



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Ex COMPONENT CERTIFICATE

Certificate No.:	IECEX UL 08.0005U	Page 1 of 4	<u>Certificate history:</u>
Status:	Current	Issue No: 8	Issue 7 (2021-11-30)
Date of Issue:	2022-07-26		Issue 6 (2016-08-11)
Applicant:	Adalet/Scott Fetzer Co 4801 W. 150th Street Cleveland, OH 44135 United States of America		Issue 5 (2015-02-17)
Ex Component:	Enclosures, XIHNX, XIHLX, XDHLX, XIHMX, XDHMX, XIHMKX XIHX, XDHX, XIHNSX		Issue 4 (2013-11-27)
			Issue 3 (2013-04-18)
			Issue 2 (2010-07-21)
			Issue 1 (2008-10-15)
			Issue 0 (2008-03-17)

This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).

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

Marking: Series XIHX, XIHMX, XIHMKX, XIHLX, XIHNX and XIHNSX:

Ex db IIC Gb; Ex tb III C Db IP66

Series XDHX, XDHMX and XDHLX:

Ex db IIB +H2 Gb; Ex tb III C Db IP66

Approved for issue on behalf of the IECEx
Certification Body:

Katy A. Holdredge

Position:

Senior Staff Engineer

Signature:
(for printed version)

Date:
(for printed version)

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 www.iecex.com or use of this QR Code.



Certificate issued by:

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





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Issue No: 8

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

Manufacturing locations: **Adalet/Scott Fetzer Co**
4801 W. 150th Street
Cleveland, OH 44135
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 component 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](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-1:2014](#) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

[IEC 60079-31:2013](#) Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the component listed has successfully met the examination and test requirements as recorded in:

Test Reports:

[US/UL/ExTR07.0015/00](#)
[US/UL/ExTR07.0015/03](#)
[US/UL/ExTR07.0015/06](#)

[US/UL/ExTR07.0015/01](#)
[US/UL/ExTR07.0015/04](#)

[US/UL/ExTR07.0015/02](#)
[US/UL/ExTR07.0015/05](#)

Quality Assessment Report:

[US/UL/QAR08.0003/10](#)



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Ex Component(s) covered by this certificate is described below:

The flameproof copper-free aluminum 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, up to four conduit entries can be provided in the single-ended bodies, and up to six conduit entries can be provided 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 additional information.

SCHEDULE OF LIMITATIONS:

- Approval applies to equipment without cable glands. Only cable glands certified for protection types 'd', 'db', '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 'db', 'tb', and have an IP66 rating.
- 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 'db', dust ignition protection 'tb', and have a minimum IP66 rating equal to the marking on the enclosure.



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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.

Issue 6: Updated IEC 60079-1 and IEC 60079-31 to latest versions.

Issue 7: The XIHX, XDHX, XIHMX, XIHMKX, XDHMX, XIHLX, XDHLX, XIHNSX, and XIHNX Series enclosures were evaluated to the latest edition of the IEC 60079-0 standard. No construction changes were evaluated in this revision.

Issue 8: Update to CoC only to remove QAR US/ETL/QAR11.0002/07. No ExTR update for this revision.

Annex:

[Annex to IECEx UL 08.0005U Issue 8.pdf](#)



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TYPE DESIGNATION

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 “K” 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, XIHMK, XIHL, XDHL, XIHN, XIHNS only)
- DGC – Dome glass cover (XIH, XDH, XIHM, XDHM, XIHMK, XIHL, XDHL, XIHN, XIHNS only)
- MC – Midsize flat cover (XIHM, XDHM, XIHMK only)
- EC – Extended cover (XIHL and XDHL only)
- TGC – Truncated glass cover (XIHN only)
- KFC – Flat Cover, “K” (XIHM, XDHM, XIHMK only)
- KFGC – Flat glass cover “K” (XIHM, XDHM, XIHMK only)

III – Additional Suffix

- X – Suffix denotes European certification



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PARAMETERS RELATING TO THE SAFETY

Empty enclosure, no electrical components.

MARKING

Marking has to be readable and indelible; it has to include the following indications:

ADALET 4801 WEST 150TH STREET Cleveland, Ohio 44135 USA	Ser No: <input type="text"/>	Year: <input type="text"/>
Cat No. XDHLX Series	0539 II 2 G Ex db IIB+H2 Gb	Ex db IIB+H2 Gb
	0539 II 2 D Ex tb IIIC Db IP66	Ex tb IIIC Db IP66
Rated Ambient Temperature Range: with Buna Nitrile O-ring: $-34^{\circ}\text{C} \leq T_a \leq 100^{\circ}\text{C}$	DEMKO 07 ATEX 0622294U	IECEX UL 08.0005U
SEE INSTALLATION INSTRUCTIONS		
EMPTY ENCLOSURE WITH Ex COMPONENT CERTIFICATE		8168N REVB

ADALET 4801 WEST 150TH STREET Cleveland, Ohio 44135 USA	Ser No: <input type="text"/>	Year: <input type="text"/>
Cat No. XDHLX Series	0539 II 2 G Ex db IIB+H2 Gb	Ex db IIB+H2 Gb
	0539 II 2 D Ex tb IIIC Db IP66	Ex tb IIIC Db IP66
Rated Ambient Temperature Range: with Silicone O-ring: $-50^{\circ}\text{C} \leq T_a \leq 100^{\circ}\text{C}$	DEMKO 07 ATEX 0622294U	IECEX UL 08.0005U
SEE INSTALLATION INSTRUCTIONS		
EMPTY ENCLOSURE WITH Ex COMPONENT CERTIFICATE		8168S REVB

ADALET 4801 WEST 150TH STREET Cleveland, Ohio 44135 USA	Ser No: <input type="text"/>	Year: <input type="text"/>
Cat No. XIHLX Series	0539 II 2 G Ex db IIC Gb	Ex db IIC Gb
	0539 II 2 D Ex tb IIIC Db IP66	Ex tb IIIC Db IP66
Rated Ambient Temperature Range: with Buna Nitrile O-ring: $-34^{\circ}\text{C} \leq T_a \leq 100^{\circ}\text{C}$	DEMKO 07 ATEX 0622294U	IECEX UL 08.0005U
SEE INSTALLATION INSTRUCTIONS		
EMPTY ENCLOSURE WITH Ex COMPONENT CERTIFICATE		8167N REVB



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ADALET 4801 WEST 150TH STREET Cleveland, Ohio 44135 USA	Ser No:	<input type="text"/>	Year:	<input type="text"/>
	Cat No. XIHLX Series Rated Ambient Temperature Range: with Silicone O-ring: $-50^{\circ}\text{C} \leq \text{Ta} \leq 100^{\circ}\text{C}$	0539 II 2 G Ex db IIC Gb 0539 II 2 D Ex tb IIIC Db IP66 DEMKO 07 ATEX 0622294U SEE INSTALLATION INSTRUCTIONS EMPTY ENCLOSURE WITH Ex COMPONENT CERTIFICATE	Ex db IIC Gb Ex tb IIIC Db IP66 IECEX UL 08.0005U 8167S REVB	

ADALET 4801 WEST 150TH STREET Cleveland, Ohio 44135 USA	Ser No:	<input type="text"/>	Year:	<input type="text"/>
	Cat No. XDHMX Series Rated Ambient Temperature Range: with Buna Nitrile O-ring: $-34^{\circ}\text{C} \leq \text{Ta} \leq 100^{\circ}\text{C}$	0539 II 2 G Ex db IIB+H2 Gb 0539 II 2 D Ex tb IIIC Db IP66 DEMKO 07 ATEX 0622294U SEE INSTALLATION INSTRUCTIONS EMPTY ENCLOSURE WITH Ex COMPONENT CERTIFICATE	Ex db IIB+H2 Gb Ex tb IIIC Db IP66 IECEX UL 08.0005U 8166N REVB	

ADALET 4801 WEST 150TH STREET Cleveland, Ohio 44135 USA	Ser No:	<input type="text"/>	Year:	<input type="text"/>
	Cat No. XDHMX Series Rated Ambient Temperature Range: with Silicone O-ring: $-50^{\circ}\text{C} \leq \text{Ta} \leq 100^{\circ}\text{C}$	0539 II 2 G Ex db IIB+H2 Gb 0539 II 2 D Ex tb IIIC Db IP66 DEMKO 07 ATEX 0622294U SEE INSTALLATION INSTRUCTIONS EMPTY ENCLOSURE WITH Ex COMPONENT CERTIFICATE	Ex db IIB+H2 Gb Ex tb IIIC Db IP66 IECEX UL 08.0005U 8166S REVB	

ADALET 4801 WEST 150TH STREET Cleveland, Ohio 44135 USA	Ser No:	<input type="text"/>	Year:	<input type="text"/>
	Cat No. XIHMX Series Rated Ambient Temperature Range: with Silicone O-ring: $-50^{\circ}\text{C} \leq \text{Ta} \leq 100^{\circ}\text{C}$	0539 II 2 G Ex db IIC Gb 0539 II 2 D Ex tb IIIC Db IP66 DEMKO 07 ATEX 0622294U SEE INSTALLATION INSTRUCTIONS EMPTY ENCLOSURE WITH Ex COMPONENT CERTIFICATE	Ex db IIC Gb Ex tb IIIC Db IP66 IECEX UL 08.0005U 8165S REVB	



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ADALET 4801 WEST 150TH STREET Cleveland, Ohio 44135 USA	Ser No:	<input type="text"/>	Year:	<input type="text"/>
	Cat No. XIHMX Series Rated Ambient Temperature Range: with Buna Nitrile O-ring: $-34^{\circ}\text{C} \leq T_a \leq 100^{\circ}\text{C}$	0539 II 2 G Ex db IIC Gb 0539 II 2 D Ex tb IIIC Db IP66 DEMKO 07 ATEX 0622294U SEE INSTALLATION INSTRUCTIONS	Ex db IIC Gb Ex tb IIIC Db IP66 IECEX UL 08.0005U SEE INSTALLATION INSTRUCTIONS	EMPTY ENCLOSURE WITH Ex COMPONENT CERTIFICATE 8165N REVB

ADALET 4801 WEST 150TH STREET Cleveland, Ohio 44135 USA	Ser No:	<input type="text"/>	Year:	<input type="text"/>
	Cat No. XDHX Series Rated Ambient Temperature Range: with Silicone O-ring: $-50^{\circ}\text{C} \leq T_a \leq 100^{\circ}\text{C}$	0539 II 2 G Ex db IIB+H2 Gb 0539 II 2 D Ex tb IIIC Db IP66 DEMKO 07 ATEX 0622294U SEE INSTALLATION INSTRUCTIONS	Ex db IIB+H2 Gb Ex tb IIIC Db IP66 IECEX UL 08.0005U SEE INSTALLATION INSTRUCTIONS	EMPTY ENCLOSURE WITH Ex COMPONENT CERTIFICATE 8164S REVB

ADALET 4801 WEST 150TH STREET Cleveland, Ohio 44135 USA	Ser No:	<input type="text"/>	Year:	<input type="text"/>
	Cat No. XDHX Series Rated Ambient Temperature Range: with Buna Nitrile O-ring: $-34^{\circ}\text{C} \leq T_a \leq 100^{\circ}\text{C}$	0539 II 2 G Ex db IIB+H2 Gb 0539 II 2 D Ex tb IIIC Db IP66 DEMKO 07 ATEX 0622294U SEE INSTALLATION INSTRUCTIONS	Ex db IIB+H2 Gb Ex tb IIIC Db IP66 IECEX UL 08.0005U SEE INSTALLATION INSTRUCTIONS	EMPTY ENCLOSURE WITH Ex COMPONENT CERTIFICATE 8164N REVB

ADALET 4801 WEST 150TH STREET Cleveland, Ohio 44135 USA	Ser No:	<input type="text"/>	Year:	<input type="text"/>
	Cat No. XIHX Series Rated Ambient Temperature Range: with Buna Nitrile O-ring: $-34^{\circ}\text{C} \leq T_a \leq 100^{\circ}\text{C}$	0539 II 2 G Ex db IIC Gb 0539 II 2 D Ex tb IIIC Db IP66 DEMKO 07 ATEX 0622294U SEE INSTALLATION INSTRUCTIONS	Ex db IIC Gb Ex tb IIIC Db IP66 IECEX UL 08.0005U SEE INSTALLATION INSTRUCTIONS	EMPTY ENCLOSURE WITH Ex COMPONENT CERTIFICATE 8163N REVB



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ADALET 4801 WEST 150TH STREET Cleveland, Ohio 44135 USA	Ser No:	<input type="text"/>	Year:	<input type="text"/>
	Cat No. XIHX Series Rated Ambient Temperature Range: with Silicone O-ring: $-50^{\circ}\text{C} \leq \text{Ta} \leq 100^{\circ}\text{C}$	0539 II 2 G Ex db IIC Gb 0539 II 2 D Ex tb IIIC Db IP66 DEMKO 07 ATEX 0622294U SEE INSTALLATION INSTRUCTIONS	Ex db IIC Gb Ex tb IIIC Db IP66 IECEX UL 08.0005U	EMPTY ENCLOSURE WITH Ex COMPONENT CERTIFICATE 8163S REVB

ADALET 4801 WEST 150TH STREET Cleveland, Ohio 44135 USA	Ser No:	<input type="text"/>	Year:	<input type="text"/>
	Cat No. XIHNX Series Rated Ambient Temperature Range: with Buna Nitrile O-ring: $-34^{\circ}\text{C} \leq \text{Ta} \leq 100^{\circ}\text{C}$	0539 II 2 G Ex db IIC Gb 0539 II 2 D Ex tb IIIC Db IP66 DEMKO 07 ATEX 0622294U SEE INSTALLATION INSTRUCTIONS	Ex db IIC Gb Ex tb IIIC Db IP66 IECEX UL 08.0005U	EMPTY ENCLOSURE WITH Ex COMPONENT CERTIFICATE 8180N REVB

ADALET 4801 WEST 150TH STREET Cleveland, Ohio 44135 USA	Ser No:	<input type="text"/>	Year:	<input type="text"/>
	Cat No. XIHNX Series Rated Ambient Temperature Range: with Silicone O-ring: $-50^{\circ}\text{C} \leq \text{Ta} \leq 100^{\circ}\text{C}$	0539 II 2 G Ex db IIC Gb 0539 II 2 D Ex tb IIIC Db IP66 DEMKO 07 ATEX 0622294U SEE INSTALLATION INSTRUCTIONS	Ex db IIC Gb Ex tb IIIC Db IP66 IECEX UL 08.0005U	EMPTY ENCLOSURE WITH Ex COMPONENT CERTIFICATE 8180S REVB

ADALET 4801 WEST 150TH STREET Cleveland, Ohio 44135 USA	Ser No:	<input type="text"/>	Year:	<input type="text"/>
	Cat No. XIHNSX Series Rated Ambient Temperature Range: with Buna Nitrile O-ring: $-34^{\circ}\text{C} \leq \text{Ta} \leq 100^{\circ}\text{C}$	0539 II 2 G Ex db IIC Gb 0539 II 2 D Ex tb IIIC Db IP66 DEMKO 07 ATEX 0622294U SEE INSTALLATION INSTRUCTIONS	Ex db IIC Gb Ex tb IIIC Db IP66 IECEX UL 08.0005U	EMPTY ENCLOSURE WITH Ex COMPONENT CERTIFICATE 8162N REVB



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ADALET

4801 WEST 150TH STREET
Cleveland, Ohio 44135 USA

Ser No:

Year:

Cat No. XIHNSX Series

0539 II 2 G Ex db IIC Gb

Ex db IIC Gb

0539 II 2 D Ex tb IIIC Db IP66

Ex tb IIIC Db IP66

Rated Ambient Temperature Range:

DEMKO 07 ATEX 0622294U

IECEX UL 08.0005U

with Silicone O-ring: $-50^{\circ}\text{C} \leq T_a \leq 100^{\circ}\text{C}$

SEE INSTALLATION INSTRUCTIONS

EMPTY ENCLOSURE WITH Ex COMPONENT CERTIFICATE

8162S REV B