



**SITIiAS**  
Worldwide Access

# 防爆合格证

证号: GYJ22.1793X

制 造 商 VEGA Grieshaber KG

(地址: Am Hohenstein 113, Schiltach, Germany)

产 品 名 称 调整及显示仪表

型 号 规 格 VEGADIS DIS81 系列

防 爆 标 志 Ex ia IIC T1...T6 Ga、Ex ia IIC T1...T6 Gb

产 品 标 准 /

图 样 编 号 GE1818、GE2411

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 3836.4-2021

特颁发此证。

本证书有效期: 2022年04月23日至2027年04月22日

备 注

1. 安全使用注意事项见本证书附件。
2. 型号规格说明见本证书附件。
3. 本安电气参数见本证书附件。
4. 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。
5. [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  
颁发日期二〇二二年四月二十三日

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





**SITIiAS**  
Worldwide Access

# EXPLOSION PROTECTION CERTIFICATE OF CONFORMITY

Cert No. GYJ22.1793X

<b>Manufacturer</b>	VEGA Grieshaber KG (Address: Am Hohenstein 113, Schiltach, Germany)
<b>Product</b>	Control and display unit
<b>Model</b>	VEGADIS DIS81 series
<b>Ex marking</b>	Ex ia IIC T1...T6 Ga、 Ex ia IIC T1...T6 Gb
<b>Product standard</b>	/
<b>Drawing number</b>	GE1818、 GE2411

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

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

Valid until: 2027.04.22

**Remarks**

- 1.Conditions for safe use are specified in the attachment(s) to this certificate.
- 2.Model designation is specified in the attachment(s) to this certificate.
- 3.Intrinsic safety parameters specified in the attachment(s) to this certificate.
- 4.This certificate also cover the product with the same type that manufactured by VEGA Americas Inc. (3877 Mason Research Parkway, Mason, Ohio, 45036, USA) .
- 5.[Variation I] (modify the standards and Ex-marking and factory 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 2022.04.23

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@nepsl.org.cn](mailto:info@nepsl.org.cn)

Tel: +86 21 64368180  
Fax: +86 21 64844580



## GYJ22.1793X防爆合格证附件 II

由 VEGA Grieshaber KG 和 VEGA Americas Inc.生产的 VEGADIS DIS81 系列调整及显示仪表, 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 3836.4-2021 爆炸性环境 第4部分: 由本质安全型“i”保护的设

产品防爆标志: Ex ia IIC T1...T6 Ga, Ex ia IIC T1...T6 Gb

防爆合格证号GYJ22.1793X。

产品具体认可型号为:

VEGADIS DIS81(a).N C | b c d e f g

**a**代表特殊客户符号, 与防爆无关;

**b**代表壳体选项, 可为A(铝)、V(不锈钢)、H(特殊颜色的铝)或K(塑料);

**c**代表防护等级选型, 可为I(IP66/IP67)或N(IP66/IP68);

**d**代表电缆入口/接头选项, 可为D(M20×1.5/盲塞)、M(M20×1.5/电缆接头)、N(1/2NPT/盲塞)、J(1/2NPT/电缆接头);

**e**代表PLICSCOM显示和调整模块选项, 可为X(不带)、A(已安装)或K(已安装; 带蓝牙功能);

**f**代表安装方式选项, 可为A(铝或不锈钢外壳的墙式安装)、C(塑料外壳的墙式安装)、D(支撑导轨)或E(管式安装);

**g**代表证书选项, 可为 X(不带)、M(带)。

### 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. 当产品外壳为非金属时, 应采取适当安全措施避免产品裸露非金属部件静电电荷产生引燃危险;

2. 当产品外壳为轻金属, 并安装于0区时, 应采取适当安全措施避免摩擦或碰撞引起的点燃危险。

3. 产品最大使用环境温度: -40℃~+80℃。

## 二、 产品使用注意事项

1. 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。

### 2. 本安参数:

供电和信号回路:  $U_i=6V$ 、 $P_i=332mW$ 、 $C_i \approx 0\mu F$ 、 $L_i \approx 0mH$ ; 线性。(端子5, 6, 7, 8)

显示和调整电路: 仅用于与PLICSCOM显示和调整模块相连。(接线腔弹簧触点)

### 3. 使用环境温度: $-40^{\circ}C \sim +80^{\circ}C$ , 环境温度与温度组别的关系:

当产品EPL为Ga时, 环境温度与温度组别的关系:

温度组别	T6	T1~T5
环境温度	$-20^{\circ}C \sim +46^{\circ}C$	$-20^{\circ}C \sim +60^{\circ}C$

当产品EPL为Gb时, 环境温度与温度组别的关系:

温度组别	T6	T5	T1~T4
环境温度	$-40^{\circ}C \sim +46^{\circ}C$	$-40^{\circ}C \sim +60^{\circ}C$	$-40^{\circ}C \sim +80^{\circ}C$


4. 本安型产品与关联设备的连接电缆应为带绝缘护套的屏蔽电缆, 其屏蔽层应接地。

5. 产品必须与已通过防爆认证的关联设备配套共同组成本安防爆系统方可使用于爆炸性气体环境。其系统接线必须同时遵守本产品 and 所配关联设备的使用说明书要求, 接线端子不得接错。

6. 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”。

### 三、 制造厂责任

1. 制造厂必须将上述使用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



注：本附件II代替附件I



## Attachment II to GYJ22.1793X

Control and display unit types VEGADIS DIS81 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 3836.4-2021 Explosive atmospheres-Part 4: Equipment protection by intrinsic safety "i"

The Ex marking is Ex ia IIC T1...T6 Ga Ex ia IIC T1...T6 Gb

The certificate number is GYJ22.1793X.

Type designation:

VEGADIS 81(a).N C | b c d e f g

a denotes optional version differentiation, not relevant for Ex approval;

b denotes enclosure, can be A, H, K or V;

c denotes protection, can be I or N;

d denotes cable entry / connection, can be M, D, N or J;

e denotes indication-adjustment module PLISCOM, can be X, A or K;

f denotes kind of installation, can be E, A, C or D;

g denotes optional certificate, can be X or M;

### 1. Special condition for safe use

Symbol "X" denotes special condition for safe use:

1.1 For EPL Ga applications, at the metallic parts of the products made of light metal there is a danger of ignition by impact or friction.

1.2 When the enclosure of the product is non-metallic, appropriate safety measures should be taken to avoid the risk of ignition caused by electrostatic charges on exposed non-metallic parts.

1.3 Ambient temperature:  $-40^{\circ}\text{C} \sim +80^{\circ}\text{C}$

## 2. Condition for safe use

2.1 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.

2.2 Connecting cable between this product and associated apparatus should be insulated screen cable; connect the cable screen functionally to earth ground.

2.3 This product should be used in explosive gas atmospheres together with approved associated apparatus, follow the instruction manual of the product and associated apparatus when connecting the wiring. Connect the wiring terminals correctly.

2.4 Intrinsically safe parameters:

Power supply and signal circuit:  $U_i=6V$ ,  $P_i=332mA$ ,  $C_i=0nF$ ,  $L_i=0mH$ ; Linear. (Terminals 5,6,7,8)

Display and adjust circuits: Only used to connect to the PLICSCOM display and adjustment module. (Connection chamber spring contact)

2.5 Ambient temperature:  $-40^{\circ}C \sim +80^{\circ}C$ . The relationship between ambient temperature and temperature class:

EPL Ga applications

Temperature class	T6	T1~T5
Ambient temperature	$-20^{\circ}C \sim +46^{\circ}C$	$-20^{\circ}C \sim +60^{\circ}C$

EPL Gb applications

Temperature class	T6	T5	T1~T4
Ambient temperature	$-40^{\circ}C \sim +46^{\circ}C$	$-40^{\circ}C \sim +60^{\circ}C$	$-40^{\circ}C \sim +80^{\circ}C$

2.6 During the installation, using and maintenance, the user shall following 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: Eleltrical installations design, selection and erection


GB/T3836.16-2022 Explosive atmospheres-Part 16: Eleltrical 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.

### 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