# **EC-TYPE EXAMINATION CERTIFICATE**



Equipment or Protective System intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC

- [3] EC-Type Examination Certificate Number: **DEMKO 12 ATEX 1104713X Rev. 2**
- [4] Equipment or Protective System: XHVX High Voltage Terminal Enclosures
- [5] Manufacturer: Adalet/Scott Fetzer Co.

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- [6] Address: 4801 W. 150<sup>th</sup> Street, Cleveland, OH 44135 USA
- [7] This equipment or protective system 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 equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to design and construction of equipment and protective systems 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. **150776.62616** 

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

EN 60079-0:2012+A11:2013 EN 60079-1:2007 EN 60079-31:2009

- [10] If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.
- [11] This EC-Type examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system.

These are not covered by the certificate.

[12] The marking of the equipment or protective system shall include the following:

Ex II 2 G Ex d IIB T6 Gb

⟨Ex⟩ II 2 D Ex th IIIC T73°C Dh IP66

Certification Manager Jan-Erik Storgaard This is to certify that the sample(s) of the Equipment described herein ("Certified Equipment") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Equipment Certification Program Requirements. This certificate and test results obtained apply only to the equipment sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured equipment. UL has not established Follow-Up Service or other surveillance of the equipment. The Manufacturer is solely and fully responsible for conformity of all equipment to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

Date of issue: 2012-03-21 Re-issued: 2014-04-24

**Notified Body** 

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark

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# Schedule EC-TYPE EXAMINATION CERTIFICATE No.

# DEMKO 12 ATEX 1104713X Rev. 2 Report: 150776.62616

### Description of Equipment or protective system

The XHVX series of terminal enclosures contain porcelain stand-offs used for terminal connections within the enclosures. The enclosures contain up to either six single lug connectors or three 4 lug connectors.. Enclosures provided with a cover gasket (Model No. suffix N4) can be marked IP66 and are suitable for dust environments.

Types of variants comprised by certificate:

XHVX followed by 121208,161608, 162408, 181808, 182408, 183008, 183608, 242408, 242410, 243008, 243608, 243610, 162410, 164610, 182410, 183610.

All numbers may be followed by -N4.

#### Temperature range

The ambient temperature range is -20 °C to +55 °C.

#### Electrical data

### 1X1 PHASE CONNECTION SERIES (Shielded or Un-Shielded Cable)

ENCLOSURE CATALOG NUMBER	MAX WORKING VOLTAGE	MAX CURRENT per phase(A)	ENCLOSURE CATALOG NUMBER	MAX WORKING VOLTAGE	MAX CURRENT per phase(A)
XHVX-121208(-N4)	2.5kV	160	XHVX-243008(-N4)	6.6kV	315
XHVX-161608(-N4)	6.6kV	200	XHVX-243608(-N4)	6.6kV	315
XHVX-162408(-N4)	6.6kV	315	XHVX-162410(-N4)	6.6kV	315
XHVX-181808(-N4)	6.6kV	225	XHVX-164610(-N4)	6.6kV	315
XHVX-182408(-N4)	6.6kV	315	XHVX-182410(-N4)	6.6kV	315
XHVX-183008(-N4)	6.6kV	315	XHVX-183610(-N4)	6.6kV	315
XHVX-183608(-N4)	6.6kV	315	XHVX-242410(-N4)	8kV	315
XHVX-242408(-N4)	6.6kV	315	XHVX-243610(-N4)	8kV	400

# 2X2 PHASE CONNECTION SERIES (Two Parallel Cables Optional)

ENCLOSURE CATALOG NUMBER	MAX WORKING VOLTAGE	MAX CURRENT per phase(A)	ENCLOSURE CATALOG NUMBER	MAX WORKING VOLTAGE	MAX CURRENT per phase(A)
XHVX-182408(-N4)	2.5kV	630	XHVX-182410(-N4)	2.5kV	630
XHVX-183008(-N4)	2.5kV	800	XHVX-183610(-N4)	2.5kV	800
XHVX-183608(-N4)	2.5kV	800	XHVX-242410(-N4)	7.5kV	630
XHVX-242408(-N4)	5kV	630	XHVX-243610(-N4)	7.5kV	1000
XHVX-243008(-N4)	5kV	800	- Mi. Mi	. \/11. \/1	1. \/11. \
XH\/X-243608(-N/4)	5k\/	800			

# Installation instructions

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

Unused apertures shall be closed with suitable blanking elements.

All conductors/cables shall be suitable for 90°C.

### Routine tests

Routine tests according to EN 60079-1 cl. 16 are not required. Routine tests for Model XHVX 121208 are covered under DEMKO 01 ATEX 0129472U.

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# Schedule EC-TYPE EXAMINATION CERTIFICATE No.

DEMKO 12 ATEX 1104713X Rev. 2 Report: 150776.62616

[16] Report No.

Project Report No.: 150776.62616 (Hazardous Location Testing)

Documents:			
Description:	Drawing No.:	Rev. Level:	Date:
XHVX Series Installation Sheet	DS629	F	2013-07-09
XHVX High Voltage 2x2 Terminal Construction	DS591M	G	2013-07-12
XHVX High Voltage 1x1 Terminal Construction	DS590M	F	2013-07-12
Ground Stud for Terminal Enclosures	18812	E	2000-11-29
XHVX Series Nameplate	8107	F	2013-10-15
XHVX Series Nameplate	8183	В	2013-10-21
XHVX Series Nameplate	8191	Α	2014-04-14
XHVX Series Nameplate	8190	Α	2014-04-14

## [17] Special conditions for safe use:

- Enclosures shall be installed to a flat rigid surface using the mounting means provided.
- When the enclosure is installed, a minimum of 30 mm separation between the flameproof flanged joint and any solid object, which is not part of the enclosure, shall be maintained.
- For conduit/cable layout information, refer to drawing DS590M and DS591M.
- All unused openings must be fitted with certified flameproof 'd'and 'tb' blanking elements and have a minimum gas and IP
  marking equal to the marking on the enclosure.
- The enclosure certification applies to equipment without cable glands. When installing cable glands, they must be certified as flameproof and have a minimum gas, dust and IP marking equal to the marking on the enclosure.
- · The end user shall provide the bonding means as necessary.
- The flanged joint has the following joint parameters: Width: 19 mm, Gap 0.08 mm
- The approval applies to equipment without cable/conduit fittings. When installing cable/conduit fittings, the cable/conduit fitting must be certified as Flameproof 'd', 'tb' and have a minimum IP rating equal to the marking on the enclosure.
- Type 'Bd' breather/drains are only suitable for bottom entry.
- The threads of the internal plug of the Type 'Bd' Breather Drains must be fully tightened within the main body and not protrude above the body surface.
- The threaded spigots of Type 'Bd' Breather Drains and taper threaded Type 'Be' Breather Drains are not permitted to protrude into the associated enclosure to maintain their ingress protection ratings.

# [18] <u>Essential Health and Safety Requirements</u>

Concerning ESR this Schedule verifies compliance with the Annex III of ATEX directive only. The manufacturer's Declaration of Conformity declares compliance with other relevant Directives.

# Additional information

The XHVX series of enclosures have in addition passed the tests for Ingress Protection to IP 66, only for models marked –N4. in accordance with EN60529: 1991/A1 2001.

This certificate was issued as "Accredited by DANAK under registration number 7011 to certification of products".

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.

