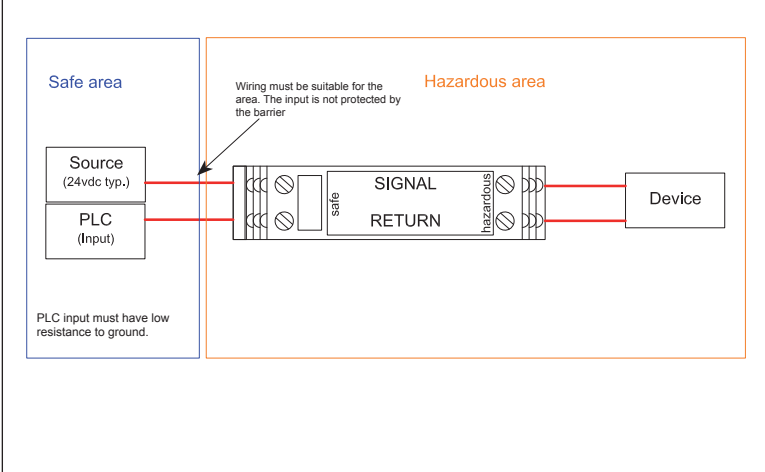
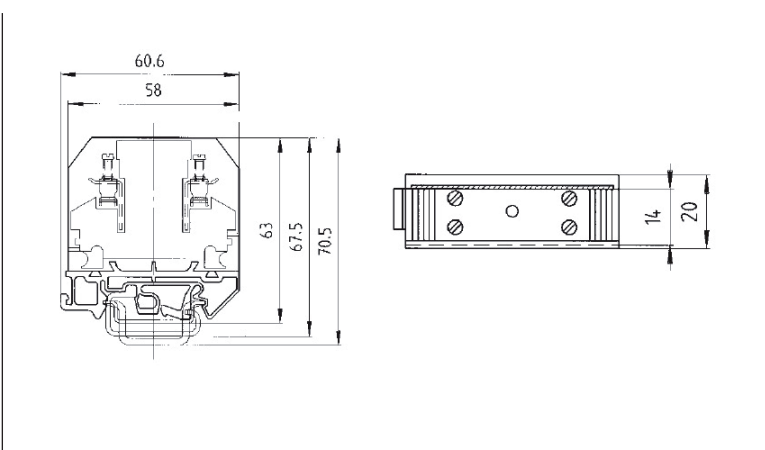
- Provides non-incendive isolation for analog signals
- Eliminates need for explosion proof enclosures
- Eliminates costly wiring
- DIN rail mountable housing
- CSA Approved



MODEL	WT-NIC-24VDC/4-20mA - FU
Type	Analog NIB
Wire Size	24-12 AWG
Max Voltage Output	35 VDC
Max Amperage Output	35 mA
Width	20 mm
Approvals	

	Part Number Model Number	Std. Pack	Part Number Model Number	Std. Pack	Part Number Model Number	Std. Pack	Part Number Model Number	Std. Pack
ANIB	34.243.0010.0	1						

Mechanical	Housing Material: Self-extinguishing polyamide Degree of Protection: IP20 Temperature Range: -40°C to +85°C Wire Gauge: 24 - 12 AWG Temperature Code: T3C (160°C)
Electrical	Nominal Input Voltage: 24 VDC Input Voltage Range: 5 - 30 VDC Maximum Input Voltage: 35 VDC Maximum Output Voltage: 35 VDC Nominal Input Current: 4 - 20 mA Maximum Input Current: 25 mA Nominal Output Current: 4 - 20 mA Maximum Output Current: 25 mA Loop Resistance: 252 ohms at 4 mA, (1.01 Vd) 187 ohms at 20 mA, (3.75 Vd)
CSA Hazardous Location	Class I, Division 2, Groups A,B,C & D
Installation	This device is designed to provide an electrical barrier between control devices and hazardous location devices. This is a non-fused device, a failure may cause it to fail in a shorted state. Must be installed in a suitable enclosure. Return line must be referenced to 0V, the PLC input must have a low resistance path to the 0V. This is essential to the proper operation of the barrier in over voltage situations. If a low impedance to 0V cannot be guaranteed on the return path, Wieland recommends the use of two barriers (one per signal) and to connect one of the return terminals on each barrier directly to ground



NIB Non-Incendive Barriers

interface

This module provides isolation for a circuit on the load side of the module to be rated as non-incendive, and is to be used on digital inputs or outputs. The DNIB allows the use of non-rated wiring to end devices in Class 1, Zone 2 / Division 2 areas, subject to the allowances of the Canadian Electrical Code.



Eliminates need for explosion proof enclosures

Eliminates costly wiring

DIN rail mountable housing

MODEL

WT-NIC-W904-35VDC-75mA

Type
Wire Size
Max Voltage Output
Max Amperage Output
Width
Approvals

Discrete NIB
24-12 AWG
35 VDC
75 mA
12 mm

DNIB Discrete Non-Incendive Barrier	Part Number	Std. Pack	Part Number	Std. Pack	Part Number	Std. Pack	Part Number	Std. Pack
	Model Number		Model Number		Model Number		Model Number	
	34.243.0008.0	1						
	WT-NIC-W904-35VDC-75mA							

Mechanical

Housing Material
Degree of Protection
Temperature Range
Tempature Code

Self-extinguishing polyamide
IP20
-40°C to +85°C
T3C (160°C)

Electrical

Nominal Input Voltage
Input Voltage Range
Maximum Input Voltage
Maximum Output Voltage

Nominal Input Current
Maximum Input Current
Nominal Output Current
Maximum Output Current

24 VDC
5 - 30 VDC
35 VDC
35 VDC

5 - 50 mA
75 mA
50 mA
75 mA

Wire Gauge
Internal Resistance

24 - 12 AWG
470 ohms

Installation

This device is designed to provide an electrical barrier between control devices and hazardous location devices. This is a non-fused device, a failure may cause it to fail in a shorted state.

Must be installed in a suitable enclosure.

Return line must be referenced to 0V, the PLC input must have a low resistance path the 0V. This is essential to the proper operation of the barrier in overvoltage situations. If a low impedance to 0V cannot be guaranteed on the return path, Wieland recommends the use of two barriers (one per signal) and to connect one of the return terminals on each barrier directly to ground.

