



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 19.0068** Page 1 of 4 [Certificate history:](#)
Issue 0 (2019-12-04)

Status: **Current** Issue No: 1

Date of Issue: 2022-12-13

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

Equipment: **Earth-Rite II P2 Static Earthing System – Power Supply**

Optional accessory:

Type of Protection: **Increased Safety, Sealed Device, Intrinsic Safety, Dust Protection by Enclosure**

Marking: Ex ec nC [ja Ga] IIC T4 Gc
Ex tb [ja Da] IIIC T70°C Db
Ta = -40°C to +55°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.
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Certificate issued by:

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





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Omega House
Private Road 8
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Nottingham
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United Kingdom

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

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/ExTR19.0094/00](#)

[GB/EXV/ExTR22.0024/00](#)

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 ER II P2 Static Earthing System Power Supply Unit is intrinsically safe associated apparatus that provides an intrinsically safe output for connection to earth monitoring equipment in the hazardous area. The Power Supply consists of a single circuit board, mounted inside an IP66 GRP enclosure. There are two versions:

- A.C. version (model code ER2PSEA), provides an isolated output from either a 220-240 Vac supply or a 110-120 Vac supply
- D.C. version (model code ER2PSED) provides an isolated output from a nominally 12-30 Vdc supply, which may be mains-derived or from a vehicle battery

The installation must be in accordance with the relevant control drawing ERII-Q-10175 AI. The maximum input voltage (U_m) is 250 V for both versions. Both versions have the same safety description at the intrinsically safe output at PL4:

$U_o = 8.61 \text{ V}$ $I_o = 152 \text{ mA}$ $P_o = 715 \text{ mW}$ $C_o = 5.9 \text{ }\mu\text{F}$ $L_o = 1.5 \text{ mH}$

SPECIFIC CONDITIONS OF USE: NO



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

1. To introduce substitutions of some safety critical components.
2. The Ex marking code has been amended to reflect correctness to the latest applicable standards.

Annex:

[IECEX_EXV_19.0068_000 Issue 1 Annex-EXV-09.pdf](#)

Routine Tests:

1. The following test shall be performed on 100% of transformers. Each transformer shall be dielectric strength tested in accordance with IEC 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 manufacturer shall ensure that the relevant control drawing is supplied with each unit or batch of units.

Technical Documents:

Drawing No.:	Rev.:	Title:	Date:
ER II GA 002	6	ERII P2 Power Supply Unit	24/06/2010
ER II LAB 002	AE	*CERTIFICATION DETAIL EARTH-RITE II POWER SUPPLY IN APPROVED GRP ENCLOSURE	22/11/2022
AA0190R3A-CERT	A	ERII PSU AC Board	25/03/2010
AA0190R3ACB-CERT	A	ERII AC Supply PCB Layout	25/03/2010
AA0190R3ACT-CERT	A	ERII AC Supply PCB Layout	25/03/2010
AA0190R3ASS-CERT	A	ERII AC Supply PCB Layout	25/03/2010
AA0190R3B-PLC	B	*ERII PSU AC Certified Parts List	10/11/2021
BE008-0-01 R3	B	Transformer Details	08/04/2010
BE010-0-01 R1C	C	Transformer Details DC Power Transformer	13/04/2010
ERII-Q-10175 AI	5	Earth-Rite II P2 RTR, PLUS and FIBC - Control Drawing - AC Terrestrial (Sheet 1 of 3)	06/10/2011
ERII-Q-10175 AI	5	Earth-Rite II P2 MGVS and PLUS – Control Drawing – DC Mobile (sheet 2 of 3)	06/10/2011
ERII-Q-10175 AI	5	Earth-Rite II P2 RTR, PLUS and FIBC - Control Drawing - DC Terrestrial (Sheet 3 of 3)	06/10/2011
AA0189-CERT	2A	ERII DC PSU	15/09/2015
AA0189-PLC	R2C	*ERII DC PSU Certified Parts List	14/02/2022

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