



Translation

**EC-TYPE EXAMINATION CERTIFICATE**

(1)

(2) Equipment or protective system intended for use in potentially explosive atmospheres - **Directive 94/9/EC**



(3) EC-Type Examination Certificate Number

**TÜV 03 ATEX 2088**

(4) Equipment: Digital Energy Power Unit DEPU type 17-8887-2636/23\*\*

(5) Manufacturer: Bartec GmbH

(6) Address: Max-Eyth-Straße 16  
D-97980 Bad Mergentheim

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

(8) The TÜV NORD CERT GmbH & Co. KG, TÜV CERT-Certification Body, notified body number N° 0032 in accordance with Article 9 of the Council Directive of the EC of March 23, 1994 (94/9/EC), 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 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 N° 03YEX550439.

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

**EN 50014:1997+A1+A2 EN 50019:2000 EN 50 020:2002 EN 50 028:1987**

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system 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, examination and tests of the specified equipment in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

(12) The marking of the equipment or protective system must include the following:

**II 2 G EEx m e ib [ib] IIC T4**

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TÜV CERT-Certification Body  
Am TÜV 1  
D-30519 Hannover  
Tel.: 0511 986-1470  
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Hanover, 2003-07-16

Head of the  
Certification Body





(13)

## SCHEDULE

(14) **EC-TYPE EXAMINATION CERTIFICATE N° TÜV 03 ATEX 2088**

(15) Description of equipment

In conjunction with Pt 100 thermocouples, the Digital Energy Power Unit DEPU type 17-8887-2636/23\*\* is used for temperature control and temperature limitation of apparatus in explosion hazardous areas that require apparatus of the category 2.

### Electrical data

Supply voltage .....  $U_n = 230 \text{ V}$ , -15%/+10%, 50 ... 60 Hz  
(Connections L1, N, PE)

Load output ..... only for connection of heating devices  
(Connections 1 and 2)

External unlocking ..... connected with the supply voltage; only for connection of a  
(Connections 6 and 7) push-button switch (250 V a. c., 0,1 A)

Output temperature alarm ..... 1 change-over contact; permissible values:  
(Connections 3, 4 and 5) 250 V a. c., 5A, 100 VA resp. 24 V d. c., 5A, 100 W

Measuring circuits ..... in type of protection "Intrinsic Safety" EEx ib IIC/IIB  
(Connections 8, 9, 10 [controller] and 11, 12, 13 [limiter] )

Maximum values per circuit:

$$U_o = 6.3 \text{ V}$$

$$I_o = 22 \text{ mA}$$

$$P_o = 35 \text{ mW}$$

Characteristic line: linear

only for connection of Pt100-resistance thermometers

EEx ib	IIC	IIB
Max. permissible external inductance	50 mH	200 mH
Max. permissible external inductance	31 $\mu$ F	720 $\mu$ F

The intrinsically safe measuring circuits are safely galvanically separated from the non intrinsically safe circuits up to a peak value of the voltage of 375V.

The intrinsically safe measuring circuits are safely separated from earth potential.



Notes for the erection:

The Pt 100 sensors connected to the intrinsically safe circuits are simple electrical apparatus and have to be assessed according to section 5.4 of EN 50 020.

(16) Test documents are listed in the test report No. 03YEX550439.

(17) Special conditions for safe use

none

(18) Essential Health and Safety Requirements

no additional ones

**Translation**

**1. SUPPLEMENT**

<b>to Certificate No.</b>	<b>TÜV 03 ATEX 2088</b>
Equipment:	Power controller combination DEPU Type 17-8887-2636/23**, Type 17-8886-2636/23** and Type 17-8887-2A36/23**
Manufacturer:	<b>BARTEC GmbH</b>
Address:	Max-Eyth-Straße 16 97980 Bad Mergentheim Germany
Order number:	8000553182
Date of issue:	2006-09-04

**Amendments:**

The power controller combination DEPU type 17-8887-2636/23\*\* is supplemented around the type 17-8886-2636/23\*\* and the type 17-8887-2A36/23\*\*. Further the electrical data of supply voltage are supplemented.

Electrical data

**Type 17-8887-2A36/23\*\***

Supply voltage .....  $U_n = 254 \text{ V, } +4\%/-10\%, 50 \dots 60 \text{ Hz}$   
(connection) L1, N, PE)

**Types 17-8887-2636/23\*\* and 17-8886-2636/23\*\***

Supply voltage .....  $U_n = 230 \text{ V, } +10\%/-15\%, 50 \dots 60 \text{ Hz}$   
(connection) L1, N, PE)

External unlocking ..... connected with the supply voltage; only for connection of a  
(connections 6 and 7) push-button switch (254 V AC, 0,1 A)

Output temperature alarm ..... 1 change-over contact; permissible values:  
(connections 3, 4 and 5) 254 V AC, 5 A, 100 VA resp. 24 V DC, 5 A, 100 W

All other data apply unchanged.

The equipment incl. of this supplement meets the requirements of these standards:

**EN 50014:1997+A1+A2                      EN 50019:2000                      EN 50020:2002**  
**EN 50028:1987**

(16) The test documents are listed in the test report No. 06 YEX 553182.

(17) Special conditions for safe use

none

1. Supplement to Certificate No. TÜV 03 ATEX 2088

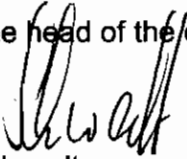
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(18) Essential Health and Safety Requirements

no additional ones

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, accredited by the central office of the countries for safety engineering (ZLS), Ident. Nr. 0044, legal successor of the TÜV NORD CERT GmbH & Co. KG Ident. Nr. 0032

The head of the certification body



Schwedt

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