

Issue No. 2 (2016-09-06)

Issue No. 1 (2016-02-15) Issue No. 0 (2015-07-23)

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 14.0104U Issue No: 4 Certificate history:

Status: Current Issue No. 4 (2019-07-31)

Page 1 of 4 Issue No. 3 (2017-02-27)

Date of Issue: 2019-07-31

Applicant: Killark, A Division of Hubbell Inc. (Delaware)

2112 Fenton Logistics Park Blvd.

Fenton, MO 63026 United States of America

Ex Component: HKH Series Actuators for Increased Safety, Dust Ignition Protection, and Restricted Breathing

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: Increased safety "eb", Dust Ignition Protection by Enclosure "tb", Restricted breathing "nR"

Marking:

Ex eb IIC Gb

Ex nR IIC Gc

Ex tb III C Db

Approved for issue on behalf of the IECEx

Certification Body:

Position: Senior Staff Engineer

Signature:

(for printed version)

Date: 2019-07-31

- 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



Katy A. Holdredge

Kety a. Halbridge



Certificate No: IECEx UL 14.0104U Issue No: 4

Date of Issue: 2019-07-31 Page 2 of 4

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 60079-15 : 2010 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

Edition:4

IEC 60079-31: 2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

Edition:2

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/ExTR14.0137/04

Quality Assessment Report:

GB/SIR/QAR16.0021/02



Certificate No: IECEx UL 14.0104U Issue No: 4

Date of Issue: 2019-07-31 Page 3 of 4

Schedule

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

The HKH series actuators include mushroom head pushbutton actuators, pushbutton actuators, rotary selector switch actuators, keyed rotary selector switch actuators, and rocker switches. They are intended for connection to Killark's HKH series contact block and intended to be mounted in a suitable enclosure. In addition, the HKH series cover plug and pilot light lens are intended to be mounted in a suitable enclosure. The devices are non-metallic, except for metallic screw used to maintain the assembly of the devices.

The mushroom head pushbutton actuators, pushbutton actuators, keyed rotary actuators, close-up plug, and rocker switch are suitable for "nR". The material combination limitations for momentary pushbutton HKH PBMMSS and rocker switch HKH RKRSWT are outlined in Dwg. Nos. 23189 and 24426 respectively for "nR". The pilot light lens assembly series, non-keyed rotary switches series, and the twist-release mushroom actuator HKH PBTMTMR are not suitable for "nR" applications.

All devices listed are suitable for the "eb" and "tb" protection methods.

Please see Annex for addtional information.

SCHEDULE OF LIMITATIONS:

- Actuators are for use with the HKH series contact blocks.
- The devices were tested for a maximum service temperature of 85°C. The equipment shall not attain a temperature of more than 85°C in use
- The electrical requirements need to be evaluated in the end use.
- For restricted breathing applications, actuators and close-up plugs that are suitable for "nR" are to be installed in an IP54 rated enclosure with a test port.
- When used in conjunction with normally arcing or sparking devices in end use, these actuators are limited to 65°C.



Certificate No:	IECEx UL 14.0104U	Issue No: 4
-----------------	-------------------	-------------

Date of Issue: 2019-07-31 Page 4 of 4

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

Issue 1: Adding additional actuators to this certification, HKH Series Rocker Switch and HKH Series Double Pushbutton.

Issue 2: Adding additional actuators to this certification, alternate material for HKH Series Rocker Switches and HKH Series Double Pushbuttons. In addition, HKH Series Keyed Mushroom Actuators is completely new.

Issue 3: Addition of HKH keyed rotary actuator series and the Cat. No. HKH PBILLMM illuminated pushbutton. In addition, the "nR" protection method was added for the mushroom head pushbutton actuators, pushbutton actuators, keyed rotary actuators, close-up plug, and rocker switch

Issue 4: Address change.

Annex:

Annex to IECEx UL 14.0104U Issue 4.pdf



Certificate No.: IECEx UL 14.0104U

Issue No.: 4

Page 1 of 5

TYPE DESIGNATION

Nomenclature for Mushroom Head Pushbuttons Assembly:

HKH PBPMTMR

I II

I - Actuator Series

HKH - Series Designation

II - Mushroom Head Maintained Contact Push-Pull Version

PBPMTMR - Pull-Release Red

PBPMTMG - Pull-Release Green

PBPMTMB - Pull-Release Black

II - Momentary Pushbutton Version

PBMMMR - Red

PBMMMG - Green

PBMMMB - Black

II - Keyed Maintained Mushroom Head Version

PBKMTMRH - Keyed Red Mushroom - Horizontal Key Slot

PBKMTMRV - Keyed Red Mushroom - Vertical Key Slot

II – Maintained Pushbutton Version (not intended for 'nR' applications)

PBTMTMR - Twist Release Red Mushroom

Nomenclature for Pushbutton

HKH PBMMSS

Ш

I - Actuator Series

HKH - Series Designation

II - Momentary Pushbutton Version

PBMMSS – With Green Start and Red Stop Disc, Green (I), Red (O), and Black Blank Disc (see Drawing No. 23189 for material limitation)

DBLPBMMGR - Double Pushbutton with Green (I), Red (O), Green, Red and Black Blank Disc

PBILLMM – Illuminated 2-Contact Momentary Pushbutton (offered in several lens colors)

PBMMTC – 3-Contact Momentary Pushbutton, supplied with four discs, green start, green, red stop, and red.



Certificate No.: IECEx UL 14.0104U

Issue No.: 4

Page 2 of 5

Nomenclature for Rotary Selector Switch Actuator:

HKH 2PS MTH

I - Actuator Series

HKH - Series Designation

II – Rotary Selector Switch- Style and Positions (2PS through MMLRV are not intended for 'nR' applications)

2PS - 2 Positions

3PS - 3 Positions

III - Directions of Switch

MTH - Maintained contact, horizontal

MTV - Maintained contact, vertical

MMRH - Momentary right contact, horizontal

MMRV - Momentary right contact, vertical

MTIH - Maintained contact independent cam, horizontal

MTIV - Maintained contact independent cam, vertical

MMRH - Momentary right, maintained left/center independent cam, horizontal

MMRV - Maintained left/center, momentary right, independent cam, vertical

MMLH - Momentary left, maintained center/right, independent cam, horizontal

MMLV - Momentary left, maintained center/right, independent cam, vertical

MMLRH – Momentary left/right, maintained center, independent cam, horizontal

MMLRV - Momentary left/right, maintained center, independent cam, vertical

Keyed Rotary Selector Switch Actuator

2PSKH – 2 Position Maintained and Momentary, Horizontal

2PSKV - 2 Position Maintained and Momentary, Vertical

3PSKIH - 3 Position Maintained and Momentary, Horizontal

3PSKIV – 3 Position Maintained and Momentary, Vertical

Nomenclature for Pilot Light Lens Cover (not intended for 'nR' applications):

HKH PLR

ll.

I – Pilot Light Lens Cover Series

HKH - Series Designation



Certificate No.: IECEx UL 14.0104U

Issue No.: 4 Page 3 of 5

II - Lens Cover Designation

PLR - Red

PLG - Green

PLA - Amber

PLC - Clear

PLB - Blue

Nomenclature for Close-Up Plug:

HKH CP

II

I - Series Designation

HKH - Series

II - Plug

CP - Unused cover opening close up plug

Nomenclature for Two-Pole Rocker Switch

HKH RKRSWT

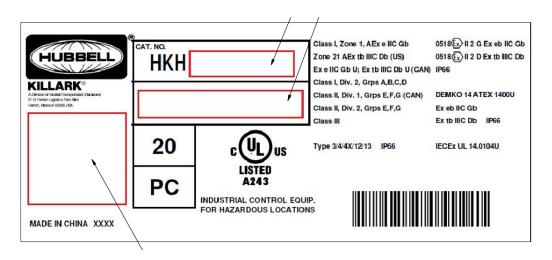
1 11

I – Series Designation

II – Two-Pole Maintained Rocker Switch (see Drawing 24426 for material combination limitation for 'nR' applications)

MARKING

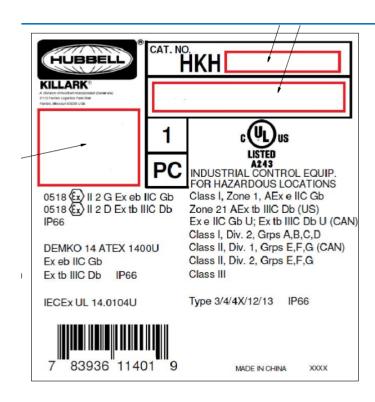
Marking has to be readable and indelible; it has to include the following indications:

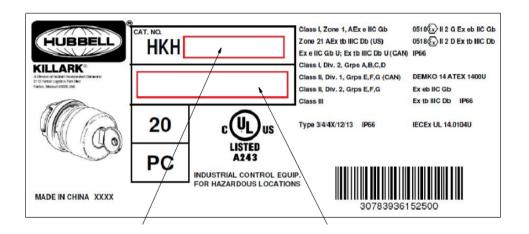




Certificate No.: IECEx UL 14.0104U

Issue No.: 4 Page 4 of 5







Certificate No.: IECEx UL 14.0104U

Issue No.: 4 Page 5 of 5



NOTES: