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 SIR 13.0156**

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Certificate history:

Status: **Current**

Issue No: 5

Issue 4 (2017-06-05)
Issue 3 (2017-03-27)
Issue 2 (2016-10-13)
Issue 1 (2015-03-16)
Issue 0 (2014-02-05)

Date of Issue: 2021-12-10

Applicant: **Gill Instruments Ltd**
67 Gosport Street
Lymington
Hampshire S041 9EG
United Kingdom

Equipment: **I.S. WindObserver Power Supply Unit 1360**

Optional accessory:

Type of Protection: **Intrinsically Safe and Dust**

Marking: [Ex ia Ga] IIC
[Ex ia Da] IIIC
Ta = -30°C to +60°C

Approved for issue on behalf of the IECEx Certification Body: **N Jones**

Position: **Certification Manager**

Signature: (for printed version) PP McHalliwell

Date: 2021-12-10

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:

CSA Group Testing UK Ltd
Unit 6, Hawarden Industrial Park
Hawarden, Deeside CH5 3US
United Kingdom

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Certificate No.: **IECEx SIR 13.0156**

Date of issue: 2021-12-10 Issue No: 5

Manufacturer: **Gill Instruments Ltd**
67 Gosport Street
Lymington
Hampshire S041 9EG
United Kingdom

Additional 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

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/CSAE/ExTR21.0171/00 GB/SIR/ExTR14.0018/00 GB/SIR/ExTR15.0071/00
GB/SIR/ExTR16.0260/00 GB/SIR/ExTR17.0054/00 GB/SIR/ExTR17.0106/00

Quality Assessment Report:

GB/SIR/QAR10.0007/09

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

The I.S. WindObserver Power Supply Unit 1360 is designed to provide an intrinsically safe supply and signal connections to a model 1360 I.S. Anemometer certified as IECEx SIR 13.0157. The equipment comprises a printed circuit board that accommodates: an intrinsically safe transformer, opto isolators and voltage clamping, current and power limiting circuitry. A DIN rail accommodates the terminals. The PCB and terminals are housed inside a metal enclosure that affords a degree of ingress protection of at least IP20. The connections to the certified Anemometer are made via connector J2 to DIN rail mounted terminals 21 to 26.

Non-Hazardous area connections

Terminals marked E, L and N and Terminals 1 to 20:
Um = 250 Vrms
Terminals 1 to 20 enable the equipment signal circuits to connect to low power RS422 and RS232 non-hazardous area circuits respectively.
Refer to EQUIPMENT (Continued) for additional information

SPECIFIC CONDITIONS OF USE: NO

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Equipment (continued):

Hazardous area connections
Terminals 21 to 26
Uo = 11.55 V Io = 162 mA Po = 0.417W Ci = 0 Li = 0

Cable parameters

The capacitance and either the inductance or the inductance to resistance (L/R) ratio of the load connected to each separate circuit listed above must not exceed the following values.

Group	Capacitance (µF)	Inductance (µH)	L/R Ratio (µH/W)
IIC	1.59	800	90
IIB	10.8	3200	360
IIA	43	6400	720

Conditions of manufacture
The Manufacturer shall comply with the following:
1. The Power supply unit transformer, T1, is subject to routine tests at voltages of 2500 V between input and output windings, 1000 V rms between windings and core, and 1500 V between the winding supplying I.S. circuit and the other output winding, in accordance with clause 11.2 of IEC 60079-11:2011.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue 1 – this Issue introduced the following change:

1. To recognise that the IS WindObserver Power Supply Unit 1360 may be used with either the Model 1360 IS Anemometer (IECEx SIR 13.0157) or IS II Anemometer Part 1360-00-097 (IECEx SIR 15.0013).

Issue 2 – this Issue introduced the following change:

1. Upgrade the upper ambient certified temperature from +40°C to +60°C. No changes have been made to the products.

Issue 3 – this Issue introduced the following changes:

1. Circuit diagram 1360-C-009 has been modified to mark resistors R44 and R46 as “MUST NOT FIT”.
2. Parts list 1360-10-003 has been modified to include R45 (zero ohm link).

Terminals T19 and T20 have been moved to the safe area side of the terminal rail. Wiring label drawing 1360-30-039 has been modified to reflect this change. The description was amended accordingly.

Issue 4 – this Issue introduced the following change:

1. Cover Plate drawing 1360-M-037 has been modified to add a note regarding surface of cover plate being free of scratches. No changes have been made to the products.

Issue 5 – this Issue introduced the following changes:

1. Revise nameplate drawing 1360-30-036 to add UKCA certificate information.
2. Following appropriate assessment to demonstrate compliance with the latest technical knowledge, IEC 60079-0:2011 Ed.6 was replaced by IEC 60079-0:2017 Ed.7.