

### **IECEx Certificate** of Conformity

### INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification System for Explosive Atmospheres**

for rules and details of the IECEx Scheme visit www.iecex.com

R. Schuller

Certificate No.: **IECEx KEM 07.0051X** Page 1 of 4

Issue No: 4 Status: Current

2024-01-31 Date of Issue:

R. STAHL Schaltgeräte GmbH Applicant:

Am Bahnhof 30 74638 Waldenburg

Germany

Equipment: Control Panel Type 8264/5

Optional accessory:

Type of Protection: Ex d, Ex e, Ex i, Ex m and Ex t

Ex db .. II.. T.. Gb Marking:

Ex tb IIIC T.. °C Db See Annex 1 for details

Approved for issue on behalf of the IECEx

Certification Body:

Position: **Certification Manager** 

Signature:

(for printed version)

(for printed version)

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Certificate history: Issue 3 (2016-09-14)

Issue 2 (2014-04-24) Issue 1 (2009-05-11)

Issue 0 (2007-11-09)

Certificate issued by:

**DEKRA Certification B.V.** Meander 1051 6825 MJ Arnhem **Netherlands** 





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Manufacturer: R. STAHL Schaltgerate GmbH

> Am Bahnhof 30 74638 Waldenburg

Germany

Manufacturing R. STAHL Schaltgerate GmbH

locations: Am Bahnhof 30 74638 Waldenburg

Germany

Electromach B.V. Member of the R.

**STAHL Technology Group** Jan Tinbergenstraat 193 7559 SP Hengelo **Netherlands** 

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

#### STANDARDS:

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements

Edition:7.0

IEC 60079-1:2014 Edition:7.0

Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

IEC 60079-11:2011

Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i" Edition:6.0

IEC 60079-18:2017

Explosive atmospheres - Part 18: Protection by encapsulation "m"

Edition:4.1

IEC 60079-28:2015 Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation

Edition:2

Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

IEC 60079-31:2013

Edition:2 IEC 60079-5:2015

Explosive atmospheres -Part 5: Equipment protection by powder filling "q"

Edition:4.0

Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

IEC 60079-7:2017 Edition:5.1

This Certificate does not indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

#### **TEST & ASSESSMENT REPORTS:**

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

NL/KEM/ExTR07.0049/03

**Quality Assessment Report:** 

DE/BVS/QAR10.0002/19



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#### **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

The Control Panel Type 8264/5...... consists of one or more enclosures in type of protection flameproof enclosure "d" or type of protection: dust ignition protection by enclosure "t", in which the electrical apparatus is mounted. The electrical connection is made by direct entry or by using separately certified terminal boxes or control and distribution boxes in type of protection increased safety "e". Combinations of enclosures are allowed and separately certified electrical apparatus can be installed in or mounted to the enclosure, according to the technical details laid down in the test documentation.

For information about nomenclature, type of protection, thermal data, temperature class and electrical data see Annex 1.

Annex 2 is a Product List of parts used, certified to earlier editions of the standards, for type 8264/5. Technical Differences evaluated and found satisfactory.

#### SPECIFIC CONDITIONS OF USE: YES as shown below:

- The flameproof joints are not intended to be repaired.
- The property classes of the screws are A70 for M10 and A80 for M12 and M14.
- For the ambient temperature ranges see Annex 1.
- The enclosures may be mounted with the flanged joint free from solid obstacles for at least 10 mm.
- Painted enclosures shall not be used in areas with prolific charge generating mechanisms such as fast moving particles along surface, pneumatic transfer of powders and charge spraying.
- · The condition of the paint of the painted enclosures shall be checked periodically. Damaged paint shall be repaired.
- Applicable Specific Conditions of Use of certified Ex Equipment used with the Control Panel shall be considered and passed through to the user.



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### **DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)**

Assessment to latest edition of standards Updated list of installed components & equipment Addition of heating system

#### Annexes:

224799800-ExTR07.0049.03-Annex1.pdf 224799800-ExTR07.0049.03-Annex2.pdf

## Annex 1 to Report No. NL/DEK/ExTR07.0049/03 IECEx KEM 07.0051X



### Type designation

8264	/	*	*	*	*	-	*	*	*	*
а	/	b	С	d	е	-	f	g	h	i

а	Type / Series					
b	Design	5 = control				
С	Enclosure size – Length [mm]:	0 = Combination				
		1 = 235				
		2 = 360				
		3 = 480				
		9 = 730				
d	Enclosure size – Width [mm]:	0 = Combination				
		1 = 235				
		2 = 360				
		3 = 480				
		9 = 730				
е	Enclosure size – Height [mm]:	0 = Combination				
		2 = 270 (stainless steel)				
		3 = 340 (stainless steel)				
		4 = 260 (aluminium, casted, sheet cover)				
		5 = 330 (aluminium, casted, sheet cover)				
		6 = 465 (Welded)				
		7 = 570 (Welded)				
		8 = 480 (Welded, retaining / captive screws)				
		9 = 585 (Welded, retaining / captive screws)				
f	Enclosure material	2 = Stainless steel				
		3 = Aluminium				
g.	g i Additional variations filled in, if required not affecting certification					

### Marking

The following marking can be used according to the type of protection required for installed equipment and components to flameproof enclosure:

(1) Protection level: db, eb, ia, ib, [ia Gb], mb, op is, op pr, q

(2) Subdivision of Group II: IIB or IIB+H<sub>2</sub>
(3) Temperature class: T6, T5 or T4

(4) Maximum surface temperature: T80 °C, T95 °C or T130 °C

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#### Thermal data

Enclosures	Ambient temperature range for equipment using these Ex Components.	
All types for IIB and IIIC except: - type 8264/-997-2 with cemented cold plates and - type 8264/6 with window	-60 °C to +60 °C	
Type 8264/* for IIB + H2 with internal heating system		
Type 8264/6 with window for IIB and IIIC	-40 °C to +60 °C	
All types for IIB + H <sub>2</sub>	-20 °C to +60 °C	
Type 8264/-997-2 with cemented cold plates (IIB only)		

The maximum ambient temperature range shall be adjusted according to the installed built-in and add-on equipment and/or components.

### **Temperature class**

The temperature class of the Control Panel T4 to T6 is based on the power dissipation of the apparatus and components mounted in the flameproof enclosure and on the temperature class of the components mounted in the terminal box or control and distribution boxes. The lowest temperature class is normative. The maximum surface temperature T 80 °C, T 95 °C or T 130 °C is related to the temperature class of the control panel.

#### **Electrical data**

The data are dependent on the built-in apparatus and the cable entries and feed-throughs used and are to be taken from the applicable certificates and manufacturers' data.

Rated voltage max. 11 kV
Rated current max. 1250 A
Nominal conductor cross section max. 630 mm²

For I/O circuits in type of protection intrinsic safety, the category of intrinsic safety ("ia" or "ib"), gasgroup and the electrical data has to be derived from the certificate of the applicable barriers and/or isolators.

Internal cells and batteries used have a maximum capacity of 1.5 Ah.

## Annex 2 to Report No. NL/DEK/ExTR07.0049/03 IECEx KEM 07.0051X



Product List of parts used, certified to earlier editions of the standards, for type 8264/5. Technical Differences evaluated and found satisfactory – for details see ExTR NL/DEK/ExTR07.0049/03 Appendix A.

Manufacturer	Component Type	Component Description	IECEx Cert. No.	Standard Edition
Cortem SpA	ECD-1, ECD-2	Breather Gland	IECEx CES 14.0016U	IEC 60079-0 Ed 6.0
Eaton Electrical Systems (Redapt, Raxton, Capri)	CF, CB, CK, CQ, CQM, CY, PA-D/PA-U, PB-U/PB-D, PD-E4, PD-U, PH-E	Stopping Plug (Blanking Element)	IECEx ITS 16.0012X	IEC 60079-0 Ed 6.0
General Monitors Limited	11159 (HC); 51457 (H2S)	Universal Gas Sensors HC & H2S Sensor Heads	IECEx SIR 07.0007U	IEC 60079-0 Ed 6.0
Nuova ASP SRL	PLG	Stopping Plug (Blanking Element)	IECEx INE 16.0013X	IEC 60079-0 Ed 6.0
Nuova ASP SRL	ECD (Series V)	Breather Gland	IECEx EXA 14.0005U	IEC 60079-0 Ed 6.0 IEC 60079-1 Ed 6.0
R. STAHL Schaltgeräte GmbH	9731/110-1, 9731/110-2	Bushing	IECEx TRC 15.0001X	IEC 60079-0 Ed 6.0 IEC 60079-1 Ed 6.0
R. STAHL Schaltgeräte GmbH	9442/35-10-00	CPU / Power Modul	IECEx PTB 17.0031X	IEC 60079-0 Ed 6.0
R. STAHL Schaltgeräte GmbH	8175	Bushing	IECEx PTB 06.0082X	IEC 60079-0 Ed.4 IEC 60079-1 Ed.4 IEC 61241-0 Ed.1 IEC 61241-1 Ed.1
R. STAHL Schaltgeräte GmbH	8176/.	Bushing	IECEx PTB 08.0056U	IEC 60079-0 Ed.5 IEC 60079-1 Ed.6 IEC 61241-0 Ed.1 IEC 61241-1 Ed.1
R. STAHL Schaltgeräte GmbH	9004/	Safety Barrier	IECEx PTB 12.0003X	IEC 60079-0 Ed 6.0
R. STAHL Schaltgeräte GmbH	9001/1	Safety Barrier	IECEx PTB 09.0001X	IEC 60079-0 Ed 6.0

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R. STAHL Schaltgeräte GmbH	9002/1	Safety Barrier	IECEx PTB 08.0057X	IEC 60079-0 Ed 6.0
R. STAHL Schaltgeräte GmbH	8174/1, 8174/2, 8174/8	Bushing	IECEx PTB 06.0081U	IEC 60079-0 Ed 6.0
R. STAHL Schaltgeräte GmbH	8171/.	Bushing	IECEx PTB 06.0080U	IEC 60079-0 Ed 5.0 IEC 60079-1 Ed 6.0
R. STAHL Schaltgeräte GmbH	8264/-	Empty enclosure	IECEx KEM 07.0050U	IEC 60079-0 Ed 6.0
R. STAHL Schaltgeräte GmbH	9270/11-19-15, 9270/21-14-14	Switching Repeater	IECEx IBE 17.0046X	IEC 60079-0 Ed 6.0
R. STAHL Schaltgeräte GmbH	9276/10-2 00	Digital Output Loop Powered	IECEx IBE 17.0045X	IEC 60079-0 Ed 6.0
R. STAHL Schaltgeräte GmbH	9275/10-2 11	Digital Output	IECEx IBE 17.0044X	IEC 60079-0 Ed 6.0
R. STAHL Schaltgeräte GmbH	9270/11-16-14, 9270/11-17-15, 9270/21-17-14	Switching Repeater	IECEx IBE 17.0043X	IEC 60079-0 Ed 6.0
R. STAHL Schaltgeräte GmbH	9730/26-11	HF isolator - Antenna Coupler	IECEx EMT 16.0031X	IEC 60079-0 Ed 6.0
R. STAHL Schaltgeräte GmbH	9175/.0-11.	Binary Output	IECEx BVS 10.0050X	IEC 60079-0 Ed 6.0
R. STAHL Schaltgeräte GmbH	9165/11-1.	Isolating Repeater	IECEx BVS 10.0011X	IEC 60079-0 Ed 6.0
R. STAHL Schaltgeräte GmbH	9163/1.	Isolating Repeater Input	IECEx BVS 08.0050X	IEC 60079-0 Ed 6.0
R. STAHL Schaltgeräte GmbH	9160/1.	Transmitter Supply Unit	IECEx BVS 08.0050X	IEC 60079-0 Ed 6.0
R. STAHL Schaltgeräte GmbH	9170/0-1., 9170/1-1., 9170/4-1.	Switching Repeater	IECEx BVS 09.0041X	IEC 60079-0 Ed 6.0
R. STAHL Schaltgeräte GmbH	9185/1110	Fieldbus Isolating Repeater	IECEx BVS 06.0004X	IEC 60079-0 Ed 6.0
R. STAHL Schaltgeräte GmbH	9182/.0-51.	Temperature Transmitter	IECEx BVS 09.0046X	IEC 60079-0 Ed 6.0
R. STAHL Schaltgeräte GmbH	9170/2., 9170/2-1., 9170/3-1.	Switching Repeater	IECEx BVS 09.0041X	IEC 60079-0 Ed 6.0
R. STAHL Schaltgeräte GmbH	9469/35-08-1.	Ex n HART Universal Module for Zone 2	IECEx DEK 17.0044X	IEC 60079-0 Ed 6.0

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R. STAHL Schaltgeräte GmbH	9471/35-16-1., 9472/35-16-1.	Digital Input Output Module (NAMUR) Digital Input Output Module 24 V for Ex n Zone 2	IECEx DEK 16.0010X	IEC 60079-0 Ed 6.0
R. STAHL Schaltgeräte GmbH	9260/23-11-10	Transmitter Supply Unit	IECEx BVS 17.0082X	IEC 60079-0 Ed 6.0
R. STAHL Schaltgeräte GmbH	9260/19-11-10	Transmitter Supply Unit	IECEx BVS 17.0081X	IEC 60079-0 Ed 6.0
R. STAHL Schaltgeräte GmbH	9260/13-11-10	Transmitter Supply Unit	IECEx BVS 17.0079X	IEC 60079-0 Ed 6.0
R. STAHL Schaltgeräte GmbH	9162/1.	Transmitter Supply Unit with Limit Value	IECEx BVS 15.0013X	IEC 60079-0 Ed 6.0
R. STAHL Schaltgeräte GmbH	9180/77-11	Resistance Isolator	IECEx BVS 10.0055X	IEC 60079-0 Ed 6.0
R. STAHL Schaltgeräte GmbH	9146/.0-16	Frequency Transmitter	IECEx BVS 13.0095X	IEC 60079-0 Ed 6.0
R. STAHL Schaltgeräte GmbH	9146/.0-11	Frequency Transmitter	IECEx BVS 13.0095X	IEC 60079-0 Ed 6.0
R. STAHL Schaltgeräte GmbH	9143/10 20	I.S. Power Supply	IECEx BVS 12.0009X	IEC 60079-0 Ed 6.0
R. STAHL Schaltgeräte GmbH	9143/10 10	I.S. Power Supply	IECEx BVS 12.0009X	IEC 60079-0 Ed 6.0
R. STAHL Schaltgeräte GmbH	9176/.0-100	Binary Output	IECEx BVS 13.0012X	IEC 60079-0 Ed 6.0
R. STAHL Schaltgeräte GmbH	9167/11-00	Isolating Repeater Loop Powered	IECEx BVS 11.0089X	IEC 60079-0 Ed 6.0
Sermatex Grün Equipamentos Eletricos Ltda	SGEX-REF-xx	Photocell	IECEx CSA 16.0050X	IEC 60079-0 Ed 6.0