

# EC-TYPE EXAMINATION CERTIFICATE



[2] **Component intended for use on/in equipment or protective system  
intended for use in Potentially Explosive Atmospheres  
Directive 94/9/EC**

[3] EC-Type Examination Certificate Number: **DEMKO 12 ATEX 1115099U Rev. 0**

[4] Component: **XIHS Series of Enclosures**

[5] Manufacturer: **Adalet/Scott Fetzer Co.**

[6] Address: **4801 W. 150<sup>th</sup> Street, Cleveland, OH 44135 USA**

[7] This Component and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

[8] UL International Demko A/S, notified body number 0539 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this component has been found to comply with the Essential Health and Safety Requirements relating to design and construction of components intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report no. **11NK15099**

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN 60079-0:2009**

**EN 60079-1:2007**

**EN 60079-31:2009**

[10] The sign "U" placed after the certificate number indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.

[11] This EC-Type examination certificate relates only to the design, examination and tests of the specified component in accordance with the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this component. These are not covered by this certificate.

[12] The marking of the component shall include the following:

II 2 G    Ex d IIC Gb  
 II 2 D    Ex tb IIIC Db IP66

**Certification Manager**  
Jan-Erik Storgaard

This certificate may only be reproduced in its entirety and without any change, schedule included.

**Date of issue:** 2012-09-26

**Notified Body**

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**Schedule**  
**EC-TYPE EXAMINATION CERTIFICATE No.**  
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**Report: 11NK15099**

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Description of Component:

The XIHS\_X series of enclosures are constructed from aluminium alloy 359 or stainless steel alloy 316. The enclosures are with a flat cover or a dome cover. The enclosures are intended for use primarily as connection fittings.

Nomenclature for XIHS\_X series enclosures:

XIHSX	FCX	3
I	II	III

I - Enclosure Body

XIHSB- Enclosure body with one conduit entry on the bottom and one conduit entry on the side

XIHSC- Enclosure body with two conduit entries on the side across from each other

XIHSD- Enclosure body with two conduit entries on the side across from each other and one conduit entry centered on the bottom

XIHSL- Enclosure body with two conduit entries on the side with a 90° angle between them

XIHST- Enclosure body with three conduit entries on the side, two entries across from each other and the other entry directly between the other entries

XIHSX- Enclosure body with four conduit entries on the side equally spaced apart

XIHSY- Enclosure body with two conduit entries at a 45° angle

II - Cover

FCX- Flat Cover

DCX- Dome Cover

III- Conduit Entry Size

2- 1/2 in. NPT entries

3- 3/4 in. NPT entries

4- 1 in. NPT entries

Temperature range

The ambient temperature range is -50°C to +100°C for gas atmospheres.

The ambient temperature range is -34°C to +100°C for dust atmospheres.

Installation instructions

All cable entry devices and blanking elements shall be certified in type of explosion protection flameproof enclosure "d", dust ignition protection 'tb', minimum IP66 rating, suitable for the conditions of use and correctly installed.

Unused apertures shall be closed with suitable blanking elements that are equivalent to the marking on the apparatus and with an IP66 rating.

For ambient temperatures below -10 °C and above +60 °C use field wiring suitable for both minimum and maximum ambient temperature.

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.

Mounting instructions

Refer to "Instructions".

Routine tests

Routine tests according to EN 60079-1 cl. 16 are not required, as the enclosures have been successfully tested at four times the reference pressure.

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Descriptive Documents

Project Report No.: 11NK15099 (Hazardous Location Testing)

Documents:

<b>Description:</b>	<b>Document No.:</b>	<b>Rev. Level:</b>	<b>Date:</b>
XIHS_ Series Instrument Housing	DS918M	A	2012-08-22
XIHS_X Series Label	6669	A	2012-08-23
OX Series Plugs	5219	K	2012-01-19
XIHS_ series Installation Instructions	DS543	A	2012-08-23
Aluminum Square Socket Plugs	5318	H	2012-09-10
Earth Ground Assembly	18813	B	2000-08-23
Grounding Screw	5850	B	2004-12-16
O-ring seals	5133	T	2012-04-19
Steel Square Socket Plugs	5318-S	G	2012-09-10



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**Schedule**  
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Schedule of limitations:

- 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.
- All conduit fittings must be certified as flameproof 'd', dust ignition proof 'tb', and have a minimum IP66 rating equal to the marking on the enclosure.
- At least 40% of each cross-sectional area must remain free to permit unimpeded gas flow and therefore, unrestricted development of an explosion.
- The threaded joint between the cover and body is other than the tolerances specified in Table 3 of EN 60079-1. Reference Drawing No. DS918M for joint details.
- 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 -34°C to +100°C for Dust atmospheres. The maximum service temperature is based off the ambient temperature of -50°C to +100°C for Gas atmospheres.
- All unused device openings must be fitted with a certified close-up plug rated equivalent or greater to the marking on the apparatus and have an IP66 rating.
- 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 external grounding connector allows for a 4mm<sup>2</sup> to #10 AWG size wire to be connected.

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Essential Health and Safety Requirements

Concerning ESR this Schedule verifies compliance with the Annex III of 94/9/EC directive only. The manufacturer's Declaration of Conformity declares compliance with other relevant requirements and Directives.

Additional information

The XIHS series of enclosures have in addition passed the tests for Ingress Protection to IP 66 in accordance with EN60529: 1991/A1 2001.

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in ANNEX III to Directive 94/9/EC of the European Parliament and the Council of 23 March 1994.

