

Discrete & Analog Non - Incendive Barriers...for Hazardous Locations
Installations

Wieland Hazardous Location Devices

Protect Your Class I, Division 2/Zone 2 Locations ...And Your Budget

revised May 2009

Discrete Non-Incendive Barrier Terminal Blocks

Ordering Part Number: 34.243.0008.0

Desc: WT-57.867.0000.0010 75 MA NON-INCENDIVE

(Old Part Numbers:

WW.900.100: WT-NIC-W904-35VDC-75mA)



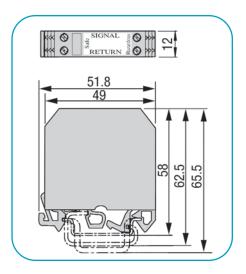
Representative photo

Description:

This module is designed to provide isolation to enable circuits beyond the module to be rated as non-incendive. It is typically used on "discrete" inputs to PLC's to allow the use of non-explosion-proof wiring and end devices in Class I Division 2 Groups, A, B, C and D Hazardous Locations. The barrier is suitable for use with all gases when located outside of the hazardous location and with gases having ignition temperatures of 160° C or higher when located in the Class I Division 2 Hazardous Location. The barrier must be located in an enclosure suitable for the location. The use of a weatherproof enclosure is recommended when the barrier is located in the Hazardous Area.)

Features:

- Provides non-incendive isolation for circuits up to 24 VDC
- Eliminates need for expensive explosion proof enclosures for End Field Devices
- Eliminates costly wiring normally required in Class I, Division 2 locations.
- DIN rail mountable terminal block style housing



Technical Information:

Materials:

Insulating Body: Polyamide 6.6, UL94 V-2 Clamping Body: Nickel plated copper alloy

Clamping screw: Dichromated Steel

Color: Grey

Ratings:

Rated Voltage: 24 Volts DC
Maximum Voltage: 35 Volts DC
Maximum Current: 75 mA

Internal Resistance: 470 Ohms+/-1%

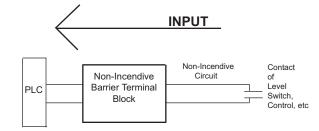
Hazardous

Location Rating: Class I Div. 2 Groups

A, B, C, & D

Temperature Code: T3C (160°C)

Typical Application:





Type "n" Protection Discrete Non-Incendive Barrier Terminal Block

Ordering Part Number: 34.243.0001.0

Desc: DNIB-TYPE-N-24VDC-FU



Representative photo

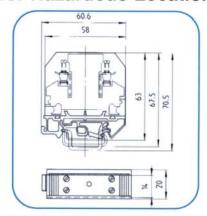
Description:

This module is designed to meet the new Type "n" protection requirements for hazardous locations. The module provides isolation to enable circuits beyond the module to be rated as "non-incendive". It is typically used for discrete inputs to PLC's to allow the use of non-explosion proof wiring and end devices in Class I, Zone 2 / Division 2 hazardous locations. The barrier is suitable for use with all gases when located outside the hazardous location and with gases having ignition temperatures of 200 °C or higher when located in the Class I, Zone 2 / Division 2 hazardous location. The barrier must be installed in an enclosure suitable for the location. The use of a weatherproof enclosure is recommended when the barrier is located in the hazardous location.

Features:

- Internally fused providing additional safety in the event of an over current / voltage condition.
- Red LED turns ON when the internal fuse is blown indicating the module needs to be replaced.

for Hazardous Locations



Technical Information:

Materials:

Insulating Body: Polyamide 6.6, UL94 V-0
Clamping Body & Screws: Zinc plated Steel
Current Bar: Tin plated copper alloy

Color: Grey

Mounting: TS32 and TS35 DIN rails

Electrical Ratings:

Voltage: 24VDC (nominal) 35VDC (maximum)

Current Limited to: 75 mA

Internal Ceramic Fuse: 100 mA (non-replaceable)

Red LED Turns on when fuse blown

Resistance (internal): 470 ohms ± 1%

Wire Connection Range: #20 - 10 AWG

Hazardous Location Ratings



Provides non-incendive connections for: CLASS I, ZONE 2, Ex nA, IIA, IIB, IIC CLASS I, ZONE 2, AEx nA, IIA, IIB, IIC CLASS I, DIVISION 2, groups: A,B,C,D TEMPERATURE CODE: T3 (200 °C)

Typical Applications:

- · Oil Refineries
- Gas Processing Plants
- Oil and Gas Production Facilities
- Petrochemical Plants
- · Pipeline Facilities
- Sewage Treatment Facilities



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Ordering Part Number: 34.243.0010.0

Desc: WT-NIC-24VDC/4-20MA-FU FUSED NON-INCENDIVE

(Old Part Number: WW.900.102)



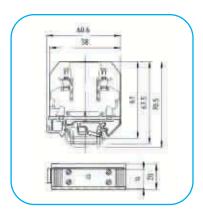
Representative photo

Description:

The Wieland Analog Non-Incendive Barrier Terminal Blocks are designed for 4-20 mA loop applications at 24 VDC to allow the use of less expensive GP (general purpose) rated end field devices and standard wiring methods instead of the more elaborate methods normally required in Class I, Division 2, Groups: A, B, C & D Hazardous Locations. The barrier is suitable for use with all gases when located outside of the hazardous location and with gases having ignition temperatures of 160°C or higher when located in the Class I, Division 2 Hazardous Location. The barrier must be located in an enclosure suitable for the location. The use of a weatherproof enclosure is recommended when the barrier is located in the Hazardous Area.

Features:

- Provides non-incendive isolation for 4 20 mA, 24 VDC circuits
- Eliminates need for expensive explosion proof enclosures for end field devices
- Eliminates costly wiring normally required in Class I, Division 2 locations
- LED indicator turns bright red warning of a short circuit condition
- · CSA Approved, FM pending
- DIN rail mountable terminal block style housing



Technical Information:

Materials:

Insulating Body: Polyamide 6.6, UL94 V-0 Clamping Body & Screws: Zinc plated Steel

Current Bar: Zinc plated Steel
Nickel plated copper alloy

Color: Grey

Mounting: TS32 and TS35 rails

Ratings:

Rated Voltage: 24VDC
Maximum Voltage: 35VDC
Current Limited to: 25 mA

Loop Resistance: 252 ohms at 4 mA, $(1.01 V_d)$

187 ohms at 20 mA, (3.75 V_d)

Fuse Replacement: Use Only Ceramic

Equivalent to Bussmann type: GDA-125 mA Size: 5 x 20 mm Rating: 250V, 125 mA

CSA Hazardous

Location Rating: Class I, Division 2, Groups A,B,C & D

Temperature Code: T3C (160°C)

Typical Applications:

Class I, Division 2 Locations in:

- Oil Refineries
- Gas Processing Plants
- · Oil and Gas Production Facilities
- · Petrochemical Plants
- Pipeline Facilities
- · Sewage Treatment Facilities



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For more than 90 years, Wieland Electric has offered customers the broad product range, worldwide approvals, superior designs, unsurpassed quality, and custom development capabilites necessary to guarantee the most cost-effective, space-saving and time-saving interconnect solutions. More than just terminal blocks, Wieland's total offering includes products from PC board connectors to advanced electronic modules; I/O systems to DIN rail power supplies; and rectangular connectors to hazardous location components. And more than just products, Wieland has the design support, application assistance and custom solutions necessary to meet your most challenging interconnect requirements.

The cornerstone of all Wieland products is the superior design and our philosophy of continuous improvement through innovation. Our high degree of vertical integration and attention to product detail enable our products not only to perform above established standards, but also to minimize the purchase cost as well as associated installation and maintenance costs.

Best by design, best product offering and best support.

Wieland Best Connections.

| Wieland Products and Industries Supported | Machine Manufacturers | Petrochemical | Heating, Ventalation & Air Conditioning | Process Controls & Instrumentation | Transportation | Water Treatment & Utilities | Telecommunications | Computers & Networking | Packaging & Material Handling | Automotive & Robotics |
|--|--------------------------|---------------|---|--|----------------|-----------------------------------|--------------------|---------------------------|-------------------------------------|--------------------------|
| selos, fasis, taris DIN rail Mountable Terminal Blocks | W | W | W | W | W | W | | | W | W |
| flare Electro-Mechanical & Solid State Relay Modules | W | W | W | W | W | W | | | W | W |
| Signal Conditioning & Surge Suppression Modules | W | W | W | W | W | W | | W | W | W |
| ricos Remote Interface Communication System | W | W | W | | W | W | | W | W | W |
| wipos DIN Rail Mounted Power Supplies | W | | W | W | W | W | | | W | W |
| Standard & Custom Interface Modules | W | W | W | W | W | W | W | W | W | W |
| revos Industrial Multipole Connectors | W | W | | W | W | W | | W | W | W |
| Wire Management Products | W | W | W | W | W | W | W | W | W | W |
| gesis ST Compact Connector System | W | | W | W | W | | | W | W | W |
| wiecon Pluggable PC Board Terminal Strips | | W | W | W | W | | W | W | | |
| wiecon Modular PC Board Terminal Strips | | W | W | W | | | W | W | | |
| europa & Compact Panel Mounted Terminal Strips | W | W | W | W | W | W | | | W | W |



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On the Internet www.wielandelectric.ca

Wieland Offers A Full Line Of Interconnect Components:

- Electro-Mechanical & Solid State Relay Modules
- Standard & Custom Interface Modules
- Industrial Multipole (rectangular) Connectors
- DIN rail Mountable Terminal Blocks
- Europa & Compact Panel Mounted Terminal Strips
- Wire Management Products
- *ricos* Remote Interface For Fieldbus
- Signal Conditioning & Surge Suppression
- ST Compact Connector System
- Pluggable PC Board Terminal Strips
- Modular PC Board Terminal Strips

