

### INTERNATIONAL ELECTROTECHNICAL COMMISSION

IEC Certification System for Explosive Atmospheres

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

Certificate No.:	IECEx UL 08.0012X	Page 1 of 4	Certificate history:
Status:	Current	Issue No: 6	Issue 5 (2015-02-25) Issue 4 (2015-01-31)
Date of Issue:	2021-11-04		Issue 3 (2014-07-11) Issue 2 (2012-06-29)
Applicant:	Adalet/Scott Fetzer Co. 4801 W. 150th Street Cleveland, OH 44135 United States of America		Issue 1 (2010-10-15) Issue 0 (2009-06-12)
Equipment:	Terminal Enclosures		
Optional accessory:			
Type of Protection:	Increased Safety "e" and Dust "tb"		
Marking:	Ex e IIC T6T4 Gb for VC, VH, VCND and VH Ex tb III C T120°C Db IP66 for VC and VH seri		
	-50°C to +40°C for T6		
	-50°C to +55°C for T5		
	-50°C to +60°C for T4		
Approved for iccup o	n bobalf of the IECEy	Koty A. Holdrodge	
Certification Body:	n behalf of the IECEx	Katy A. Holdredge	
Position:		Senior Staff Engineer	
Signature: (for printed version)			
Date: (for printed version)			
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Certificate issued	by:		
UL LLC 333 Pfingsten R Northbrook IL 60 United States	0062-2096		「 し



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Date of issue:	2021-11-04	Issue No: 6
Manufacturer:	Adalet/Scott Fetzer Co. 4801 W. 150th Street Cleveland, OH 44135 United States of America	
Manufacturing locations:	Adalet/Scott Fetzer Co. 201 Cunard Street Cardington, OH 43315 United States of America	
IEC Standard list b	elow and that the manufacturer's quality sy	sentative of production, was assessed and tested and found to comply with the stem, relating to the Ex products covered by this certificate, was assessed and This certificate is granted subject to the conditions as set out in IECEx Scheme

#### STANDARDS :

The equipment 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 60079-31:2008 Edition:1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'	
IEC 60079-7:2006 Edition:4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"	
	This Cartificate data not indicate compliance with adapt, and performance requirements	

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

#### **TEST & ASSESSMENT REPORTS:**

Rules, IECEx 02 and Operational Documents as amended

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

Test Reports:

US/UL/ExTR08.0014/00 US/UL/ExTR08.0014/03 US/UL/ExTR08.0014/01 US/UL/ExTR08.0014/04 US/UL/ExTR08.0014/02 US/UL/ExTR08.0014/05

Quality Assessment Reports:

US/UL/QAR08.0003/10

US/UL/QAR16.0016/04



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#### EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

These devices are increased safety and dust protected terminal enclosures constructed out of brushed finish 316L stainless steel and are available in various sizes and depths. The enclosures consist of a cover, hinge assembly, body, external and internal grounding lugs, gland plates, gaskets and welded mounting lugs. The enclosure may be mounted in a vertical or horizontal position.

#### Please see Annex for additional information.

#### SPECIFIC CONDITIONS OF USE: YES as shown below:

- This certificate applies to equipment without cable/conduit entries. When installing cable or conduit entries, the cable/conduit entries must be certified as increased safety, for protection type 'tb', and have a minimum IP66 rating for the VC and VH enclosures. When installing cable or conduit entries, the cable/conduit entries must be certified as increased safety have a minimum IP66 rating for the VCND and VHND enclosures. All unused conduit openings must be fitted with a certified close up plug equivalent of the apparatus and must be marked with an IP66 rating.
- The number of conductors entering the enclosure plus the number of internal connections (bridges and ground conductors are not counted) shall not exceed that of the Enclosure Size Terminal Content sheets.
- After installation, all creepage distances and clearances shall be according to Table 1 in IEC 60079-7, Fourth
- All conductors/cables shall be copper and shall be suitable for: 80°C when -50°C≤Ta≤+40°C, 95°C when -50°C≤Ta≤+55°C, 100°C when -50°C≤Ta≤+60°C.
- Each terminal block shall not be specified to accommodate more than one individual conductor in a clamping point unless specifically designed and assessed for doing so.
- For screwless connections intended for Class 5 or Class 6 fine stranded conductors according to IEC 60228, the fine stranded wire shall be equipped with a ferrule or the termination shall have a method to open the clamping mechanism so that the conductors are not damaged during installation of the conductor.
- The end user shall provide bonding means as necessary.
- See enclosure outline for conduit/cable layout information, minimum wire bending requirements, and minimum electrical clearance.
- 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.
- When two wires are used, they shall be of the same type and size.
- All unused terminals shall be tightened.



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

Issue 1: Addition of model.

Issue 2: Nomenclature was updated to increase the enclosure depth. New latch construction was evaluated.

Issue 3: Updating to the latest standards and the addition of new terminal blocks.

Issue 4: The addition of the VCND and VHND models.

Issue 5: Updating DS589TB, DS869ND and DS869for the populated VC/VH enclosures to include new terminal block options.

Issue 6: Adds Manufacturer Adalet/Scott Fetzer Co., Cardington, OH (US/UL/QAR16.0016/04). No ExTR revision for this update.

#### Annex:

Annex to IECEx UL 08.0012X Issue 6.pdf



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#### TYPE DESIGNATION Nomenclature: VC4X6 09 06 А 05 Н VI Ш IV Ш V 1 Basic Enclosure Designation VC4X – Brushed Finish Stainless Steel 304 ١. VC4X6 – Brushed Finish Stainless Steel 316L VCND4- Cold Rolled/Hot Rolled Carbon Steel VCND4X - Brushed Finish Stainless Steel 304 VCND4X6 - Brushed Finish Stainless Steel 316L II. **Enclosure Length** XX – Any two-digit number (30 maximum) III. **Enclosure Width** XX - Any two-digit number (30 maximum) IV. **Enclosure Depth** XX – Any two-digit number (16 maximum) V. Mounting Feet H – Horizontal V - Vertical VI. **Gland Plate Location** A - Gland Plate on Top Side B - Gland Plate on Bottom Side C - Gland Plate on Left Side D - Gland Plate on Right Side VH4X6 0 10 80 А Ш ш IV V I.

- Basic Enclosure DesignationVH4X Brushed Finish Stainless Steel 304
  - VH4X6 Brushed Finish Stainless Steel 316L

VHND4- Cold Rolled/Hot Rolled Carbon Steel

VHND4X – Brushed Finish Stainless Steel 304

VHND4X6 – Brushed Finish Stainless Steel 316L



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- II. Enclosure Length
  - XX Any two-digit number (30 maximum)

#### III. Enclosure Width

- XX Any two-digit number (30 maximum)
- IV. Enclosure Depth
  - XX Any two-digit number (16 maximum)

#### V. Gland Plate Location

- A Gland Plate on Top Side
- B Gland Plate on Bottom Side
- C Gland Plate on Left Side
- D Gland Plate on Right Side

#### PARAMETERS RELATING TO THE SAFETY

1100 V, 500 Amps max (dependent on the terminal block installed)

#### MARKING

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



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4801 W150 ST., CLEVELAND, OHIO 44135 U.S.A.	
C€ 0539   II 2 G Ex e IIC T Gb -50 <ta< c<="" p=""></ta<>	
CE 0539 🚱 II 2 D Ex tb IIIC T120°C Db IP66	
DEMKO 09 ATEX 0803119X	
IECEx UL 08.0012X Cat #	
Ex e IIC T Gb -50 <ta< c<="" td=""><td></td></ta<>	
Ex tb IIIC T120°C Db IP66 Ser #	
MAX VOLTAGE MAX AMPERAGE MAX # OF CONDUCTORS MIN CONDUCTOR SIZE	
Junction and Pull Box for Hazardous Locations	
Class I, Zone 1, AEx e IIC T50C <ta<°c Ex e IIC T50C<ta<°c< td=""><td></td></ta<°c<></ta<°c 	
Cl. I, Div. 2, Grps. ABCD; Cl. II, Div. 2, Grps. FG	
Type 4X, 12, & 13 YEAR USTED	
ADALET 4801 W150 ST., CLEVELAND, OHIO 44135 U.S.A.	
C€ 0539 ₪ II 2 G Ex e IIC T Gb -50 <u>&lt;</u> Ta<℃	
IP66 DEMKO 09 ATEX 0803119X	
IECEx UL 08.0012X Cat #	
IP66 Ser #	
MAX VOLTAGE MAX # OF CONDUCTORS MIN CONDUCTOR SIZE	
Junction and Pull Box for Hazardous Locations	
Ex e IIC T Gb -50C < Ta < C Cl. I, Div. 2, Grps. ABCD; Cl. II, Div. 2, Grps. FG	
Type 4X, 12, & 13 YEAR LISTED	