

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

这是一份适用于中国危险场所应用的安装手册。

Read this first!

English

安装要求!

中文

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.

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。  
 本文件中提供的信息准确、可靠; 如有修改, 恕不另行通知。  
 本文件翻译自英文版本, 中英文版本之间如有差异, 应以英文版为准。

**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.

**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。

Product Description

The devices are redundancy modules, which can be used to build 1+1 and N+1 redundant systems. They are equipped with two input channels, which can be connected to power supplies and one output, which can carry nominal currents.

产品介绍

本产品是冗余模块系列, 用于建立 1+1 和 N+1 冗余系统。具有两路输入通道 (可连接到电源) 和一路输出通道 (可连接到负载)。

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.

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。

List of covered models and their ratings:

**YR20.242** Input 1+2:  
 DC 12-28V, 20A continuous, 32.5A up to 5s  
 Output:  
 24A continuous, 32.5A up to 5s (below 45°C)  
 20A continuous, 32.5A up to 5s (below 70°C)  
 Temperature range: -40°C to +70°C  
 Ex Protection level: Ex ec IIC T4 Gc

**YR20.242** 输入 1 和 2 通道:  
 DC 12-28V, 20A 持续, 32.5A 长至 5s  
 输出:  
 24A 持续, 32.5A 长至 5s (低于 45°C)  
 20A 持续, 32.5A 长至 5s (低于 70°C)  
 温度范围: -40°C 至 +70°C  
 防爆等级: Ex ec IIC T4 Gc

**YR20.246** Input 1+2:  
 DC 24-28V, 12A continuous, 17A up to 5s  
 Output:  
 24A continuous, 32.5A up to 5s (below 45°C)  
 20A continuous, 32.5A up to 5s (below 70°C)  
 Temperature range: -40°C to +70°C  
 Ex Protection level: Ex ec nC IIC T4 Gc

**YR20.246** 输入 1 和 2 通道:  
 DC 24-28V, 12A 持续, 17A 长至 5s  
 输出:  
 24A 持续, 32.5A 长至 5s (低于 45°C)  
 20A 持续, 32.5A 长至 5s (低于 70°C)  
 温度范围: -40°C 至 +70°C  
 防爆等级: Ex ec nC IIC T4 Gc

**YR40.241** Input 1+2:  
 DC 12-28V, 20A continuous, 32.5A up to 5s  
 Output:  
 40A continuous, 65A up to 5s  
 Temperature range: -40°C to +70°C  
 Ex Protection level: Ex ec IIC T4 Gc

**YR40.241** 输入 1 和 2 通道:  
 DC 12-28V, 20A 持续, 32.5A 长至 5s  
 输出:  
 40A 持续, 65A 长至 5s  
 温度范围: -40°C 至 +70°C  
 防爆等级: Ex ec IIC T4 Gc

**YR40.242** Input 1+2:  
 DC 12-28V, 20A continuous, 32.5A up to 5s  
 Output:  
 40A continuous, 65A up to 5s (below 60°C)  
 30A continuous, 65A up to 5s (below 70°C)  
 Temperature range: -40°C to +70°C  
 Ex Protection level: Ex ec IIC T4 Gc

**YR40.242** 输入 1 和 2 通道:  
 DC 12-28V, 20A 持续, 32.5A 长至 5s  
 输出:  
 40A 持续, 65A 长至 5s (低于 60°C)  
 30A 持续, 65A 长至 5s (低于 70°C)  
 温度范围: -40°C 至 +70°C  
 防爆等级: Ex ec IIC T4 Gc

**YR40.245** Input:  
 DC 12-28V, 40A continuous, 65A up to 5s  
 Output:  
 40A continuous, 65A up to 5s (below 60°C)  
 30A continuous, 65A up to 5s (below 70°C)  
 Temperature range: -40°C to +70°C  
 Ex Protection level: Ex ec IIC T4 Gc

**YR40.245** 输入:  
 DC 12-28V, 40A 持续, 65A 长至 5s  
 输出:  
 40A 持续, 65A 长至 5s (低于 60°C)  
 30A 持续, 65A 长至 5s (低于 70°C)  
 温度范围: -40°C 至 +70°C  
 防爆等级: Ex ec IIC T4 Gc

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| <b>YR40.482</b>   | <b>Input 1+2:</b><br>DC 24-56V, 20A continuous, 32.5A up to 5s<br><b>Output:</b><br>40A continuous, 65A up to 5s (below 60°C)<br>30A continuous, 65A up to 5s (below 70°C)<br><b>Temperature range:</b> -40°C to +70°C<br><b>Ex Protection level:</b> Ex ec IIC T4 Gc  |
| <b>YR80.241</b>   | <b>Input 1+2:</b><br>DC 12-28V, 40A continuous, 65A up to 5s<br><b>Output:</b><br>80A continuous, 130A up to 5s<br><b>Temperature range:</b> -40°C to +70°C<br><b>Ex Protection level:</b> Ex ec IIC T4 Gc   |
| <b>YR80.242</b>   | <b>Input 1+2:</b><br>DC 12-28V, 40A continuous, 65A up to 5s<br><b>Output:</b><br>80A continuous, 130A up to 5s (below 60°C)<br>60A continuous, 130A up to 5s (below 70°C)<br><b>Temperature range:</b> -40°C to +70°C<br><b>Ex Protection level:</b> Ex ec IIC T4 Gc  |
| <b>YR2.DIODE</b>  | <b>Input 1+2:</b><br>DC 12-48V, 10A continuous, 15A up to 5s<br><b>Output:</b><br>20A continuous, 30A up to 5s (below 60°C)<br>15A continuous, 30A up to 5s (below 70°C)<br><b>Temperature range:</b> -40°C to +70°C<br><b>Ex Protection level:</b> Ex ec IIC T4 Gc    |
| <b>YRM2.DIODE</b> | <b>Input 1+2:</b><br>DC 24-48V, 10A continuous, 15A up to 5s<br><b>Output:</b><br>20A continuous, 30A up to 5s (below 60°C)<br>15A continuous, 30A up to 5s (below 70°C)<br><b>Temperature range:</b> -40°C to +70°C<br><b>Ex Protection level:</b> Ex ec nC IIC T4 Gc |
| <b>MLY10.241</b>  | <b>Input 1+2:</b><br>DC 12-48V, 5A continuous, 7.5A up to 5s<br><b>Output:</b><br>10A continuous, 15A up to 5s (below 60°C)<br>7.5A continuous, 15A up to 5s (below 70°C)<br><b>Temperature range:</b> -40°C to +70°C<br><b>Ex Protection level:</b> Ex ec IIC T4 Gc   |
| <b>MLY02.100</b>  | <b>Input 1+2:</b><br>DC 12-48V, 5A continuous, 7.5A up to 5s<br><b>Output:</b><br>10A continuous, 15A up to 5s (below 60°C)<br>7.5A continuous, 15A up to 5s (below 70°C)<br><b>Temperature range:</b> -40°C to +70°C<br><b>Ex Protection level:</b> Ex ec IIC T4 Gc   |
| <b>PIRD20.241</b> | <b>Input 1+2:</b><br>DC 12-28V, 10A continuous, 16A up to 5s<br><b>Output:</b><br>20A continuous, 32A up to 5s (below 55°C)<br>12.5A continuous, 32A up to 5s (below 70°C)<br><b>Temperature range:</b> -40°C to +70°C<br><b>Ex Protection level:</b> Ex ec IIC T4 Gc  |

All models optional with suffix "-C1" for conformal coated pc-boards

**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 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).

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.

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|-------------------|--|
| <b>YR40.482</b>   | 输入 1 和 2 通道<br>DC 24-56V, 20A 持续, 32.5A 长至 5s<br>输出:<br>40A 持续, 65A 长至 5s (低于 60°C)<br>30A 持续, 65A 长至 5s (低于 70°C)<br>温度范围: -40°C 至 +70°C<br>防爆等级: Ex ec IIC T4 Gc   |
| <b>YR80.241</b>   | 输入 1 和 2 通道:<br>DC 12-28V, 40A 持续, 65A 长至 5s<br>输出:<br>80A 持续, 130A 长至 5s<br>温度范围: -40°C 至 +70°C<br>防爆等级: Ex ec IIC T4 Gc  |
| <b>YR80.242</b>   | 输入 1 和 2 通道:<br>DC 12-28V, 40A 持续, 65A 长至 5s<br>输出:<br>80A 持续, 130A 长至 5s (低于 60°C)<br>60A 持续, 130A 长至 5s (低于 70°C)<br>温度范围: -40°C 至 +70°C<br>防爆等级: Ex ec IIC T4 Gc  |
| <b>YR2.DIODE</b>  | 输入 1 和 2 通道:<br>DC 12-48V, 10A 持续, 15A 长至 5s<br>输出:<br>20A 持续, 30A 长至 5s (低于 60°C)<br>15A 持续, 30A 长至 5s (低于 70°C)<br>温度范围: -40°C 至 +70°C<br>防爆等级: Ex ec IIC T4 Gc    |
| <b>YRM2.DIODE</b> | 输入 1 和 2 通道:<br>DC 24-48V, 10A 持续, 15A 长至 5s<br>输出:<br>20A 持续, 30A 长至 5s (低于 60°C)<br>15A 持续, 30A 长至 5s (低于 70°C)<br>温度范围: -40°C 至 +70°C<br>防爆等级: Ex ec nC IIC T4 Gc |
| <b>MLY10.241</b>  | 输入 1 和 2 通道:<br>DC 12-48V, 5A 持续, 7.5A 长至 5s<br>输出:<br>10A 持续, 15A 长至 5s (低于 60°C)<br>7.5A 持续, 15A 长至 5s (低于 70°C)<br>温度范围: -40°C 至 +70°C<br>防爆等级: Ex ec IIC T4 Gc   |
| <b>MLY02.100</b>  | 输入 1 和 2 通道:<br>DC 12-48V, 5A 持续, 7.5A 长至 5s<br>输出:<br>10A 持续, 15A 长至 5s (低于 60°C)<br>7.5A 持续, 15A 长至 5s (低于 70°C)<br>温度范围: -40°C 至 +70°C<br>防爆等级: Ex ec IIC T4 Gc   |
| <b>PIRD20.241</b> | 输入 1 和 2 通道:<br>DC 12-28V, 10A 持续, 16A 长至 5s<br>输出:<br>20A 持续, 32A 长至 5s (低于 55°C)<br>12.5A 持续, 32A 长至 5s (低于 70°C)<br>温度范围: -40°C 至 +70°C<br>防爆等级: Ex ec IIC T4 Gc  |

以上所有产品型号如带有尾缀-C1, 则表示该产品电路板有敷形涂覆工艺

**警告 爆炸危险!**

该设备适合在第 II 类第 2 区环境中使用。替换部件可能会影响对该环境的适用性。不要断开设备的连接, 除非电源已经关闭或已知该区域没有危险。必须为最终产品提供一个合适的外壳, 其最低保护等级为 IP54, 并满足 GB/T 3836.1 (EN 60079-0) 的要求。

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。