

[1] **EC-TYPE EXAMINATION CERTIFICATE**  
according to Directive 94/9/EC, Annex III  
(Translation)



[2] Equipment and Protective Systems intended for use  
in Potentially Explosive Atmospheres, Directive 94/9/EC

[3] EC-Type Examination Certificate Number: **IBExU09ATEX1113 X**

[4] Equipment: **Visual unit POLARIS II**  
Typ 17-71V\* \*\*\*\*/\*\*\*\*

[5] Manufacturer: Bartec GmbH

[6] Address: Max-Eyth-Straße 16  
97980 Bad Mergentheim  
Germany

[7] This equipment and any acceptable variation thereto are specified in the schedule to this EC-Type Examination Certificate.

[8] IBExU Institut für Sicherheitstechnik GmbH, NOTIFIED BODY number 0637 in accordance with article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system 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.  
The examination and test results are recorded in the test report IB-09-3-198/1 of 11 September 2009.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN 61241-0:2006 and EN 61241-1:2004.

[10] If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified under [17] in the schedule to this EC-Type Examination Certificate.

[11] This EC-Type Examination Certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this directive apply to the manufacture and supply of this equipment.

[12] The marking of the equipment mentioned in [4] shall include the following:

II 2D Ex tD A21 IP 65 T 100 °C  
-25 °C ≤ T<sub>a</sub> ≤ +50 °C

IBExU Institut für Sicherheitstechnik GmbH  
Fuchsmühlenweg 7 - D-09599 Freiberg  
Tel.: 00493731 3805-0 - Fax: 00493731 23650

Authorised for certifications  
- Explosion protection -

By order

(Dr. Wagner)



- Seal-  
(ID no. 0637)

Freiberg, 14 September 2009

Certificates without signature and seal are not valid.  
Certificates may only be duplicated completely and unchanged. In case of dispute, the German text shall prevail.

**Schedule**

[13] **Schedule**

[14] **to the EC-TYPE EXAMINATION CERTIFICATE IBExU09ATEX1113 X**

[15] **Description of equipment**

The Visual unit POLARIS II permits the use of arbitrary software applications in explosive areas of the zone 21 and 22. The equipment can be used both as panel-PC and as remote terminal. The construction types have a touch screen or an optionally separated keyboard with track ball or touch pad.

**Technical data**

Ambient temperature range                      -25 °C to +50 °C

Display size    12 – 22 inch

**Typ 17-71V\*.\*1\*\*/\*\*\*\***

Wide range voltage

Rated voltage:    110 V AC to 230 V AC ± 10 % max. 120 W

**Typ 17-71V\*.\*2\*\*/\*\*\*\***

DC- power supply

Rated voltage:    +24 V (18 V) to max. 26 V DC max. 120 W

[16] **Test report**

The proof of the explosion protection is recorded in the test report IB-09-3-198/1.  
The test documents are part of the test report and are listed there.

Summary of the test results:

The Visual unit POLARIS II fulfils the requirements of the dust explosion protection for equipment of the Group II and Category 2D. The surface temperature of the enclosure is at most 100 °C.

[17] **Special conditions**

High energy load mechanism on the operating surface of the keyboard (for example pneumatic particle transport) has to be excluded during the application.

[18] **Essential Health and Safety Requirements**

Confirmed by compliance with standards (see [9]).

By order

Freiberg, 14 September 2009



(Dr. Wagner)



- [1] **1<sup>st</sup> Addition to**  
**EC-TYPE EXAMINATION CERTIFICATE IBExU09ATEX1113 X**  
according to Directive 94/9/EC, Annex III  
(Translation)

- [2] Equipment: **Visual unit POLARIS II**  
Type 17-72V\*\_\*\*\*\*/\*\*\*\*
- [3] Manufacturer: BARTEC GmbH
- [4] Address: Max-Eyth-Str. 16  
97980 Bad Mergentheim  
Germany

[5] **Addition/Modification**

The equipment mentioned in [2] can be produced in accordance with the revised documents. Depending on the used internals it can be marked according to the current standards as mentioned in [7].

[6] **Test report**

The proof of the explosion protection of the equipment mentioned in [2] is documented in the test report IB-14-3-147 of 16 October 2014. The test documents are part of the test report.

[7] **Test result**

IBExU certifies that the equipment mentioned in [2] has been found to comply with the Essential Health and Safety Requirements given in Annex II of Directive 94/9/EC by compliance with EN 60079-0:2012, EN 60079-11:2012, EN 60079-15:2010, EN 60079-28:2007 and EN 60079-31:2009.

The equipment mentioned in [2] fulfils the requirements of the dust explosion protection for the Equipment Group II, Category 2D with protection by enclosure.  
The marking shall include the following:

 **II 2D Ex ib tb IIIC T100 °C Db**

It fulfils in addition the requirements of the explosion protection for the Equipment Group II, Category 3G with type of protection 'n'. A combination with other types of protection depends on the used components.

 **II 3G Ex nA ic IIC T5 Gc**

 **II 3(2)G (1)G Ex nA ic [ic] [ib Gb] [op is Ga] IIC T4/T5 Gc**  
-25 °C ≤ T<sub>a</sub> ≤ +50 °C

[8] **Special conditions**

High-energy charge mechanisms at the user interface of the keyboard (e.g. pneumatic particle transport) have to be excluded.

**This addition is only valid in connection with the EC-Type Examination Certificate IBExU09ATEX1113 X of 14 September 2009.**

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