



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEX EXV 19.0062X** Page 1 of 4 Certificate history:
Status: **Current** Issue No: 1 [Issue 0 \(2019-11-25\)](#)
Date of Issue: 2023-04-26
Applicant: **Newson Gale Limited**
Omega House, Private Road 8, Colwick, Nottingham NG4 2JX
United Kingdom
Equipment: **Earth-Rite Multipoint II**
Optional accessory:
Type of Protection: **Increased Safety, Intrinsic Safety, Non-Sparking, Protection by Enclosure**
Marking:

Monitoring Unit	Power Supply Unit
Ex ia IIC T4 Ga	Ex ec nC [ia Ga] IIC T4 Gc
Ex ia IIIC T135°C Da	Ex tb [ia Da] IIIC T65°C Db
Ta = -40°C to +60°C	Ta = - 40°C to +60°C

Approved for issue on behalf of the IECEx
Certification Body:

Sean Clarke CEng MSc FIET

Position:

Certification Manager

Signature:
(for printed version)

Date:
(for printed version)

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

ExVeritas Limited
Units 16-18 Abenbury Way
Wrexham Ind. Est.
Wrexham LL 139UZ
United Kingdom





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Manufacturer: **Newson Gale Limited**
Omega House, Private Road 8, Colwick, Nottingham NG4 2JX
United Kingdom

Manufacturing
locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

[IEC 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

[IEC 60079-15:2017](#) Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
Edition:5.0

[IEC 60079-31:2013](#) Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

[IEC 60079-7:2015](#) Explosive atmospheres – Part 7: Equipment protection by increased safety "e"
Edition:5.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

[GB/EXV/ExTR19.0091/00](#)

[GB/EXV/ExTR23.0036/00](#)

Quality Assessment Report:

[GB/EXV/QAR19.0009/04](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The Earth-Rite Multipoint II Static Earthing system comprises the following modules and the associated interconnecting cables and clamps:

- Power Supply Unit (PSU), certified Ex ec nC [ja Ga] IIC T4 Gc, Ex tb [ja Da] IIIC T65°C Db
- Monitoring Unit (MU) with status indication, certified Ex ia IIC T4 Ga, Ex ia IIIC T135°C Da

The outputs from the Monitoring Unit are connected to a combination of static grounding clamps, junction boxes, indicator junction boxes, marshalling boxes and static earth dissipating points. The system monitors the resistance to earth of up to 8 channels. Each channel provides a pass/fail output to the PSU via the "CAN" transceiver from the Monitoring Unit and used to drive status relays. The status of each channel is indicated by the illumination of either a green or a red LED on the Monitoring Unit.

The mains power supply is connected to the PSU, which is located in the non-hazardous area or in a Zone 2, Zone 21 or Zone 22. The PSU provides an intrinsically safe output to the Monitoring Unit and the rest of the system which is located in Zone 0/1/2 and Zone 20/21/22.

Continued in Annex.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The system shall be installed as per the control drawing 'X MP11 Q15151'



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Variation to Earth-Rite Multipoint II to update Ex marking codes as per the applicable standards.

Annex:

[MPII ExVeritas 19.0062X DRAFT Annex Issue 1 PDF_1.pdf](#)

Description Continued:

Power supply unit (PSU)

Input: 100-230 Vac, 50/60 Hz, $U_m = 250\text{ V}$

Outputs:

- ten non-intrinsically safe volt-free relay outputs.
- one intrinsically safe output on a CANbus data link via a 4-core cable with the following entity parameters:
 $U_o = 11.76\text{ V}$ $I_o = 0.413\text{ A}$ $P_o = 0.904\text{ W}$ $C_i = 0$ $L_i = 0$

The external capacitance, inductance and inductance/resistance ratio are as follows:

Gas Group	IIC	IIB	IIA
Co	1.5 μF	9.9 μF	39 μF
Lo	208 μH	833 μH	1667 μH
Lo/Ro	29.1 $\mu\text{H}/\Omega$	117 $\mu\text{H}/\Omega$	234 $\mu\text{H}/\Omega$

The PSU comprises a circuit board, housed in a GRP or a stainless steel enclosure. The PSU generates two supplies: a +5V I.S. supply which feeds the Monitoring Unit and the CAN transceiver on the PSU board; the second non I.S. supply drives relays, micro and fail safe pump circuit.

Monitoring Unit

The Monitoring Unit is powered from the Multipoint II PSU. It has eight outputs via Channels 1 to 8. The electronics in the monitoring board are mounted on a PCB, which is housed in a stainless steel enclosure.

Input from the MPII PSU (Intrinsically safe)

$U_i = 11.76\text{ V}$ $I_i = 0.413\text{ A}$ $P_i = 0.904\text{ W}$ $C_i = 1.3\ \mu\text{F}$ $L_i = 0$

Combined output through Channels 1- 8 – Intrinsically safe

$U_o = 11.76\text{ V}$ $I_o = 0.170\text{ A}$ $P_o = 500\text{ mW}$ $C_i = 0$ $L_i = 208\ \mu\text{H}$

Gas Group	IIC	IIB	IIA
Co	1.5 μF	9.9 μF	39 μF
Lo	1022 μH	4088 μH	8175 μH
Lo/Ro	68 $\mu\text{H}/\Omega$	272 $\mu\text{H}/\Omega$	544 $\mu\text{H}/\Omega$

Channels 1 to 8 are intrinsically safe in combination, so need not be installed as separate intrinsically safe circuits.

Routine tests:

1. The following test shall be performed on 100% of transformers. Each transformer shall be dielectric strength tested in accordance with EN 60079-11:2012 clause 11.2 as follows: 1500 Vac shall be applied between the primary and secondary windings for a minimum of 60 s. The maximum current shall not exceed 5 mA and there shall be no evidence of insulation breakdown. Alternatively, the test may be performed at 1800 Vac for a minimum of 1 s.
2. The system incorporates previously certified enclosures. It is therefore the responsibility of the manufacturer to continually monitor the status of the certification associated with this device, and the manufacturer shall inform the certification body of any modifications of the device that may impinge upon the explosion safety design of the product.

Certificates	Enclosure
IECEX PTB 07.0059U	Phoenix Mecano Rose Type 34 stainless steel enclosure
IECEX PTB 08.0003U	Phoenix Mecano Rose Type 26 GRP enclosure

Technical Documents			
Drawing No.:	Date:	Rev. Level:	Title:
AA0211-PLC	24/07/2015	R3C	Multipoint II Monitor Board Certified Parts List
AA0211R3C-CERT	24/07/2015	C	Multipoint II Monitor Circuit 8 CH
AA0211R3C-PCB	24/07/2015	C	Multipoint II Monitor Board
AA0220R4A-CERT	24/07/2015	A	Multipoint II O-P Board
AA0220R4A-PCB	24/07/2015	A	Multipoint II O/P Board
AA0220R4A-PLC	06/09/2019	R4B	Multipoint II O/P Board Certified Parts List
X GA MPII GRP PSU	14/08/2015	1	General Arrangement - Multipoint II GRP Power Supply Unit
X GA MPII MON	14/08/2015	1	General Arrangement - Multipoint II Monitoring Unit
X GA MPII SS PSU	14/08/2015	2	General Arrangement - Multipoint II St St Power Supply Unit
X MPII MB LAB AI	16/10/2019	AC	Marking for the Earth-Rite Multipoint II Marshalling Box
X MPII MON LAB AI	01/03/2023	AF	*CERTIFICATION DETAIL EARTH-RITE MULTIPOINT II MONITORING UNIT
X MPII PSU LAB AI	01/03/2023	AE	* CERTIFCATION DETAIL EARTH-RITE MULTIPOINT II POWER SUPPLY UNIT
X MPII Q15151	02/03/2023	5	*Multipoint II Static Earth Monitoring - Control Drawing
X MPII RIS LAB AI	16/10/2019	AC	Marking Earth-Rite Multipoint II Remote Indicator Station

*Note: An * is included before the title of documents that are new or revised.*