



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 15.0002X Issue No: 0 Certificate history:
Issue No. 0 (2015-04-29)

Status: **Current** Page 1 of 3

Date of Issue: **2015-04-29**

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

Electrical Apparatus: **KDE Series Breather/Drains**
Optional accessory:

Type of Protection: **Ex e IIC Gb / Ex tb IIIC Db IP66**

Marking:
IECEX QPS 15.0002X
Ex e IIC Gb / Ex tb IIIC Db IP66

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

Dave Adams, P.Eng.

Position:

Manager, Hazardous Locations [Ex Equipment] Department

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

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 Martin Luther King Drive
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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 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 60079-31 : 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:

[CA/QPS/ExTR15.0003/00](#)

Quality Assessment Report:

[US/UL/QAR07.0004/06](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

KDE Series Breather/Drains, made out of 7 body materials (Akulon PA6, Brass (2 types), Stainless Steel (3 types), Aluminum; 1/2 inch and 3/4 inch NPT and NPSM, M20 and M25..... with Porex Sintered Elements (Puck shape).

Nomenclature breakdown: **KD**¹ **E**² ******³ ***4** ***** (****)**⁵

1 - Series Designation

2 - Explosive Atmosphere version - IP66

3 - Material Type: AL = Aluminium; BR = Brass; S3 = 303 SS; S4 = 304 SS; S6 = 3016 SS; GF = Glass Filled PA6 Nylon

4 - Plating Type: 0 = Unplated; 1 = Nickel; 2 = Zinc; 3 = Cadmium; 4 = Chromatise; 5 = Electroless Nickel

5 - Thread Type: M20 = M20; M25 = M25; 050 = 1/2 inch NPT; 075 = 3/4 inch NPT; 050NPSM = 1/2 inch NPSM; 075NPSM = 3/4 inch NPSM

CONDITIONS OF CERTIFICATION: YES as shown below:

1. The breather/drains are intended for "enclosure bottom only" installation into clearance holes only, using the locknuts provided.

2. The breather/drains shall be mounted into clearance holes having maximum diameters as follows:

KDE Trade Size / Thread Form	Max. Opening Diameter (mm)	Max. Opening Diameter (in)
M20	21	0.815
1/2 in. NPT, NPSM	22	0.875
M25	26	1.030
3/4 in. NPT, NPSM	27	1.060

They are not intended for installation into threaded openings or hubs.

3. Minimum required locknut tightening torque is 4 Nm. Maximum locknut tightening torque is 8 Nm. .

4. The operating temperature range of the breather/drains is -55°C to +80°C.