

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

(Formerly WW.900.100)

DNIB
Discrete Non-Incendive Barrier

Part Number Model Number	Std. Pack	Part Number Model Number	Std. Pack	Part Number Model Number	Std. Pack	Part Number Model Number	Std. Pack
34.243.0008.0 WT-NIC-W904-35VDC-75mA	1						

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.

