

This is a family installation manual for Hazardous Location applications in China.

Read this first!

English

Before operating this device, please read this manual thoroughly and retain this manual for future reference! This device may only be installed and put into operation by qualified personnel. If damage or malfunction should occur during operation, immediately turn power off and send device to the factory for inspection. The device does not contain serviceable parts. The information presented in this document is believed to be accurate and reliable and may change without notice. For any clarifications the English translation will be used.

**WARNING**

Risk of electrical shock, fire, personal injury, or death:

- Turn power off before working on the device. Protect against inadvertent re-powering.
- Do not open, modify or repair the device.
- Use caution to prevent any foreign objects from entering the housing.
- Do not use in wet locations or in areas where moisture or condensation can be expected.
- Do not touch during power-on and immediately after power-off. Hot surfaces may cause burns.

Product Description

The CD5 series are DIN-rail mountable DC/DC converter, which provides a floating, stabilized and galvanically separated SELV/PELV output voltage.

Intended Use

This device is designed for installation in an enclosure and is intended for commercial use, such as in industrial control, process control, monitoring and measurement equipment or the like. Do not use this device in equipment where malfunction may cause severe personal injury or threaten human life. If this device is used in a manner outside of its specification, the protection provided by the device may be impaired.

List of Covered Models and Ratings:

<b>CD5.121</b>	<b>Input:</b> DC 24V, 5.6A <b>Output:</b> DC 12-15V, 9.6-7.7A (below 45°C), 8-6.4A (at 60°C), 6-4.8A (at 70°C) <b>Temperature range:</b> -25°C to +70°C <b>Ex Protection level:</b> Ex ec nC IIC T4 Gc
<b>CD5.241</b>	<b>Input:</b> DC 24V, 7.0A <b>Output:</b> DC 24-28V, 6-5.1A (below 45°C), 5-4.3A (at 60°C), 3.8-3.2A (at 70°C) <b>Temperature range:</b> -25°C to +70°C <b>Ex Protection level:</b> Ex ec nC IIC T4 Gc
<b>CD5.241-L1</b>	<b>Input:</b> DC 24V, 5.5A <b>Output:</b> 24Vdc, 3.8A <b>Temperature range:</b> -25°C to +70°C <b>Ex Protection level:</b> Ex ec nC IIC T4 Gc
<b>CD5.241-S1</b>	<b>Input:</b> DC 24V, 7.0A <b>Output:</b> DC 24-28V, 6-5.1A (below 45°C), 5-4.3A (at 60°C), 3.8-3.2A (at 70°C) <b>Temperature range:</b> -25°C to +70°C <b>Ex Protection level:</b> Ex ec nC IIC T4 Gc
<b>CD5.242</b>	<b>Input:</b> DC 48V, 3.5A <b>Output:</b> DC 24-28V, 6-5.1A (below 45°C), 5-4.3A (at 60°C), 3.8-3.2A (at 70°C) <b>Temperature range:</b> -25°C to +70°C <b>Ex Protection level:</b> Ex ec nC IIC T4 Gc
<b>CD5.243</b>	<b>Input:</b> DC 12V, 12A <b>Output:</b> DC 24-28V, 4.8-4.1A (below 45°C), 4-3.4A (at 60°C), 3-2.6A (at 70°C) <b>Temperature range:</b> -25°C to +70°C <b>Ex Protection level:</b> Ex ec nC IIC T4 Gc

**WARNING EXPLOSION HAZARDS!**

The device is suitable for use in Group II Zone 2 environments. Substitution of components may impair suitability for this environment. Do not disconnect the device or operate the voltage adjustment unless power has been switched off or the area is known to be non-hazardous. A suitable enclosure must be provided for the end product which has a minimum protection of IP54 and fulfils the requirements of the GB/T 3836.1 (EN 60079-0) . Reduced output current conditions must be considered for high ambient temperatures and non-standard mounting orientations. The device shall only be used in an area of at least pollution degree 2, as defined in GB/T 16935.1. The device is fulfilled the requirements related to Ex properties of GB/T 3836.1-2021, GB/T 3836.3-2021, GB/T 3836.8-2021.

这是一份适用于中国危险场所应用的安装手册。

安装要求!

中文

在操作本产品之前, 请仔细阅读本手册, 并保留本手册以供将来参考! 本产品只能由有相关资质的人员安装和操作。如果安装或运行过程中发生损坏或故障, 立即关断电源, 并将产品返回厂商检查。本产品不包含需要维护的零件。本文中提供的信息准确、可靠, 如有修改, 恕不另行通知。本文档翻译自英文版本, 中英文版本之间如有差异, 应以英文版为准。

**警告**

触电、火灾、人身伤害或死亡危险:

- 在设备上执行作业前, 先关断电源。提供保护, 以免设备意外重新通电。
- 由于产品内部有高压, 请勿自行打开或维护本产品。
- 谨防任何异物进入壳体。
- 切勿在潮湿地点或可能会出现湿气或冷凝区域使用该产品。
- 电源在运行期间及刚断电时, 切勿触碰。灼热的表面可能会造成烫伤。

产品介绍

CD5 系列是可安装在 DIN 导轨上的 DC/DC 转换器, 它提供一个浮动的、稳定的和电隔离的 SELV/PELV 输出电压。

预期用途

本装置设计安装在机箱内, 用于商业用途, 如工业控制、过程控制、监测和测量设备或类似设备。请勿将本装置用于发生故障可能导致严重人身伤害或威胁人类生命的设备中。如果本装置的使用方式不符合其规格, 本装置所提供的保护可能会受到影响。

涵盖的型号和额定规格:

<b>CD5.121</b>	输入: DC 24V, 5.6A 输出: DC 12-15V, 9.6-7.7A (低于 45°C), 8-6.4A (在 60°C), 6-4.8A (在 70°C) 温度范围: -25°C 至 +70°C 防爆等级: Ex ec nC IIC T4 Gc
<b>CD5.241</b>	输入: DC 24V, 7.0A 输出: DC 24-28V, 6-5.1A (低于 45°C), 5-4.3A (在 60°C), 3.8-3.2A (在 70°C) 温度范围: -25°C 至 +70°C 防爆等级: Ex ec nC IIC T4 Gc
<b>CD5.241-L1</b>	输入: DC 24V, 5.5A 输出: 24Vdc, 3.8A 温度范围: -25°C 至 +70°C 防爆等级: Ex ec nC IIC T4 Gc
<b>CD5.241-S1</b>	输入: DC 24V, 7.0A 输出: DC 24-28V, 6-5.1A (低于 45°C), 5-4.3A (在 60°C), 3.8-3.2A (在 70°C) 温度范围: -25°C 至 +70°C 防爆等级: Ex ec nC IIC T4 Gc
<b>CD5.242</b>	输入: DC 48V, 3.5A 输出: DC 24-28V, 6-5.1A (低于 45°C), 5-4.3A (在 60°C), 3.8-3.2A (在 70°C) 温度范围: -25°C 至 +70°C 防爆等级: Ex ec nC IIC T4 Gc
<b>CD5.243</b>	输入: DC 12V, 12A 输出: DC 24-28V, 4.8-4.1A (低于 45°C), 4-3.4A (在 60°C), 3-2.6A (在 70°C) 温度范围: -25°C 至 +70°C 防爆等级: Ex ec nC IIC T4 Gc

**警告 爆炸危险!**

本设备适用于第 II 组第 2 区环境。替换部件可能会影响对该环境的适用性。除非电源已被切断或已知该区域无危险, 否则不要断开设备或进行电压调整。必须为最终产品提供一个合适的外箱, 其最低保护等级为 IP54, 并满足 GB/T 3836.1 (EN 60079-0) 的要求。对于高环境温度和非标准的安装方向, 必须考虑降低输出电流的条件。设备须安装在不高于 GB/T 16935.1 定义的污染等级为 2 级的环境中。本产品符合 GB/T 3836.1-2021, GB/T 3836.3-2021, GB/T 3836.8-2021 中防爆性能的要求。