



SITIiAs
Worldwide Access

防爆合格证

证 号: GYJ26.1171X

制 造 商 恩德斯+豪斯公司

(地址: Bergener Ring 27, 01458 Ottendorf-Okrilla, Germany)

产 品 名 称 显示屏

型 号 规 格 CID100

防 爆 标 志 Ex ia IIC T4 Ga

产 品 标 准 /

图 样 编 号 9384436

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: 2026 年 07 月 21 日 至 2031 年 07 月 20 日

备 注

1. 证书编号后缀“X”表明产品具有特殊使用条件, 详见本证书附件。
2. 产品使用注意事项见本证书附件。
3. 电气参数见本证书附件。

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 六 年 七 月 二 十 一 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



SitiAs
Worldwide Access

EXPLOSION PROTECTION

CERTIFICATE OF CONFORMITY

Cert No. GYJ26.1171X

Manufacturer	Endress+Hauser SICK GmbH+Co. KG (Address: Bergener Ring 27, 01458 Ottendorf-Okrilla, Germany)
Product	Display Device
Model	CID100
Ex marking	Ex ia IIC T4 Ga
Product standard	/
Drawing number	9384436

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

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

Valid until: 2031.07.20

Remarks

1. The symbol "X" placed after the certificate number denotes specific conditions of use, which are specified in the attachment(s) to this certificate.
2. The conditions for use are specified in the attachment(s) to this certificate.
3. The electrical parameters are specified in the attachment(s) to this certificate.

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 2026.07.21

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



(GYJ26.1171X)

(Attachment I)

GYJ26.1171X 防爆合格证附件 I

产品符合下列标准:

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” 保护的设备

1. 产品特殊使用条件

防爆合格证号后缀“X”表明产品具有特殊使用条件:

1.1 产品使用环境温度范围: $-40^{\circ}\text{C} \sim +70^{\circ}\text{C}$ 。

1.2 产品的使用环境温度必须考虑其安装处主机设备的发热影响,且不得超过允许范围。

1.3 根据连接至 M12 连接头的本安参数,设备允许用于 IIA、IIB 或 IIC 类爆炸性气体
环境内。

1.4 连接至 CID100 的电路中的最大电感不得超过不同气体组别规定的 L_0 值。这些限值仅适用于非组合式 LC 电路,组合式 LC 电路可能需要更低的限值。

1.5 当安装在主机设备上时,CID100 外壳对地电阻在 (500 ± 25) VDC 电压下测得不应
超过 $1\text{G}\Omega$ 。

1.6 当产品安装于要求 EPL Ga 级的场所时,用户须采取有效措施防止产品外壳由于冲
击或摩擦引起的点燃危险。

2. 产品使用注意事项

2.1 该产品必须与已通过防爆认证的关联装置配套共同组成本安系统方可使用于爆炸
性环境,其系统接线必须同时遵守该产品和所配关联装置的使用说明书要求,接线端子不得
接错。本安电气参数见下表:

端子	最高输入电压	最大输入电流	最大输入功率	最大内部等效参数	
	U_i (V)	I_i (mA)	P_i (W)	C_i (nF)	L_i (μ H)
M12	10	140	1.1	200	3

$L_o = 416\mu\text{H}$ (II A), $L_o = 208\mu\text{H}$ (II B), $L_o = 52\mu\text{H}$ (II C)。

2.2 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。

2.3 产品的安装、使用和维护应同时遵守产品使用说明书及下列相关标准的要求:

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 3836.15—2024 爆炸性环境 第 15 部分: 电气装置设计、选型、安装规范

GB 3836.16—2024 爆炸性环境 第 16 部分: 电气装置检查与维护规范

GB/T 3836.18—2024 爆炸性环境 第 18 部分: 本质安全电气系统

GB 50257—2014 电气装置安装工程爆炸和火灾危险环境电气装置施工及验收规范

3. 制造商责任

3.1 制造商应将包含上述产品特殊使用条件及产品使用注意事项的使用说明书提供给用户。

3.2 制造商应严格按照国家级仪器仪表防爆安全监督检验站认可的文件资料生产。

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

二〇二六年七月二十一日



(GYJ26.1171X)

(Attachment I)

Attachment I to GYJ26.1171X

1. Description

The product complies with the 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”

2. Special Conditions of Use

The suffix “X” placed after the certificate number indicates that this product is subject to special conditions of use, that is:

2.1 Apparatus is designated for use in ambient temperature range from -40 °C to +70 °C.

2.2 Ambient temperature of the place where CID100 is installed shall take into account heating from host equipment on which it is installed and shall not exceed the allowed range.

2.3 Apparatus is allowed to be used in gas group IIA or IIB or IIC depending on the entity parameters in the intrinsically safe circuit connected to M12 plug.

2.4 The maximum inductance in the circuit connected to CID100 shall not exceed L_o values as defined in the entity parameter set for the specific gas group. These limits are valid only for non-combined LC circuits. Combined LC circuit may require a lower inductance limit.

2.5 The resistance of CID100 enclosure to earth shall not exceed 1 GΩ measured at (500±25) VDC, when installed onto the host device.

2.6 When the product is installed in EPL Ga, the user shall take effective measures to prevent ignition hazard caused by impact or friction on the enclosure of the product.

3. Conditions for Safe Use

3.1 This product must be used together with an associated apparatus that has obtained explosion-proof certification to form an intrinsically safe system for use in explosive atmospheres. The system wiring must comply with both the instruction manuals of this product and the associated apparatus used. The terminals must not be connected incorrectly. The intrinsically safe electrical parameters are shown in the table below:

Terminal	U_i (V)	I_i (mA)	P_i (W)	C_i (nF)	L_i (μH)
M12	10	140	1.1	200	3

$L_o = 416\mu\text{H}$ (II A), $L_o = 208\mu\text{H}$ (II B), $L_o = 52\mu\text{H}$ (II C).

3.2 The user is not permitted to replace any parts of this product independently. In the event of any operational faults, the user shall cooperate with the product manufacturer to resolve the issues, so as to eliminate any potential damage.

3.3 For installation, use and maintenance of this product, the end user should observe the instruction manual and the following standards:

GB/T 3836.13-2021 "Explosive atmospheres-Part 13: Equipment repair, overhaul, reclamation and modification".

GB 3836.15-2024 "Explosive atmospheres-Part 15: Specification of electrical installations design, selection and erection".

GB 3836.16-2024 "Explosive atmospheres-Part 16: Specification of electrical installations inspection and maintenance".

GB/T 3836.18-2024 "Explosive atmospheres-Part 18: Intrinsically safe electrical systems".

GB 50257-2014" Code for construction and acceptance of electric device for explosion atmospheres and fire hazard electrical equipment installation engineering".

4. Manufacturer's Responsibility

4.1 Conditions for safe use and special conditions of use, as specified above, should be included in the documentation the user is provided with.

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

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

2026.07.21