



(1) EC-TYPE-EXAMINATION CERTIFICATE (Translation)

(2) Equipment and Protective Systems Intended for Use in
Potentially Explosive Atmospheres - **Directive 94/9/EC**



(3) EC-type-examination Certificate Number:

PTB 03 ATEX 1052 X

(4) Equipment: Heater of type EEx...

(5) Manufacturer: O'Brien Corporation

(6) Address: 1900 Crystal Industrial Court
St. Louis, Missouri, USA 63114

(7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report PTB Ex 03-12249.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 50014:1997+A1+A2

EN 50018:2000

(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 in the schedule to this certificate.

(11) This EC-type-examination Certificate relates only to the design and construction of the specified equipment in accordance with Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and supply of this equipment.

(12) The marking of the equipment shall include the following:

II 2 G EEx d IIC T3

Zertifizierungsstelle Explosionsschutz

Braunschweig, June 26, 2003

By order:

Dr.-Ing. U. Klaus
Regierungsdirektor



sheet 1/2

EC-type-examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.

SCHEDULE

(13)

(14) **EC-TYPE-EXAMINATION CERTIFICATE PTB 03 ATEX 1052 X**

(15) Description of equipment

- Equipment: Heater, type EEx...
- Utilization: anti-freezing heater resp. device for temperature preservation, for example in instrument-protecting boxes in potentially explosive atmospheres of zone 1

Technical data

Rated voltage	max. 277	V
Rated power	max. 200	W
Ambient temperature	max. +50	°C

(16) Test report PTB Ex 03-12249

(17) Special conditions for safe use

1. The heater shall be installed such that there is free convection through the vertical fins.
2. The heater must not be insulated; the defined minimum clearances shall be observed (see instructions for installation).
3. The holders furnished should be used for installation.
4. The maximum permissible temperatures of adjacent elements/operators shall be observed.
5. The connecting cable shall be installed as fixed wiring and sufficiently protected against mechanical damage.
6. The connecting cable shall be installed in an enclosure which meets the requirements of a recognized type of protection according to EN 50014, section 1.2., if it is connected in the potentially explosive area.
7. The instructions for operation/installation furnished by the manufacturer shall be observed.

(18) Essential health and safety requirements

Met by compliance with the standards mentioned above.

Zertifizierungsstelle Explosionsschutz

Braunschweig, June 26, 2003

By order:


Dr.-Ing. U. Klausmeyer
Regierungsdirektor



sheet 2/2

EC-type-examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.