

## 1 EU - Type Examination Certificate

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: ExVeritas 19ATEX0562 Issue: 1

4 Equipment: Earth-Rite II P2 Static Earthing System – Monitoring Unit

5 Manufacturer: Newson Gale Limited

6 Address: Omega House, Private Road 8, Colwick, Nottingham NG4 2JX, UK

7 This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

8 ExVeritas, Notified Body number 2804 in accordance with Article 17 of the Council Directive 2014/34/EU of 26 February 2014, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to design and construction of equipment and protective systems for use in potentially explosive atmospheres given in Annex II to the Directive

9 Compliance with the applicable Essential Health and Safety Requirements has been assured by compliance with the following Standards and section 16 of this certificate:

EN IEC 60079-0: 2018

EN 60079-11: 2012

EN 60079-31:2014

10 If the sign “X” is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

11 This EU-Type Examination Certificate relates only to the design, construction, examination and tests of the specified equipment or protective system in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12 The marking of the equipment shall include the following:



II 1 GD  
Ex ia IIC T4 Ga  
Ex ta IIIC T70°C Da  
(TA = -40°C to +55°C)

On behalf of ExVeritas



Peter Lauritzen  
Managing Director

13 Description of Equipment or Protective System

The Earth-Rite II Static Earthing System Monitoring Unit receives an intrinsically safe input from a suitably approved Newson Gale Power Supply Unit and provides an intrinsically safe output for connection to an earth bar and a clamp. The equipment is used where static build-up may occur due to the transfer of powders and liquids, and gives a visual indication to indicate satisfactory earthing.

The equipment consists of a single printed circuit board, mounted inside a glass-reinforced plastic enclosure with a window to allow the user to view the status LEDs. The versions of the equipment are as follows:

- single mode monitoring unit (model PLUSP2E)
- tri-mode monitoring unit with additional functionality, which may be vehicle-mounted (model MGVP2E) or terrestrial (model RTRP2E)
- The model FIBCP2E that incorporates an upper FIBC II monitoring unit board

The installation must be in accordance with the relevant control drawing ER11-Q-10175 AI.

The safety description is as follows:

Single mode (PLUSP2E)	Tri-mode (RTRP2E or MGVP2E)		FIBC (Model FIBCP2E)
<b>IS input at PL1</b>	<b>IS input at PL1</b>		<b>IS input at PL1</b>
$U_i = 8.61\text{ V}$ $I_i = 152\text{ mA}$ $P_i = 715\text{ mW}$ $C_i = 5.539\text{ }\mu\text{F}$ $L_i = 12\text{ }\mu\text{H}$	$U_i = 8.61\text{ V}$ $I_i = 152\text{ mA}$ $P_i = 715\text{ mW}$ $C_i = 4.9\text{ }\mu\text{F}$ $L_i = 8\text{ }\mu\text{H}$		$U_i = 8.61\text{ V}$ $I_i = 152\text{ mA}$ $P_i = 715\text{ mW}$ $C_i = 5.539\text{ }\mu\text{F}$ $L_i = 12\text{ }\mu\text{H}$
<b>IS output at PL3/PL4 combined</b>	<b>IS output at PL3/PL4 combined</b>	<b>IS output at PL2</b>	<b>IS output at PL3/PL4 combined</b>
$U_o = 8.61\text{ V}$ $I_o = 41\text{ mA}$ $P_o = 88\text{ mW}$ $C_o = 0.361\text{ }\mu\text{F}$ $L_o = 21\text{ mH}$	$U_o = 8.61\text{ V}$ $I_o = 60\text{ mA}$ $P_o = 129\text{ mW}$ $C_o = 1\text{ }\mu\text{F}$ $L_o = 9.8\text{ mH}$	Simple apparatus only	$U_o = 8.61\text{ V}$ $I_o = 0.87\text{ mA}$ $P_o = 8\text{ mW}$ $C_o = 5.9\text{ }\mu\text{F}$ $L_o = 46\text{ H}$

For all models, intrinsic safety is maintained if the cable connected to any intrinsically safe output terminal does not exceed 100 m.

13.1 Details of Change

The following changes are introduced in issue 1 of the certificate:

Transfer of the certificate from ExVeritas UK, Notified Body number 2585 to ExVeritas Denmark, Notified Body number 2804. Certificate number remains unchanged

## 14 Descriptive Documents

### 14.1 Associated Report and Certificate History:

Report Number	Cert Issue Date	Issue	Comment
R2249/A/9	2020-01-17	0	Initial issue of the Prime Certificate
EXV3140A	2021-01-12	1	Issue of the first variation, see section 13.1.

### 14.2 Compliance Drawings:

#### Issue 0

Title:	Drawing No.:	Rev. Level:	Date:
ERII P2 Monitoring Unit	ERII GA 001	6	24/06/2010
ERII CR Monitor Board Circuit	AA0195R1B-CERT	B	18/03/2010
ERII CR Monitor Board PCB Layout	AA0195R1BCB-CERT	A	18/03/2010
ERII CR Monitor Board PCB Layout	AA0195R1BCT-CERT	A	18/03/2010
RTR II CR Monitor Board PCB Layout	AA0195R1BSS-CERT	A	18/03/2010
RTR II CR Monitor Board Certified Parts List	AA0195R1B-PLC	B	03/03/2010
ERII R Monitor Circuit	AA0194R1B-CERT	B	18/03/2010
RTR II R Monitor Board PCB Layout	AA0194R1BCB-CERT	B	18/03/2010
RTR II R Monitor Board PCB Layout	AA0194R1BCT-CERT	B	18/03/2010
RTR II R Monitor Board PCB Layout	AA0194R1BSS-CERT	B	18/03/2010
RTR II R Monitor Board Certified Parts List	AA0194R1B-PLC	B	11/01/2010
Label for Earth-Rite II Monitoring Unit in GRP Enclosure (P2)	ERII LAB 001	AH	31/10/2019
Earth-Rite II P2 RTR, PLUS and FIBC - Control Drawing - AC Terrestrial (Sheet 1 of 3)	ERII-Q-10175 AI	5	06/10/2011
Earth-Rite II P2 MGV and PLUS – Control Drawing – DC Mobile (Sheet 2 of 3)	ERII-Q-10175 AI	5	06/10/2011
Earth-Rite II P2 RTR, PLUS and FIBC - Control Drawing - DC Terrestrial (Sheet 3 of 3)	ERII-Q-10175 AI	5	06/10/2011
FIBC II Board PCB Layout	AA0206R3A-CB-CERT	A	29/07/2011
FIBC II Monitor Circuit	AA0206R3A-CERT	A	29/07/2011
FIBC II Board PCB Layout	AA0206R3A-CT-CERT	A	29/07/2011
FIBC II Monitor Board Certified Parts List	AA0206R3A-PLC	A	01/09/2011
FIBC II Board PCB Layout	AA0206R3A-SS-CERT	A	29/07/2011

## 15 Conditions of Certification

### 15.1 Special Conditions for Safe Use

- None.

### 15.2 Conditions for Use (Routine tests)

- None.

## 16 Essential Health and Safety Requirements

Essential Health and Safety Requirements are addressed by the standards listed in section 9 and where required the report listed in section 14.1

The manufacturer shall inform the Notified Body of any modifications to the design of the product described by this schedule.

Certificate: ExVeritas 19ATEX0562

Issue 1

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For help or assistance relating to this certificate, contact [info@exveritas.com](mailto:info@exveritas.com).

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