



Product Service

(1) **EU type examination certificate**

(2) Equipment and protective systems intended for use in potentially explosive atmospheres - **Directive 2014/34/EU**

(3) Number of the EU type examination certificate:

**TPS 21 ATEX 092005 0010 X**      Version 00



(4) Device:                      Metal detector  
    DETECTION UNIT RG \*\*\*-GO-EX | DETECTION UNIT RF \*\*\*-GO-EX

(5) Type:

Detection Unit RG 50-GO-EX	Detection Unit RF 50-GO-EX
Detection Unit RG 80-GO-EX	Detection Unit RF 80-GO-EX
Detection Unit RG 100-GO-EX	Detection Unit RF 100-GO-EX
Detection Unit RG 120-GO-EX	Detection Unit RF 120-GO-EX
Detection Unit RG 150-GO-EX	Detection Unit RF 150-GO-EX
Detection Unit RG 200-GO-EX	Detection Unit RF 200-GO-EX
Detection Unit RG 250-GO-EX	Detection Unit RF 250-GO-EX

(6) Manufacturer:              Sesotec GmbH  
 (7) Address:                      Regener Str. 130  
    94513 Schönberg / GERMANY

(8) The model of this device as well as the various permissible versions are specified in the annex to this type examination certificate.

(9) TÜV SÜD Product Service GmbH certifies as notified body no. 0123 according to Article 17 of Directive 2014/34/EU of the European Parliament and of the Council of the European Union of February 26, 2014, the compliance with the essential health and safety requirements for the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres in accordance with Annex II of the Directive.      The results of the audit are set out in the confidential audit report 713213601.

(10) The essential health and safety requirements are met by conformity with:

<b>EN ISO 80079-36:2016</b>	<b>EN ISO 80079-37:2016</b>
<b>EN IEC 60079-0:2018</b>	<b>EN ISO 60079-31:2014</b>

(11) If the sign "X" is placed after the certificate number, special conditions for the safe use of the device are referred to in the annex to this certificate.

(12) This EU type examination relates only to the design and construction of the specified device in accordance with Directive 2014/34/EU. Other requirements of this directive apply to the manufacture and placing on the market of this device.

(13) The marking of the device must contain the following information:



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Detection Unit RG ***-GO-EX or De- tection Unit RF ***-GO-EX in all nominal scanning tube widths	⊕ ⊕ ⊕	II 1/2 D II 1/- D	Ex h tb Ex h	IIIC IIIC	T85°C T85°C	Da/Db Da/-
Control Unit GENIUS ONE EX Ambient temperature range for all combinations	⊕	II 2 D	Ex tb	IIIC	T85°C	Db
					-10°C ≤ T <sub>a</sub> ≤ 50°C	

Certification Body Explosion Protection  
Ridlerstraße 65, 80339 Munich

Munich, 20.09.2021

  
digitally signed by U. Jacobs on 20.09.2021  
Dipl.-Ing. Ulrich Jacobs



(14)

## Annex

(15) **EU type examination certificate TPS 21 ATEX 092005 0010 X** Version 00

(16) Description of the devices:

The metal detectors of the DETECTION UNIT RG and DETECTION UNIT RF series are devices for the inspection of bulk materials in free-fall conveying lines. These detect all magnetic and non-magnetic metal contaminants (steel, stainless steel, aluminium, ...) - even if they are included in the product.

The DETECTION UNIT RG/RF is mainly used in the food industry for products such as spices, flour, milk powder or in the chemical and pharmaceutical industry with similar applications and corresponding hygienic requirements.

The difference between DETECTION UNIT RG and DETECTION UNIT RF is the installed metal detection coil. The DETECTION UNIT RF uses a coil with slightly larger external dimensions to achieve even higher sensitivities. The general structure, such as sealing of the connection housing and potting, is identical.

Both systems are controlled by a GENIUS ONE (EX) control unit.

Technical data:

Designation		Value(s)
DETECTION UNIT RG ***-GO-EX and DETECTION UNIT RF ***-GO-EX		
	DETECTION UNIT and electronics housing	Stainless steel 1.4301 (AISI 304)
	Sensing tube	PTFE-EL
	Operating voltage	100-240 VAC, N, PE
	Maximum current consumption	0.8-0.4 A (nominal current 0.5 A-0.25 A)
	Max. operating frequency detector	600 kHz
Nominal width(***):		50, 80,100,120,150, 200, 250 [mm]
Product temperature		-10°C to +80°C
Ambient temperature		-10°C to +50°C
Climatic conditions		25-85% rH, non-condensing
Bulk materials:		Powder, fine-grained bulk materials, granules, flakes, etc.
Material flow:		Free fall (material backflow into the unit is not permissible)
Max. falling height of the bulk materials:		3m above top edge of device
Max. permissible pressure in the conveying line:		Pressureless conveying
Ex zones	Interior	20
	Exterior	21
		none
Minimum ignition energy of the dusts:		≥ 1 mJ
Ignition temperature of the dusts:		> 127.5°C
Glow temperature of the dusts:		> 160°C



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- (17) Test report: 713213601
- (18) Special conditions for use:
- With the RG \*\*\*-GO-EX Detection Unit or RF \*\*\*-GO-EX Detection Unit, only powders or other products may be tested according to the specifications in the technical data (point 3.2 Operating instructions).
  - The specific operating data (checklist) agreed with the manufacturer must be observed.
  - The equipment/plant components connected upstream and downstream of the Detection Unit RG \*\*\*-GO-EX or Detection Unit RF \*\*\*-GO-EX must be designed to be explosion-proof in such a way that no explosion can occur there or that an explosion cannot affect the separator.
  - If upstream and downstream apparatus / plant components are protected by constructive explosion protection measures (e.g. explosion pressure shock resistant design), then the metal Detection Unit must be explosion decoupled from these parts. For explosion decoupling, only decoupling systems (protective systems, e.g. burst discs or cellular wheel sluices) with a suitability certificate according to RL 2014/34/EU must be installed.
  - The instructions in these operating instructions must be observed at all times, this applies in particular to the permissible ambient and bulk material temperatures, the permissible free fall height of the bulk materials and the exclusion of certain aggressive materials to be conveyed and ambient media as well as the necessity of grounding the equipment.
- (19) Essential health and safety requirements:  
covered by standards listed under (9).