

# I/O 扩展卡使用说明书

(IOV-D104 标准型)

## 技术参数

IOV-D104 标准型 I/O 扩展卡拥有的配置如下：

- ◆ 一组 RS485 通道；
- ◆ ±10V 辅助电压源；
- ◆ 3 路数字量输入；
- ◆ 1 路高速 OC 输出；
- ◆ 1 路模拟量输入；
- ◆ 1 组带常开、常闭触点的继电器可编程输出。

## 接线端子

接线端子如下图所示：



图 1 I/O 扩展卡的端子示意图

## 接线端子规格

类型	名称	端子说明	规格
通信接口	RS+	485 差分信号正端	标准 RS85 通信接口
	RS-	485 差分信号负端	
输出电源	+10V	+10V 参考电压源	最大负载能力: 10mA
	-10V	-10V 参考电压源	
模拟量输入	AI3	模拟量输入端。 详见适用机型说明书 F4 参数	输入范围: -10V~10V 最低输入阻抗: 100MΩ
数字量输入	DI7	数字量输入。 详见适用机型说明书 F3 参数	输入阻抗: R= 4.7KΩ 最高输入频率: 200Hz
	DI8		输入阻抗: R=4.7KΩ 最高输入频率: 100KHz
	DI9		
数字量输出	DO3	OC 输出。 详见 V360 说明书 F3 参数	最高输出频率: 100KHz 最大工作电压: 24V 最大输出电流: 150mA
继电器可编程输出	TA1	TA1-TB1 常闭触点; TA1-TC1 常开触点; 详见适用机型说明书 F3 参数;	触点容量: AC 250V/1A
	TB1		
	TC1		
公共端	GND	模拟量公共端。 ±10V, AI3 的公共端	
	CM	数字量公共端。 DO3, DI7, DI8, DI9 的公共端	

## 安装与拆卸

### ◆ 安装

- ① 将扩展卡按如图示方向放置，下按直至扩展卡与控制卡插座接触良好；
- ② 扩展卡左侧的螺孔对齐后，锁紧三个 M3 螺钉。

### ◆ 拆卸

- ① 拆下扩展卡左侧的三个螺钉；
- ② 将 I/O 扩展卡从控制卡的插座中向上拔出（如图 2）。

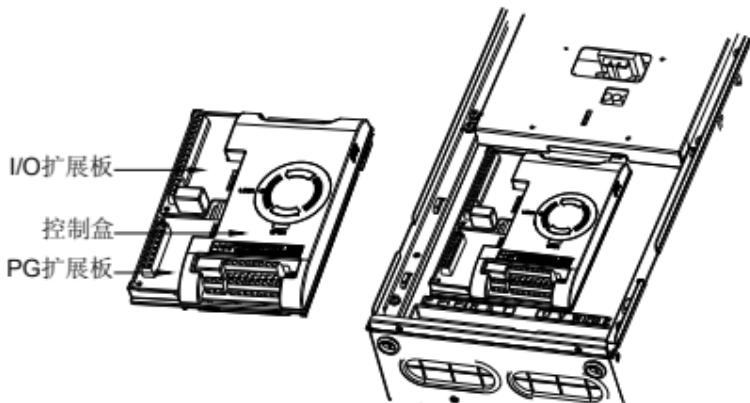


图 2 I/O 扩展卡的拆卸安装示意图

## 配线方式

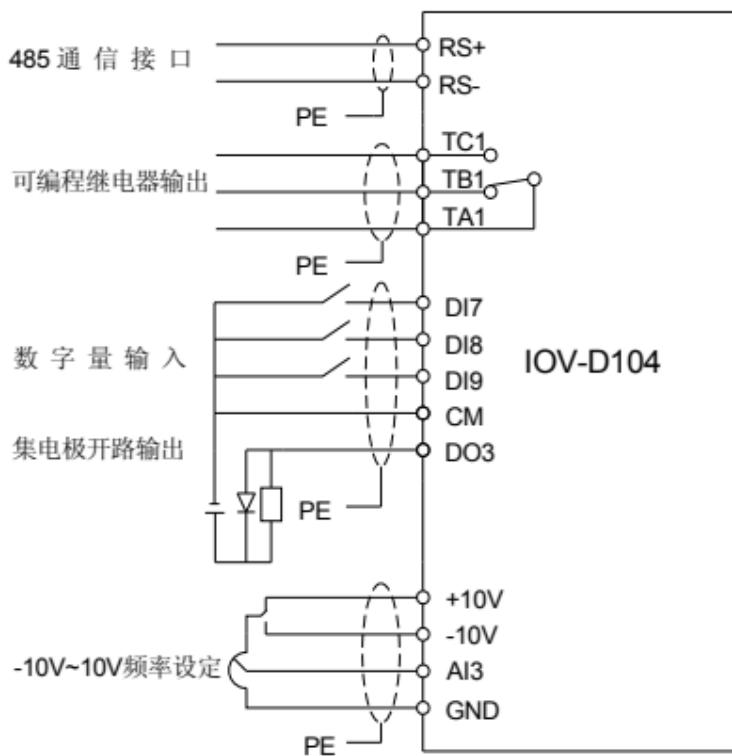


图 3 I/O 扩展卡配线示意图

# USER MANUAL FOR I/O EXPANSION CARD

## (IOV-D104 STANDARD TYPE)

### Technical parameters

IOV-D104 standard I/O expansion card is configured as below:

- ◆ One group of RS485 channel;
- ◆ ±10V auxiliary voltage source;
- ◆ 3-circuit digital input ;
- ◆ Circuit high speed OC output;
- ◆ Circuit analog input;
- ◆ 1 group of normally open and closed contacts of relay programmable output.

### Terminals

The connecting terminals are arranged as follows:

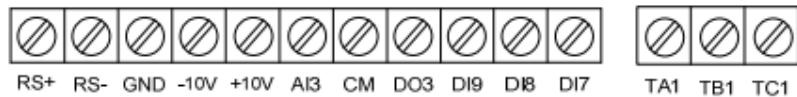


Figure-1 Terminals Introduction of I/O Expansion Card

## Terminals & Functions

Type	Name	Description	Specification	
Communication	RS+	485 differential signaling positive	Standard RS485 communication interface	
	RS-	485 differential signaling negative		
Output power supply	+10V	Positive 10V voltage source	Max load capacity: 10mA	
	-10V	Negative 10V voltage source		
Analog input	AI3	Analog input terminal. See F4 parameter in the user manual of applicable models.	Input range: -10V~10V Min Input impedance:100MΩ	
Digital input	DI7	See F3 parameter in user manual	Input impedance: R= 4.7KΩ Max input frequency :200Hz	
	DI8		Input impedance : R=4.7KΩ Max input frequency : 100KHz	
	DI9			
Digital output	DO3	OC output. See F3 parameter in user manual	Max output frequency: 100KHz Max operating voltage: 24V Max output current: 150mA	
Relay programmable output	TA1	TA1-TB1 normally closed contacts; TA1-TC1 normally open contacts	Contact capacity: AC 250V/1A	
	TB1	See F3 parameter in the user manual		
	TC1			
Common port	GND	Analog common port. The common port of ±10V, AI3		
	CM	Digital common port. The common port of DO3, DI7, DI8, and DI9		

## Assembly & Disassembly

Refer to Figure-2 for the assembly and disassembly of the expansion board.

### ◆ Assembly

1. Place the expansion board in the direction as shown in the figure, and press it until it is well contacted with the socket on the control panel;
2. Align with screw holes on the left of the expansion board and tighten the three M3 screws.

### ◆ Disassembly

1. Unscrew the three screws on the left of the expansion board;
2. Pull the expansion board upward (as shown in Figure-2) to remove it from the socket on the control panel.

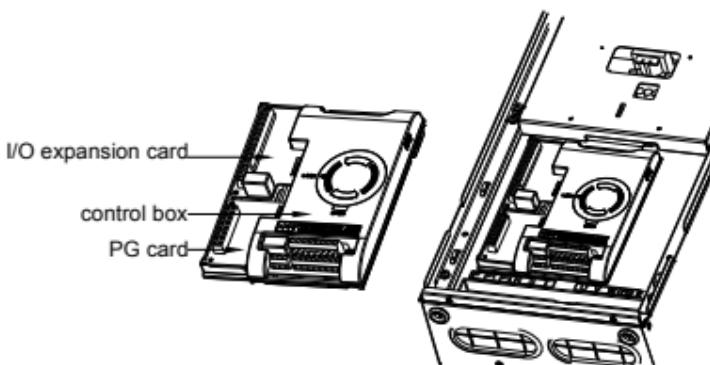


Figure-2 Schematic Diagram of Assembly & Disassembly of I/O Expansion

## Wiring

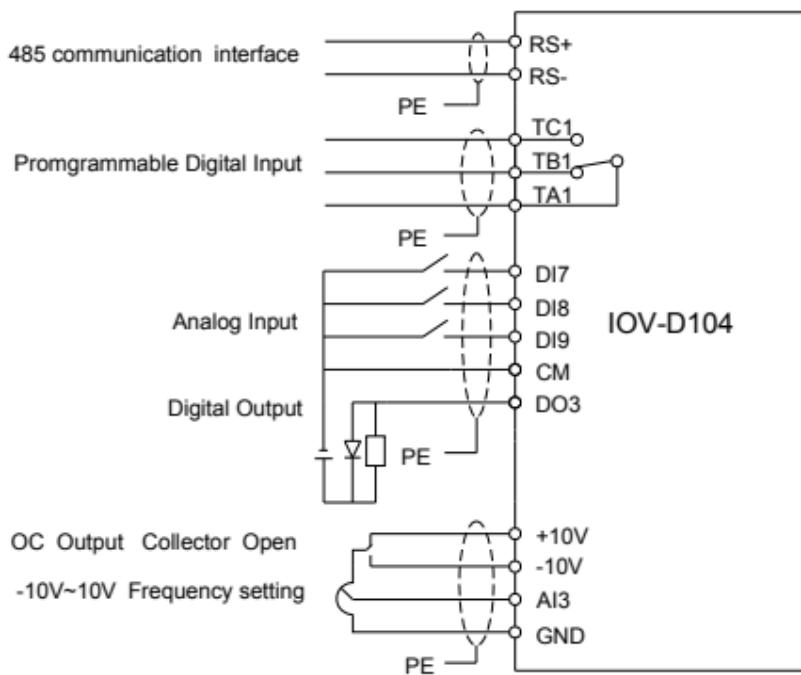


Figure-3 Wiring for I/O Expansion Card