IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx ETL 18.0041X

Issue No: 0

Certificate history:
Issue No. 0 (2019-05-31)

Status: **Current**

Date of Issue: **2019-05-31**

Applicant: **Kurz Instruments, Inc.**
2411 Garden Road
Monterey, CA 93940
United States of America

Equipment: **Averaging Flow Transmitter Series 255**

Optional accessory:

Type of Protection: **Increased Safety "ec", Non-Arcing "nA nC", Dust Ignition Protected by Enclosure "tc"**

Marking:

Ex nA nC ec IIC T3 Gc

Ex tc IIIC T80°C Dc

-25°C ≤ Tamb ≤ 50°C

Approved for issue on behalf of the IECEx Certification Body: Todd L. Relyea

Position: Certification Officer

Signature:
(for printed version)

Date:

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 the Official IECEx Website.

Certificate issued by:

Intertek
3933 US Route 11 South
Cortland NY 13045-2995
United States of America

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Manufacturer: **Kurz Instruments, Inc.**
2411 Garden Road
Monterey, CA 93940
United States of America

Additional Manufacturing location(s):

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 apparatus 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 Edition:7.0	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-15 : 2010 Edition:4	Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7 : 2015 Edition:5.0	Explosive atmospheres – Part 7: Equipment protection by increased safety "e"

*This Certificate **does not** indicate compliance with electrical 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 Report:

US/ETL/ExTR18.0051/00

Quality Assessment Report:

US/FMG/QAR09.0003/05

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

255AThe Kurz Series 255 Averaging Flow Transmitter is a system transmitter designed for measuring flow rates in very large ducts that have non-uniform or unstable velocity profiles and/or wide temperature ranges. The system powers and reads up to 16 independent sensing points, providing a grand average of the flow and temperature.

The system continuously reads and analyzes flow and temperature data from the individual channels, and automatically removes channels from the average that are under alarm or have been removed for service or repair. The equipment contains multiple and independent power and communication ports. The model breakdown is as follows:

Model	Part Number	Max number of Sensors	Rated Power (W)
255A	750993-H-F2-F3	4	95
255B	750994-H-F2-F3	9	200
255C	750995-H-F2-F3	16	350
255DC	750997-H-F2-F3	16	N/A

See below for F2, F3 options:

	Option	Board Type
F2	10	Standard
F2	20	HART
F2	30	Profibus
F2	40	Ethernet
	Option	**Stainless Steel Window**
F3	A	Not included (default)
F3	B	Included

SPECIFIC CONDITIONS OF USE: YES as shown below:

- Adjustment of the potentiometers on the DC power supply is allowed only when an explosive atmosphere is not present.
- The equipment shall only be used in an area of at least pollution degree 2, as defined in IEC 60664-1.
- If the cables used with the conduit hubs are not provided with their own strain relief, flexible sheathed cables and strain relief devices shall be used that have passed a tension test in accordance with IEC 60079-01, section A.3.1.4.
- For ambient temperatures below -10°C and above +60°C, use field wiring suitable for both minimum and maximum ambient temperatures.
- Refer to installation manual for guidance on prevention of electrostatic discharge.

Annex:

103516547DAL-004 Annex for IECEx Certificate of Conformity.pdf

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Technical Documents			
Title:	Drawing No.:	Rev. Level:	Date:
SAFETY APPROVAL TECHNICAL DOCUMENT/DRAWINGS SERIES 255 AVERAGING FLOW TRANSMITTER (ATEX) (Pages 8 through 13)	280211	H	01/17/2019
SERIES 255 HARDWARE GUIDE	368060	A	01/14/2019
255 FIELD WIRING DIAGRAM-CUSTOMER I/O CONNECTIONS (ATEX)	342062	B	11/09/2018
255 FIELD WIRING DIAGRAM-FLOW ELEMENT ELECTRONICS (ATEX)	342063	B	11/09/2018
255 PRODUCT LABEL - HAZARDOUS LOCATIONS	170384	E	01/17/2019
WARNING - DO NOT OPEN WHEN ENERGIZED	170389	A	11/05/2018
WARNING - DO NOT REPLACE FUSE WHEN ENERGIZED	170390	A	11/05/2018
255 MAIN BOARD SCHEMATIC (ATEX)	300211	B	12/06/2018
255 FRONT PANEL SCHEMATIC	300212	A	05/01/2018
FAB 255 MAIN BOARD (ATEX)	420439	A	12/06/2018
255 MAIN BOARD ASSEMBLY (ATEX)	420440	B	12/06/2018
BOM for 255 Main Board	420440BOM	B	01/17/2019
FAB 255 FRONT PANEL BOARD (ATEX)	420441	A	04/18/2018
ASSY 255 FRONT PANEL BOARD (ATEX)	420442	A	04/18/2018
BOM for 255 Front Panel Board	420442BOM	A	01/17/2019
255 FRONT PANEL LCD AND KEYPAD OVERLAY	440064	2	08/22/2017
255 BASEPLATE	110620	C	04/25/2018
255 UNIVERSAL SWING PANEL ASSEMBLY	700913	A	03/13/2018
255 SWING PANEL SUB-ASSEMBLY	700919	B	06/11/2018
255 GROUND BUS BAR	110635	A	05/01/2018
255 PROCESSOR BOARD ASSEMBLY (ATEX)	700914	A	05/02/2018

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IECEx Certified Components on Which Conformance Depends

Item	Description	Manufacturer	Type	Certificate No. / Standards*	Coding / Ratings
1	SS Enclosure	Adalet	VC4X6-201608H VC4X6-302008H	**IECEx UL 09.0013U** IEC 60079-0: 2011 IEC 60079-31: 2008 IEC 60079-7: 2006-07	Ex e IIC Gb Ex tb III C Db IP66 +50°C to +100°C
2	Window Kit	Adalet	EWK-0505SS6	**IECEx UL 11.0014U** IEC 60079-0: 2011 IEC 60079-31: 2008 IEC 60079-7: 2006-07	Ex e IIC Gb Ex tb III C Db IP66 95°C max.
3	Conduit Hub	R Stahl	8166/11-01-NE 8166/11-03-NE	**IECEx PTB 06.0095U** IEC 60079-0: 2011 IEC 60079-31: 2008 IEC 60079-7: 2006-07	Ex e IIC Gb Ex tb III C Db IP66 -30 °C to +100 °C
4	AC-DC Power Supply	TDK-Lambda	DRF120-24-1/HL	**IECEx SIQ 14.0004X** IEC 60079-0 (Ed.6.0) IEC 60079-15 (Ed.4)	Ex nA nC IIC T4 Gc -25°C to +70°C
			DRF240-24-1/HL	**IECEx SIQ 14.0005X** IEC 60079-0 (Ed.6.0) IEC 60079-15 (Ed.4)	Ex nA nC IIC T4 Gc -25°C to +70°C
			DRF480-24-1/HL	**IECEx SIQ 14.0006X** IEC 60079-0 (Ed.6.0) IEC 60079-15 (Ed.4)	Ex nA nC IIC T3 Gc -25°C to +70°C

* - Technical differences with standard editions listed in page 1 incorporated within individual ExTRs and found satisfactory – See ExTRs for details.

Required Manufacturer Routine Testing

Test	Title/Description of Test	Standard and Clause
1	Dielectric Strength Test:	IEC 60079-7:2015 clause 7.1

Test Points	Test Voltage	Test Time
Line + Neutral of AC circuits to Ground	1528 VAC Or 2140 VDC	60 sec.
	1834 VAC Or 2568 VDC	1 sec.