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 FMG 15.0003U

Issue No: 5

Status: **Current**

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Date of Issue: **2018-02-23**

Applicant: **Burns Engineering Inc.**
10201 Bren Road East
Minnetonka, MN 55343
United States of America

Equipment: **Series #5 and #3 Connection Head Enclosure**
Optional accessory:

Type of Protection: **Flameproof "db", Protection by Enclosure "tb"**

Marking:
Ex db IIC Gb; IP66

Ex tb IIIC Db

Ta = -40C to +100C

Certificate history:
Issue No. 5 (2018-02-23)
Issue No. 4 (2017-05-30)
Issue No. 3 (2017-03-07)
Issue No. 2 (2016-05-25)
Issue No. 1 (2016-04-26)
Issue No. 0 (2016-01-19)

Approved for issue on behalf of the IECEx Certification Body: J. E. Marquedant

Position: VP, Manager - Electrical Systems

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:

FM Approvals LLC
1151 Boston-Providence Turnpike
Norwood, MA 02062
United States of America

FM Approvals
Member of the FM Global Group

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Manufacturer:	**Burns Engineering Inc.** 10201 Bren Road East Minnetonka, MN 55343 **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 electrical 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 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

*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/FMG/ExTR15.0005/00 US/FMG/ExTR15.0005/01 US/FMG/ExTR15.0005/02
US/FMG/ExTR15.0005/03 US/FMG/ExTR15.0005/04 US/FMG/ExTR15.0005/05

Quality Assessment Report:

GB/FME/QAR15.0004/02

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Model Code as follows:

Series #5a and #3a Series Connection Head (Enclosure)

a = Model: A or E.

Schedule of limitations:

1. Where necessary for safety, the contents of the enclosure shall comply with the appropriate requirements of relevant standards for electrical equipment.
2. Consult the manufacturer if dimensional information on the flameproof joints is necessary.
3. Consult the manufacturer's instructions for the specific information regarding wiring entry number, sizes, position and thread type.
4. The painted surfaces of the Series #5 and #3 Connection Head may store electrostatic charge and become a source of ignition in applications with a low relative humidity < ~ 30% relative humidity where the painted surface is relatively free of surface contamination such as dirt, dust, or oil. Guidance on protection against the risk of ignition due to electrostatic discharge can be found in IEC TR60079-32 (in preparation). Cleaning of the painted/unpainted surface should only be done with a damp cloth.
5. For Group IIC enclosures, the content of the enclosure apparatus may be placed in any arrangement provided that an area of at least 40 % of each cross-sectional area remains free to permit unimpeded gas flow and, therefore, unrestricted development of an explosion.
6. All entry or closure devices when fitted shall satisfy the requirements of Clause 5 of IEC 60079-1, or be specifically evaluated with

the apparatus and be suitable for the conditions of use. Threads interrupted by the set screw shall not be counted in satisfying the requirements of Clause 5 of IEC 60079-1. A thread of engagement of ³ 5 threads is required and depth of engagement ³ 8mm is required.

7. Rotating machines, or other devices which create turbulence, shall not be incorporated.

8. The ambient temperature range and service temperature range for the Series #5 and #3 Connection Head is -40°C to +100°C .

SPECIFIC CONDITIONS OF USE: NO

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Minor document changes. New nameplate combining Flameproof and Explosionproof ratings.