IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx SIR 13.0073U**

Certificate history:
Issue 1 (2014-02-05)
Issue 0 (2013-06-27)

Status: **Current**

Issue No: 2

Date of Issue: 2017-12-19

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

Equipment: **Type R & RE Series Reducers, Type CUP Series Plugs, Type AN, AN-xS & ATEX-EPL-RCON-ALU-NPL Series Conduit Nipples**

Optional accessory:

Type of Protection: **Flameproof, Increased Safety and Dust**

Marking:
Ex db IIC Gb
Ex eb IIC Gb
Ex tb IIIC Db
Ta = -50°C to +60°C

Approved for issue on behalf of the IECEx Certification Body: **C Ellaby**

Position: **Deputy Certification Manager**

Signature: (for printed version)

Date:

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 www.iecex.com or use of this QR Code.

Certificate issued by:

SIRA Certification Service
CSA Group
Unit 6, Hawarden Industrial Park
Hawarden, Deeside, CH5 3US
United Kingdom

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Manufacturer: **Killark, A Div. of Hubbell Inc. (Delaware)**
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Additional manufacturing locations:

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 equipment 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 60079-31:2013 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 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 Reports:

GB/SIR/ExTR13.0188/00 GB/SIR/ExTR14.0022/00 GB/SIR/ExTR17.0267/00

Quality Assessment Report:

GB/SIR/QAR16.0021/00

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

Refer to the Annexe for the equipment description.

SPECIFIC CONDITIONS OF USE: NO

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
This issue, issue 2, recognises the following changes; refer to the certificate annex to view a comprehensive history:

1. Change of the body responsible for quality to a drawing note.
2. The inclusion of the 1½”-11½” NPT reducer, Type reference R-51, R-52, R-53 and R-54, to the existing range.
3. Correction of administrative error on the Nipple scheduled drawing 23541.
4. Following appropriate assessment to demonstrate compliance with the latest technical knowledge, IEC 60079-1:2007, IEC 60079-7:2006 and IEC 60079-31:2008 were replaced by IEC 60079-1:2014, IEC 60079-7:2015 and IEC 60079-31:2013. The markings have been updated in accordance with the latest standards.

Annex:

IECEx SIR 13.0073U Annexe Issue 2.pdf

Annexe to:	**IECEx SIR 13.0073U Issue 2**
Applicant:	**Killark, A Div. of Hubbell Inc. (Delaware)**
Apparatus:	**Type R & RE Series Reducers, Type CUP Series Plugs and Type AN & AN-xS Series Conduit Nipples**

Type R & RExxS Series Reducers:

The Type R and RExxS Series Reducers comprise a hollow hexagonal body, partly threaded at each end, one end having a male thread and the other a female thread. The Reducers are used to convert an existing threaded cable entry aperture to a different thread form and/or size.

The Type R and RExxS Series Reducers have an IP 66 ingress protection rating in accordance with IEC 60529.

The Reducers may be machined with NPT thread forms in sizes and materials as follows:

Sizes:	**Materials of manufacture:**
3/8-18 NPT	A1 = Aluminium, 6061-T6, 6061-T651
½"-14 NPT	A2 = Aluminium, AA356-T6
¾"-14 NPT	A3 = Aluminium, Modified A413.1 Alloy Per Killark Spec. MA-0105
1"-11 ½ NPT	S = Zinc Electroplated Steel (12L14); or Zinc Electroplated Steel (12L14-SA)
1 ¼"-11 ½ NPT	S3 = SS-303 Grade
2"-11 ½ NPT	S4 = SS-304 Grade
2 ½"-8 NPT	S6 = SS-316 Grade
3"-8 NPT	
3 ½"-8 NPT	
4"-8 NPT	

Surface coating

The products may additionally be metallic plated with Zinc (0.008 mm thick max.) to suit the application.

Type CUP & PLUG Series:

The CUP & PLUG series comprise a cylindrical body, threaded with a male thread. They are intended to fill unused cable entries in associated apparatus.

The CUP & PLUG series have an IP 66 ingress protection rating in accordance with IEC 60529.

The products are manufactured with the following external profiles and assigned the following prefix type designations:

CUP-250 - CUP-6; Hexagonal socket recess
PLUG-250 - PLUG-3; Hexagonal socket recess
PLUG-4 – PLUG-6; Square socket recess
CUP-7 – CUP-8 & PLUG-7–PLUG-10; Cross (X) recess

The CUP & PLUG series may be machined with NPT thread forms in sizes and materials as follows:

Sizes:	**Materials of manufacture:**
¼"-18 NPT	CUP – Series
3/8"-18 NPT	(blank); A1 = Aluminium, 6061-T6, 6061-T651
½"-14 NPT	(blank); A2 = Cast Aluminium, AA356-T6
¾"-14 NPT	S3 = SS-303 Grade
1"-11 ½ NPT	S4 = SS-304 Grade
1 ¼"-11 ½ NPT	S6 = SS-316 Grade
1 ½"-11 ½ NPT	
2"-11 ½ NPT	PLUG Series:
2 ½"-8 NPT	(blank) = Zinc Electroplated Steel (12L14) or Zinc Electroplated Steel (12L14-SA)
3"-8 NPT	S3 = SS-303 Grade
3 ½"-8 NPT	S4 = SS-304 Grade
4"-8 NPT	S6 = SS-316 Grade

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Type AN, AN-xS & ATEX-EPL-RCON-ALU-NPL Series Conduit Nipples:

The AN, AN-xS & ATEX-EPL-RCON-ALU-NPL Series Conduit Nipples comprise a cylindrical straight body, with NPT male threads on each end. They are used for the protection of wire conductors and intended to connect conduit to cast hubs on drilled and tapped conduit openings.

The AN, AN-xS & ATEX-EPL-RCON-ALU-NPL Series Conduit Nipples have an IP 66 ingress protection rating in accordance with IEC 60529.

The Nipples may be threaded in sizes and materials as follows:

Sizes:	**Materials of manufacture:**
½"-14 NPT	(blank) = Aluminium, 6063 alloy
¾"-14 NPT	S = Zinc Electroplated Rigid Steel Conduit
1"-11 ½ NPT	S3 = SS-303 Grade
1 ¼"-11 ½ NPT	S4 = SS-304 Grade
2"-11 ½ NPT	S6 = SS-316 Grade
2 ½"-8 NPT	
3"-8 NPT	
3 ½"-8 NPT	
4"-8 NPT	

Schedule of Limitations

The User/Installer shall comply with the following:

1. The Stopping Plugs and Blanking elements shall not be used in conjunction with an adapter or reducer when installed in a flameproof enclosure.
2. Nipples and Reducers shall not to be used for the direct inter-connection of enclosures.
3. Only one Nipple or Reducer is to be used with any single cable entry on the associated equipment.
4. The Nipples, Reducers and Plugs are for threaded entries only.
5. The interfaces between the male thread of the adaptor/reducer and an associated enclosure and between the female thread of the adaptor/reducer and the cable entry device cannot be defined. Therefore it is the installer's responsibility to ensure that the appropriate ingress protection level is maintained at these interfaces.
6. For the nipples, installation is to be in accordance with the manufacturer's installation manual, ensuring correct thread engagement and torque is applied to ensure threads are undamaged. Installation in accordance to IEC 60079-14 is also to be followed.

Complete Certificate History

Issue 1 – this Issue introduced the following change:

1. The introduction of a 3"-1¼" NPT reducer, Type reference R-84 to the existing range.

Issue 2 – this Issue introduced the following changes:

1. Change of the body responsible for quality.
2. The inclusion of the 1½"-11½" NPT reducer, Type reference R-51, R-52, R-53 and R-54, to the existing range.
3. Correction of administrative error on the Nipple scheduled drawing 23541.
4. Following appropriate assessment to demonstrate compliance with the latest technical knowledge, IEC 60079-1:2007, IEC 60079-7:2006 and IEC 60079-31:2008 were replaced by IEC 60079-1:2014, IEC 60079-7:2015 and IEC 60079-31:2013. The markings have been updated in accordance with the latest standards.

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