



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

Ex COMPONENT CERTIFICATE

Certificate No.: IECEx UL 12.0033U

Issue No: 3

Certificate history:

[Issue No. 3 \(2019-07-29\)](#)

Status: **Current**

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[Issue No. 2 \(2016-07-26\)](#)

Date of Issue: **2019-07-29**

[Issue No. 1 \(2014-04-28\)](#)

[Issue No. 0 \(2013-01-28\)](#)

Applicant: **Killark, A Division of Hubbell Inc. (Delaware)**
2112 Fenton Logistics Park Blvd.
Fenton, MO 63026
United States of America

Ex Component: **Flameproof/Increased Safety Contact Blocks, HKH Series***

This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).

Type of Protection: **Flameproof "db" and Increased Safety "eb"**

Marking:

Ex db eb I Mb

Ex db eb IIC Gb

Approved for issue on behalf of the IECEx
Certification Body:

Katy A. Holdredge

Position:

Senior Staff Engineer

Signature:
(for printed version)

Date:

2019-07-29

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: **Killark, A Division of Hubbell Inc. (Delaware)**
2112 Fenton Logistics Park Blvd.
Fenton, MO 63026
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 Component 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 Ex Component 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 Explosive atmospheres - Part 0: General requirements
Edition:6.0

IEC 60079-1 : 2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

IEC 60079-7 : 2015 Explosive atmospheres – Part 7: Equipment protection by increased safety "e"
Edition:5.0

*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 Ex Component listed has successfully met the examination and test requirements as recorded in

Test Report:

[US/UL/ExTR12.0042/03](#)

Quality Assessment Report:

[GB/SIR/QAR16.0021/02](#)



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Schedule

Ex Component(s) covered by this certificate is described below:

The Series HKH contact blocks consist of increased safety terminals and a flameproof housing. The contact housing is made from PBT, the terminals are a brass alloy, and the bushing and plunger are stainless steel. The contact block is intended to be mounted inside a suitable increased safety or flameproof enclosure and is intended for switching load, control, and signal circuits.

Installation Instructions:

- Contact blocks are intended to be installed in a suitable Ex enclosure, where the suitability is determined in the end application.
- Contact block shall be mounted to an operator or to a din rail using the mounting means provided.
- All conductors shall be suitable for both the minimum ambient and the maximum temperature achieved in service. Contact block shall be mounted to provide a minimum clearance of 10 mm and minimum creepage of 16 mm.

Please see Annex for additional information

SCHEDULE OF LIMITATIONS:

- Contact the manufacturer for information on the dimensions of flameproof joints.
- The #3-28 x 0.320 in. contact block housing fasteners have a minimum yield strength of 210 MPa for stainless steel or 340 MPa for steel.
- The non-metallic contact block body was tested for a maximum service temperature of 100°C. It shall not attain a temperature more than 100°C when used in service.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Issue 1: Drawing revisions.

Issue 2: Minor drawing revisions and updates of IEC 60079-1 and IEC 60079-7 to most recent edition.

Issue 3: Address update.

Annex:

[Annex to IECEx UL 12.0033U Issue 3.pdf](#)



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TYPE DESIGNATION

The Series HKH contact blocks consist of increased safety terminals and a flameproof housing. The contact housing is made from PBT, the terminals are a brass alloy, and the bushing and plunger are stainless steel. The contact block is intended to be mounted inside a suitable increased safety or flameproof enclosure and is intended for switching load, control, and signal circuits.

Nomenclature for the Series HKH Contact Blocks

<u>HKH1</u>	<u>NC</u>	<u>20</u>	<u>P</u>
I	II	III	IV

I - Denotes basic contact block series designation

HKH1 – Contact Block Series

II - Denotes Contact Position

NC – Normally Closed Contacts

NO – Normally Open Contacts

III – Denotes Current

20 – 20 A

IV – Denotes Mounting Configuration

P – Panel Mount

D – Din Rail Mount

Wiring Information

Wire Range – 0.5 to 2.5 mm² (SOL or STR) and 4.0 mm² (STR)

Number of Wires – 1 or 2

Wire Type – Cu

Torque – 15 in-lbs. (1.7 N-m)

Wire Strip - 3/8 in (10 mm)

PARAMETERS RELATING TO THE SAFETY

690 Vac, 16 A, 50 to 60 Hz;

230 Vdc, 16A, 50 to 60 Hz;

125 Vdc, 1 A;

60 Vdc, 5.0 A



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MARKING




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

	
HKH1NC20D	
KILLARK FENTON, MO. 63026 USA	
Amb. Temp.: -55°C ≤ Ta ≤ +60°C	0518  IM2 Ex db eb I Mb 0518  II2G Ex db eb IIC Gb
Ratings:	DEMKO 12 ATEX 1202251U
AC690V 16A AC-12 AC230V 16A AC-15 50-60Hz	WIRE STRIP - 10mm. TORQUE - 1.7 N • m WIRE RANGE WITH 1 OR 2 CU WIRES: 0.5 to 2.5mm ² (SOL & STR) and 4.0mm ² (STR)
DC60V 5A DC-12 DC125V 1A DC-12	Ex db eb I Mb Ex db eb IIC Gb IECEx UL 12.0033U CHINA

	
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ROUTINE EXAMINATIONS AND TESTS

Routine tests according to IEC/EN 60079-1 cl. 16 are not required, as the contact block has been successfully tested to the overpressure requirements in Clause 15.2.3.2 for small volumes.

A routine dielectric test according to IEC/EN 60079-7, Clause 7.1, is required on the Series HKH contact blocks either on all contact blocks or on a statistical basis according to ISO 2859-1 with an acceptance quality limit (AQL) of 0.04. The Series HKH contact blocks shall withstand the test voltage of either 2380 V r.m.s. for 1 minute or 2856 V r.m.s for 100 ms without dielectric breakdown occurring.