

Cenelectrex®

Bond-Rite

the self testing static grounding clamp



Installation and Operating Instructions

READ MANUAL BEFORE COMMENCING INSTALLATION

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With regard to the relevant Essential Health & Safety Requirements (EHSRs) of the ATEX Directive 94/9/EC, the following declarations are made with respect to the Bond-Rite Self Testing Clamp:

EHSR 1.0.3:

The following special checking or maintenance conditions are required for the safe operation of the equipment:

The LED flashes when the clamp is operating correctly and is monitoring a good bonding connection.

If the LED does not flash when the clamp is attached to a conductive item then it should be checked as follows:-

Check the condition of all associated cable terminations. Adjust as necessary.

Connect the clamp onto a clean piece of metal. The LED should now flash.

If the LED does not flash replace the battery in accordance with the instructions, in a safe area.

Again connect the clamp onto a clean piece of metal. The LED should now flash.

If the LED still fails to show please contact Newson Gale for further advice.

EHSR 1.1.2:

The constructional materials of the equipment are deemed to be suitable for the intended use.

The following adverse service conditions have been identified and have been considered in the design and manufacture of the equipment:

Ambient temperature range -20°C to +40°C

EHSR 1.2.2:

Components to be incorporated into or used as replacements in equipment have been so designed and constructed that they function safely for their intended purpose of explosion protection when they are installed in accordance with the manufacturer's instructions.

Battery Replacement

The clamp is fitted with a short length of cable and an in-line quick connector. Unscrew the connector locking-ring and pull apart the two sections. Move the clamp to a safe area such as a workshop.

Use the correct tool (Torx TX10 driver) to remove the Torx head screws which retain the pcb housing lid.

Carefully remove the battery and replace with an identical new battery (Ultralife U9VL-J).

Replace the housing lid and replace the screws.

The Bond-Rite is not designed to be permanently connected.

The battery life is approximately 1 year with a duty cycle of 3 hours per day.

For battery information log onto www.allbatteries.com

Operation

Attach the Bond-Rite clamp to the item to be grounded (drum, IBC, bucket etc).

If the connection is good (less than 10 Ohms loop resistance) then the green LED lamp should flash at a rate of about 1 flash per second.

If the LED does not flash then the connection resistance is too high. Check the placement of the clamp to ensure a good, positive connection.

The Bond-Rite must have a connection to ground in order to dissipate static electricity.

Installation and Maintenance

Installation of this equipment shall be carried out by suitably trained personnel in accordance with the applicable code of practice (EN 60079-14 within Europe).

The system should be connected as per the relevant installation drawings.

Spare Parts

- Replacement Bond-Rite Clamp [Code VESC50](#)
- LED Assembly [Code VESI02](#)
- Ultralife Battery U9VL-J [Code VESB50](#)
- Torx TX10 Driver [Code VEST13](#)
- In-Line Quick Connect terminal access tool [Code VEST16](#)

Repair of this equipment shall be carried out by the manufacturer.

NB: Use only genuine Cenelectrex replacement parts. Contact your distributor for all spare parts.



If you are in any doubt regarding the installation please contact Newson Gale without delay.

Bond-Rite Technical Specification

Ingress protection	IP65
Maximum ambient temperature	40° C
Certification	EEx ia IIC T4 II 1GD
Certificate No.	Sira 00ATEX2199X
Approval authority	Sira Test & Certification
Operational ground resistance	10 Ohm maximum.
Indicator Lamp	LED: 1 green (earth connection healthy)

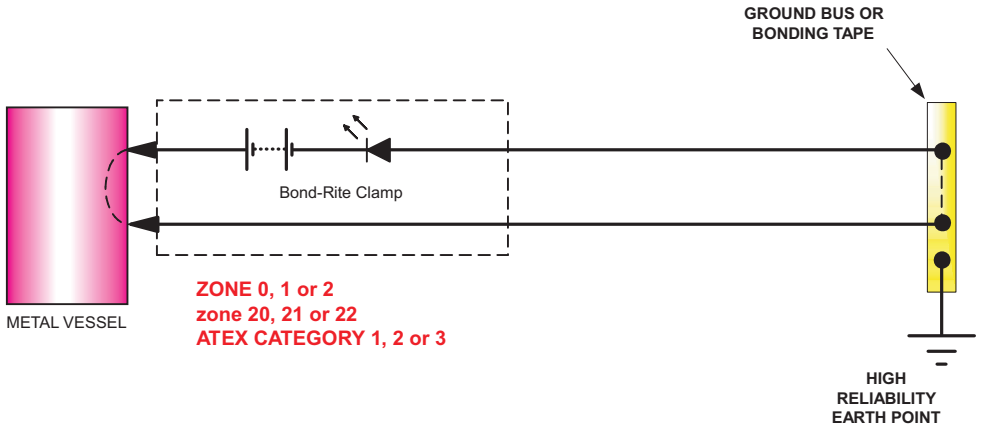
NB: In line with our policy of continual product development, we reserve the right to alter specifications at any time.

Bond-Rite Certification Label

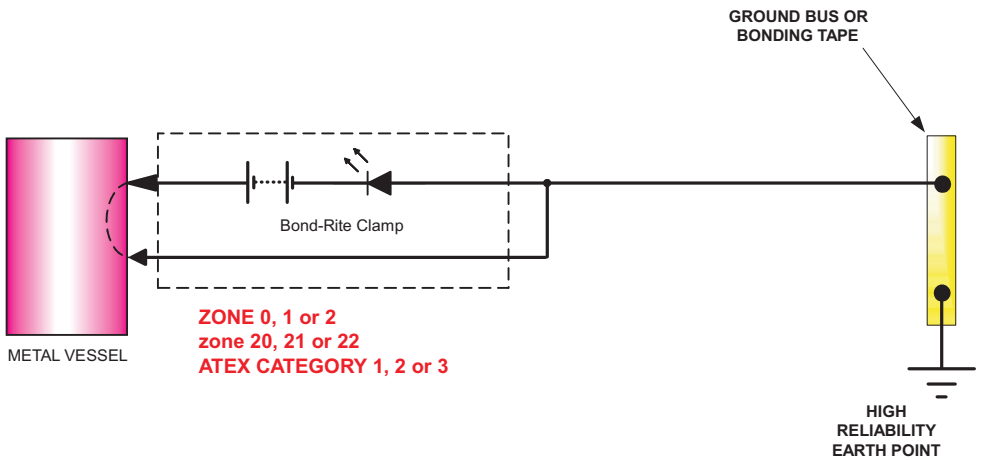
<p>SELF MONITORING CLAMP EEx ia IIC T4 SIRA 00ATEX2199X</p> <p>   </p> <p>0518 II 1GD</p> <p>FOR SERIAL NUMBER PLEASE SEE INSIDE ENCLOSURE</p>	<p>Newson Gale Ltd Nottingham NG4 2HF UK</p> <p>DO NOT OPEN BATTERY ENCLOSURE IN A POTENTIALLY EXPLOSIVE ATMOSPHERE</p>
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Cenelectrex Bond-Rite - EQUIVALENT CIRCUITS

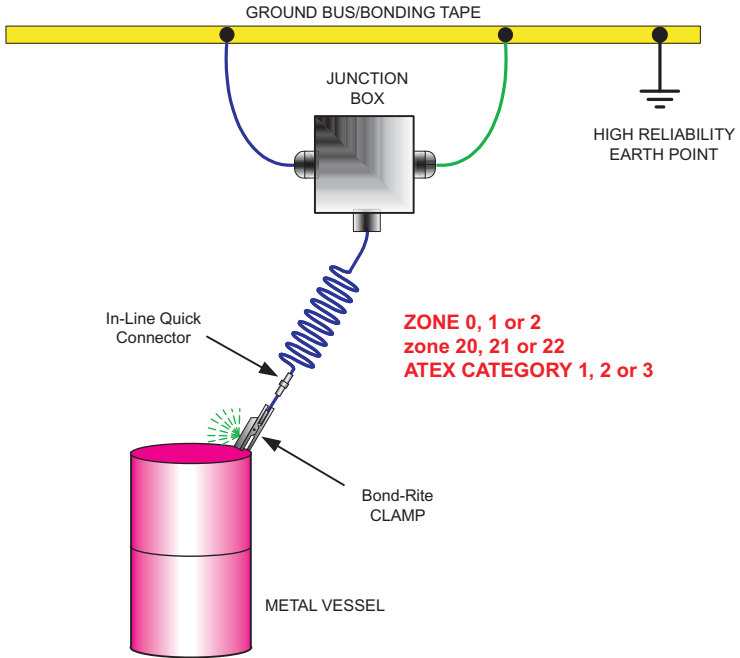
GROUND-LOOP MONITORING (G.L.M.) ARRANGEMENT



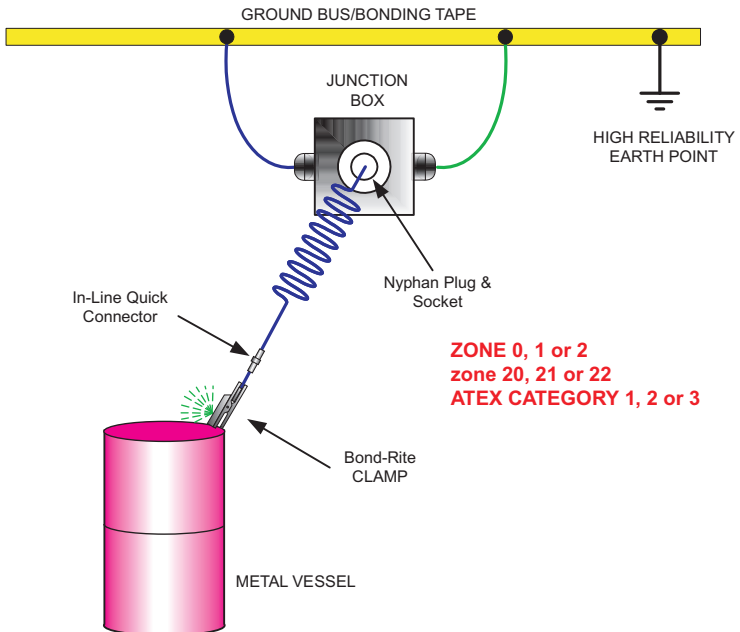
CLAMP MONITORING (C.M.) ARRANGEMENT



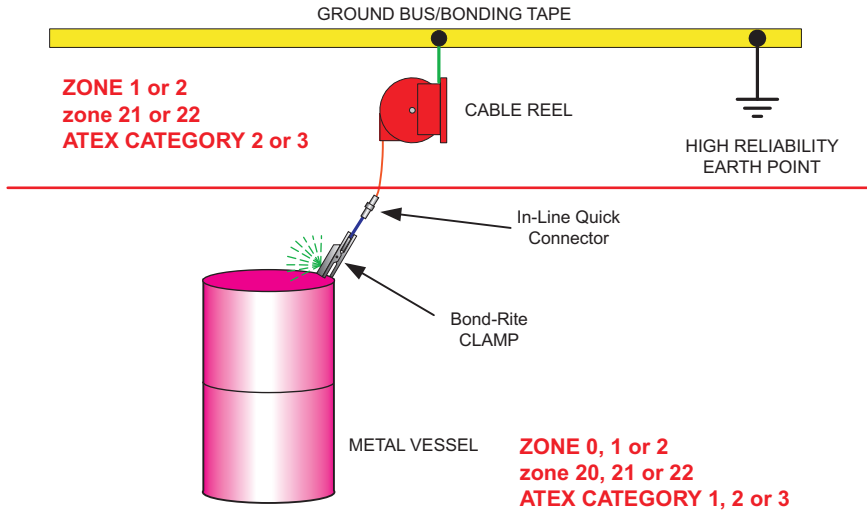
INSTALLATION OF GLM Bond-Rite WITH GRP JUNCTION BOX



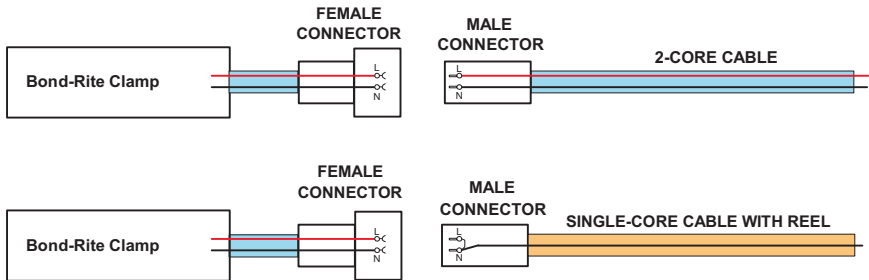
INSTALLATION OF GLM Bond-Rite WITH Nyphan PLUG AND SOCKET



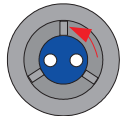
INSTALLATION OF CLAMP MONITORING Bond-Rite



FITTING CABLES TO THE IN-LINE QUICK CONNECTOR



- 1 Unscrew the connector locking-ring and pull apart the two sections.
- 2 Use tool VEST16 to rotate the contact block retention ring counter-clockwise. If the tool is not available it is possible to use a flat bladed screwdriver, with care.
- 3 Withdraw the contact block.
- 4 Loosen the gland nut.
- 5 Thread the connector onto the cable.
- 6 Connect the cable with reference to the above cable fitting sketch.
- 7 Re-assemble and tighten the gland nut.





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EC Declaration of Conformity

In accordance with EN 45014:1998

We, Newson Gale Ltd of Unit 6, Churchill Park, Colwick, Nottingham

declare that: Bond-Rite

in accordance with the following directives:

89/336/EEC The Electromagnetic Compatibility Directive
and its amending directives

94/9/EC The ATEX Directive

has been designed and manufactured to the following specifications:

BS 5958 Control of Undesirable Static Electricity.

EN 50014:1997 +A1+A2

EN 50020:1994

EN 50281-1-1:1998

EN 50284:1999

I hereby declare that the equipment named above has been designed to comply with the relevant sections of the above referenced specifications. The equipment complies with the essential requirements of the Directives.

Name:

Position:

Technical Manager

Done at

Colwick, Nottingham

On

31 January 2005