

Translation

(1) **EU-Type Examination Certificate**

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

(3)	Certificate Number	TÜV 14 ATEX 134822 X	Issue:	02
(4)	for the product:	Signal conditioning instrume VEGATOR 121 type TOR12 VEGATOR 122 type TOR12:	1 .**S/X****	

- (5) of the manufacturer: VEGA Grieshaber KG
 (6) Address: Am Hohenstein 113, 77761 Schiltach, Germany
 Order number: 8003032484
 Date of issue: 2021-07-06
- (7) The design of this product and any acceptable variation thereto are specified in the schedule to this EU-Type Examination Certificate and the documents therein referred to.
- (8) The TÜV NORD CERT GmbH, Notified Body No. 0044, in accordance with Article 17 of the Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential ATEX Assessment Report No. 21 203 296734 .

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

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EN IEC 60079-0:2018
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EN IEC 60079-7:2015/A1:2018

EN 60079-11:2012 EN IEC 60079-15:2019

except in respect of those requirements listed at item 18 of the schedule.

- (10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions for Use specified in the schedule to this certificate.
- (11) This EU-Type Examination Certificate relates only to the design, and construction of the specified product. 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 product shall include the following:

⟨Ex⟩ See "Type code and Marking"

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, notified 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 deputy of the head of the notified body



Digital unterschrieben von Meyer Andreas Datum: 2021.08.18 18:18:11 +02'00'

Meyer



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(14) EU-Type Examination Certificate No. TÜV 14 ATEX 134822 X

Issue 02

(15) Description of product:

The signal conditioning instruments VEGATOR 121 type TOR121 .**S/X**** and VEGATOR 122 type TOR122.****** are used for the supply of passive, intrinsically safe 8 mA/16 mA two wire measuring sensors, the safe galvanic separation of the intrinsically safe circuits from all non-intrinsically safe circuits and the evaluation of the analogue transmitted measuring data.

Type code and Marking:	II 3 (1) G Ex ec nC [ia Ga] IIC T4 Gc
VEGATOR 121 type TOR121 .**S/X**** VEGATOR 122 type TOR122.******	II 3 G (1) D Ex ec nC [ia IIIC Da] IIC T4 Gc II 3 G (M1) Ex ec nC [ia I Ma] IIC T4 Gc I (M1) [Ex ia Ma] I II (1) G [Ex ia Ga] IIC II (1) D [Ex ia Da] IIIC
Electrical data:	
Supply (Terminals 16/17)	For connection to non-intrinsically safe circuits with the following maximum values:
	U _n = 24230 V a.c (-15 +10%) U _n = 24 65 V d.c (-15 +10%) U _m = 253 V a.c
Relay outputs (Terminals	For connection to non-intrinsically safe circuits with the following maximum values:
Relay 1: 10/11/12 Relay 2: 13/14/15)	U _n = 253 V a.c; I _n = 3 A U _n = 60 V d.c; I _n = 1 A
Signal circuits (Terminals 1/2, 4/5)	In type of protection intrinsic safety Ex ia I/IIC/IIB(IIIC) with following maximum values per circuit:
Effective internal capacitance C_i Effective internal inductance L_i	$U_o = 22.4 V$ $I_o = 113.5 mA$ $P_o = 636 mW$ Characteristic line: linear Negligibly small Negligibly small

The maximum permissible values for the external inductance L_{\circ} and the external capacitance C_{\circ} can be taken from the following tables:

Ev ia l	L _o [mH]	58	20	0.5	0.2	0.1
	C _o [µF]	2	3.1	3.8	4.8	5.5

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Schedule to EU-Type Examination Certificate No. TÜV 14 ATEX 134822 X Issue 02

Ex ia IIC	L₀ [mH]	1.9	1	0.5	0.2	0.1
	C₀ [µF]	0.058	0.076	0.097	0.13	0.156
Ex ia IIB (IIIC)	L₀ [mH]	16	10	5	0.5	0.2
	C₀ [µF]	0.6	0.69	0.69	0.86	1.09

The intrinsically safe signal circuit is safe galvanically separated from the non-intrinsically safe circuits up to a peak value of the voltage of 375 V.

Thermal data:

Permissible ambient temperature range: $-20 \degree C \le Ta \le +60 \degree C$.

(16) Drawings and documents are listed in the ATEX Assessment Report No. 21 203 296734

(17) Specific Conditions for Use:

- For EPL Gc applications the signal conditioning instruments VEGATOR 121 type TOR121 .**S/X**** and VEGATOR 122 type TOR122.******* have to be installed in a suitable enclosure according to EN 60079-7 resp. EN 60079-15 in such a way that a degree of protection of at least IP54 is achieved.
- 2. For EPL Gc applications the signal conditioning instruments VEGATOR 121 type TOR121 .**S/X**** and VEGATOR 122 type TOR122.****** have to be erected in such a way that a pollution degree 2 or less, according to EN 60664-1, is achieved.
- For EPL Gc applications measures have to be taken, external to the signal conditioning instruments VEGATOR 121 type TOR121 .**S/X**** and VEGATOR 122 type TOR122.******, to provide a transient protection that ensures that the rated voltage, connected to the power supply terminals, is not exceeded by more than 40 %.
- 4. For EPL Gc applications the connecting and disconnecting of non-intrinsically safe circuits is only permitted in the absence of a potentially explosive atmosphere.

(18) Essential Health and Safety Requirements: No additional ones.

- End of EU-Type Examination Certificate -

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(1) EU-Type Examination Certificate

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



- (3) Certificate Number
 (4) for the product:
 VEGATOR TOR 121.A A/C/F/O/U X **** VEGATOR TOR 121.A A/C/F/O/U S **** VEGATOR TOR 122.A A/C/F/O/U X ****
- (5) of the manufacturer: VEGA Grieshaber KG

(6) Address: Am Hohenstein 113, 77761 Schiltach

Order number: 8003005932

Date of issue: 2019-05-28

- (7) The design of this product and any acceptable variation thereto are specified in the schedule to this EU-Type Examination Certificate and the documents therein referred to.
- (8) The TÜV NORD CERT GmbH, Notified Body No. 0044, in accordance with Article 17 of the Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential ATEX Assessment Report No. 19 203 244966.

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

EN 60079-0:2012+A11:2013 EN 60079-11:2012

except in respect of those requirements listed at item 18 of the schedule.

- (10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions for Use specified in the schedule to this certificate.
- 11) This EU-Type Examination Certificate relates only to the design, and construction of the specified product. 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 product shall include the following:

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, notified 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 notified body

Hanover office, Am TÜV 1, 30519 Hannover, Tel. +49 511 998-61455, Fax +49 511 998-61590



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(14) EU-Type Examination Certificate No. 14 ATEX 134822 issue 01

(15) Description of product

The signal conditioning instruments type VEGATOR TOR 121.A A/C/F/O/U X **** VEGATOR TOR 121.A A/C/F/O/U S **** VEGATOR TOR 122.A A/C/F/O/U *****

are used for the supply of passive, intrinsically safe 8 mA/16 mA two wire measuring sensors, the safe galvanic separation of the intrinsically safe circuits from all non-intrinsically safe circuits and the evaluation of the analogue transmitted measuring data.

The permissible ambient temperature range is -20 °C ... +60 °C.

Electrical data

Supply Terminals 16/17) Signal circuits (Terminals 1/2, 4/5) U = 20...253 V a. c./d. c. $U_{m} = 253 V$ in type of protection "Intrinsic Safety" Ex ia IIC, IIB, I maximum values per circuit:

 $U_0 = 22.4 V$ = 113.5mA 0 P. = 636 mW characteristic line: linear

Ex ia	IIC	IIB	
max. permissible ext. inductance	0.5 mH	10 mH	10 mH
max. permissible ext. capacitance	0.095 µF	0.55 µF	1.2 µF

The maximum values of the tables are also allowed to be used up to the permissible limits as concentrated capacitances and as concentrated inductances.

The values for IIC and IIB are also permissible for explosive dust atmospheres.

Relay outputs (Terminals Relav 1: 10/11/12 Relay 2: 13/14/15) maximum values: 253 V a. c., 3A 60 V d. c., 1A

The intrinsically safe signal circuit is safe galvanically separated from the non-intrinsically safe circuits up to a peak value of the voltage of 375 V.

(16) Drawings and documents are listed in the ATEX Assessment Report No. 19 203 244966

(17) Specific Conditions for Use none

(18) Essential Health and Safety Requirements

no additional ones

- End of Certificate -

Translation



(1) Statement of Conformity

- (2) Equipment and protective systems intended for use in potentially explosive atmospheres, Directive 2014/34/EU
- (3) Statement of Conformity TÜV 14 ATEX 134826 X Number:

Issue:

- (4) for the product:
 - oduct: Evaluation devices type VEGATOR TOR 121.AAX**** VEGATOR TOR 121.AAS**** VEGATOR TOR 121.AAS**** VEGATOR TOR 122.AA*****
- (5) of the manufacturer: VEGA Grieshaber KG

(6) Address: Am Hohenstein 113, 77761 Schiltach

Order number: 8000473097

Date of issue: 2017-09-04

- (7) The design of this product and any acceptable variation thereto are specified in the schedule to this Statement of Conformity and the documents therein referred to.
- (8) The TÜV NORD CERT GmbH certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive. The examination and test results are recorded in the confidential ATEX Assessment Report No. 17 214 207957.
- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012+A11:2013 EN 60079-11:2012 EN 60079-15:2010

except in respect of those requirements listed at item 18 of the schedule.

- (10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to specific conditions for use specified in the schedule to this Statement of Conformity.
- (11) This statement of conformity relates only to the design, examination and tests of the specified product in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this Statement of Conformity.
- (12) The marking of the product must include the following:

(Ex) II 3 G Ex nA nC ic IIC T4 Gc

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, notified 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

Specialist Manager Explosion Protection

Meyer

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This statement of conformity may only be reproduced without any change, schedule included. Excerpts or changes shall be allowed by the TÜV NORD CERT GmbH



(14) Statement of Conformity No. TÜV 14 ATEX 134826 X issue 00

(15) Description of product

The signal conditioning instruments type VEGATOR TOR 121.AAX**** VEGATOR TOR 121.AAS**** VEGATOR TOR 122.AA*****

are used for the supply of passive, intrinsically safe 8 mA/16 mA two wire measuring sensors, the safe galvanic separation of the intrinsically safe circuits from all non-intrinsically safe circuits and the evaluation of the analogue transmitted measuring data.

Regarding the intrinsically safe signal circuits, an EU-Type Examination Certificate TÜV 14 ATEX 134822 exists.

The permissible ambient temperature range is -20 °C ... +60 °C.

<u>Electrical data</u> Supply (Terminals 16/17)

Signal circuits (Terminals 1/2, 4/5)

Relay outputs (Terminals Relay 1: 10/11/12 Relay 2: 13/14/15) U = 20 ... 253 V a. c./d. c. U_m = 253 V

See EU-Type Examination Certificate TÜV 14 ATEX 134822

maximum values: 253 V a. c., 3A 60 V d. c., 1A

(16) Drawings and documents are listed in the ATEX Assessment Report No. 17 214 207957.

(17) Specific conditions of use

According to EN/IEC 60079-15, section 6.3.1, the following is valid for this apparatus:

 The apparatus has to be mounted in a housing tested according to IEC 60079-0, that meets the requirements of degree of protection IP54.

or

b) The apparatus has to be mounted in a housing tested according to IEC 60079-0, that meets the requirements of degree of protection IP4X. Then, the apparatus may exclusively be mounted in locations providing adequate protection against the entry of solid foreign objects or liquids.

The apparatus may be installed in an area of not more than pollution degree 2.

(18) Essential Health and Safety Requirements

no additional ones

- End of Statement -

Translation

(1) Statement of Conformity

- (2) Equipment and protective systems intended for use in potentially explosive atmospheres, Directive 2014/34/EU
- (3) Statement of Conformity TÜV 14 ATEX 134826 X Number:

Issue:

TUV NORD

- (4) for the product:
 - product: Evaluation devices type VEGATOR TOR 121.AAX**** VEGATOR TOR 121.AAS**** VEGATOR TOR 121.AAS****
- (5) of the manufacturer: VEGA Grieshaber KG

(6) Address: Am Hohenstein 113, 77761 Schiltach

Order number: 8000473097

Date of issue: 2017-09-04

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(Ex) II 3 G Ex nA nC ic IIC T4 Gc

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Specialist Manager Explosion Protection

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(14) Statement of Conformity No. TÜV 14 ATEX 134826 X issue 00

(15) Description of product

The signal conditioning instruments type VEGATOR TOR 121.AAX**** VEGATOR TOR 121.AAS**** VEGATOR TOR 122.AA*****

are used for the supply of passive, intrinsically safe 8 mA/16 mA two wire measuring sensors, the safe galvanic separation of the intrinsically safe circuits from all non-intrinsically safe circuits and the evaluation of the analogue transmitted measuring data.

Regarding the intrinsically safe signal circuits, an EU-Type Examination Certificate TÜV 14 ATEX 134822 exists.

The permissible ambient temperature range is -20 °C ... +60 °C.

<u>Electrical data</u> Supply (Terminals 16/17)

Signal circuits (Terminals 1/2, 4/5)

Relay outputs (Terminals Relay 1: 10/11/12 Relay 2: 13/14/15) $U = 20 \dots 253 V a. c./d. c.$ $U_m = 253 V$

See EU-Type Examination Certificate TÜV 14 ATEX 134822

maximum values: 253 V a. c., 3A 60 V d. c., 1A

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or

b) The apparatus has to be mounted in a housing tested according to IEC 60079-0, that meets the requirements of degree of protection IP4X. Then, the apparatus may exclusively be mounted in locations providing adequate protection against the entry of solid foreign objects or liquids.

The apparatus may be installed in an area of not more than pollution degree 2.

(18) Essential Health and Safety Requirements

no additional ones

- End of Statement -