

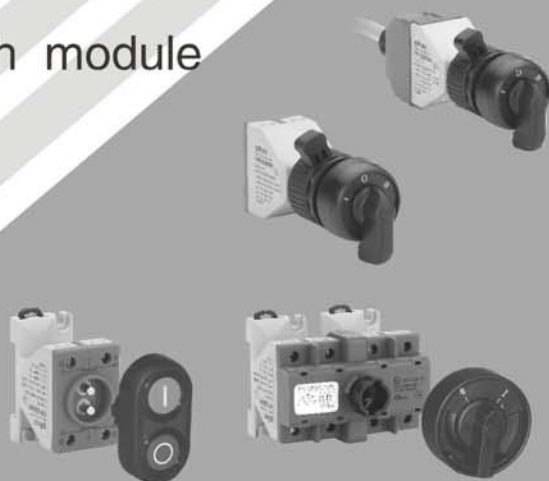


使用说明书

Operating instructions

CZ0201系列 防爆开关模块

CZ0201 Series
Explosion-proof switch module



创正防爆电器有限公司

CZ EXPLOSION-PROOF ELECTRIC APPLIANCES CO.,LTD.

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说明用途

- 在危险区工作时，人身安全与装置安全取决于是否已遵照所有相关的安全规定。
- 装配与维修人员应承担特定的责任，这些人员应具备相关可行标准与规定的准确知识。
- 本说明书关于最重要的安全措施有简明的概要，并补充了员工必须学习的相应规定。



安全说明

- 只能在防爆开关模块自身功能范围内进行使用。
- 防爆开关模块不适宜用于0区危险场所！
- 不正确或不允许的使用或不按照本说明的，会导致我们提供的保修规定无效。
- 减弱设备防爆性能的任何更改都是不允许的。
- 只有干净且无损坏的防爆开关模块才可以使用。
- 任何损坏都会使防爆性能无效。
- 当安装与操作时，请遵守以下规定：
 - 国家安全规定；
 - 国家防止事故规定；
 - 国家安装规定（如：IEC 60079-14）；
 - 基本公认的技术规定；
 - 本说明书中的安全指南；
 - 防爆开关模块上的特征值。

符合标准

本防爆开关模块根据ISO9001 标准进行设计、制造和测试的。

本防爆开关模块符合ATEX指令94/9/EC和以下标准：

IEC60079-0 : 2011	EN60079-0 : 2012
IEC60079-1 : 2007	EN60079-1 : 2007
IEC60079-7 : 2006	EN60079-7 : 2007

适应范围

本系列产品适应于额定工作电压AC250V及以下的工业控制电路；作为电磁起动器、接触器、继电器及其它电气线路的控制之用。

Purpose of these instructions

- Working in hazardous areas, the safety of personnel and plant depends on complying with all relevant safety regulations.
- Assembly and maintenance staff working on installations therefore have a particular responsibility. They require precise knowledge of the applicable standards and regulations.
- These instructions give a brief summary of the most important safety measures. It supplements the corresponding regulations which the staff must study.



SAFETY INSTRUCTIONS

- Use the explosion-proof switch module only for its intended purpose.
- Explosion-proof switch module are not suitable for Zone 0 hazardous areas!
- Incorrect or impermissible use or non-compliance with these instructions invalidates our warranty provision.
- No changes to the device impairing its explosion protection are permitted.
- Use the explosion-proof switch module only if they are clean and undamaged.
- Any damage can invalidate the Ex-protection.
- Observe the following during installation and operation:
 - National safety regulations;
 - National accident prevention regulations;
 - National installation regulations(e.g. IEC 60079-14);
 - Generally recognized technical regulations;
 - Safety guidelines in these operating instructions;
 - Characteristic values given on the explosion-proof switch module.

Conformity to standards

The explosion-proof switch module is designed and manufactured according to standard of ISO 9001.

The explosion-proof switch module is conformity to the directive 94/9/EC,ATEX and the following standards:

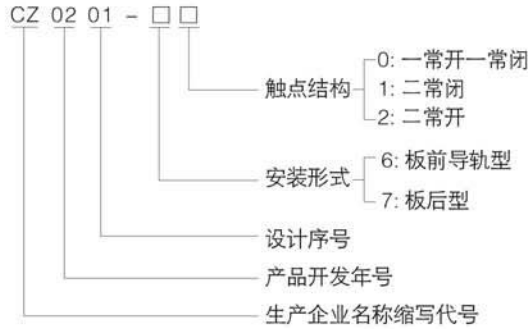
IEC60079-0 : 2011	EN60079-0 : 2012
IEC60079-1 : 2007	EN60079-1 : 2007
IEC60079-7 : 2006	EN60079-7 : 2007

Applicable scope

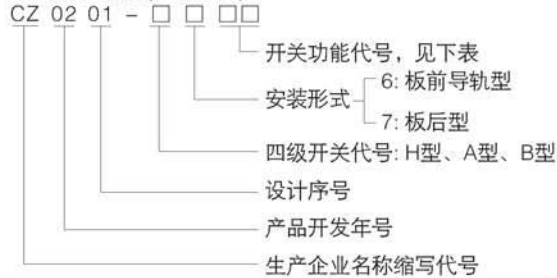
The series product can be used in the industry control circuit of which rated working voltage is AC250V or below to control electromagnetic starter, contact or, relay and other electric wiring.

型号及其含义

防爆开关模块(二级开关)

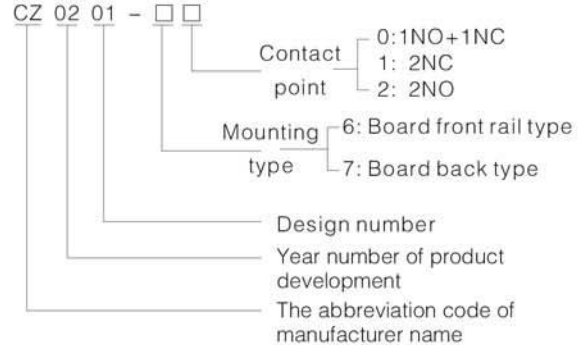


防爆开关模块(四级开关)

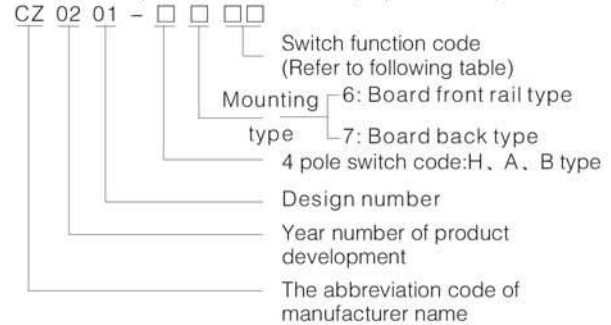


Model and implication

Explosion-proof switch module (2-pole Switch)



Explosion-proof switch module (4-pole Switch)



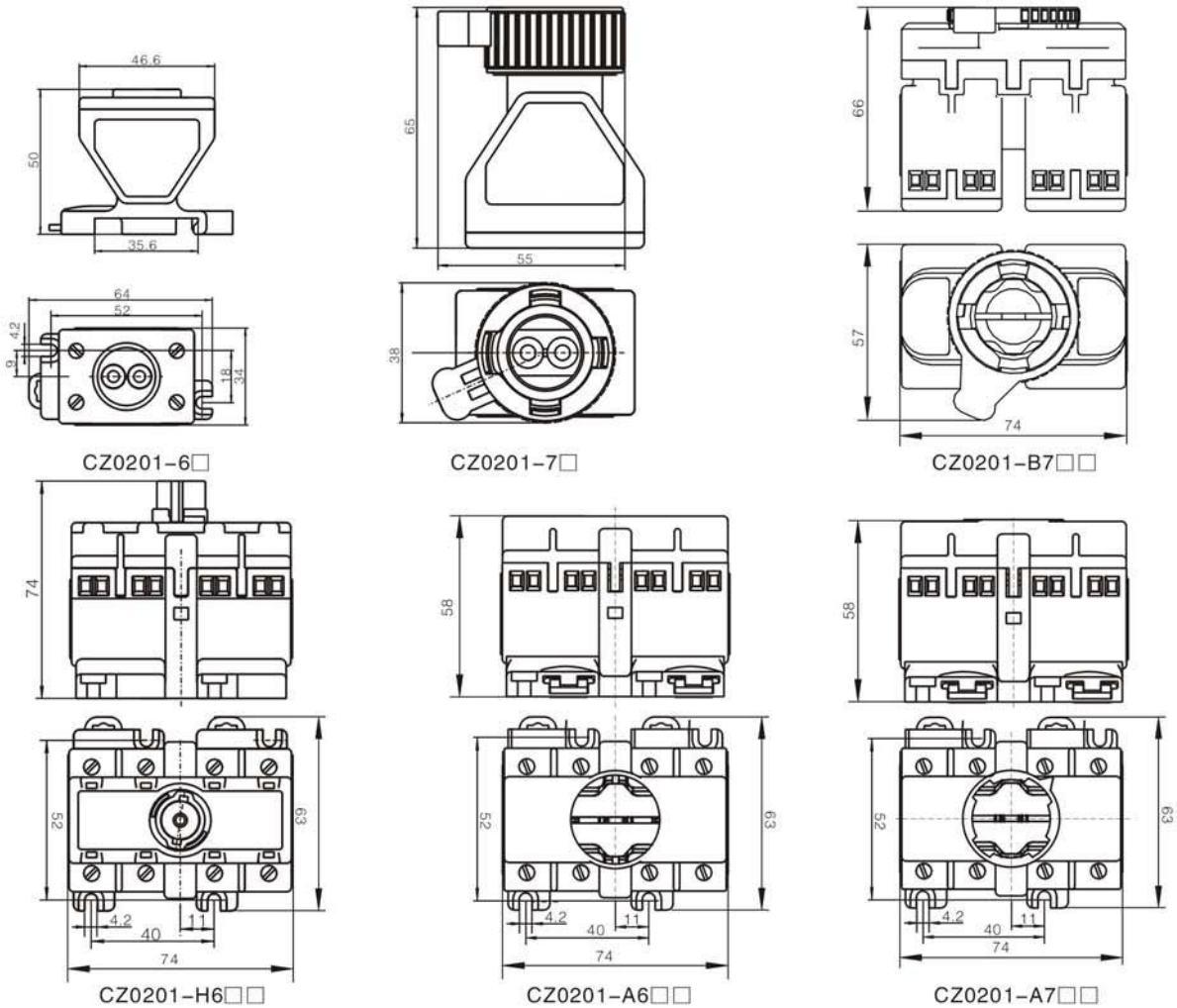
代号 Code	功能图 Functional diagram	代号 Code	功能图 Functional diagram	代号 Code	功能图 Functional diagram
01		02		03	
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10		11		12	
13		50		51	
52		53		54	

技术数据

- 防爆标志: $\text{Ex II 2G Ex de II C Gb}$
- 检验证书: IECEx CQM 08.0005U
DNV-2008-OSL-ATEX-21657U
- 防护等级: IP20
- 使用环境温度: $-40^{\circ}\text{C} \leq T_a \leq +55^{\circ}\text{C}$
- 工作温度: $-40^{\circ}\text{C} \sim +90^{\circ}\text{C}$
- 额定电压/额定电流: AC 250V/16A DC 110V/1A
- 额定频率: 0...60Hz
- 触点形式: 1NO+1NC、2NC、2NO
- 机械寿命: 10^7 次 (在机械寿命内使用时, 产品隔爆间隙不会超过设计间隙, 产品的防爆性能不会发生改变)
- 接线型式: 端子 2.5mm^2
- 安装形式: TS35 \times 7.5 导轨
- 外形及安装尺寸:

Technical data

- Ex-mark: $\text{Ex II 2G Ex de II C Gb}$
- Test certificate: IECEx CQM 08.0005U
DNV-2008-OSL-ATEX-21657U
- Degree of protection: Ip20
- Ambient temperature: $-40^{\circ}\text{C} \leq T_a \leq +55^{\circ}\text{C}$
- Service temperature: $-40^{\circ}\text{C} \sim +90^{\circ}\text{C}$
- Rated voltage/Rated currents: AC 250V/16A DC 110V/1A
- Rated frequency: 0...60Hz
- Contact options: 1NO+1NC、2NC、2NO
- Mechanical life: 10^7 switching cycles (The flameproof gap will not exceed the designed gap and its explosion protection performance will not be changed when it is to be used in its mechanical life)
- Connection type: Terminal 2.5mm^2
- Mounting type: TS35 \times 7.5 rail
- Outline and installation dimensions:

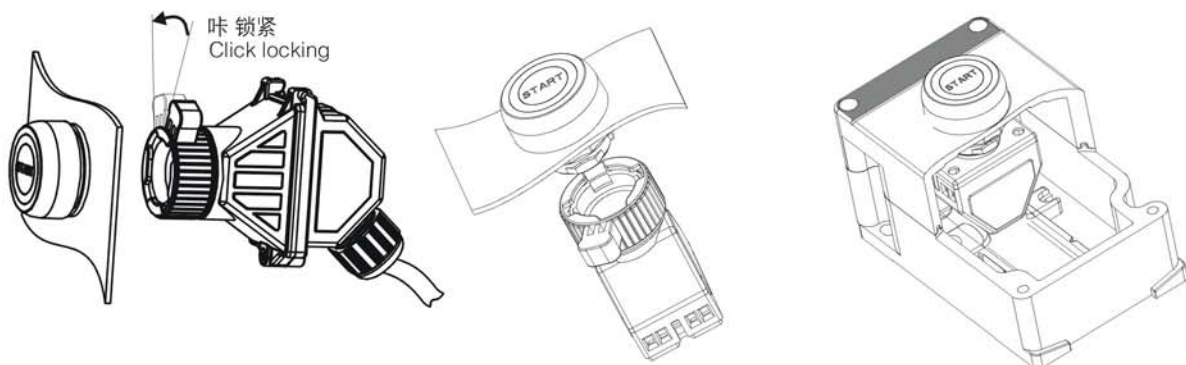


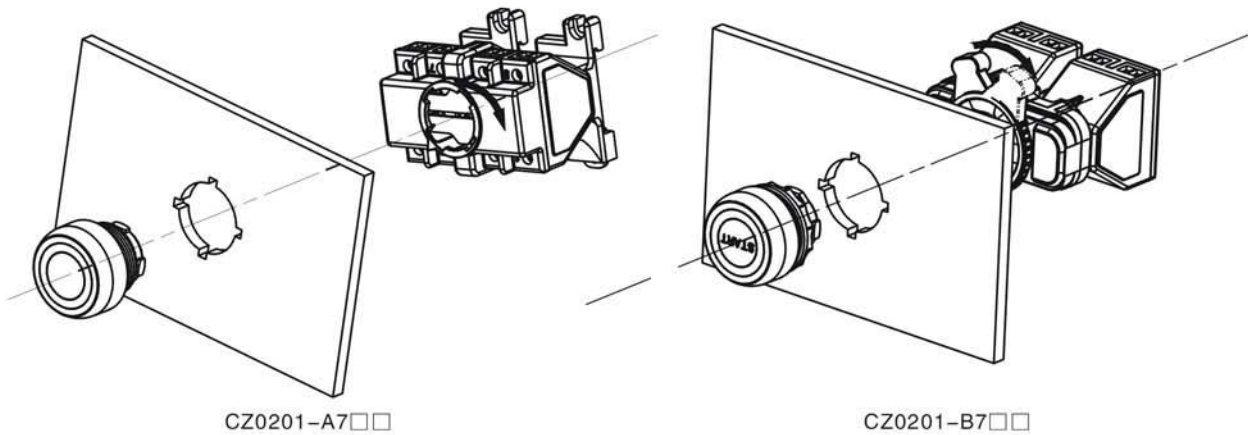
使用/安装

- 仅能在包装状态下进行运输与储存。安装与操作此产品时，必须严格遵守国家安全与安装规定和工程实践通常公认的规则。
- 公司提供一系列的操作头供用户与本系列模块配合使用；与操作头配合安装如下图；操作头详细资料见本公司《P□/L□/K□系列操作头使用说明书》。
- 为保证防爆开关模块正常工作和安全，用户必须遵守以下规定
 - 防爆开关模块适用于1区和2区等危险区。
 - 防爆开关模块应使用在如下大气条件下：
 - 压力为80kPa(0.8bar)~110kPa(1.1bar)
 - 标准氧含量体积比为21%的空气。
 - 本系列产品只能安装在与环境相适用的防爆外壳内方可使用。
 - 本系列产品只能与本公司生产的操作头配合使用。
 - 本系列产品的安装必须根据标准IEC 60947-5-1
 - 建议拧紧螺钉力矩：1.1Nm
 - 模块安装时应固定可靠。
 - 产品接线时不允许有虚接现象。
 - 产品接线时裸露导电部分爬电距离应 $\geq 8\text{mm}$ ，电气间隙 $\geq 5\text{mm}$ 。
 - 板后电缆型电缆连接应与环境相适应的防爆设备连接。

Operation/installation

- Transport and storage in original packaging only. National safety and installations regulations and the generally accepted rules of engineering practice must be observed when mounting and operating this equipment.
- The series of operation head is provided by the company to be used with the series module together. The diagram of being used with the operation head together is as following; The detailed information of operation head see < Manual Instruction of P□/L□/K□ Series Operation Head >
- For the sake of ensuring normal operation and safety of explosion-proof switch modules, user must abide by the followin gprovisions.
 - Explosion-proof switch module is suitable for use in hazardous areas, zones 1 and 2.
 - The explosion-proof switch module should be used under the following atmospheric condition:
 - The pressure is 80kPa(0.8bar)~110kPa(1.1bar)
 - The volume ratio of standard oxygen content is 21% air.
 - The product should be enclosed in explosion-proof enclosure which is fitted to the environment.
 - This series of products only can be used together with the actuator attachments manufactured by us.
 - This series of products should be installed in accordance with IEC60947-5-1.
 - Proposed tightening screw torque : 1.1Nm
 - The module mounting should be firm and reliable.
 - Virtual connection is not allowed during the wiring.
 - During wiring, the creepage distance of bare current-carrying part should be $\geq 8\text{mm}$, electric clearance should be $\geq 5\text{mm}$.
 - The component wiring of board back cable type shall be connected with explosion-proof equipment in accordance with its applicable environment.





CZ0201-A7□□

CZ0201-B7□□

附件/备件

- 只能使用创正防爆电器有限公司制造的原装备件以及原装附件。
- 创正防爆电器有限公司提供一系列的操作头供用户选择，详细资料请参见本公司最新选型手册。

维修/维护

- 严格遵守贵国的相关规定!
- 只有本公司的零件才可以用来进行更换维修，更换应由专业电工进行!
- 在维护期间，必须检查以下几点：
 - 是否符合允许温度；
 - 本防爆开关模块是否有裂纹；
- 模块是否被可靠固定；
- 接线有无松动；
- 隔爆接合面有无损坏。

处理/回收

- 当处理时，应当注意关于废物处理的的国家相应有效的规定!
- 非常欢迎每位客户的任何咨询，请与您所在地的最近创正防爆电器有限公司服务站联系。

Accessories/spare parts

- Use only original spare parts as well as original accessories made by CZ EXPLOSION-PROOF ELECTRIC APPLIANCES CO.,LTD.
- CZ EXPLOSION-PROOF ELECTRIC APPLIANCES CO.,LTD. Provides the actuator for users to select, please refer to our latest catalogue for details.

Maintenance/repairs

- Observe the relevant national regulations for your country!
- Only parts from our company that can be used to replace or maintain, and the operation should be carried out by professional electrician!
- The following points must be checked during maintenance:
 - Compliance with permitted temperatures;
 - Cracks in the explosion-proof switch module;
- Check if the product has been fixed reliably.
- Check if the wiring is loose.
- Check if the flame-proof joint is damaged.

Disposal/recycling

- The respective valid national regulations for waste disposal shall be observed when disposing of apparatus!
- We are pleased to answer any special questions you may have Please contact your nearest CZ representative.