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 08.0012X issue No.:5

Status: **Current**

Date of Issue: **2015-02-25** Page 1 of 4

Certificate history:
Issue No. 5 (2015-2-25)
Issue No. 4 (2015-1-31)
Issue No. 3 (2014-7-11)
Issue No. 2 (2012-6-29)
Issue No. 1 (2010-10-15)
Issue No. 0 (2009-6-12)

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

Electrical Apparatus: **Terminal Enclosures**
Optional accessory:

Type of Protection: **Increased Safety "e" and Dust "tb"**

Marking:
Ex e IIC T6..T4 Gb for VC, VH, VCND and VHND series
Ex tb IIIC T120°C Db IP66 for VC and VH series

-50°C to +40°C for T6
-50°C to +55°C for T5
-50°C to +60°C for T4

Approved for issue on behalf of the IECEx Certification Body: Paul T. Kelly

Position: Principal Engineer, Global Hazardous Locations

Signature: (for printed version)

Date: 2015-02-25

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:

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

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Manufacturer: **Adalet/Scott Fetzer Co.**
4801 W. 150th Street
Cleveland, OH 44135
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 60079-31 : 2008 Edition: 1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'
IEC 60079-7 : 2006-07 Edition: 4	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/UL/ExTR08.0014/00 US/UL/ExTR08.0014/01 US/UL/ExTR08.0014/02
US/UL/ExTR08.0014/03 US/UL/ExTR08.0014/04 US/UL/ExTR08.0014/05

Quality Assessment Report:

US/UL/QAR08.0003/05

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Schedule

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.

See Annex for Nomenclature.

CONDITIONS OF CERTIFICATION: YES as shown below:

Please see Annex for Conditions of Certification.

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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.

Annex for IECEx UL 08.0012X Issue 5:

Nomenclature:

VC4X6	09	06	05	H	A
I	II	III	IV	V	VI

I. Basic Enclosure Designation VC4X – Brushed Finish Stainless Steel 304
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	08	A
I	II	III	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

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

The terminal blocks detailed in the table below were certified under their applicable IECEx certificates. Technical Differences were evaluated and found satisfactory- for detail see ExTR.

MFG	**Model**	**Certificate No.**	**issue**	**IEC 60079-0**	**IEC 60079-7**
				rev	**rev**
WEIDMULLER	SAK/KrG 2.5/35	IECEx KEM 06.0014U	0	2004	2001
WEIDMULLER	* ZDU, ZDK, ZPE	IECEx ULD 05.0009U	1	2004	2001
WEIDMULLER	SAKK	IECEx SIR 05.0032U	0	2004	2001
WEIDMULLER	WDU,WDK,WPE 2.5-70	IECEx ULD 05.0008U	0	2004	2001
WEIDMULLER	WDU 2.5T/C	IECEx SIR 05.0039U	0	2004	2001
WEIDMULLER	WFF	IECEx KEM 07.0053U	0	2004	2001
WEIDMULLER	ZB w/o insulation	IECEXULD13.0005U	0	2007	2006
ROCKWELL	1492-J	IECEx ULD 06.0015U	1	2004	2001
ROCKWELL	* 1492-L	IECEx ULD 06.0014U	0	2004	2001

“Conditions of Use” for Ex Equipment:

- 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 edition.
- 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.