



## EU Type Examination Certificate CML 19ATEX2240X Issue 0

- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Equipment **Pressure Transmitter types H455E and 455E**
- 3 Manufacturer **Barksdale, Inc.**
- 4 Address **3211 Fruitland Ave,  
Los Angeles,  
California 90058  
USA**
- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 CML B.V., Chamber of Commerce No 6738671, Hoogoorddreef 15, Amsterdam, 1101 BA, The Netherlands, Notified Body Number 2776, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.
- 7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.
- 8 This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN IEC 60079-0:2018                      EN 60079-11:2012

- 10 The equipment shall be marked with the following:



II 1 GD

Ex ia IIC T4 Ga

Ex ia IIIC T135°C Da

IP66 & IP67

-40°C ≤ Tamb ≤ +80°C



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## 11 Description

The Pressure Transmitter types H455E and 455E are intrinsically safe pressure transmitters suitable for use in environments requiring equipment protection level Ga or Da. The equipment comprises a pressure sensor and electronic assembly within a sealed stainless-steel enclosure. A single electrical connection is provided for connection to a 4-20mA loop.

The equipment may be supplied with flying leads or with a variety of two-part connector types and there are numerous available options for different pressure ranges, units, and process connections.

Intrinsic safety is achieved by limiting energy storage and discharge, and by connecting to the non-hazardous area via an intrinsically safe interface device.

The equipment has the following safety description:

$U_i$	=	30 V
$I_i$	=	100 mA
$P_i$	=	0.75 W
$C_i$	=	2.2 nF
$L_i$	=	30 $\mu$ H

## 12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	02 Oct 2019	R21070A/01	Issue of Prime Certificate

Note: Drawings that describe the equipment or component are listed in the Annex.

## 13 Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

- i. Where the product incorporates certified parts or safety critical components, the manufacturer shall ensure that any changes to those parts or components do not affect the compliance of the certified product that is the subject of this certificate.

## 14 Specific Conditions of Use (Special Conditions)

The following conditions relate to safe installation and/or use of the equipment.

- i. The equipment is not capable of withstanding the 500V insulation test required by Clause 6.3.13 of IEC/EN 60079-11:2011. This shall be taken into account when installing the equipment.

## Certificate Annex

**Certificate Number** CML 19ATEX2240X  
**Equipment** Pressure Transmitter types H455E and 455E  
**Manufacturer** Barksdale, Inc.



The following documents describe the equipment or component defined in this certificate:

### Issue 0

Drawing no.	Sheets	Rev	Approved date	Title
982434	1 to 3	B	02 Oct 2019	Assembly drawing, BiT I.S, silicon HART configuration,
982435	1 to 3	B	02 Oct 2019	Assembly drawing, BiT I.S., thin film HART configuration,
371PC131	1 of 1	B	02 Oct 2019	Circuit board assly, HART, I.S.
271PC132	1 of 1	B	02 Oct 2019	Drilled DWG., HART I.S. PCB
271PC132	1 of 10	B	02 Oct 2019	PCB, drill dwg, HART, intrinsic safety (with artwork files)
271PC133	1 of 1	B	02 Oct 2019	Circuit board assm, transfer pcb, I.S.
271PC133	1 to 10	A	02 Oct 2019	Transfer PCB artworks
455E-H-DE	1 to 2	B	02 Oct 2019	Schematic, HART, BiT, Intrinsic Safety
450E-DE	1 of 1	A	02 Oct 2019	Schematic, Transfer PCB, BiT, Intrinsic Safety
2501269	1 to 2	A	02 Oct 2019	Laser template, etch (label detail)
272471	1 to 4	A	02 Oct 2019	Control drawing