


EU-TYPE EXAMINATION CERTIFICATE



- [1]
- [2] **Component intended for use on/in Equipment or Protective System
Intended for use in Potentially Explosive Atmospheres
Directive 2014/34/EU**
- [3] EU-Type Examination Certificate Number: **DEMKO 01 ATEX 015742U Rev. 1**
- [4] Component: **HK Series Flameproof Enclosures**
- [5] Manufacturer: **Killark, Div of Hubbell Inc (Delaware)**
- [6] Address: **3940 Martin Luther King Drive, St. Louis, MO 63113 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 the European Parliament and the Council, dated 26 February 2014, 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. **4787696372-01ATEX015742U**
- [9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
- EN 60079-0:2012+A11:2013 EN 60079-1:2014**
EN 60079-31:2014
- [10] The sign "U" is placed after the certificate number. It 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 EU-Type Examination Certificate relates only to the design and construction of the specified component. 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 db IIC Gb**

 **II 2 D Ex tb IIIC Db IP66**

Certification Manager
Jan-Erik Storgaard

This is to certify that the sample(s) of the Component described herein ("Certified Component") 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 component 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 component. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all products 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: 2015-02-03

Re-issued: 2017-12-21

Notified Body

UL International Demko A/S, Ballerup 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 01 ATEX 015742U Rev. 1**

- [15] Description of Component:
 These devices are empty aluminum or stainless steel flameproof enclosures, with a single or double enclosure body. The cover can be of blank, glass lens, dome, or glass lens dome construction, with various openings and locations.

Nomenclature for HK Enclosures

Double Port Enclosure Nomenclature

2HKB I	BC II	BC III	0 IV
I	Back Box Type		
	2HKB	Aluminum Box Double Port	
	2HKS	Stainless Steel Box Double Port	
II	Cover Assembly – Side 1		
	BC	Blank	
	1DC	1 in. High Dome Cover	
	2DC	2 in. High Dome Cover	
	4DC	4 in. High Dome Cover	
	GLC	Glass Lens Cover	
	1GLDC	1 in. High Glass Lens Cover	
	2 GLDC	2 in. High Glass Lens Cover	
	4 GLDC	4 in. High Glass Lens Cover	
III	Cover Assembly – Side 2		
	BC	Blank	
	1DC	1 in. High Dome Cover	
	2DC	2 in. High Dome Cover	
	4DC	4 in. High Dome Cover	
	GLC	Glass Lens Cover	
	1GLDC	1 in. High Glass Lens Cover	
	2 GLDC	2 in. High Glass Lens Cover	
	4 GLDC	4 in. High Glass Lens Cover	
IV	Side Alternate Machining		
	0	None	
	10	1/2 in. NPT	
	1S	1/2 in. NPSM*	
	20	3/4 in. NPT	
	2S	3/4 in. NPSM*	

*Not to be used for cable or conduit connections.

Single Port Enclosure Nomenclature

HKB I	1GLD II	1S III	20 IV
I	Back Box Type		
	HKB	Aluminum Box Single Port	
	HKBD	Aluminum Deep Box Single Port	
	HKS	Stainless Steel Box Single Port	
	HKSBD	Stainless Steel Deep Box Single Port	
II	B	Blank	
	1D	1 in. High Dome Cover	
	2D	2 in. High Dome Cover	
	4D	4 in. High Dome Cover	
	GL	Glass Lens Cover	
	1GLD	1 in. Glass Lens Cover	
	2GLD	2 in. Glass Lens Cover	
	4GLD	4 in. Glass Lens Cover	
III	Back Alternate Machining		
	0	None	
	10	1/2 in. NPT	
	1S	1/2 in. NPSM*	
	20	3/4 in. NPT	

[13]

Schedule

[14]

EU-TYPE EXAMINATION CERTIFICATE No. DEMKO 01 ATEX 015742U Rev. 1

2S 3/4 in. NPSM*

IV	Side Alternate Machining
0	None
10	1/2 in. NPT
1S	1/2 in. NPSM*
20	3/4 in. NPT
2S	3/4 in. NPSM*

*Not to be used for cable or conduit connections.

Temperature range
The ambient temperature range is -60 °C to +70 °C.

Routine tests

Routine tests according to EN 60079-1 cl. 16.1 are not required, as the enclosures have been successfully tested at four times the reference pressure.

[16]

Descriptive Documents

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

[17]

Schedule of limitations:

- Where necessary for safety, the contents of the enclosure shall comply with the appropriate requirements of relevant standards for electrical apparatus for use in potentially explosive atmospheres.
- The assembled equipment shall comply with the appropriate requirements of relevant standards for electrical apparatus for use in potential explosive atmospheres.
- The enclosure's apparatus may be placed in any arrangement provided that an area of at least 40% of each cross sectional area remains free to permit unimpeded gas flow and, therefore, unrestricted development of an explosion. Separate relief areas may be aggregated provided that each area has a minimum dimension in any direction of 12.5 mm.
- Rotating or other devices, which create turbulence, shall not be incorporated.
- Liquids shall not be used when there is risk of producing an explosive mixture by the decomposition of or release of oxygen by these liquids.
- The use of energy storage devices may present difficulties, due to the possibility of sparking, after isolation from the supply, when the enclosure cover is removed. In addition, secondary cells, and in some cases primary cells may emit flammable gas not considered under the normal certification conditions. The following requirements shall apply:
 - All such devices shall be provided with adequate means to prevent incendive sparking when flameproof covers are removed.
 - Enclosures which can be opened more quickly than the time necessary for the discharge of incorporated capacitors to a residual energy of:
 - 0.2 mJ for electrical apparatus of Group I or Group IIA, or
 - 0.06 mJ for electrical apparatus of Group IIB
 - 0.02 mJ for electrical apparatus of Group IICshall be provided with a label stating the delay required before attempting to open the enclosure.
 - If enclosed components have a temperature above that of the temperature classification of the electrical apparatus a label shall be provided stating the delay necessary before attempting to open the enclosure to allow the component to cool below the temperature classification.
- Oil-filled contactors shall not be used.
- No holes, whether for mechanical or electrical purpose and whether blind or clear, shall be drilled in the enclosure other than those shown on the Component Certificate Drawings D-20675 & D-20676.
- All entry devices shall be of a type specified in the certification documents having an appropriate component Certificate and suitable for the conditions of use, or be specifically certified with the apparatus.
- Any unused entry shall be closed by a device specified in the certification documents having an appropriate Component Certificate or be specifically certified with the apparatus.
- The holder of the final Certificate will be required to provide information to enable the test authority to verify compliance with the above and the relevant parts of the certification standard not explicitly covered by the Component Certificate (e.g. temperature classification).
- The window temperature must not exceed 120°C.
- The sealing cement on the windows shall not exceed 87°C.
- Flameproof joints are not to be repaired in the field. If the flamepath is damaged the enclosure is to be removed from service and replaced with a new properly working enclosure.


[18]

Essential Health and Safety Requirements

The Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9.

Additional information

The HKB, HKBD, 2HKB, HKSB, and 2HKS Series have in addition passed the tests for Ingress Protection to IP 66 in accordance with EN60529:1991+A1:2000+A2:2013.

The trademark  **KILLARK** will be used as the company identifier on the marking label.

[13]

[14]

Schedule
EU-TYPE EXAMINATION CERTIFICATE No.
DEMKO 01 ATEX 015742U Rev. 1

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.