



防爆合格证

证 号: GYJ21.1235X

由 VEGA Grieshaber KG

制造的产品:

(地址: Am Hohenstein 113, Schiltach, Germany)

名 称 防爆隔离器

型 号 规 格 VEGATRENN 141 (a) 、 VEGATRENN 142 (a)

防 爆 标 志 [Ex ia Ga] IIC , [Ex iaD] , [Ex ia Ma] I

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 GB 3836.1-2010, GB 3836.4-2010, GB 3836.20-2010, 标准,
GB 12476.1-2013, GB 12476.4-2010,
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. (4241 Allendorf Drive, Cincinnati, Ohio 45209, USA) 组装生产的相同型号产品。

站 长



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。

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EXPLOSION PROTECTION

CERTIFICATE OF CONFORMITY

Cert NO.GYJ21.1235X

This is to certify that the product

Ex Separators

manufactured by VEGA Grieshaber KG

(Address:Am Hohenstein 113, Schiltach, Germany)

which model is VEGATRENN 141(a) 、 VEGATRENN 142(a)

Ex marking [Ex ia Ga] IIC , [Ex iaD] , [Ex ia Ma] I

product standard /

drawing number GE3467

has been inspected and certified by NEPSI, and that it conforms
to GB 3836.1-2010,GB 3836.4-2010,GB 3836.20-2010,GB 12476.1-2013,
GB 12476.4-2010,.

This Approval shall remain in force 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. (4241 Allendorf Drive, Cincinnati,Ohio 45209, USA).

Director

National Supervision and Inspection Centre for
Explosion Protection and Safety of Instrumentation

Issued Date 2021.05.25

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

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国家级仪器仪表防爆安全监督检验站

National Supervision and Inspection Centre for
Explosion Protection and Safety of Instrumentation

(GYJ21.1235X)

(Attachment I)

GYJ21.1235X防爆合格证附件 I

由 VEGA Grieshaber KG 和 VEGA Americas Inc.生产的 VEGATRENN 14 系列防爆隔离器, 经国家级仪器仪表防爆安全监督检验站(NEPSI)检验, 符合下列标准:

GB 3836.1-2010 爆炸性环境 第1部分: 设备 通用要求

GB 3836.4-2010 爆炸性环境 第4部分: 由本质安全型“i”保护的的设备

GB 3836.20-2010 爆炸性环境 第20部分: 设备保护等级 (EPL) 为Ga级的设备

GB 12476.1-2013 可燃性粉尘环境用电气设备 第1部分: 通用要求

GB 12476.4-2010 可燃性粉尘环境用电气设备 第4部分: 本质安全型“iD”

产品防爆标志: [Ex ia Ga] II C , [Ex iaD] , [Ex ia Ma] I

防爆合格证号GYJ21.1235X。

产品具体认可型号为:

VEGATRENN 141 (I)、VEGATRENN 141 (II)

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、 安装人员必须确保设备与其他设备安装在机箱内时, 不超过设备的额定环境温度范围, 并确保设备周围有足够的距离。
- 2、 设备的安装方向必须与说明书一致。

二、 产品使用注意事项

1. 使用环境温度: $-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$ 。
2. 产品的输出端的最大输出参数(线性输出)如下表所示:

本安端	1, 2	4, 5
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U _o	26.3V	26.3V
I _o	100mA	100mA
P _o	658mW	658mW

3. 防爆隔离器的允许外部最大电容和最大电感如下表所示:

Ex ia	IIC		IIB, iaD		IIA	I
L _o	0.2mH	1mH	0.2mH	2mH	10mH	5mH
C _o	95.8nF	54.8nF	618.8nF	328.8nF	508.8nF	708.8nF
L _o /R _o	/		216uH/Ω	216uH/Ω	433uH/Ω	710uH/Ω

4. 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。

5. 产品的安装、使用和维护应同时遵守产品使用说明书、GB3836.13-2013“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 3836.16-2017“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

国家级仪器仪表防爆安全监督检验站

二〇二一年五月二十五日

国家级仪器仪表防爆安全监督检验站

National Supervision and Inspection Centre for Explosion Protection and Safety of Instrumentation

(GYJ21.1235X)

(Attachment I)

Attachment I to GYJ21.1235X

Ex Separators types VEGATRENN 14 series manufactured by VEGA Grieshaber KG and VEGA Americas Inc. has been certified by National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation (NEPSI), this product accords with following standards:

GB 3836.1-2010 Explosive atmospheres-Part 1: Equipment-General Requirements

GB 3836.4-2010 Explosive atmospheres-Part 4: Equipment protection by intrinsic safety "i"

GB 3836.20-2010 Explosive atmospheres-Part 20: Equipment with equipment protection level (EPL) Ga

GB 12476.1-2013 Electrical apparatus for use in the presence of combustible dust – Part 1: General requirements

GB12476.4-2010 Electrical apparatus for use in the presence of combustible dust- Part 4: Protection by intrinsic safety "iD"

The Ex marking is [Ex ia Ga] IIC , [Ex iaD] , [Ex ia Ma] I

The certificate number is GYJ21.1235X.

Type designation:

VEGATRENN 141(■)、VEGATRENN 142(■)

■ 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 installer must ensure that the rated ambient temperature range of the equipment is not exceeded when installed in an enclosure with other equipment and that sufficient separation is provided around the device.

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

2. Condition for safe use

2.1 Ambient temperature: -20℃~+60℃

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 Maximum values of the intrinsically safe signal circuit:

intrinsically safe terminal	1, 2	4, 5
U _o	26.3V	26.3V
I _o	100mA	100mA
P _o	658mW	658mW

2.4 The maximum external capacitance and maximum external inductance allowed by the product are shown in the table below:

Ex ia	IIC		IIB, iaD		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

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

GB3836.13-2013 Explosive atmospheres-Part 13: Equipment repair, overhaul and reclamation

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

GB/T3836.16-2017 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 Any modification with influence on the type of protection should be submitted to NEPSI before application.

3.4 Following items should be added to the nameplate

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

**National Supervision and Inspection Center
for Explosion Protection and Safety of Instrumentation**

May 25th, 2021

