

EU-TYPE EXAMINATION CERTIFICATE



[1]

[2]

**Equipment or Protective System intended for use
in Potentially Explosive Atmospheres
Directive 2014/34/EU**

[3]

EU-Type Examination Certificate Number: **DEMKO 12 ATEX 1104713X Rev. 3**

[4]

Product: **XHVX High Voltage Terminal Enclosures**

[5]

Manufacturer: **Adalet/Scott Fetzer Co.**

[6]

Address: **4801 W. 150th Street, Cleveland, OH 44135 USA**

[7]

This product 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 17 of the Council Directive 2014/34/EU of 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to design and construction of products 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. **4788996775.1.1**

[9]

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

EN IEC 60079-0:2018

EN 60079-1: 2014

EN 60079-31:2014

[10]

If the sign "X" is placed after the certificate number, it indicates that the product is subject to special conditions for safe use specified in the schedule to this certificate.

[11]

This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by the certificate.

[12]

The marking of the product shall include the following:

 **II 2 G Ex db IIB+H2 T6 Gb**

 **II 2 G Ex db IIB T6 Gb**

 **II 2 D Ex tb IIIC T73°C Db IP66**

Certification Manager

Jan-Erik Storgaard

This is to certify that the sample(s) of the Product described herein ("Certified Product") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Product Certification Program Requirements. This certificate and test results obtained apply only to the product 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 product. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all product 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: 2019-07-17



Notified Body

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark
Tel. +45 44 85 65 65, info.dk@ul.com, www.ul.com

[13]

Schedule

[14]

EU-TYPE EXAMINATION CERTIFICATE No.**DEMKO 12 ATEX 1104713X Rev. 3**

[15]

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.

XHVXSS6 followed by 121208, 161608, 182410, 242410, and 243610

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

Stainless Steel Option, 1X1 PHASE CONNECTION SERIES

ENCLOSURE CATALOG NUMBER	MAX WORKING VOLTAGE	MAX CURRENT per phase(A)
XHVXSS6-121208 (-N4)	2.5kV	160
XHVXSS6-161608(-N4)	6.6kV	200
XHVXSS6-182410(-N4)	6.6kV	315
XHVXSS6-242410(-N4)	6.6kV	315
XHVXSS6-243610(-N4)	6.6kV	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			
XHVX-243608(-N4)	5kV	800			

Stainless Steel Option, X2 PHASE CONNECTION SERIES

ENCLOSURE CATALOG NUMBER	MAX WORKING VOLTAGE	MAX CURRENT per phase(A)
XHVXSS6-182410 (-N4)	2.5kV	315
XHVXSS6-242410 (-N4)	6.6kV	315
XHVXSS6-243610 (-N4)	6.6kV	400

[13]

Schedule

[14]

EU-TYPE EXAMINATION CERTIFICATE No. DEMKO 12 ATEX 1104713X Rev. 3

Installation instructions

All cable entry devices and blanking elements shall be ATEX certified in type of explosion protection flameproof enclosure "db" 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

N/A

[16]

Descriptive Documents

The scheduled drawings are listed in the report no. provided under item no. [8] on page 1 of this EU-Type Examination Certificate.

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Special conditions of use:

- These enclosures shall be installed to a flat rigid surface using the mounting means provided.
- All unused openings must be fitted with certified flameproof 'db' and dust ignition protected 'tb' close up plugs and have a minimum IP rating equal to the marking on the enclosure.
- The approval applies to equipment without cable/conduit fittings. When installing cable or conduit entries, the cable/conduit fitting must be certified as flameproof 'db' and dust ignition protected 'tb' and have a minimum IP rating equal to the marking on the enclosure.
- The end user shall provide bonding means as necessary.
- Clean box and cover flange before closing and tightening cover bolts.
- Alternate cover bolt pattern when tightening, see table for torque specs.
- The end user shall provide stress cone termination as necessary for shielded cables. For available Adalet termination kits consult factory.
- All conductors/cables shall be suitable for 90°C.
- The number of conductors entering the enclosure shall not exceed indication on external nameplate. Ground conductors are not counted.
- Metric threaded holes in the enclosure shall have a tolerance class of 6h or better according to ISO 965-1 and ISO 965-3, and any chamfer or undercut is limited to a maximum depth of 2 mm from the external wall surface
- For installations using conduit. All conduit runs must have a sealing fitting within 2 inches [50mm] of the enclosure
- See outline drawings DS590M and DS591M for conduit/cable gland layout information.
- 40mm of the flameproof joints are other than the relevant minimum or maximum specified in Tables 1 through 2 of EN 60079-1:2011. Enclosures are to be marked with an "X" and manufacturer's drawings no. DS590M and DS591M detail the dimensions of the flameproof joints. Flameproof joints are not intended to be repaired.
- When the enclosure is installed, a minimum of 40 mm separation between the flameproof flanged joint and any solid object, which is not part of the enclosure, shall be maintained
- All porcelain insulators and cable connections are to be free of grease and/or cleaning substances.
- Reference drawings DS590M and DS591M for identification of entries.
- 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.
- 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.
- Only one hazardous location solutions reducer shall be used with any single cable entry on the associated equipment.
- The hazardous locations solutions reducers shall not be used for the direct interconnection of enclosures.
- All plugs are for one time use only.
- Bolts are metric, class 8.8 min, class A4-70.

[18]

Essential Health and Safety Requirements

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.

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in Annex III to Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014.



The trademark

will be used as the company identifier on the marking label.