



EU Type Examination Certificate CML 19ATEX1373X Issue 1

- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Equipment **CDP301 Dew Point Tester**
- 3 Manufacturer **Michell Instruments Ltd**
- 4 Address **Unit 48, Lancaster Way
Business Park, Cambridge,
Ely, CB6 3NW,
United Kingdom**
- 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

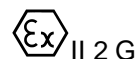
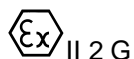
EN 60079-1:2014

EN 60079-11:2012

- 10 The equipment shall be marked with the following:

(Fitted with Michell Instruments Breather)

(Fitted with Killark Breather)



Ex db ia IIB+H₂ T6/T5 Gb

Ex db ia IIB+H₂ T3 Gb

Ta= -30°C to +40°C (T6) or +50°C (T5)

Ta= -30°C to +50°C (T3)



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11 Description

The CDP301 Dew Point Tester is a transportable, battery-powered dew point analyser consisting of a processor PCB, display module, battery-pack arrangement and measuring sensor arrangement, housed in a cast aluminium flameproof enclosure. The flameproof enclosure has a threaded lid with a silicone based cemented viewing window and threaded base. The threaded lid and base have EPDM O-rings for ingress protection.

The threaded lid is secured against opening via an M4 x 0.7 set screw.

There are ½" NPT flame arrestor entries mounted under the upper enclosure section for gas inlet, outlet and breather connections. Measurement and pressure sensors and an inlet flow limiter are part of an internal containment arrangement.

There are five menu buttons, located on the side of the flameproof enclosure. Signal lines to the buttons are connected via a glass-to-metal seal arrangement. The cover surrounding the menu buttons additionally houses the connection point for the battery pack charging socket.

Ratings:

16.8 V, 0.86 A, 14.5 W

Maximum working pressure = 13,800 kPa

Variation 1

This variation introduces the following modification:

- i. To allow an alternative enclosure breather; KILLARK KQBA ½" NPT

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	16 Aug 2019	R12006A/00	Issue of Prime Certificate
1	11 Dec 2019	R12942A/00	Variation to include an additional breather; KILLARK KBQA ½" NPT

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.
- ii. Each unit shall be subjected to a routine overpressure test of 18.6 bar in accordance with EN/IEC 60079-1:2014 clause 16. There shall be no damage or deformation to the enclosure or threaded flamepaths, additionally, there shall be no leakage through the cemented lid.
- iii. Each internal containment arrangement shall undergo a routine, 1.5 times working pressure test for a minimum of 2 min. in accordance with EN/IEC 60079-1:2014 clause G.4.1.
- iv. When the CPD301 Dew Point tester is fitted with the KILLARK KBQA breather, the equipment shall be marked with a temperature class of T3.



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14 Specific Conditions of Use (Special Conditions)

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

- i. The flamepath dimensions differ from the requirements of EN/IEC 60079-1, therefore they shall not be repaired by the end user. Contact the manufacturer for more information.
- ii. The CPD301 Dew Point Tester shall not be opened or charged in the hazardous area.
- iii. The equipment is a potential electrostatic charging hazard, therefore, shall only be cleaned with a damp cloth.
- iv. The flameproof joints of the KILLARK KBQA breather are not intended to be repaired.

Certificate Annex

Certificate Number CML 19ATEX1373X
Equipment CDP301 Dew Point Tester
Manufacturer Michell Instruments Ltd



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

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
Ex90870	1 to 9	01	16 Aug 2019	CDP301 Dew Point Tester Certification Control Drawing ATEX/IECEX

Issue 1

Drawing No	Sheets	Rev	Approved date	Title
Ex90870	1 to 9	02	11 Dec 2019	CDP301 Dew Point Tester Certification Control Drawing ATEX/IECEX