



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

Certificate No.: IECEx UL 15.0054X issue No.:1
Status: **Current**
Date of Issue: **2016-07-14** Page 1 of 4

Certificate history:
Issue No. 1 (2016-7-14)
Issue No. 0 (2015-11-24)

Applicant: **Killark, Div. of Hubbell Inc. (Delaware)**
3940 Martin Luther King Drive
St. Louis, MO 63113
United States of America

Equipment: **HKH Series Control Stations, Increased Safety, Encapsulated, and Flameproof
Components in Increased Safety Enclosures**
Optional accessory:

Type of Protection: **Flameproof "d", Increased Safety "e", Encapsulation "mb", Enclosure "tb"**

Marking: Ex de IIC T6...T4 Gb
Ex e IIC T6...T4 Gb
Ex e mb IIC T6...T4 Gb
Ex de mb IIC T6...T4 Gb
Ex tb IIIC T85°C...T135°C Db

-50°C to +60°C
-40°C to +55°C (when calotte or CZ0205 meter is installed)

Approved for issue on behalf of the IECEx Lucy Frieders
Certification Body:

Position: Staff Engineer

Signature:
(for printed version)

Date: 2016-07-14

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](http://www.iecex.com).

Certificate issued by:

UL LLC
333 Pfingsten Road
Northbrook IL 60062-2096
United States of America





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Certificate No.: IECEx UL 15.0054X
Date of Issue: 2016-07-14 Issue No.: 1
Page 2 of 4

Manufacturer: **Killark, Div. of Hubbell Inc. (Delaware)**
3940 Martin Luther King Drive
St. Louis, MO 63113
United States of America

Additional Manufacturing location
(s):

**Hubbell Ltd T/A Chalmit
Lighting, Victor Products
and Transtar**
388 Hillington Road
Glasgow
G52 4BL
United Kingdom

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 products 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 electrical apparatus 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 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2007-04 Edition: 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-18 : 2014 Edition: 4.0	Explosive atmospheres – Part 18: Equipment protection by encapsulation "m"
IEC 60079-31 : 2013 Edition: 2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7 : 2006-07 Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

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

Test Report:
[US/UL/ExTR15.0063/01](#)

Quality Assessment Report:

[GB/BAS/QAR06.0027/06](#)

[GB/BAS/QAR06.0061/05](#)

[US/UL/QAR07.0004/08](#)



IECEx Certificate of Conformity

Certificate No.: IECEx UL 15.0054X

Date of Issue: **2016-07-14**

Issue No.: 1

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The HKH Series Control Station are stainless steel or polymeric enclosures that can house a variety of Ex components, such as pilot lights, contact blocks, operators, E-Stops, and terminals.

See Annex for additional information.

CONDITIONS OF CERTIFICATION: YES as shown below:

See Annex for Conditions of Certification.



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Certificate No.: IECEx UL 15.0054X

Date of Issue: 2016-07-14

Issue No.: 1

Page 4 of 4

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

Issue 1: Drawing updates.

The HKH Series Control Station are stainless steel or polymeric enclosures that can house a variety of Ex components, such as pilot lights, contact blocks, operators, E-Stops, and terminals. The components are covered under the following Ex component certificates:

HKH Series Contact Block:	IECEX UL 12.0033U/DEMKO 12 ATEX 1202251U
HKH Series Pilot Light:	IECEX UL 14.0047U/DEMKO 14 ATEX 1337U
HKH Series Actuators, Pilot Light Lens Covers and Plugs:	IECEX UL 14.0104U/DEMKO 14 ATEX 1400U
HKH Series Polymeric Enclosures:	IECEX UL 14.0103U/DEMKO 14 ATEX 1399U
HKH Series Stainless Steel Enclosures:	IECEX UL 14.0039U/DEMKO 14 ATEX 1323U
HKH Series E-Stops:	IECEX UL 15.0111U/DEMKO 15 ATEX 1422U
ABB ZS4 Terminal Blocks:	IECEX LCIE 08.0031U/LCIE 08 ATEX 0007U
Weidmuller WDU 2.5 or 4 and WPE 2.5 or 4 Terminal Blocks:	IECEX ULD 14.0005U/DEMKO 14 ATEX 1338U
EXM Calotte Cover:	IECEX CQM 15.0035U/SIRA 15 ATEX 3333U
CZ0205 Series Meters:	IECEX CQM 14.0034U/SIRA 14 ATEX 3169U

Ex de IIC T6...T4 Gb

To be used when control station includes an HKH Contact Block, HKH Pilot Light, HKH E-Stop, WDU, WPE or ZS4 Terminal Blocks, and a CZ0205 Ammeter.

Ex e IIC T6...T4 Gb

To be used when control station includes only series WDU, WPE, or ZS4 terminal blocks, and/or CZ0205 ammeter.

Ex e mb IIC T6...T4 Gb

To be used when control station includes only series WDU, WPE, or ZS4 terminal blocks, and a CZ0205 voltmeter or milliammeter.

Ex de mb IIC T6...T4 Gb

To be used when control station includes an HKH contact block or HKH pilot light and a CZ0205 voltmeter or milliammeter.

Ex tb IIIC T85°C...T135°C Db

All options.

Note: When a CZ0205 meter is in use, the EXM calotte cover shall also be installed.

Nomenclature for HKH Series Control Station:

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
HKH	1B	N	P	x	E	xx	3	x	xx	x	S

I – Product Series
 HKH Series Control Stations

II – Enclosure Type/Size
 1A - One Device
 1B - One Device / Two Device
 1C - Two Device / Three Device

- III – Enclosure Material
 - N - Polymeric
 - S - 316 Stainless Steel (Inward Flange)
 - E - 316 Stainless Steel (Outward Flange)

- IV - Contact Block / Pilot Light Mounting Method
 - D - DIN-rail mount
 - P - Panel mount

- V - Cable Entry (optional)
 - x - Letter or Digit indicating size and location

- VI - Earthing Plate (optional)
 - E - Brass Earthing Continuity Plate (Metric Only)

- VII - Operator/ Meter
 - xx - Letter-Digit or Letter-Letter indicating HKH Series Actuator(s) and/or Series CZ0205 meter installed

- VIII - Control Module
 - L - LED Lamp (Pilot Light)
 - 1 - 1 NO / 1 NC
 - 2 - 1 NO
 - 3 - 1 NC
 - 4 - 2 NO
 - 5 - 2 NC

- IX - Legend Plate (optional)
 - x - Letter or Digit

- X - Accessory Type (optional)
 - xx - Letter-Digit

- XI - Hub / Gland Designator (optional)
 - x - Letter or Digit

- XII - Earthing Stud Kit (optional)
 - S - Internal/External Earth Stud

Alternate Nomenclature

I	II	III
HKH	MOD	xxxxxx

- I – Product Series
 - HKH Series Control Stations

- II – Extended Catalog Number Designator
 - MOD – indicates the Standard Nomenclature exceeds 18 characters

- III – Dedicated Configuration Designator
 - Xxxxxx – 1 to 6 characters indicating a specific component configuration

For a **T6** Temperature Code/**T85°C** Maximum Surface Temperature, the following electrical ratings are in effect:

Enclosure Size	Max. No. of CZ Meters	Maximum No. of HKH Contact Blocks	Max. No. of ABB ZS4 Terminal Blocks	Maximum No. of HKH Pilot Lights	Minimum Wire Size	Maximum Continuous Current Rating
2c	2	12	16	6	2 mm ² (14 AWG)	10 A
2a	1	8	16	4	2 mm ² (14 AWG)	10 A
1c	1	6	8	3	2 mm ² (14 AWG)	10 A
1b	1	4	6	2	2 mm ² (14 AWG)	10 A
1a	1	2	N/A	1	4 mm ² (12 AWG)	20 A

For a **T5** Temperature Code/**T100°C** maximum Surface Temperature, the following electrical ratings are in effect:
 (For Complete Control Stations with Pilot Lights only)

Enclosure Size	Max. No. of CZ Meters	Maximum No. of HKH Pilot Lights	Minimum Wire Size	Maximum Wattage Rating	Max. Continuous Current Rating
2c	2	6	0.5 mm ² (20 AWG)	0.6 Watts	20 A
2a	1	4	0.5 mm ² (20 AWG)	0.6 Watts	20 A
1c	1	3	0.5 mm ² (20 AWG)	0.6 Watts	20 A
1b	1	2	0.5 mm ² (20 AWG)	0.6 Watts	20 A
1a	1	1	0.5 mm ² (20 AWG)	0.6 Watts	20 A

For a **T4** Temperature Code/**T135°C** Maximum Surface Temperature, the following electrical ratings are in effect:

Enclosure Size	Max. No. of CZ Meters	Maximum No. of HKH Contact Blocks	Max. No. of ABB or Weidmuller Terminal Blocks	Maximum No. of HKH Pilot Lights	Minimum Wire Size	Maximum Continuous Current Rating
2c	2	12	16	6	4 mm ² (12 AWG)	20 A
2a	1	8	16	4	4 mm ² (12 AWG)	20 A
1c	1	6	8	3	4 mm ² (12 AWG)	20 A
1b	1	4	6	2	4 mm ² (12 AWG)	20 A

Installation Instructions:

- The HKH Contact Blocks, Weidmuller WDU and WPE 2.5 and 4 Series, and ABB ZS4 Series must be mounted to provide a minimum of 10 mm clearance to any conductive surfaces.
- The Series HKH Pilot Lights must be mounted to provide a minimum clearance of 5.0 mm to any conductive surfaces.
- The Series HKH Contact Block and Pilot Lights can accommodate wire sizes from 22 AWG (0.5 mm²) to 12 AWG (4 mm²) solid and stranded and 10 AWG (4.0 mm²) stranded, with a maximum of two wires per terminal. Strip wire insulation 10 mm. Tighten terminal screws 15 in-lbs (1.7 N-m).
- The Weidmuller WDU and WPE 4 Series and ABB ZS4 Series will accommodate wire sizes from 20 AWG (0.5 mm²) to 10 AWG (6 mm²) and Weidmuller WDU and WPE 2.5 Series will accommodate wire sizes from 20 AWG (0.5 mm²) to 12 AWG (4 mm²), with a maximum of two wires per terminal. Strip wire insulation 10 mm for Weidmuller terminals and 10.3 mm for ABB terminals. Tighten terminal screws 3.5 to 7 in-lbs (0.4 to 0.8 N-m) for WDU and WPE 2.5 Series, 4.4 to 8 in-lbs (0.5 to 1.0 N-m) for WDU and WPE 4 Series, and 5.3 in-lbs (0.6 N-m) for ABB ZS4 Series.
- The Weidmuller Series WDU terminal blocks require an additional accessory (end section or circuit separator) when a jumper bar with “cut extremity” is used.
- The Weidmuller Series WDU and WPE and ABB Series ZS terminals can accommodate one or two solid or stranded Cu wires. When two wires are installed under a single terminal, they must be of the same type (STR or SOL) and of equal sizes.
- The Series HKH Polyamide Enclosure cover bolts should be torqued to 3 Nm to 4 Nm.
- The Series HKH Stainless Steel Enclosure cover bolts should be torqued to hand tight. Do not over-tighten.
- To maintain the IP66 rating or dust protection method “tb”, all actuator/enclosure sealing gaskets must be installed in accordance with these installation instructions.
- These enclosures may be provided without cable glands/ conduit entries. When installing glands or entries, the cable glands/ conduit entries must be certified as increased safety or flameproof for protection type “tb”, and have a minimum IP 66 rating.
- To assure the IP ratings are not compromised, Cable Gland and Conduit Entry holes must not exceed the maximum dimensions noted in the gland/ entry manufacturer's installation instructions.
- All unused wiring terminals shall be tightened.
- All conductors shall be suitable for the minimum ambient and maximum temperature achieved in service – use 90°C rated conductors (minimum) for T6 applications, and use 105°C conductors (minimum) for T5 and T4 applications.
- Do not remove the tamper-proof screws or attempt to open or alter the Series HKH contact blocks.

Conditions of Certification

- CZ0205 modules are intended to be installed as TS35*7.5 rail mounted or panel-mounted (mounting frame is screw-fixed to the enclosure cover). Dimensions of all models are 66mm x 66mm x47.5mm.
- EXM Calotte covers must be installed per the manufacturer's instructions through the wall of a suitable IECEx certified enclosure. Note- mounting screw length is dependent upon enclosure wall thickness.
- The EXM Calotte viewing window frame presents a potential electrostatic hazard and shall be fitted to fixed installations only to allow it to comply with IEC 60079-0 Clause 7.4.2 e) and Clause 7.4.3 d). The polymeric frame shall only be cleaned with a damp cloth and sited away from any static charging methods (ie: near forced air movement or where they can easily be rubbed by passers-by).
- The EXM Calotte viewing window is intended for use when Series CZ0205 meters are installed.
- The ammeter and voltmeter modules must be mounted in suitable Ex enclosure and after installation must maintain the creepage and clearance distances as noted in IEC 60079-7, Clauses 4.3 and 4.4 and Table 1. Series CZ0205 meters shall be mounted to provide a minimum clearance of 10mm and minimum creepage of 16mm.
- Tightening torque of the CZ0205 meter wiring terminals is 1.2 Nm and the EXM mounting frame screw is 1.1 Nm.