防爆合格证

证　号：GYJ21.1236X

制　造　商　VEGA Grieshaber KG

（地址：Am Hohenstein 113, Schiltach, Germany）

产品名称　防爆隔离器

型号规格　VEGATRENN 141(a) 、VEGATRENN 142(a)

防爆标志　Ex ec [ia Ga] IIC T4 Gc
Ex ec [ia IIIC Da] IIC T4 Gc
Ex ec [ia I Ma] IIC T4 Gc

产品标准　/

图样编号　GE3467

经图样及技术文件的审查和样品检验，确认上述产品符合下列标准：

GB/T 3836.1-2021,GB/T 3836.3-2021,GB/T 3836.4-2021

特颁发此证。

本证书有效期：2021 年 05 月 25 日 至 2026 年 05 月 24 日

备注
1. 安全使用注意事项见本证书附件。
2. 证书编号后缀“X”表明产品具有安全使用特殊条件，内容见本证书附件。
3. 型号规格说明见本证书附件。
4. 本安电气参数见本证书附件。
5. 本证书同时适用于 VEGA Americas Inc.（3877 Mason Research Parkway, Mason, Ohio, 45036, USA）组装生产的相同型号产品。
6. [更改 1]（防爆标志、防爆标准、美国工厂地址变更）2023 年 6 月 15 日签发。

批　准

上海仪器仪表自控系统检验测试所有限公司
国家级仪器仪表防爆安全监督检验站

颁发日期二〇二一　年　五　月　二十五　日

本证书仅对与认可文件和样品一致的产品有效。

地址：上海市漕宝路103号
邮编：200233
网址：www.nepsi.org.cn
Email:info@nepsi.org.cn
电话：+86 21 64368180
传真：+86 21 64844580

66107-ZH-230615

EXPLOSION PROTECTION
CERTIFICATE OF CONFORMITY

Cert No. GYJ21.1236X

Manufacturer	**VEGA Grieshaber KG** **(Address: Am Hohenstein 113, Schiltach, Germany)**
Product	**Ex Separators**
Model	**VEGATRENN 141(*a*) 、 VEGATRENN 142(*a*)**
Ex marking	**Ex ec [ia Ga] IIC T4 Gc** **Ex ec [ia IIIC Da] IIC T4 Gc** **Ex ec [ia I Ma] IIC T4 Gc**
Product standard	**/**
Drawing number	**GE3467**

The product was found to comply with the following standard(s):

GB/T 3836.1-2021,GB/T 3836.3-2021,GB/T 3836.4-2021

Valid until: 2026.05.24

Remarks

1.Conditions for safe use are specified in the attachment(s) to this certificate.
2.Symbol "X" placed after the certification number denotes specific conditions of use, which are specified in the attachment(s) to this certificate.
3.Model designation is specified in the attachment(s) to this certificate.
4.Intrinsic safety parameters specified in the attachment(s) to this certificate.
5.This certificate also cover the product with the same type that manufactured by VEGA Americas Inc. (3877 Mason Research Parkway, Mason, Ohio, 45036, USA) .
6.[Variation I] (modify the standards and Ex-marking and foctory address in America) issued on 2023.06.15.

Approval

Shanghai Inspection and Testing Institute of Instruments and Automation Systems Co., Ltd.
National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation
Date of issue 2021.05.25

This Certificate is valid for products compatible with the documents and samples approved by NEPSI.

103 Cao Bao Road
Shanghai 200233, China
http://www.nepsi.org.cn
Email: info@nepsi.org.cn
Tel: +86 21 64368180
Fax: +86 21 64844580

GYJ21.1236X防爆合格证附件Ⅱ

由 VEGA Grieshaber KG 和 VEGA Americas Inc.生产的 VEGATRENN 14 系列防爆隔离器，经检验，符合下列标准：

GB/T 3836.1-2021 爆炸性环境 第1部分：设备 通用要求

GB/T 3836.3-2021 爆炸性环境 第3部分：由增安型“e”保护的设备

GB/T 3836.4-2021 爆炸性环境 第4部分：由本质安全型“i”保护的设备

产品防爆标志： Ex ec [ia Ga] IIC T4 Gc

Ex ec [ia IIIC Da] IIC T4 Gc

Ex ec [ia I Ma] IIC T4 Gc

防爆合格证号GYJ21.1236X。

产品具体认可型号为：

VEGATRENN 141(a)、VEGATRENN 142(a)

a代表OEM商预留位，无防爆无关项。

一、 产品安全使用特殊条件

产品防爆合格证号后缀“X”代表产品安全使用有特定条件：.

1. 设备的安装方向必须与说明书中相匹配。

2. 产品使用的区域污染等级不高于GB/T16935.1-2008（IEC 60664-1）定义的2级。

3. 产品在现场使用时，应安装于满足GB/T 3836.1-2021标准要求的IP54外壳中。

4. 使用环境温度：-20℃～+60℃。

二、 产品使用注意事项

1. 电气参数：

供电（端子16、17）：

VEGATRENN 141(a)： 24V~230V AC 50/60Hz 15VA；24V~65V DC 3W； Um=253VAC。

VEGATRENN 142(a)： 24V~31V DC 5W； Um=253VAC。

电流输出（VEGATRENN 141(a):端子10~12）或（VEGATRENN 142(a):端子10~15）：

4~20mA/HART；U≤16.5V；负载= 最大600 Ω(内部无HART电阻)；Um=253VAC。

传感器输入电路（VEGATRENN 141(a):端子1,2）或（VEGATRENN 142(a):端子1,2或4,5）：

4~20mA/HART；本安参数最大值Uo≤26.3V、Io≤100mA、Po≤658mW 线性 Ci=1.2nF Li≈0。

Ex ia	IIC		IIB,IIIC		IIA	I
Lo	0.2mH	1mH	0.2mH	2mH	10mH	5mH
Co	95.8nF	54.8nF	618.8nF	328.8nF	508.8nF	708.8nF
Lo/Ro	/		216uH/Ω	216uH/Ω	433uH/Ω	710uH/Ω

2. 用户不得自行更换该产品的零部件，应会同产品制造商共同解决运行中出现的故障，以杜绝损坏现象的发生。

3. 产品的安装、使用和维护应同时遵守产品使用说明书、GB/T 3836.13-2021“爆炸性环境 第13部分：设备的修理、检修、修复和改造”、 GB/T 3836.15-2017“爆炸性环境 第15部分：电气装置的设计、选型和安装”、GB/T 3836.16-2022“爆炸性环境 第16部分：电气装置的检查和维护” 、GB/T 3836.18-2017 “爆炸性环境 第18部分：本质安全电气系统”、GB50257-2014“电气设备安装工程爆炸和火灾危险环境电气装置施工及验收规范”。GB15577-2018 粉尘防爆安全规程。

三、 制造厂责任

1. 制造厂必须将上述使用特殊条件和注意事项纳入产品的使用说明书中。
2. 制造厂必须严格按照NEPSI认可的文件资料生产。
3. 产品铭牌中应至少包括下列内容：
   a) NEPSI认可标志（见防爆合格证书）
   b) 产品防爆标志
   c) 防爆合格证号
   d) 使用环境温度范围等

上海仪器仪表自控系统检验测试所有限公司
国家级仪器仪表防爆安全监督检验站
二〇二二年六月十五日

注：本附件Ⅱ代替附件Ⅰ

Attachment Ⅱ to GYJ21.1236X

Ex Separators types VEGATRENN 14 series manufactured by VEGA Grieshaber KG and VEGA Americas Inc. has been certified, this product accords with following standards:

GB/T 3836.1-2021 Explosive atmospheres-Part 1: Equipment-General Requirements

GB/T 3836.3-2021 Explosive atmospheres-Part 3: Equipment protection by increased safety "e"

GB/T 3836.4-2021 Explosive atmospheres-Part 4: Equipment protection by intrinsic safety "i"

The Ex marking is Ex ec [ia Ga] IIC T4 Gc
Ex ec [ia IIIC Da] IIC T4 Gc
Ex ec [ia I Ma] IIC T4 Gc

The certificate number is GYJ21.1236X.

Type designation:

VEGATRENN 141(a)、VEGATRENN 142(a)

a denotes reserved for OEM partners with same device, not relevant for Ex approval.

1. Special condition for safe use

Symbol "X" denotes special condition for safe use:

1.1 The installation orientation of the device must be in accordance with the instructions.

1.2 The device may only be used in an area with a pollution degree of 2 or better.

1.3 The equipment must be mounted in a housing that has been tested according to GB/T 3836.1-2021 and meets the requirements of protection class IP54.

1.4 Ambient temperature: -20℃～+60℃

2. Condition for safe use

2.1 Electrical ratings:

Power supply nominal range (terminals 16,17):

VEGATRENN 141: 24V~230V AC 50/60Hz 15VA; 24V~65V DC 3W; Um=253VAC.

VEGATRENN 142: 24V~31V DC 5W; Um=253VAC.

Current output（VEGATRENN 141: terminals 10~12）or（VEGATRENN 142: terminals 10~15）:

4~20mA/HART; U≤16.5V; load= max.600 Ω(without internal HART resistor); Um=253VAC.

Sensor input circuit（VEGATRENN 141: terminals 1,2）or（VEGATRENN 142: terminals 1,2或4,5）:

4~20mA/HART; Maximum values of the intrinsically safe signal circuit :Uo≤26.3V、Io≤

100mA、Po≤658mW characteristic: linear Ci=1.2nF Li≈0。

Ex ia	IIC		IIB,IIIC		IIA	I
Lo	0.2mH	1mH	0.2mH	2mH	10mH	5mH
Co	95.8nF	54.8nF	618.8nF	328.8nF	508.8nF	708.8nF
Lo/Ro	/		216uH/Ω	216uH/Ω	433uH/Ω	710uH/Ω

2.2 The user shall not replace the parts of the product by himself. The user shall work with the product manufacturer to solve the failure during operation to prevent the occurrence of damage.

2.3 During the installation, using and maintenance, the user shall folloing the instruction and following standards:

GB/T3836.13-2021 Explosive atmospheres-Part 13: Equipment repair, overhaul and reclamation

GB/T3836.15-2017 Explosive atmospheres-Part 15: Eletrical installations design, selection and erection

GB/T3836.16-2022 Explosive atmospheres-Part 16: Eletrical installations inspectio and maintenance

GB/T3836 18-2017 Explosive atmospheres-Part 18: Intrinsically safe electrical systems

GB50257-2014 Code for construction and acceptance of electric device for explosion atmospheres and fire hazard electrical equipment installation engineering.

GB15577-2018 Safety regulations for dust explosion protection .

3. Manufacturer's Responsibility

3.1 Condition for safe use specified above should be included in the instruction manual.

3.2 Manufacturing should be done according to the documentation approved by NEPSI.

3.3 Following items should be added to the nameplate

a) NEPSI logo
b) Ex marking
c) Number of certificate
d) Ambient temperature range

Shanghai Inspection and Testing Institute of Instruments and Automation Systems Co., Ltd.
National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation
Jun. 15th, 2023

Note: This annex II replaces Annex I