



[1]

UNITED KINGDOM CONFORMITY ASSESSMENT
TYPE EXAMINATION CERTIFICATE

[2]

**Product or Protective System Intended for use in Potentially Explosive Atmospheres
UKSI 2016:1107 (as amended by UKSI 2019:696)**

[3]

Type Examination Certificate No.: **UL22UKEX2667X Rev. 1**

[4]

Product: **Industrial Control Equipment, Models IS42#UCSEx2A, IS42#UCSEx2B
and IS42#UCSEx2C**

[5]

Manufacturer: **GE Drives & Controls Inc.**

[6]

Address: **1501 Roanoke Blvd., Salem, VA 24153 USA**

[7]

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

[8]

UL International (UK) Ltd certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Schedule 1 of the Regulations. The examination and test results are recorded in the confidential report **US/UL/ExTR22.0089/01**.

[9]

Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018 EN IEC 60079-7:2015/A1:2018

Except in respect of those requirements listed at section 19 of the schedule to this certificate.

[10]

If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the Schedule to this certificate.

[11]

This TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Regulations apply to the manufacturing process and supply of this product. These are not covered by this certificate.

[12]

The marking of the product shall include the following:

 **II 3 G Ex ec IIC T4 Gc**

Certification Officer
Andrew Moffat

This is to certify that the sample(s) of the Product described herein ("Certified Product") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the UKEx Product Certification Program Requirements. This certificate and test results obtained apply only to the product sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured product. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all product to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

Date of issue: 2023-01-31

Re-issued: 2023-08-15

UL International (UK) Ltd Unit 1-3 Horizon Kingsland Business Park Wade
Road, Basingstoke RG24 8AH, UK
Phone : +44 (0)1256 312100

[13]

[14]

Schedule

TYPE EXAMINATION CERTIFICATE No.

UL22UKEX2667X Rev. 1

[15]

Description of Product

The IS42#UCSE series are compact standalone industrial controllers utilizing Intel I7 dual or quad-core microprocessors that run application-specific control system logic used in a diverse range of applications, such as wind turbines, gas and steam turbines, and combined-cycle power plants.

The IS42#UCSEx2A, IS42#UCSEx2B and IS42#UCSEx2C modules are composed of 2 boards; the carrier card and a COM EXPRESS module. The COM EXPRESS module is same for all the 3 models. The IS42#UCSEx2A and IS42#UCSEx2B use the same 8-ethernet port Carrier card. The IS42#UCSEx2C uses a 12-ethernet port Carrier card. The IS42#UCSEx2A, IS42#UCSEx2B are identical electrically, but are used in different housings. The IS42#UCSEx2A and IS42#UCSEx2C use the same 85 mm heatsink housing. The IS42#UCSEx2B uses a smaller 56 mm heatsink housing.

Nomenclature:

Industrial Control Equipment Cat. Nos.: IS42#UCSEx2A, IS42#UCSEx2B, IS42#UCSEx2C

Where:

= "0" for uncoated PWB and
"1" for conformally coated PWB

x = "H" for Standard safety certification and
"S" for additional SIL certification

The optical radiation output of the product with respect to explosion protection, according to Schedule 1 clause 16 of the Regulation 2016 No. 1107 (as amended by UKSI 2019:696) is covered in this certificate based on Exception 1 to the scope of EN 60079-28:2015.

Temperature range:

IS42#UCSEx2A: $-40\text{ }^{\circ}\text{C} \leq T_a \leq +52\text{ }^{\circ}\text{C}$ or $-40\text{ }^{\circ}\text{C} \leq T_a \leq +65\text{ }^{\circ}\text{C}^*$

IS42#UCSEx2B: $-40\text{ }^{\circ}\text{C} \leq T_a \leq +58\text{ }^{\circ}\text{C}$

IS42#UCSEx2C: $-40\text{ }^{\circ}\text{C} \leq T_a \leq +60\text{ }^{\circ}\text{C}$

*Must be installed in an enclosure with 0.5 m/s vertical airflow

Electrical data

IS42#UCSEx2A: 24 Vdc/28 Vdc, 2.6 A / 48 Vdc, 1.3 A

IS42#UCSEx2B: 24 Vdc/28 Vdc, 1.7 A / 48 Vdc, 0.9 A

IS42#UCSEx2C: 24 Vdc/28 Vdc, 1.7 A / 48 Vdc, 0.9 A

Routine tests:

N/A

[16]

Test Report No. (associated with this certificate issue)

The test report no. is provided under item no. [8] on page 1 of this Type Examination Certificate.

[17]

Specific conditions of use:

- The equipment shall only be used in an area of not more than pollution degree 2, as defined in EN 60664-1.
- The equipment shall be installed in only accessible with the use of a tool and that provides a degree of protection not less than IP 54 in accordance with EN IEC 60079-0.
- Transient protection shall be provided that is set at a level not exceeding 140 % of the peak rated voltage value at the supply terminals to the equipment.
- For model IS42#UCSEx2A at ambient rating of +65 °C the unit shall be installed in an enclosure which shall have air flow of 0.5 m/s

[18]

Conditions of certification:

None

[19]

Essential Health and Safety Requirements (Regulations Schedule 1)

In addition to the Essential Health and Safety Requirements covered by the standards listed at item 9, all other requirements are demonstrated in the relevant reports.

Additional information

The manufacturer shall inform the approved body concerning all modifications to the technical documentation as described in Annex III to UKSI 2016:1107 (as amended by UKSI 2019:696) – Schedule 3A, Part 1.



[13]

[14]

Schedule
TYPE EXAMINATION CERTIFICATE No.
UL22UKEX2667X Rev. 1

[20]

Drawings and Documents

Title:	Drawing No.:	Rev. Level:	Date:
Ex Control Drawing	GEEEx-CDL-008	C	-
IS42#UCSEx2A and IS42#UCSEx2B Schematic	IS400UCSEH1ABA-S	G	-
IS42#UCSEx2C Schematic	IS400UCSEH2ABA-S	G	-

