



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 UL 08.0005U** issue No.:5

Status: **Current**

Date of Issue: **2015-02-17** Page 1 of 4

Applicant: **Adalet/Scott Fetzer Company**
4801 W 150th Street
Cleveland, OH 44135
United States of America

Certificate history:

- Issue No. 5 (2015-2-17)
- Issue No. 4 (2013-11-27)
- Issue No. 3 (2013-4-18)
- Issue No. 2 (2010-7-21)
- Issue No. 1 (2008-10-15)
- Issue No. 0 (2008-3-17)

Electrical Apparatus: **Enclosures**
Optional accessory:

Type of Protection: **Flameproof "d" Protection by Enclosure "tb"**

Marking: Series XIHX, XIHMX, XIHMKX, XIHLX, XIHNX and XIHNSX: Ex d IIC; Ex tb IIIC Db IP66
Series XDHX, XDHMX and XDHLX: Ex d IIB +H2; Ex tb IIIC Db IP66

Approved for issue on behalf of the IECEx
Certification Body:

Paul T. Kelly

Position:

Principal Engineer, Global Hazardous Locations

Signature:
(for printed version)

Date:

2015-02-17

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](http://www.iecex.com).

Certificate issued by:

UL LLC
333 Pfingsten Road
Northbrook IL 60062-2096
United States of America





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Certificate No.: IECEx UL 08.0005U

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Page 2 of 4

Manufacturer: **Adalet/Scott Fetzer Company**
4801 W. 150th Street
Cleveland, OH 44135
United States of America

Additional Manufacturing location
(s):

Adalet/Scott Fetzer Co.
4300 Windfern Road
Suite 200
Houston, TX 77041
United States of America

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 : 2007-04
Edition: 6 | Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d" |
| IEC 60079-31 : 2008
Edition: 1 | 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/UL/ExTR07.0015/00
US/UL/ExTR07.0015/03

US/UL/ExTR07.0015/01
US/UL/ExTR07.0015/04

US/UL/ExTR07.0015/02

Quality Assessment Report:

US/ETL/QAR11.0002/02

US/UL/QAR08.0003/05



IECEx Certificate of Conformity

Certificate No.: IECEx UL 08.0005U

Date of Issue: 2015-02-17

Issue No.: 5

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The flameproof copper-free aluminium or 316 stainless steel XIHX, XIHMX, XIHMKX and XIHLX single ended enclosures, the 316 stainless steel XIHNSX single ended enclosures, the aluminium XIHNX single ended enclosures, and the aluminium or 316 stainless steel XDHX, XDHMX and XDHLX double ended enclosures with flat solid, dome solid, extended cover solid, flat glass and dome glass covers are intended to be used primarily as instrument housings. The single-ended enclosures are similar to the double-ended enclosures, except the double-ended enclosures are provided with a threaded cover at both ends of the body. Up to three conduit entries can be provided in the double-ended bodies and up to four or six conduit entries for the XIHNSX models. Conduit entries are described in the control drawing Nos. DS411E, DS428E, DS430E, DS431E, DS437E, DS681E, DS908, DS911 and DS833.

Please see Annex for Nomenclature details and Schedule of Limitations for Ex Components.

CONDITIONS OF CERTIFICATION: NO



IECEx Certificate of Conformity

Certificate No.: IECEx UL 08.0005U

Date of Issue: 2015-02-17

Issue No.: 5

Page 4 of 4

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

Issue 1: Added Schedule of Limitations details.

Issue 2: Update Schedule of Limitations to include items required to be listed by D.3.10 of IEC 60079-1: 2007.

Issue 3: Addition of the XIHNS_X Series and the Houston manufacturing location. Also upgraded to IEC 60079-0 Ed. 6 and IEC 60079-31 Ed. 1. Removed a construction option.

Issue 4: Addition of XIHNX Series of enclosures.

Issue 5: Updating glass options and minor construction changes that do not affect the protection methods.

Annex to IECEx UL 08.0005U Issue 5

Nomenclature for type:

XIH	FC	X
I	II	III

I – Enclosure Type

XIH – Single small body

XDH – Double small body

XIHM – Single medium body

XIHMK – Single short medium body

XDHM – Double medium body

XIHL – Single large body

XDHL – Double large body

XIHNS- Single ended style body

XIHN – Single ended style body

II – Enclosure Covers

FC – Flat cover (XIH, XDH, XIHM, XDHM, XIHMK, XIHL, XDHL, XIHN, XIHNS only)

FGC – Flat glass cover (XIH, XDH, XIHM, XDHM, XIHMK, XIHL, XDHL, XIHN, XIHNS only)

DC – Dome cover (XIH, XDH, XIHM, XDHM, XIHL, XDHL, XIHN, XIHNS only)

DGC – Dome glass cover (XIH, XDH, XIHM, XDHM, XIHMK, XIHL, XDHL, XIHN, XIHNS only)

MC – Medium flat cover (XIHM, XDHM only)

EC – Extended cover (XIHL and XDHL only)

III – Additional Suffix

X – Suffix denotes European certification

Schedule of Limitations for Ex Components:

- Approval applies to equipment without cable glands. Only cable glands certified for protection types 'd', 'tb', and have an IP66 rating may be used.
- All unused device openings must be fitted with a close up plug provided with the Ex component enclosures or a certified close-up plug with protection types 'd', 'tb', and have an IP66 rating.
- All conduit sealing fittings must be certified as flameproof 'd', dust ignition protection 'tb', and have a minimum IP66 rating equal to the marking on the enclosure.
- Refer to Drawing No. DS833 for number, size, and position of entries.
- The content of the Ex component enclosure equipment 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. Separate relief areas may be aggregated provided that each area has a minimum dimension in any direction of 12.5mm.
- No temperature tests were conducted as the enclosure is certified as an empty Ex component. The maximum service temperature is based off the ambient temperature of -50°C to +100°C for silicone o-rings or -34°C to +100°C for Nitrile Buna N o-rings.
- To minimize the risk of electrostatic charge, provisions shall be made for adequate grounding and equipment shall be installed in such a manner so that accidental discharge shall not occur
- Oil-filled circuit breakers and contactors shall not be used.
- Rotating machines, or other devices which create turbulence, shall not be incorporated.
- The cross-sectional area of the corresponding internal ground conductor must be taken into account during final product evaluation.
- The Hazardous Location Solutions reducers shall not be used for the direct inter-connection of enclosures.
- Only one Hazardous Location Solutions reducer shall be used with any single cable entry on the associated equipment. All conduit sealing fittings must be certified as flameproof 'd', dust ignition protection 'tb', and have a minimum IP66 rating equal to the marking on the enclosure.