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 QPS 16.0012X

Issue No: 0

Certificate history:
Issue No. 0 (2016-11-03)

Status: **Current**

Date of Issue: **2016-11-03**

Applicant: **Killark, a Division of Hubbell Inc. (Delaware)**
3940 Rd. Martin Luther King Dr.,
St. Louis, MO 63113
United States of America

Equipment: **range of conduit fittings**

Optional accessory:

Type of Protection: **Flameproof 'db', By Protection by enclosure 'tb'**

Marking: Ex db IIC* Gb / Ex db IIB* Gb
Ex tb III C Db IP6X*
* See Equipment section bellow

Approved for issue on behalf of the IECEx Certification Body: D. Adams, P. Eng.

Position: Manager, Hazardous Locations Department [Ex Equipment]

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 the Official IECEx Website.

Certificate issued by:

QPS
Evaluation Services Inc.
81 Kelfield St
Unit 8
Toronto, Ontario M9W 5A3
Canada

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Manufacturer: **Killark, a Division of Hubbell Inc. (Delaware)**
3940 Rd. Martin Luther King Dr.,
St. Louis, MO 63113
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 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 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 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

*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:

CA/QPS/ExTR16.0012/00

Quality Assessment Report:

US/UL/QAR07.0004/08

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

A Range of Conduit Fitting

Catalog Numbers: GUFS-**-EX; GUMFS-*-EX; Y-*-EX; EYMF-*-EX; FF-**-*-EX; MF-**-*-EX; MM-**-*-EX; BL-**-*-EX; GUM-*-EX; GUMM-*-EX; UNY*-EX; GUF-*-EX; UNF*-EX.

The conduit fittings can be manufactured in 356, 6061-T6, 6061-T651 Aluminum, 316 Stainless Steel, or Ductile Iron.

The entire range of conduit fitting is tested and approved for an extended ambient temperature of Ta= -50 °C to +100 °C.

Assigned protection code, ingress protection (in addition to IP6X required by IEC 60079-31), and operating temperature range for different types of fittings are as follows:

Swivel Elbows	**Capped Elbows**	**Plugged Elbows**	**Std. Elbows**	**Unions**
GUFS--EX**	**Y-*-EX**	**EYMF-*-EX**	**FF-**-*-EX**	**UNF*-EX**
GUMFS-*-EX			**MF-**-*-EX**	**UNY*-EX**
			MM--*-EX**	**GUF-*-EX**
			BL--*-EX**	**GUM-*-EX**
				GUML-*-EX
				GUMM-*-EX
Ex db IIB	Ex db IIB	Ex db IIB	Ex db IIC	Ex db IIC
Ex tb III C IP65	Ex tb III C IP66	Ex tb III C IP65	Ex tb III C IP66	Ex tb III C IP65
T_{op}= -50°C to +400°C	T_{op}= -50°C to +100°C (with gasket employed to maintain IP66), otherwise T_{op}= -50°C to +400°C	T_{op}= -50°C to +400°C	T_{op}= -50°C to +400°C	T_{op}= -50°C to +400°C

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. With the exception of the IP66-rated Capped Elbows (Type Y-*-EX), the standard operating temperature range for all listed fittings is from -50 °C to +400 °C.

For the IP66-rated Capped Elbow (with gasketed, threaded cover-to-housing joint), the standard operating temperature range is from -50 °C to +100 °C.

2. A seal is not required between the fitting and a flameproof enclosure, provided:

- The enclosure volume is less than 160 litres and is of simple internal geometry, or
- The enclosure reference pressure is less than 234 psi for IIC applications or 196 psi for IIB applications

A seal is always required within 50-mm of the free end of the fitting.