

EU - TYPE EXAMINATION CERTIFICATE

Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

- 1 EU - Type Examination Certificate Number: **SGS25ATEX0075X**
- 2 Product: **UPS4E-IS Loop calibrator**
- 3 Manufacturer: **Druck Limited**
- 4 Address: **Fir Tree Lane, Groby, Leicester, LE6 0FH. United Kingdom**
- 5 This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- 6 SGS Fimko Oy, Notified Body number 0598, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, 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 Annex II to the Directive.
- 7 The examination and test results are recorded in confidential Report No. **GB/SGS/ExTR25.0113/00**
- 8 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN IEC 60079-0: 2018 EN IEC 60079-11: 2024
except in respect of those requirements listed at item 18 of the Schedule.
- 9 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.
- 10 This EU - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- 11 The marking of the product shall include the following:
⊕ II 1G Ex ia IIC T4 Ga (-10°C ≤ Ta ≤ +50°C)

SGS Fimko Oy Customer Reference No. **312**

Project File No. **25/0244**

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SGS Fimko Oy

Takomotie 8
FI-00380 Helsinki, Finland
Telephone +358 9 696 361

www.sgs.com

Business ID 0634247-4 Member of the SGS
Group (SGS SA)



A handwritten signature in blue ink, which appears to read "Mikko Välimäki".

Mikko Välimäki
SGS Fimko Oy

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Schedule

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Certificate Number SGS25ATEX0075X

15 Description of Product

The UPS4E is an electrical loop calibrator used for loop testing/powering process control mA loops and mA devices.

The equipment is made in a rectangular housing made of RTP 2599 X 133889 Polycarbonate/ABS Alloy static dissipative plastic, consisting of a base and a front panel. The front panel contains a display, keyboard (4 way directional button), control and power buttons. The three user terminals at the top of the apparatus are used for the different measurement functions.

The display assembly consists of a painted glass cover, a custom segment display, backlight and the electrical flexi PCB for display coming out of it. The electronics comprises a 3 board PCB stack connected with flexi PCB. The device is powered from 4-off AA alkaline (ZnMoO₂) cells which are replaceable by disassembling the battery cover.

The USB connector is rated $U_m = 253V$ and is for use only in safe areas.

There are two measurement channels that share a common 0V and have their own separate entity parameters:

Analogue Channel 1 (User Terminal CON2 w.r.t. CON1):

Channel 1 Measurement Terminals Entity Parameters

$U_i = 30V$	$U_o = 6.51V$
$I_i = 450mA$	$I_o = 12mA$
$P_i = 700mW$	$P_o = 0.021W$
$C_i = 0.583nF$	$C_o = 32.4nF$
$L_i = 0$	$L_o = 123mH$

Analogue Channel 2 (Loop Supply Terminal CON3 w.r.t. CON1):

Channel 2 Measurement Terminals Entity Parameters

$U_i = 30V$	$U_o = 25.2V$
$I_i = 450mA$	$I_o = 154.3mA$
$P_i = 1W$	$P_o = 0.98W$
$C_i = 0$	$C_o = 33nF$
$L_i = 0$	$L_o = 0.74mH$

16 Report Number

GB/SGS/ExTR25.0113/00

17 Specific Conditions of Use

1. Do not open in an explosive atmosphere. The batteries must only be replaced in a non-hazardous area.
2. Only approved battery types may be used with the equipment. The permitted (AA) primary cell types are Varta Industrial Pro AA and Duracell Plus AA.
3. The USB connection is only for use in a non-hazardous area.
4. Where a remote sensor is connected to Loop Supply Terminal, the remote sensor must be disconnected from all other power sources.

18 Essential Health and Safety Requirements

In addition to the Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9, the following are considered relevant to this product, and conformity is demonstrated in the report:

Clause	Subject
1.2.7	Protection against other hazards
1.2.8	Overloading of equipment (protection relays, etc)
1.4.1	External effects
1.4.2	Aggressive substances

19 Drawings and Documents

Number	Sheet	Issue	Date	Description
185M6840	1 to 10	-	11 Dec 2025	UPS4E-IS MAIN BOARD BOM (SGS)
185M6849	1 to 8	-	11 Dec 2025	UPS4E-IS PSU BOARD BOM (SGS)
185M6862	1 of 12	-	13-NOV-25	UPS-4-E MAIN IS BOARD (SGS) TOP SHEET
185M6862	2 of 12	-	13-NOV-25	UPS-4-E MAIN IS BOARD (SGS) MICROCONTROLLER
185M6862	3 of 12	-	13-NOV-25	UPS-4-E MAIN IS BOARD (SGS) USB INTERFACE
185M6862	4 of 12	-	13-NOV-25	UPS-4-E MAIN IS BOARD (SGS) KEYPAD & DISPLAY I/F
185M6862	5 of 12	-	13-NOV-25	UPS-4-E MAIN IS BOARD (SGS) DRIVE CIRCUITS
185M6862	6 of 12	-	13-NOV-25	UPS-4-E MAIN IS BOARD (SGS) PSU & DAC-PGA CLOCK
185M6862	7 of 12	-	13-NOV-25	UPS-4-E MAIN IS BOARD (SGS) CURRENT MEASURE
185M6862	8 of 12	-	13-NOV-25	UPS-4-E MAIN IS BOARD (SGS) VOLT MEASURE
185M6862	9 of 12	-	13-NOV-25	UPS-4-E MAIN IS BOARD (SGS) PGA & ADC
185M6862	10 of 12	-	13-NOV-25	UPS-4-E MAIN IS BOARD (SGS) TERMINALS
185M6862	11 of 12	-	13-NOV-25	UPS-4-E MAIN IS BOARD (SGS) CONNECTOR & ON/OFF CONTROL
185M6862	12 of 12	-	13-NOV-25	UPS-4-E MAIN IS BOARD (SGS) C&C TABLE
185M6863	1 of 5	-	13-NOV-25	UPS4E-IS PSU BOARD (SGS) TOP SHEET
185M6863	2 of 5	-	13-NOV-25	UPS4E-IS PSU BOARD (SGS) PSU ON OFF CONTROL & RTC SUPPLY
185M6863	3 of 5	-	13-NOV-25	UPS4E-IS PSU BOARD (SGS) PSU SUPPLIES
185M6863	4 of 5	-	13-NOV-25	UPS4E-IS PSU BOARD (SGS) PSU LOOP SUPPLY & BUZZER
185M6863	5 of 5	-	13-NOV-25	UPS4E-IS PSU BOARD (SGS) PSU C&C TABLE
188M1637	1 to 11	-	13-NOV-25	PCB FABRICATION PLOTS UPS4E-IS MAIN BOARD SCHEDULED FAB (SGS)
188M1643	1 to 11	-	13-NOV-25	PCB FABRICATION PLOTS UPS4E-IS PSU BOARD SCHEDULED FAB (SGS)
189M1397	1 to 2	-	18-DEC-25	UPS4E IS GENERAL CONSTRUCTION (SGS)
189M1758	1 of 1	-	18-DEC-25	UPS4E-IS MARKING DETAILS (SGS)
189M6704	1 to 2	-	18-DEC-25	UPS4E-IS PSU PCB ENCAPSULATED ASSY (SGS)
185M6858	1 to 7	-	05 JAN 26	PCB FABRICATION PLOTS UPS4E-IS SOCKET BOARD SCHEDULE FAB (SGS)
185M6865	1 of 1	-	05 JAN 26	UPS4E-IS SOCKET BOARD (SGS) SCHEMATIC

These drawings are common to IECEx SGS 25.0031X.