



(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 00 ATEX 1052



(4) Equipment: Power distribution, switchgear and controlgear assembly
type 35. und 36.

(5) Manufacturer: ROSE Elektrotechnik GmbH + Co. KG

(6) Address: D-32457 Porta Westfalica

(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 00-10074.

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

EN 50014:1997

EN 50018:1994

EN 50019:1994

EN 50020:1994

(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 e II T6 bzw. EEx ed IIC T6 bzw. EEx ia IIC T6 bzw. EEx e [ia] IIC
T6 bzw. EEx ed [ia] IIC T6**

Zertifizierungsstelle Explosionschutz

By order:

In the absence of Dr. J. Klaus Meyer
Regierungsdirektor



Braunschweig, July 27, 2000

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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.

(13)

SCHEDULE

(14)

EC-TYPE-EXAMINATION CERTIFICATE PTB 00 ATEX 1052

(15) Description of equipment

The power distribution, switchgear and controlgear assembly of type 35. und 36. consists of – separately certified – terminal housings of special steel or sheet steel of the Increased Safety "e" type of protection which are provided for stationary assembly.

They are optionally used as terminal housings for circuits of the Increased Safety "e" type of protection or of the Intrinsic Safety "ia" type of protection or combinations of intrinsically safe and non-intrinsically safe circuits in the types of protection Increased Safety "e" and Intrinsic Safety "ia".

All terminal housings can also be equipped with – separately certified – control and signaling units and fuses in the Flameproof Enclosure "d" type of protection.

The connection is from outside via separately certified cable and conduit entries. The housing area for intrinsically safe circuits is marked, e.g. in light blue. The maximum permissible ambient temperature range of the terminal housing can be limited by the maximum permissible ambient temperature ranges of the separately certified equipment.

Technical data

Rated voltage:* up to 690 V

Rated current:* max. 500 A

Rated wire range:* max. 240 mm²

Protective conductor section:*. max. 120 mm²

**) according to terminal type and ex-components used*

Ambient temperature range -20 °C...+80 °C with CR, NBR and PU Fermapor seal
 -55 °C...+100 °C with silicon and HF seal

The rated values are maximum values, the actual electrical values depend on the electrical equipment incorporated. Within the scope of these maximum permissible values and with due regard to the standards, the manufacturer specifies the final rated values dependent on the system conditions, mode of operation, utilization category, etc. The characteristic values of the intrinsically safe circuits are to be given by the manufacturer on his own responsibility. Further technical details have been specified in the test documents.

The composition of the symbol specifying the type of protection depends on the types of protection of the components used.

(16) Test report PTB Ex 99-10074

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(17) Special conditions for safe use

None.

Hints for installation and operation

The maximum number of conductors for the housing size in dependence on the section and the permissible continuous current rating are to be taken from the specifications.

If the distances required according to EN 50020 for connection facilities are not ensured by the installation, cables of increased safety "e" quality of fail-safe cables are to be used.

When more than one intrinsically safe circuit is used, the rules for interconnection are to be observed

(18) Essential health and safety requirements

The tests carried out and their results show that the power distribution, switchgear and controlgear assembly of type 35. und 36. meets the requirements of Directive 94/9/EC and of the standards given on the cover sheet.

Zertifizierungsstelle Explosionsschutz

Braunschweig, July 27, 2000


By order:

In the absence of
Regierungsdirektor



1st SUPPLEMENT
according to Directive 94/9/EC Annex III.6
to EC-TYPE-EXAMINATION CERTIFICATE PTB 00 ATEX 1052
(Translation)

Equipment: Power distribution, switch and control gear assembly, types 35. and 36.

Marking:  **II 2 G EEx e II T6 or EEx ed IIC T6 or EEx ia IIC T6 or
EEx e [ia] IIC T6 or EEx ed [ia] IIC T6**

Manufacturer: ROSE Systemtechnik GmbH + Co. KG

Address: Erbeweg 13, 32457 Porta Westfalica, Germany

Description of supplements and modifications

The power distribution, switch and control gear assembly of types 35. and 36. may also be employed in areas in which explosive atmospheres with dust/air mixtures have to be expected to occur.


Separately certified control and signalling devices as well as fuses designed to type of protection Flameproof Enclosure "d" and Encapsulation "m" may be fitted.

The empty enclosure specified in the 1st supplement for PTB 00 ATEX 1101 may be used.

The temperature class is extended and will now also cover classes T5 and T4, respectively. The maximum permissible ambient temperature of the separately certified operators shall duly be considered.

The rated voltage will be increased to 1500 V.

The marking changes to read

 **II 2 G/D EEx edm ia [ia] IIC T6, T5 or T4 IP66 T 85 °C, T 100 °C or T135 °C**

The composition of the protection symbol will be based on the types of protection of components actually used.

Technical data

Rated voltage:* up to 1500 V
Rated current:* max. 500 A
Cross-sectional area of plan conductor:* max. 240 mm²
Cross-sectional area of protective conductor:* max. 120 mm²

*) depending on the type of terminal and the components used

Shock protection, protection against solid bodies,
and protection against ingress of water: IP66 acc. to EN 60529:1991 as a minimum

Ambient temperatures: -20 °C to +55 °C with CR, NBR and PU-Fermapor seal
-55 °C to +55 °C with silicone and HF seal
-55 °C to +90 °C with silicone foam seal produced by SICO
-20 °C to +55 °C with glass / polycarbonate pane

Test report: PTB Ex 03-13125

Zertifizierungsstelle Explosionsschutz

By order:

Dr.-Ing. U. Klausmeyer
Regierungsdirektor



Braunschweig, June 19, 2003