

TROX GmbH

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## ATEX-Specific Supplementary Operating Instructions for System-Powered Controllers Type RN and EN



### ATEX-Specific Supplementary Operating Instructions



**RN-Ex**  
**EN-Ex**

#### 1. General Information

These Supplementary Operating Instructions contain fundamental information that must be complied with during installation, operation and maintenance in potentially explosive atmospheres. It is therefore essential that these instructions be read by the installation and operating technicians prior to installation and operation and always be kept on hand at the installation site.

In addition to these **Supplementary Operating Instructions**, the following operating instructions must also be complied with at all times to prevent risks:

- Product operating instructions for types RN-Ex and EN-Ex (E016EA5; E016EA6)
- Installation, initial operation and maintenance instructions for types RN and EN (E016KC2; E016KC4)

These Supplemental Operating Instructions do not take into account local regulations. The operator is responsible for ensuring compliance with any such regulations, including on behalf of any hired installation personnel.

Please contact TROX GmbH if any additional information is required or in the event of any damage to the equipment.

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## ATEX-Specific Supplementary Operating Instructions for System-Powered Controllers Type RN and EN

### 1.1 Application and Intended Use

Each specific construction of equipment used in potentially explosive atmospheres of zones 1, 2 & 21, 22 must be accepted and ATEX-certified for such use.

The system-powered controllers type EN and RN must have the certifications specified under European Community Directive 94/9/EG and must bear the corresponding ATEX certification.

The intended use also includes compliance with the conditions specified by TROX for installation, initial operation and maintenance (see standard, installation, initial operation and maintenance instructions). Any use deviating from or extending beyond that outlined here is not considered to be the intended use. TROX shall not be liable for damage resulting from improper use.

### 1.2 Information on Products and Operating Conditions

#### 1.2.1 Certification

The explosion-proof system-powered controllers type EN and RN are ATEX-certified as follows:

 II 2 G D c 80 °C (T6)  TÜV 05 ATEX 7159 X

### 2. Basic Safety Information

In addition to the basic safety information included in the standard installation, commissioning and maintenance instructions, the special safety information outlined in these Supplementary Operating Instructions must also be complied with.

#### Personnel Qualification and Training

The installation, inspection and maintenance personnel must possess the appropriate qualification to work in potentially explosive atmospheres.

The operator must further ensure that all persons involved in the installation, initial operation, operation and maintenance of the controllers understand the content of the Special Operating Instructions in their entirety.

#### Hazards of Noncompliance with Safety Information

The type EN and RN controllers and their components are constructed according to the state of the art and are operationally reliable. Nevertheless, operator errors or misuse present a risk of:

- Personal injury or death
- Material damage to the controller or other material assets of the operator

#### Restrictions

The controllers are intended solely for use in supply and exhaust air ventilation systems in explosion zones 1, 2 and 21, 22 up to a maximum differential pressure range of 50-1000 Pa and a maximum operating temperature of 50 °C. The controllers type RN-Ex and EN-Ex may not be equipped with an electric actuator.

The controllers may only be used if their safety features are in perfect working order!

Failure to comply with safety information renders any damage claims null and void.

#### Working Safely

It is important that you observe the safety information in these Supplementary Operating Instructions and in the specific standard operating instructions of the corresponding system-powered controller, current national and international regulations on explosion and accident prevention, and the operator's in-house work, operational and safety regulations.

#### Residual Risks

The controllers may pose the following residual risks:

Even if all necessary safety measures have been taken, there is a residual risk from mechanical damage. The controller must therefore be installed in such a way that it is protected from damage through mechanical influences.

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### 3. Installation and Initial Operation

#### 3.1 Visual Inspection of Controller

Prior to installation in the ventilation system, inspect the controller for any damage that could hinder the smooth operability of the control blade.

#### 3.2 Lubrication

Do not apply oil or grease to the controller bearings. They must be dry to operate properly.

#### 3.3 Connection to the Ventilation Duct

The controller must be connected to the ventilation ducts with electrical continuity at both ends.

#### 3.4 Earthing



To prevent the risk of static charging, the controller must be connected to the on-site equipotential at the proper earthing point.

### 4. Maintenance Information

The system's operational reliability and service life depend on many factors, including proper maintenance and repair.

Please observe the following maintenance instructions of these Supplementary Operating Instructions as well as the maintenance provisions in the standard operating instructions for the system-powered controllers type EN and RN.

#### Basic Requirements

- Perform all specified maintenance and inspections tasks in a timely manner.
- Notify operating personnel prior to the start of maintenance and servicing work.
- Secure all system and operational components upstream and downstream from the equipment against unsupervised startup.
- Refer to the personal protective measures in the operator's material safety data sheet.
- Take the appropriate measures to eliminate the risk from contact with or inhalation of dangerous liquids, gases, vapors and dusts.

We recommend taking the following precautions during maintenance operations:

- Make sure the controller is attached securely.
- Make sure the earthing is seated securely and is making good contact.
- Perform a visual check of the controller body for mechanical damage. If any damage is detected, replace the controller.
- Do not apply oil or grease to the controller bearings. The bearings must be dry to operate properly.

We recommend consulting TROX personnel the first time repairs to the controller are needed. This will provide an opportunity to train your own maintenance personnel. We strongly recommend creating a maintenance plan.

Any liability or warranty on the part of Gebrüder TROX GmbH for damages resulting from the use of non-original replacement parts is excluded.

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## ATEX-Specific Supplementary Operating Instructions for System-Powered Controllers Type RN and EN



TÜV Rheinland Group

### Baumusterprüfbescheinigung

(1)

(2) Geräte und Schutzsysteme zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen - Richtlinie 94/9/EG

(3) Baumusterprüfbescheinigungsnummer:

**TÜV 05 ATEX 7159 X**



(4) **Gerät:** Konstantvolumenstromregler RN und EN

(5) **Hersteller:** Gebrüder Trox GmbH

(6) **Anschrift:** 47504 Neukirchen- Vluyn  
Heinrich- Trox- Platz

(7) Die Bauart dieses Gerätes sowie die verschiedenen zulässigen Ausführungen sind in der Anlage zu dieser Baumusterprüfbescheinigung festgelegt.

(8) Die TÜV CERT-Zertifizierungsstelle für Ex-Schutz-Produkte der TÜV Industrie Service GmbH, TÜV Rheinland Group, bescheinigt die Erfüllung der grundlegenden Sicherheits- und Gesundheitsanforderungen für die Konzeption und den Bau von Geräten und Schutzsystemen zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen gemäß Anhang II der Richtlinie 94/9/EG.

Die Ergebnisse der Prüfung sind in dem vertraulichen Prüfbericht Nr.194 /Ex 159 00 /05 festgelegt.

(9) Die grundlegenden Sicherheits- und Gesundheitsanforderungen werden erfüllt durch Übereinstimmung mit

EN 1127-1:1997

EN 13463-1: 2001

EN 13463-5: 2003

(10) Falls das Zeichen „X“ hinter der Bescheinigungsnummer steht, wird auf besondere Bedingungen für die sichere Anwendung des Gerätes in der Anlage zu dieser Bescheinigung hingewiesen.

(11) Diese Baumusterprüfbescheinigung bezieht sich nur auf Konzeption und Prüfung des festgelegten Gerätes gemäß Richtlinie 94/9/EG. Weitere Anforderungen dieser Richtlinie gelte für die Herstellung und das Inverkehrbringen dieses Gerätes. Diese Anforderungen werden durch diese Bescheinigung nicht abgedeckt.

(12) Die Kennzeichnung des Gerätes muss die folgenden Angaben enthalten:

II 2 G D

c 80°C (T6)

TÜV CERT-Zertifizierungsstelle für Explosionsschutz

Am Grauen Stein 1  
D-51101 Köln

Dipl.-Ing. Klaus Wettingfeld

Köln, 20.06.05

Diese Baumusterprüfbescheinigung hat ohne Unterschrift und Stempel keine Gültigkeit.  
Diese Baumusterprüfbescheinigung darf nur unverändert verbreitet werden. Auszüge und Änderungen bedürfen der Genehmigung der  
TÜV Cert-Zertifizierungsstelle für Ex-Schutz-Produkte  
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### 1. Ergänzung gemäß Richtlinie 94/9/EG Anhang III Ziffer 6 zur Baumusterprüfbescheinigung TÜV 05 ATEX 7159 X

**Gerät:** Konstantvolumenstromregler RN und EN  
**Hersteller:** Gebrüder Trox GmbH  
**Anschrift:** Heinrich-Trox-Platz 47504 Neukirchen-Vluyn

#### Beschreibung der Ergänzungen und Änderungen

Die Konstantvolumenstromregler können aus feuerverzinktem Stahlblech oder nun alternativ auch aus Stahlblech mit Pulverbeschichtung hergestellt werden.

#### Technische Daten

Die technischen Daten bleiben unverändert gegenüber dem Grundschein.

**Prüfbericht- Nr.:** 194/Ex 159-01/09

#### Besondere Bedingungen / Special conditions for safe use

Es gelten die im Grundschein aufgeführten Bedingungen.

#### Sicherheitsrelevante Informationen / Safety-relevant information

Es gelten die im Grundschein aufgeführten Bedingungen.

TÜV CERT-Zertifizierungsstelle

Köln, 02.06.2009

Dipl.-Ing. Heinz Farke



Diese Ergänzung zur EG-Baumusterprüfbescheinigung hat ohne Unterschrift und Stempel keine Gültigkeit.  
Diese Ergänzung zur EG-Baumusterprüfbescheinigung darf nur unverändert verbreitet werden.  
Auszüge und Änderungen bedürfen der Genehmigung der TÜV Cert-Zertifizierungsstelle für Ex-Schutz-Produkte

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Seite 1 / 1

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